



2022

DOUGLAS COUNTY PROPERTY ASSESSMENT STUDY



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.

A handwritten signature in cursive script, reading "Harry J. Fuller".

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

TABLE OF CONTENTS

Introduction	3
Regional/Historical Sketch of Douglas County	4
Ratio Analysis.....	6
Time Trending Verification	8
Sold/Unsold Analysis	9
Agricultural Land Study	11
<i>Agricultural Land</i>	11
<i>Agricultural Outbuildings</i>	12
<i>Agricultural Land Under Improvements</i>	13
Sales Verification.....	14
Economic Area Review and Evaluation	16
Natural Resources	17
<i>Earth and Stone Products</i>	17
Vacant Land.....	18
Possessory Interest Properties	19
Personal Property Audit	20
Wildrose Auditor Staff.....	22
Appendices.....	23

INTRODUCTION



Colorado

The State Board of Equalization (SBOE) reviews assessments for conformance to the Constitution. The SBOE will order revaluations for counties whose valuations do not reflect the proper valuation period level of value.

The statutory basis for the audit is found in C.R.S. 39-1-104 (16)(a)(b) and (c).

The legislative council sets forth two criteria that are the focus of the audit group:

To determine whether each county assessor is applying correctly the constitutional and statutory provisions, compliance requirements of the State Board of Equalization, and the manuals published by the State Property Tax Administrator to arrive at the actual value of each class of property.

To determine if each assessor is applying correctly the provisions of law to the actual values when arriving at valuations for assessment of all locally valued properties subject to the property tax.

The property assessment audit conducts a two-part analysis: A procedural analysis and a statistical analysis.

The procedural analysis includes all classes of property and specifically looks at how the assessor develops economic areas, confirms and qualifies sales, and develops time adjustments. The audit also examines the procedures for adequately discovering, classifying and valuing agricultural outbuildings, discovering subdivision build-out and subdivision discounting procedures. Valuation methodology for vacant land, improved residential properties and commercial properties is examined. Procedures for producing mines, oil and gas leaseholds and lands producing, producing coal mines, producing earth and stone products, severed mineral interests and non-producing patented mining claims are also reviewed.

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

Wildrose Audit has completed the Property Assessment Study for 2022 and is pleased to report its findings for Douglas County in the following report.

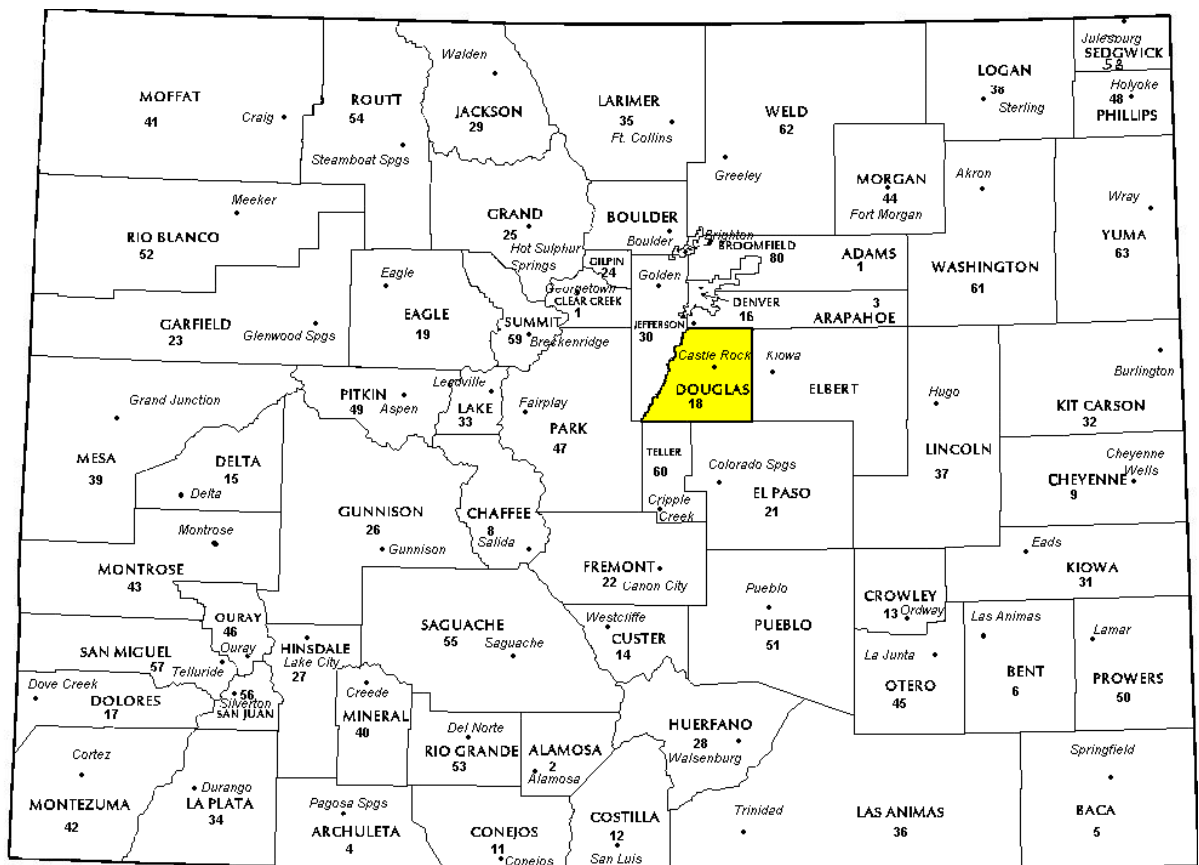


REGIONAL/HISTORICAL SKETCH OF DOUGLAS COUNTY

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 840.29 square miles and an estimated population of approximately 351,154 people, 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
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 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	0.959	1.171	13	Compliant
Single Family	18,666	0.978	1.006	4.6	Compliant
Vacant Land	410	0.986	1.040	15.7	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
Single Family	Compliant
Vacant Land	Compliant

