2017
MINERAL COUNTY
PROPERTY ASSESSMENT
STUDY

WILDROSE
APPRAISAL, INCORPORATED
Audit Division

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APPRAISAL, INCORPORATED
Audit Division

September 15, 2017

Mr. Mike Mauer
Director of Research
Colorado Legislative Council
Room 029, State Capitol Building
Denver, Colorado 80203

RE: Final Report for the 2017 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2017 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.

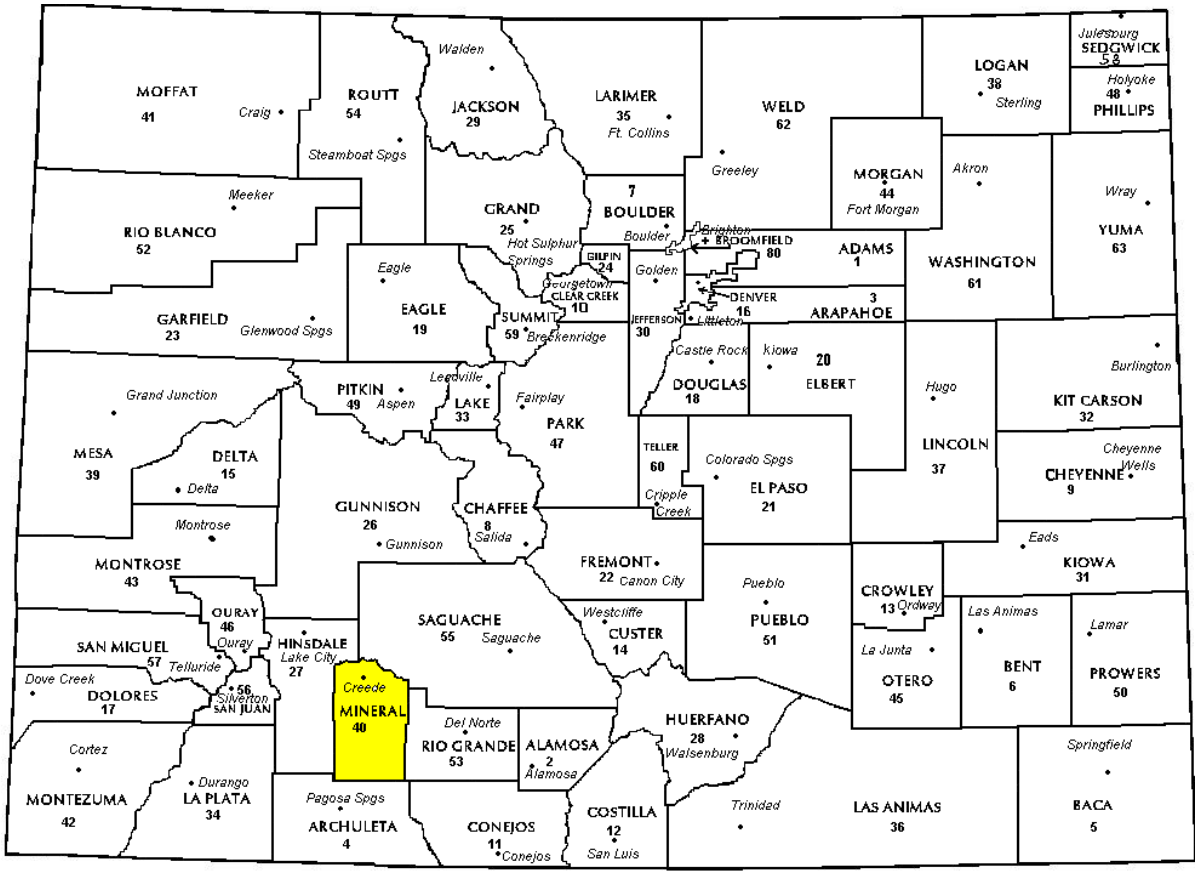
Statistical analysis is performed on vacant land, residential properties, commercial industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax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

Wildrose Audit has completed the Property Assessment Study for 2017 and is pleased to report its findings for Mineral County in the following report.

REGIONAL / HISTORICAL SKETCH OF MINERAL COUNTY

Regional Information

Mineral County is located in the San Luis Valley region of Colorado. The San Luis Valley is a large, broad, alpine valley in the Rio Grande Basin of south-central Colorado. The valley is drained to the south by the Rio Grande River which rises in the San Juan Mountains to the west of the valley. The San Luis Valley includes Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties.



Historical Information

Mineral County had an estimated population of approximately 732 people with 0.8 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a 2.8 percent change from April 1, 2010 to July 1, 2016.

