



2008  
MESA 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*



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## 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 Mesa County in the following report.



# REGIONAL/HISTORICAL SKETCH OF MESA COUNTY

## Regional Information

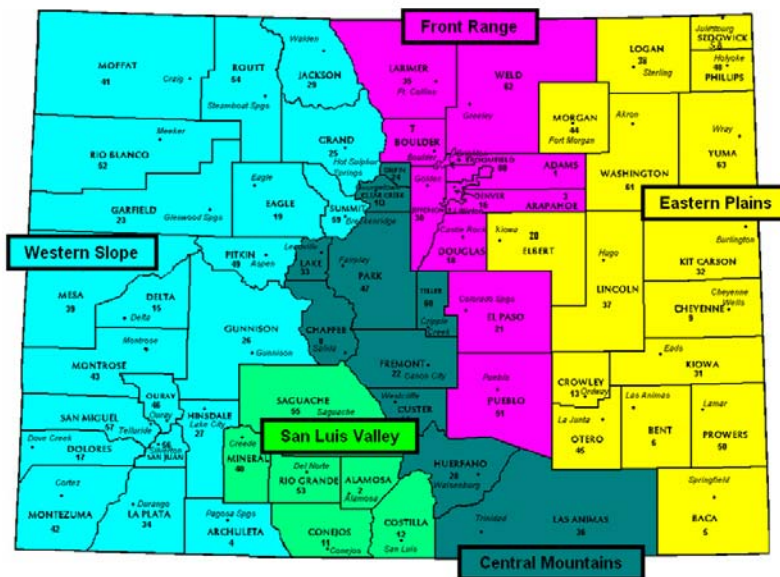
Mesa County is located in the Western Slope region of Colorado. The Western Slope of Colorado refers to the region of the State of Colorado west of the Rocky Mountains. The region is considered the part of Colorado outside the mountains that are emptied by the Colorado River and its tributaries. The 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.





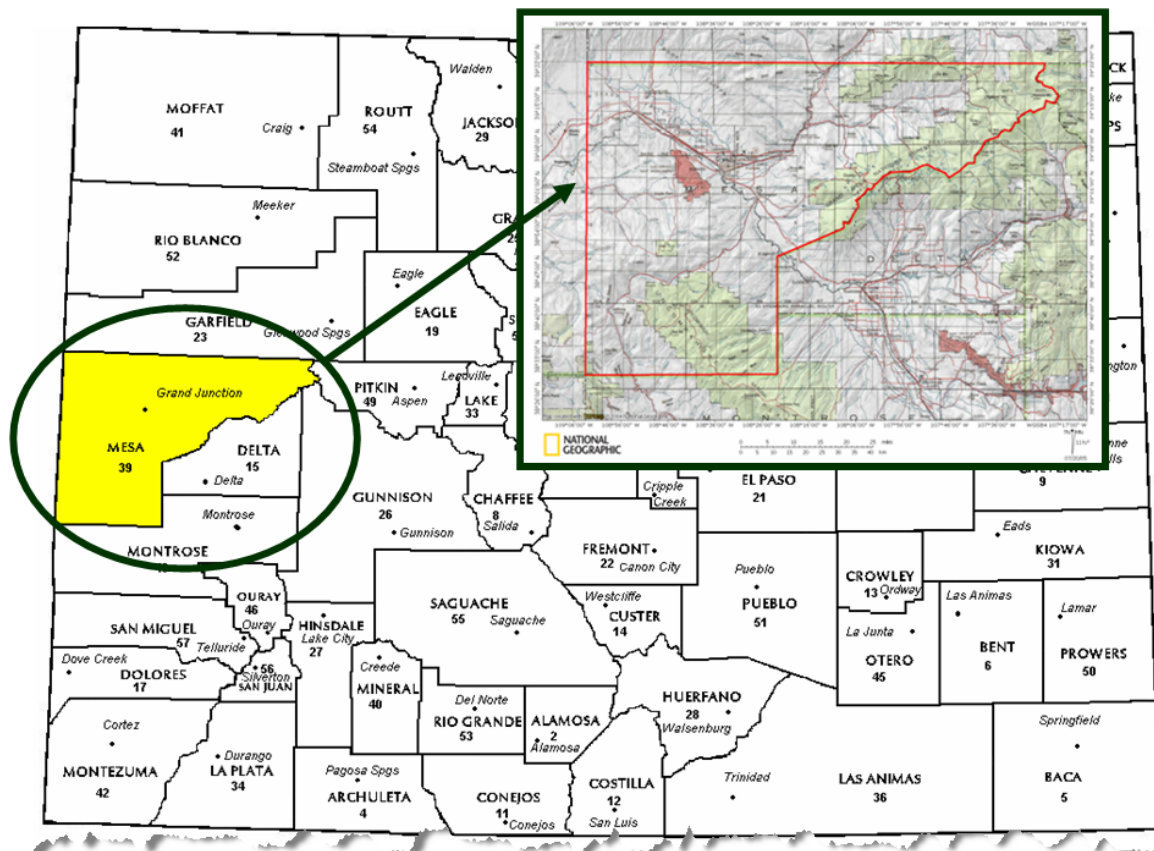


## Historical Information

Mesa County has a population of approximately 134,189 people with 34.9 people per square mile, according to the U.S. Census Bureau's 2006 estimated population data.

The County, formed from a portion of Gunnison County, was established in 1883 with an area of 3,301 square miles. Its

name is Spanish for 'table' and refers to the tablelands and plateaus prevalent in the county. The county seat is Grand Junction, so named for its location at the junction of the Gunnison and Grand (later Colorado) rivers. (William Bright, Colorado Place Names, 3rd Edition, Johnson Books, 2004, p. 115 and 76)







# 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 Mesa County are:

Mesa County Ratio Grid						
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis	
Commercial/Industrial	171	1.005	1.004	12.5	Compliant	
Condominium	N/A	N/A	N/A	N/A	N/A	
Single Family	5,479	0.992	1.009	6.7	Compliant	
Vacant Land	326	0.980	1.037	16.6	Compliant	

**Ratio Statistics**

ECON AREA	Sale Count	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
10	160	.994	.988	1.016	.106
12	348	.992	.984	1.002	.076
15	703	.994	.992	1.004	.070
19	734	.992	.993	1.004	.060
22	871	.996	1.006	1.006	.062
25	117	.991	.976	1.009	.074
27	899	.993	.991	1.006	.063
29	596	.977	.959	1.017	.081
30	912	.995	.993	1.005	.054
31	139	.980	.963	1.010	.100
Overall	5,479	.992	.986	1.009	.067

RATIO = CURRENT ASMT / TASP

After applying the above described methodologies, it is concluded from the sales ratios that Mesa County is in

compliance with SBOE, DPT, and Colorado State Statute valuation guidelines.

**Recommendations**

None



## TIME TRENDING VERIFICATION

### Methodology

While we recommend that counties use the inverted ratio regression analysis method to account for market (time) trending, some counties have used other IAAO-approved methods, such as the weighted monthly median approach. We are not auditing the methods used, but rather the results of the methods used. Given this range of methodologies used to account for market trending, we concluded that the best validation method was to examine the sale ratios for each class across the appropriate sale period. To be specific, if a county has considered and adjusted correctly for market trending, then the sale ratios should remain stable (i.e. flat) across the sale period. If a residual market trend is detected, then the county may or may not have addressed market trending adequately,

and a further examination is warranted. This validation 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 Mesa County has complied with the statutory requirements to analyze the effects of time on value in their county. Mesa County has also satisfactorily applied the results of their time trending analysis to arrive at the time adjusted sales price (TASP).

