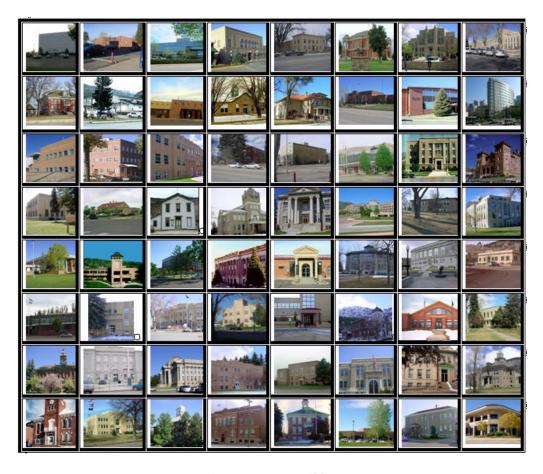


2012 GRAND COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2012

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

RE: Final Report for the 2012 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2012 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

Introduction	3
Regional/Historical Sketch of Grand County	4
Ratio Analysis	
Random Deed Analysis	7
Time Trending Verification	8
Sold/Unsold Analysis	
Agricultural Land Study	
Agricultural Land	
Agricultural Outbuildings	12
Agricultural Land Under Improvements	
Sales Verification	
Economic Area Review and Evaluation	14
Natural Resources	15
Earth and Stone Products	
Vacant Land	16
Possessory Interest Properties	17
Personal Property Audit	
Wildrose Auditor Staff	20
Appendices	21



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 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 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 2012 and is pleased to report its findings for Grand County in the following report.



REGIONAL/HISTORICAL SKETCH OF GRAND COUNTY

Regional Information

Grand 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

Grand County has a population of approximately 14,843 people with 8.04 people per square mile, according to the U.S. Census Bureau's 2010 census data. This represents a 19.3 percent change from the 2000 Census.

When Grand County was created on February 2, 1874 it was carved out of Summit County and contained land to the western and northern borders of the state, which is now in present day Moffat County and Routt County. It was named after Grand Lake and the Grand River, an old name for the Colorado River, which has its headwaters in the county. On January 29, 1877 Routt County was created and Grand County shrunk down to its current western boundary. When valuable minerals were found in North Park, Grand County claimed the area as part of its county, a claim Larimer County also held. It took a decision by the Colorado Supreme Court in 1886 to declare North Park part of Larimer County, setting Grand County's northern boundary.

Grand Lake is the deepest and largest natural lake in Colorado and the area attracts an

impressive diversity of wildlife. Prehistoric peoples, and later Native American Ute, Arapaho and Cheyenne tribes made annual pilgrimages to the area each summer to fish, hunt and reap the bounty of nature's harvest. It wasn't long before trappers, traders and explorers followed.

In the mid-1800s, European hunting parties Lake. Some discovered Grand hunters constructed summer lodges and hired local mountain men as guides. The area was permanently settled in 1867. Grand Lake Village's first full-time, year-round residents were an intriguing mix of miners (who participated in a brief mining boom) and hunting guides. In the late 1870s, silver was discovered in the rivers and mountains near Grand Lake. Prospectors bought supplies in local stores and established small mountain mining communities. Almost overnight, the town of Grand Lake transformed into a bustling economy.

(Wikipedia.org & www.grandlakechamber.com)



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 Grand County are:

Grand County Ratio Grid							
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis		
Commercial/Industrial	38	0.981	0.996	10.4	Compliant		
Condominium	360	0.999	1.027	8.6	Compliant		
Single Family	505	0.998	1.010	9.8	Compliant		
Vacant Land	115	0.993	1.040	15.5	Compliant		

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

Grand 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 2012 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 Results				
Property Class	Results			
Commercial/Industrial	Compliant			
Condominium	Compliant			
Single Family	Compliant			
Vacant Land	Compliant			

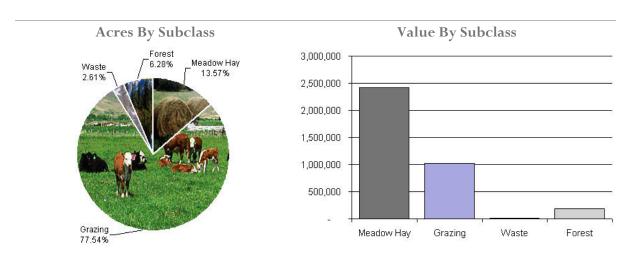
Conclusions

After applying the above described methodologies, it is concluded that Grand 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, 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:



	Grand County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Fotal Value	WRA Total Value	Ratio	
4137	Meadow Hay	33,794	71.00	2,413,781	2,413,781	1.00	
4147	Grazing	193,045	5.00	1,022,777	1,022,777	1.00	
4177	Forest	15,631	12.00	185,058	185,058	1.00	
4167	Waste	6,494	2.00	10,481	10,481	1.00	
Total/Avg		248,964	15.00	3,632,096	3,632,096	1.00	

Recommendations

None

Agricultural Outbuildings

Methodology

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

Conclusions

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

Recommendations

None

Agricultural Land Under Improvements

Methodology

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

Conclusions

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

Recommendations



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 2012 for Grand County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 30 sales listed as unqualified.

All but four of the sales selected in the sample gave reasons that were clear and supportable. Four sales had insufficient documentation.

Conclusions

Grand County appears to be doing an adequate job of verifying their sales. There are no recommendations.

Recommendations



ECONOMIC AREA REVIEW AND EVALUATION

Methodology

Grand County has submitted a written narrative describing the economic areas that make up the county's market areas. Grand 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 Grand 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 2012 in Grand 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

Grand 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.

Grand County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural, commercial and ski area possessory interest properties. The county has also been queried as to their confidence that the possessory interest properties have been discovered and placed on the tax rolls.

Conclusions

Grand 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

Grand 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.

Grand 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.

Grand County submitted their personal property written audit plan and was current for the 2012 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 \$5,500 actual value exemption status
- Accounts protested with substantial disagreement

Conclusions

Grand 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

Carl W. Ross, Agricultural/Natural Resource Analyst

J. Andrew Rodriguez, Field Analyst



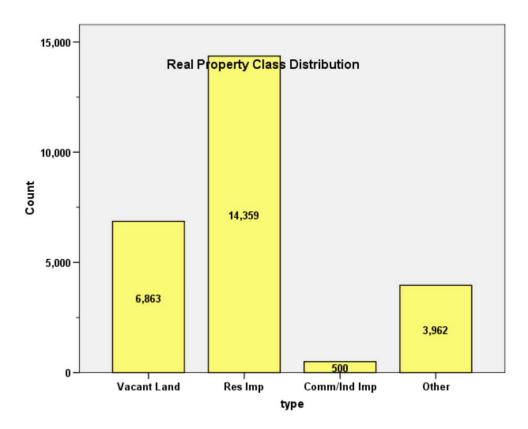
APPENDICES



STATISTICAL COMPLIANCE REPORT FOR GRAND COUNTY 2012

I. OVERVIEW

Grand County is a mountain resort located in western Colorado. The county has a total of 25,684 real property parcels, according to data submitted by the county assessor's office in 2012. 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 86.5% of all vacant land parcels.

For residential improved properties, single family properties accounted for 65.0% of all residential properties. Residential condominiums accounted for 32.8% of all residential improved properties. Based on the guidelines for the state audit statistical compliance analysis, we will analyze residential condominiums separately.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 1.9% of all such properties in this county.



II. DATA FILES

The following sales analyses were based on the requirements of the 2012 Colorado Property Assessment Study. Information was provided by the Grand Assessor's Office in May 2012. 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. Selected qualified sales	2,374
2. Select improved sales	1,800
3. Select residential sales between July 1, 2008 and June 30, 2010	865
The sales ratio analysis was analyzed as follows:	

Residential Non-Condominiums (505 Sales)

Median	0.998
Price Related Differential	1.017
Coefficient of Dispersion	.098

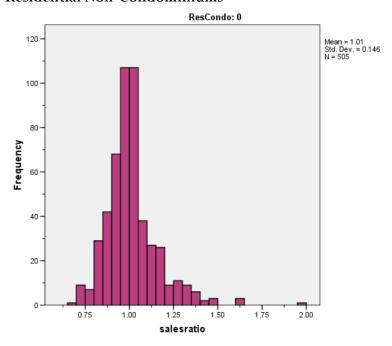
Residential Condominiums (360 Sales)

