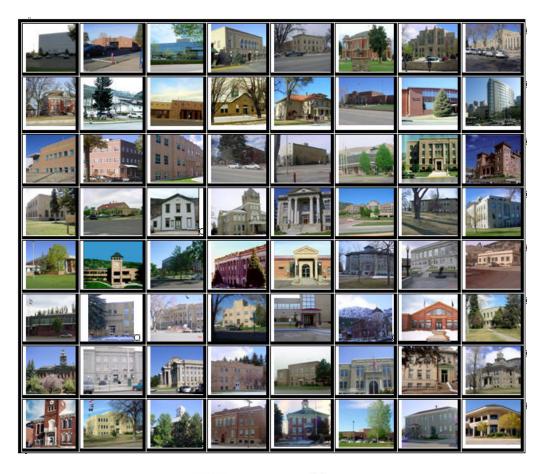


2011 RIO GRANDE COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2011

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

RE: Final Report for the 2011 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2011 Colorado Property Assessment Study.

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

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

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

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

Harry J. Fuller Project Manager

Harry J. Zulla

Wildrose Appraisal Inc. – Audit Division



TABLE OF CONTENTS

INSERT TABLE OF CONTENTS



INTRODUCTION



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 twopart 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 subdivision and discounting procedures. Valuation methodology for vacant land, improved properties commercial residential and 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 2011 and is pleased to report its findings for Rio Grande County in the following report.



REGIONAL/HISTORICAL SKETCH OF RIO GRANDE COUNTY

Regional Information

Rio Grande County is located in the San Luis Valley region of Colorado. The San Luis Valley is a large, broad, alpine valley in the Rio Grande Basin of south-central Colorado. The valley is drained to the south by the Rio Grande

River which rises in the San Juan Mountains to the west of the valley. The San Luis Valley includes Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties.





Historical Information

Rio Grande County has a population of approximately 11,982 people with 13.14 people per square mile, according to the U.S. Census Bureau's 2010 census data. This represents a -3.47 percent change from the 2000 Census.

The gateway to the San Juan Mountains, Rio Grande County is one of the highlights of the San Luis Valley. The county covers 913 square miles ranging from around 7,000 feet on valley floor to numerous 13,000-foot peaks. The scenic landscape and close community make Rio Grande County a great place to vacation, work and live. There are three municipalities within the county, Monte Vista, Del Norte, and South Fork and all have been historically developed along the rail line that follows the Rio Grande River.

Monte Vista is the county's largest community situated on the valley floor and is the center of the agricultural aspect of the county. There are numerous festivals and events that take place in and around Monte Vista. The Monte Vista National Wildlife Refuge is a stop for migratory Sand Hill Cranes every year.

Del Norte is a quaint town with a focus on its historic past. It is the county seat, home to the Rio Grande County Museum, and maintains a historic façade on its main street. Home to many small shops and boutiques, it is a beautiful place to shop and also provides recreational activity with climbing, hiking, and fishing close by.

The newest town in Rio Grande County is South Fork. South Fork is surrounded by the Rio Grande National Forest and other public lands and has easy access to Wolf Creek Ski Area. Developed as a logging center, it has become a gem of the Valley with a booming housing market, world class 18 hole golf course, and the distinction of being the Gateway to the Silver Thread scenic byway.

(www.riograndecounty.org)



RATIO ANALYSIS

Methodology

All significant classes of properties were Sales were collected for each analyzed. property class over the appropriate sale period, which was typically defined as the 18-month period between January 2009 and June 2010. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2010 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 pricerelated 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 Grande County are:

Rio Grande County Ratio Grid						
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis	
Commercial/Industrial	20	0.950	1.031	11.6	Compliant	
Condominium	N/A	N/A	N/A	N/A	N/A	
Single Family	138	0.985	1.026	11.9	Compliant	
Vacant Land	217	0.973	0.987	15.7	Compliant	

After applying the above described methodologies, it is concluded from the sales ratios that Rio Grande 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, 2009 through June 30, 2010. 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 Grande County has accurately transferred sales data from the recorded deeds to the qualified or unqualified database.