Mineral County is the third least populous of the 64 Colorado counties. The county was named for the many valuable minerals found in the mountains and streams of the area. The county seat and the only municipality in the county is the Town of Creede.

Travelers to this area appeared in the early 1800s. Tom Boggs, a brother-in-law of Kit Carson , farmed at Wagon Wheel Gap in the summer of 1840. The first silver discovery was made at the Alpha mine in 1869, but the silver could not be extracted at a profit from the complex ores. Ranchers and homesteaders moved in when stagecoach stations (linking the mining operations over the Divide with the east) were built in the 1870s, but the great "Boom Days" started with the discovery of rich minerals in Willow Creek Canyon in 1889.

Creede was the last silver boom town in Colorado in the 1800s. The town leapt from a population of 600 in 1889 to more than 10,000 people in December 1891. The Creede mines operated continuously from 1890 until 1985. The original townsite of Creede was located on East Willow Creek just above its junction with West Willow Creek. Below Creede were Stringtown, Jimtown, and Amethyst. The Willow Creek site was soon renamed Creede after Nicholas C. Creede who discovered the Holy Moses Mine. Soon the entire town area from East Willow to Amethyst was called Creede.

Creede's boom lasted until 1893, when the Silver Panic hit all of the silver mining towns in Colorado. The price of silver plummeted and most of the silver mines were closed. Creede never became a ghost town, although the boom was over and its population declined. After 1900, Creede stayed alive by relying increasingly on lead and zinc in the ores.

Today, historic buildings and names from a bygone era mark the quaint seven-block downtown section of Creede's famous silver mining era. The spectacular Pillars of Hercules, volcanic cliffs rising nearly a thousand feet at the edge of town, frame Creede's array of shops, galleries, eateries, lodging, and sundry services. Simply viewing the old downtown area against this magnificent canyon backdrop makes a visit to Creede worthwhile in any season. A "Walking Tour" guidebook provides detailed information about Creede's historic buildings and downtown district. Being the only community in Mineral County, Creede serves as the commercial and government center for residents and visitors. Both the Mineral County Courthouse and the Creede Town Hall are located on North Main Street. Rio Grande National Forest maintains the Creede Ranger Station on South Main Street.
(www.Wikipedia.org, www.creede.com)

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, 2015 through June 20, 2016. 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. For the largest 11 counties, the residential ratio statistics were broken down by economic area as well.

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 Mineral County are:

Mineral County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
*Commercial/Industrial	N/A	N/A	N/A	N/A	N/A
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	33	0.947	1.000	14.1	Compliant
Vacant Land	N/A	N/A	N/A	N/A	N/A

**Due to the small number of sales, a procedural audit was performed.*

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

Mineral 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	N/A
Condominium	N/A
Single Family	Compliant
Vacant Land	N/A

Conclusions

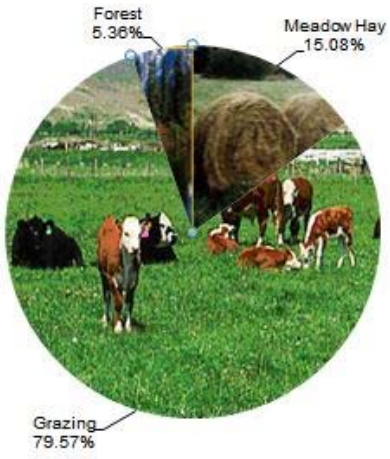
After applying the above described methodologies, it is concluded that Mineral County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

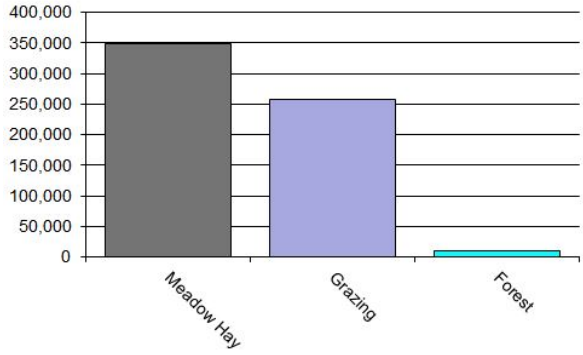
None

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:

Mineral 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	3,575	97.44	348,367	348,366	1.00
4147	Grazing	18,867	13.65	257,590	257,586	1.00
4177	Forest	1,270	8.75	11,109	11,140	1.00
Total/Avg		**23,713**	**26.02**	**617,066**	**6,170,920**	**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

Mineral County has substantially complied with the procedures provided by the Division of Property Taxation for the valuation of agricultural outbuildings.