### Recommendations

None



## SOLD/UNSOLD ANALYSIS

### Methodology

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



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

### **Conclusions**

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

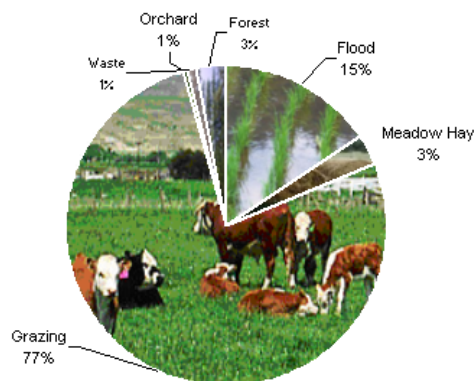
### **Recommendations**

None

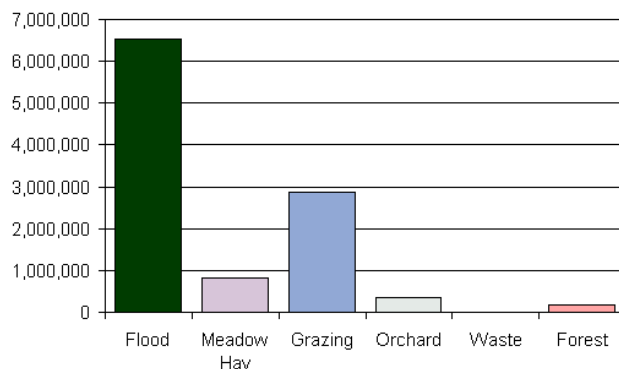


# AGRICULTURAL LAND STUDY

Acres By Subclass



Value By Subclass



## Agricultural Land

County records were reviewed to determine major land categories such as irrigated farm, dry farm, meadow hay, grazing and other lands. In addition, county records were reviewed in order to determine if: Aerial photographs are available and are being used; soil conservation guidelines have been used to classify lands based on productivity; crop rotations have been documented; typical commodities and yields have been determined; orchard lands have been properly classified and valued; expenses reflect a ten year average and are typical landlord expenses; grazing lands have been properly classified and valued; the number of acres in each class and subclass have been determined; the capitalization rate was properly applied. Also, documentation was required for the valuation methods used and any locally developed yields, carrying capacities, and expenses. Records were also

checked to ensure that the commodity prices and expenses, furnished by the Property Tax Administrator (PTA), were applied properly. (See Assessor Reference Library Volume 3 Chapter 5.)

### Conclusions

An analysis of the agricultural land data indicates an acceptable appraisal of this property type. Directives, commodity prices and expenses provided by the PTA were properly applied. County yields compared favorably to those published by Colorado Agricultural Statistics. Expenses used by the county were allowable expenses and were in an acceptable range. Grazing lands carrying capacities were in an acceptable range. The data analyzed resulted in the following ratios:





Mesa County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	RMVS Total Value	Ratio
4117	Flood	67,897	96.07	6,523,147	6,853,695	0.95
4137	Meadow Hay	14,018	57.65	808,089	811,168	1.00
4147	Grazing	337,180	8.51	2,868,056	2,868,056	1.00
4157	Orchard	2,827	127.57	360,627	360,627	1.00
4177	Forest	13,663	13.58	185,268	185,268	1.00
4167	Waste	3,011	1.73	5,219	5,219	1.00
<b>Total/Avg</b>		<b>438,596</b>	<b>24.51</b>	<b>10,750,406</b>	<b>11,084,033</b>	<b>0.97</b>

### 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

Mesa 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 Mesa County. This study was conducted by checking selected sales from the master sales list for the valuation period. Specifically RMVS selected 45 sales listed as unqualified.

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

### **Conclusions**

Mesa 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**

Mesa County has submitted a written narrative describing the economic areas that make up the county's market areas. Mesa County has also submitted a map illustrating these areas. Each of these narratives have been read and analyzed for logic and appraisal sensibility. The maps were also compared to the narrative for consistency between the written description and the map.

### **Conclusions**

After review and analysis, it has been determined that Mesa County has

adequately identified homogeneous economic areas comprised of smaller neighborhoods. Each economic area defined is equally subject to a set of economic forces that impact the value of the properties within that geographic area and this has been adequately addressed. Each economic area defined adequately delineates an area that will give "similar values for similar properties in similar areas."

### **Recommendations**

None



## NATURAL RESOURCES

### Earth and Stone Products

#### Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Natural Resource Valuation Procedures, the income approach was 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

### Producing Coal Mines

#### Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Section 6, Valuation of Producing Coal Leaseholds and Lands, the income approach was the primary method applied to find value for the valuation of coalmines. This methodology estimates annual economic royalty income based on previous year's production, then capitalizes that income to value using a Hoskold factor to estimate the present worth of the permitted acres. The operator provided production data and the life of the leases.

#### Conclusions

County has applied the correct formulas and state guidelines to coal mine valuation.

#### Recommendations

None



# VACANT LAND

## Subdivision Discounting

In 2008 subdivisions were reviewed in Mesa County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14) and by applying the recommended methodology in ARL Vol 3, Chap 4. Subdivision Discounting in the intervening year 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

Mesa County has implemented proper procedures to adequately estimate absorption periods, discount rates, and lot values for qualifying subdivisions.

### Recommendations

None



## POSSESSORY INTEREST PROPERTIES

Possessory interest 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.

Mesa 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**

Mesa County has implemented a discovery process to place possessory interest properties on the roll. They have also correctly and consistently applied the correct procedures and valuation methods in the valuation of possessory interest properties.

### **Recommendations**

None





## PERSONAL PROPERTY AUDIT

Mesa County was studied for its procedural compliance with the personal property assessment outlined in the Assessor's Reference Library (ARL) Volume 5, and in the State Board of Equalization (SBOE) requirements for the assessment of personal property. The SBOE 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.

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

- Public Record Documents
- 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.

Mesa 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:



- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Accounts with greater than 10% change
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Non-filing Accounts - Best Information Available
- Accounts close to the \$2,500 actual value exemption status
- Accounts protested with substantial disagreement

Mesa County's median ratio is 1.00. This is in compliance with the State Board of Equalization (SBOE) compliance requirements which range from .90 to 1.10 with no COD requirements.

### **Conclusions**

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

### **Recommendations**

None



## 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*



# APPENDICES



## STATISTICAL ANALYSIS MESA COUNTY 2008

### I. OVERVIEW

Mesa County is an urban county located in western Colorado. The County has a total of 55,788 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	7,349	13.2
RESIDENTIAL	38,140	68.4
COMMERCIAL	2,370	4.2
INDUSTRIAL	420	.8
OTHER	7,509	13.5
Total	55,788	100.0

### Vacant Land

The vacant land class of properties has a total of 7,349 parcels. The majority (54%) of the parcels are classified as single-family residential (100,1112). The remaining vacant parcels are a mix of commercial/industrial, PUD, mobile home, or have a subclass code that is delineated by the acreage of the parcel.

#### SUBCLASS CODE

	Frequency	Percent
100 Residential Lots	3,852	52.4
200 Commercial Lots	832	11.3
300 Industrial Lots	209	2.8
400 PUD Lots	7	.1
510 Less Than 1.0 ACRES	184	2.5
520 1.0 to 4.99 ACRES	267	3.6
530 5.0 to 9.99 ACRES	112	1.5
540 10.0 to 34.99 ACRES	152	2.1
550 35.0 to 99.99 ACRES	297	4.0
560 100.0 ACRES and Up	21	.3
1112 Single Family Residence Land	152	2.1
1135 Manuf Housing (Mobile Homes) Land	1,264	17.2
Total	7,349	100.0



## Residential

The residential subclass category has a total of 38,140 parcels. Over 99% of the parcels have a single-family (1212) subclass code. The remaining parcels in this category are multi-unit or condominiums.

### SUBCLASS CODE

	Frequency	Percent
1212 Single Family Residence	38,088	99.9
1215 Duplexes-Triplexes	9	.0
1220 Multi-Units (4-8)	2	.0
1230 Condominiums	41	.1
Total	38,140	100.0

## Commercial/Industrial

The commercial/industrial subclass category has a total of 2,790 properties. This category represents 5% of the total property inventory. The majority (85%) of these parcels have a commercial use. The breakdown by subclass code is listed below.

