DOUGLAS COUNTY

2024
DOUGLAS COUNTY PROPERTY ASSESSMENT STUDY

EastWest ECONOMETRICS

September 15, 2024

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

RE: Final Report for the 2024 Colorado Property Assessment Study

Dear Ms. Castle:

East West Econometrics.-Audit Division is pleased to submit the Final Reports for the 2024 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.

East West Econometrics – 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
East West Econometrics. – Audit Division

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INTRODUCTION

Colorado

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

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

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

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

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

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

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

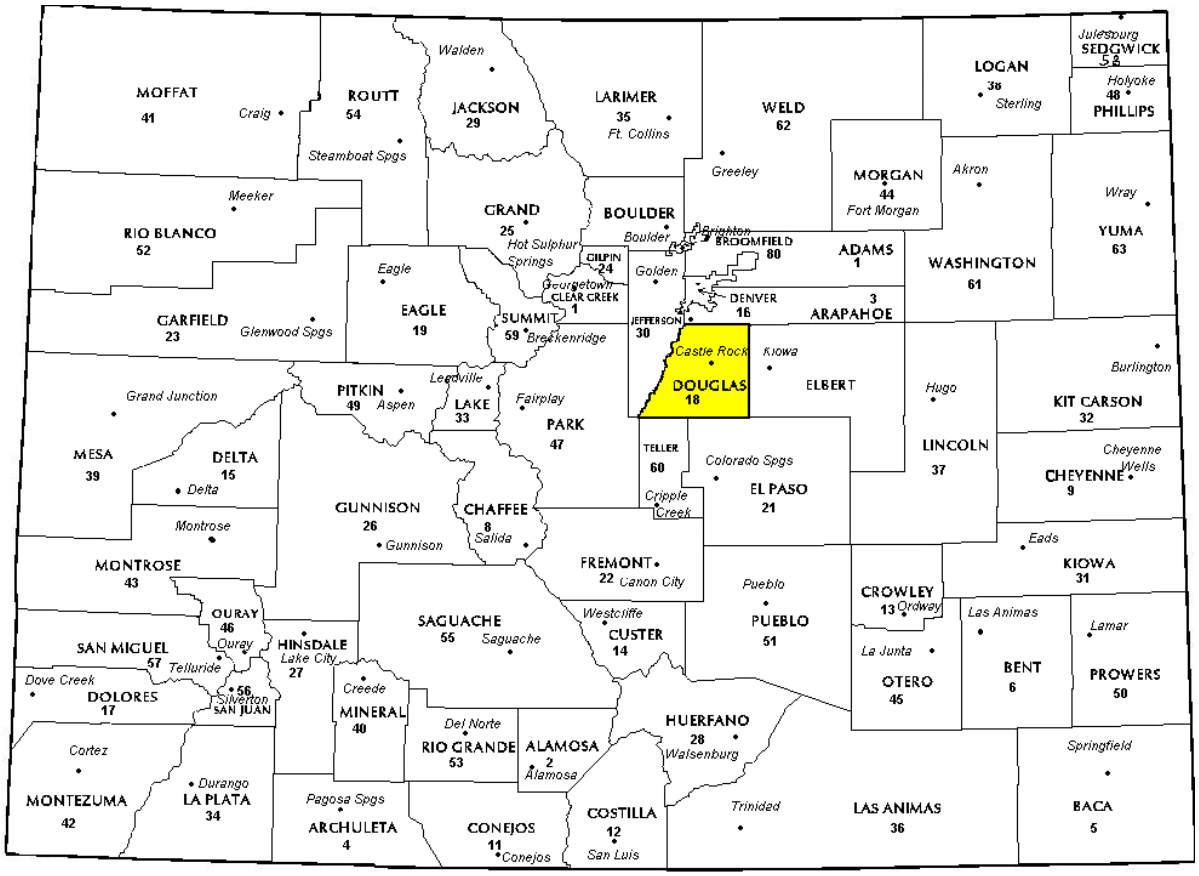
Statistical analysis is performed on vacant land, residential properties, commercial/industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax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

East West Econometrics has completed the Property Assessment Study for 2024 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	200	0.972	1.081	18	Compliant
Single Family	16,606	0.994	1.010	6.5	Compliant
Vacant Land	503	0.976	1.056	13.8	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

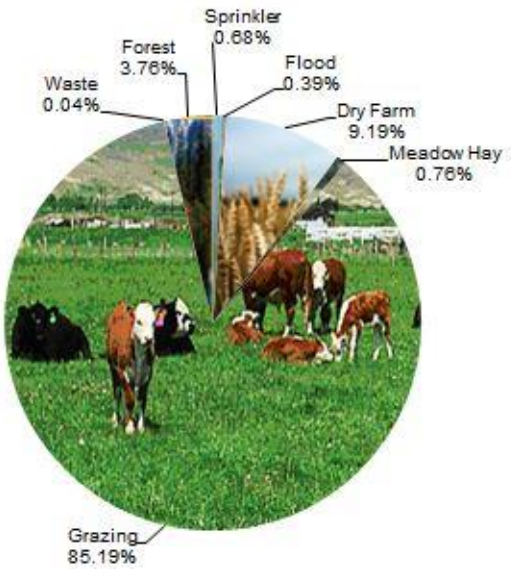
After applying the above described methodologies, it is concluded that Douglas County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

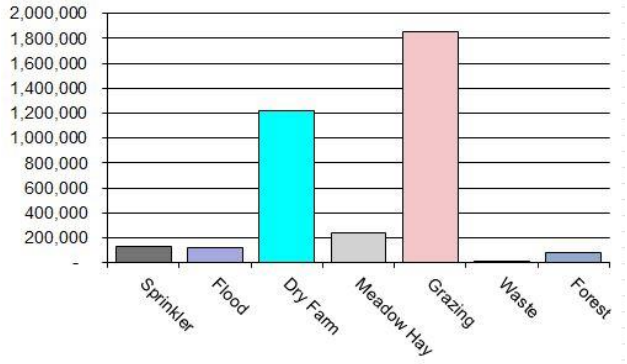
None

AGRICULTURAL LAND STUDY

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	1,216	106.17	129,106	127,395	1.01
4117	Flood	696	172.60	120,131	120,312	1.00
4127	Dry Farm	16,393	74.37	1,219,157	1,234,935	0.99
4137	Meadow Hay	1,350	179.38	242,164	242,164	1.00
4147	Grazing	151,985	12.18	1,851,747	1,851,747	1.00
4177	Forest	6,712	11.86	79,602	79,602	1.00
4167	Waste	63	2.19	138	138	1.00
Total/Avg		**178,415**	**20.41**	**3,642,046**	**3,656,294**	**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 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 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.