Recommendations

None

Agricultural Land Under Improvements

Methodology

Data was collected and reviewed to determine if the guidelines found in the Assessor's Reference Library (ARL) Volume 3, pages 5.19 and 5.20 were being followed.

Conclusions

Mineral 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
- Personal Knowledge of Occupants at Assessment Date

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

- Property Record Card Analysis
- Questionnaires
- Personal Knowledge of Occupants at Assessment Date

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

Recommendations

None

SALES VERIFICATION

According to Colorado Revised Statutes:

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

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

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

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

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

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

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

WRA reviewed the sales verification procedures in 2017 for Mineral County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 33 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 $500, the contractor has examined and reported the ratio of qualified sales to total sales by class and performed the following analyses of unqualified sales:

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

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

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

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

Conclusions

Mineral County appears to be doing a good 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

Mineral County has submitted a written narrative describing the economic areas that make up the county's market areas. Mineral 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 Mineral County has adequately identified homogeneous economic areas comprised of smaller neighborhoods. Each economic area defined is equally subject to a set of economic forces that impact the value of the properties within that geographic area and this has been adequately addressed. Each economic area defined adequately delineates an area that will give "similar values for similar properties in similar areas."

Recommendations

None

NATURAL RESOURCES

Earth and Stone Products

Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Natural Resource Valuation Procedures, the income approach was applied to determine value for production of earth and stone products. The number of tons was multiplied by an economic royalty rate determined by the Division of Property Taxation to determine income. The income was multiplied by a recommended Hoskold factor to determine the actual value. The Hoskold factor is determined by the life of the reserves or the lease. Value is based on two variables: life and tonnage. The operator determines these since there is no other means to obtain production data through any state or private agency.

Conclusions

The County has applied the correct formulas and state guidelines to earth and stone production.

Recommendations

None

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2017 in Mineral County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14). Discounting procedures were applied to all subdivisions where less than 80 percent of all sites were sold using the present worth method. The market approach was applied where 80 percent or more of the subdivision sites were sold. An absorption period was estimated for each subdivision that was discounted. An appropriate discount rate was developed using the summation method. Subdivision land with structures was appraised at full market value.

Conclusions

Mineral 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.

Mineral 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

Mineral 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

Mineral 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.

Mineral 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
- 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.

Mineral County submitted their personal property written audit plan and was current for the 2017 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:

- New businesses filing for the first time
- Incomplete or inconsistent declarations
- Same business type or use
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts - Best Information Available
- Accounts close to the $7,400 actual value exemption status

Conclusions

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

Recommendations

None

WILDROSE AUDITOR STAFF

Harry J. Fuller, *Audit Project Manager*

Suzanne Howard, *Audit Administrative Manager*

Steve Kane, *Audit Statistician*

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

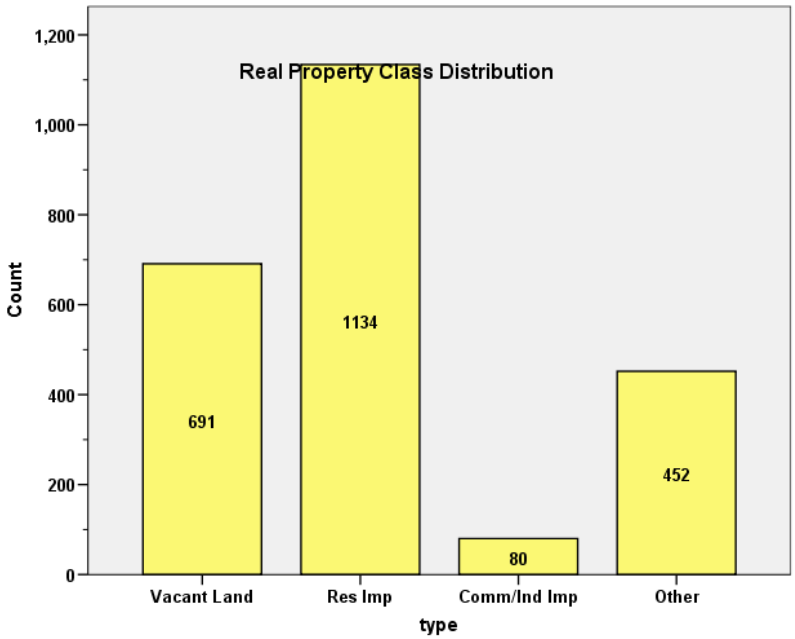
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE REPORT
FOR MINERAL COUNTY
2017

I. OVERVIEW

Mineral County is located in southwestern Colorado. The county has a total of 2,357 real property parcels, according to data submitted by the county assessor's office in 2017. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100 and 1112) accounted for 73.5% of all vacant land parcels. Based on the number of vacant land parcels in Mineral County, we were not required to analyze this class of property for audit compliance.