Recommendations



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 Grande County has complied with the statutory requirements to analyze the effects of time on value in their county. Rio Grande County has also satisfactorily applied the results of their time trending analysis to arrive at the time adjusted sales price (TASP).

Recommendations



SOLD/UNSOLD ANALYSIS

Methodology

Rio Grande 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 2010 and 2011 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. 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 nonparametric 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 multivariate mass appraisal model that developed ratio statistics from the sold properties that were then applied to the unsold sample. This test compared the measures of central tendency and confidence intervals for the sold properties with the unsold property sample. If this comparison was also determined to be significantly different, then the conclusion was that the county had treated the unsold properties in a different manner than sold properties.

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



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

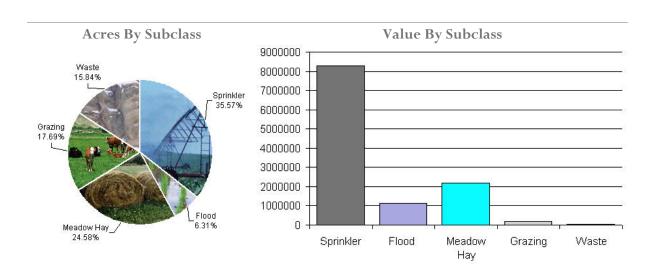
Conclusions

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

Recommendations



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: 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 locally developed yields, 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:



Rio Grande County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Fotal Value	WRA Total Value	Ratio
4107	Sprinkler	67,784	122.00	8,272,623	7,759,045	1.07
4117	Flood	12,033	95.00	1,143,838	1,099,254	1.04
4137	Meadow Hay	46,840	46.00	2,170,571	2,170,571	1.00
4147	Grazing	33,706	6.00	196,485	196,485	1.00
4167	Waste	30,191	2.00	48,727	48,727	1.00
Total/Avg		190,554	62.00	11,832,244	11,274,082	1.05

Recommendations

None

Agricultural Outbuildings

Methodology

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

Conclusions

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

Recommendations



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 2011 for Rio Grande County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 32 sales listed as unqualified.

All but one of the sales selected in the sample gave reasons that were clear and supportable. One sale was incorrectly recorded.

Conclusions

Rio Grande County appears to be doing a good job of verifying their sales. There are no recommendations.

Recommendations



ECONOMIC AREA REVIEW AND EVALUATION

Methodology

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



NATURAL RESOURCES

Earth and Stone Products

Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Natural Resource Valuation Procedures, the income approach was applied to determine value for production of earth and stone products. The number of tons was multiplied by an economic royalty rate determined by the Division of Property Taxation to determine income. The income was multiplied by a recommended Hoskold factor to determine the actual value. The Hoskold factor is determined by the life of the reserves or the lease. Value is based on two

variables: life and tonnage. The operator determines these since there is no other means to obtain production data through any state or private agency.

Conclusions

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

Recommendations



VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2011 in Rio Grande County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14). Discounting procedures were applied to all subdivisions where less than 80 percent of all sites were sold using the present worth method. The market approach was applied where 80 percent or more of the subdivision sites were sold. An absorption period was estimated for each subdivision that was discounted. An appropriate discount rate was

developed using the summation method. Subdivision land with structures was appraised at full market value.

Conclusions

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

Recommendations



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 C.R.S. Chapter 39-1-103 (17)(a)(II)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 under lease, permit, license, concession, contract, or other agreement.