EWE reviewed the sales verification procedures in 2024 for Douglas County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically EWE selected 52 sales listed as unqualified.

All but 1 of the sales selected in the sample gave reasons that were clear and supportable. One sale 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 2024 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 2024 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 $52,000 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

East West Econometrics
Auditor Staff

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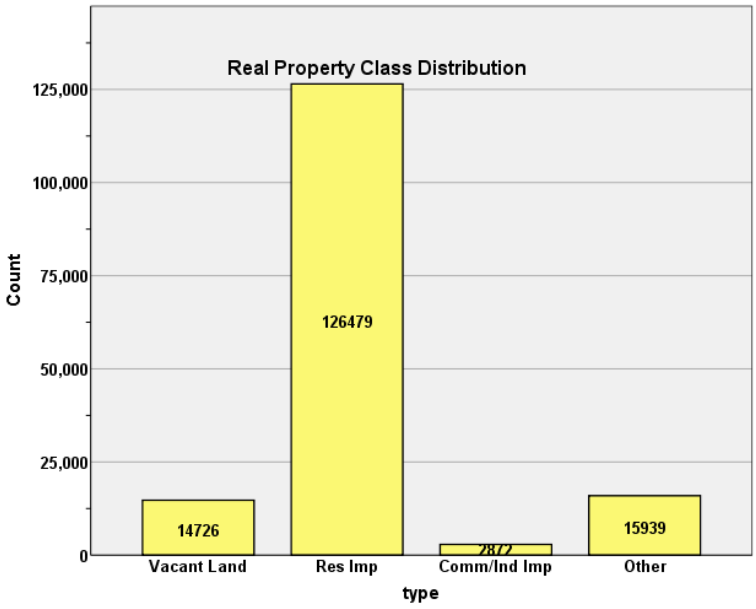
APPENDICES

STATISTICAL COMPLIANCE REPORT
FOR DOUGLAS COUNTY
2024

I. OVERVIEW

Douglas County is a metropolitan county located along Colorado's Front Range urban corridor. The county has a total of 160,016 real property parcels, according to data submitted by the county assessor's office in April 2024. 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 91.6% of all vacant land parcels.

For residential improved properties, residential properties coded 1212 accounted for 93.6% 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 2024 Colorado Property Assessment Study. Information was provided by the Douglas Assessor's Office in April 2024. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 16,606 qualified residential sales for the 18-month sale period ending June 30, 2022. The sales ratio analysis results were as follows:

Median	**0.994**
Price Related Differential	**1.010**
Coefficient of Dispersion	**6.5**

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	4945	29.8%
	2	3217	19.4%
	3	1280	7.7%
	4	5663	34.1%
	5	182	1.1%
	6	280	1.7%
	7	45	0.3%
	99	994	6.0%
Overall		16606	100.0%
Excluded		0	
Total		16606	

Ratio Statistics for currtot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.995	1.007	.063
2	.989	1.008	.065
3	.996	1.008	.066
4	.996	1.012	.065
5	.989	1.013	.109
6	.991	1.020	.102
7	1.011	1.027	.167
99	.998	1.003	.055
Overall	.994	1.010	.065

***Economic Area 99 are residential condominiums**

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.950	1.005	.055
2	.953	1.001	.055
3	.952	1.008	.063
4	.956	1.008	.056
5	.950	1.017	.098
6	.951	1.019	.086
7	.954	1.028	.134
99	.956	1.004	.050
Overall	.953	1.006	.057

Neighborhoods with 30 or more sale

Case Processing Summary

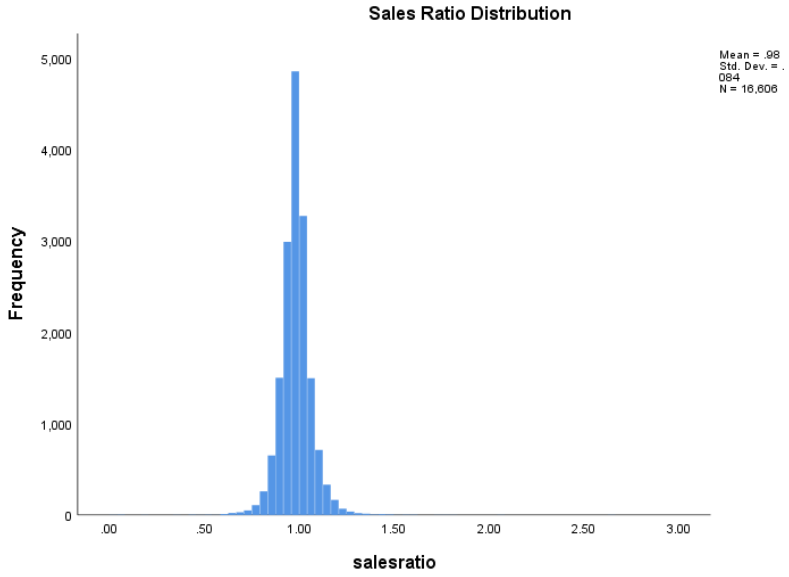
		Count	Percent
NBHD			
	13201	81	0.5%
	13202	51	0.3%
	13204	39	0.2%
	13205	45	0.3%
	1BB	81	0.5%
	1CC	1925	11.8%
	1DD	1009	6.2%
	1EE	1448	8.9%
	23201	63	0.4%
	23202	56	0.3%
	23203	107	0.7%
	23206	32	0.2%
	2AA	313	1.9%
	2BB	1131	6.9%
	2CA	97	0.6%
	2CC	1398	8.6%
	33203	66	0.4%
	3CC	67	0.4%
	3DD	1156	7.1%
	43201	34	0.2%
	43202	145	0.9%
	43204	108	0.7%
	4AA	198	1.2%
	4BB	1312	8.0%
	4CC	1100	6.7%
	4DD	1530	9.4%
	4EE	1059	6.5%
	4FF	87	0.5%
	9AA	81	0.5%
	9BB	168	1.0%
	9C1	68	0.4%
	9C2	72	0.4%
	9CC	133	0.8%
	9DD	65	0.4%
Overall		16319	100.0%
Excluded		0	
Total		16319	

