2024
MESA 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

TABLE OF CONTENTS

Introduction 3
Regional/Historical Sketch of Mesa County 4
Ratio Analysis 6
Time Trending Verification 8
Sold/Unsold Analysis 9
Agricultural Land Study 11
Agricultural Land 11
Agricultural Outbuildings 12
Agricultural Land Under Improvements 13
Sales Verification 14
Economic Area Review and Evaluation 16
Natural Resources 17
Earth and Stone Products 17
Producing Oil and Gas 17
Vacant Land 18
Possessory Interest Properties 19
Personal Property Audit 20
East West Econometrics 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.

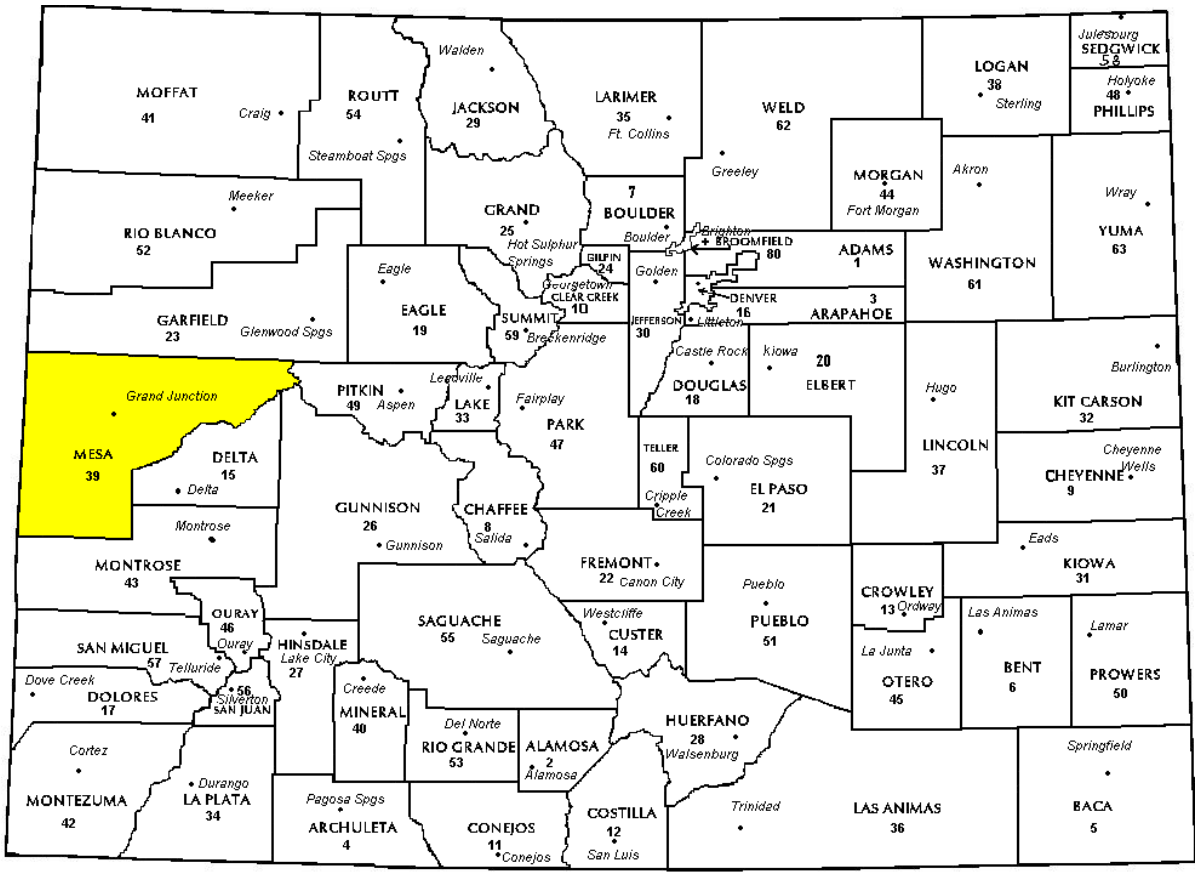
Statistical analysis is performed on vacant land, residential properties, commercial/industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax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

East West Econometrics has completed the Property Assessment Study for 2024 and is pleased to report its findings for Mesa County in the following report.

Regional / Historical Sketch of Mesa County

Regional Information

Mesa County is located in the Western Slope region of Colorado. The Western Slope of Colorado refers to the region west of the Rocky Mountains. It includes Archuleta, Delta, Dolores, Eagle, Garfield, Grand, Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel, and Summit counties.



Historical Information

Mesa County has approximately 3,329 square miles and an estimated population of approximately 154,210 people, according to the U.S. Census Bureau's 2020 estimated census data. This represents a 5.1 percent change from April 1, 2010 to July 1, 2019.

The County, formed from a portion of Gunnison County, was established in 1883 with an area of 3,301 square miles. Its name is Spanish for 'table' and refers to the tablelands and plateaus prevalent in the county. The county seat is Grand Junction, so named for its location at the junction of the Gunnison and Grand (later Colorado) rivers. The Grand Mesa National Forest encompasses the Grand Mesa, which is one of the world's largest flattop mountains and has an average elevation of 10,000 feet, dotted with over 300 alpine lakes and reservoirs. The Uncompahgre National Forest includes the Uncompahgre Plateau, portions of the San Juan Mountains and three wilderness areas.

Grand Junction which sits near the mid-point of a 30-mile arcing valley, known as the Grand Valley, is a major fruit-growing region, historically home to the Ute people and settled by white farmers in the 1880s. In recent years, several wineries have been established in the area as well. The Colorado National Monument, a series of canyons and mesas similar to the Grand Canyon, overlooks the city, while most of the area is surrounded by public lands managed by the Bureau of Land Management.

Grand Junction has a strong history that dates back more than 100 years. In the 1880s, the area was part of the Northern Ute Reservation, although the Native Americans were later moved west into Utah. In September 1881, the area experienced a land rush settlement and a town site was staked. This town, located in the Grand Valley, was first called Ute, then West Denver and finally came to be known as Grand Junction.

