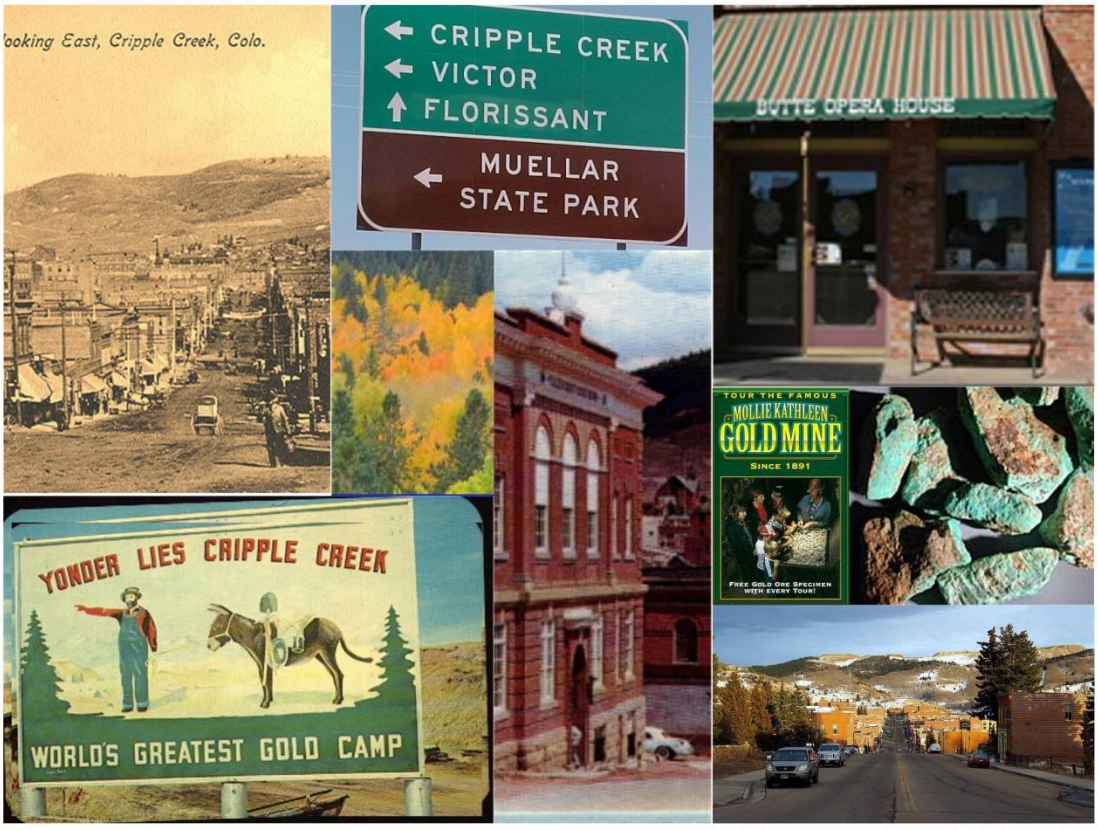
Teller County
COLORADO
Protect the Past... Embrace the Future

2022
TELLER COUNTY
PROPERTY ASSESSMENT
STUDY



WILDROSE
APPRAISAL, INCORPORATED
Audit Division

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September 15, 2022

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

RE: Final Report for the 2022 Colorado Property Assessment Study

Dear Ms. Mullis:

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

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

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

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

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

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

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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.

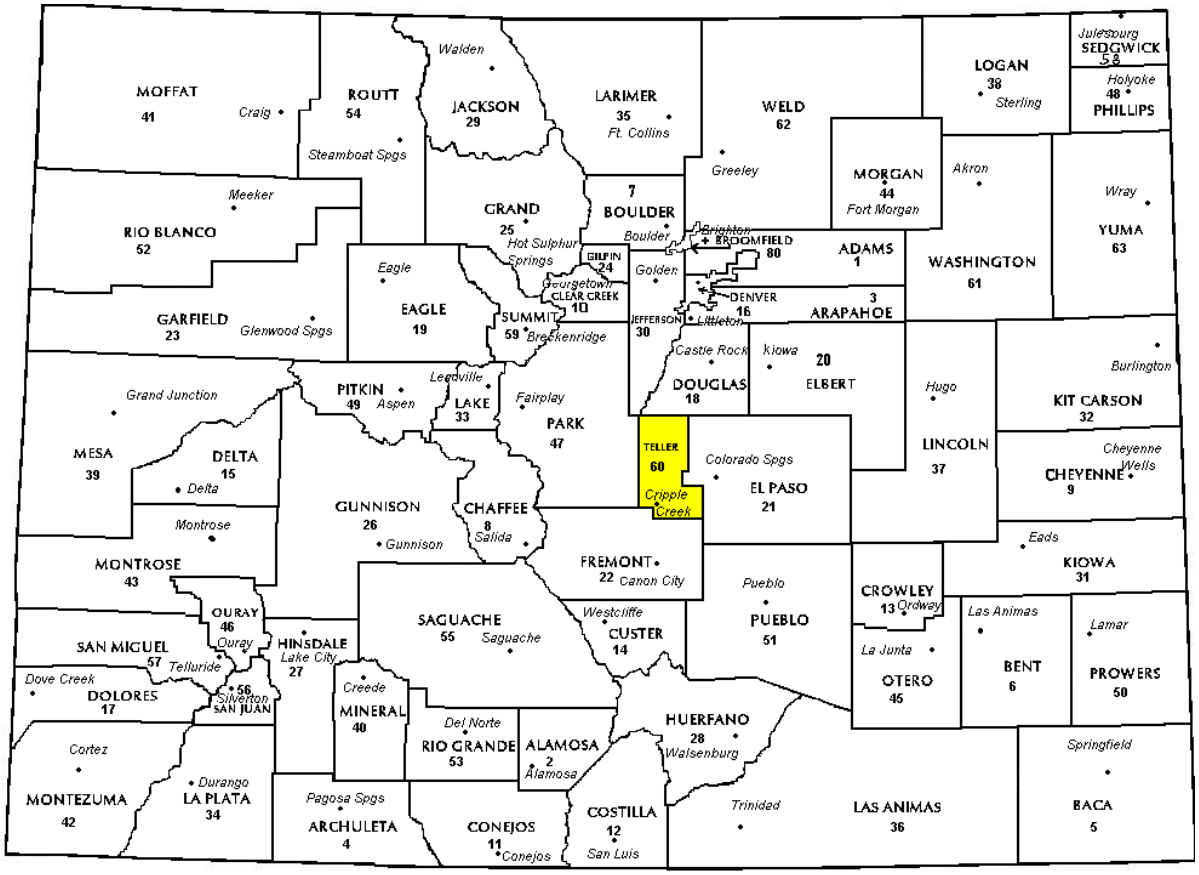
Statistical analysis is performed on vacant land, residential properties, commercial/industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax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

