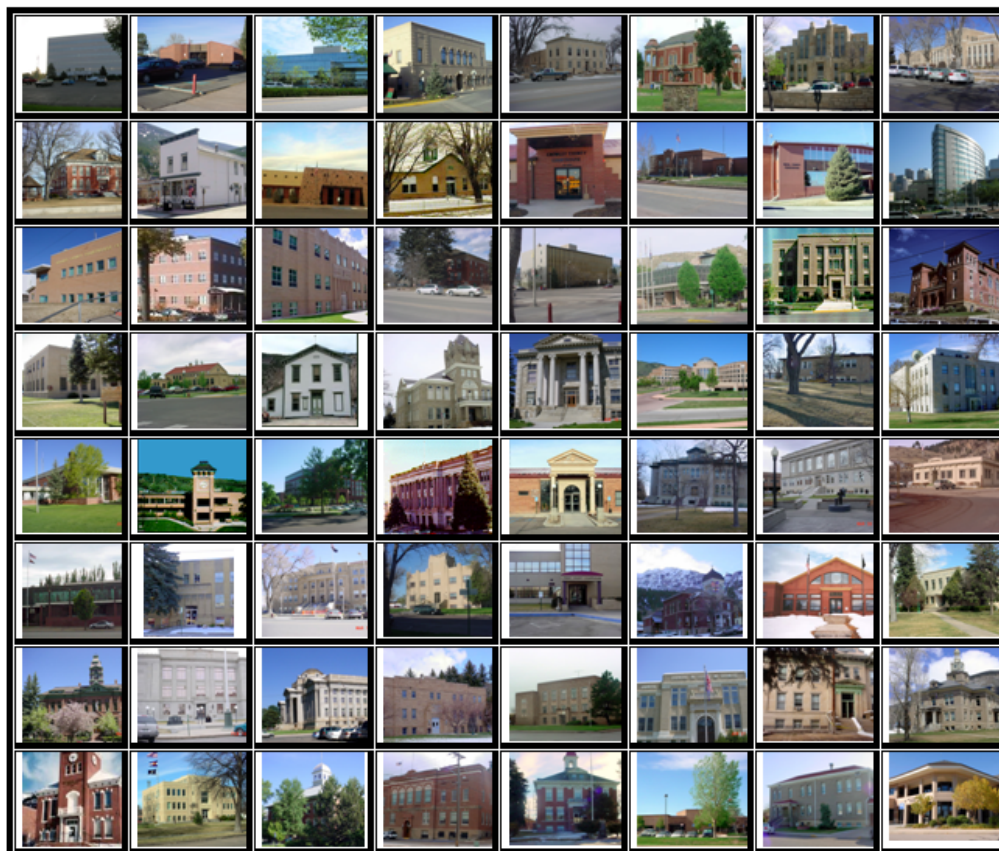




2010  
RIO BLANCO COUNTY  
PROPERTY ASSESSMENT  
STUDY

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**WILDROSE**  
APPRAISAL, INCORPORATED  
**Audit Division**



September 15, 2010

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

**RE: Final Report for the 2010 Colorado Property Assessment Study**

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2010 Colorado Property Assessment Study.

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

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

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

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

A handwritten signature in black ink that reads "Harry J. Fuller". The signature is written in a cursive style.

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

## TABLE OF CONTENTS

Introduction .....	3
Regional/Historical Sketch of Rio Blanco County .....	4
Ratio Analysis.....	6
<i>Random Deed Analysis</i> .....	7
Time Trending Verification .....	8
Sold/Unsold Analysis .....	9
Agricultural Land Study .....	11
<i>Agricultural Land</i> .....	11
<i>Agricultural Outbuildings</i> .....	13
Sales Verification.....	14
Economic Area Review and Evaluation .....	15
Natural Resources .....	16
<i>Earth and Stone Products</i> .....	16
<i>Producing Oil and Gas Procedures</i> .....	16
<i>Producing Coal Mines</i> .....	17
Vacant Land.....	18
Possessory Interest Properties .....	19
Personal Property Audit .....	20
Wildrose Auditor Staff.....	22
Appendices.....	23

# INTRODUCTION

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## Colorado

The State Board of Equalization (SBOE) reviews assessments for conformance to the Constitution. The SBOE will order revaluations for counties whose valuations do not reflect the proper valuation period level of value.

The statutory basis for the audit is found in C.R.S. 39-1-104 (16)(a)(b) and (c).

The legislative council sets forth two criteria that are the focus of the audit group:

To determine whether each county assessor is applying correctly the constitutional and statutory provisions, compliance requirements of the State Board of Equalization, and the manuals published by the State Property Tax Administrator to arrive at the actual value of each class of property.

To determine if each assessor is applying correctly the provisions of law to the actual values when arriving at valuations for assessment of all locally valued properties subject to the property tax.

The property assessment audit conducts a two-part analysis: A procedural analysis and a statistical analysis.

The procedural analysis includes all classes of property and specifically looks at how the assessor develops economic areas, confirms and qualifies sales, and develops time adjustments. The audit also examines the procedures for adequately discovering, classifying and valuing agricultural outbuildings, discovering subdivision build-out and subdivision discounting procedures. Valuation methodology for vacant land, improved residential properties and commercial properties is examined. Procedures for producing mines, oil and gas leaseholds and lands producing, producing coal mines, producing earth and stone products, severed mineral interests and non-producing patented mining claims are also reviewed.

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

Wildrose Audit has completed the Property Assessment Study for 2010 and is pleased to report its findings for Rio Blanco County in the following report.

# REGIONAL/HISTORICAL SKETCH OF RIO BLANCO COUNTY

## Regional Information

Rio Blanco County is located in the Western Slope region of Colorado. The Western Slope of Colorado refers to the region west of the Rocky Mountains. It includes Archuleta, Delta, Dolores, Eagle, Garfield, Grand,

Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel, and Summit counties.