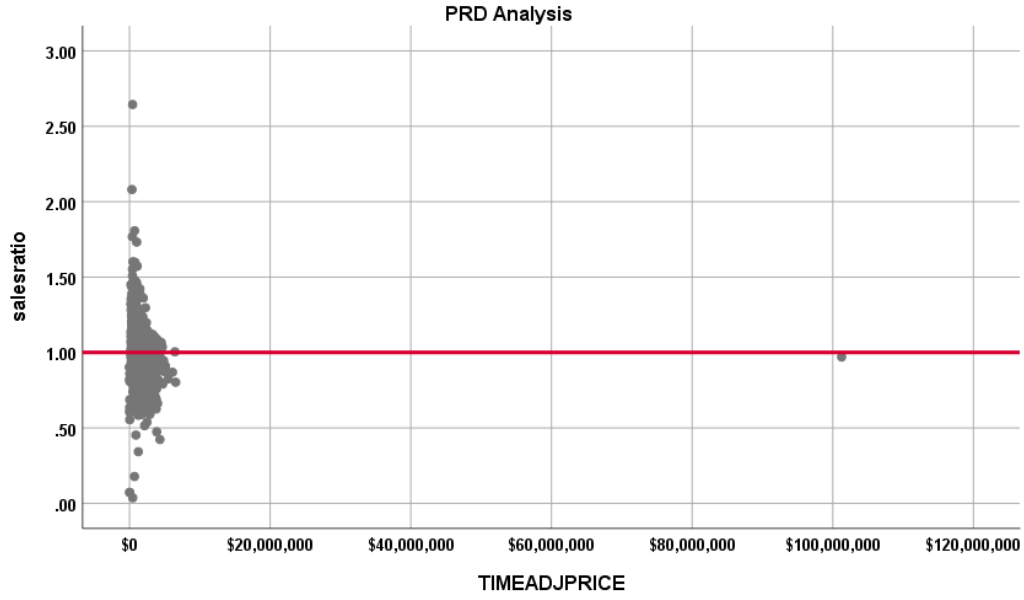
Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
13201	.986	1.004	.064
13202	1.000	1.002	.046
13204	.989	1.001	.031
13205	1.001	1.005	.047
1BB	.991	1.017	.088
1CC	.983	1.006	.056
1DD	.988	1.002	.045
1EE	.983	1.004	.055
23201	.996	1.002	.039
23202	1.001	1.003	.046
23203	.995	1.008	.054
23206	.999	1.018	.058
2AA	.981	1.009	.067
2BB	.980	1.008	.057
2CA	.991	1.007	.059
2CC	.977	1.006	.054
33203	1.000	1.002	.037
3CC	.965	1.018	.092
3DD	.991	1.007	.061
43201	.983	1.002	.040
43202	.980	1.003	.041
43204	1.000	1.002	.051
4AA	.967	1.028	.110
4BB	.997	1.014	.064
4CC	.990	1.006	.052
4DD	.993	1.008	.054
4EE	.987	1.004	.049
4FF	.967	1.014	.089
9AA	.975	1.014	.084
9BB	.977	1.018	.096
9C1	.984	1.055	.105
9C2	.974	1.019	.112
9CC	.986	1.022	.090
9DD	.989	1.014	.083
Overall	.987	1.010	.058

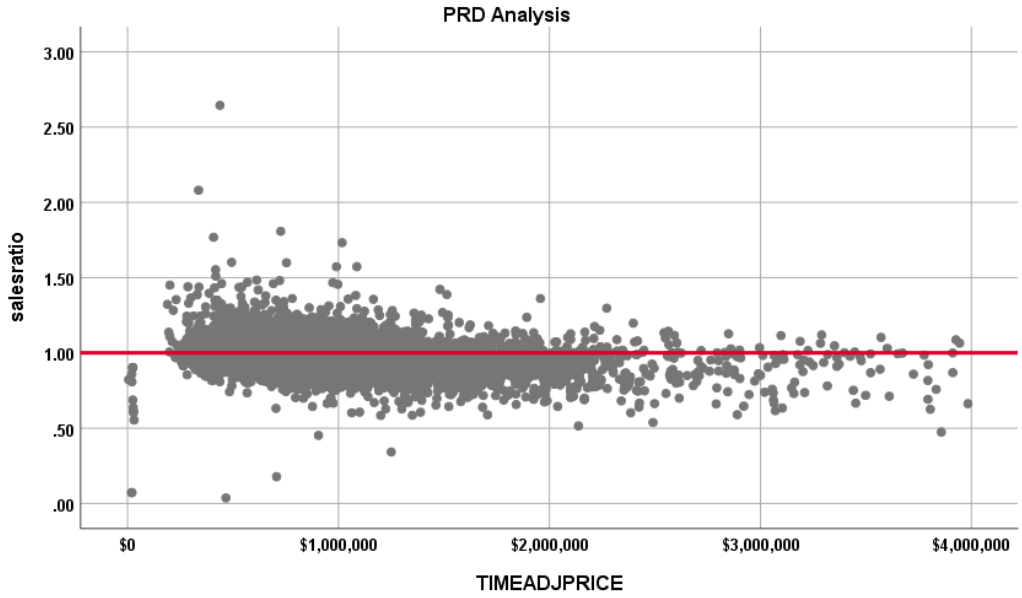
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for residential properties at the class level and at the economic area level. For neighborhoods with at least 30 sales, all neighborhoods were in compliance in terms of the median sales ratio.

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


Sales Ratio Distribution
Mean = .98
Std. Dev. = .084
N = 16,606
Frequency
5,000
4,000
3,000
2,000
1,000
0
.00
.50
1.00
1.50
2.00
2.50
3.00
salesratio


PRD Analysis
salesratio
3.00
2.50
2.00
1.50
1.00
.50
.00
$0
$20,000,000
$40,000,000
$60,000,000
$80,000,000
$100,000,000
$120,000,000
TIMEADJPRICE