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

REGIONAL / HISTORICAL SKETCH OF TELLER COUNTY

Regional Information

Teller County is located in the Central Mountains region of Colorado. The Central Mountains Region is in the central portion of Colorado. It extends from the northern Gilpin county boundary approximately 210 miles southeasterly to the southern boundary of Colorado, including Chaffee, Clear Creek, Custer, Fremont, Gilpin, Huerfano, Lake, Las Animas, Park, and Teller counties.



Historical Information

Teller County has approximately 557.1 square miles and an estimated population of approximately 25,388 people, according to the U.S. Census Bureau's 2020 estimated census data. This represents a 8.7 percent change from April 1, 2010 to July 1, 2019.

Teller County was named after United States Senator Henry M. Teller. Teller County was carved from the western slope of Pikes Peak, which had been entirely within El Paso County, in 1899.

The county seat is Cripple Creek. On October 20, 1890, Robert Miller "Bob" Womack discovered a rich ore and the last great Colorado gold rush was on. Thousands of prospectors flocked to the region, and before long W. S. Stratton located the famous Independence lode, one of the largest gold strikes in history. In three years, the population increased from 500 to 10,000. By 1900 Cripple Creek and its sister city, Victor, were substantial communities.

Through 2005, the Cripple Creek district produced about 23.5 million troy ounces (731 tonnes) of gold. The old underground mines are exhausted, but open pit mining has operated since 1994 east of Cripple Creek, near its sister city of Victor, Colorado.

With many empty storefronts and picturesque homes, Cripple Creek once drew interest as a ghost town. At one point the population dropped to a few hundred, although Cripple Creek was never entirely deserted.

Colorado voters allowed Cripple Creek to establish legalized gambling in 1991 and it is currently more of a gambling and tourist town than a ghost town. Casinos now occupy many historic buildings. Casino gambling has been successful in bringing revenue and vitality back into the area.
(www.Wikipedia.org)

RATIO ANALYSIS

Methodology

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

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

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

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

Conclusions

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

ALLOWABLE STANDARDS RATIO GRID		
Property Class	**Unweighted Median Ratio**	**Coefficient of Dispersion**
Commercial/Industrial	Between .95-1.05	Less than 20.99
Condominium	Between .95-1.05	Less than 15.99
Single Family	Between .95-1.05	Less than 15.99
Vacant Land	Between .95-1.05	Less than 20.99

The results for Teller County are:

Teller County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	37	0.998	1.068	18.9	Compliant
Single Family	2,083	0.997	1.015	8.4	Compliant
Vacant Land	720	0.985	1.064	19.8	Compliant

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

Teller 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

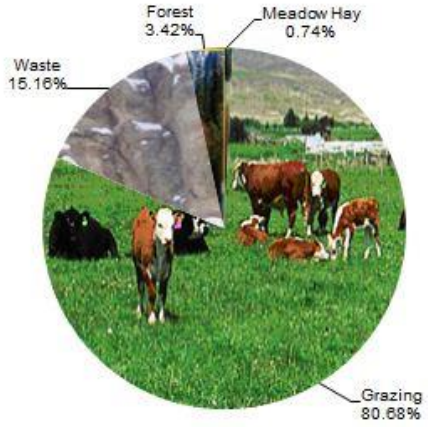
After applying the above described methodologies, it is concluded that Teller County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

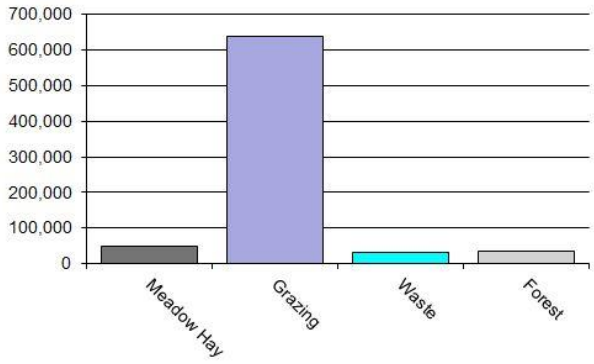
None

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:

Teller County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio
4137	Meadow Hay	639	68.02	43,463	43,573	1.00
4147	Grazing	69,776	8.33	581,558	583,842	1.00
4177	Forest	3,072	10.26	31,514	31,348	1.01
4167	Waste	13,112	2.20	28,864	28,864	1.00
Total/Avg		**86,599**	**7.91**	**685,400**	**687,627**	**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

Teller 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

Teller 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
- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

Teller 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.:

- Field Inspections
- Aerial Photography/Pictometry

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

Recommendations

None

SALES VERIFICATION

According to Colorado Revised Statutes:

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

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

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

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

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

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

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

WRA reviewed the sales verification procedures in 2022 for Teller County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 38 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

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

Recommendations

None

ECONOMIC AREA REVIEW AND EVALUATION

Methodology

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

Methodology

Colorado Revised Statutes (CRS) Article 39, Section 6, and the Assessor's Reference Library (ARL), Volume 3 are the basis for valuing producing mine property. The gross value of the ore extracted during the preceding year is determined. All costs of treatment, reduction, transportation and sale are deducted to estimate gross proceeds. The costs of extraction are deducted from the gross proceeds to estimate net proceeds.

The current value for assessment is determined by determining if 25% of the gross proceeds or 100% of the net proceeds is greater, then applying that number as the valuation for assessment.