By 1883, Mesa County was created from neighboring counties and Grand Junction was named the county seat. Grand Junction began to thrive when the main line of the Denver and Rio Grande Railroad came into the area in 1887. Soon after, major irrigation turned the Grand Valley into a fertile agricultural area.
(www.rootsweb.com,www.gjchamber.org, 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 Mesa County are:

Mesa County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	216	0.978	1.001	8.6	Compliant
Single Family	5,872	0.983	1.010	7.9	Compliant
Vacant Land	658	0.984	1.036	12.8	Compliant

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

Mesa 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

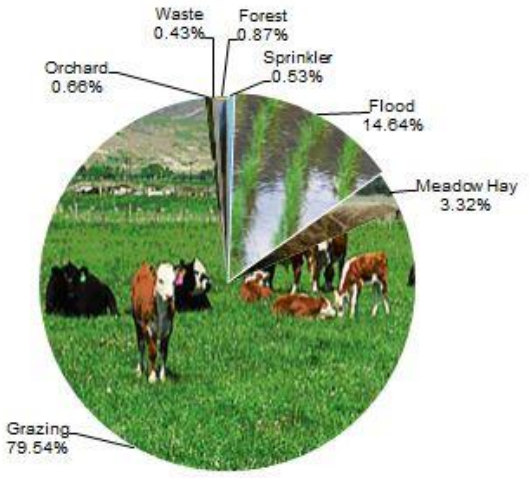
After applying the above described methodologies, it is concluded that Mesa County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

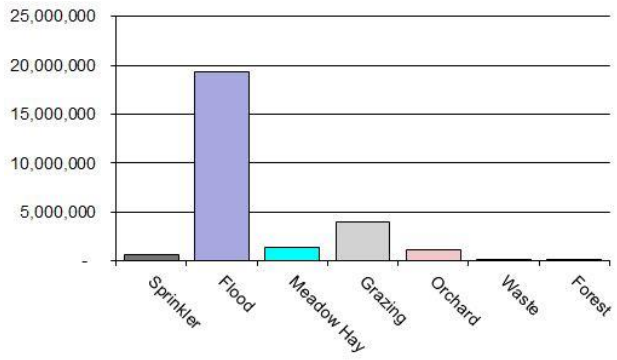
None

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:

Mesa 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	2,267	256.92	582,430	584,359	1.00
4117	Flood	62,737	308.53	19,356,150	19,446,969	1.00
4137	Meadow Hay	14,245	97.46	1,388,383	1,388,383	0.99
4147	Grazing	340,779	11.66	3,972,610	3,972,144	1.00
4157	Orchard	2,826	410.51	1,160,090	1,160,090	1.00
4177	Forest	3,741	5.87	21,970	21,923	1.00
4167	Waste	1,858	2.19	4,066	4,066	1.00
Total/Avg		**428,453**	**61.82**	**26,485,698**	**26,577,933**	**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

Mesa 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

Mesa County has used the following methods to discover land under a residential improvement on a farm or ranch that is determined to be not integral under 39-1-102, C.R.S.:

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

Mesa 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
- Field Inspections
- Phone Interviews
- In-Person Interviews with Owners/Tenants
- Written Correspondence other than Questionnaire
- Aerial Photography/Pictometry

Mesa 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 Mesa County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically EWE selected 55 sales listed as unqualified.

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

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

> The contractor has examined the manner in which sales have been classified as qualified or unqualified, including a listing of each step in the sales verification process, any adjustment procedures, and the county official responsible for making the final decision on qualification.
>
> 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

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

Recommendations

None

Economic Area Review and Evaluation

Methodology

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

Producing Oil and Gas

Methodology

Assessors Reference Library (ARL) Volume 3, Chapter 6: Valuation of Natural Resources

STATUTORY REFERENCES
Section § 39-1-103, C.R.S., specifies that producing oil or gas leaseholds and lands are valued according to article 7 of title 39, C.R.S.
Actual value determined - when.
(2) The valuation for assessment of leaseholds and lands producing oil or gas shall be determined as provided in article 7 of this title.
§ 39-1-103, C.R.S.
Article 7 covers the listing, valuation, and assessment of producing oil and gas leaseholds and lands.

Valuation:
Valuation for assessment.
(1) Except as provided in subsection (2) of this section, on the basis of the information contained in such statement, the assessor shall value such oil and gas leaseholds and lands for assessment, as real property, at an amount equal to eighty-seven and one-half percent of:
(a) The selling price of the oil or gas sold there from during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year;
(b) The selling price of oil or gas sold in the same field area for oil or gas transported from the premises which is not sold during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year.
§ 39-7-102, C.R.S.

Conclusions

The county applied approved appraisal procedures in the valuation of oil and gas.

Recommendations

None

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2024 in Mesa 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

Mesa 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.

Mesa County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural, commercial and ski area 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

Mesa 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

Mesa 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.

Mesa 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
- Chamber of Commerce/Economic Development Contacts
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth
- Questionnaires, Letters and/or Phone Calls to Buyer, Seller and/or Realtor

The county uses the Division of Property Taxation (DPT) recommended classification and documentation procedures. The DPT's recommended cost factor tables, depreciation tables and level of value adjustment factor tables are also used.

Mesa 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
- Accounts protested with substantial disagreement

Mesa County's median ratio is 1.04. 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

Mesa 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

Harry J. Fuller, *Audit Project Manager*

Suzanne Howard, *Audit Administrative Manager*

Steve Kane, *Audit Statistician*

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

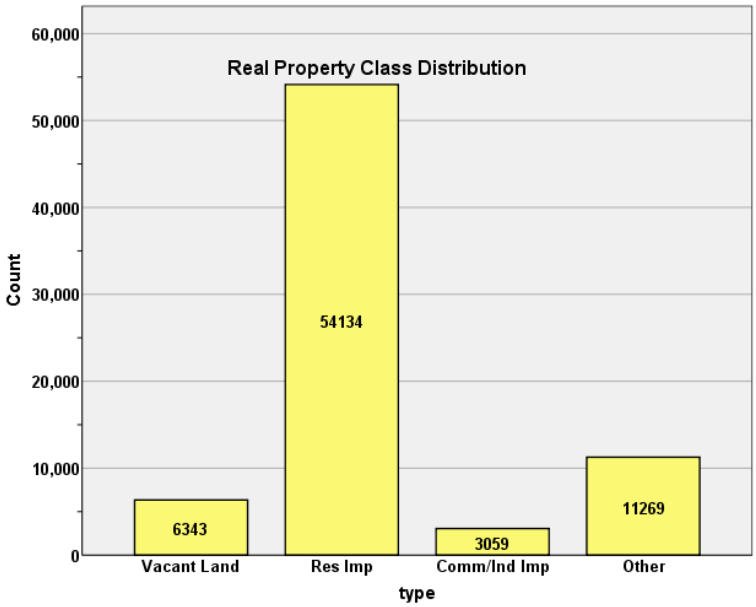
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE REPORT
FOR MESA COUNTY
2024

I. OVERVIEW

Mesa County is an urban county located along Colorado's western slope. The county has a total of 74,805 real property parcels, according to data submitted by the county assessor's office in 2024. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential and commercial lots. These land subclasses (coded 100, 200 and 1112) accounted for 58.9% of all vacant land parcels.

For residential improved properties, single family properties accounted for 93.3% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 4.2% of all such properties in this county.

