



2008
MONTEZUMA COUNTY
PROPERTY ASSESSMENT
STUDY



ROCKY MOUNTAIN
VALUATION SPECIALISTS



September 15, 2008

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

**RE: Final Report for the 2008 Colorado Property Assessment Study
for Colorado's sixty four counties**

Dear Mr. Mauer:

Rocky Mountain Valuation Specialists LLC is pleased to submit the Final Reports for the 2008 Colorado Property Assessment Study for all sixty four counties that make up the State of Colorado.

These reports represent the result of a two-part analysis and audit for each county: A procedural analysis and a statistical analysis.

The procedural analysis, for each county, included all classes of property and specifically looked at how the assessor developed economic areas, confirmed and qualified their sales, developed their time adjustments, and performed their periodic physical property inspections. The audit also reviewed the procedures for discovering, classifying and valuing agricultural outbuildings, discovering subdivision build-out and subdivision discounting procedures. Valuation methodology for residential properties and commercial properties was examined. Procedures for producing mines, oil and gas leaseholds and lands producing, producing coalmines, producing earth and stone products, severed mineral interests, and non-producing patented mining claims were also reviewed. Starting in 2007, procedural analyses of agricultural outbuildings were performed for each county.



Statistical analysis was also performed, for each county, on vacant land, residential properties, commercial/industrial properties, and agricultural land. A statistical analysis was performed to check for personal property compliance on the top 11 counties: Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo, and Weld. All other counties received a procedural study.

Throughout this project RMVS has remained committed to its belief that for an ad valorem system to be successful, values must be equitable and market-driven in all parts of Colorado. Only then is the taxpayer assured of a fair property tax.

RMVS appreciates the opportunity to be of service to the State of Colorado.

A handwritten signature in black ink, appearing to read "Mark R. Linné".

Mark R. Linné **MAI, CAE, ASA, CRE, FRICS**
Managing Director
Rocky Mountain Valuation Specialists LLC



TABLE OF CONTENTS

Introduction.....	3
Regional/Historical Sketch of Montezuma County.....	5
Ratio Analysis.....	7
Time Trending Verification	9
Sold/Unsold Analysis	10
Agricultural Land Study.....	12
<i>Agricultural Land</i>	12
<i>Agricultural Outbuildings</i>	13
Sales Verification	14
Economic Area Review and Evaluation	15
Natural Resources.....	16
Vacant Land.....	17
<i>Subdivision Discounting</i>	17
Possessory Interest Properties	18
Personal Property Audit	19
RMVS Auditor Staff.....	21
Appendices	22



INTRODUCTION



Colorado

The Colorado Constitution directs that each property tax levy shall be uniform upon all real and personal property not exempt from taxation. The constitution goes on to direct that the actual value of all applicable real and personal property shall be determined under general laws, which shall prescribe such methods and regulations as shall secure just and equalized valuations (Colo. Const., Art. X, Sec. 3 (1)(a)).

In order to check that all applicable property has been valued with just and equalized valuations, the Constitution states that commencing in 1983 the general assembly shall cause a valuation for assessment study to be conducted. Such study shall determine whether or not the assessor of each county has complied with the property tax provisions of this constitution and of the statutes in valuing property and has determined the actual value and valuation for assessment of each and every class of taxable real and personal property consistent with such provisions. Such study shall sample at least one percent of each and every class of taxable real and personal property in the county (Colo. Const., Art. X, Sec. 3 (2)(a)).

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.

C.R.S. 39-1-104 (16)(a)(b) and (c) outlined how this was to be accomplished by stating that during each property tax year, the director of research of the legislative council shall contract with a private person for a valuation for assessment study to be conducted as set forth in this subsection (16). The study shall be conducted in all counties of the state to determine whether or not the assessor of each county has, in fact, used all manuals, formulas, and other directives required by law to arrive at the valuation for assessment of each and every class of real and personal property in the county. The person conducting the study shall sample each class of property in a statistically valid manner, and the aggregate of such sampling shall equal at least one percent of all properties in each county of the state. The sampling shall show that the various areas, ages of buildings, economic conditions, and uses of properties have been sampled. Such study shall be completed, and a final report of the findings and conclusions thereof shall be submitted to the state board of equalization, by September 15 of the year in which the study is conducted.

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.

RMVS has completed the Property Assessment Study for 2008 and is pleased to report its findings for Montezuma County in the following report.



REGIONAL/HISTORICAL SKETCH OF MONTEZUMA COUNTY

Regional Information

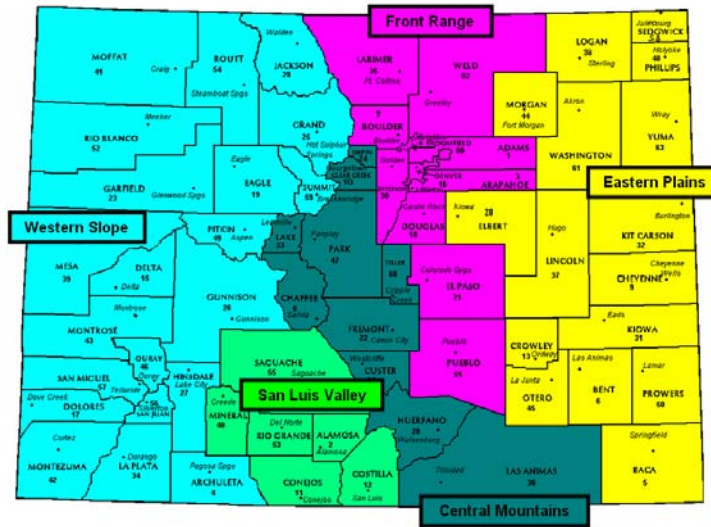
Montezuma County is located in the Western Slope region of Colorado. The Western Slope of Colorado refers to the region of the State of Colorado west of the Rocky Mountains. The region is considered the part of Colorado outside the mountains that are emptied by the Colorado River and its tributaries. The area's climate is similar to that of the Great Basin.

The Western Slope is generally much less populated than the Front Range and has only a few towns with populations over 5,000. The primary economic activity is ranching, mining, and tourism. Fruit farming is also prevalent in many areas along the Colorado and Gunnison rivers, including the Grand Valley. The unofficial

capital of the Western Slope is considered to be Grand Junction, located in the Grand Valley.

The Western Slope includes Archuleta, Delta, Dolores, Eagle, Garfield, Grand, Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel, and Summit counties.

Historically, the area was the homeland of the Ute people and was the Utah Territory before its inclusion in the Colorado Territory upon organization in 1861. Settlers began arriving in large numbers in the late 1870s and early 1880s.