Conclusions

The County valued the producing mine production using acceptable appraisal procedures.

Recommendations

None

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2022 in Teller 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

Teller 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.

Teller 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

Teller 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

Teller 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.

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

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

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

Teller County submitted their personal property written audit plan and was current for the 2022 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Accounts with obvious discrepancies
- New businesses filing for the first time
- Accounts with greater than 10% change
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Businesses with no deletions or additions for 2 or more years

- Non-filing Accounts - Best Information Available
- Accounts close to the $50,000 actual value exemption status

Conclusions

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

Recommendations

None

WILDROSE AUDITOR STAFF

Harry J. Fuller, *Audit Project Manager*

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Steve Kane, *Audit Statistician*

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

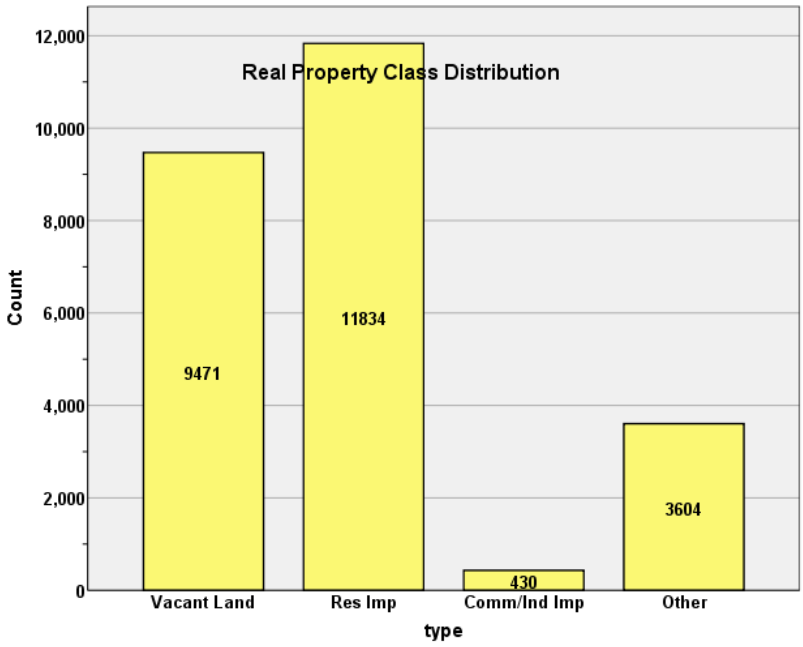
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE REPORT
FOR TELLER COUNTY
2022

I. OVERVIEW

Teller County is located in central Colorado. The county has a total of 25,339 real property parcels, according to data submitted by the county assessor's office in 2022. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100) accounted for 74.2% of all vacant land parcels.

For residential improved properties, single family properties accounted for 97.3% of all residential properties.

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

II. DATA FILES

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

III. RESIDENTIAL SALES RESULTS

There were 2,085 qualified residential sales for the 48-month sale period ending June 30, 2020. Two sales were trimmed using IAAO standards, resulting in a final count of 2,083 sales. The sales ratio analysis results were as follows:

Median	**0.997**
Price Related Differential	**1.015**
Coefficient of Dispersion	**8.4**

We next stratified the sale ratio analysis by economic area. The following are the results of this stratification analysis:

Case Processing Summary

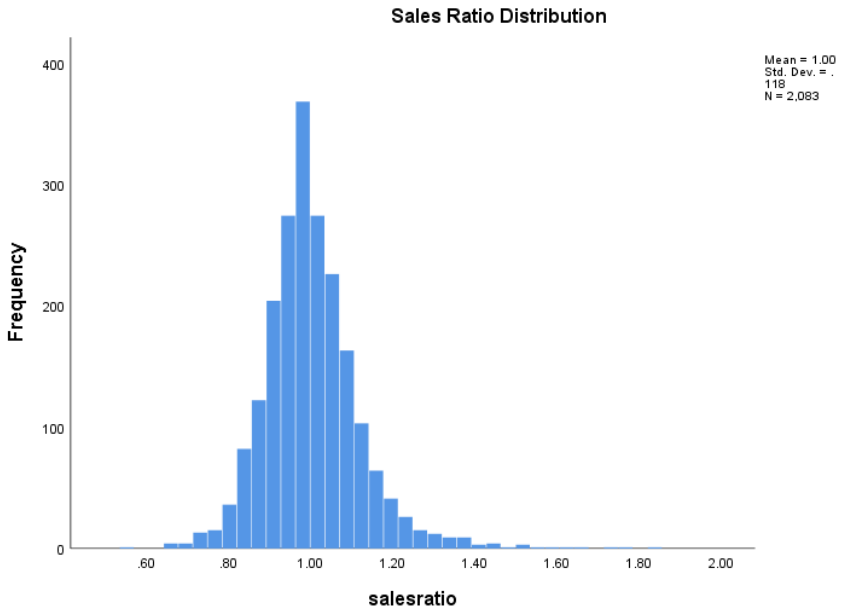
		Count	Percent
ECONAREA	1.00	960	46.7%
	3.00	953	46.4%
	4.00	96	4.7%
	5.00	34	1.7%
	44.00	1	0.0%
	49.00	1	0.0%
	66.00	9	0.4%
Overall		2054	100.0%
Excluded		29	
Total		2083	