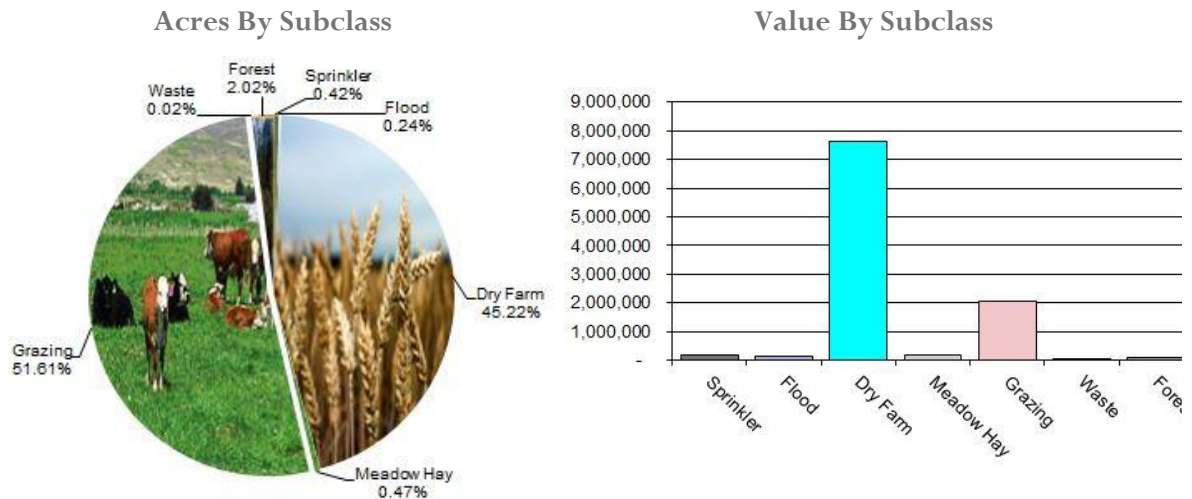
Conclusions

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



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	1,186	119.72	141,993	147,636	0.96
4117	Flood	730	174.05	127,054	127,529	1.00
4127	Dry Farm	16,947	49.95	846,451	841,440	1.01
4137	Meadow Hay	1,370	128.26	175,712	175,712	1.00
4147	Grazing	153,369	11.83	1,814,883	1,814,883	1.00
4177	Forest	6,157	11.52	70,945	70,945	1.00
4167	Waste	63	2.20	139	139	1.00
Total/ Avg		179,822	17.67	3,177,176	3,178,282	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.

Property Taxation for the valuation of agricultural outbuildings.

Recommendations

None

Conclusions

Douglas County has complied with the procedures provided by the Division of

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 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 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 but three of the sales selected in the sample gave reasons that were clear and supportable. Three 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

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

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 2022 in Douglas 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

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
- Internet
- CoStar
- Loopnet

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 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:

- 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 \$50,000 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

Harry J. Fuller, *Audit Project Manager*

Suzanne Howard, *Audit Administrative Manager*

Steve Kane, *Audit Statistician*

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

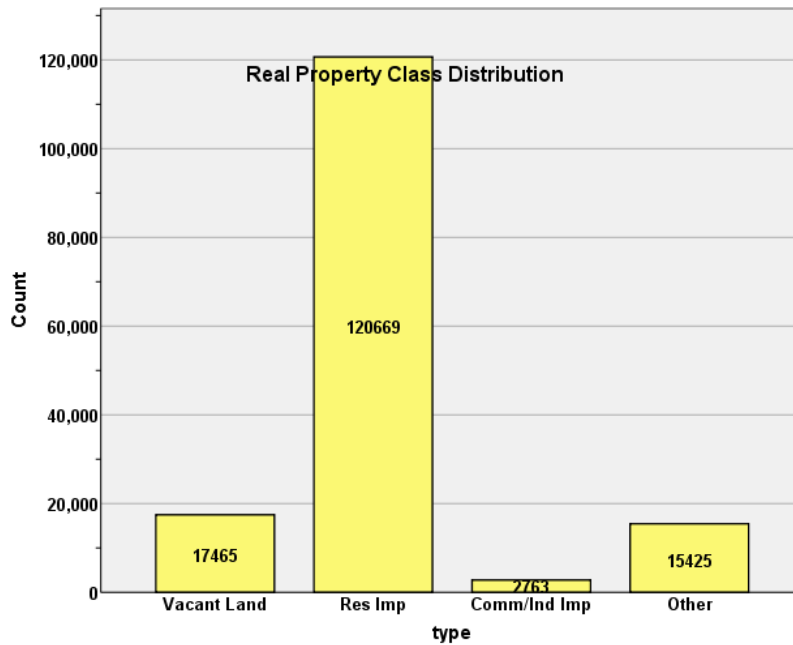
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE REPORT FOR DOUGLAS COUNTY 2022

I. OVERVIEW

Douglas County is a metropolitan county located along Colorado's Front Range urban corridor. The county has a total of 156,322 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 over 92.8% of all vacant land parcels.

For residential improved properties, residential properties coded 1212 accounted for 92.3% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 1.8% 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 Douglas Assessor's Office in April 2022. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 18,666 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

We next stratified the sale ratio analysis by economic area and neighborhood. The minimum count for the neighborhood stratification was 30 sales. The following are the results of this stratification analysis:

Economic Area Case Processing Summary

		Count	Percent
ECONAREA	1.00	5733	33.0%
	2.00	4180	24.0%
	3.00	1059	6.1%
	4.00	5840	33.6%
	5.00	215	1.2%
	6.00	324	1.9%
	7.00	30	0.2%
Overall		17381	100.0%
Excluded		1285	
Total		18666	