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

II. DATA FILES

The following sales analyses were based on the requirements of the 2024 Colorado Property Assessment Study. Information was provided by the Mesa 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 5,872 qualified residential sales over the 18 month sale period ending June 30, 2022. The sales ratio analysis results were as follows:

Median	**0.983**
Price Related Differential	**1.010**
Coefficient of Dispersion	**7.9**

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

Economic Area

Case Processing Summary

		Count	Percent
ECONAREA	10	145	2.5%
	12	322	5.5%
	15	883	15.0%
	19	752	12.8%
	22	935	15.9%
	25	148	2.5%
	27	765	13.0%
	29	576	9.8%
	30	938	16.0%
	31	162	2.8%
	99	246	4.2%
Overall		5872	100.0%
Excluded		0	
Total		5872	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
10	.971	1.019	.130
12	.974	1.026	.093
15	.984	1.016	.064
19	.989	1.007	.079
22	.988	1.004	.068
25	.978	1.010	.067
27	.978	1.004	.081
29	.981	1.008	.085
30	.983	1.001	.066
31	.973	1.016	.152
99	.996	1.011	.099
Overall	.983	1.010	.079

Economic Area 99.00 represents condominium sales for this county. All residential economic areas were within the median sales ratio compliance range of 0.95 to 1.05.

Neighborhoods with 25 or more sale

Case Processing Summary

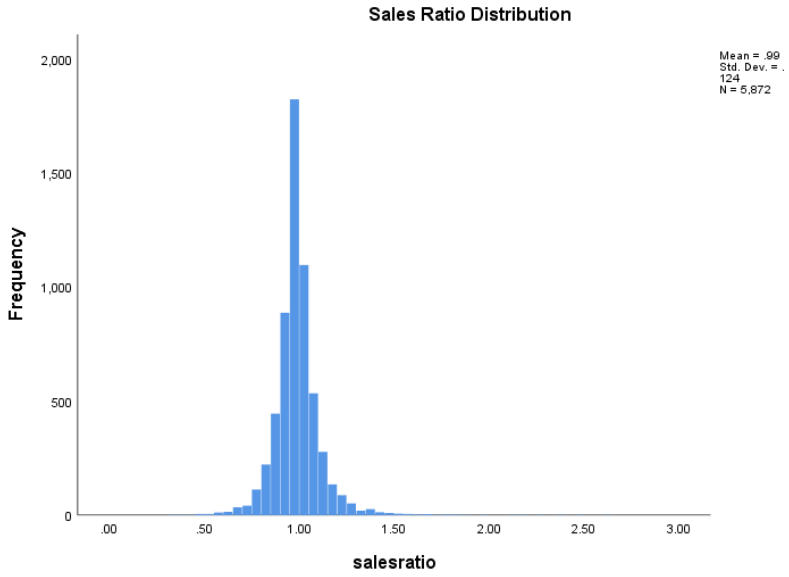
		Count	Percent
NBHD		246	26.1%
	10.01	35	3.7%
	10.06	29	3.1%
	13.66	31	3.3%
	14.28	32	3.4%
	15.88	48	5.1%
	16.29	44	4.7%
	18.55999999	36	3.8%
	180.25	25	2.7%
	19.89999999	25	2.7%
	21.11	36	3.8%
	21.14	27	2.9%
	21.61	46	4.9%
	21.94	32	3.4%
	210.18	29	3.1%
	23.5	37	3.9%
	26.41	30	3.2%
	26.7	28	3.0%
	26.71	28	3.0%
	270.07	38	4.0%
	300.08	26	2.8%
	300.11	35	3.7%
Overall		943	100.0%
Excluded		0	
Total		943	

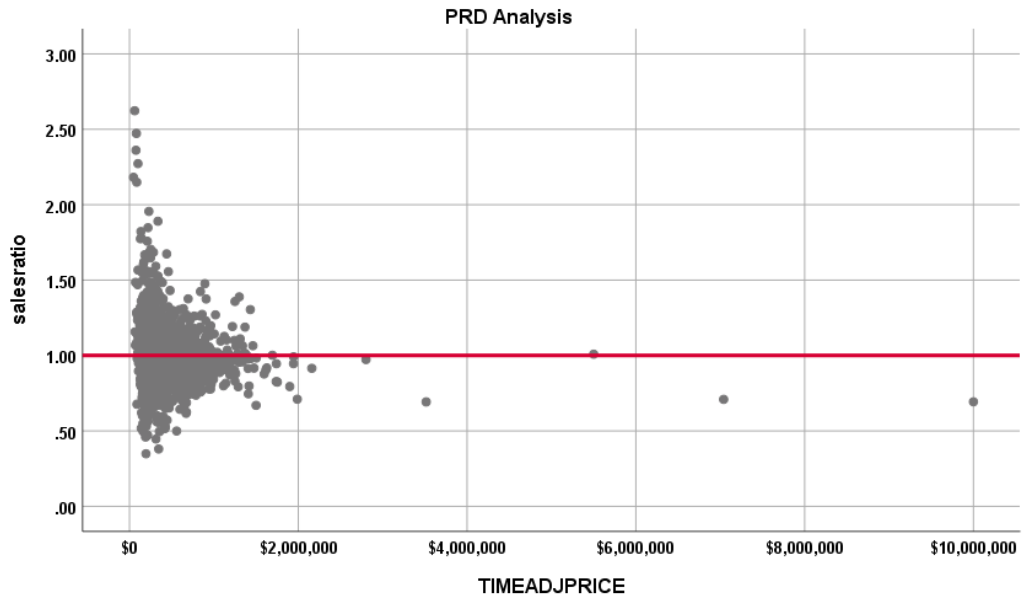
Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
	.996	1.011	.099
10.01	.971	1.020	.112
10.06	.990	1.029	.152
13.66	1.025	1.002	.040
14.28	.985	1.008	.082
15.88	.995	1.002	.047
16.29	.978	1.006	.077
18.55999999	.991	1.010	.102
180.25	1.029	1.002	.050
19.89999999	.986	1.001	.050
21.11	.976	1.014	.087
21.14	.988	1.003	.067
21.61	.988	1.002	.047
21.94	.994	1.001	.047
210.18	1.007	1.003	.043
23.5	.989	1.002	.035
26.41	.985	1.008	.075
26.7	1.008	1.005	.097