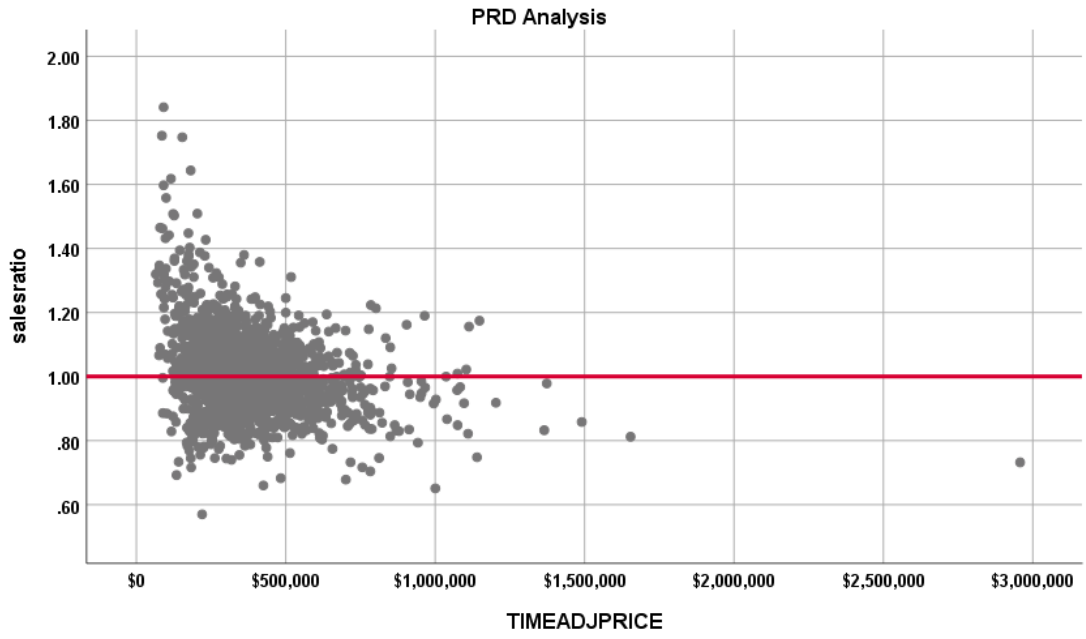
Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	.998	1.016	.087
3.00	.996	1.012	.071
4.00	1.007	1.043	.140
5.00	.959	1.062	.180
44.00	.916	1.000	.000
49.00	.660	1.000	.000
66.00	1.009	1.011	.059
Overall	.997	1.016	.084

The above results indicate that the three largest economic areas were in compliance with SBOE ratio standards, but the smallest (EA 4) was out of compliance, although it had the fewest sales with 42. The other 2 EAs had only 1 sale each.

The above ratio statistics were in compliance overall with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. The following graphs describe further the sales ratio distribution for these properties:



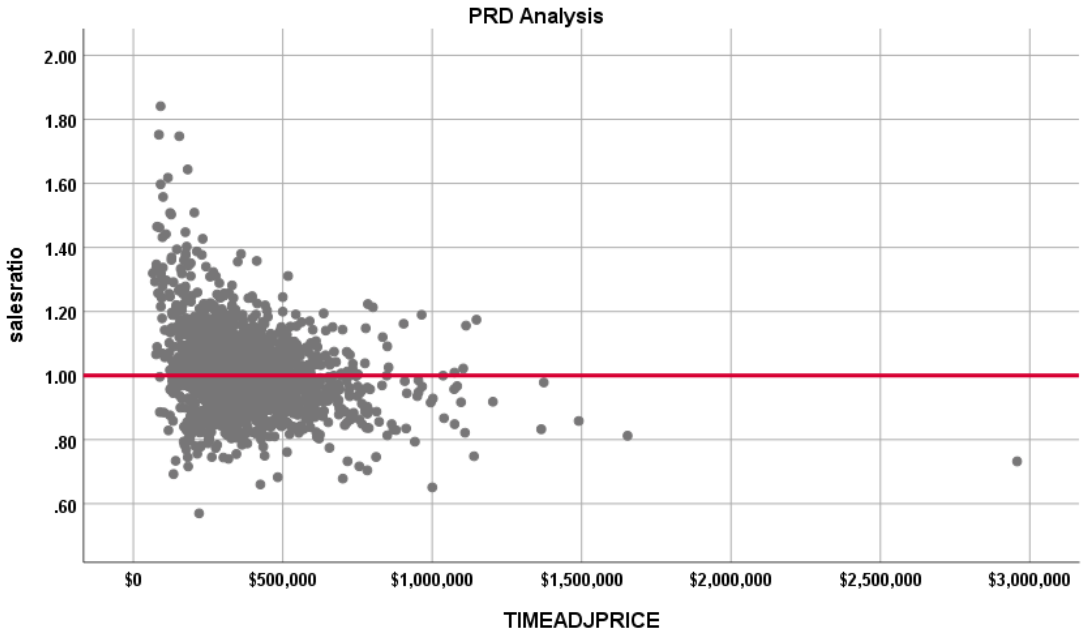


The above graphs indicate that the distribution of the sale ratios was within state mandated limits.

Subclass 1212 PRD Analysis

We next analyzed residential properties identified as 1212 using the state abstract code system. 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 1.016, which is within IAAO standards for the PRD. We also performed a regression analysis between the sales ratio and the assessor's current value to further test for regressivity or progressivity in the residential sales valuation, as follows:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.030	.007		156.502	.000
	CURRTOT	-.0000000625	.000	-.086	-3.898	.000

a. Dependent Variable: salesratio

The slope of the line at 0.0000000625 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 $100K	25	1.2%
	$100K to $200K	184	9.0%
	$200K to $300K	452	22.2%
	$300K to $400K	610	30.0%
	$400K to $500K	411	20.2%
	Over $500K	352	17.3%
Overall		2034	100.0%
Excluded		0	
Total		2034	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
LT $100K	1.304	.999	.121
$100K to $200K	1.048	1.005	.126
$200K to $300K	1.000	1.001	.087
$300K to $400K	1.000	1.000	.067
$400K to $500K	.987	1.001	.067
Over $500K	.960	1.007	.073
Overall	.997	1.016	.084

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

Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period for any residual market trending, with the following results:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.002	.005		204.308	.000
	SalePeriod	9.627287E-5	.000	.012	.530	.596

a. Dependent Variable: salesratio

There was no statistically significant trend. We therefore concluded that the assessor has adequately addressed market trending in the valuation of residential properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median change in value between valuation years 2018 and 2020 for each group, both by class and stratified by economic area:

Report

DIFF

sold	N	Median	Mean
UNSOLD	9267	1.13	1.15
SOLD	2070	1.14	1.15

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	.122	Retain the null hypothesis.