### SUBCLASS CODE

	Frequency	Percent
2112 Merchandising	10	.4
2115 Lodging	1	.0
2120 Offices	2	.1
2125 Recreation	8	.3
2130 Special Purpose	49	1.8
2135 WareHouse/Strg	43	1.5
2140 Multi-Use (3+)	1	.0
2212 Merchandising	491	17.6
2215 Lodging	48	1.7
2220 Offices	250	9.0
2225 Recreation	38	1.4
2230 Special Purpose	692	24.8
2235 WareHouse/Strg	219	7.8
2240 Multi-Use (3+)	98	3.5
2245 Commercial Condo	409	14.7
2250 Partially Exempt (Taxable Part)	11	.4
3112 Contract/Service	16	.6
3115 Manuf/Processing	5	.2
3212 Contract/Service	185	6.6
3215 Manuf/Processing	138	4.9
3225 Refining/Petrol	7	.3
3230 Industrial Condos	69	2.5
Total	2,790	100.0





**Other**

The majority of the remaining 7,509 parcels have an agricultural use.

**II. SALES FILE**

The sale file provided by the Mesa County Assessor’s Office contained 9,263 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	371	450	821
	February	367	386	753
	March	484	520	1,004
	April	552	512	1,064
	May	599	620	1,219
	June	636	666	1,302
	July	577	0	577
	August	617	0	617
	September	586	0	586
	October	511	0	511
	November	443	0	443
	December	366	0	366
Total		6,109	3,154	9,263

*\*Note: Sales without current assessed values were excluded from the above analysis.*

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
QUALIFIED	7,187	83.0
UNQUALIFIED	1,472	17.0
Total	8,659	100.0

There were 7,187 sales classified as qualified. The breakdown of the sales with the current property type is listed below.



### SALE TYPE

	Frequency	Percent
VACANT	326	4.5
VACANT SALE WITH NON-VACANT LAND SUBCLASS	976	13.6
RESIDENTIAL	5,484	76.3
COMM/IND	171	2.4
IMPROVED SALE WITH VACANT SUBCLASS	9	.1
OTHER	221	3.1
Total	7,187	100.0

### III. RESIDENTIAL SALES RESULTS

For the residential analysis, 5,484 sales between the dates January 2005 and June 2006 were analyzed. A breakdown of the sales by subclass is listed below.

### SUBCLASS CODE

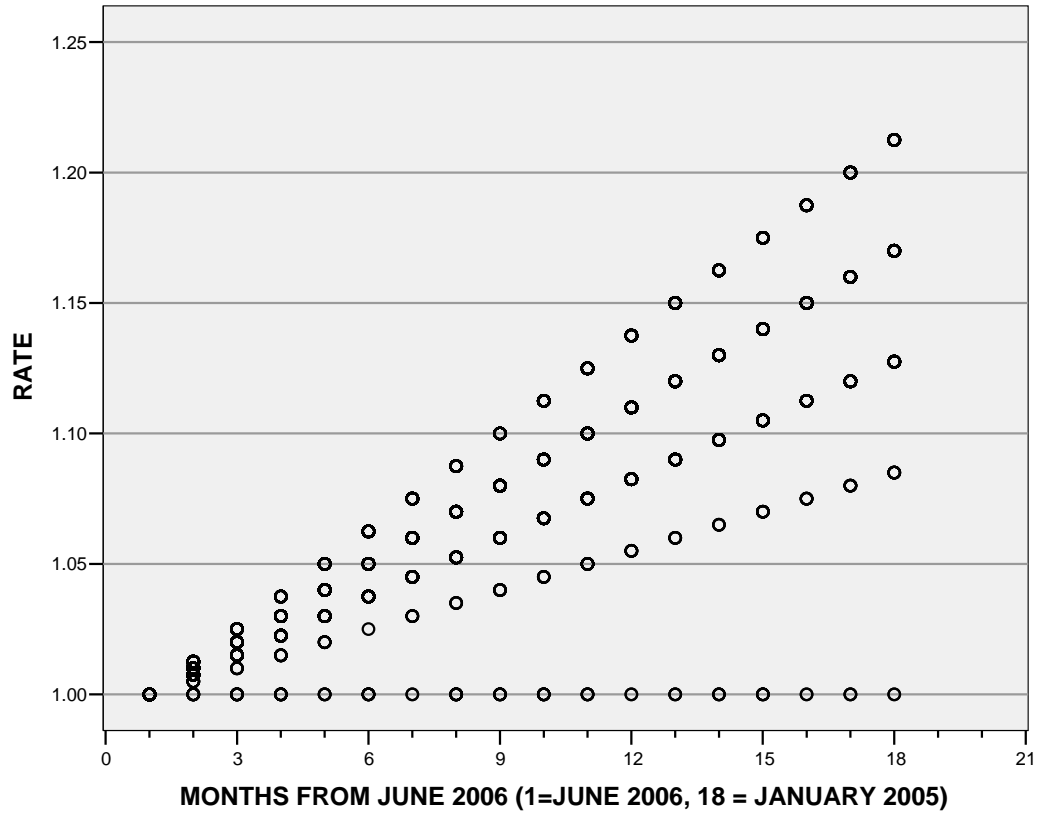
	Frequency	Percent
1212 Single Family Residence	5,481	99.9
1215 Duplexes-Triplexes	1	.0
1220 Multi-Units (4-8)	1	.0
1230 Condominiums	1	.0
Total	5,484	100.0

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 applied time adjustments to the sales during this time period. The following graph illustrates the various time adjustment factors applied to the residential sales.



### MESA COUNTY RESIDENTIAL TIME ADJUSTMENT FACTORS



The following table outlines the sales ratio statistics by economic area for residential properties in Mesa County.



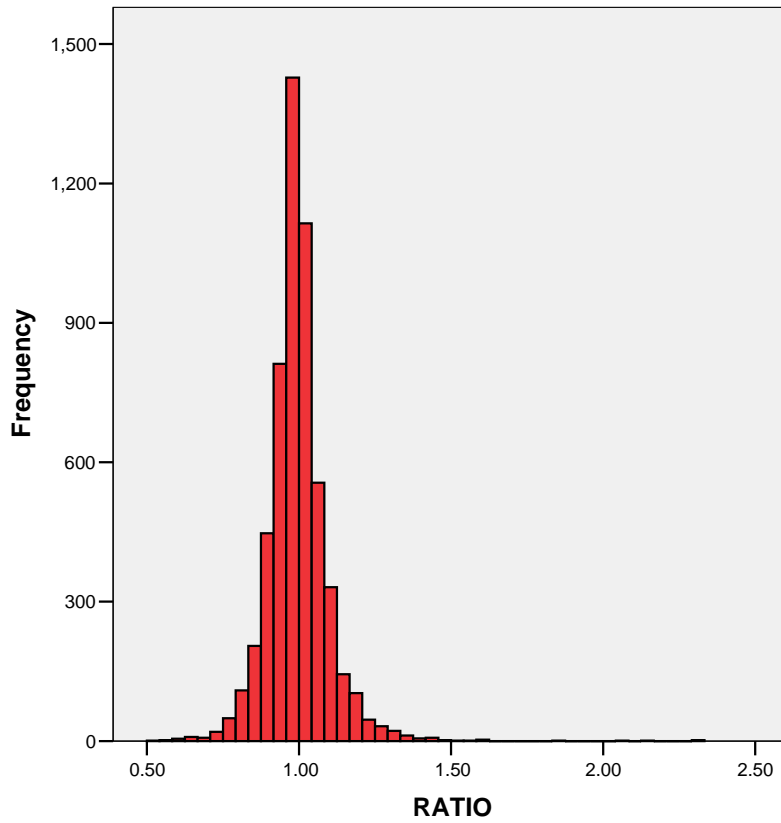
### Ratio Statistics

ECON AREA	Sale Count	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
10	160	.994	.988	1.016	.106
12	348	.992	.984	1.002	.076
15	703	.994	.992	1.004	.070
19	734	.992	.993	1.004	.060
22	871	.996	1.006	1.006	.062
25	117	.991	.976	1.009	.074
27	899	.993	.991	1.006	.063
29	596	.977	.959	1.017	.081
30	912	.995	.993	1.005	.054
31	139	.980	.963	1.010	.100
Overall	5,479	.992	.986	1.009	.067