Ratio Statistics for CURRTOT / TASP

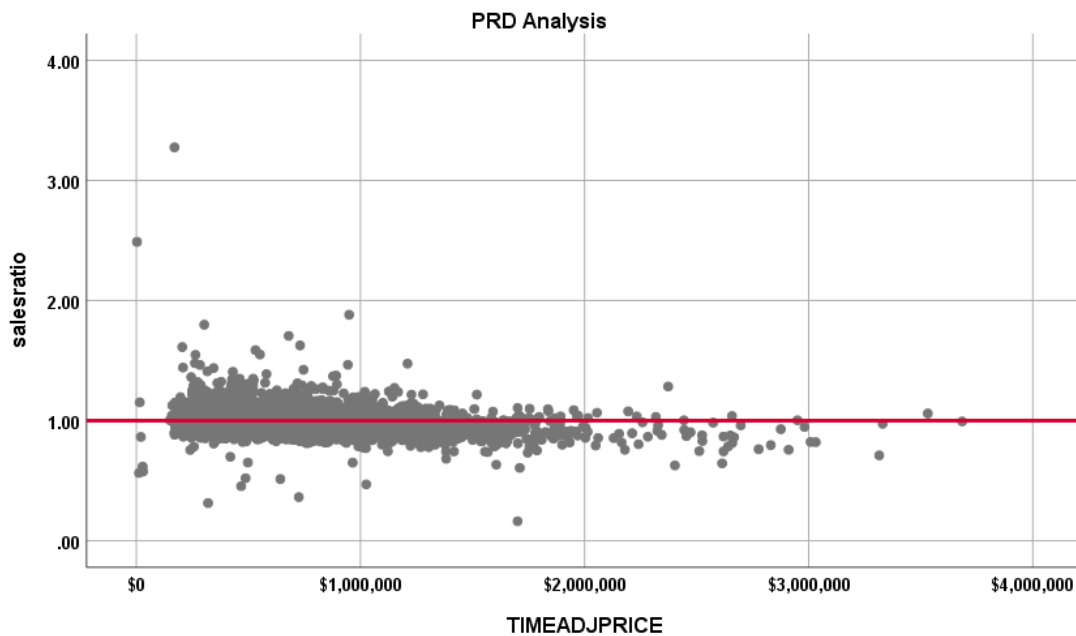
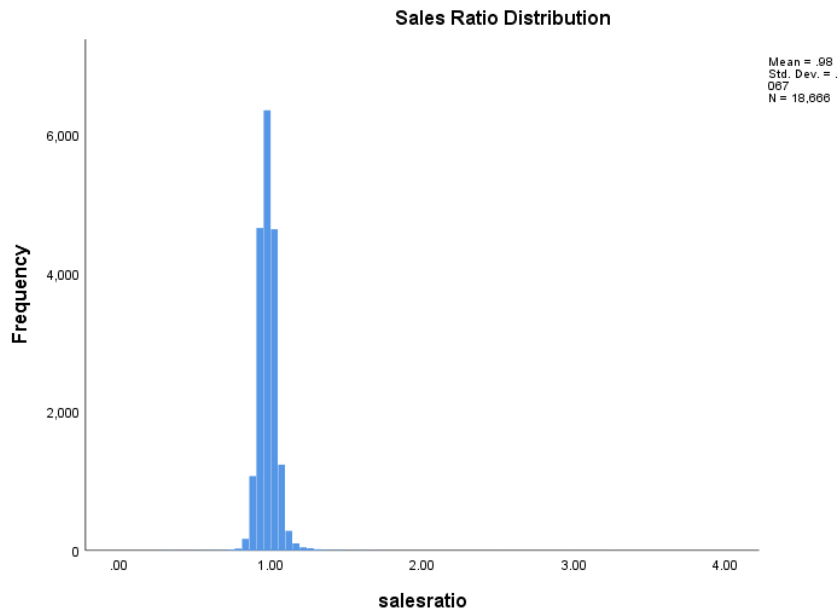
Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	.978	1.007	.043
2.00	.977	1.002	.046
3.00	.977	1.010	.051
4.00	.976	1.008	.044
5.00	.995	1.017	.079
6.00	.999	1.014	.083
7.00	1.001	1.064	.185
Overall	.978	1.006	.046

Neighborhoods with 20 or more sale Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
	.975	1.003	.039
13201	.969	1.003	.046
13202	.978	.999	.035
13203	.985	1.010	.067
13204	.973	1.000	.030
13205	.982	1.003	.036
1BB	.920	1.013	.076
1CC	.980	1.007	.045

1DD	.977	1.001	.036
1EE	.977	1.002	.040
23201	.973	1.003	.039
23202	.965	1.003	.046
23203	.972	1.006	.046
2AA	.976	1.013	.072
2BB	.977	1.003	.044
2CA	.979	1.003	.048
2CC	.978	1.002	.041
3AA	.919	1.018	.083
3CC	.973	1.034	.085
3DD	.980	1.004	.048
3FF	.945	1.072	.204
43201	.984	1.002	.042
43202	.974	1.001	.029
43204	.971	1.001	.035
4AA	.981	1.015	.083
4BB	.980	1.006	.042
4CC	.976	1.002	.040
4DD	.975	1.004	.044
4EE	.976	1.002	.043
4FF	.962	1.002	.055
4GG	.965	1.008	.065
9AA	.966	1.008	.078
9BB	1.023	1.009	.079
9C1	.992	1.013	.077
9C2	1.016	1.028	.097
9CC	.985	1.017	.084
9DD	.993	1.030	.075
9EE	.952	1.011	.093
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 20 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:



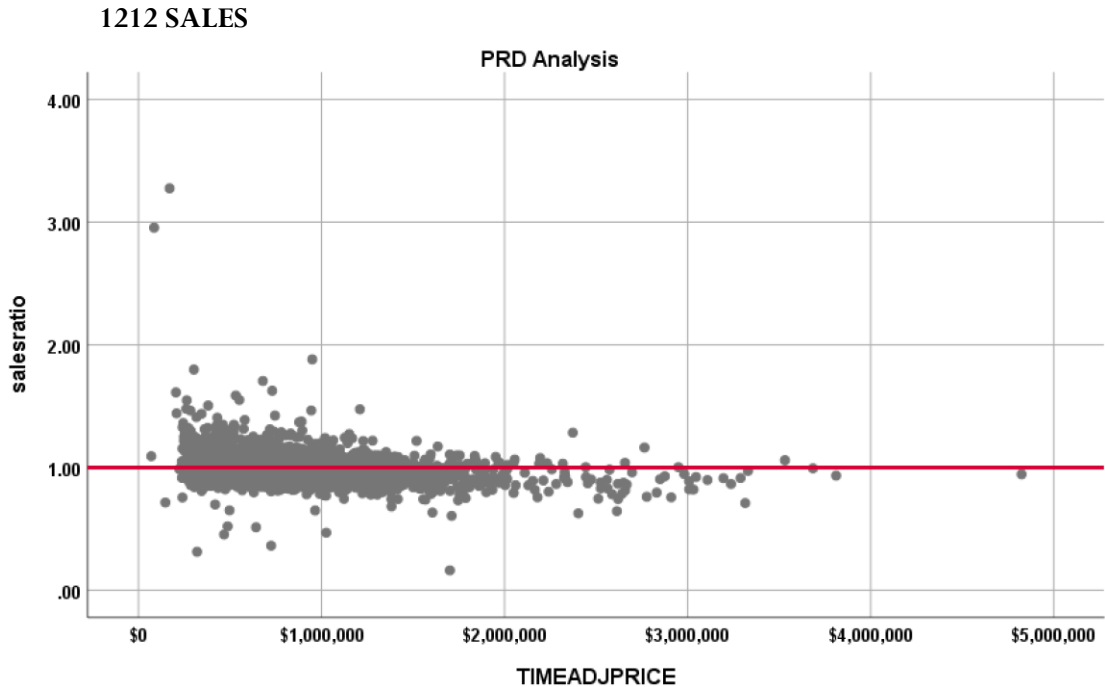
NOTE: SALES OVER \$4,000,000 NOT INCLUDED FOR ILLUSTRATION

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:



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		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.982		751.519	.000
	CURRTOT	-.00000000237	-.009	-1.121	.262

a. Dependent Variable: salesratio

The slope of the line at 0.00000000237 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	122	0.7%
	\$300K to \$400K	1962	11.3%
	\$400K to \$500K	5580	32.1%
	\$500K to \$600K	4225	24.3%
	\$600K to \$750K	3043	17.5%
	\$750K to \$1000K	1520	8.8%

\$1000K to \$2000K	845	4.9%
Over \$2000K	71	0.4%
Overall	17368	100.0%
Excluded	0	
Total	17368	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$300K	.999	1.019	.132	31.4%
\$300K to \$400K	.984	1.000	.043	6.3%
\$400K to \$500K	.984	1.000	.039	5.2%
\$500K to \$600K	.979	1.000	.040	5.2%
\$600K to \$750K	.968	1.000	.047	6.5%
\$750K to \$1000K	.962	1.000	.061	8.3%
\$1000K to \$2000K	.937	1.004	.075	10.1%
Over \$2000K	.903	1.001	.093	12.4%
Overall	.978	1.005	.046	6.8%

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	Std. Error	Standardized Coefficients Beta	t	Sig.
.	1	(Constant)	.979	.004		270.568	.000
		SalePeriod	.000	.000	-.014	-.498	.619
1.00	1	(Constant)	.980	.002		646.448	.000
		SalePeriod	6.530E-5	.000	.008	.580	.562
2.00	1	(Constant)	.980	.002		542.967	.000
		SalePeriod	5.403E-5	.000	.006	.404	.686
3.00	1	(Constant)	.981	.004		253.935	.000
		SalePeriod	.000	.000	-.020	-.656	.512
4.00	1	(Constant)	.973	.001		663.839	.000
		SalePeriod	.000	.000	.047	3.563	.000
5.00	1	(Constant)	1.004	.016		63.190	.000
		SalePeriod	-.001	.001	-.054	-.784	.434
6.00	1	(Constant)	.998	.018		57.002	.000
		SalePeriod	.001	.001	.037	.673	.501
7.00	1	(Constant)	.952	.123		7.750	.000
		SalePeriod	.010	.009	.216	1.173	.251

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 2022 between each group. The data was analyzed both as a whole and broken down by economic area and neighborhoods with at least 30 sales, as follows:

Report

VALSF

sold	N	Median	Mean
UNSOLD	100183	\$230	\$238
SOLD	18665	\$232	\$240

Report

VALSF

ECONAREA	sold	N	Median	Mean
1.00	UNSOLD	27708	\$218	\$226
	SOLD	5732	\$225	\$232
2.00	UNSOLD	31850	\$243	\$247
	SOLD	4180	\$254	\$259
3.00	UNSOLD	4652	\$241	\$255
	SOLD	1059	\$238	\$255
4.00	UNSOLD	23911	\$216	\$236
	SOLD	5840	\$217	\$229
5.00	UNSOLD	1937	\$230	\$240
	SOLD	215	\$245	\$252
6.00	UNSOLD	3098	\$256	\$260
	SOLD	324	\$263	\$267
7.00	UNSOLD	512	\$239	\$250
	SOLD	30	\$269	\$286

Report

VALSF

NBHD	sold	N	Median	Mean
13201	UNSOLD	564	\$243	\$237
	SOLD	97	\$244	\$239
13202	UNSOLD	168	\$211	\$220
	SOLD	54	\$205	\$219
13203	UNSOLD	155	\$208	\$200
	SOLD	32	\$200	\$204
13204	UNSOLD	197	\$231	\$232
	SOLD	54	\$229	\$226
13205	UNSOLD	49	\$240	\$245
	SOLD	32	\$240	\$246
1BB	UNSOLD	129	\$316	\$326
	SOLD	33	\$381	\$369
1CC	UNSOLD	5752	\$221	\$232
	SOLD	1836	\$226	\$234
1DD	UNSOLD	7925	\$208	\$211
	SOLD	1465	\$215	\$219
1EE	UNSOLD	9908	\$225	\$229