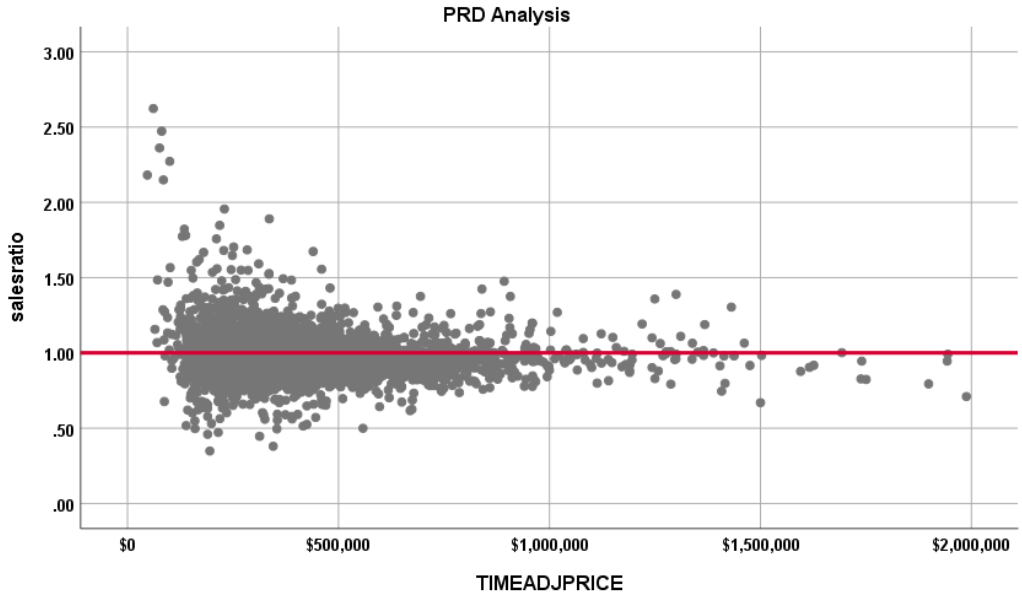
26.71	1.001	1.024	.135
270.07	.997	1.007	.056
300.08	1.017	1.002	.033
300.11	.981	1.002	.037
Overall	.994	1.009	.078

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





ALL SALES



1212 SALES LESS THAN $2,000,000

The Price-Related Differential (PRD) for all sales is 1.007; for the 1212 sales; the PRD is 1.007. Both were within the 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)	.962	.004		237.687	.000
	CURRTOT	.0000000637	.000	.095	7.131	.000

a. Dependent Variable: salesratio

The slope of the line (red box above) indicates that there is virtually no slope in the regression line, which indicates that sales ratios are similar across the entire sale price array. We also stratified the sales ratio analysis by the sale price range, as follows:

Case Processing Summary

		Count	Percent
SPRec	LT $200K	237	4.3%
	$200K to $300K	1014	18.3%
	$300K to $400K	1778	32.1%
	$400K to $500K	1256	22.7%
	$500K to $600K	569	10.3%
	$600K to $700K	282	5.1%
	$700K to $800K	187	3.4%
	$800K to $900K	80	1.4%
	$900K to $1,000K	49	0.9%

Over $1,000K	79	1.4%
Overall	5531	100.0%
Excluded	0	
Total	5531	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
LT $200K	1.001	1.025	.180
$200K to $300K	.989	1.001	.097
$300K to $400K	.986	1.000	.068
$400K to $500K	.984	1.000	.059
$500K to $600K	.976	1.000	.059
$600K to $700K	.966	1.000	.062
$700K to $800K	.959	1.000	.068
$800K to $900K	.963	1.000	.088
$900K to $1,000K	.959	1.001	.097
Over $1,000K	.979	1.006	.081
Overall	.983	1.007	.076

The above indicates that the sales ratio distribution was more or less consistent across the sale price range for Mesa County.

Residential Market Trend Analysis

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

Coefficients[a]

ECONAREA	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
10	1	(Constant)	.945	.030		31.657	.000
		SalePeriod	.003	.003	.068	.816	.416
12	1	(Constant)	.989	.014		70.646	.000
		SalePeriod	.000	.001	-.017	-.309	.757
15	1	(Constant)	.964	.006		158.122	.000
		SalePeriod	.003	.001	.168	5.046	.000
19	1	(Constant)	.976	.009		105.006	.000
		SalePeriod	.004	.001	.138	3.811	.000
22	1	(Constant)	.972	.007		143.397	.000
		SalePeriod	.003	.001	.145	4.491	.000
25	1	(Constant)	.985	.015		66.343	.000
		SalePeriod	-.001	.002	-.030	-.359	.720
27	1	(Constant)	.959	.009		106.743	.000
		SalePeriod	.002	.001	.096	2.659	.008
29	1	(Constant)	.976	.010		100.022	.000
		SalePeriod	.001	.001	.061	1.454	.146
30	1	(Constant)	.967	.007		142.054	.000
		SalePeriod	.002	.001	.093	2.857	.004
31	1	(Constant)	.917	.039		23.268	.000

		SalePeriod	.004	.004	.074	.935	.351
99	1	(Constant)	.915	.015		59.217	.000
		SalePeriod	.011	.002	.423	7.286	.000

a. Dependent Variable: salesratio

The sales ratios in all economic areas had insignificant trends statistically or had statistically significant trends of very low magnitude. We therefore concluded that the assessor has adequately considered market trending in the residential valuation of Mesa County.

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 2024 between each group, as follows:

Report

VALSF

sold	N	Median	Mean
UNSOLD	47798	$232	$229
SOLD	5862	$240	$237

Given that there was a statistically significant difference using the non-parametric Mann-Whitney U test, we next compared the percent change in actual value between the prior base year and the current base year for sold and unsold residential properties in Mesa County, as follows:

Report

DIFF

sold	N	Median	Mean
UNSOLD	47889	1.40	1.61
SOLD	5869	1.41	1.53

We also performed the first comparison analysis by economic area, which also indicates overall similar changes in value for sold and unsold residential properties:

Report

DIFF

ECONAREA	sold	N	Median	Mean
10	UNSOLD	1305	1.32	1.34
	SOLD	145	1.33	1.33
12	UNSOLD	2991	1.42	1.46
	SOLD	322	1.43	1.45
15	UNSOLD	7281	1.38	1.91
	SOLD	882	1.39	1.62
19	UNSOLD	6498	1.48	1.68
	SOLD	752	1.48	1.54
22	UNSOLD	6002	1.37	1.46
	SOLD	933	1.39	1.49
25	UNSOLD	1520	1.46	1.60
	SOLD	148	1.57	2.03
27	UNSOLD	5621	1.39	1.75
	SOLD	765	1.39	1.61
29	UNSOLD	5948	1.36	1.48
	SOLD	576	1.39	1.41

30	UNSOLD	6881	1.42	1.52
	SOLD	938	1.42	1.51
31	UNSOLD	1856	1.28	1.53
	SOLD	162	1.34	1.42
99	UNSOLD	1858	1.36	1.40
	SOLD	246	1.37	1.38

Please note that Economic Area 99 is residential condominiums.