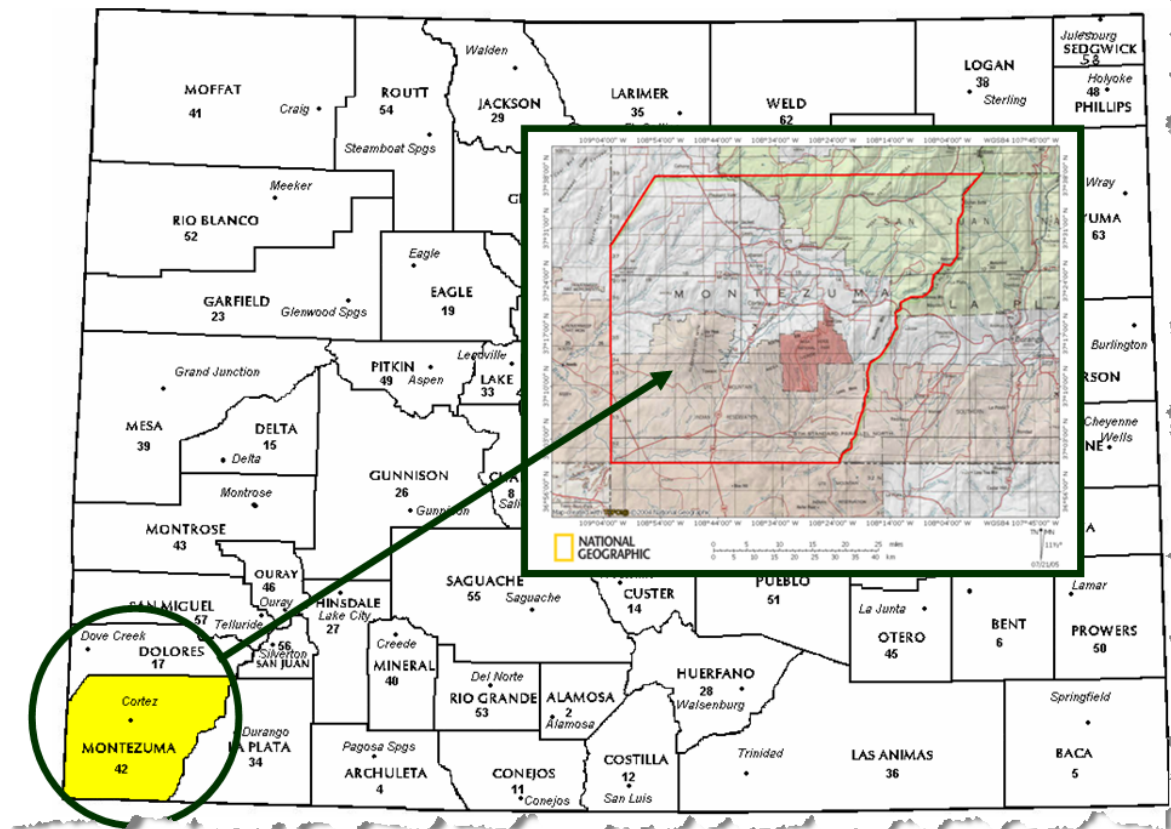


Historical Information

Montezuma County has a population of approximately 25,217 people with 11.7 people per square mile, according to the U.S. Census Bureau's 2006 estimated population data.

The County, formed from part of La Plata County, was established in 1889 and is 2,094 square miles in area. It was named for the Aztec emperor of Mexico when prehistoric dwellings in the area were erroneously believed to have been built by the Aztecs.

The county seat is Cortez which was named for the Spanish conquistador who conquered Mexico in the sixteenth century. The name was suggested by James W. Hanna, the homesteader who sold the site to the Montezuma Land & Development Company. (William Bright, Colorado Place Names, 3rd Edition, Johnson Books, 2004, p. 120 and 44)





RATIO ANALYSIS

Methodology

All significant classes of properties were analyzed. Sales were collected for each property class over the appropriate sale period, which was typically defined as the 18-month period between January 2005 and June 2006. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2006 in 6-month increments. If there were still fewer than 30 sales, supplemental appraisals were performed and treated as proxy sales. Residential sales for all counties using this method totaled at least 30 per county. For commercial sales, the total number analyzed was allowed, in some cases, to fall below 30. There were no sale quantity issues for counties requiring vacant land analysis or condominium analysis. 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 insure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method were 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 Montezuma County are:

Montezuma County Ratio Grid						
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis	
Commercial/Industrial	46	0.982	0.990	10.9	Compliant	
Condominium	N/A	N/A	N/A	N/A	N/A	
Single Family	569	0.968	1.033	14.8	Compliant	
Vacant Land	118	0.981	1.068	*21.1	Compliant	

**Using Evaluating Compliance with COD Standards by Robert J. Gloudemans which defined maximum acceptable COD compliance standards. This study concluded that with a sample of 118 sales, the maximum COD for property types with a 20.99% compliance standard is 23.21%.*

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

Montezuma County was tested for the equal treatment of sold and unsold properties to insure 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.

All qualified residential and commercial class properties were examined using the unit value method, where the actual value per square foot was compared between sold and unsold properties. A class was considered qualified if it met the criteria for the ratio analysis. The median value per square foot for both groups was compared from an appraisal and statistical perspective. If no significant difference was indicated, then we concluded that no further testing was warranted and that the county was in compliance in terms of sold/unsold consistency.

If either residential or commercial differences were significant using the unit value method, or if data limitations made the comparison invalid, then the next step was to perform a ratio analysis comparing the 2006 and 2008 actual values for each qualified class of property. All qualified vacant land classes were tested using this method. The sale property ratios were arrayed using a range of 0.8 to 1.5, which theoretically excluded changes between years that were due to other unrelated changes in the property. These ratios were also stratified at the appropriate level of analysis. Once the percent change was determined for each appropriate class and sub-class, the next step was to select the

unsold sample. This sample was at least 1% of the total population of unsold properties and excluded any sale properties. The unsold sample was filtered based on the attributes of the sold dataset to closely correlate both groups. The ratio analysis was then performed on the unsold properties and stratified. The median and mean ratio distribution was then compared between the sold and unsold group. A non-parametric test such as the Mann-Whitney test for differences between independent samples was undertaken to determine whether any observed differential was significant. If this test determined that the unsold properties were treated in a manner similar to the sold properties, it was concluded that no further testing was warranted and that the county was in compliance.

If a class or sub-class of property was determined to be significantly different by this method, the final step was to perform a multi-variate mass appraisal model that developed ratio statistics from the sold properties that were then applied to the unsold sample. This test compared the measures of central tendency and confidence intervals for the sold properties with the unsold property sample. If this comparison was also determined to be significantly different, then the conclusion was that the county had treated the unsold properties in a different manner than sold properties.

These tests were supported by both tabular and chart presentations, along with saved sold and unsold sample files.



Sold/Unsold Results	
Property Class	Results
Commercial/Industrial	Compliant
Condominium	N/A
Single Family	Compliant
Vacant Land	Compliant

Conclusions

After applying the above described methodologies, it is concluded that Montezuma County is reasonably treating

its sold and unsold properties in the same manner.

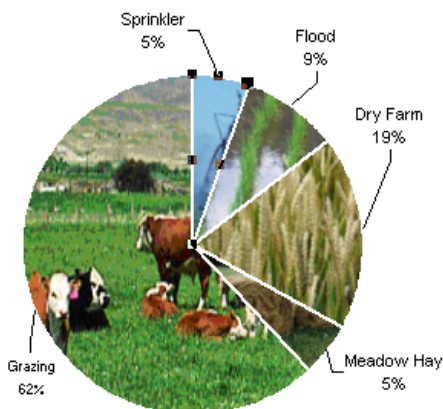
Recommendations

None

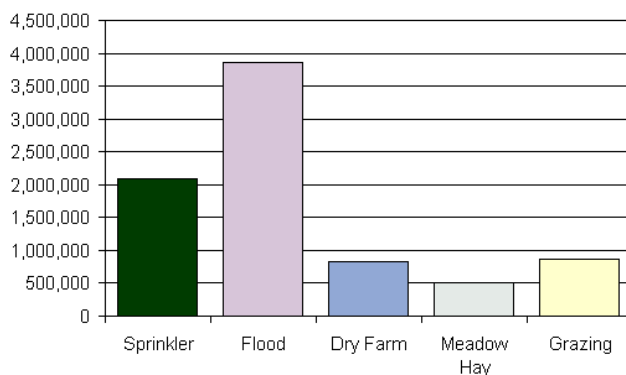


AGRICULTURAL LAND STUDY

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:



Montezuma County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	RMVS Total Value	Ratio
4107	Sprinkler	16,212	128.39	2,081,528	2,074,227	1.00
4117	Flood	27,455	140.60	3,860,055	3,859,656	1.00
4127	Dry Farm	56,100	14.90	835,879	865,349	0.97
4137	Meadow Hay	14,963	33.51	501,365	501,365	1.00
4147	Grazing	185,959	4.66	866,369	866,369	1.00
Total/Avg		300,689	27.09	8,145,196	8,166,967	1.00

Recommendations

None

Agricultural Outbuildings

Methodology

A sample of various use types of agricultural outbuildings with varying ages was reviewed to see if the guidelines found in the Assessor's Reference Library (ARL) Volume 3, pages 5.73 through 5.78 were being followed.