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

Report

DIFF

ECONAREA	sold	N	Median	Mean
1.00	UNSOLD	4902	1.13	1.14
	SOLD	956	1.15	1.15
3.00	UNSOLD	3475	1.12	1.14
	SOLD	949	1.13	1.13
4.00	UNSOLD	405	1.21	1.23
	SOLD	94	1.22	1.24
5.00	UNSOLD	250	1.27	1.29
	SOLD	31	1.21	1.22

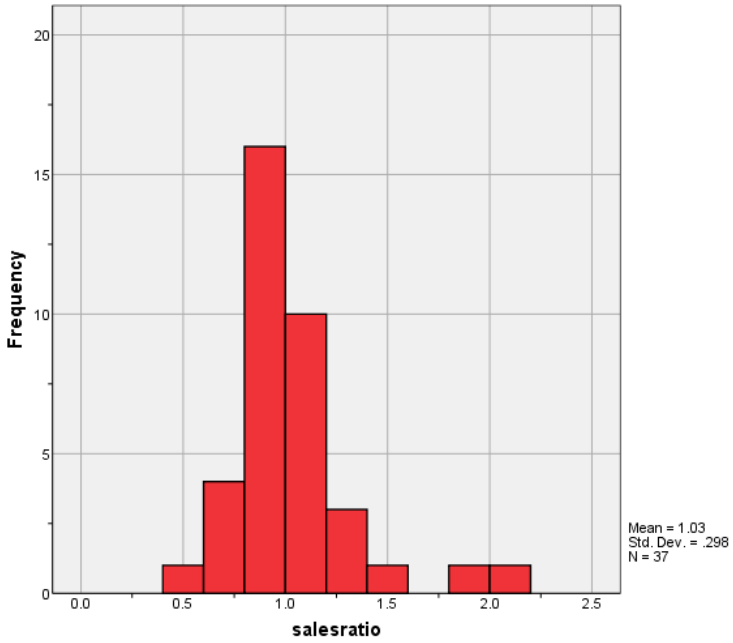
The above results from the second comparison method indicate that sold and unsold residential properties were valued in a consistent manner.

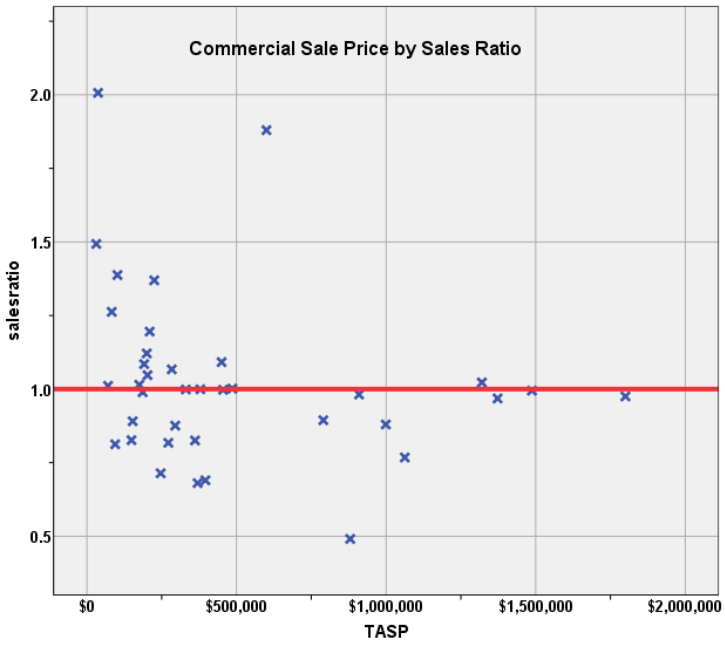
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 37 qualified commercial and industrial sales for the 60-month sale period ending June 30, 2020. The sales ratio analysis results were as follows:

Median	**0.998**
Price Related Differential	**1.068**
Coefficient of Dispersion	**18.9**

Based on these results, we concluded that the assessor is in compliance. The following describes the sales ratio distribution further:





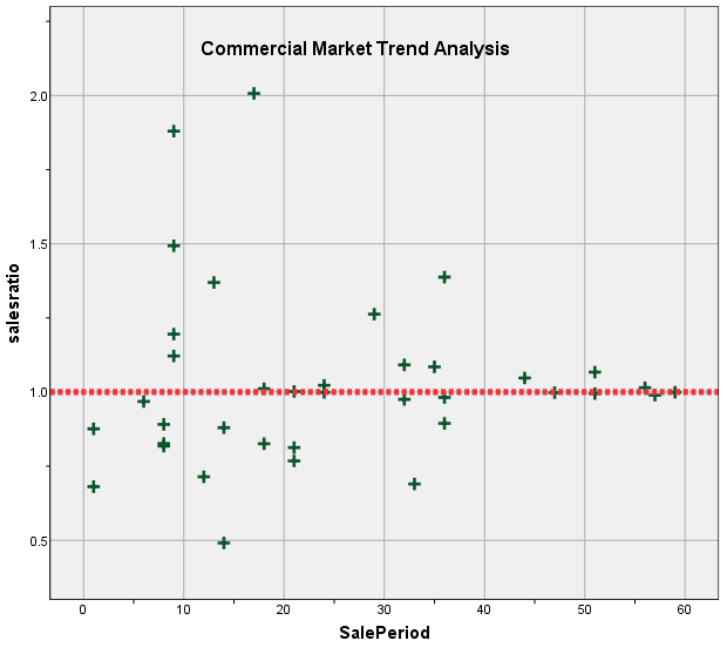
Commercial Market Trend Analysis

The commercial/industrial sales were next analyzed by subclass for any residual market trending, examining the sale ratios across the 60-month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.034	.090		11.532	.000
	SalePeriod	.000	.003	-.008	-.047	.963

a. Dependent Variable: salesratio



The market trend results indicated no significant residual sales ratio trend in the commercial/industrial data. We therefore concluded that the assessor adequately considered market trending in their valuation of commercial and industrial properties.

Sold/Unsold Analysis

We compared the median actual value per square foot between sold and unsold commercial properties to determine if the assessor was valuing each group consistently. The analysis was by class and by subclass, as follows:

Report
VALSF

sold	N	Median	Mean
UNSOLD	369	$72	$90
SOLD	37	$81	$96

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	.843	Retain the null hypothesis.