## Historical Information

Rio Blanco County has a population of approximately 6,534 people with 1.9 people per square mile, according to the U.S. Census Bureau's 2009 estimated population data.

Rio Blanco County, formed from part of Garfield County, was established in 1889 with an area of 3,263 square miles. The county was named for the Rio Blanco River, Spanish for White River.

The Town of Meeker is a Statutory Town that is the county seat and the most populous town in Rio Blanco County. The town is named for Nathan Meeker, the United States Native American agent who was killed along with 11 other U.S. citizens by Ute Indians in the 1879 Meeker Massacre. The site of the massacre is located along State Highway 64 in the White River valley east of town and is marked by a prominent sign. After the massacre and the ensuing conflict known as the Ute War, the Ute population was forced to relocate to reservations in Utah and the United States Army established a garrison on the current site

of the town. The town was founded in 1883 following the removal of troops. The White River Museum is located just north of the Rio Blanco County Courthouse and housed in several original wooden structures of the Army garrison.

The town emerged as a regional center for hunting by the turn of the 20th century. Theodore Roosevelt once visited the town on a mountain lion hunting trip and stayed in the historic Hotel Meeker opposite the courthouse.

Meeker CO is located at the west end of the Flat Tops Trail Scenic Byway and is close to many access points to the 235,000 acre Flat Tops Wilderness area which is the 2nd largest in Colorado. The Meeker, Craig and Rio Blanco County community offers opportunities for horseback riding, backpacking, hiking, fishing, rafting, snowmobiling, cross country skiing, and elk and deer big game hunting.

*(www.meekercolorado.com, William Bright, Colorado Place Names, 3rd Edition, Johnson Books, 2004, p. 149 and 115)*



# 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 2007 and June 2008. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2008 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 ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were “lost” because of trimming. For the largest 11 counties, the residential ratio statistics were broken down by economic area as well.

## Conclusions

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

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

The results for Rio Blanco County are:

<b>Rio Blanco County Ratio Grid</b>					
<b>Property Class</b>	<b>Number of Qualified Sales</b>	<b>Unweighted Median Ratio</b>	<b>Price Related Differential</b>	<b>Coefficient of Dispersion</b>	<b>Time Trend Analysis</b>
Commercial/Industrial	34	0.985	1.065	19.7	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	184	0.991	1.011	10	Compliant
Vacant Land	N/A	N/A	N/A	N/A	N/A

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

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

**Recommendations**

None

**Random Deed Analysis**

An additional analysis was performed as part of the Ratio Analysis. Ten randomly selected deeds with documentary fees were obtained from the Clerk and Recorder. These deeds were for sales that occurred from January 1, 2007 through June 30, 2008. These sales were then checked for inclusion on the Assessor’s qualified or unqualified database.

**Conclusions**

After comparing the list of randomly selected deeds with the Assessor’s database, Rio Blanco County has accurately transferred sales data from the recorded deeds to the qualified or unqualified database.

**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 Rio Blanco County has complied with the statutory requirements to analyze the effects of time on value in their county. Rio Blanco 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

Rio Blanco County was tested for the equal treatment of sold and unsold properties to ensure that “sales chasing” has not occurred. The auditors employed a multi-step process to determine if sold and unsold properties were valued in a consistent manner.

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 2009 and 2010 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	N/A

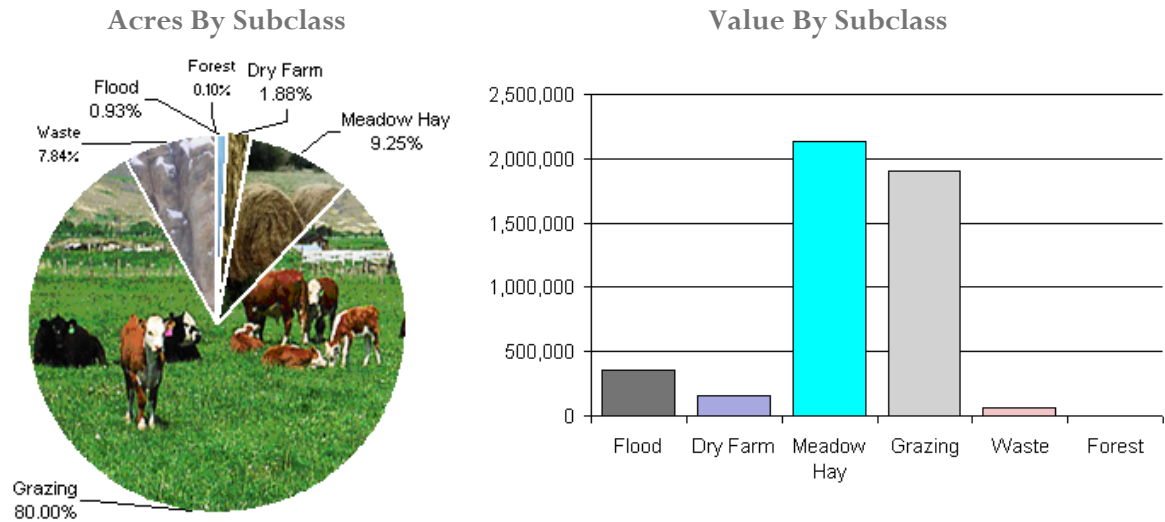
### **Conclusions**

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

### **Recommendations**

None

# AGRICULTURAL LAND STUDY



## 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:



<b>Rio Blanco County Agricultural Land Ratio Grid</b>						
<b>Abstract Code</b>	<b>Land Class</b>	<b>Number Of Acres</b>	<b>County Value Per Acre</b>	<b>County Assessed Total Value</b>	<b>WRA Total Value</b>	<b>Ratio</b>
4117	Flood	4,374	82.15	359,322	371,451	0.97
4127	Dry Farm	8,859	17.35	153,716	153,182	1.00
4137	Meadow Hay	43,508	49.11	2,136,705	2,136,705	1.00
4147	Grazing	376,202	5.07	1,908,643	1,908,643	1.00
4177	Forest	468	8.61	4,031	4,031	1.00
4167	Waste	36,853	1.62	59,520	59,520	1.00
<b>Total/Avg</b>		<b>470,264</b>	<b>9.83</b>	<b>4,621,936</b>	<b>4,633,532</b>	<b>1.00</b>