Rio Grande County has been reviewed for their procedures and adherence to guidelines when

assessing and valuing agricultural 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 Grande 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



PERSONAL PROPERTY AUDIT

Rio Grande 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 of Equalization Board (SBOE) requirements for the assessment of personal property. The SBOE requires that counties use ARL Volume 5, including current discovery, documentation classification, 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 Grande County is compliant with the guidelines set forth in ARL Volume 5 regarding discovery procedures, using the following methods to discover personal property accounts in the county:

- Public Record Documents
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth
- New tax license listing

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 Grande County submitted their personal property written audit plan and was current for the 2011 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:

- Incomplete or inconsistent declarations
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts Best Information Available
- Accounts close to the \$5,500 actual value exemption status
- Accounts protested with substantial disagreement



Conclusions

Rio Grande 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



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



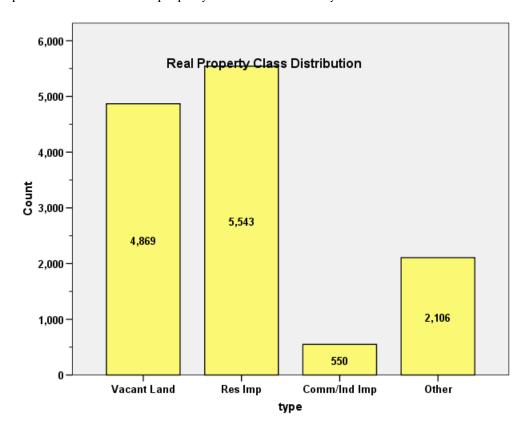
APPENDICES



STATISTICAL COMPLIANCE REPORT FOR RIO GRANDE COUNTY 2011

I. OVERVIEW

Rio Grande County is located in south central Colorado. The county has a total of 13,068 real property parcels, according to data submitted by the county assessor's office in 2011. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100) accounted for 81% of all vacant land parcels.

For residential improved properties, single family properties accounted for 82% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 4% of all such properties in this county.



II. DATA FILES

The following sales analyses were based on the requirements of the 2011 Colorado Property Assessment Study. Information was provided by the Rio Grande Assessor's Office in April 2011. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

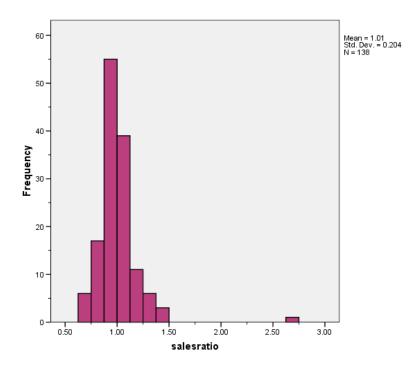
The following steps were taken to analyze the residential sales:

1. Total sales	847
2. Select improved sales	213
3. Select residential sales only	191
4. Sales between January 1, 2009 and June 30, 2010	138

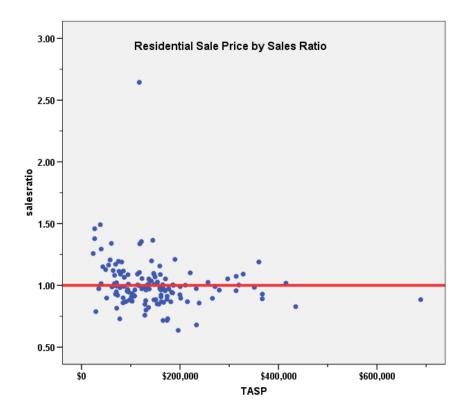
The sales ratio analysis was analyzed as follows:

Median	0.985
Price Related Differential	1.026
Coefficient of Dispersion	.119

The following graphs describe further the sales ratio distribution for these properties:







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

Residential Market Trend Analysis

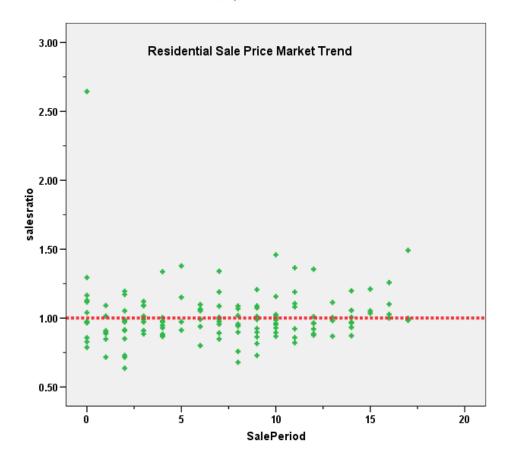
We next analyzed the residential dataset using the 18-month sale period for any residual market trending, with the following results:

Coefficients^a

Model				Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	.995	.031		31.746	.000
	SalePeriod	.002	.004	.046	.540	.590

a. Dependent Variable: salesratio





The above analysis indicated that the assessor has adequately addressed market trending in the valuation of residential properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median and mean actual value per square foot for 2011 between each group, as follows:

Group	No. Props	Median Val/SF	Mean Val/SF
Unsold	4,167	\$73	\$87
Sold	138	\$82	\$90

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

IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

The auditor visited with the county assessor's office to verify that the commercial/industrial sales provided by the assessor were valid. Out of 24 qualified in the original data submission, 4 were found to be invalid and removed from the analysis. The new commercial/industrial sale file was provided by

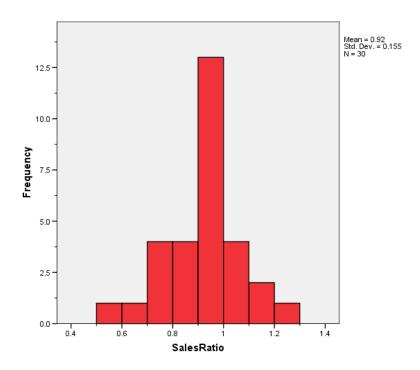


the assessor in June 2011 based on this field audit of the commercial and industrial sales. This file totaled 20 sales.

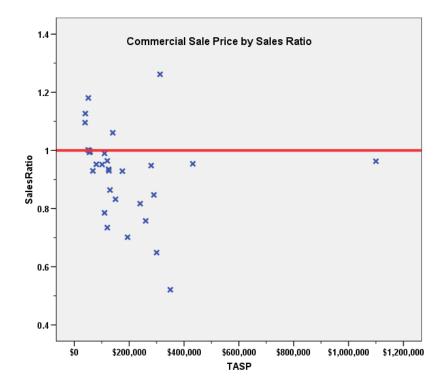
Because there were fewer than 30 sales, 10 supplemental appraisals of unsold commercial/industrial properties were completed to bring the total number of analyzed properties to 30 for the final sales ratio analysis. We used all 30 sold and appraised properties for the ratio analysis, and the 20 sold properties for the market trending and sold/unsold analysis.

Median	0.950
Price Related Differential	1.031
Coefficient of Dispersion	.116

The median sales ratio statistics were in compliance. The following histogram and scatter plot describe the sales ratio distribution further:







Commercial/Industrial Market Trend Analysis

The assessor did not apply any market trend adjustment to the commercial/industrial dataset. The 20 commercial/industrial sales were analyzed, examining the sale ratios across a 60-month sale period with the following results:

Coefficients^a

Mode	el	Unstandardized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.018	.160		6.350	.000
	SalePeriod	002	.004	132	564	.580

a. Dependent Variable: SalesRatio

The market trend results indicated no statistically significant trend. We concur that no market trend adjustments were warranted for properties in this class for Rio Grande County.

Sold/Unsold Analysis

We compared the median change in value between 2010 and 2011 between sold and unsold commercial properties, as follows:

Group	No.	Median	Mean
Unsold	424	0.93	0.93
Sold	20	0.93	0.88



The above results indicate that the assessor has valued sold and unsold commercial/industrial properties consistently.