Median	0.999
Price Related Differential	1.027
Coefficient of Dispersion	.086

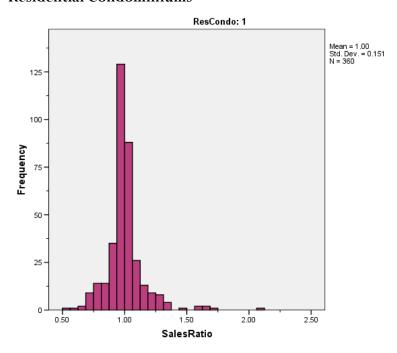
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. The following graphs describe further the sales ratio distribution for these properties:



Residential Non-Condominiums



Residential Condominiums



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 24-month sale period for any residual market trending. We stratified the sales by economic area, assigning residential condominiums under Economic Area 0, with the following results:

Coefficients^a

Res	Condo	Model		Unstandardized Coefficients		Standardized Coefficients		
				В	Std. Error	Beta	t	Sig.
	0	1	(Constant)	.999	.013		78.681	.000
			SalePeriod	.001	.001	.059	1.317	.188
'	1	1	(Constant)	1.004	.015		67.859	.000
			SalePeriod	2.710E-5	.001	.001	.025	.980

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 2012 median actual value per square foot between each group, stratified by subdivision, as follows:

ResCondo	Group	No. Props	Median	Mean
Res Non-Condo	Unsold	9,084	\$189	\$218
	Sold	505	\$199	\$233
Res Condo	Unsold	4,169	\$180	\$184
	Sold	360	\$195	\$201

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



IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

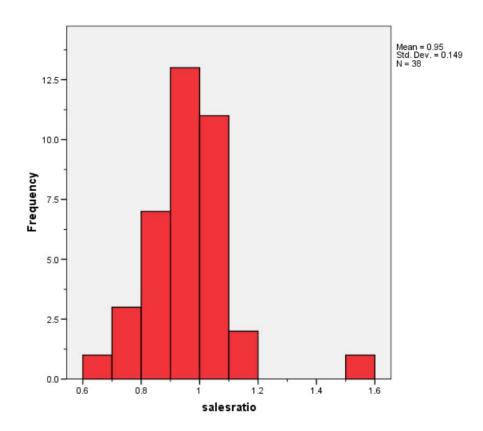
The following steps were taken to analyze the commercial sales:

1. Selected qualified sales	2,374
2. Select improved sales	1,800
3. Select commercial sales only	38
4. Sales between January 1, 2007 and June 30, 2008	38

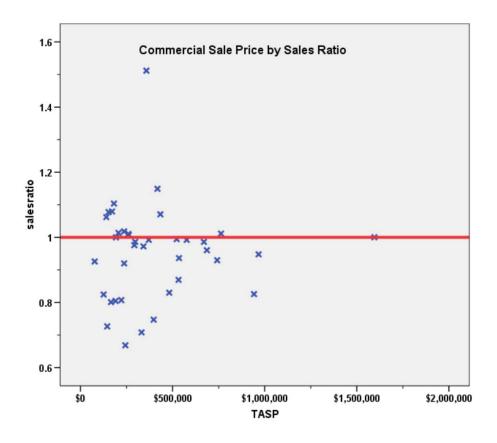
The sales ratio analysis was analyzed as follows:

Median	0.981
Price Related Differential	0.996
Coefficient of Dispersion	.104

The above tables indicate that the Grand 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 Market Trend Analysis

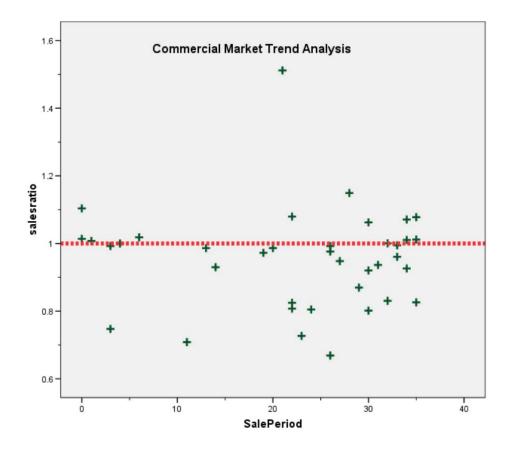
The assessor did not apply any market trend adjustment to the commercial dataset. The 38 commercial sales were analyzed, examining the sale ratios across the 36 month sale period with the following results:

Coefficients^a

Mode	il.	Unstandardize	d Coefficients	Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	.963	.054		17.725	.000
	SalePeriod	.000	.002	031	185	.854

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 Grand County.