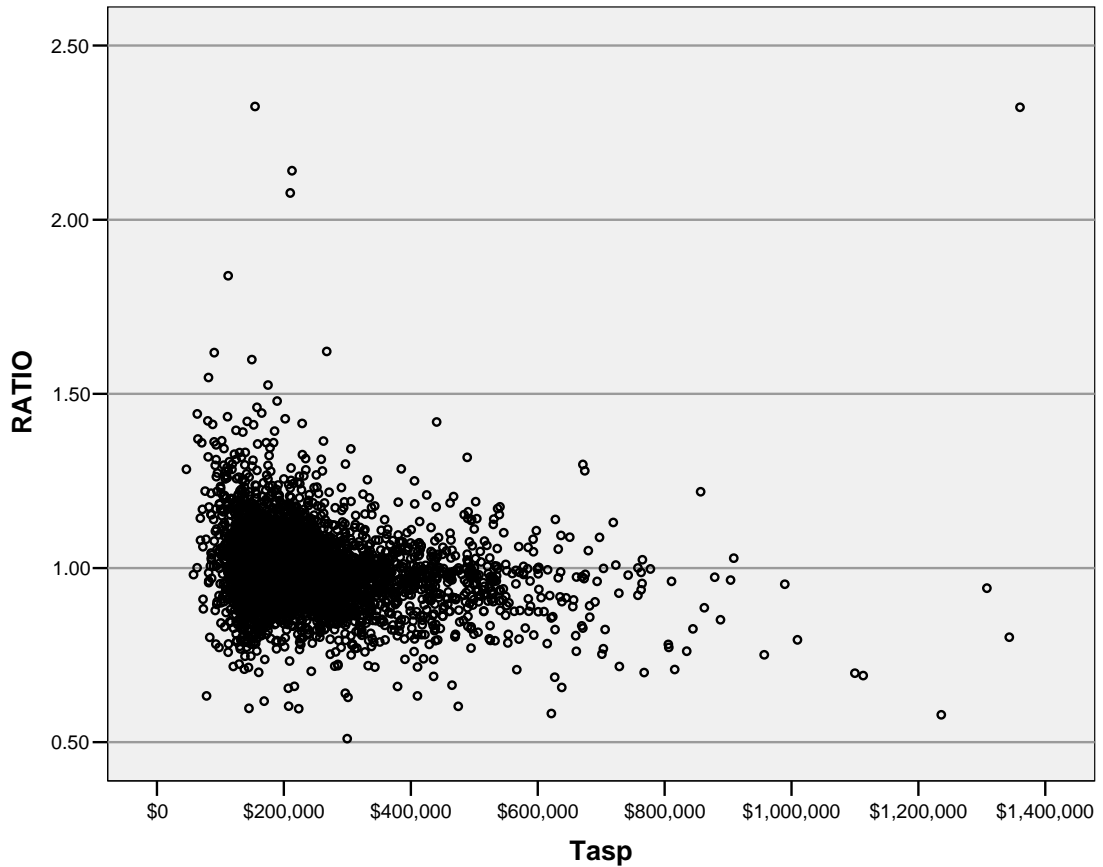
RATIO = CURRENT ASMT / TASP

*\*Note: 2 sales with sale ratios > 3 and 3 sales with an effective year built > sale year were excluded from the above analysis.*

The residential sale 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:



Mean =0.9956  
Std. Dev. =0.10067  
N =5,479



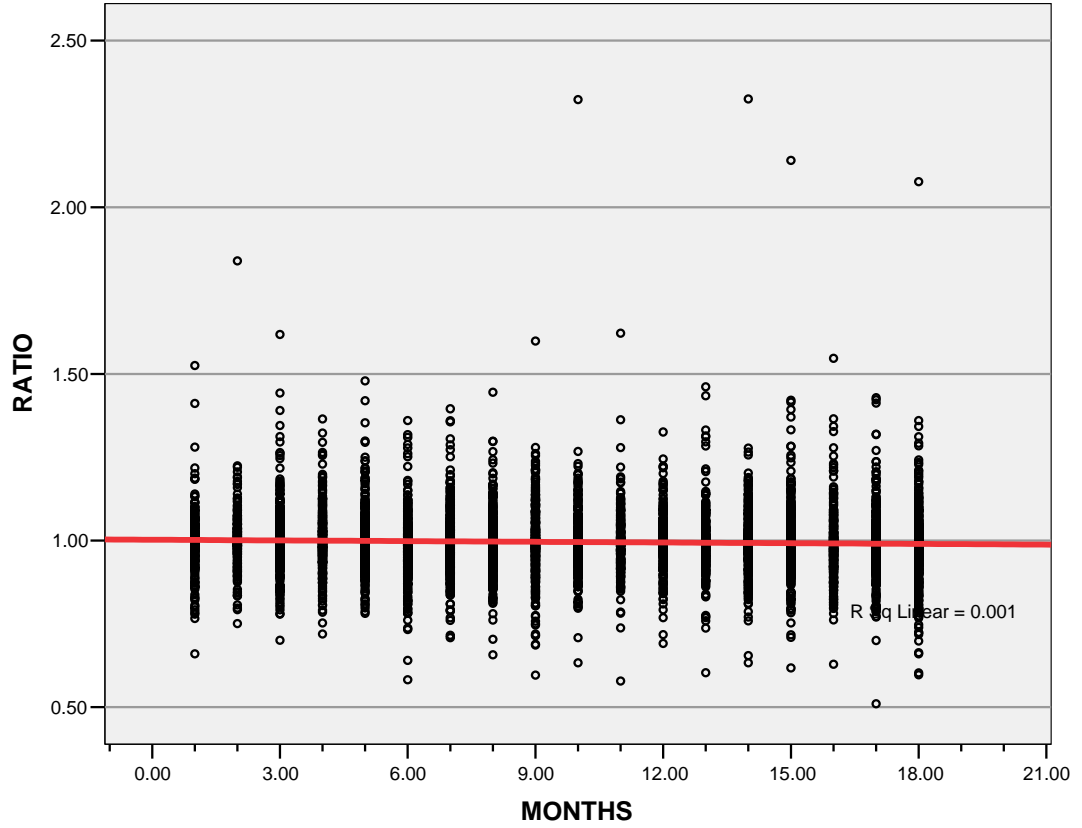
The above graphs indicate that the distribution of the sale ratios are within state mandated limits, and that there are no significant price related differential issues.

### **Residential Market Trend Analysis**

We verified that market trending was accounted for in the residential valuations by analyzing the sale ratios over the 18 month time period. The following graph indicates that there is no trend in sale ratios during this time period when evaluated on a countywide basis.



### Sale Ratio By Months



Time trends were next analyzed for each economic area. The results are as follows:



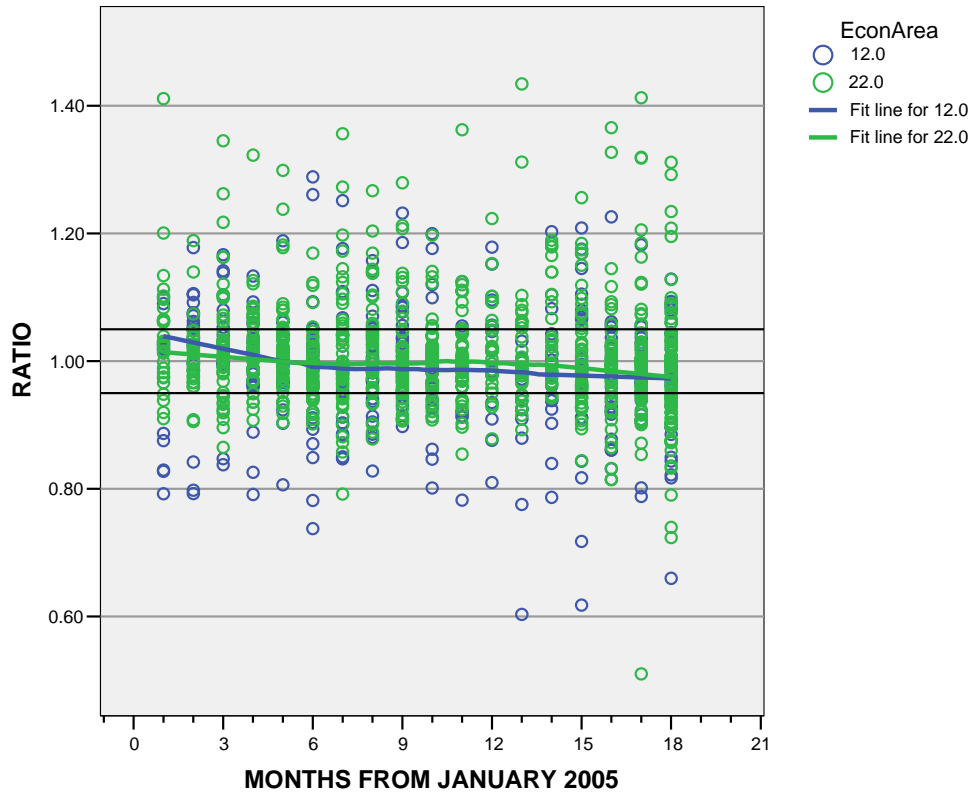
**TIME TREND SIGNIFICANCE TEST BY ECONOMIC AREA**

EconArea	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
10	1	(Constant)	1.016	.024		41.752	.000
		MONTHS	-.001	.002	-.044	-.558	.577
12	1	(Constant)	1.009	.011		88.178	.000
		MONTHS	-.002	.001	-.120	<b>-2.247</b>	.025
15	1	(Constant)	.998	.007		135.753	.000
		MONTHS	-.001	.001	-.031	-.820	.413
19	1	(Constant)	1.001	.007		143.832	.000
		MONTHS	.000	.001	-.027	-.723	.470
22	1	(Constant)	1.033	.007		146.955	.000
		MONTHS	-.002	.001	-.120	<b>-3.550</b>	.000
25	1	(Constant)	1.008	.019		51.755	.000
		MONTHS	-.002	.002	-.130	-1.409	.162
27	1	(Constant)	.993	.006		158.002	.000
		MONTHS	.000	.001	.024	.725	.469
29	1	(Constant)	.986	.010		102.457	.000
		MONTHS	-.001	.001	-.051	-1.240	.215
30	1	(Constant)	.998	.006		169.769	.000
		MONTHS	.000	.001	-.007	-.203	.839
31	1	(Constant)	1.008	.023		43.299	.000
		MONTHS	-.004	.002	-.146	-1.726	.087

a. Dependent Variable: RATIO

Economic areas that have significant trends (at the 95% confidence level) are highlighted in red. The two economic areas (12,22) that indicate a significant trend suggest a time trend of .2% per month. The following graph outlines the trend in sale ratios in these areas.





Since the target ratio level of .95-1.05 is maintained in both economic areas, no further analysis is necessary.

### 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	5,478
UNSOLD	.0000	32,585
Total	.0000	38,063

The median percent change table of sold and unsold residential 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.



#### IV. COMMERCIAL/INDUSTRIAL SALES RESULTS

For the commercial/industrial analysis, 171 sales between the dates of January 2005 and June 2006 were analyzed. A breakdown of the sales by subclass is as follows:

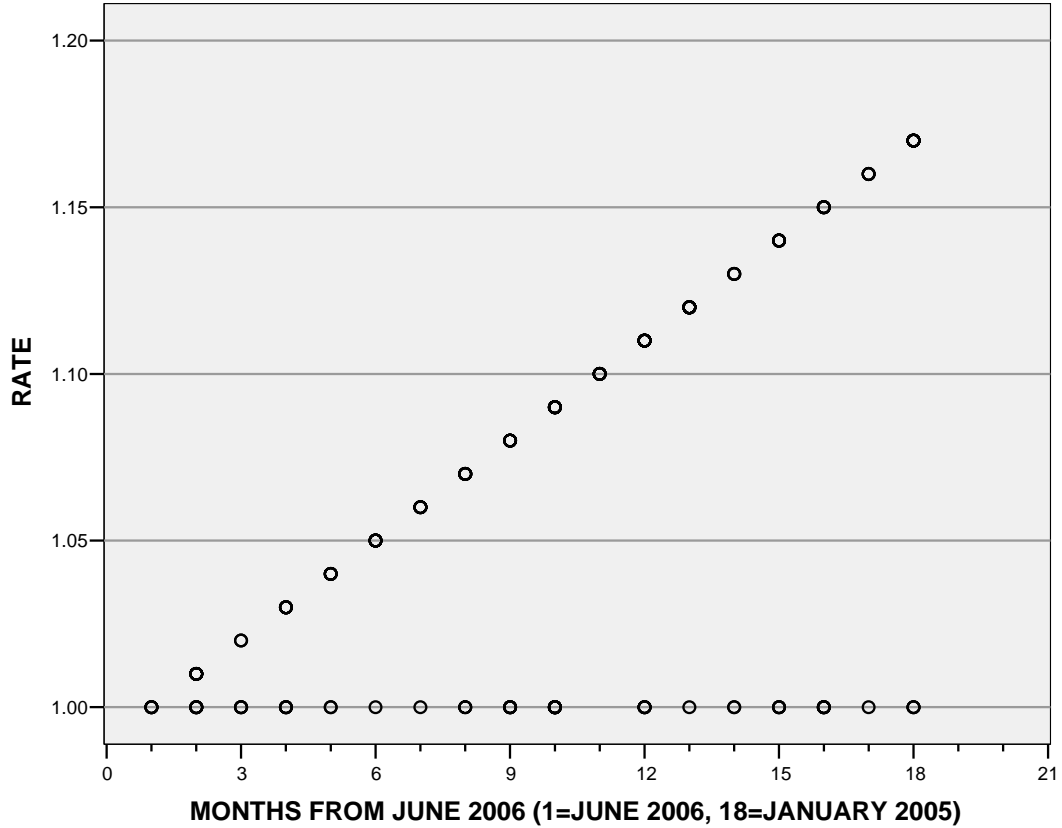
##### SUBCLASS CODE

	Frequency	Percent
2135 WareHouse/Strg	1	.6
2212 Merchandising	26	15.2
2215 Lodging	1	.6
2220 Offices	12	7.0
2225 Recreation	4	2.3
2230 Special Purpose	41	24.0
2235 WareHouse/Strg	7	4.1
2240 Multi-Use (3+)	7	4.1
2245 Commercial Condo	38	22.2
3212 Contract/Service	11	6.4
3215 Manuf/Processing	4	2.3
3230 Industrial Condos	19	11.1
Total	171	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 applied time adjustments to the sales during this time period. The following graph illustrates the various time adjustment factors applied to the commercial/industrial sales.



### MESA COUNTY COMMERCIAL TIME ADJUSTMENT FACTORS



The following table outlines the sales ratio statistics for commercial and industrial properties in Mesa County.