ALL SALES

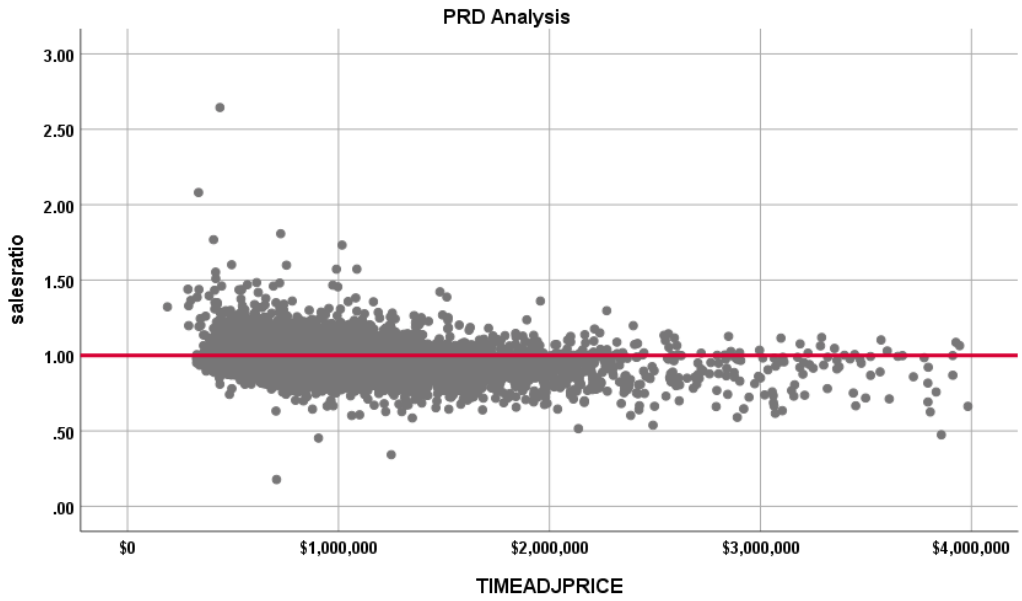


NOTE: SALES OVER $4,000,000 NOT INCLUDED FOR ILLUSTRATION

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:



1212 SALES

The Price-Related Differential (PRD) for 1212 sales is 1.010, 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		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.992	.002		568.759	.000
	CURRTOT	-.00000001002	.000	-.041	-5.131	.000

a. Dependent Variable: salesratio

The slope of the line at 0.00000001002 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	5	0.0%
	$300K to $400K	44	0.3%
	$400K to $500K	398	2.6%
	$500K to $600K	2103	13.5%
	$600K to $750K	5458	35.0%
	$750K to $1000K	4748	30.5%
	$1000K to $2000K	2508	16.1%
	Over $2000K	322	2.1%
Overall		15586	100.0%
Excluded		0	
Total		15586	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $300K	1.330	1.000	.043	6.6%
$300K to $400K	1.022	1.003	.104	20.3%
$400K to $500K	1.008	1.001	.074	14.0%
$500K to $600K	1.000	1.000	.046	6.5%
$600K to $750K	.990	1.000	.048	6.7%
$750K to $1000K	.982	1.000	.056	7.6%
$1000K to $2000K	.955	1.003	.079	10.6%
Over $2000K	.922	1.003	.108	13.7%
Overall	.987	1.010	.058	8.4%

The above table indicates no significant evidence of 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	1	(Constant)	.984	.002		458.685	.000
		SalePeriod	.000	.000	-.013	-.889	.374
2	1	(Constant)	.986	.003		357.092	.000
		SalePeriod	-.001	.000	-.065	-3.681	.000
3	1	(Constant)	.987	.004		220.608	.000
		SalePeriod	3.627E-5	.000	.002	.077	.938
4	1	(Constant)	.990	.002		486.693	.000
		SalePeriod	.000	.000	-.023	-1.759	.079
5	1	(Constant)	1.015	.018		55.660	.000
		SalePeriod	-.005	.002	-.176	-2.400	.017
6	1	(Constant)	.972	.018		54.167	.000
		SalePeriod	.000	.002	.009	.153	.879
7	1	(Constant)	.940	.068		13.861	.000
		SalePeriod	.006	.007	.141	.935	.355
99	1	(Constant)	.980	.006		174.287	.000
		SalePeriod	.001	.001	.054	1.701	.089

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 2024 median actual value per square foot between each group. The data was analyzed both as a whole and broken down by economic area and neighborhoods with at least 35 sales, as follows:

Class

Report

VALSF

sold	N	Median	Mean
UNSOLD	109081	$336	$339
SOLD	16605	$336	$343

Economic Area

Report

VALSF

ECONAREA	sold	N	Median	Mean
1.00	UNSOLD	30816	$320	$320
	SOLD	4944	$328	$331
2.00	UNSOLD	33030	$359	$368
	SOLD	3217	$370	$380
3.00	UNSOLD	5917	$330	$328
	SOLD	1280	$330	$342
4.00	UNSOLD	26683	$317	$329
	SOLD	5663	$317	$329
5.00	UNSOLD	2063	$307	$327
	SOLD	182	$355	$368
6.00	UNSOLD	3196	$359	$363
	SOLD	280	$363	$378
7.00	UNSOLD	513	$328	$345
	SOLD	45	$364	$377

Neighborhoods with 35 or more sales

Report

VALSF

NBHD	sold	N	Median	Mean
13201	UNSOLD	580	$358	$350
	SOLD	81	$368	$358
13202	UNSOLD	171	$307	$320
	SOLD	51	$295	$307
13204	UNSOLD	212	$337	$339
	SOLD	39	$335	$335
13205	UNSOLD	102	$309	$236
	SOLD	45	$316	$321
1BB	UNSOLD	137	$425	$402
	SOLD	81	$415	$417
1CC	UNSOLD	7442	$307	$290
	SOLD	1925	$316	$313
1DD	UNSOLD	8621	$308	$311
	SOLD	1009	$322	$328
1EE	UNSOLD	10417	$339	$346
	SOLD	1447	$343	$349
23201	UNSOLD	549	$331	$346
	SOLD	63	$325	$345
23202	UNSOLD	404	$338	$362
	SOLD	56	$360	$379
23203	UNSOLD	929	$391	$402
	SOLD	107	$378	$391
2AA	UNSOLD	2257	$431	$430
	SOLD	313	$423	$412
2BB	UNSOLD	12396	$347	$350
	SOLD	1131	$358	$361
2CA	UNSOLD	956	$363	$392
	SOLD	97	$365	$406
2CC	UNSOLD	15191	$366	$373
	SOLD	1398	$378	$388
33203	UNSOLD	162	$259	$207
	SOLD	66	$360	$340