	SOLD	1865	\$230	\$234
23201	UNSOLD	540	\$226	\$225
	SOLD	72	\$224	\$234
23202	UNSOLD	402	\$233	\$240
	SOLD	58	\$247	\$258
23203	UNSOLD	888	\$280	\$289
	SOLD	148	\$282	\$285
2AA	UNSOLD	2006	\$296	\$304
	SOLD	501	\$314	\$317
2BB	UNSOLD	12140	\$234	\$234
	SOLD	1370	\$241	\$241
2CA	UNSOLD	956	\$243	\$266
	SOLD	97	\$263	\$286
2CC	UNSOLD	14686	\$247	\$247
	SOLD	1906	\$253	\$252
3CC	UNSOLD	457	\$315	\$310
	SOLD	43	\$316	\$312
3DD	UNSOLD	4309	\$235	\$243
	SOLD	1049	\$234	\$242
43201	UNSOLD	301	\$230	\$238
	SOLD	47	\$226	\$231
43202	UNSOLD	717	\$209	\$204
	SOLD	203	\$206	\$205
43204	UNSOLD	280	\$212	\$218
	SOLD	50	\$211	\$217
4AA	UNSOLD	1294	\$323	\$328
	SOLD	246	\$354	\$354
4BB	UNSOLD	3295	\$225	\$285
	SOLD	1365	\$209	\$222
4CC	UNSOLD	4461	\$206	\$212
	SOLD	1098	\$203	\$212
4DD	UNSOLD	5150	\$213	\$220
	SOLD	1402	\$220	\$226
4EE	UNSOLD	6757	\$217	\$223
	SOLD	1247	\$222	\$227
4FF	UNSOLD	763	\$219	\$228
	SOLD	98	\$221	\$232
9AA	UNSOLD	821	\$265	\$275
	SOLD	86	\$297	\$300
9BB	UNSOLD	2198	\$225	\$237
	SOLD	197	\$225	\$233
9C1	UNSOLD	791	\$192	\$211
	SOLD	71	\$209	\$218
9C2	UNSOLD	645	\$214	\$227
	SOLD	54	\$257	\$253
9CC	UNSOLD	1649	\$234	\$246
	SOLD	133	\$253	\$261
9DD	UNSOLD	594	\$277	\$274
	SOLD	67	\$291	\$281
9EE	UNSOLD	369	\$206	\$210
	SOLD	42	\$200	\$219

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, which indicated that sold and unsold residential properties were valued in a similar manner

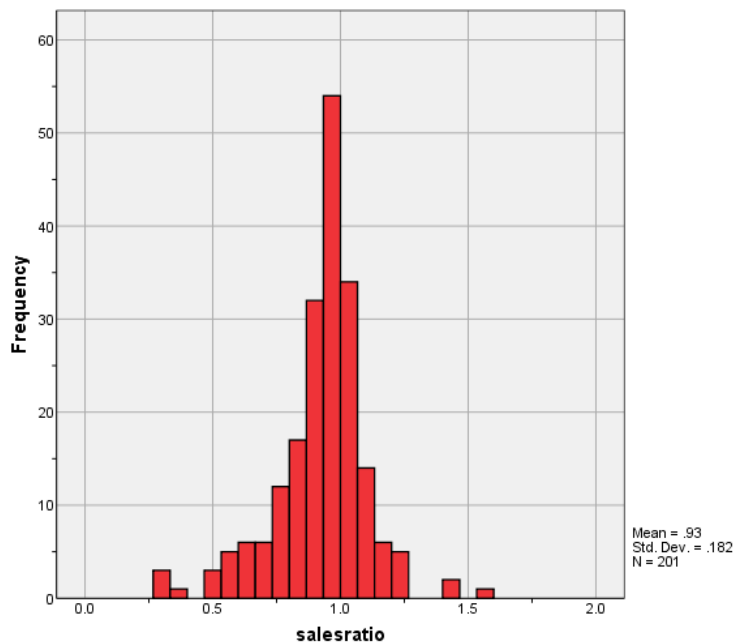
Based on these results, we concluded that the assessor valued sold and unsold residential properties consistently in 2022.

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	0.959
Price Related Differential	1.171
Coefficient of Dispersion	13.0

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:





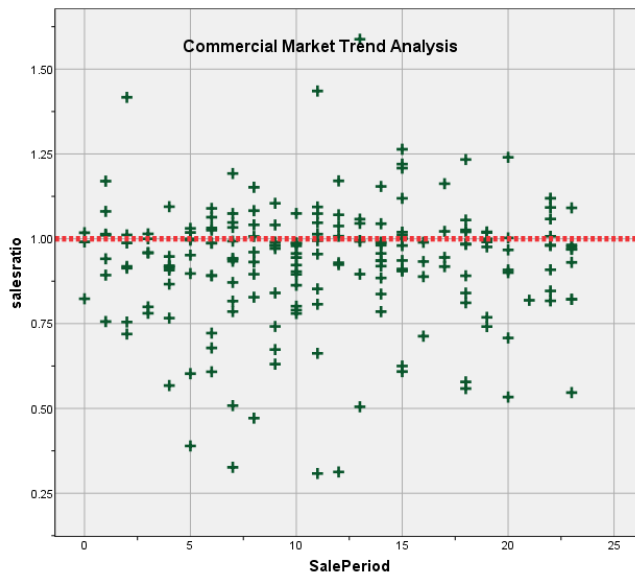
Commercial/Industrial Market Trend Analysis

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	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.914	.027		34.409	.000
	SalePeriod	.001	.002	.041	.578	.564

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

DIFF	sold	N	Median	Mean
UNSALED	2325	1.06	1.10	
SOLD	192	1.10	1.17	

Report

DIFF

DIFF	sold	N	Median	Mean
2212.00	UNSALED	461	1.04	1.09
	SOLD	31	1.16	1.21
2220.00	UNSALED	193	1.07	1.12
	SOLD	16	1.21	1.27
2230.00	UNSALED	501	1.02	1.03
	SOLD	21	1.07	1.04
2245.00	UNSALED	192	1.06	1.13
	SOLD	15	1.10	1.16
3212.00	UNSALED	167	1.13	1.14
	SOLD	10	1.22	1.23
3230.00	UNSALED	323	1.10	1.17
	SOLD	77	1.10	1.17