#### Ratio Statistics

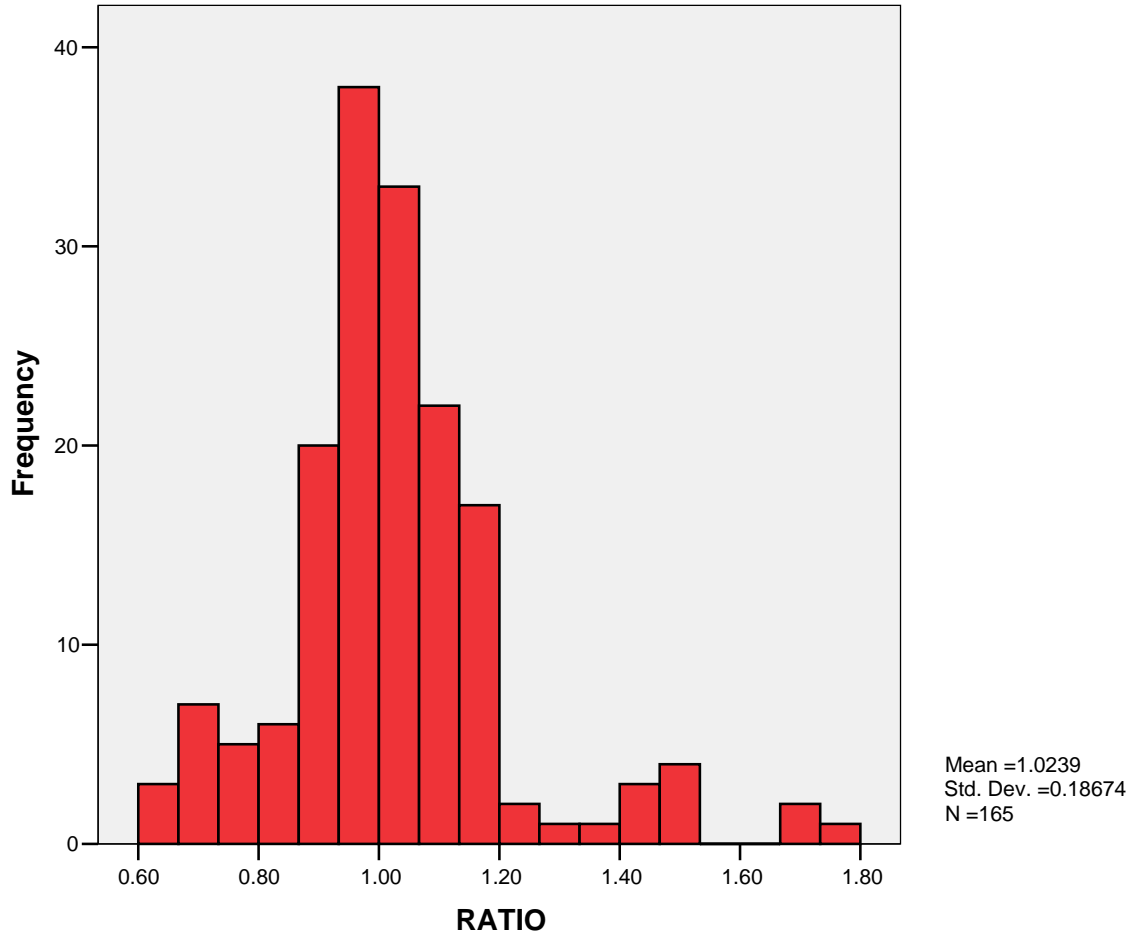
Mean	1.024
Median	1.005
Weighted Mean	1.020
Price Related Differential	1.004
Coefficient of Dispersion	.125

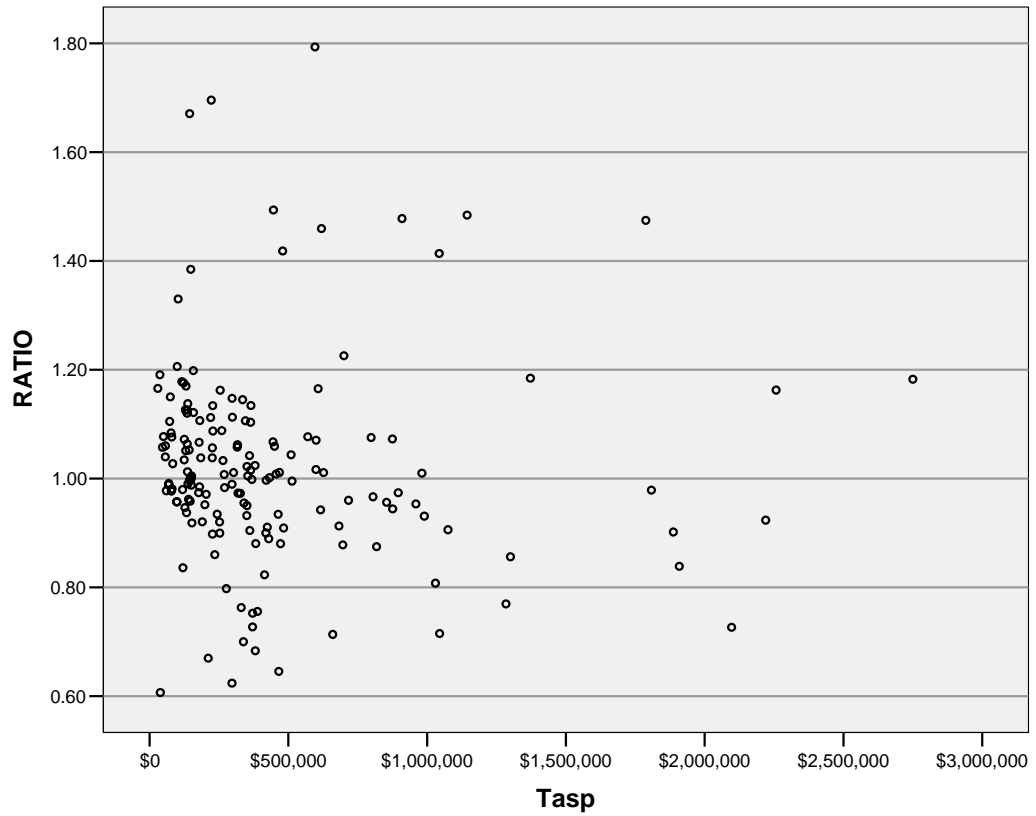
RATIO = CURRENT ASMT / TASP

*\*Note: 6 sales with ratios > 2 were excluded from the analysis.*



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:



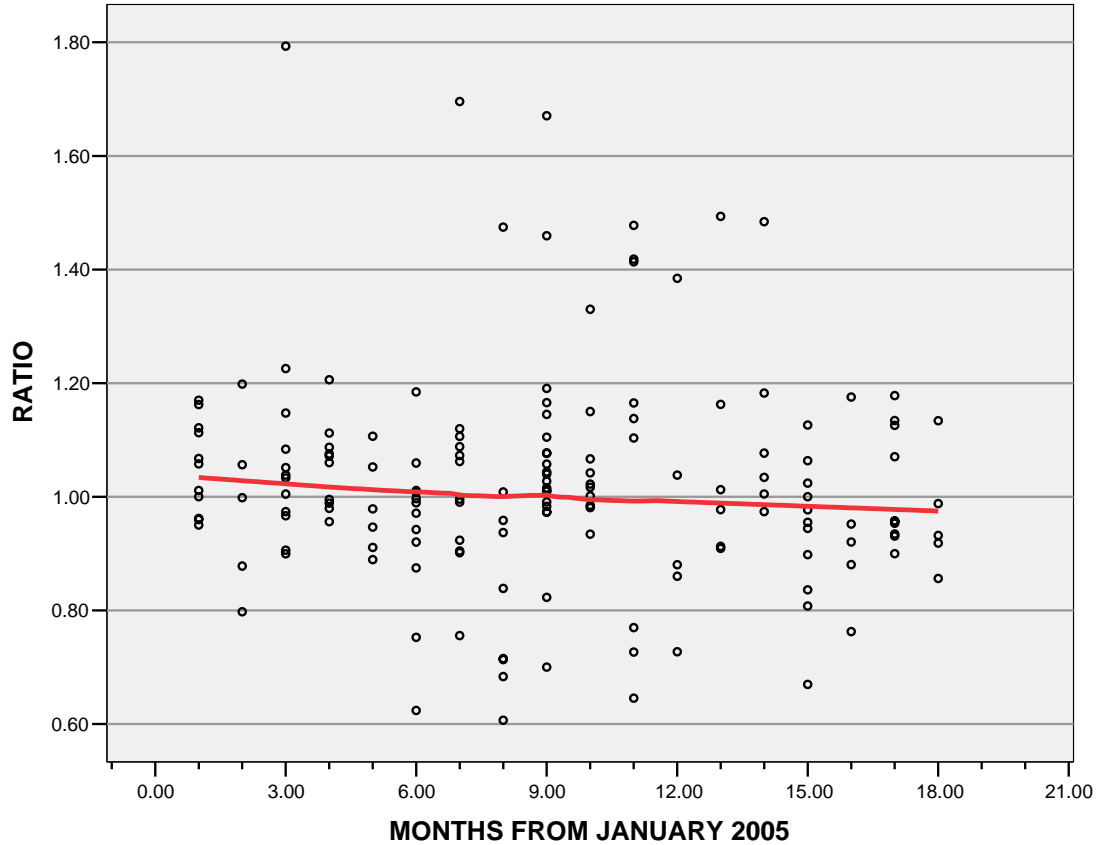


### Commercial Market Trend Analysis

The “Sales Ratio by Months” graph describes the sales ratios over the 18 month time period. Although there is a slight decline in the sale ratios during this time period, the trend is not significant at the 95% confidence level.