3CC	UNSOLD	445	$502	$482
	SOLD	67	$499	$495
3DD	UNSOLD	5465	$331	$318
	SOLD	1156	$324	$331
43202	UNSOLD	775	$303	$303
	SOLD	145	$306	$307
43204	UNSOLD	236	$310	$316
	SOLD	108	$286	$299
4AA	UNSOLD	1404	$489	$491
	SOLD	198	$495	$503
4BB	UNSOLD	4275	$303	$306
	SOLD	1312	$320	$324
4CC	UNSOLD	4554	$304	$308
	SOLD	1100	$290	$302
4DD	UNSOLD	6301	$310	$306
	SOLD	1530	$311	$316
4EE	UNSOLD	7066	$327	$336
	SOLD	1059	$337	$343
4FF	UNSOLD	774	$347	$361
	SOLD	87	$332	$346
9AA	UNSOLD	834	$351	$371
	SOLD	81	$455	$464
9BB	UNSOLD	2273	$315	$332
	SOLD	168	$296	$319
9C1	UNSOLD	863	$268	$291
	SOLD	68	$259	$264
9C2	UNSOLD	644	$283	$301
	SOLD	72	$345	$332
9CC	UNSOLD	1566	$327	$341
	SOLD	133	$346	$375
9DD	UNSOLD	828	$361	$368
	SOLD	65	$357	$375

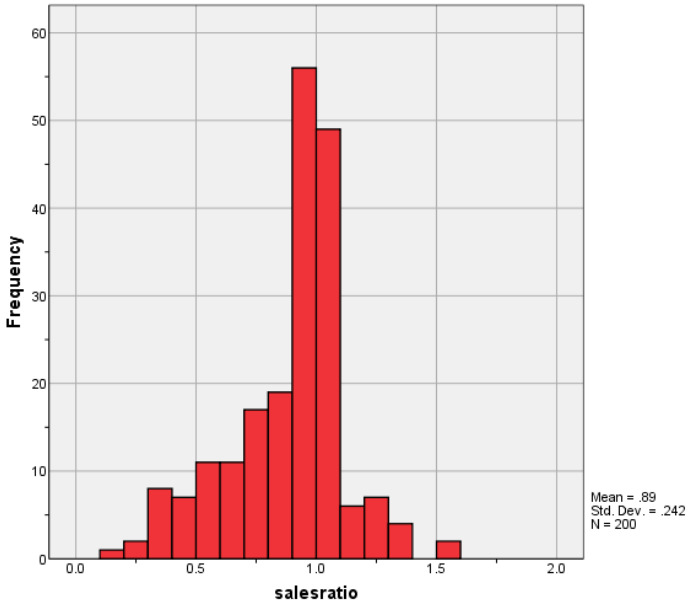
The residential neighborhoods had similar values per square foot for sold and unsold residential properties. The neighborhoods with significant differences then had their sold and unsold properties compared using the median percent change in value method, which indicated that sold and unsold residential properties were valued in a similar manner. Based on these results, we concluded that the assessor valued sold and unsold residential properties consistently in 2024.

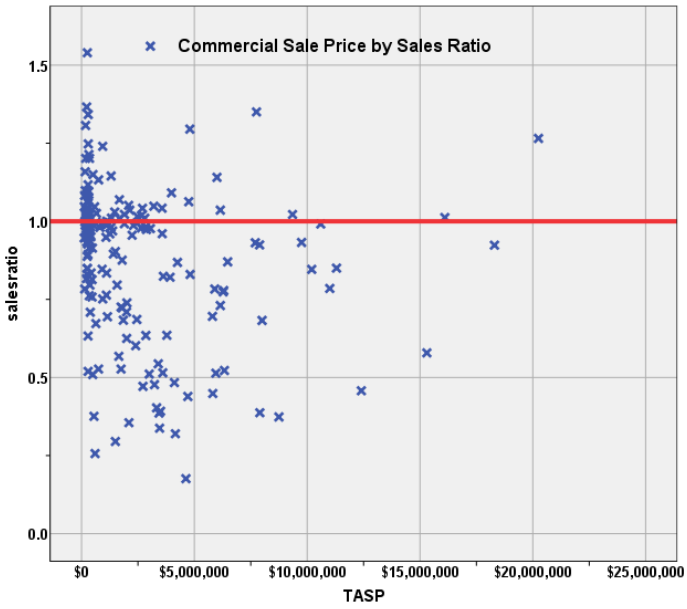
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 200 qualified commercial and industrial sales for the 24-month sale period ending June 30, 2022. The sales ratio analysis results were as follows:

Median	**0.972**
Price Related Differential	**1.081**
Coefficient of Dispersion	**18.0**

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:





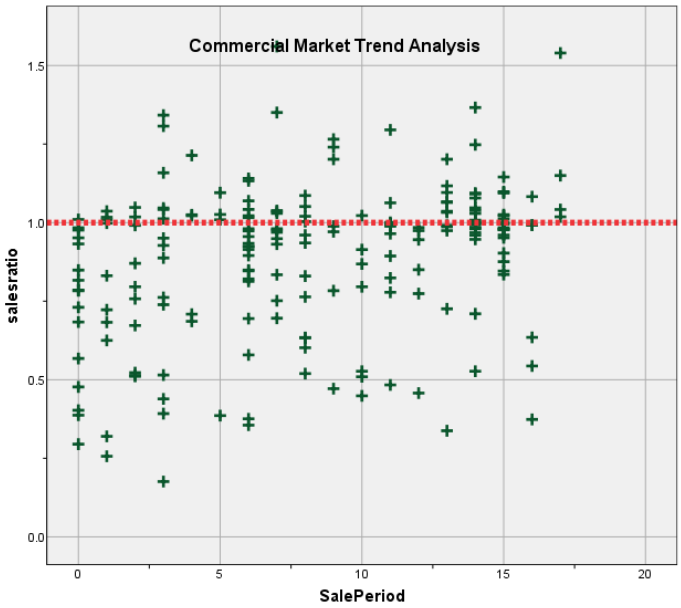
Commercial/Industrial Market Trend Analysis

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

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.776	.031		25.085	.000
	SalePeriod	.014	.003	.295	4.352	.000

a. Dependent Variable: salesratio



While there was residual market trending present in the commercial/industrial sale ratios, when stratified, there was no residential market trending for major commercial subclasses. 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	2507	1.21	1.27
SOLD	198	1.19	1.31

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DIFF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.587	Retain the null hypothesis.