As a final check, we stratified this analysis by neighborhoods with at least 25 sales, as follows:

Report

DIFF

NBHD	sold	N	Median	Mean
10.01	UNSOLD	276	1.27	1.30
	SOLD	35	1.27	1.31
10.06	UNSOLD	308	1.39	1.38
	SOLD	29	1.40	1.45
13.66	UNSOLD	20	1.30	1.30
	SOLD	31	1.30	1.30
14.28	UNSOLD	303	1.40	1.40
	SOLD	32	1.41	1.43
15.88	UNSOLD	190	1.41	1.58
	SOLD	48	1.41	1.48
16.29	UNSOLD	354	1.32	1.33
	SOLD	44	1.35	1.35
18.55999999	UNSOLD	277	1.52	1.52
	SOLD	36	1.52	1.53
180.25	UNSOLD	85	1.51	1.51
	SOLD	25	1.53	1.52
19.89999999	UNSOLD	29	2.43	3.94
	SOLD	25	1.43	1.84
21.11	UNSOLD	219	1.35	1.37
	SOLD	36	1.36	1.37
21.14	UNSOLD	202	1.41	1.41
	SOLD	27	1.41	1.43
21.61	UNSOLD	273	1.34	1.34
	SOLD	46	1.34	1.35
21.94	UNSOLD	213	1.36	1.36
	SOLD	32	1.36	1.35
210.18	UNSOLD	6	1.40	2.86
	SOLD	29	1.39	2.13
23.5	UNSOLD	30	7.46	5.60
	SOLD	37	2.15	3.44
26.41	UNSOLD	280	1.36	1.36
	SOLD	30	1.36	1.38
26.7	UNSOLD	373	1.53	1.58
	SOLD	28	1.51	1.59
26.71	UNSOLD	190	1.41	1.44
	SOLD	28	1.44	1.49
270.07	UNSOLD	25	1.32	1.59
	SOLD	38	1.32	1.38
300.08	UNSOLD	14	1.37	2.14
	SOLD	26	1.32	1.36

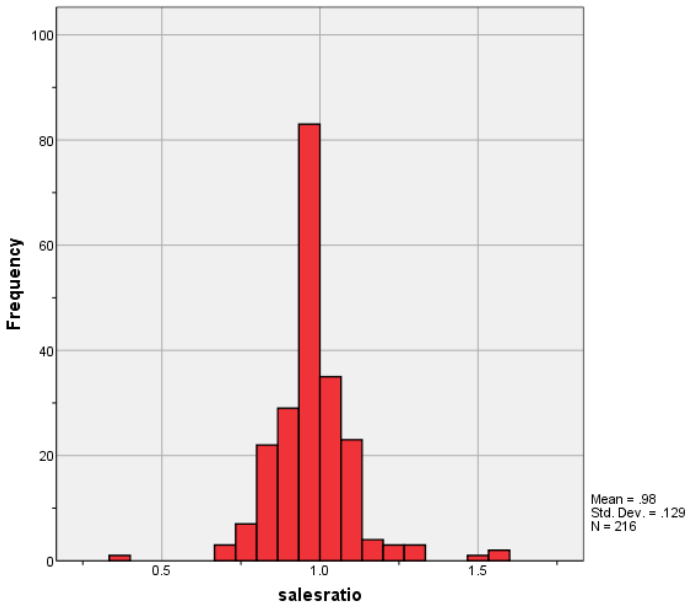
Based on the consistent change in value pattern, as well as the results from the other tests, we concluded that residential sold and unsold properties in Mesa County were valued consistently.

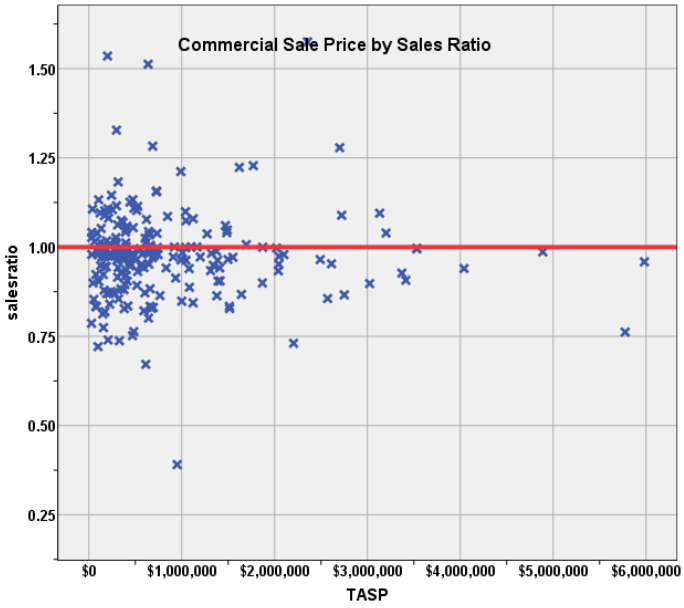
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 216 qualified commercial sales over the 18 month sale period ending June 30, 2022. The sales ratio analysis results were as follows:

Median	**0.978**
Price Related Differential	**1.001**
Coefficient of Dispersion	**8.6**

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





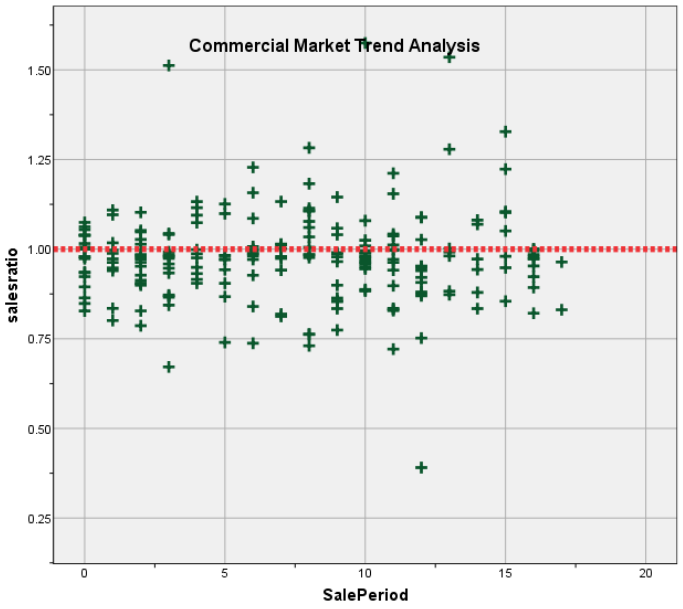
Commercial/Industrial Market Trend Analysis

The commercial/industrial sales were next analyzed for residual market trending. We examined the sales 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)	.972	.016		61.603	.000
	SalePeriod	.001	.002	.025	.360	.719

a. Dependent Variable: salesratio



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

Sold/Unsold Analysis

We compared the median actual 2024 value per square foot between sold and unsold commercial properties to determine if sold and unsold properties were valued consistently, as follows:

Report

VALSF

sold	N	Median	Mean
UNSOLD	2861	$121	$151
SOLD	202	$124	$146

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.399	Retain the null hypothesis.