Conclusions

Montezuma County has developed a written plan for the implementation of the recommended procedures provided by the Division of Property Taxation for the valuation of agricultural outbuildings.

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. RMVS has used the above-cited statutes as a guide in our study of the county's procedures and practices for verifying sales.

RMVS reviewed the sales verification procedures in 2008 for Montezuma County. This study was conducted by checking selected sales from the master sales list for the valuation period. Specifically RMVS selected 30 sales listed as unqualified.

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

Conclusions

Montezuma County appears to be doing an excellent job of verifying their sales. RMVS 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

Montezuma County has submitted a written narrative describing the economic areas that make up the county's market areas. Montezuma 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 Montezuma 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 the primary method applied to find value for production of earth and stone products. The number of tons was multiplied by an economic location factor that represented the landlord's royalty. The landlord's share was multiplied by a recommended Hoskold factor to determine the actual value. The Hoskold factor was determined by the life of the reserves, or the lease. The value was primarily 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

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

Recommendations

None

Producing Oil and Gas Procedures

Methodology

The Colorado Revised Statutes (CRS) in Article 39, Section 7, and the Assessor's Reference Library (ARL), Volume 3 were the basis for valuing the production of gas property. For gas, the gross volume of thousand cubic feet (MCF) sold was multiplied by the current average field price per unit sold. For Oil, the gross volume of barrels sold was multiplied by the current average field price per unit sold. Any federal, state or local government ownership (royalty) was deducted from the gross value sold to arrive at actual value.

Conclusions

County valued oil and gas production using acceptable appraisal procedures.

Recommendations:

None



VACANT LAND

Subdivision Discounting

In 2008 subdivisions were reviewed in Montezuma 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 was 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

Montezuma 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 property discovery and valuation is described in the Assessor's Reference Library (ARL) Volume 3 section 7 in accordance with the requirements of 39-1-103 (17)(a) (II) C.R.S. Possessory Interest is defined by the Property Tax Administrator's Publication ARL Volume 3, Section 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.

Montezuma County has been reviewed for their procedures and adherence to guidelines when assessing and valuing

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

Montezuma 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

Montezuma 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 requirements are outlined as follows:

Use ARL Volume 5 including current discovery, classification, and documentation procedures, and including 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, RMVS 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.

Montezuma 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
- 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.

Montezuma County submitted their personal property written audit plan and was current for the 2008 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
- 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 \$2,500 actual value exemption status
- Accounts protested with substantial disagreement

Conclusions

Montezuma 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



RMVS AUDITOR STAFF

Mark Linné, MAI, CRE, CAE, ASA, FRICS, *Corporate Managing Director of RMVS*

Suzanne J. Howard, *Audit Manager for RMVS*

Uwe Hohoff, *Chief Statistician for RMVS, Audit Division*

James Gresham, *Audit Chief Data Analyst for RMVS*

Garth Thimgan, CAE, *General Audit Support and Consultant for RMVS*

Helen D. Powszukiewicz, *General Audit Support Administrative Assistant*

Carl W. Ross, *Agricultural Coordinator and Supervisor for RMVS*

Cathie E. Ross, *General Audit Support Administrative Assistant*

Katie Linné, *Administrative Assistant*



ROCKY MOUNTAIN
VALUATION SPECIALISTS

APPENDICES



STATISTICAL ANALYSIS MONTEZUMA COUNTY 2008

I. OVERVIEW

Montezuma County is located in southwestern Colorado. The County has a total of 14,424 real property parcels based on the data submitted by the County Assessor's office in 2008. The breakdown by property type is listed in the table below.

PROPERTY TYPE

	Frequency	Percent
VACANT LAND	3,593	24.9
RESIDENTIAL	5,726	39.7
COMMERCIAL	655	4.5
INDUSTRIAL	70	.5
OTHER	4,380	30.4
Total	14,424	100.0

Vacant Land

The vacant land class of properties has a total of 3,593 parcels. The majority (69%) of these parcels fall into the residential (100,1112) use category. The remaining vacant parcels are a mix of commercial/industrial, multiple unit and mobile home, or have a subclass code that is delineated by the acreage of the parcel.

SUBCLASS CODE

	Frequency	Percent
100 Residential Lots	1,417	39.4
200 Commercial Lots	70	1.9
300 Industrial Lots	8	.2
510 Less Than 1.0 ACRES	25	.7
520 1.0 to 4.99 ACRES	142	4.0
530 5.0 to 9.99 ACRES	101	2.8
540 10.0 to 34.99 ACRES	134	3.7
550 35.0 to 99.99 ACRES	121	3.4
560 100.0 ACRES and Up	11	.3
1112 Single Family Residence Land	1,076	29.9
1115 Duplexes-Triplexes Land	1	.0
1120 Multi-Units (4-8) Land	1	.0
1135 Manuf Housing (Mobile Homes) Land	459	12.8
1140 Manuf Housing (Land, Park, Etc.) Land	27	.8
Total	3,593	100.0



Residential

The residential subclass category has a total of 5,726 parcels. Over 96% of the parcels have a single-family (1212) designation. The remaining parcels in this category are condominiums and multi-unit properties.

SUBCLASS CODE

	Frequency	Percent
1212 Single Family Residence	5,545	96.8
1215 Duplexes-Triplexes	91	1.6
1220 Multi-Units (4-8)	40	.7
1225 Multi-Units (9 & Up)	10	.2
1230 Condominiums	40	.7
Total	5,726	100.0

Commercial/Industrial

The commercial/industrial subclass category has a total of 725 properties. This category represents 5% of the total real property inventory. The majority (90%) of these parcels have a commercial use. The breakdown by subclass code is listed below.

SUBCLASS CODE

	Frequency	Percent
2112 Merchandising	11	1.5
2120 Offices	1	.1
2130 Special Purpose	28	3.9
2135 WareHouse/Strg	3	.4
2212 Merchandising	167	23.0
2215 Lodging	36	5.0
2220 Offices	84	11.6
2225 Recreation	4	.6
2230 Special Purpose	250	34.5
2235 WareHouse/Strg	62	8.6
2240 Multi-Use (3+)	9	1.2
3112 Contract/Service	1	.1
3115 Manuf/Processing	2	.3
3212 Contract/Service	18	2.5
3215 Manuf/Processing	47	6.5
3225 Refining/Petrol	2	.3
Total	725	100.0



Other

The majority of the remaining 4,380 parcels have an agricultural use.

II. SALES FILE

The sale file provided by the Montezuma County Assessor’s Office contained 1,523 real property sales between the dates of January 2005 and June 2006. The breakdown of sales activity by sale month and year is as follows:

		SALE YEAR		Total
		2005	2006	
SALE MONTH	January	56	59	115
	February	63	44	107
	March	94	92	186
	April	94	72	166
	May	109	80	189
	June	115	100	215
	July	87	0	87
	August	99	0	99
	September	105	0	105
	October	111	0	111
	November	72	0	72
	December	71	0	71
Total		1,076	447	1,523

Once the sales were edited to keep the most recent sale, transactions that were coded as unqualified by the County were excluded from the analysis. The following table provides a breakdown of the qualified and unqualified sales.

SALE INVESTIGATION CODE

	Frequency	Percent
MISSING CODE	46	3.2
QUALIFIED	799	56.3
UNQUALIFIED	573	40.4
Total	1,418	100.0



There were 799 sales that were classified as qualified. The breakdown of the sale property type is listed below.