V. VACANT LAND SALE RESULTS

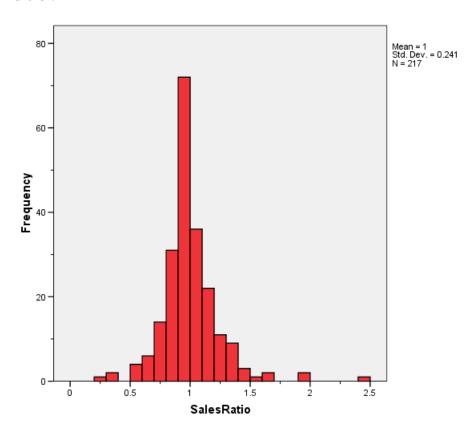
The following steps were taken to analyze vacant land sales:

1. Total sales	847
2. Select vacant land sales	218
4. Select non-agricultural sales	217
5. Sales between January 2007 and June 2010	217

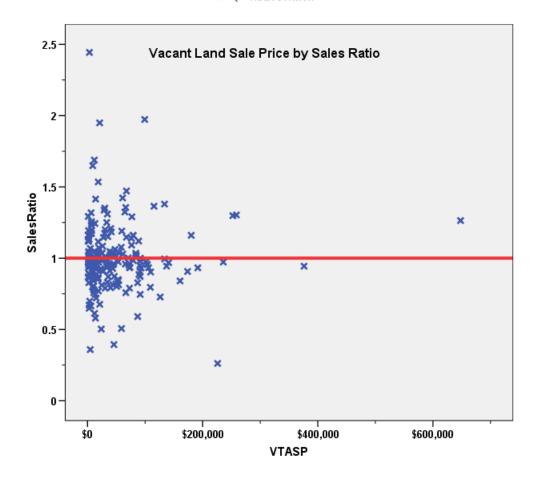
The sales ratio analysis was analyzed as follows:

Median	0.973
Price Related Differential	0.987
Coefficient of Dispersion	.157

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







Vacant Land Market Trend Analysis

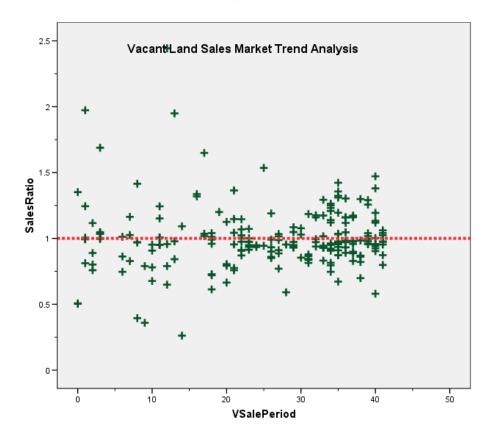
The assessor did not apply any market trend adjustment to the vacant land dataset. The 217 vacant land sales were analyzed, examining the sale ratios across the 42 month sale period with the following results:

Coefficients^a

Model				Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	.990	.038		26.047	.000
	VSalePeriod	.000	.001	.020	.296	.768

a. Dependent Variable: SalesRatio





The market trend results indicated no statistically significant trend. We concur that no market trend adjustments were warranted for properties in this class for Rio Grande County.

Sold/Unsold Analysis

We compared the median change in actual value between 2010 and 2011 for vacant land properties to determine if sold and unsold properties were valued consistently, as follows:

Group	N	Median	Mean
Unsold	4,524	0.78	0.86
Sold	217	0.71	0.78

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

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 Grande County.

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



	ſ	Descri	ptives		
	ABSTRIN	IP		Statistic	Std. Error
ImpValSF.	SFR	Mean		\$86.91	\$1.604
		95% Confidence Interval for Mean	Lower Bound	\$83.75	
			Upper Bound	\$90.08	
		5% Trimmed Mean	\$86.89		
		Median	\$86.19)	
		Variance		447.649	
		Std. Deviation		\$21.158	
		Minimum		\$21	
		Maximum		\$147	
		Range		\$125	
		Interquartile Range		\$27	
		Skewness		.070	.18
		Kurtosis		.659	.36
	Ag	Mean	\$95.40	\$3.17	
	Res	95% Confidence Interval for Mean	Lower Bound	\$89.14	
			Upper Bound	\$101.66	
		5% Trimmed Mean		\$92.63	
		Median		\$89.17)
		Variance		2657.983	
		Std. Deviation		\$51.556	
		Minimum	\$5		
		Maximum	\$295		
		Range	Range		
		Interguartile Range		\$74	
		Skewness		.823	.15
		Kurtosis		.546	.29