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

Report

VALSF

ABSTRIMP	sold	N	Median	Mean
2220.00	UNSOLD	223	$151	$157
	SOLD	20	$157	$170
2230.00	UNSOLD	854	$141	$199
	SOLD	50	$121	$160
2235.00	UNSOLD	181	$56	$112
	SOLD	12	$72	$72
2240.00	UNSOLD	102	$85	$115
	SOLD	8	$102	$114
2245.00	UNSOLD	596	$138	$119
	SOLD	49	$156	$141
3212.00	UNSOLD	248	$117	$135
	SOLD	20	$103	$108
3215.00	UNSOLD	94	$76	$85
	SOLD	4	$74	$86
3230.00	UNSOLD	111	$122	$105
	SOLD	6	$132	$126

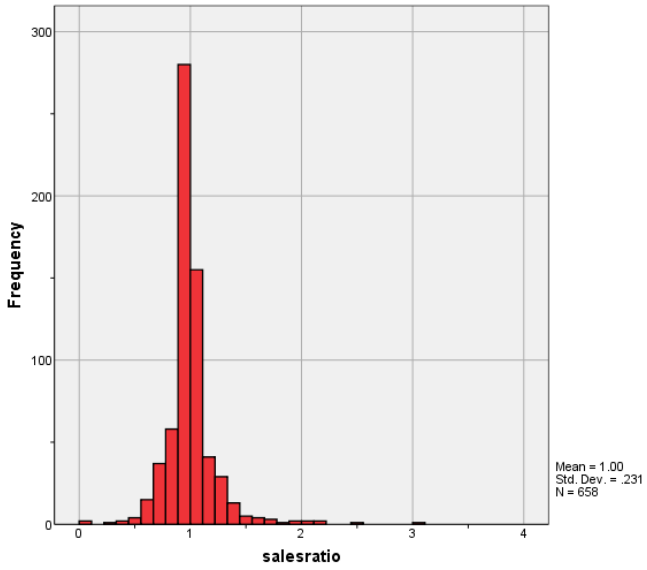
The above results indicated that sold commercial/industrial properties were not consistently valued more than unsold commercial properties and that there was sufficient overlap between each group overall.

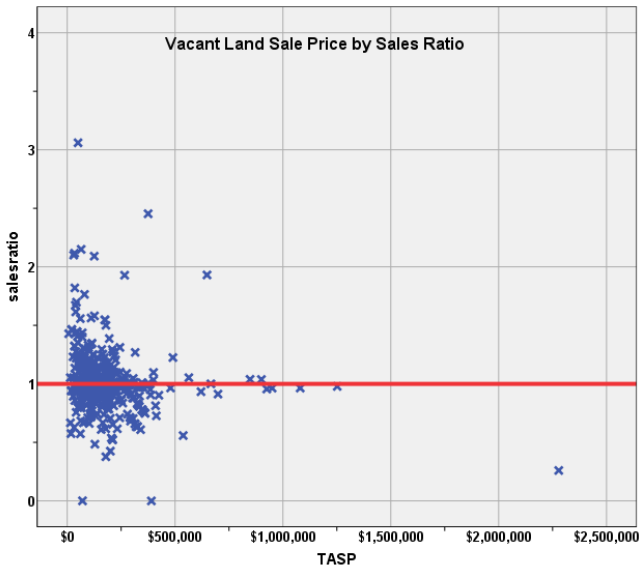
V. VACANT LAND SALE RESULTS

There were 658 qualified vacant land sales over the 18-month sale period ending June 30, 2022. The sales ratio analysis results were as follows:

Median	**0.984**
Price Related Differential	**1.036**
Coefficient of Dispersion	**12.8**

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.

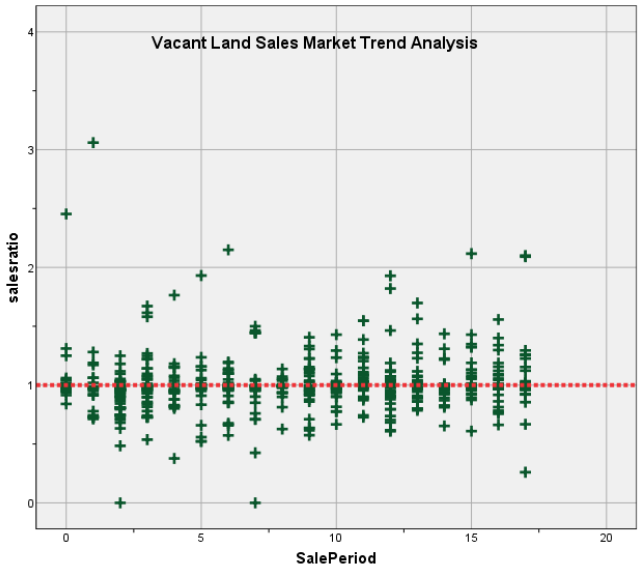
Vacant Land Market Trend Analysis

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)	.966	.016		59.840	.000
	SalePeriod	.004	.002	.097	2.500	.013

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 between the prior base year and the current base year, as follows:

Report

DIFF

sold	N	Median	Mean
UNSOLD	4137	1.42	1.41
SOLD	549	1.42	1.46

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	.648	Retain the null hypothesis.

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

We next stratified this analysis by subdivisions with at least 6 sales:

Report

DIFF

SUBDIVNO	sold	N	Median	Mean
3130	UNSOLD	5	2.80	2.64
	SOLD	20	2.00	2.12
3622	UNSOLD	8	1.82	1.59
	SOLD	6	1.82	1.82
5157	UNSOLD	21	1.07	1.02
	SOLD	22	1.07	1.02
5180	UNSOLD	3	1.17	1.17
	SOLD	8	1.17	1.17
7488	UNSOLD	1	1.81	1.81
	SOLD	7	1.35	1.57
7495	UNSOLD	1	.97	.97
	SOLD	15	.97	1.13
7555	UNSOLD	1	.00	.00
	SOLD	10	1.98	1.95
7556	UNSOLD	4	.97	.97
	SOLD	22	.97	.95
7658	UNSOLD	9	1.35	1.37
	SOLD	9	1.42	1.42
7723	UNSOLD	4	1.67	1.57
	SOLD	16	1.67	1.60
7745	UNSOLD	7	1.42	1.42
	SOLD	30	1.42	1.42
7750	UNSOLD	5	1.12	1.12
	SOLD	6	1.12	1.12
7766	UNSOLD	1	1.53	1.53
	SOLD	10	1.54	1.54
7770	UNSOLD	1	1.00	1.00
	SOLD	11	1.00	1.00
7791	UNSOLD	1	1.22	1.22
	SOLD	6	1.22	1.22