SALE TYPE

	Frequency	Percent
VACANT	118	14.8
VACANT SALE WITH NON-VACANT LAND SUBCLASS	27	3.4
RESIDENTIAL	569	71.2
COMM/IND	46	5.8
IMPROVED SALE WITH VACANT SUBCLASS	30	3.8
OTHER	9	1.1
Total	799	100.0

III. RESIDENTIAL SALES RESULTS

For the residential analysis, 569 sales between the dates of January 2005 and June 2006 were analyzed. A breakdown of the sales by subclass is listed below.

SUBCLASS CODE

	Frequency	Percent
1212 Single Family Residence	677	98.7
1215 Duplexes-Triplexes	1	.1
1220 Multi-Units (4-8)	1	.1
1230 Condominiums	6	.9
1235 Manuf Housing (Mobile Homes)	1	.1
Total	686	100.0

**3 sales with an effective year built > sale year will be excluded from the ratio study.*

These sales were used to perform a sales ratio analysis to determine whether the statutory guidelines for the level and quality of the assessments have been satisfied. In order to perform a sales ratio analysis all sales must reflect market conditions as of June 30, 2006.

Based on an examination of the sales file, the County did not apply time adjustments to the sales during this time period. The following table outlines the sales ratio statistics for all residential properties in Montezuma County.

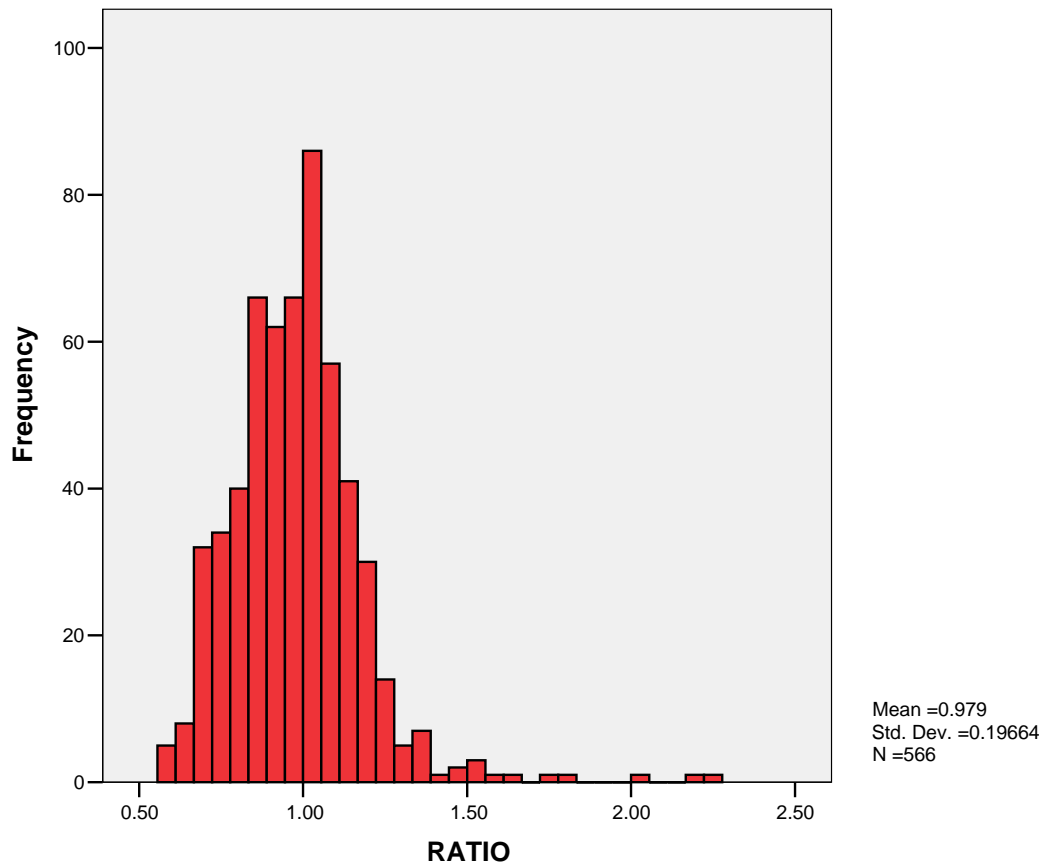


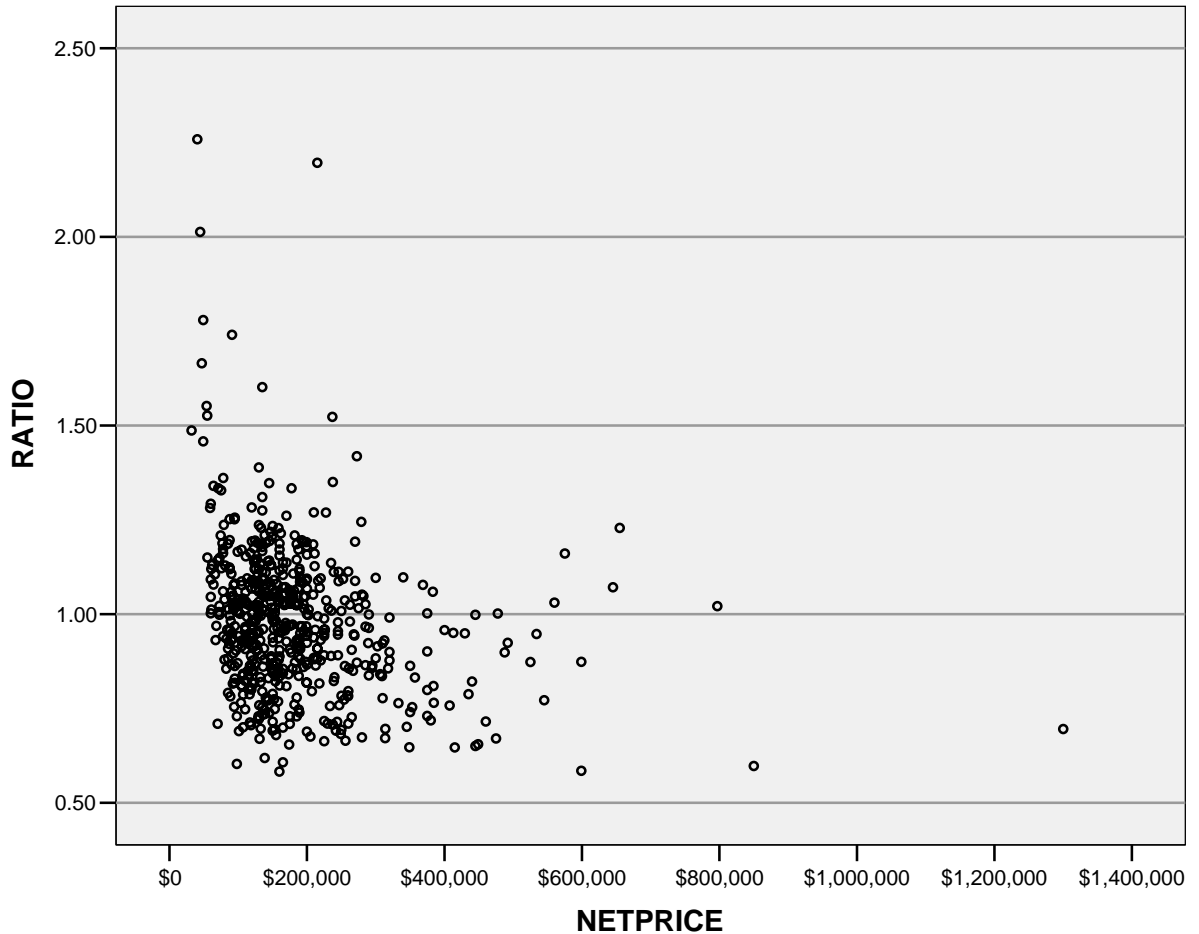
Ratio Statistics

Mean	.979
Median	.968
Weighted Mean	.947
Price Related Differential	1.033
Coefficient of Dispersion	.148