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

Report
DIFF

ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD	491	1.16	1.20
	SOLD	37	1.24	1.36
2215.00	UNSOLD	23	1.43	1.46
	SOLD	3	1.40	1.39
2220.00	UNSOLD	207	1.13	1.18
	SOLD	20	1.32	1.64
2225.00	UNSOLD	65	1.32	1.40
	SOLD	1	1.11	1.11
2230.00	UNSOLD	566	1.21	1.24
	SOLD	17	1.26	1.28
2235.00	UNSOLD	125	1.39	1.51
	SOLD	4	1.30	1.29
2245.00	UNSOLD	198	1.11	1.22
	SOLD	15	1.11	1.18
3212.00	UNSOLD	176	1.35	1.41
	SOLD	14	1.43	1.45
3230.00	UNSOLD	368	1.19	1.28
	SOLD	77	1.19	1.17

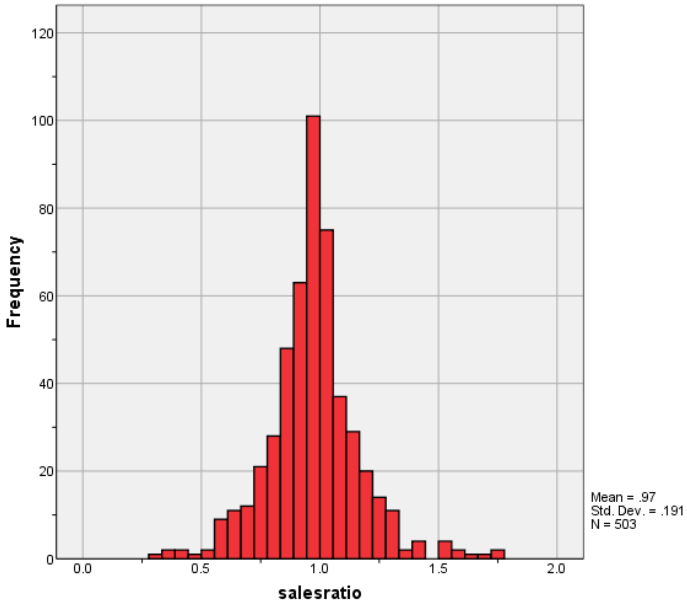
The above comparison analyses indicate that there is no consistent pattern of sold properties being valued more than unsold properties.

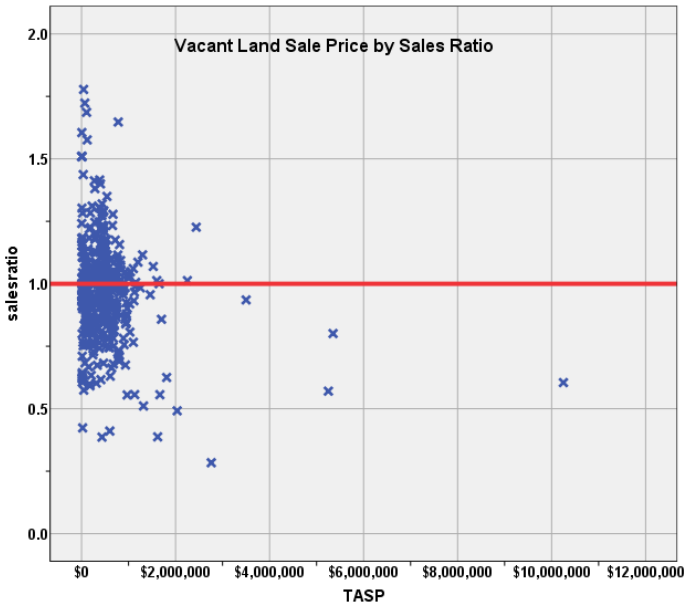
V. VACANT LAND SALE RESULTS

There were 514 qualified vacant land sales for the 18-month sale period ending June 30, 2020. 11 sales were trimmed using IAAO standards, resulting in a final total of 503 vacant land sales. The sales ratio analysis results were as follows:

Median	**0.976**
Price Related Differential	**1.056**
Coefficient of Dispersion	**13.8**

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.

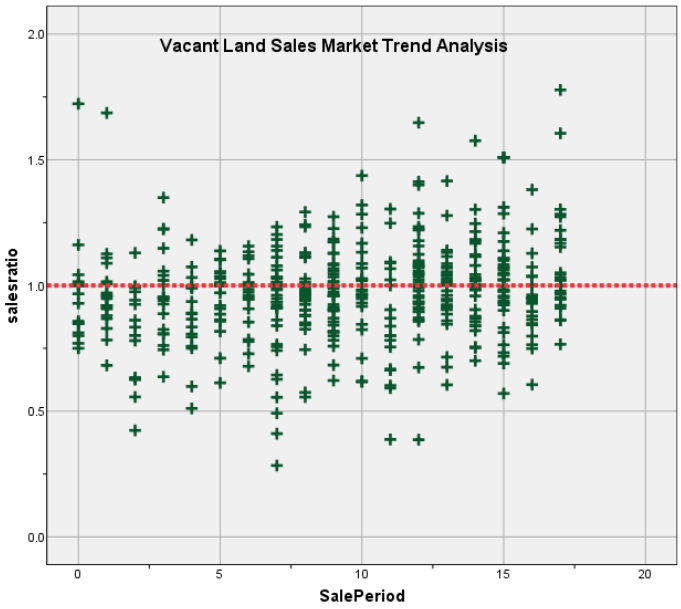
Vacant Land Market Trend Analysis

We next analyzed the vacant land dataset using the 18-month sale period, with the following results:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.905	.019		48.853	.000
	SalePeriod	.007	.002	.180	4.087	.000

a. Dependent Variable: salesratio



The above analysis indicated that there was a marginal though significant market trending present in the vacant land sale data. We stratified the vacant land sale data by neighborhood and found that Economic Areas 3 and 6 had significant trends while the other economic areas did not. We have contacted the assessor's office for clarifications, although the assessor did account for most of the market trending for vacant land over the 18 month sale period.

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 the previous base year and the current base year between each group, as follows:

Report

DIFF

sold	N	Median	Mean
UNSOLD	7248	1.39	1.39
SOLD	480	1.50	1.54

Based on the above difference, we next compared sold and unsold vacant land properties stratified by subdivisions with at least 6 sales:

Report
DIFF

SUBDIVNO	sold	N	Median	Mean
51	UNSOLD	557	1.37	1.42
	SOLD	7	1.63	1.69
44700	UNSOLD	6	1.37	1.37
	SOLD	6	1.23	1.25
123177	UNSOLD	28	1.73	1.53
	SOLD	6	1.72	1.60
124558	UNSOLD	34	2.10	2.12
	SOLD	6	2.36	2.34
134957	UNSOLD	311	1.79	1.80
	SOLD	22	1.79	1.78
136477	UNSOLD	72	1.98	1.93
	SOLD	15	1.98	1.98
139865	UNSOLD	60	1.95	1.92
	SOLD	10	1.95	1.98
144862	UNSOLD	323	1.07	1.07
	SOLD	38	1.07	1.07
164775	UNSOLD	13	1.52	1.67
	SOLD	8	1.77	1.77
2003034870	UNSOLD	4	1.37	1.40
	SOLD	9	1.32	1.40
2005004587	UNSOLD	1	1.16	1.16
	SOLD	15	1.16	1.16
2005122094	UNSOLD	16	1.15	1.15
	SOLD	24	1.16	1.20
2006007568	UNSOLD	4	1.60	1.59
	SOLD	9	1.38	1.46
2006078510	UNSOLD	3	1.34	1.36
	SOLD	40	1.77	1.63
2008050535	UNSOLD	1	1.50	1.50
	SOLD	6	1.37	1.41
2009012245	UNSOLD	1	1.00	1.00
	SOLD	8	1.72	1.74
2016045809	UNSOLD	5	1.59	1.51
	SOLD	6	1.49	1.47
2020011759	UNSOLD	16	1.50	1.50
	SOLD	17	1.50	1.53
2021116937	UNSOLD	10	1.38	1.38
	SOLD	8	1.38	1.39

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

V. CONCLUSIONS

Based on this 2024 audit statistical analysis, residential, commercial/industrial and vacant land properties were found to be in compliance with state guidelines.

STATISTICAL ABSTRACT

Residential

Ratio Statistics for currtot / TASP

ECONAREA	Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
		Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
1	.997	.995	.999	.995	.992	.997	95.0%	.990	.987	.993	1.007	.063	8.5%
2	.990	.987	.993	.989	.985	.992	95.2%	.982	.978	.986	1.008	.065	9.2%
3	.995	.990	1.000	.996	.990	1.000	95.3%	.987	.980	.994	1.008	.066	9.0%
4	.998	.995	1.000	.996	.993	.998	95.1%	.986	.983	.989	1.012	.065	8.8%
5	.992	.970	1.014	.989	.960	1.007	95.5%	.979	.956	1.002	1.013	.109	15.4%
6	.995	.979	1.011	.991	.968	1.001	95.2%	.975	.958	.993	1.020	.102	13.5%
7	1.039	.973	1.106	1.011	.913	1.119	96.4%	1.012	.939	1.085	1.027	.167	21.2%
99	.994	.988	1.000	.998	.993	1.001	95.4%	.991	.984	.998	1.003	.055	9.3%

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

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
.890	.857	.924	.972	.935	.984	96.0%	.824	.758	.890	1.081	.180	27.2%

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

Vacant Land

Ratio Statistics for CURRLND / TASP

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
.973	.956	.990	.976	.959	.993	95.0%	.921	.881	.961	1.056	.138	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.

Residential Median Ratio Stratification

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	.00	1	0.0%
	1212.00	15596	93.9%
	1215.00	1	0.0%
	1216.00	1	0.0%
	1220.00	1	0.0%
	1225.00	1	0.0%
	1230.00	994	6.0%
	1712.00	1	0.0%
	1885.67	1	0.0%
	2745.50	1	0.0%
	3335.77	1	0.0%
	4277.00	2	0.0%
	4278.00	1	0.0%
	4278.50	1	0.0%
	9250.00	2	0.0%
	9270.00	1	0.0%
Overall		16606	100.0%
Excluded		0	
Total		16606	

Ratio Statistics for currtot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.928	1.000	.000	.
1212.00	.994	1.009	.066	9.1%
1215.00	.923	1.000	.000	.
1216.00	.585	1.000	.000	.
1220.00	1.052	1.000	.000	.
1225.00	.971	1.000	.000	.
1230.00	.998	1.003	.055	9.2%
1712.00	.759	1.000	.000	.
1885.67	1.005	1.000	.000	.
2745.50	1.050	1.000	.000	.
3335.77	.423	1.000	.000	.
4277.00	.987	1.065	.319	45.0%
4278.00	.707	1.000	.000	.
4278.50	.895	1.000	.000	.
9250.00	1.097	1.009	.036	5.1%
9270.00	.938	1.000	.000	.
Overall	.994	1.010	.065	9.1%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	0	1	0.0%
	Over 100	8	0.0%
	75 to 100	14	0.1%
	50 to 75	71	0.4%
	25 to 50	2985	18.0%
	5 to 25	6960	41.9%
	5 or Newer	6567	39.5%
Overall		16606	100.0%
Excluded		0	
Total		16606	

Ratio Statistics for currtot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.928	1.000	.000	.
Over 100	1.006	1.040	.178	23.3%
75 to 100	.973	1.019	.138	17.4%
50 to 75	.967	1.038	.130	18.3%
25 to 50	.990	1.010	.071	10.3%
5 to 25	.990	1.008	.062	8.7%
5 or Newer	1.000	1.011	.065	8.7%
Overall	.994	1.010	.065	9.1%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	0	1	0.0%
	LE 500 sf	17	0.1%
	500 to 1,000 sf	247	1.5%
	1,000 to 1,500 sf	2076	12.5%
	1,500 to 2,000 sf	4318	26.0%
	2,000 to 3,000 sf	6495	39.1%
	3,000 sf or Higher	3452	20.8%
Overall		16606	100.0%
Excluded		0	
Total		16606	

Ratio Statistics for currtot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.928	1.000	.000	.
LE 500 sf	.809	1.165	.292	43.5%
500 to 1,000 sf	.993	1.008	.058	8.6%
1,000 to 1,500 sf	.988	1.005	.053	7.3%
1,500 to 2,000 sf	.993	1.005	.056	7.6%
2,000 to 3,000 sf	.995	1.008	.064	8.7%
3,000 sf or Higher	1.000	1.017	.085	11.5%
Overall	.994	1.010	.065	9.1%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY		1	0.0%
	1	5	0.0%
	2	32	0.2%
	3	12313	74.1%
	4	3238	19.5%
	5	867	5.2%
	6	150	0.9%
Overall		16606	100.0%
Excluded		0	
Total		16606	

Ratio Statistics for currtot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.928	1.000	.000	.
1	1.006	1.028	.103	15.5%
2	1.014	1.041	.110	15.7%
3	.993	1.005	.058	8.1%
4	.999	1.012	.078	10.5%
5	.989	1.016	.100	13.6%
6	.972	1.016	.115	15.2%
Overall	.994	1.010	.065	9.1%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION		1	0.0%
	1	12	0.1%
	3	7658	46.1%
	4	8931	53.8%
	5	4	0.0%
Overall		16606	100.0%
Excluded		0	
Total		16606	