### **Recommendations**

None

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## Agricultural Outbuildings

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### **Methodology**

Data was collected and reviewed to determine if the guidelines found in the Assessor's Reference Library (ARL) Volume 3, pages 5.74 through 5.77 were being followed.

### **Conclusions**

Rio Blanco County has substantially complied with the 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. WRA has used the above-cited statutes as a guide in our study of the county's procedures and practices for verifying sales.

WRA reviewed the sales verification procedures in 2010 for Rio Blanco County. This study was conducted by checking selected sales from the master sales list for the Jan 1, 2007 - June 30, 2008 valuation period. Specifically WRA selected 32 sales listed as unqualified.

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

### **Conclusions**

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

### **Recommendations**

None

# ECONOMIC AREA REVIEW AND EVALUATION

## **Methodology**

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

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## Earth and Stone Products

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### Methodology

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

### Conclusions

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

### Recommendations

None

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## Producing Oil and Gas Procedures

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### Methodology

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

### STATUTORY REFERENCES

Section § 39-1-103, C.R.S., specifies that producing oil or gas leaseholds and lands are valued according to article 7 of title 39, C.R.S.

**Actual value determined - when.**

(2) The valuation for assessment of leaseholds and lands producing oil or gas shall be determined as provided in article 7 of this title.

### § 39-1-103, C.R.S.

Article 7 covers the listing, valuation, and assessment of producing oil and gas leaseholds and lands.

### Valuation:

#### Valuation for assessment.

(1) Except as provided in subsection (2) of this section, on the basis of the information contained in such statement, the assessor shall value such oil and gas leaseholds and lands for assessment, as real property, at an amount equal to eighty-seven and one-half percent of:

(a) The selling price of the oil or gas sold there from during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year;

(b) The selling price of oil or gas sold in the same field area for oil or gas transported from the premises which is not sold during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year.

### § 39-7-102, C.R.S.

### Conclusions

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

### Recommendations

None



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## Producing Coal Mines

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### 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 is 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 provides 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**

Subdivisions were reviewed in 2010 in Rio Blanco 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.

### **Conclusions**

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

### **Recommendations**

None

## POSSESSORY INTEREST PROPERTIES

### Possessory Interest

Possessory interest property discovery and valuation is described in the Assessor's Reference Library (ARL) Volume 3 section 7 in accordance with the requirements of Chapter 39-1-103 (17)(a) (II) C.R.S. Possessory Interest is defined by the Property Tax Administrator's Publication ARL Volume 3, Chapter 7: A private property interest in government-owned property or the right to the occupancy and use of any benefit in government-owned property that has been granted under lease, permit, license, concession, contract, or other agreement.

Rio Blanco County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural and

commercial possessory interest properties. The county has also been queried as to their confidence that the possessory interest properties have been discovered and placed on the tax rolls.

### Conclusions

Rio Blanco 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

Rio Blanco County was studied for its procedural compliance with the personal property assessment outlined in the Assessor's Reference Library (ARL) Volume 5, and in the State Board of Equalization (SBOE) requirements for the assessment of personal property. The SBOE requires that counties use ARL Volume 5, including current discovery, classification, documentation procedures, current economic lives table, cost factor tables, depreciation table, and level of value adjustment factor table.

The personal property audit standards narrative must be in place and current. A listing of businesses that have been audited by the assessor within the twelve-month period reflected in the plan is given to the auditor. The audited businesses must be in conformity with those described in the plan.

Aggregate ratio will be determined solely from the personal property accounts that have been physically inspected. The minimum assessment sample is one percent or ten schedules, whichever is greater, and the maximum assessment audit sample is 100 schedules.

For the counties having over 100,000 population, WRA selected a sample of all personal property schedules to determine whether the assessor is correctly applying the provisions of law and manuals of the Property Tax Administrator in arriving at the assessment levels of such property. This sample was selected from the personal property schedules audited by the assessor. In no event was the sample selected by the contractor less than 30 schedules. The counties to be included in this study are Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo, and Weld. All other counties received a procedural study.

Rio Blanco 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:

- 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
- New business advertisements

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.

Rio Blanco County submitted their personal property written audit plan and was current for the 2010 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Accounts with greater than 10% change
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Businesses with no deletions or additions for 2 or more years



- Non-filing Accounts - Best Information Available
- Accounts close to the \$4,000 actual value exemption status
- Accounts protested with substantial disagreement
- Every 5-year check