RATIO = CURRENT ASMT / NETPRICE

The above ratios are in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall sales. The following graphical exhibits describe further the sales ratio distribution for all of these properties:



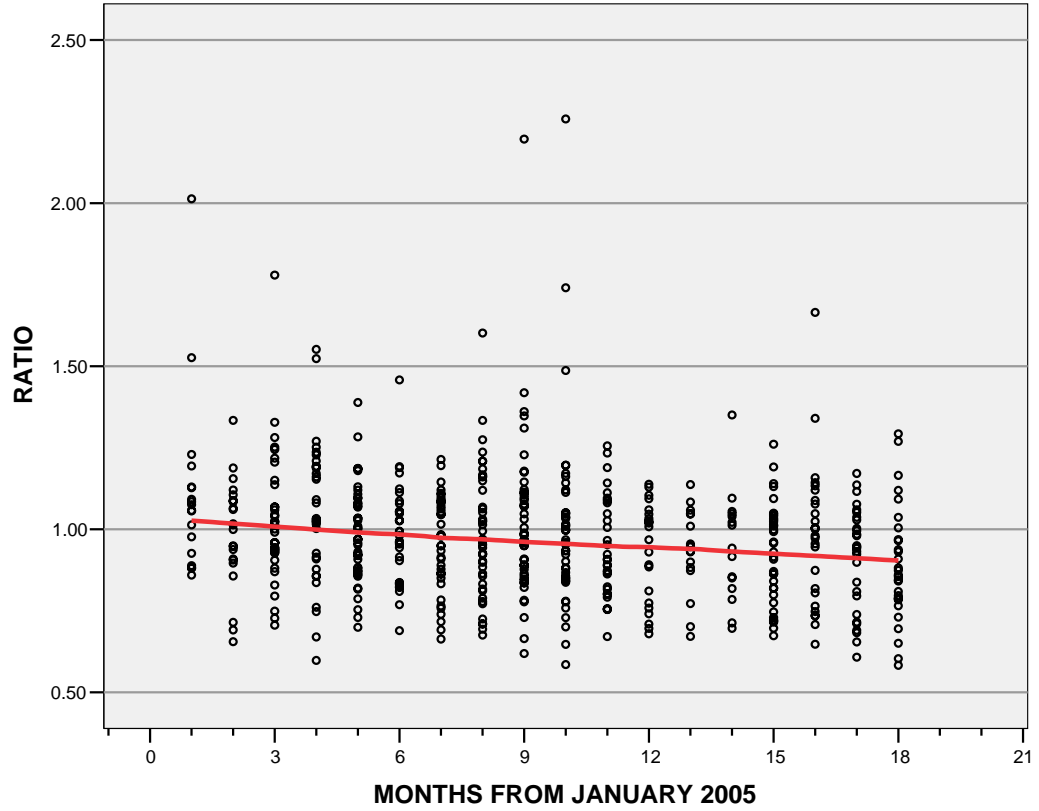


Residential Market Trend Analysis

Sale ratios were analyzed over the 18-month time period to determine whether market trending was accounted for in the residential valuations. The following graph illustrates a downward trend in sale ratios during this time period. This trend was tested and was significant at a 95% confidence level. The chart of the median sale ratios for 2006 indicates that only 1 month has a median sale ratio above the 95% lower target assessment level. For the next revaluation year the county should closely analyze all sales in the 18-month period and make time adjustments (if necessary) to the sales to ensure the valuations are reflective as the June valuation date.



Sale Ratio By Months





RESIDENTIAL RATIO REPORT BY SALE YEAR AND MONTH

RATIO

SALE YEAR	SALE MONTH	Mean	Median	Minimum	Maximum	N	
2005	1.0 January	1.1119	1.0665	.86	2.01	18	
	2.0 February	.9905	1.0136	.66	1.33	23	
	3.0 March	1.0245	.9960	.71	1.78	36	
	4.0 April	1.0494	1.0316	.60	1.55	32	
	5.0 May	.9892	.9700	.70	1.39	45	
	6.0 June	.9858	.9869	.69	1.46	34	
	7.0 July	.9585	.9785	.66	1.21	39	
	8.0 August	.9857	.9663	.68	1.60	44	
	9.0 September	1.0176	.9750	.62	2.20	48	
	10.0 October	1.0029	.9678	.59	2.26	45	
	11.0 November	.9429	.9073	.67	1.26	30	
	12.0 December	.9328	.9879	.68	1.14	22	
	Total		.9972	.9839	.59	2.26	416
2006	1.0 January	.9352	.9465	.67	1.14	17	
	2.0 February	.9464	.9422	.70	1.35	15	
	3.0 March	.9251	.9302	.67	1.26	35	
	4.0 April	.9805	.9912	.65	1.66	26	
	5.0 May	.9098	.9438	.61	1.17	28	
	6.0 June	.8911	.8601	.58	1.29	29	
	Total		.9285	.9396	.58	1.66	150

Sold/Unsold Analysis

For the 2007 revaluation year audit, an analysis was performed that confirmed that the median assessed value per square foot for sold and unsold residential property was similar. Since tax year 2008 is the intervening year, this relationship should not change. If there is no change in either category, the conclusions from the 2007 audit would also be applicable to the current year.

2007 - 2008 PERCENT CHANGE

CHANGE

CATEGORY	Median	N
SOLD	.0000	566
UNSOLD	.0000	5,147

The median percent change table of sold and unsold residential properties indicates that there is no change in the residential category. Therefore, we can conclude that the analysis performed for the 2007 audit is also applicable for the 2008 intervening year.



IV. COMMERCIAL/INDUSTRIAL SALES RESULTS

For the commercial/industrial analysis, 46 sales between the dates of January 2005 and June 2006 were analyzed. A breakdown of the sales by subclass is as follows:

SUBCLASS CODE

	Frequency	Percent
2212 Merchandising	8	17.4
2215 Lodging	3	6.5
2220 Offices	10	21.7
2230 Special Purpose	15	32.6
2235 WareHouse/Strg	6	13.0
3212 Contract/Service	2	4.3
3215 Manuf/Processing	2	4.3
Total	46	100.0