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

Report

VALSF

ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD	78	$103	$115
	SOLD	9	$121	$147
2220.00	UNSOLD	42	$125	$136
	SOLD	11	$95	$110
2230.00	UNSOLD	85	$109	$108
	SOLD	5	$137	$140

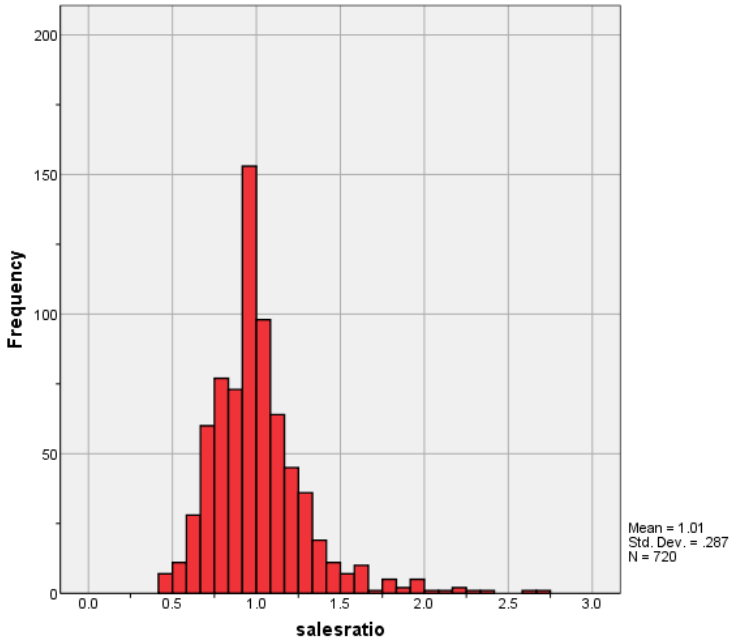
Based on the above results, we concluded that the Teller County assessor was valuing sold and unsold commercial properties consistently**.**

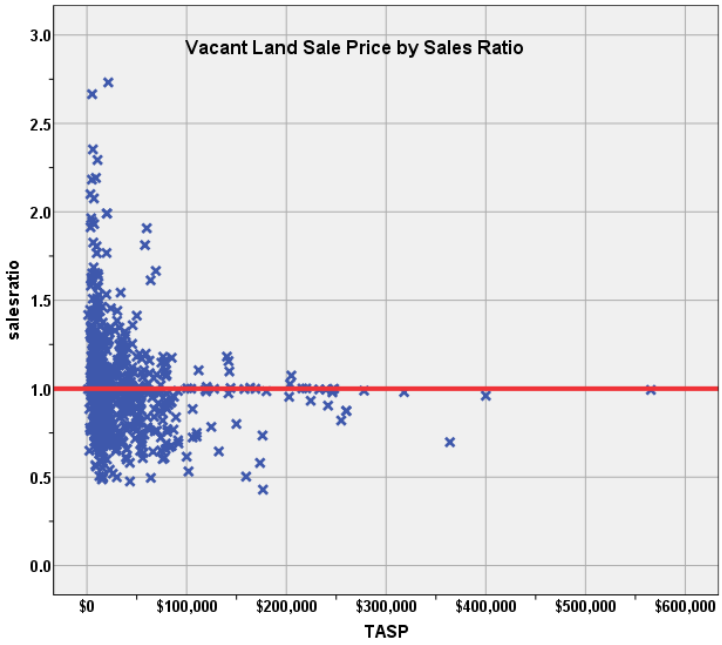
V. VACANT LAND SALE RESULTS

The number of qualified vacant land sales was 723 for the 60 month period ending June 30, 2020. 3 sales were trimmed using IAAO standards, resulting in a final count of 720 sales. The sales ratio analysis resulted in the following ratio statistics:

Median	**0.985**
Price Related Differential	**1.064**
Coefficient of Dispersion	**19.8**

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





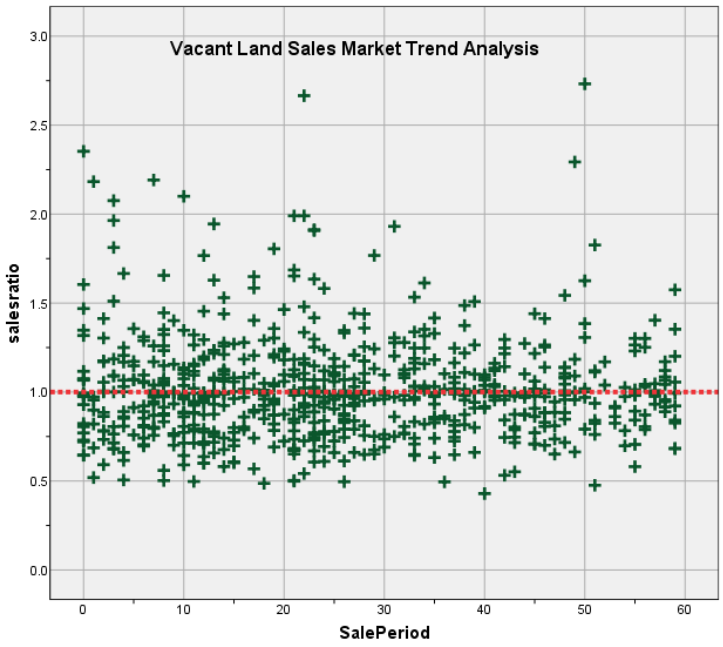
Vacant Land Market Trend Analysis

The vacant land sales were analyzed, examining the sale ratios across the 60-month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.015	.020		51.149	.000
	SalePeriod	.000	.001	-.007	-.199	.842

a. Dependent Variable: salesratio



The market trend results indicated a marginally statistically significant trend, but with a slope coefficient that was not significant. We concur that no market trend adjustments were warranted for properties in this class for Teller County.

Sold/Unsold Analysis

We compared the median change in actual value between valuation years 2018 and 2020 for vacant land properties to determine if sold and unsold properties were valued consistently, as follows:

Report

DIFF

sold	N	Median	Mean
UNSOLD	8123	.97	.98
SOLD	715	.97	.99

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	.339	Retain the null hypothesis.