### **Conclusions**

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

### **Recommendations**

None

## WILDROSE AUDITOR STAFF

**Harry J. Fuller**, *Audit Project Manager*

**Suzanne Howard**, *Audit Administrative Manager*

**Steve Kane**, *Audit Statistician / Field Analyst*

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

**J. Andrew Rodriguez**, *Field Analyst*

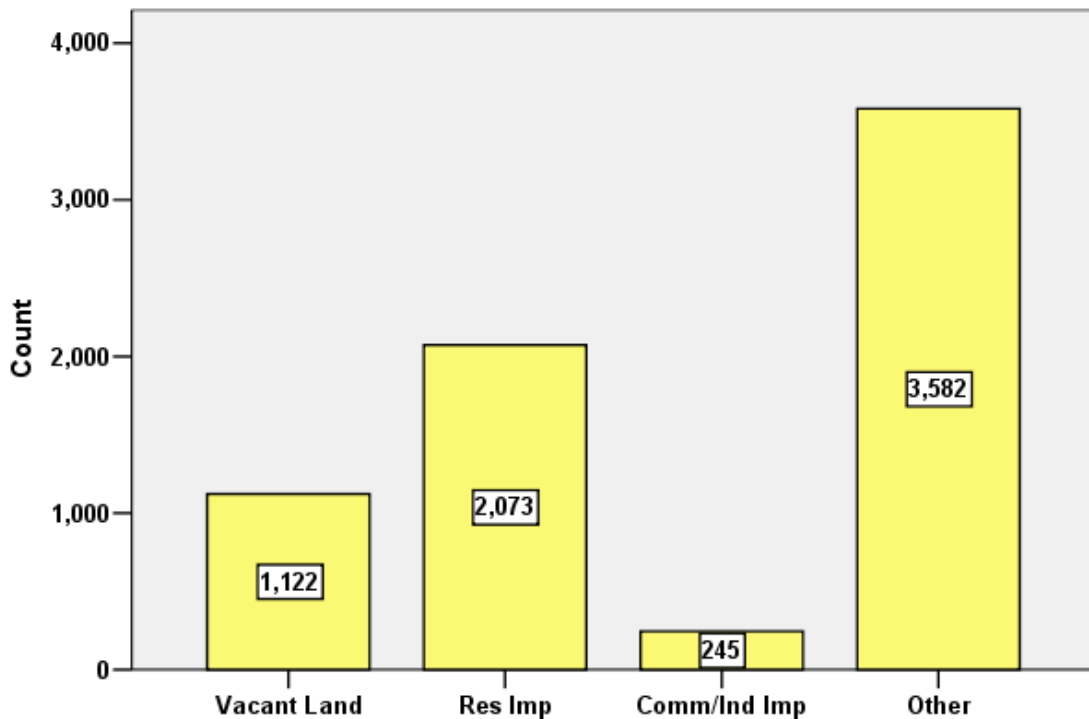
# APPENDICES

## **STATISTICAL RESULTS FOR RIO BLANCO COUNTY 2010**

### I. OVERVIEW

Rio Blanco County is a rural county located in northwestern Colorado. The county has a total of 7,022 real property parcels, according to data submitted by the county assessor’s office in 2010. The following provides a breakdown of property classes for this county:

**Real Property Class Distribution**



The vacant land class of properties was dominated by residential land. Residential lots (coded 100 and 1112) accounted for 47% of all vacant land parcels. Because there were less than 1,200 vacant land parcels, this property class was excluded from further analysis.

For residential improved properties, single family properties accounted for 94% of all residential properties. No further breakdowns were necessary in terms of subclasses.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 3.9% of all such properties in this county.

**II. DATA FILES**

The following sales analyses were based on the requirements of the 2010 Colorado Property Assessment Study. Information was provided by the Rio Blanco Assessor’s Office in April 2010. The data included all 5 property record files as specified by the Auditor.

**III. RESIDENTIAL SALES RESULTS**

The following steps were taken to analyze the residential sales:

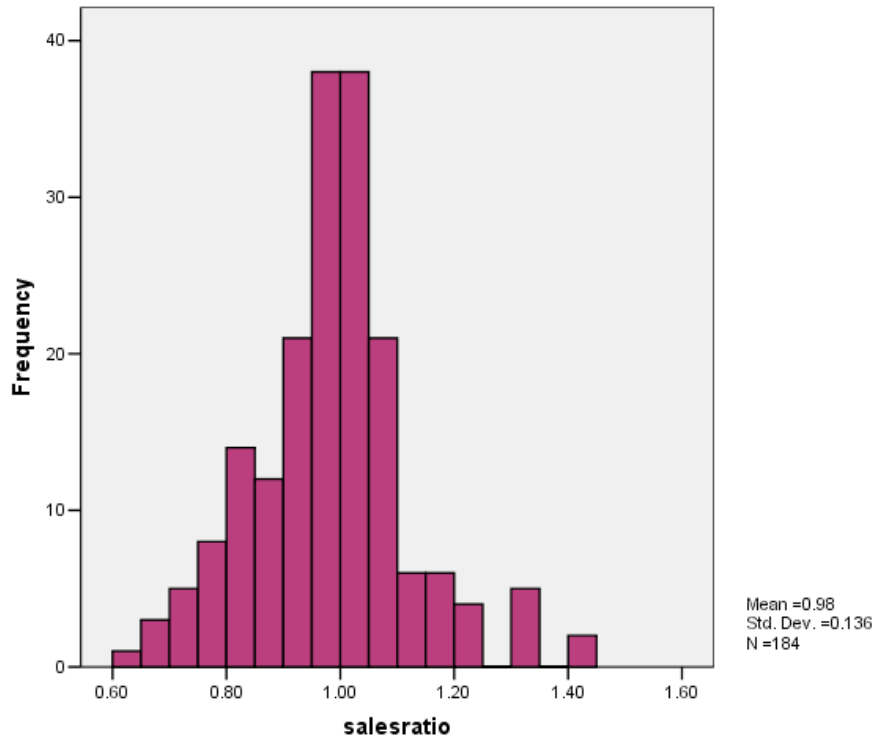
- |  |       |
|--|-------|
| 1. All sales                                       | 1,384 |
| 2. Selected qualified sales                        | 813   |
| 3. Select improved sales                           | 458   |
| 4. Exclude earlier sales for same properties       | 413   |
| 5. Select residential sales only                   | 374   |
| 6. Sales between January 1, 2007 and June 30, 2008 | 184   |