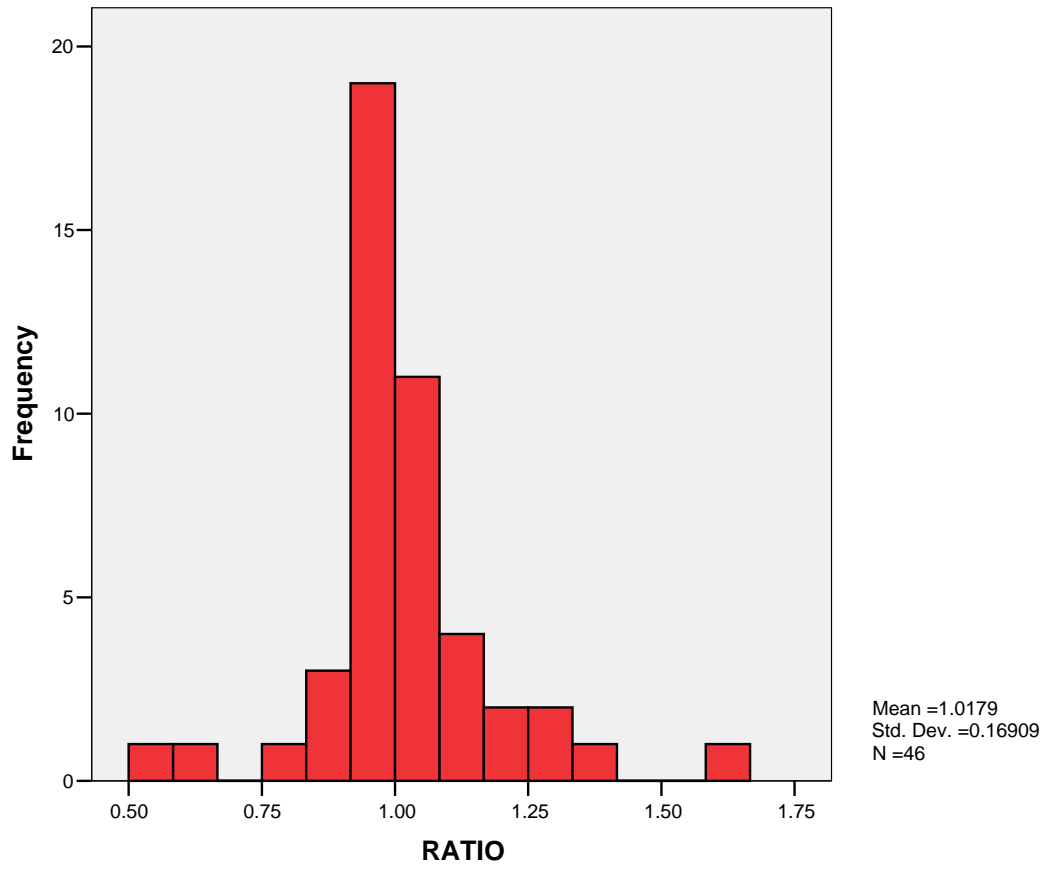
In order to perform a sales ratio analysis all commercial/industrial sales must reflect market conditions as of June 30, 2006. Based on an examination of the sales file, the County did not apply time adjustments to the sales during this time period. The following table outlines the sales ratio statistics for all commercial/industrial properties in Montezuma County.

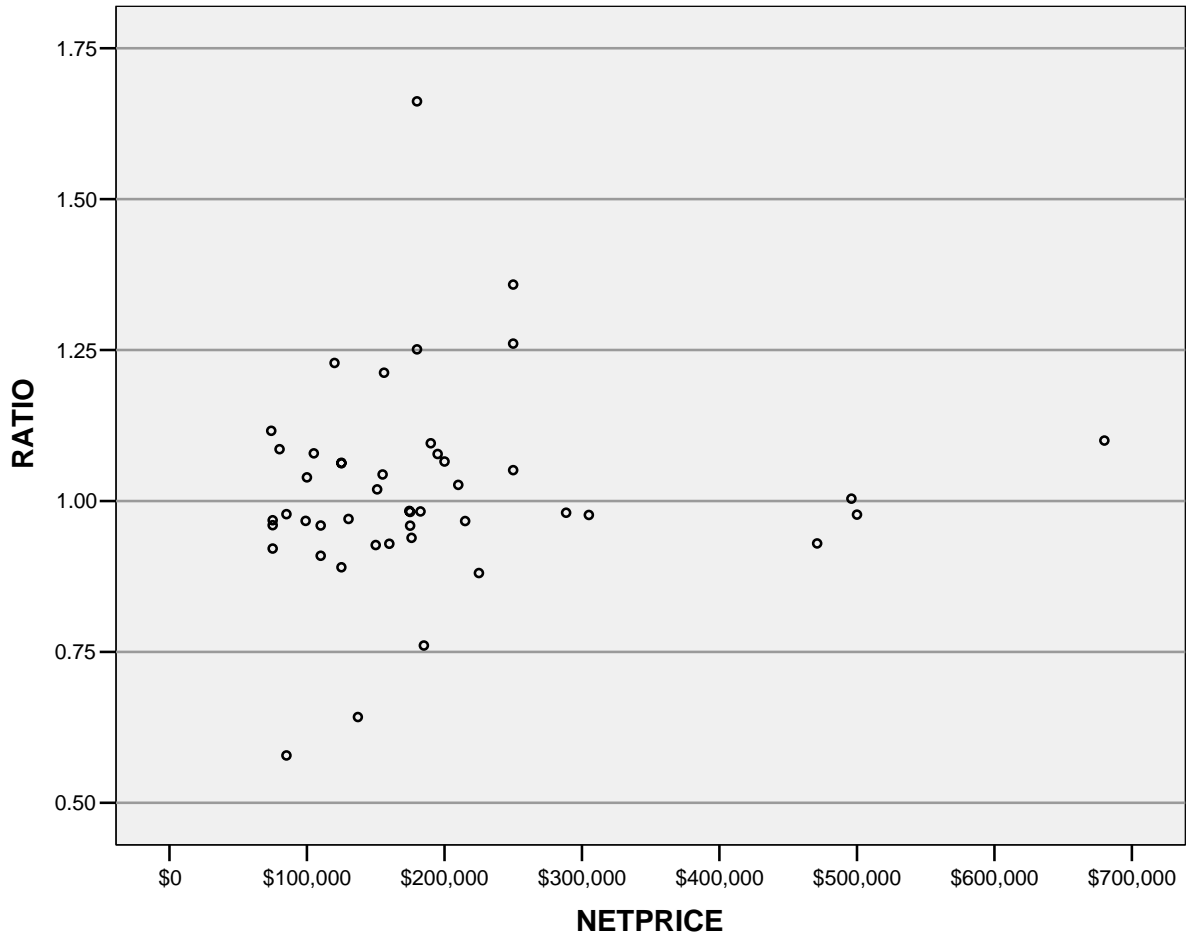
Ratio Statistics

Mean	1.018
Median	.982
Weighted Mean	1.028
Price Related Differential	.990
Coefficient of Dispersion	.109

RATIO = CURRENT ASMT / NETPRICE

The above ratios are in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall sales. The following graphical exhibits describe further the sales ratio distribution for all of these properties:



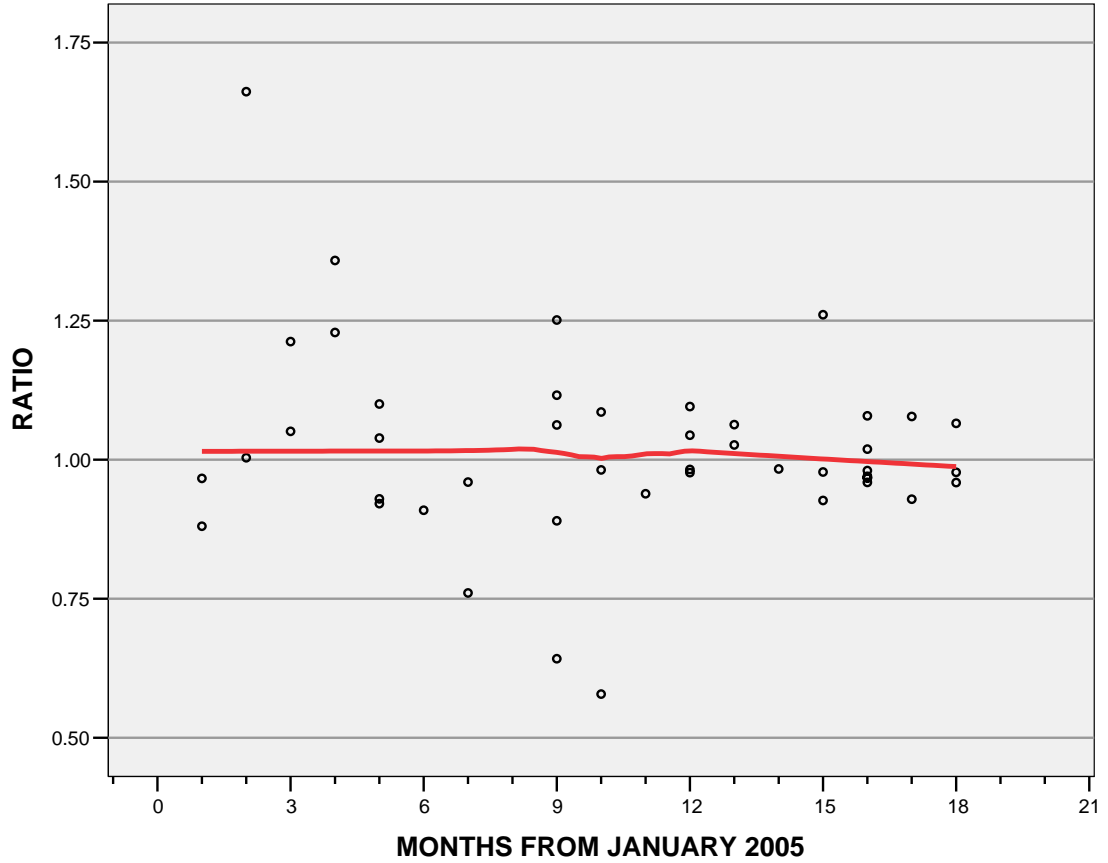


Commercial Market Trend Analysis

Sale ratios were analyzed over the 18-month time period to determine whether market trending was accounted for in the commercial valuations. The following graph illustrates a horizontal pattern indicating no significant changes in sale ratios during this time period.



Sale Ratio By Months



Sold/Unsold Analysis

For the 2007 revaluation year audit, an analysis was performed that confirmed that the median assessed value per square foot for sold and unsold commercial/industrial property was similar. This analysis was performed by commercial subclass code. Since tax year 2008 is the intervening year, this relationship should not change. If there is no change in either category, the conclusions from the 2007 audit would also be applicable to the current year.



2007 - 2008 PERCENT CHANGE

CHANGE

SUBCLASS CODE	CATEGORY	Median	N
2212 Merchandising	SOLD	.0000	8
	UNSOLD	.0000	153
2215 Lodging	SOLD	.0000	3
	UNSOLD	.0000	33
2220 Offices	SOLD	.0000	10
	UNSOLD	.0000	74
2230 Special Purpose	SOLD	.0000	15
	UNSOLD	.0000	232
2235 WareHouse/Strg	SOLD	.0000	6
	UNSOLD	.0000	55
3212 Contract/Service	SOLD	.0000	2
	UNSOLD	.0000	16
3215 Manuf/Processing	SOLD	.0000	2
	UNSOLD	.0000	45

The median percent change table of sold and unsold commercial/industrial property indicates that there is no change in either category. Therefore, we can conclude that the analysis performed for the 2007 audit is also applicable for the 2008 intervening year.

V. VACANT LAND SALE RESULTS

For the vacant land analysis, 145 sales between the dates of January 2005 and June 2006 were analyzed. A breakdown of the sales by current property type is listed below.

PROPERTY TYPE

	Frequency	Percent
VACANT LAND	118	81.4
RESIDENTIAL	26	17.9
COMMERCIAL	1	.7
Total	145	100.0

Sales that were coded as vacant (118) were used in the vacant land sale ratio study. The remaining sales were excluded from the analysis.

In order to perform a sales ratio analysis all vacant land sales must reflect market conditions as of June 30, 2006. Based on an examination of the sales file, the County did not apply time



adjustments to the sales during this time period. The following table outlines the sales ratio statistics for all vacant land properties in Montezuma County.

Ratio Statistics

Mean	1.015
Median	.981
Weighted Mean	.951
Price Related Differential	1.068
Coefficient of Dispersion	.211

RATIO = CURRENT ASMT / NETPRICE

The vacant land sale ratios comply with the standards set forth by the Colorado State Board of Equalization (SBOE) for the median level of assessment (.95-1.05). The Coefficient of Dispersion is above the prescribed level of 20.99% for uniformity standards. Since the Coefficient of Dispersion was above the prescribed standard, we evaluated whether the COD for vacant land in Montezuma County was within a reasonable range with an appropriate degree of statistical confidence. We used a study* that defined maximum acceptable COD compliance standards. This study concluded that with a sample of 118 sales, the maximum COD for properties types with a 20.99% compliance standard is 23.21. Since the COD for vacant land in Montezuma County is less than 23.21%, no corrective action is recommended for the intervening year.

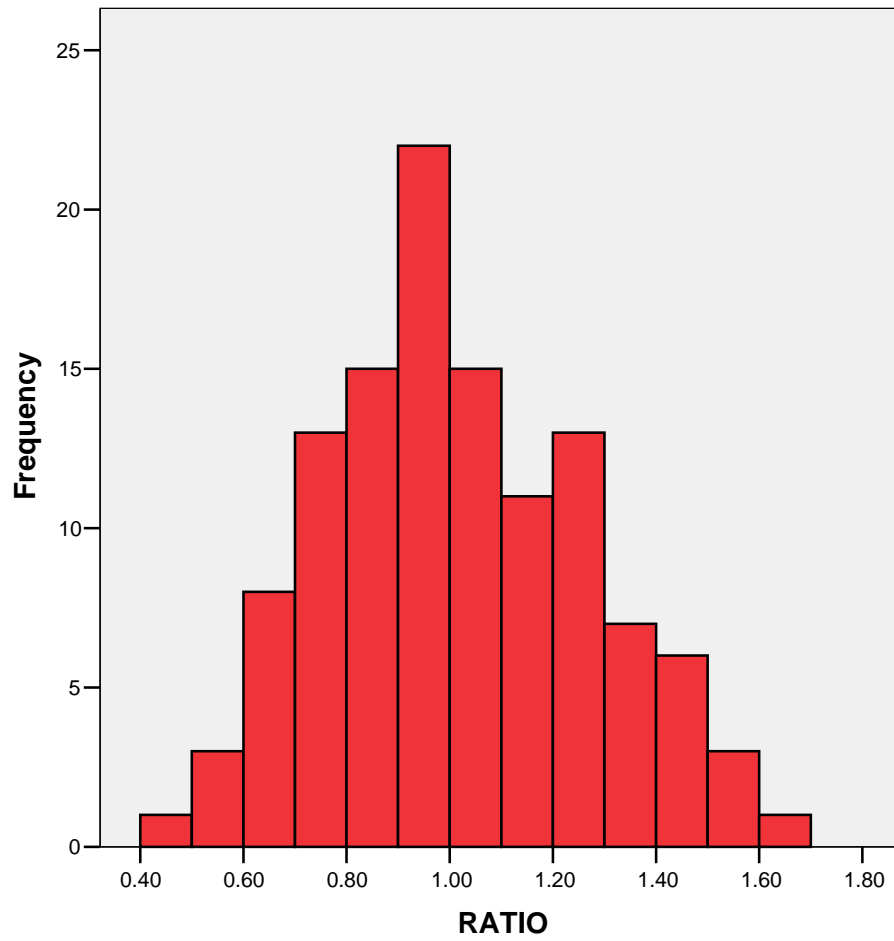
***Evaluating Compliance with COD standards” by Robert J.Gludemans.*