### Sale Ratios 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. 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	170
UNSOLD	.0000	2,595



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, 1,302 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

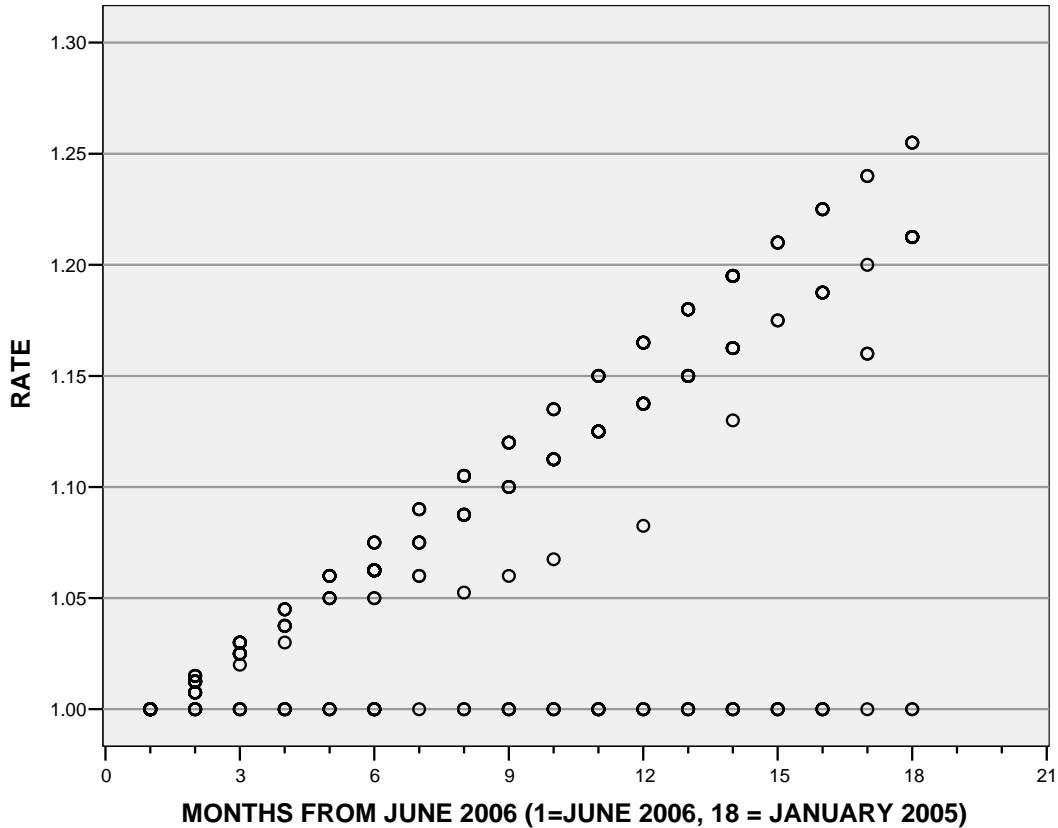
	Frequency	Percent
VACANT LAND	326	25.0
RESIDENTIAL	733	56.3
COMMERCIAL	23	1.8
INDUSTRIAL	7	.5
OTHER	213	16.4
Total	1,302	100.0

Sales that were coded as vacant (326) 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 applied time adjustments to the sales during this time period. The following graph illustrates the various time adjustment factors that were applied to the vacant land sales.



### MESA COUNTY VACANT LAND TIME ADJUSTMENT FACTORS



The following table outlines the sales ratio statistics for vacant land properties in Mesa County.

#### Ratio Statistics

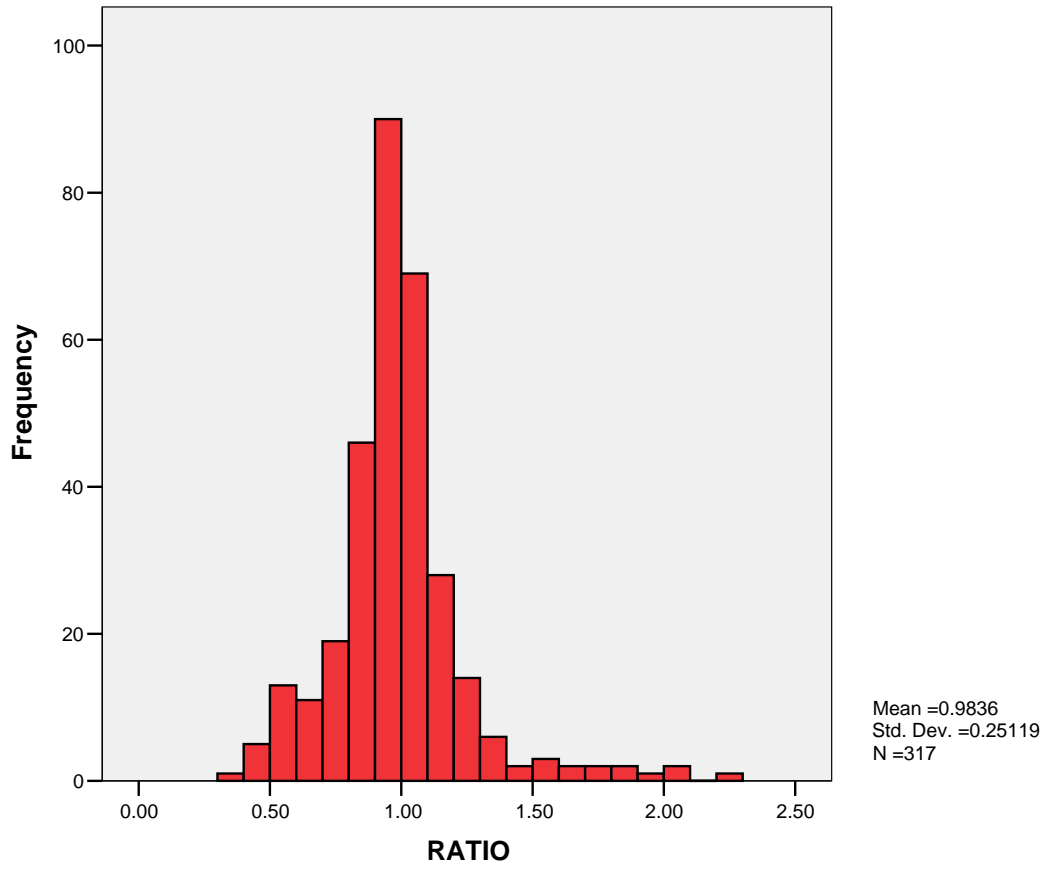
Mean	.984
Median	.980
Weighted Mean	.949
Price Related Differential	1.037
Coefficient of Dispersion	.166