The sales ratio analysis was analyzed as follows:

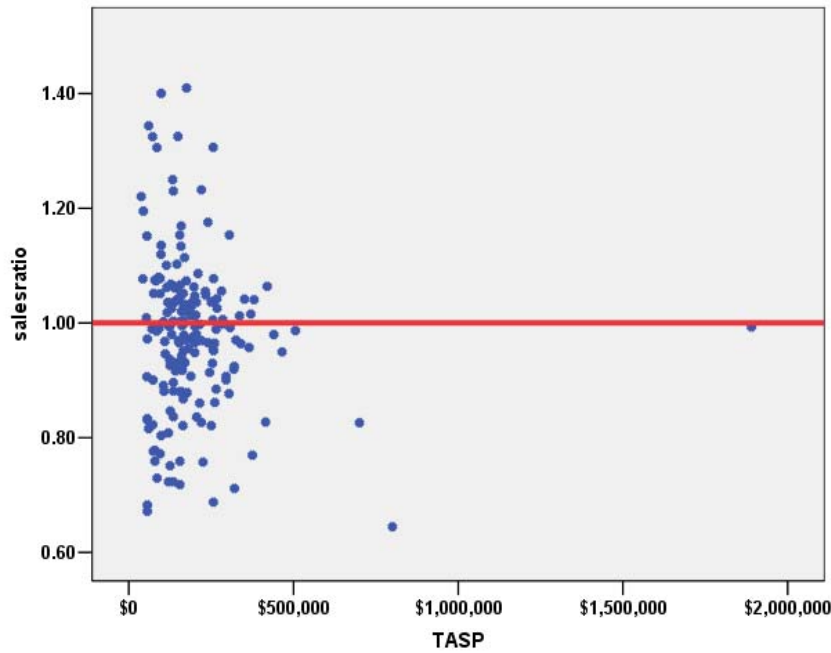
Median	<b>0.991</b>
Price Related Differential	<b>1.011</b>
Coefficient of Dispersion	<b>.100</b>

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





**Residential Sale Price by Sales Ratio**



The above graphs indicate that the distribution of the sale ratios was within state mandated limits. No sales were trimmed.

### Residential Market Trend Analysis

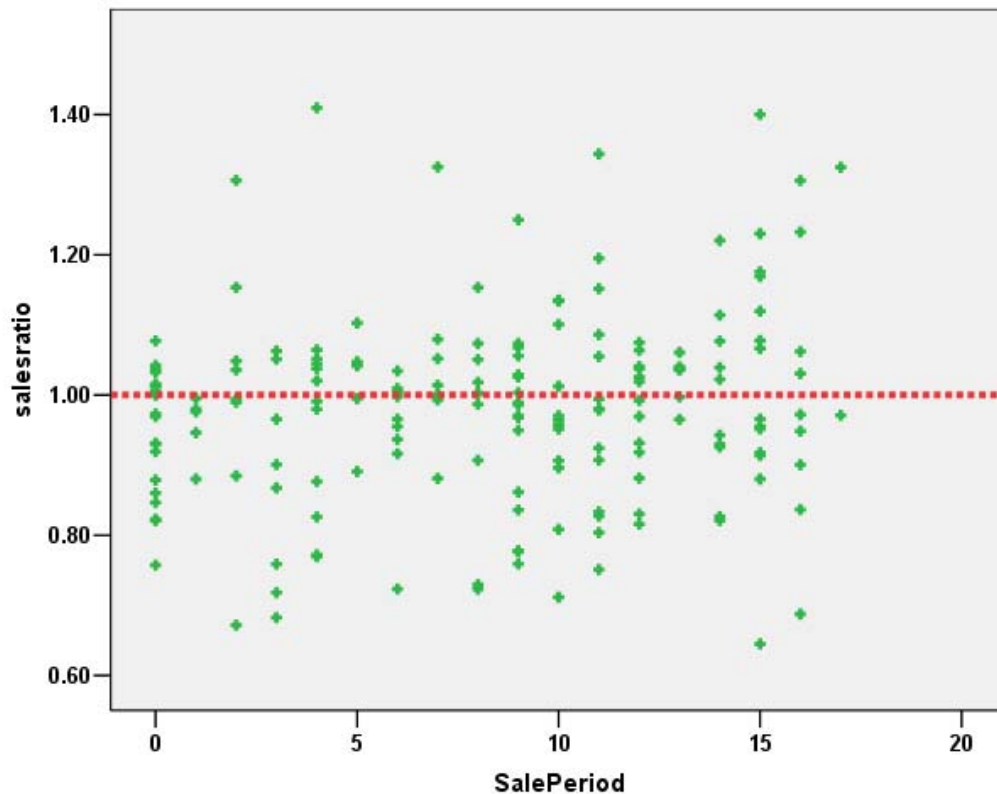
We next analyzed the residential dataset using the 18-month sale period for any residual market trending, as follows:

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.949	.019		50.073	.000
	SalePeriod	.004	.002	.145	1.981	.049

a. Dependent Variable: salesratio

**Residential Sale Price Market Trend**



The above analysis indicated that the assessor has adequately addressed market trending in the valuation of residential properties. No residential market trending was present, based on this analysis.

### Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square foot for 2010 between each group, stratified by subdivision, as follows:

Group	No. Props	Median	Mean
Unsold	1,889	\$126	\$134
Sold	184	\$123	\$129

The above results indicate that sold and unsold residential properties were valued in a consistent manner.

### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

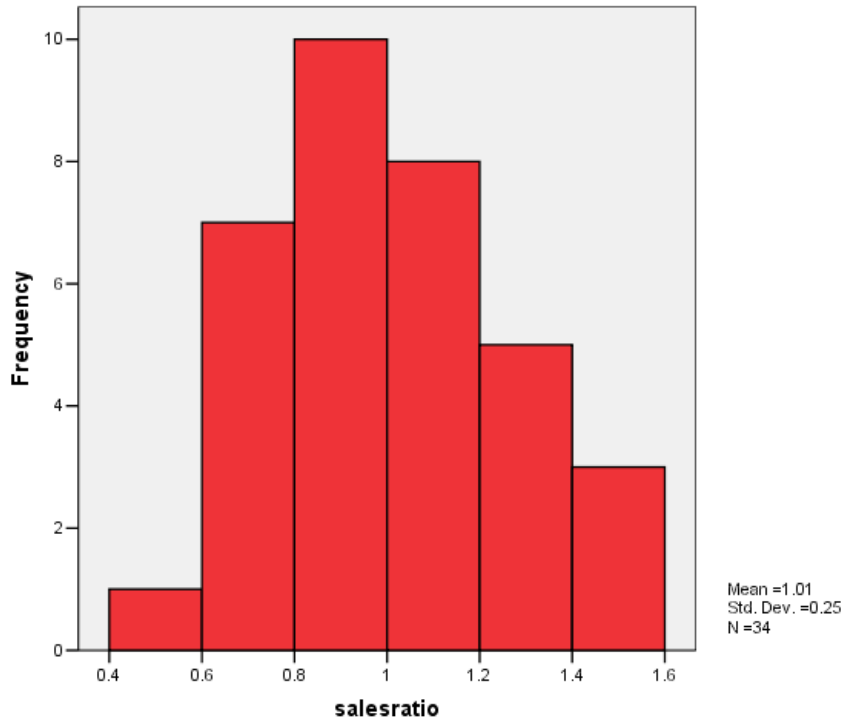
The following steps were taken to analyze the commercial sales:

1. All sales	1,384
2. Selected qualified sales	813
3. Select improved sales	458
4. Exclude earlier sales for same properties	413
5. Select commercial sales only	34

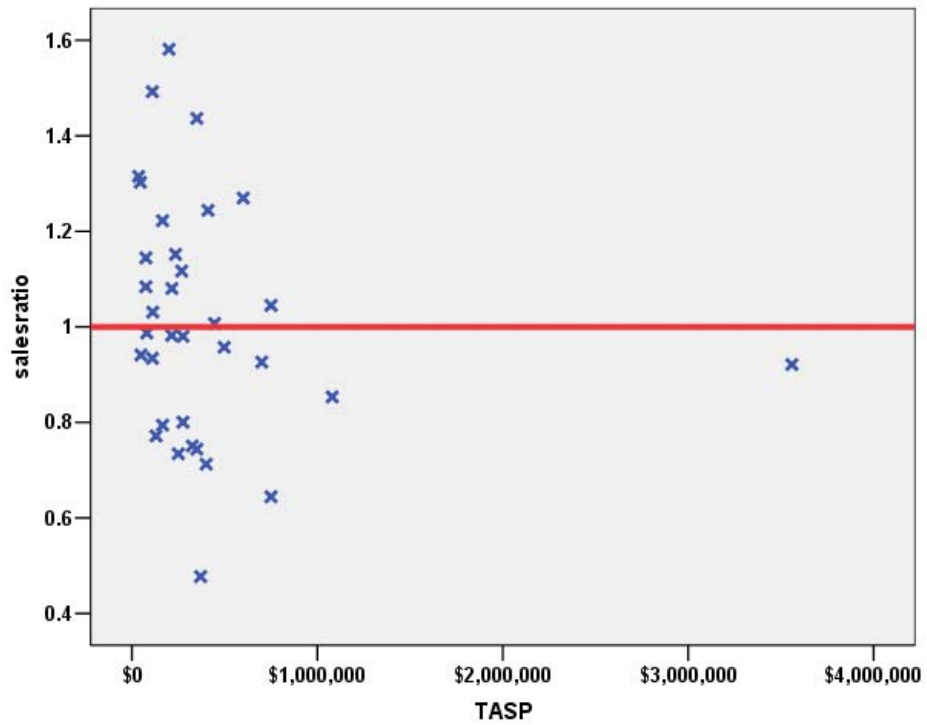
The sales ratio analysis was analyzed as follows:

Median	<b>0.985</b>
Price Related Differential	<b>1.065</b>
Coefficient of Dispersion	<b>.197</b>

The above tables indicate that the Rio Blanco County commercial/industrial sale ratios were in compliance with the SBOE standards. The following histogram and scatter plot describe the sales ratio distribution further:



Commercial Sale Price by Sales Ratio



### Commercial Market Trend Analysis

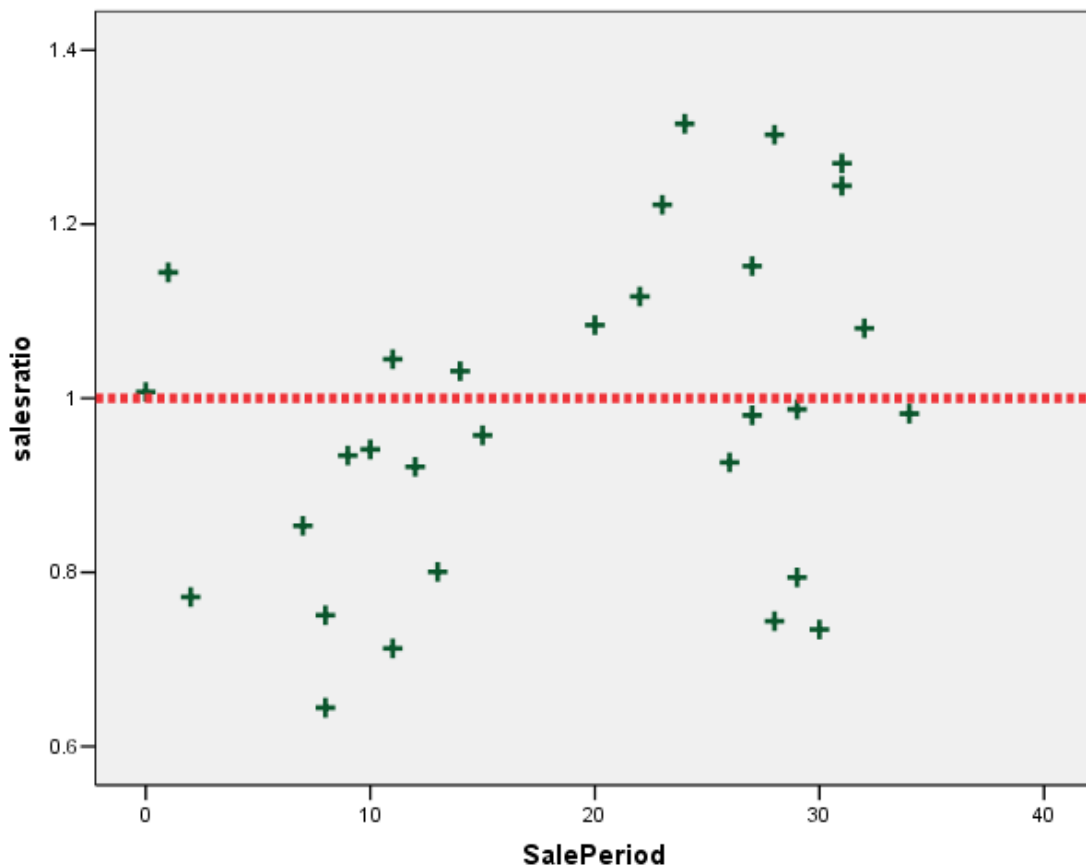
The assessor did not apply any market trend adjustment to the commercial dataset. The 34 commercial sales were analyzed, examining the sale ratios across the 36 month sale period, with the following results:

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.864	.068		12.750	.000
	SalePeriod	.006	.003	.350	1.980	.058

a. Dependent Variable: salesratio

**Commercial Market Trend Analysis**



We concur with the assessor that no market trending should have been applied.

### **Sold/Unsold Analysis**

We compared the median change in value between 2008 and 2010 between sold and unsold commercial properties to determine if the assessor was valuing each group consistently. While this is a challenge to prove in this county, given the small number of sales and the overall small number and diversity of commercial/industrial properties in general, the following results indicate that based on the median change in value, both groups were valued in a consistent manner:

<b>Group</b>	<b>No. Props</b>	<b>Median Chg</b>	<b>Mean Chg</b>
Unsold	216	1.17	1.61
Sold	34	1.22	1.29

The above results indicated that sold and unsold commercial properties were valued consistently.

### **V. VACANT LAND SALE RESULTS**

Based on the parameters of the 2010 audit, this class was not analyzed.

### **V. AGRICULTURAL IMPROVEMENTS ANALYSIS**

The final statistical verification concerned the assigned actual values for agricultural residential improvements. We compared the actual value per square foot rate for this group and compared it to rates assigned to residential single family improvements in Rio Blanco County.

The following indicates that agricultural residential improvements were valued in a manner similar to the single family residential improvements in this county:



**Descriptives**

abstrimp		Statistic	Std. Error
ImpValSF	1212.00	Mean	\$104.12
		95% Confidence Interval for Mean	\$102.59
		Lower Bound	\$105.64
		Upper Bound	\$103.45
		5% Trimmed Mean	\$101.03
		Median	1175.373
		Variance	\$34.284
		Std. Deviation	\$8
		Minimum	\$233
		Maximum	\$226
		Range	\$48
		Interquartile Range	.300
		Skewness	.055
		Kurtosis	-.070
			.111
4277.00		Mean	\$103.70
		95% Confidence Interval for Mean	\$97.26
		Lower Bound	\$110.14
		Upper Bound	\$98.33
		5% Trimmed Mean	\$98.19
		Median	4689.578
		Variance	\$68.480
		Std. Deviation	\$7
		Minimum	\$1,003
		Maximum	\$997
		Range	\$53
		Interquartile Range	6.669
		Skewness	.117
		Kurtosis	75.729
			.233

**VI. Conclusions**

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

**STATISTICAL ABSTRACT**

**Residential**

**Ratio Statistics for CURRTOT / TASP**

Mean		.981
95% Confidence Interval for Mean	Lower Bound	.961
	Upper Bound	1.000
Median		.991
95% Confidence Interval for Median	Lower Bound	.970
	Upper Bound	1.002
	Actual Coverage	95.4%
Weighted Mean		.970
95% Confidence Interval for Weighted Mean	Lower Bound	.947
	Upper Bound	.993
Price Related Differential		1.011
Coefficient of Dispersion		.100
Coefficient of Variation	Mean Centered	13.9%

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

**Commercial/Industrial**

**Ratio Statistics for CURRTOT / TASP**

Mean		1.013
95% Confidence Interval for Mean	Lower Bound	.926
	Upper Bound	1.100
Median		.985
95% Confidence Interval for Median	Lower Bound	.921
	Upper Bound	1.117
	Actual Coverage	97.6%
Weighted Mean		.951
95% Confidence Interval for Weighted Mean	Lower Bound	.876
	Upper Bound	1.025
Price Related Differential		1.065
Coefficient of Dispersion		.197
Coefficient of Variation	Mean Centered	24.7%