** To determine the factor to apply to the maximum COD, the following formula was used:*

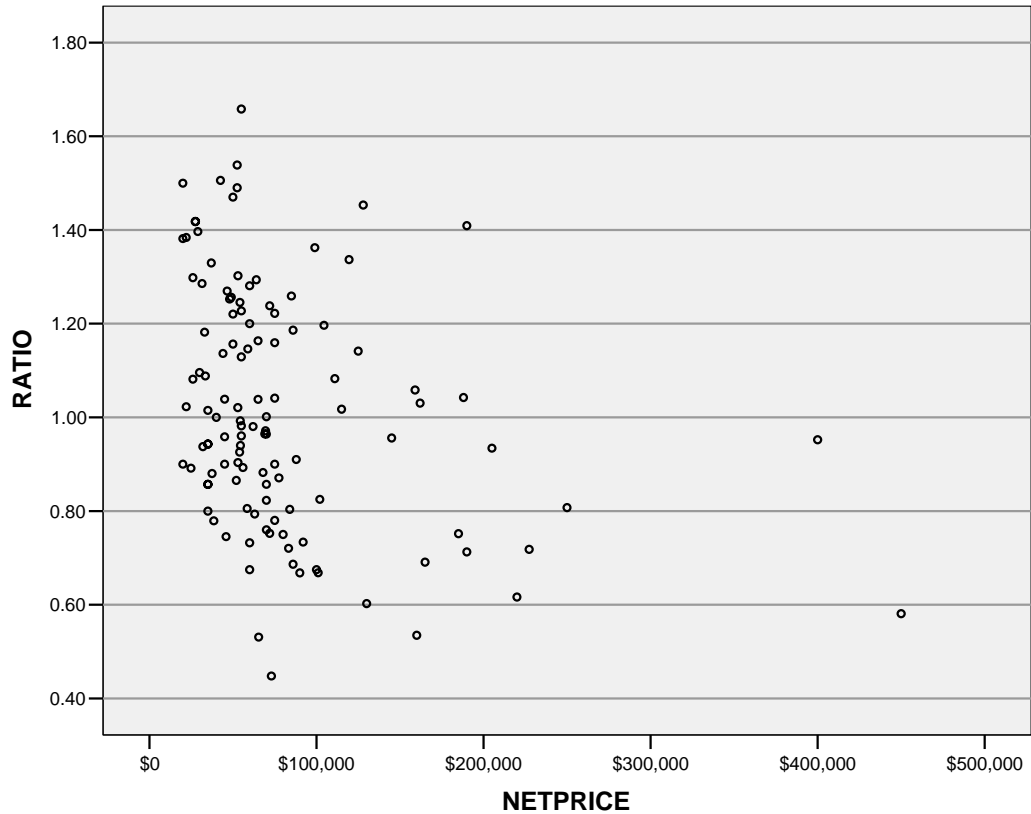
COMPUTE df=118-1.

COMPUTE CUTPOINT=IDF.CHISQ(.95,n-1).

COMPUTE TF=SQRT(CUTPOINT/df).



Mean =1.0154
Std. Dev. =0.25515
N =118



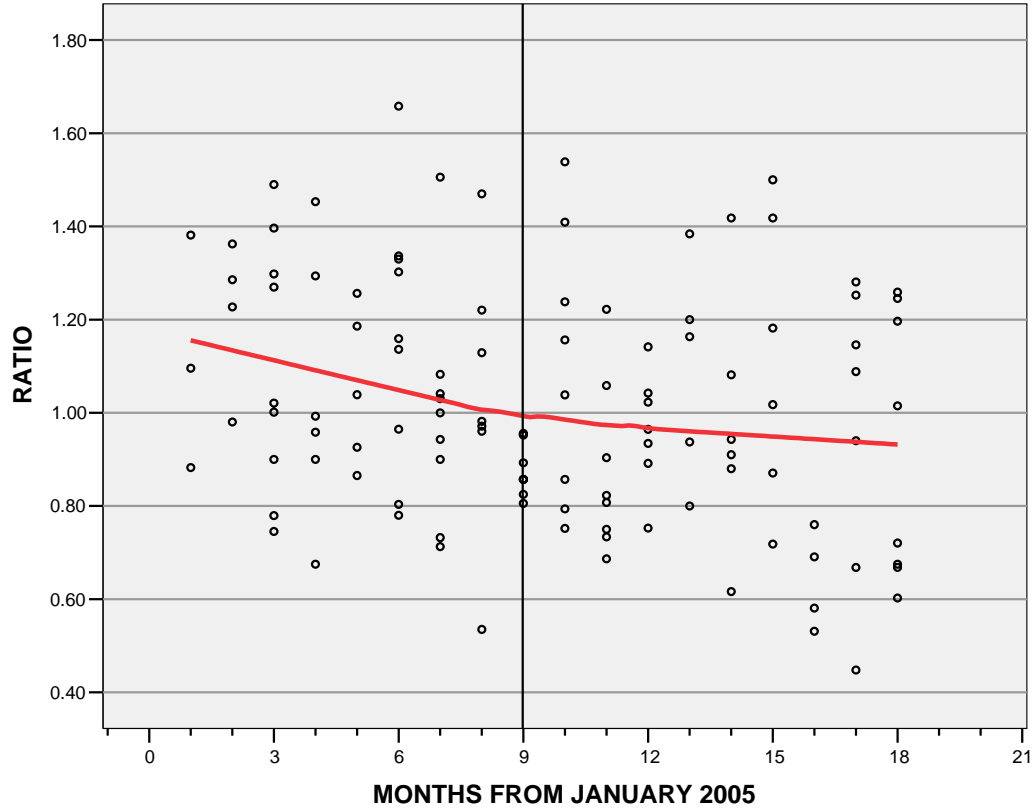
Vacant Land Market Trend Analysis

The “Sales Ratio by Months” graph describes the vacant land sale ratios over the 18 month time period. This graph illustrates that there is a downward trend in sale ratios during the study period. This trend can be separated into two time periods. The first time period includes sales from January 2005 thru September 2005. The second time period includes sales from October 2005 thru June 2006. Both time periods were tested to evaluate the significance of the trend.

The first time period was significant at a 95% confidence level. Although, the second time period illustrates a slight downward pattern, it is not significant at a 95% confidence level. For the intervening year, no corrective action is recommended. However, as the County prepares for the next revaluation additional time trend analysis may be required to maintain a median sale ratio target level between .95-1.05 for the entire study period.



Sale Ratio By Months



2006 SALE RATIOS

RATIO		Median	N
SALE YEAR	SALE MONTH		
2006	January	1.1634	5
	February	.9265	6
	March	1.0997	6
	April	.6359	4
	May	1.0884	7
	June	.8677	8
	Total	.9414	36

Sold/Unsold Analysis

For the 2007 revaluation year audit, an analysis was performed that confirmed that the median change in value between sold and unsold land was similar. Since tax year 2008 is the intervening year, this relationship should not change. If there is no change in either category, the conclusions from the 2007 audit would also be applicable for the current year.



2007 - 2008 PERCENT CHANGE

CHANGE

CATEGORY	Median	N
SOLD	.0000	118
UNSOLD	.0000	1,197

The above median percent change table of sold and unsold vacant land indicates there is no change in either category. Therefore, we can conclude that the analysis performed for the 2007 audit is also applicable for the 2008 intervening year.

VI. AGRICULTURAL IMPROVEMENTS ANALYSIS

For the 2007 revaluation year audit, a comparison was made between the improvement value per square foot of agricultural residential improvements and the rates assigned to single-family residential improvements in Montezuma County. This analysis concluded that the County valued its agricultural residential improvements in a manner consistent with the single-family residential improvements. Since tax year 2008 is the intervening year, this relationship should not change. If there is no change in the improvement values for both categories, the conclusions from the 2007 audit would also be applicable for the current year.

2007 - 2008 IMPROVEMENT CHANGE

IMPCHANGE

SUBCLASS CODE	Median	N
1212 Single Family Residence	.0000	5,472
4277 Farm/Ranch Residences	.0000	1,211

Since single family and agricultural improvement values did not change, we can conclude that the analysis performed for the 2007 audit is applicable for the 2008 intervening year.

VII. CONCLUSIONS

Based on this statistical analysis, there are no intervening year compliance issues concluded for Montezuma County. However, the County should closely monitor the COD for vacant land and analyze the sales for potential time adjustments for the next valuation year. Incorporating time adjustments into the valuation process will improve both the level and uniformity of assessments.