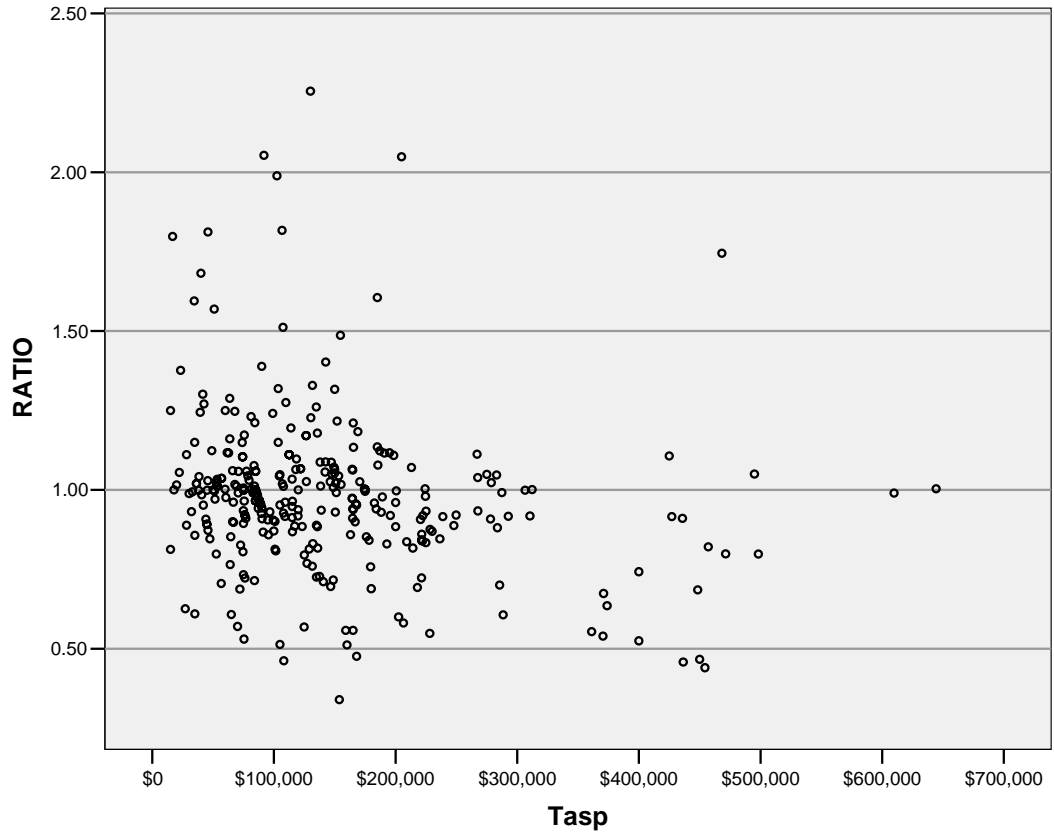
RATIO = CURRENT LAND VALUE / TASF

*\*Note: 8 sales outside of the sale ratio range of .35-2.5 were excluded from this analysis.*

The sales 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:







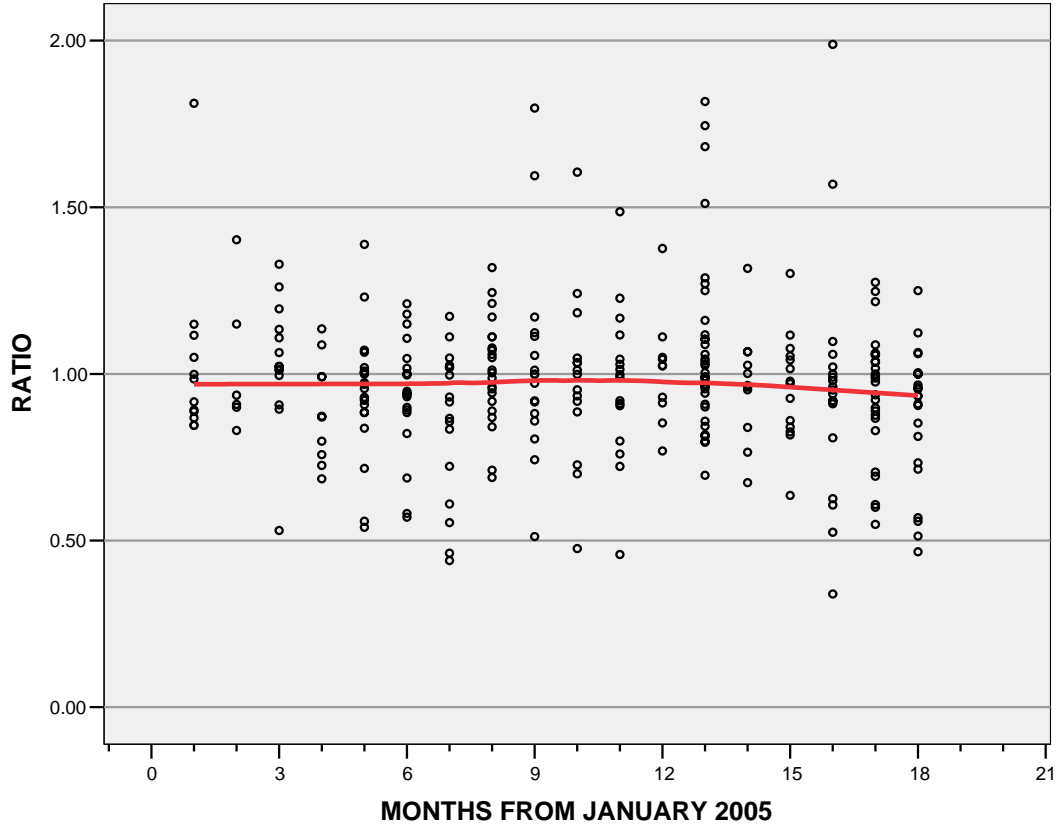
*Note: For interpretation purposes, 5 sales  $\geq$  \$1,000,000 were excluded from the above graph.*

### **Vacant Land Market Trend Analysis**

The “Sales Ratio by Months” graph describes the sales ratios over the 18 month time period. The graph illustrates that there is no significant trend in the sale ratios and that the target ratio level of .95-1.05 is maintained throughout the entire study period.



### Sale Ratios by Months



### 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 consistent. This analysis was performed on a neighborhood level for vacant land parcels that have a residential land 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 for the current year.



2007 - 2008 PERCENT CHANGE

CHANGE

NBHD	CATEGORY	Median	N
1572.00	SOLD	.0000	5
	UNSOLD	.0000	5
1573.00	SOLD	.0000	5
	UNSOLD	.0000	5
2503.00	SOLD	.0000	3
	UNSOLD	.0000	2
2722.00	SOLD	.0000	5
	UNSOLD	.0000	7
2747.00	SOLD	.0000	6
	UNSOLD	.0000	3
2812.00	SOLD	.0000	7
	UNSOLD	.0000	2
2814.00	SOLD	.0000	5
	UNSOLD	.0000	29
2920.00	SOLD	.0000	5
	UNSOLD	.0000	8
2928.00	SOLD	.0000	7
	UNSOLD	.0000	8
2949.00	SOLD	.0000	3
	UNSOLD	.0000	1
2983.00	SOLD	.0000	4
	UNSOLD	.0000	4
3108.00	SOLD	.0000	4
	UNSOLD	.0000	13
3151.00	SOLD	.0000	4
	UNSOLD	.0000	8
16005.00	SOLD	.0000	3
	UNSOLD	.0000	11
16000007.00	SOLD	.0000	5
	UNSOLD	.0000	27
16000009.00	SOLD	.0000	3
	UNSOLD	.0000	28
16000010.00	SOLD	.0000	9
	UNSOLD	.0000	39
16000019.00	SOLD	.0000	5
	UNSOLD	.0000	20
18000043.00	SOLD	.0000	16
	UNSOLD	.0000	23
19000005.00	SOLD	.0000	4
	UNSOLD	.0000	25
28000007.00	SOLD	.0000	9
	UNSOLD	.0000	11
28000008.00	SOLD	.0000	7
	UNSOLD	.0000	35
29000005.00	SOLD	.0000	3
	UNSOLD	.0000	2
30000002.00	SOLD	.0000	3
	UNSOLD	.0000	5



The above median percent change table of sold and unsold vacant land 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 tax 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 Mesa County. This analysis concluded that the County valued its agricultural residential improvements in a manner consistent with 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	36,971
4277 Farm/Ranch Residences	.0000	3,207

## VII. CONCLUSIONS

Based on this statistical analysis, there were no intervening year compliance issues concluded for Mesa County.