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

We next stratified this analysis for subdivisions with at least 10 sales:

Report

DIFF

SUBDIVNO	sold	N	Median	Mean
80	UNSOLD	90	1.26	1.25
	SOLD	12	1.24	1.25
90	UNSOLD	78	.87	.88
	SOLD	16	.87	.91
216	UNSOLD	124	.96	.99
	SOLD	17	.97	1.01
218	UNSOLD	229	1.27	1.26
	SOLD	19	1.22	1.23
220	UNSOLD	234	1.08	1.11
	SOLD	10	1.18	1.19
223	UNSOLD	849	.98	1.00
	SOLD	95	.98	.99
226	UNSOLD	321	.92	.94
	SOLD	30	.90	.93
232	UNSOLD	147	1.01	1.02
	SOLD	11	1.01	1.02
236	UNSOLD	46	.89	.98
	SOLD	10	.94	.90
242	UNSOLD	382	1.01	1.03
	SOLD	40	1.01	1.03
251	UNSOLD	120	.87	.92
	SOLD	23	.87	.93
252	UNSOLD	1041	.96	.98
	SOLD	109	.97	.97
258	UNSOLD	46	1.14	1.15
	SOLD	16	1.13	1.12
700	UNSOLD	161	.84	.83
	SOLD	13	.88	.86
1050	UNSOLD	373	.99	1.01
	SOLD	28	.95	.87

The above results indicated that sold and unsold vacant land properties were valued consistently overall.

V. CONCLUSIONS

Based on this statistical analysis, there were no significant compliance issues concluded for Teller County as of the date of this report.

STATISTICAL ABSTRACT

Residential

Ratio Statistics for CURRTOT / TASP												
	95% Confidence Interval for Mean			95% Confidence Interval for Median				95% Confidence Interval for Weighted Mean				Coefficient of Variation
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
1.004	.999	1.009	.997	.991	1.000	95.1%	.989	.984	.994	1.015	.084	11.7%

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

Commercial/Industrial

Ratio Statistics for CURRTOT / TASP												
	95% Confidence Interval for Mean			95% Confidence Interval for Median				95% Confidence Interval for Weighted Mean				Coefficient of Variation
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
1.031	.931	1.130	.998	.894	1.023	95.3%	.965	.875	1.054	1.068	.189	29.0%

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

Vacant Land

Ratio Statistics for CURRLND / TASP												
	95% Confidence Interval for Mean			95% Confidence Interval for Median				95% Confidence Interval for Weighted Mean				Coefficient of Variation
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
1.012	.991	1.033	.985	.976	.995	95.2%	.951	.930	.973	1.064	.198	28.3%

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.

Residential Median Ratio Stratification

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1212.00	2037	97.8%
	1215.00	5	0.2%
	1220.00	7	0.3%
	1225.00	1	0.0%
	1230.00	25	1.2%
	1712.00	4	0.2%
	1716.00	2	0.1%
	3215.00	1	0.0%
	4277.00	1	0.0%
Overall		2083	100.0%
Excluded		0	
Total		2083	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212.00	.997	1.015	.084	11.7%
1215.00	.973	1.023	.073	10.3%
1220.00	.820	1.019	.124	15.1%
1225.00	.723	1.000	.000	.
1230.00	.960	1.017	.074	10.1%
1712.00	.946	1.006	.096	13.9%
1716.00	.957	1.065	.132	18.6%
3215.00	.660	1.000	.000	.
4277.00	.732	1.000	.000	.
Overall	.997	1.015	.084	11.8%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	96	4.6%
	75 to 100	16	0.8%
	50 to 75	152	7.3%
	25 to 50	843	40.5%
	5 to 25	830	39.8%
	5 or Newer	146	7.0%
Overall		2083	100.0%
Excluded		0	
Total		2083	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.999	1.053	.171	22.6%
75 to 100	.998	1.033	.097	12.6%
50 to 75	.999	1.004	.095	13.3%
25 to 50	.999	1.014	.080	11.5%
5 to 25	.985	1.014	.078	10.4%
5 or Newer	1.029	1.008	.066	8.3%
Overall	.997	1.015	.084	11.8%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	30	1.4%
	500 to 1,000 sf	329	15.8%
	1,000 to 1,500 sf	685	32.9%
	1,500 to 2,000 sf	564	27.1%
	2,000 to 3,000 sf	327	15.7%
	3,000 sf or Higher	148	7.1%
Overall		2083	100.0%
Excluded		0	
Total		2083	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	1.032	1.023	.100	13.4%
500 to 1,000 sf	.989	1.023	.110	15.8%
1,000 to 1,500 sf	1.000	1.010	.080	11.6%
1,500 to 2,000 sf	.995	1.009	.071	9.4%
2,000 to 3,000 sf	.987	1.015	.082	11.0%
3,000 sf or Higher	.999	1.019	.096	12.8%
Overall	.997	1.015	.084	11.8%

Improved Quality

Case Processing Summary

		Count	Percent
QUALITY	Average	873	41.9%
	Average Plus	132	6.3%
	Excellent	2	0.1%
	Fair	276	13.3%
	Fair Plus	734	35.2%
	Good	34	1.6%
	Low	32	1.5%
Overall		2083	100.0%
Excluded		0	
Total		2083	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	.993	1.008	.071	9.4%
Average Plus	.982	1.006	.068	8.7%
Excellent	.855	1.056	.144	20.4%
Fair	.988	1.038	.129	18.7%
Fair Plus	1.000	1.010	.082	11.3%
Good	.954	1.006	.102	13.4%
Low	.994	1.034	.139	17.5%
Overall	.997	1.015	.084	11.8%