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 sales accounted for 3.4% of all such properties in this county.

II. DATA FILES

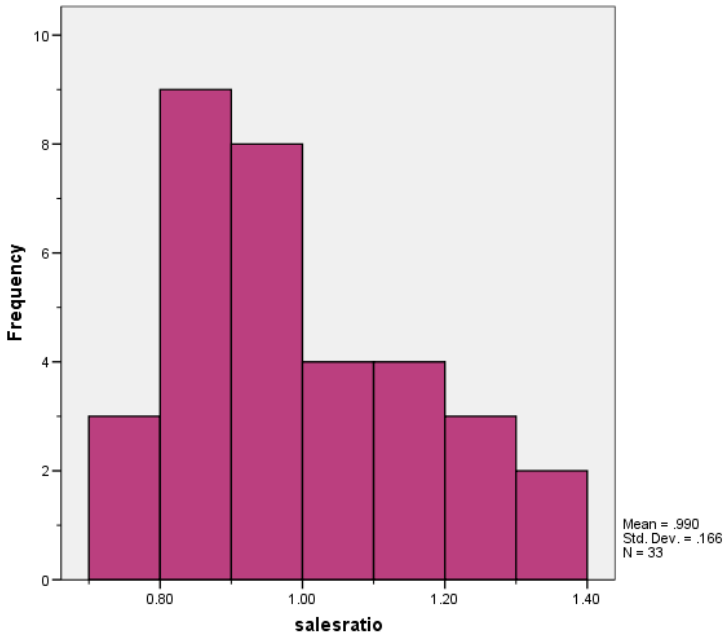
The following sales analyses were based on the requirements of the 2017 Colorado Property Assessment Study. Information was provided by the Mineral Assessor's Office in June 2017. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 36 total qualified residential sales over the 24 month period ending June 30, 2016; we trimmed three sales with extreme sale ratios, resulting in a final count of 33 qualified residential sales for this analysis. The residential sales ratio analysis results were as follows:

Median	**0.947**
Price Related Differential	**1.000**
Coefficient of Dispersion	**14.1**

The above median ratio results and COD results were in compliance as set for by the Colorado SBOE, although the sales ratio was only in compliance after rounding. We spoke to the assessor about this very low ratio, advising her to carefully evaluate the county's residential valuation model and property classification. The following graphs indicate the sales ratio distribution for qualified residential sales:



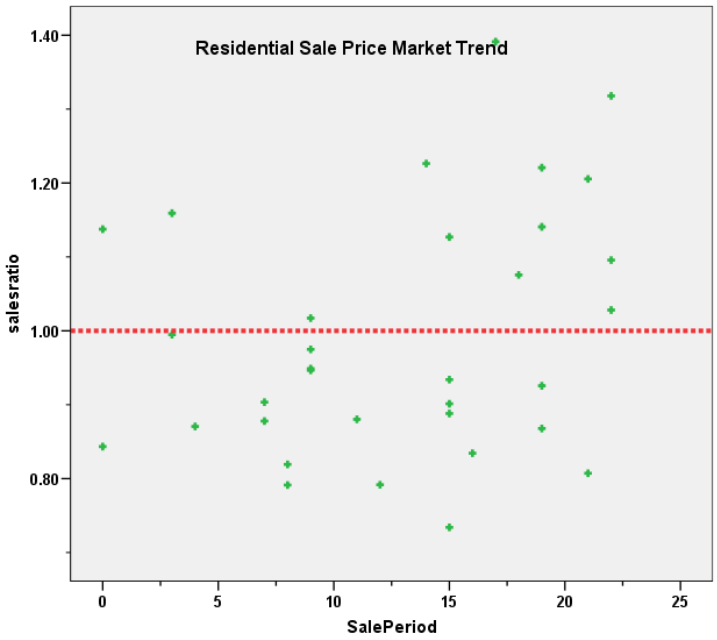
Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period, tracing the sales ratio pattern over the sale period. The following results indicate that there was no significant residual market trend pattern in the sales ratio, based on the magnitude of the slope coefficient:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.900	.062		14.462	.000
	SalePeriod	.007	.004	.280	1.626	.114

a. Dependent Variable: salesratio



The above results indicate that the assessor has adequately addressed market trending in their residential valuation for this sale period.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median and mean value per square foot for 2017, as follows:

Report

VALSF

sold	N	Median	Mean
UNSOLD	1,100	$107	$114
SOLD	33	$114	$123

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	.096	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Based the results from the Mann-Whitney non-parametric test, we concluded that the assessor has valued sold and unsold residential properties consistently in 2017.

IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

The County did not have enough qualified commercial/industrial sales to be statistically significant. A procedural audit was completed for taxable year 2017. This analysis reviewed all qualified commercial sales. Information was gathered concerning class of property, year built, improvement size, type and quality of construction, condition at the time of sale, sale date and amount and the Assessor value. The audit then determined sale price per square foot and the sales ratio. The audit concluded that the County is in compliance due to the lack of substantive data to support a revaluation decision.

V. AGRICULTURAL IMPROVEMENTS ANALYSIS

With only 15 properties with improvements coded as 4277, it was not possible to statistically compare this subclass of agricultural improvements with single family residential improvements.

VI. CONCLUSIONS

Based on this statistical analysis, there were no significant compliance issues concluded for Mineral 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
.990	.931	1.049	.947	.880	1.076	96.5%	.990	.931	1.050	1.000	.141	16.7%

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

Not applicable

Vacant Land

Not applicable

Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$50K to $100K	2	6.1%
	$100K to $150K	5	15.2%
	$150K to $200K	11	33.3%
	$200K to $300K	9	27.3%
	$300K to $500K	5	15.2%
	Over $1,000K	1	3.0%
Overall		33	100.0%
Excluded		0	
Total		33	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$50K to $100K	.960	1.008	.036	5.1%
$100K to $150K	1.206	.987	.141	23.9%
$150K to $200K	1.017	1.010	.138	17.0%
$200K to $300K	.903	1.002	.122	22.2%
$300K to $500K	.880	.999	.074	10.5%
Over $1,000K	1.096	1.000	.000	.
Overall	.947	1.000	.141	18.1%

Sub-Class

Case Processing Summary

		Count	Percent
ABSTRIMP	1212.00	32	97.0%
	1223.50	1	3.0%
Overall		33	100.0%
Excluded		0	
Total		33	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212.00	.940	.998	.140	18.4%
1223.50	1.138	1.000	.000	.
Overall	.947	1.000	.141	18.1%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	2	6.1%
	75 to 100	3	9.1%
	50 to 75	3	9.1%
	25 to 50	8	24.2%
	5 to 25	17	51.5%
Overall		33	100.0%
Excluded		0	
Total		33	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.872	1.022	.061	8.6%
75 to 100	1.138	.975	.102	21.5%
50 to 75	.995	.996	.133	20.1%
25 to 50	.961	1.025	.105	14.2%
5 to 25	.934	.995	.153	21.1%
Overall	.947	1.000	.141	18.1%

Improvement Size

Case Processing Summary

		Count	Percent
ImpSFRec	500 to 1,000 sf	4	12.1%
	1,000 to 1,500 sf	10	30.3%
	1,500 to 2,000 sf	9	27.3%
	2,000 to 3,000 sf	7	21.2%
	3,000 sf or Higher	3	9.1%
Overall		33	100.0%
Excluded		0	
Total		33	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
500 to 1,000 sf	.901	.991	.173	23.6%
1,000 to 1,500 sf	.930	1.007	.112	18.0%
1,500 to 2,000 sf	1.017	1.031	.128	15.3%
2,000 to 3,000 sf	.901	1.029	.157	26.6%
3,000 sf or Higher	1.096	1.001	.033	5.1%
Overall	.947	1.000	.141	18.1%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	ABOVE AVG	2	6.1%
	ABOVE AVG.	5	15.2%
	AVERAGE	16	48.5%
	BELOW AVG.	1	3.0%
	GOOD	9	27.3%
Overall		33	100.0%
Excluded		0	
Total		33	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
ABOVE AVG	.982	.934	.116	16.4%
ABOVE AVG.	.934	.988	.096	14.3%
AVERAGE	.907	1.025	.148	20.2%
BELOW AVG.	1.138	1.000	.000	.
GOOD	1.028	1.022	.133	17.4%
Overall	.947	1.000	.141	18.1%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	AVERAGE	33	100.0%
Overall		33	100.0%
Excluded		0	
Total		33	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
AVERAGE	.947	1.000	.141	18.1%
Overall	.947	1.000	.141	18.1%

Commercial Median Ratio Stratification

Not applicable

Vacant Land Median Ratio Stratification

Not applicable