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

**Vacant Land**

Not applicable

**Residential Median Ratio Stratification**

**Sale Price**

**Case Processing Summary**

		Count	Percent
SPRec	\$25K to \$50K	3	1.6%
	\$50K to \$100K	32	17.4%
	\$100K to \$150K	38	20.7%
	\$150K to \$200K	51	27.7%
	\$200K to \$300K	38	20.7%
	\$300K to \$500K	18	9.8%
	\$500K to \$750K	2	1.1%
	\$750K to \$1,000K	1	.5%
	Over \$1,000K	1	.5%
Overall		184	100.0%
Excluded		0	
Total		184	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
\$25K to \$50K	1.195	1.002	.040	7.1%
\$50K to \$100K	.988	.990	.163	20.1%
\$100K to \$150K	.994	.997	.097	13.2%
\$150K to \$200K	1.000	.999	.071	10.6%
\$200K to \$300K	.993	1.000	.087	12.1%
\$300K to \$500K	.967	1.000	.079	11.1%
\$500K to \$750K	.906	1.015	.089	12.5%
\$750K to \$1,000K	.645	1.000	.000	.
Over \$1,000K	.993	1.000	.000	.
Overall	.991	1.011	.100	13.8%

**Subclass**

**Case Processing Summary**

		Count	Percent
PredUse	1212	173	94.0%
	1215	8	4.3%
	1220	1	.5%
	1225	2	1.1%
Overall		184	100.0%
Excluded		0	
Total		184	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
1212	.995	1.014	.096	13.4%
1215	.800	.968	.136	17.5%
1220	.966	1.000	.000	.
1225	.909	.960	.092	13.0%
Overall	.991	1.011	.100	13.8%

**Age**

**Case Processing Summary**

		Count	Percent
AgeRec	Over 100	8	4.3%
	75 to 100	7	3.8%
	50 to 75	34	18.5%
	25 to 50	71	38.6%
	5 to 25	22	12.0%
	5 or Newer	42	22.8%
Overall		184	100.0%
Excluded		0	
Total		184	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
Over 100	1.012	1.003	.086	12.4%
75 to 100	1.000	1.019	.150	20.2%
50 to 75	.929	1.037	.149	18.5%
25 to 50	.980	1.010	.097	13.4%
5 to 25	1.015	1.037	.098	14.1%
5 or Newer	1.009	1.005	.054	7.1%
Overall	.991	1.011	.100	13.8%

**Improved Area**

**Case Processing Summary**

	Count	Percent
ImpSFRec 500 to 1,000 sf	47	25.5%
1,000 to 1,500 sf	77	41.8%
1,500 to 2,000 sf	37	20.1%
2,000 to 3,000 sf	16	8.7%
3,000 sf or Higher	7	3.8%
Overall	184	100.0%
Excluded	0	
Total	184	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
500 to 1,000 sf	.948	1.009	.127	15.7%
1,000 to 1,500 sf	.998	1.016	.093	13.0%
1,500 to 2,000 sf	1.006	1.010	.097	14.5%
2,000 to 3,000 sf	.983	1.008	.050	7.0%
3,000 sf or Higher	.993	1.025	.096	16.4%
Overall	.991	1.011	.100	13.8%

**Improvement Quality**

**Case Processing Summary**

		Count	Percent
QUAL	1.00	1	.5%
	2.00	32	17.4%
	2.50	3	1.6%
	3.00	134	72.8%
	4.00	13	7.1%
	5.00	1	.5%
Overall		184	100.0%
Excluded		0	
Total		184	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
1.00	.955	1.000	.000	.
2.00	.985	.989	.147	18.5%
2.50	.821	1.070	.161	24.2%
3.00	.991	1.012	.090	12.6%
4.00	1.037	1.002	.064	10.5%
5.00	.950	1.000	.000	.
Overall	.991	1.011	.100	13.8%

**Commercial Median Ratio Stratification**

**Sale Price**

**Case Processing Summary**

		Count	Percent
SPRec	\$25K to \$50K	3	8.8%
	\$50K to \$100K	3	8.8%
	\$100K to \$150K	4	11.8%
	\$150K to \$200K	3	8.8%
	\$200K to \$300K	7	20.6%
	\$300K to \$500K	8	23.5%
	\$500K to \$750K	4	11.8%
	Over \$1,000K	2	5.9%
Overall		34	100.0%
Excluded		0	
Total		34	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
\$25K to \$50K	1.303	1.013	.096	19.6%
\$50K to \$100K	1.084	1.002	.048	7.4%
\$100K to \$150K	.983	1.012	.208	32.7%
\$150K to \$200K	1.222	.979	.215	32.3%
\$200K to \$300K	.982	1.005	.121	16.1%
\$300K to \$500K	.854	.993	.287	37.3%
\$500K to \$750K	.986	1.016	.189	26.5%
Over \$1,000K	.887	.980	.038	5.4%
Overall	.985	1.065	.197	25.6%

**Subclass**

**Case Processing Summary**

	Count	Percent
PredUse 2130	1	2.9%
2212	13	38.2%
2215	3	8.8%
2220	1	2.9%
2225	1	2.9%
2230	13	38.2%
2235	1	2.9%
2240	1	2.9%
Overall	34	100.0%
Excluded	0	
Total	34	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
2130	1.222	1.000	.000	.
2212	1.080	1.023	.144	18.7%
2215	1.007	1.023	.063	11.1%
2220	.921	1.000	.000	.
2225	.713	1.000	.000	.
2230	.934	1.080	.290	37.8%
2235	.987	1.000	.000	.
2240	.980	1.000	.000	.
Overall	.985	1.065	.197	25.6%

**Vacant Land Median Ratio Stratification**

Not applicable