Improved Condition

Case Processing Summary

		Count	Percent
CONDITION	Average	2013	96.6%
	Badly Worn	7	0.3%
	Fair	60	2.9%
	Good	3	0.1%
Overall		2083	100.0%
Excluded		0	
Total		2083	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	.997	1.015	.083	11.6%
Badly Worn	.886	.999	.206	29.5%
Fair	.997	1.025	.112	15.4%
Good	.883	.984	.083	14.8%
Overall	.997	1.015	.084	11.8%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$25K to $50K	2	5.4%
	$50K to $100K	3	8.1%
	$100K to $150K	2	5.4%
	$150K to $200K	5	13.5%
	$200K to $300K	7	18.9%
	$300K to $500K	8	21.6%
	$500K to $750K	1	2.7%
	$750K to $1,000K	4	10.8%
	Over $1,000K	5	13.5%
Overall		37	100.0%
Excluded		0	
Total		37	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$25K to $50K	1.750	.988	.147	20.8%
$50K to $100K	1.011	1.009	.148	22.4%
$100K to $150K	1.107	1.050	.253	35.8%
$150K to $200K	1.015	.993	.064	8.9%
$200K to $300K	1.047	1.015	.167	22.0%
$300K to $500K	.998	.992	.112	18.3%
$500K to $750K	1.880	1.000	.000	.
$750K to $1,000K	.887	.998	.142	26.5%
Over $1,000K	.975	.990	.058	11.0%
Overall	.998	1.068	.189	30.1%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1712.00	2	5.4%
	1716.00	1	2.7%
	1721.00	1	2.7%
	1723.50	1	2.7%
	1725.00	1	2.7%
	2097.88	1	2.7%
	2212.00	9	24.3%
	2215.00	1	2.7%
	2217.50	1	2.7%
	2220.00	11	29.7%
	2222.50	1	2.7%
	2225.00	1	2.7%
	2230.00	5	13.5%
	9249.00	1	2.7%
Overall		37	100.0%
Excluded		0	
Total		37	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1712.00	.778	1.014	.125	17.7%
1716.00	1.015	1.000	.000	.
1721.00	1.121	1.000	.000	.
1723.50	1.388	1.000	.000	.
1725.00	2.007	1.000	.000	.
2097.88	.894	1.000	.000	.
2212.00	.975	1.061	.181	25.7%
2215.00	1.880	1.000	.000	.
2217.50	.998	1.000	.000	.
2220.00	.999	1.016	.097	15.4%
2222.50	1.023	1.000	.000	.
2225.00	.768	1.000	.000	.
2230.00	.999	1.029	.108	16.2%
9249.00	.491	1.000	.000	.
Overall	.998	1.068	.189	30.1%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	11	29.7%
	75 to 100	1	2.7%
	50 to 75	8	21.6%
	25 to 50	8	21.6%
	5 to 25	9	24.3%
Overall		37	100.0%
Excluded		0	
Total		37	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	1.011	1.080	.200	35.3%
75 to 100	.690	1.000	.000	.
50 to 75	.969	1.068	.191	22.5%
25 to 50	1.000	1.021	.183	36.4%
5 to 25	.975	1.070	.166	27.3%
Overall	.998	1.068	.189	30.1%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	2	5.4%
	500 to 1,000 sf	3	8.1%
	1,000 to 1,500 sf	1	2.7%
	1,500 to 2,000 sf	4	10.8%
	2,000 to 3,000 sf	4	10.8%
	3,000 sf or Higher	23	62.2%
Overall		37	100.0%
Excluded		0	
Total		37	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	1.378	1.039	.084	11.8%
500 to 1,000 sf	.813	1.023	.072	10.9%
1,000 to 1,500 sf	.827	1.000	.000	.
1,500 to 2,000 sf	1.140	1.014	.145	20.4%
2,000 to 3,000 sf	1.006	1.005	.014	2.4%
3,000 sf or Higher	.989	1.072	.200	34.5%
Overall	.998	1.068	.189	30.1%

Improved Quality

Case Processing Summary

		Count	Percent
QUALITY	Average	14	37.8%
	Average Plus	1	2.7%
	Fair	17	45.9%
	Fair Plus	1	2.7%
	Good	2	5.4%
	Low	1	2.7%
	Low Plus	1	2.7%
Overall		37	100.0%
Excluded		0	
Total		37	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	.978	1.018	.188	31.8%
Average Plus	.768	1.000	.000	.
Fair	.999	1.057	.159	22.6%
Fair Plus	1.121	1.000	.000	.
Good	.857	.966	.166	23.5%
Low	1.011	1.000	.000	.
Low Plus	2.007	1.000	.000	.
Overall	.998	1.068	.189	30.1%

Improved Condition

Case Processing Summary

		Count	Percent
CONDITION	Average	30	81.1%
	Badly Worn	1	2.7%
	Fair	6	16.2%
Overall		37	100.0%
Excluded		0	
Total		37	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	.996	1.047	.161	25.6%
Badly Worn	2.007	1.000	.000	.
Fair	.944	1.074	.203	27.2%
Overall	.998	1.068	.189	30.1%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	442	61.4%
	$25K to $50K	137	19.0%
	$50K to $100K	93	12.9%
	$100K to $150K	20	2.8%
	$150K to $200K	8	1.1%
	$200K to $300K	16	2.2%
	$300K to $500K	3	0.4%
	$500K to $750K	1	0.1%
Overall		720	100.0%
Excluded		0	
Total		720	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	.997	1.034	.217	32.3%
$25K to $50K	.982	.999	.165	21.3%
$50K to $100K	.922	1.007	.187	26.4%
$100K to $150K	.989	.991	.138	19.4%
$150K to $200K	.861	1.002	.253	30.5%
$200K to $300K	.991	1.003	.048	7.3%
$300K to $500K	.960	1.002	.098	19.4%
$500K to $750K	.993	1.000	.000	.
Overall	.985	1.064	.198	29.2%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100.00	584	81.1%
	200.00	7	1.0%
	520.00	15	2.1%
	530.00	29	4.0%
	540.00	32	4.4%
	550.00	20	2.8%
	1112.00	33	4.6%
Overall		720	100.0%
Excluded		0	
Total		720	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	.988	1.063	.197	28.5%
200.00	.960	1.224	.548	76.2%
520.00	.994	1.081	.152	24.2%
530.00	.925	1.112	.280	48.0%
540.00	1.000	.997	.169	22.9%
550.00	.983	1.012	.094	15.3%
1112.00	.954	1.022	.190	27.1%
Overall	.985	1.064	.198	29.2%