The analysis of sold and unsold valuation at the class level and the subdivision level (for subdivisions with more than 6 sales) did not indicate a pattern where sold properties were adjusted by a greater degree than unsold properties within the same subdivision; therefore, we concluded that the county assessor valued sold and unsold vacant land 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
10	.966	.936	.996	.971	.936	.989	95.4%	.948	.918	.977	1.019	.130	18.9%
12	.985	.971	1.000	.974	.964	.982	96.1%	.961	.927	.994	1.026	.093	13.3%
15	.990	.984	.996	.984	.980	.988	95.7%	.974	.960	.989	1.016	.064	9.5%
19	1.006	.997	1.016	.989	.982	.994	95.5%	.999	.992	1.007	1.007	.079	13.3%
22	.998	.991	1.005	.988	.985	.992	95.0%	.994	.988	1.000	1.004	.068	10.7%
25	.980	.964	.997	.978	.972	.986	96.0%	.971	.955	.986	1.010	.067	10.6%
27	.979	.970	.989	.978	.973	.984	95.7%	.975	.968	.982	1.004	.081	13.6%
29	.988	.979	.998	.981	.972	.989	95.9%	.981	.970	.991	1.008	.085	12.1%
30	.984	.978	.991	.983	.979	.989	95.4%	.983	.978	.989	1.001	.066	10.3%
31	.949	.910	.988	.973	.952	.977	95.1%	.934	.906	.962	1.016	.152	26.4%
99	1.012	.995	1.029	.996	.987	1.009	95.2%	1.001	.985	1.018	1.011	.099	13.4%

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 Land

Ratio Statistics for CURRTOT / TASP

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
.977	.959	.994	.978	.971	.984	95.2%	.975	.948	1.003	1.001	.086	13.2%

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

Vacant Land

Ratio Statistics for CURRLND / TASP

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
1.000	.982	1.017	.984	.979	.987	95.3%	.965	.927	1.002	1.036	.128	23.1%

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

Residential Median Ratio Stratification

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	.00	7	0.1%
	1212.00	5524	94.1%
	1215.00	57	1.0%
	1220.00	28	0.5%
	1225.00	10	0.2%
	1230.00	246	4.2%
Overall		5872	100.0%
Excluded		0	
Total		5872	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	1.020	1.127	.372	59.5%
1212.00	.983	1.006	.076	12.3%
1215.00	.984	1.011	.162	21.1%
1220.00	1.022	1.028	.113	16.2%
1225.00	.877	1.088	.177	21.8%
1230.00	.996	1.011	.099	13.7%
Overall	.983	1.010	.079	12.7%

Age

Case Processing Summary

		Count	Percent
AgeRec	0	7	0.1%
	Over 100	199	3.4%
	75 to 100	157	2.7%
	50 to 75	549	9.3%
	25 to 50	1766	30.1%
	5 to 25	2036	34.7%
	5 or Newer	1158	19.7%
Overall		5872	100.0%
Excluded		0	
Total		5872	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	1.020	1.127	.372	59.5%
Over 100	.977	1.022	.113	15.7%
75 to 100	.971	1.020	.102	14.6%
50 to 75	.989	1.019	.104	17.4%
25 to 50	.980	1.008	.090	13.8%
5 to 25	.983	1.007	.067	11.1%
5 or Newer	.989	1.007	.059	8.3%
Overall	.983	1.010	.079	12.7%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	0	7	0.1%
	500 to 1,000 sf	421	7.2%
	1,000 to 1,500 sf	2067	35.2%
	1,500 to 2,000 sf	1917	32.6%
	2,000 to 3,000 sf	1136	19.3%
	3,000 sf or Higher	324	5.5%
Overall		5872	100.0%
Excluded		0	
Total		5872	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	1.020	1.127	.372	59.5%
500 to 1,000 sf	.981	1.016	.110	17.2%
1,000 to 1,500 sf	.980	1.008	.078	12.7%
1,500 to 2,000 sf	.987	1.007	.070	11.3%
2,000 to 3,000 sf	.982	1.011	.076	11.8%
3,000 sf or Higher	.995	1.031	.090	13.2%
Overall	.983	1.010	.079	12.7%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY		7	0.1%
	1 - MINIMUM	1	0.0%
	2 - BELOW AVERAGE	35	0.6%
	3 - AVERAGE	4398	74.9%
	4 - ABOVE AVERAGE	1245	21.2%
	5 - GOOD	151	2.6%
	6 - VERY GOOD	27	0.5%
	7 - EXCELLENT	8	0.1%
Overall		5872	100.0%
Excluded		0	
Total		5872	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	1.020	1.127	.372	59.5%
1 - MINIMUM	.601	1.000	.000	.
2 - BELOW AVERAGE	.842	1.028	.287	40.2%
3 - AVERAGE	.983	1.009	.081	12.9%
4 - ABOVE AVERAGE	.986	1.011	.064	10.0%
5 - GOOD	.977	1.004	.059	8.7%
6 - VERY GOOD	.953	1.005	.124	18.7%
7 - EXCELLENT	.987	1.011	.110	17.8%
Overall	.983	1.010	.079	12.7%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION		170	2.9%
	0 - N/A	1028	17.5%
	2 - BELOW AVG	15	0.3%
	3 - AVG CONDITION	4642	79.1%
	4 - AVERAGE + COND	17	0.3%
Overall		5872	100.0%
Excluded		0	
Total		5872	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.989	1.068	.088	15.8%
0 - N/A	.982	1.012	.081	13.2%
2 - BELOW AVG	.961	1.006	.303	44.0%
3 - AVG CONDITION	.983	1.006	.077	12.2%
4 - AVERAGE + COND	1.050	1.003	.108	14.8%
Overall	.983	1.010	.079	12.7%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$25K to $50K	6	2.8%
	$50K to $100K	9	4.2%
	$100K to $150K	8	3.7%
	$150K to $200K	16	7.4%
	$200K to $300K	22	10.2%
	$300K to $500K	49	22.7%
	$500K to $750K	37	17.1%
	$750K to $1,000K	10	4.6%
	Over $1,000K	59	27.3%
Overall		216	100.0%
Excluded		0	
Total		216	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$25K to $50K	1.003	.997	.085	11.9%
$50K to $100K	.923	1.000	.094	11.5%
$100K to $150K	.993	1.006	.083	10.5%
$150K to $200K	.973	.993	.100	17.5%
$200K to $300K	.997	.994	.085	12.3%
$300K to $500K	.977	1.000	.066	9.5%
$500K to $750K	.981	.998	.095	14.7%
$750K to $1,000K	.953	1.000	.134	22.8%
Over $1,000K	.971	1.006	.082	13.1%
Overall	.978	1.001	.086	13.2%

Sub Class

Case Processing Summary

		Count	Percent
ABSTRIMP	.00	14	6.5%
	1713.50	6	2.8%
	2212.00	23	10.6%
	2215.00	1	0.5%
	2220.00	20	9.3%
	2225.00	2	0.9%
	2230.00	50	23.1%
	2235.00	12	5.6%
	2240.00	8	3.7%
	2245.00	49	22.7%
	3212.00	20	9.3%
	3215.00	4	1.9%
	3230.00	6	2.8%
	9271.00	1	0.5%
Overall		216	100.0%
Excluded		0	
Total		216	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.867	1.217	.157	21.4%
1713.50	.959	.992	.066	8.5%
2212.00	.981	1.047	.120	20.6%
2215.00	.996	1.000	.000	.
2220.00	.984	1.006	.063	8.4%
2225.00	1.019	1.059	.112	15.8%
2230.00	.976	1.009	.078	13.1%
2235.00	.984	.993	.095	15.2%
2240.00	1.011	.998	.084	11.0%
2245.00	.974	1.010	.063	8.8%
3212.00	.994	1.015	.087	11.6%
3215.00	.977	1.059	.064	8.2%
3230.00	.980	1.001	.084	11.4%
9271.00	.801	1.000	.000	.
Overall	.978	1.001	.086	13.2%