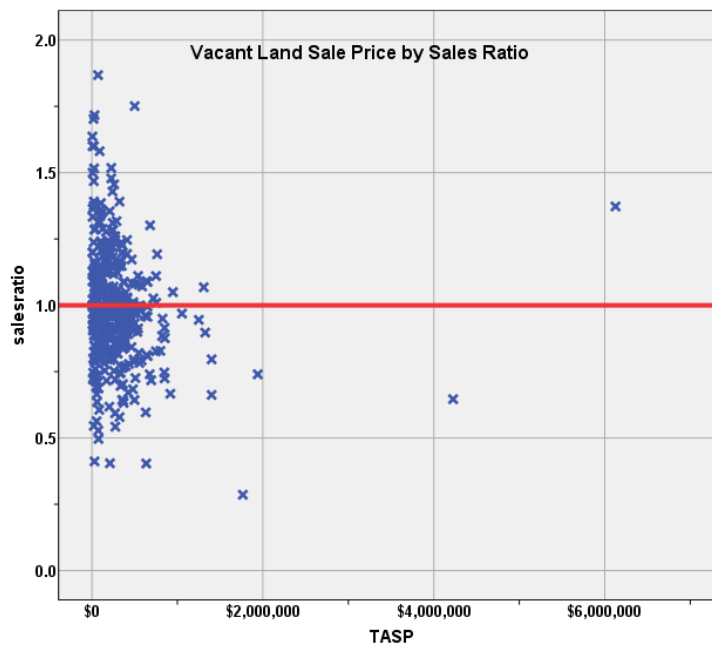
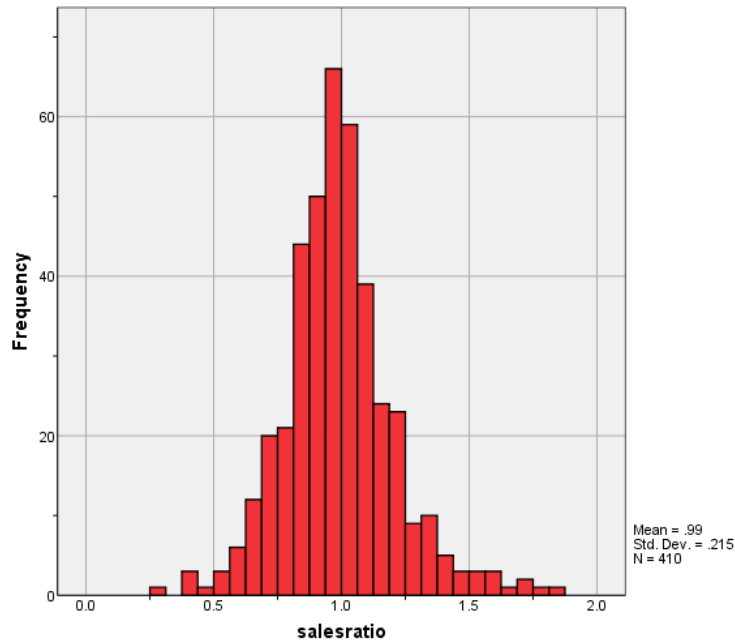
For the four commercial subclasses with a greater change in value for sold properties, they were newer, in superior condition and/or they were of superior quality overall. When these differences are considered, the above comparison analyses indicate that there is no consistent pattern of sold properties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

V. VACANT LAND SALE RESULTS

There were 419 qualified vacant land sales for the 24-month sale period ending June 30, 2020. Nine sales were trimmed using IAAO standards, resulting in a final total of 410 vacant land sales. The sales ratio analysis was analyzed as follows:

Median	0.986
Price Related Differential	1.040
Coefficient of Dispersion	15.7

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.

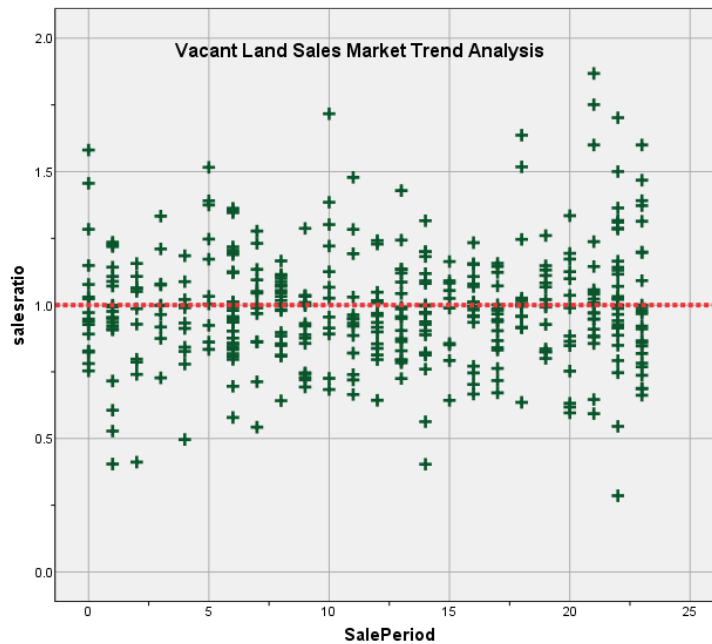
Vacant Land Market Trend Analysis

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

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.970	.021		45.768	.000
	SalePeriod	.002	.002	.053	1.067	.287

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
0	6765	1.09	1.08
1	401	1.14	1.16
Total	7166	1.10	1.08