VI. Conclusions

The results from the statistical analysis indicate that residential, commercial and vacant properties in Rio Grande County were compliant with Colorado State Audit guidelines. Agricultural residential values were also found to meet state guidelines.



STATISTICAL ABSTRACT Residential

Ratio Statistics for CURRTOT / TASP

	95% Confiden Me			95% Confidence Interval for Median			95% Confiden Weighte				Coefficient of Variation	
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
1.009	.975	1.044	.985	.971	1.003	95.0%	.984	.954	1.014	1.026	.119	20.2%

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

Commercial/Industrial

Ratio Statistics for CURRTOT / TASP

	95% Confider Me			95% Confidence Interval for Median			95% Confiden Weighte				Coefficient of Variation	
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
.922	.864	.980	.950	.864	.990	95.7%	.895	.815	.975	1.031	.116	16.9%

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.

Vacant Land

Ratio Statistics for CURRLND / VTASP

ſ		95% Confider Me			95% Confidence Interval for Median			95% Confidence Interval for Weighted Mean				Coefficient of Variation	
	Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
Γ	1.000	.968	1.033	.973	.955	.991	95.9%	1.013	.953	1.074	.987	.157	24.1%

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



Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	1	.7%
	\$25K to \$50K	9	6.5%
	\$50K to \$100K	35	25.4%
	\$100K to \$150K	37	26.8%
	\$150K to \$200K	32	23.2%
	\$200K to \$300K	13	9.4%
	\$300K to \$500K	10	7.2%
Overall Excluded	\$500K to \$750K	1 138 0	.7% 100.0%
Total		138	

Ratio Statistics for CURRTOT / TASP

Group		Price Related	Coefficient of	Coefficient of Variation	
	Median	Differential	Dispersion	Median Centered	
LT \$25K	1.258	1.000	.000	.%	
\$25K to \$50K	1.151	1.005	.166	21.0%	
\$50K to \$100K	.998	1.006	.098	12.9%	
\$100K to \$150K	.999	1.001	.141	30.8%	
\$150K to \$200K	.941	1.001	.093	12.9%	
\$200K to \$300K	.974	.998	.079	11.5%	
\$300K to \$500K	.994	1.005	.079	10.5%	
\$500K to \$750K	.885	1.000	.000	.%	
Overall	.985	1.026	.119	20.8%	

Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	19	13.8%
	75 to 100	9	6.5%
	50 to 75	18	13.0%
	25 to 50	34	24.6%
	5 to 25	47	34.1%
	5 or Newer	11	8.0%
Overall Excluded		138 0	100.0%
Total		138	

Ratio Statistics for CURRTOT / TASP

Natio Statistics	IOI CORRIOI	/ TASE		
Group		Price Related	Coefficient of	Coefficient of Variation
	Median	Differential	Dispersion	Median Centered
Over 100	1.027	1.078	.164	21.6%
75 to 100	.909	.988	.094	12.1%
50 to 75	1.001	1.010	.110	15.0%
25 to 50	.969	1.027	.094	13.2%
5 to 25	.990	1.041	.136	28.6%
5 or Newer	.973	1.004	.053	7.3%
Overall	.985	1.026	.119	20.8%



Improved Area Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	2	1.4%
	500 to 1,000 sf	21	15.2%
	1,000 to 1,500 sf	46	33.3%
	1,500 to 2,000 sf	38	27.5%
	2,000 to 3,000 sf	29	21.0%
	3,000 sf or Higher	2	1.4%
Overall		138	100.0%
Excluded		0	
Total		138	