Age

Case Processing Summary

		Count	Percent
AgeRec	0	14	6.5%
	Over 100	17	7.9%
	75 to 100	8	3.7%
	50 to 75	36	16.7%
	25 to 50	69	31.9%
	5 to 25	65	30.1%
	5 or Newer	7	3.2%
Overall		216	100.0%
Excluded		0	
Total		216	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.867	1.217	.157	21.4%
Over 100	1.006	.969	.063	8.6%
75 to 100	.979	1.005	.065	10.6%
50 to 75	.973	1.004	.095	13.3%
25 to 50	.979	.999	.065	9.6%
5 to 25	.978	1.010	.091	14.3%
5 or Newer	.977	1.067	.110	23.4%
Overall	.978	1.001	.086	13.2%

Improvement Size

Case Processing Summary

		Count	Percent
ImpSFRec	0	14	6.5%
	LE 500 sf	2	0.9%
	500 to 1,000 sf	12	5.6%
	1,000 to 1,500 sf	28	13.0%
	1,500 to 2,000 sf	13	6.0%
	2,000 to 3,000 sf	31	14.4%
	3,000 sf or Higher	116	53.7%
Overall		216	100.0%
Excluded		0	
Total		216	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.867	1.217	.157	21.4%
LE 500 sf	.953	1.056	.078	11.0%
500 to 1,000 sf	.960	.882	.123	20.4%
1,000 to 1,500 sf	.980	1.014	.091	14.5%
1,500 to 2,000 sf	.972	1.010	.056	9.5%
2,000 to 3,000 sf	.980	1.014	.064	9.7%
3,000 sf or Higher	.980	1.010	.081	12.1%
Overall	.978	1.001	.086	13.2%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY		14	6.5%
	10 - Average	151	69.9%
	11 - Above Average	26	12.0%
	12 - Good	4	1.9%
	18 - Hotel Below Average Quality	1	0.5%
	19 - Hotel Average Quality	6	2.8%
	8 - Fair	3	1.4%
	9 - Below Avg	11	5.1%
Overall		216	100.0%
Excluded		0	
Total		216	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.867	1.217	.157	21.4%
10 - Average	.981	.992	.081	11.9%
11 - Above Average	.969	1.000	.053	8.1%
12 - Good	.913	1.111	.176	37.9%
18 - Hotel Below Average Quality	.907	1.000	.000	.
19 - Hotel Average Quality	.987	.987	.055	7.4%
8 - Fair	.916	1.017	.038	6.7%
9 - Below Avg	1.014	1.036	.114	19.2%
Overall	.978	1.001	.086	13.2%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION		14	6.5%
	10 - Average	166	76.9%
	11 - Above Average	9	4.2%
	17 - Hotel Inferior Condtion	1	0.5%
	19 - Hotel Average Condition	6	2.8%
	7 - Poor	1	0.5%
	8 - Fair	5	2.3%
	9 - Below Avg	14	6.5%
Overall		216	100.0%
Excluded		0	
Total		216	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.867	1.217	.157	21.4%
10 - Average	.974	1.003	.084	12.6%
11 - Above Average	.979	1.006	.029	4.4%
17 - Hotel Inferior Condtion	.907	1.000	.000	.
19 - Hotel Average Condition	.987	.987	.055	7.4%
7 - Poor	1.000	1.000	.000	.
8 - Fair	.995	.950	.076	12.2%
9 - Below Avg	1.003	1.031	.079	16.0%
Overall	.978	1.001	.086	13.2%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	8	1.2%
	$25K to $50K	55	8.4%
	$50K to $100K	160	24.3%
	$100K to $150K	171	26.0%
	$150K to $200K	126	19.1%
	$200K to $300K	81	12.3%
	$300K to $500K	44	6.7%
	$500K to $750K	6	0.9%
	$750K to $1,000K	4	0.6%
	Over $1,000K	3	0.5%
Overall		658	100.0%
Excluded		0	
Total		658	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	.997	1.005	.287	36.4%
$25K to $50K	1.012	1.008	.249	43.7%
$50K to $100K	.983	.999	.113	19.9%
$100K to $150K	.995	.999	.095	16.4%
$150K to $200K	.977	1.000	.103	16.7%
$200K to $300K	.980	1.001	.109	19.1%
$300K to $500K	.878	.993	.205	35.9%
$500K to $750K	.967	.987	.272	48.7%
$750K to $1,000K	1.001	1.001	.039	4.5%
Over $1,000K	.964	1.184	.248	51.7%
Overall	.984	1.036	.128	23.5%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	.00	1	0.2%
	100.00	239	36.3%
	200.00	22	3.3%
	300.00	9	1.4%
	400.00	4	0.6%
	510.00	9	1.4%
	520.00	10	1.5%
	525.00	1	0.2%
	530.00	8	1.2%
	540.00	10	1.5%
	550.00	10	1.5%
	560.00	1	0.2%
	1112.00	318	48.3%
	1115.00	1	0.2%
	1125.00	4	0.6%
	1135.00	3	0.5%
	2112.00	1	0.2%
	2130.00	3	0.5%
	2135.00	1	0.2%
	3112.00	2	0.3%
	3125.00	1	0.2%
Overall		658	100.0%
Excluded		0	
Total		658	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.000	.	.	.
100.00	.986	1.046	.144	22.7%
200.00	1.013	.993	.087	11.8%
300.00	.942	1.029	.107	17.2%
400.00	1.025	.999	.030	3.9%
510.00	.966	.989	.025	3.4%
520.00	.982	1.135	.280	72.2%
525.00	1.135	1.000	.000	.
530.00	.984	1.182	.225	37.7%
540.00	.955	1.453	.214	41.6%
550.00	.997	1.085	.149	26.3%
560.00	.910	1.000	.000	.
1112.00	.983	1.003	.104	18.5%
1115.00	1.000	1.000	.000	.
1125.00	1.177	1.257	.269	48.8%
1135.00	.979	1.035	.062	12.6%
2112.00	2.453	1.000	.000	.
2130.00	1.033	.998	.034	6.8%
2135.00	.985	1.000	.000	.
3112.00	.937	.997	.129	18.3%
3125.00	.821	1.000	.000	.
Overall	.984	1.036	.128	23.5%