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	530	1.14	1.16
	SOLD	8	1.34	1.29
00026875	UNSOLD	8	1.10	1.09
	SOLD	6	1.10	1.10
00044700	UNSOLD	10	1.04	1.01
	SOLD	8	1.04	1.03
0123177	UNSOLD	29	1.34	1.29
	SOLD	5	1.34	1.39
0134957	UNSOLD	313	1.24	1.25
	SOLD	43	1.24	1.20
0136477	UNSOLD	71	1.24	1.19
	SOLD	19	1.24	1.21
0139865	UNSOLD	60	1.16	1.19
	SOLD	10	1.16	1.15
0139958	UNSOLD	11	1.59	1.59
	SOLD	6	1.59	1.53
0141307	UNSOLD	11	1.14	1.05
	SOLD	6	1.15	1.23
0144032	UNSOLD	21	1.50	1.38
	SOLD	5	1.19	1.22
0144862	UNSOLD	387	1.00	1.00
	SOLD	17	1.00	1.01
0146292	UNSOLD	14	1.05	1.05
	SOLD	6	1.05	1.08
0147369	UNSOLD	25	1.03	1.04
	SOLD	5	1.05	1.15
2002137766	UNSOLD	2	1.00	1.00
	SOLD	6	.96	.94
2005122094	UNSOLD	37	1.24	1.22
	SOLD	16	1.26	1.23
2006019898	UNSOLD	2	.56	.56
	SOLD	6	1.12	1.20
2006046645	UNSOLD	67	1.14	1.14
	SOLD	5	1.14	1.11
2006078510	UNSOLD	36	.79	.85
	SOLD	18	1.05	1.03
2018022022	UNSOLD	2	1.01	1.01
	SOLD	6	1.01	1.07

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

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 Mean Centered
		Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
.	.977	.974	.981	.975	.973	.978	95.5%	.975	.972	.977	1.003	.039	6.8%
1.00	.981	.979	.982	.978	.977	.980	95.2%	.974	.967	.981	1.007	.043	6.0%
2.00	.981	.979	.982	.977	.975	.979	95.1%	.979	.972	.986	1.002	.046	6.1%
3.00	.979	.975	.983	.977	.972	.982	95.1%	.969	.963	.975	1.010	.051	6.9%
4.00	.978	.976	.979	.976	.974	.978	95.2%	.970	.966	.975	1.008	.044	6.1%
5.00	.993	.976	1.010	.995	.981	1.009	95.9%	.977	.958	.995	1.017	.079	12.4%
6.00	1.008	.990	1.026	.999	.985	1.012	96.0%	.994	.981	1.007	1.014	.083	16.3%
7.00	1.070	.924	1.215	1.001	.918	1.090	95.7%	1.005	.945	1.065	1.064	.185	36.4%

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 Mean Centered
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
.927	.902	.952	.959	.935	.982	95.2%	.792	.667	.916	1.171	.130	19.6%

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

Vacant Land

Ratio Statistics for CURRLND / TASP												
Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Mean Centered
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
.990	.969	1.010	.986	.965	1.000	95.7%	.951	.894	1.008	1.040	.157	21.7%

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	1	0.0%
	600.00	1	0.0%
	1212.00	17356	93.0%
	1213.50	1	0.0%
	1220.00	3	0.0%
	1221.15	1	0.0%
	1225.00	7	0.0%
	1230.00	1285	6.9%
	1240.00	1	0.0%
	1548.00	1	0.0%
	1716.00	1	0.0%
	4277.00	1	0.0%
	4278.00	2	0.0%
	4278.33	2	0.0%
	4278.50	2	0.0%
	9250.00	1	0.0%
Overall		18666	100.0%
Excluded		0	
Total		18666	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.162	1.000	.000	.
600.00	1.092	1.000	.000	.
1212.00	.978	1.005	.046	6.7%
1213.50	1.114	1.000	.000	.
1220.00	.858	1.005	.030	4.5%
1221.15	.937	1.000	.000	.
1225.00	.919	1.039	.168	29.9%
1230.00	.975	1.003	.039	6.8%
1240.00	.552	1.000	.000	.
1548.00	.943	1.000	.000	.
1716.00	.880	1.000	.000	.
4277.00	.815	1.000	.000	.
4278.00	.408	1.025	.111	15.8%
4278.33	.586	.999	.112	15.8%
4278.50	.491	1.010	.045	6.3%
9250.00	1.015	1.000	.000	.
Overall	.978	1.006	.046	6.8%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	0	1	0.0%
	Over 100	14	0.1%
	75 to 100	7	0.0%
	50 to 75	59	0.3%
	25 to 50	3658	19.6%
	5 to 25	8695	46.6%
	5 or Newer	6232	33.4%
Overall		18666	100.0%
Excluded		0	
Total		18666	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.162	1.000	.000	.
Over 100	.921	.990	.086	12.2%
75 to 100	.979	1.007	.056	6.9%
50 to 75	.945	1.037	.129	32.8%
25 to 50	.979	1.005	.053	8.7%
5 to 25	.977	1.000	.044	6.3%
5 or Newer	.978	1.012	.042	5.4%
Overall	.978	1.006	.046	6.8%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	0	1	0.0%
	LE 500 sf	11	0.1%
	500 to 1,000 sf	319	1.7%
	1,000 to 1,500 sf	2409	12.9%
	1,500 to 2,000 sf	4685	25.1%
	2,000 to 3,000 sf	7475	40.0%
	3,000 sf or Higher	3766	20.2%
Overall		18666	100.0%
Excluded		0	
Total		18666	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.162	1.000	.000	.
LE 500 sf	.919	1.090	.313	58.5%
500 to 1,000 sf	.974	1.006	.053	13.0%
1,000 to 1,500 sf	.971	1.002	.040	5.6%
1,500 to 2,000 sf	.978	1.002	.040	6.3%
2,000 to 3,000 sf	.980	1.005	.044	5.8%
3,000 sf or Higher	.977	1.010	.059	8.4%
Overall	.978	1.006	.046	6.8%

Improvement Quality

Case Processing Summary

	Count	Percent
QUALITY	1	0.0%
Average	13544	72.6%
Excellent	157	0.8%
Fair	26	0.1%
Good	3982	21.3%
Low	7	0.0%
Very Good	949	5.1%
Overall	18666	100.0%
Excluded	0	
Total	18666	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.162	1.000	.000	.
Average	.977	1.005	.041	6.3%
Excellent	.996	1.017	.091	13.9%
Fair	.955	1.000	.068	8.9%
Good	.980	1.007	.054	7.2%
Low	1.030	1.048	.176	32.0%
Very Good	.984	1.016	.071	9.4%
Overall	.978	1.006	.046	6.8%