Ratio Statistics for currtot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.928	1.000	.000	.
1	1.031	1.102	.181	23.9%
3	1.000	1.010	.068	9.4%
4	.988	1.009	.063	8.8%
5	.976	.997	.044	6.2%
Overall	.994	1.010	.065	9.1%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$100K to $150K	5	2.5%
	$150K to $200K	8	4.0%
	$200K to $300K	43	21.5%
	$300K to $500K	28	14.0%
	$500K to $750K	8	4.0%
	$750K to $1,000K	8	4.0%
	Over $1,000K	100	50.0%
Overall		200	100.0%
Excluded		0	
Total		200	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$100K to $150K	.998	1.003	.080	12.1%
$150K to $200K	1.070	1.000	.083	11.1%
$200K to $300K	.999	1.000	.104	16.8%
$300K to $500K	.975	1.015	.102	15.4%
$500K to $750K	.829	1.016	.358	42.3%
$750K to $1,000K	.994	1.003	.100	15.2%
Over $1,000K	.859	.993	.249	31.1%
Overall	.972	1.081	.180	26.3%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1225.00	1	0.5%
	1720.00	1	0.5%
	1722.25	1	0.5%
	2212.00	38	19.0%
	2215.00	3	1.5%
	2220.00	20	10.0%
	2221.00	1	0.5%
	2225.00	1	0.5%
	2230.00	17	8.5%
	2233.33	1	0.5%
	2235.00	5	2.5%
	2245.00	15	7.5%
	3212.00	14	7.0%
	3214.00	1	0.5%
	3215.00	3	1.5%
	3230.00	77	38.5%
	9259.00	1	0.5%
Overall		200	100.0%
Excluded		0	
Total		200	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1225.00	1.022	1.000	.000	.
1720.00	1.036	1.000	.000	.
1722.25	.484	1.000	.000	.
2212.00	.838	1.043	.261	32.9%
2215.00	.932	1.106	.278	49.0%
2220.00	.988	1.007	.166	26.9%
2221.00	.796	1.000	.000	.
2225.00	.386	1.000	.000	.
2230.00	.710	.896	.359	41.8%
2233.33	.458	1.000	.000	.
2235.00	.726	1.100	.134	20.4%
2245.00	.989	1.070	.122	17.8%

3212.00	.887	.943	.198	27.6%
3214.00	.960	1.000	.000	.
3215.00	.602	.803	.465	88.6%
3230.00	.995	1.013	.093	14.5%
9259.00	1.295	1.000	.000	.
Overall	.972	1.081	.180	26.3%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	2	1.0%
	75 to 100	4	2.0%
	50 to 75	5	2.5%
	25 to 50	25	12.5%
	5 to 25	72	36.0%
	5 or Newer	92	46.0%
Overall		200	100.0%
Excluded		0	
Total		200	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.639	.981	.176	24.8%
75 to 100	.792	1.006	.286	40.0%
50 to 75	.376	1.125	.517	91.4%
25 to 50	.949	1.032	.183	25.6%
5 to 25	.962	1.018	.195	28.1%
5 or Newer	.987	1.224	.139	21.5%
Overall	.972	1.081	.180	26.3%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	2	1.0%
	500 to 1,000 sf	24	12.0%
	1,000 to 1,500 sf	46	23.0%
	1,500 to 2,000 sf	15	7.5%
	2,000 to 3,000 sf	18	9.0%
	3,000 sf or Higher	95	47.5%
Overall		200	100.0%
Excluded		0	
Total		200	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.865	1.009	.094	13.4%
500 to 1,000 sf	.997	1.025	.108	16.8%
1,000 to 1,500 sf	.994	1.047	.133	20.6%
1,500 to 2,000 sf	.998	1.024	.065	9.4%
2,000 to 3,000 sf	.840	1.095	.251	32.3%
3,000 sf or Higher	.895	1.007	.236	30.3%
Overall	.972	1.081	.180	26.3%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	1	2	1.0%
	2	1	0.5%
	3	122	61.0%
	4	75	37.5%
Overall		200	100.0%
Excluded		0	
Total		200	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1	.761	1.146	.328	46.4%
2	.602	1.000	.000	.
3	.948	1.099	.202	28.4%
4	.989	1.061	.141	21.0%
Overall	.972	1.081	.180	26.3%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	3	73	36.5%
	4	127	63.5%
Overall		200	100.0%
Excluded		0	
Total		200	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
3	.876	.966	.258	32.2%
4	.982	1.164	.144	21.8%
Overall	.972	1.081	.180	26.3%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	52	10.3%
	$25K to $50K	11	2.2%
	$50K to $100K	44	8.7%
	$100K to $150K	20	4.0%
	$150K to $200K	18	3.6%
	$200K to $300K	39	7.8%
	$300K to $500K	143	28.4%
	$500K to $750K	106	21.1%
	$750K to $1,000K	40	8.0%
	Over $1,000K	30	6.0%
Overall		503	100.0%
Excluded		0	
Total		503	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	.968	1.053	.182	26.2%
$25K to $50K	.993	1.006	.262	36.2%
$50K to $100K	.958	1.003	.107	16.4%
$100K to $150K	.906	.998	.156	28.3%
$150K to $200K	.944	.998	.160	21.5%
$200K to $300K	1.001	.990	.153	19.1%
$300K to $500K	1.000	.997	.117	15.9%
$500K to $750K	.964	1.003	.105	14.3%
$750K to $1,000K	.966	1.003	.135	19.2%
Over $1,000K	.934	1.079	.207	28.1%
Overall	.976	1.056	.138	19.6%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100.00	254	50.5%
	200.00	13	2.6%
	300.00	3	0.6%
	510.00	2	0.4%
	540.00	2	0.4%
	550.00	1	0.2%
	1112.00	202	40.2%
	1125.00	4	0.8%
	2112.00	6	1.2%
	2130.00	13	2.6%
	3112.00	1	0.2%
	9130.00	1	0.2%
	9159.00	1	0.2%
Overall		503	100.0%
Excluded		0	
Total		503	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	.965	1.025	.139	20.4%
200.00	1.013	.980	.052	7.8%
300.00	.555	1.440	.348	52.2%
510.00	1.086	1.017	.143	20.3%
540.00	.963	.996	.039	5.5%
550.00	.674	1.000	.000	.
1112.00	.973	1.033	.137	17.9%
1125.00	.703	1.058	.200	24.8%
2112.00	1.062	1.009	.073	10.3%
2130.00	1.013	1.004	.115	21.5%
3112.00	.845	1.000	.000	.
9130.00	1.648	1.000	.000	.
9159.00	1.013	1.000	.000	.
Overall	.976	1.056	.138	19.6%