Ratio Statistics for CURRTOT / TASP

. tuno ottationio in obitation, into				
Group		Price Related	Coefficient of	Coefficient of Variation
	Median	Differential	Dispersion	Median Centered
LE 500 sf	.894	1.004	.039	5.6%
500 to 1,000 sf	.973	1.049	.133	18.1%
1,000 to 1,500 sf	1.001	1.026	.117	16.7%
1,500 to 2,000 sf	.971	1.005	.099	13.6%
2,000 to 3,000 sf	.990	1.017	.083	11.7%
3,000 sf or Higher	1.866	1.069	.417	59.0%
Overall	.985	1.026	.119	20.8%

Improvement Quality Case Processing Summary

Ouse i rocci	Jenny Cunnin	.w. y	
		Count	Percent
QUALITY	0	10	7.2%
	1	61	44.2%
	2	60	43.5%
	3	7	5.1%
Overall Excluded		138 0	100.0%
Total		138	

Ratio Statistics for CURRTOT / TASP

rtatio otat	Radio Cladiolico for Corretto 17 17101					
Group		Price Related	Coefficient of	Coefficient of Variation		
	Median	Differential	Dispersion	Median Centered		
0	1.110	1.005	.181	20.7%		
1	.988	1.027	.114	15.7%		
2	.974	1.014	.118	25.4%		
3	1.003	1.015	.052	7.0%		
Overall	.985	1.026	.119	20.8%		



Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	\$25K to \$50K	3	10.0%
	\$50K to \$100K	6	20.0%
	\$100K to \$150K	10	33.3%
	\$150K to \$200K	2	6.7%
	\$200K to \$300K	5	16.7%
	\$300K to \$500K	3	10.0%
	Over \$1,000K	1	3.3%
Overall		30	100.0%
Excluded		0	
Total		30	

Ratio Statistics for CURRTOT / TASP

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
\$25K to \$50K	1.096	1.005	.038	6.4%
\$50K to \$100K	.994	1.008	.050	9.1%
\$100K to \$150K	.933	1.000	.081	11.1%
\$150K to \$200K	.815	1.007	.139	19.7%
\$200K to \$300K	.817	1.002	.095	13.7%
\$300K to \$500K	.954	1.010	.259	39.4%
Over \$1,000K	.963	1.000	.000	.%
Overall	.950	1.031	.116	16.6%



Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	2212	9	30.0%
	2220	9	30.0%
	2230	12	40.0%
Overall		30	100.0%
Excluded		0	
Total		30	

Ratio Statistics for CURRTOT / TASP

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
2212	.964	1.021	.071	10.9%
2220	.935	1.009	.100	14.9%
2230	.939	1.048	.162	22.0%
Overall	.950	1.031	.116	16.6%

Vacant Land Median Ratio Stratification

Case Processing Summary

		Count	Percent
ABSTRLND	100	190	87.6%
	200	2	.9%
	400	1	.5%
	520	1	.5%
	530	1	.5%
	540	4	1.8%
	550	8	3.7%
	560	3	1.4%
	1112	6	2.8%
	1135	1	.5%
Overall		217	100.0%
Excluded		0	
Total		217	

Ratio Statistics for CURRLND / VTASP

Group		Price Related	Coefficient of	Coefficient of Variation
	Median	Differential	Dispersion	Median Centered
100	.970	1.020	.144	23.7%
200	1.158	.944	.144	20.4%
400	1.001	1.000	.000	.%
520	1.160	1.000	.000	.%
530	1.303	1.000	.000	.%
540	1.281	1.078	.197	33.1%
550	1.133	1.085	.144	19.9%
560	1.147	1.035	.128	24.2%
1112	.802	.995	.196	32.3%
1135	.793	1.000	.000	.%
Overall	.973	.987	.157	24.9%