Improvement Condition

Case Processing Summary

	Count	Percent
CONDITION	1	0.0%
AA	1	0.0%
Average	6723	36.0%
Badly Worn	5	0.0%
Excellent	1	0.0%
Good	11928	63.9%
Very Good	5	0.0%
Worn Out	2	0.0%
Overall	18666	100.0%
Excluded	0	
Total	18666	

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	.047	6.6%
Badly Worn	1.292	1.211	.368	66.8%
Excellent	.957	1.000	.000	.
Good	.976	1.004	.045	6.7%
Very Good	1.008	1.002	.019	2.6%
Worn Out	1.112	.983	.046	6.6%
Overall	.978	1.006	.046	6.8%

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	.079	10.1%
\$500K to \$750K	.797	1.004	.155	18.7%
\$750K to \$1,000K	.879	.993	.195	27.3%
Over \$1,000K	.903	1.107	.151	22.0%
Overall	.959	1.171	.130	19.3%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1712.00	1	0.5%
	1716.00	1	0.5%
	1720.00	1	0.5%
	2088.86	1	0.5%
	2212.00	33	16.4%
	2215.00	4	2.0%
	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%
	2502.93	1	0.5%
	2712.00	1	0.5%
	2725.00	1	0.5%
	3212.00	11	5.5%
	3215.00	1	0.5%
	3230.00	81	40.3%
	5734.50	1	0.5%
	9249.00	1	0.5%
9259.00	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	.
1720.00	.609	1.000	.000	.
2088.86	.840	1.000	.000	.
2212.00	.934	1.068	.111	16.8%
2215.00	.723	1.045	.116	15.1%
2220.00	.983	1.370	.130	22.4%
2221.00	1.261	1.051	.260	36.7%
2227.50	.713	1.000	.000	.
2230.00	.742	1.062	.249	31.8%
2235.00	.955	1.078	.094	16.1%
2245.00	.914	1.018	.116	16.3%
2502.93	.807	1.000	.000	.
2712.00	.578	1.000	.000	.
2725.00	.908	1.000	.000	.
3212.00	.976	1.022	.057	8.9%
3215.00	.919	1.000	.000	.
3230.00	.993	1.017	.087	12.8%
5734.50	.918	1.000	.000	.
9249.00	.957	1.000	.000	.
9259.00	1.059	1.000	.000	.
9279.00	1.000	1.000	.000	.
Overall	.959	1.171	.130	19.3%

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	19	9.5%
	5 to 25	100	49.8%
	5 or Newer	70	34.8%
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
Over 100	1.032	1.000	.000	.
75 to 100	1.015	1.054	.090	17.2%
50 to 75	.934	.948	.088	16.8%
25 to 50	.933	1.235	.123	18.4%
5 to 25	.923	1.149	.145	20.4%
5 or Newer	.985	1.180	.111	17.8%
Overall	.959	1.171	.130	19.3%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRRec	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	1.012	.088	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	.907	1.108	.149	21.7%
Overall	.959	1.171	.130	19.3%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	Average	115	57.2%
	Good	85	42.3%
	Very Good	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	.967	1.045	.115	17.5%
Good	.948	1.298	.151	21.6%
Very Good	.896	1.000	.000	.
Overall	.959	1.171	.130	19.3%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	Average	37	18.4%
	Good	164	81.6%
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	.914	.990	.186	26.6%
Good	.973	1.234	.116	17.1%
Overall	.959	1.171	.130	19.3%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	42	10.2%
	\$25K to \$50K	46	11.2%
	\$50K to \$100K	34	8.3%
	\$100K to \$150K	49	12.0%
	\$150K to \$200K	30	7.3%
	\$200K to \$300K	66	16.1%
	\$300K to \$500K	90	22.0%
	\$500K to \$750K	32	7.8%
	\$750K to \$1,000K	11	2.7%
	Over \$1,000K	10	2.4%
Overall		410	100.0%
Excluded		0	
Total		410	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.010	1.003	.212	29.2%
\$25K to \$50K	1.000	1.006	.121	18.8%
\$50K to \$100K	.946	.978	.234	31.6%
\$100K to \$150K	.987	1.012	.132	16.5%
\$150K to \$200K	.991	1.000	.117	14.7%
\$200K to \$300K	1.001	1.003	.166	22.2%
\$300K to \$500K	.956	1.000	.136	18.7%
\$500K to \$750K	.964	1.001	.136	18.7%
\$750K to \$1,000K	.884	1.004	.131	17.5%
Over \$1,000K	.847	.918	.251	34.2%
Overall	.986	1.040	.157	21.8%

Subclass

Case Processing Summary

		Count	Percent
ABSTRRLND	100.00	194	47.3%
	200.00	17	4.1%
	300.00	1	0.2%
	530.00	1	0.2%
	540.00	2	0.5%
	550.00	2	0.5%
	1112.00	173	42.2%
	1125.00	1	0.2%
	2112.00	4	1.0%
	2120.00	3	0.7%
	2130.00	9	2.2%
	2135.00	1	0.2%
	3112.00	1	0.2%
	9159.00	1	0.2%
	Overall	410	100.0%
	Excluded	0	
	Total	410	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	.997	1.054	.158	21.9%
200.00	.960	1.025	.211	30.8%
300.00	.404	1.000	.000	.
530.00	.911	1.000	.000	.
540.00	.962	1.008	.065	9.2%
550.00	1.084	1.000	.047	6.6%
1112.00	.982	1.019	.147	19.7%
1125.00	1.373	1.000	.000	.
2112.00	.848	1.338	.282	41.3%
2120.00	.968	1.044	.089	16.4%
2130.00	.915	1.043	.158	24.9%
2135.00	.828	1.000	.000	.
3112.00	.884	1.000	.000	.
9159.00	1.110	1.000	.000	.
Overall	.986	1.040	.157	21.8%