Sold/Unsold Analysis

We compared the median actual value per square foot 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 diversity of commercial/industrial properties across six economic areas, the following results indicate that based on the median and mean actual value, both groups were valued overall in a consistent manner:

Group	No, Props	Median Val / SF	Mean Val / SF		
Unsold	403	\$94	\$120		
Sold	37	\$108	\$132		



V. VACANT LAND SALE RESULTS

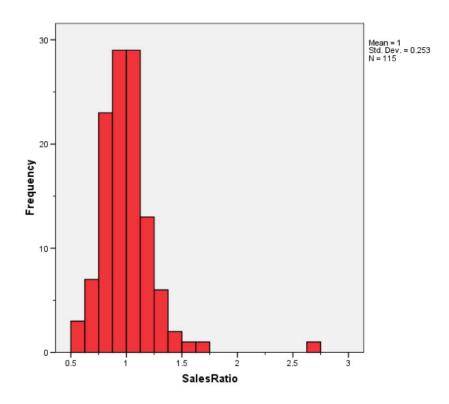
The following steps were taken to analyze vacant land sales:

1. Selected qualified sales	2,374
2. Select vacant land sales	418
3. Sales between January 1, 2009 and June 30, 2010	115

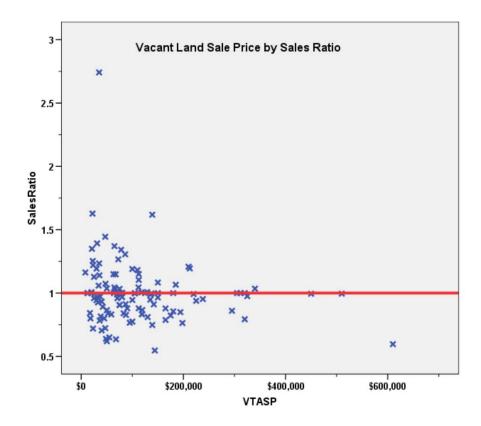
The sales ratio analysis was analyzed as follows:

Median	0.993
Price Related Differential	1.040
Coefficient of Dispersion	.155

The above tables indicate that the Grand 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

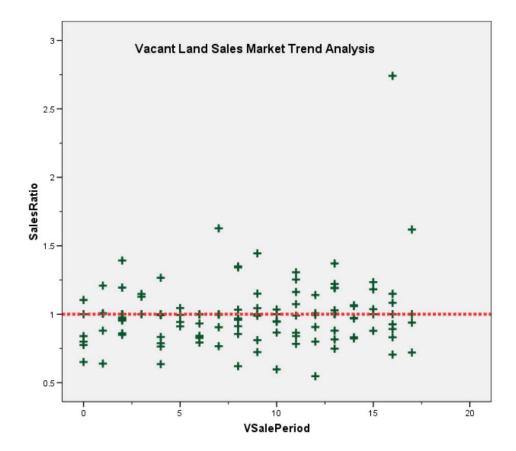
The assessor did not apply any market trend adjustment to the vacant land dataset. The 115 vacant land sales were analyzed, examining the sale ratios across the 18 month sale period with the following results:

Coefficients^a

M	lodel			Standardized Coefficients		
L		В	Std. Error	Beta	t	Sig.
1	(Constant)	.927	.046		20.120	.000
L	VSalePeriod	.008	.005	.163	1.752	.082

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 Grand County.

Sold/Unsold Analysis

We compared the median change in actual value between 2008 and 2012 for vacant land properties to determine if sold and unsold properties were valued consistently, as follows:

Group	No. Props	Median	Mean
Unsold	6,655	.8000	.8631
Sold	115	.9000	.9678

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

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 Grand County.

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



Descriptives

	Abstrin	np		Statistic	Std. Error
ImpValSF	1212	Mean		\$157.11	\$.862
		95% Confidence Interval	Lower Bound	\$155.42	
		for Mean	Upper Bound	\$158.80	
		5% Trimmed Mean		\$149.71	
		Median		\$137.72)
		Variance		6902.971	
		Std. Deviation		\$83.084	
		Minimum		\$11	
		Maximum		\$1,448	
		Range		\$1,436	
		Interquartile Range		\$85	
		Skewness		1.924	.025
		Kurtosis		9.513	.051
	4277	Mean		\$130.63	\$3.653
		95% Confidence Interval for Mean	Lower Bound	\$123.45	
		TOT Weart	Upper Bound	\$137.81	
		5% Trimmed Mean		\$123.88	
		Median		\$116.29)
		Variance		5659.128	
		Std. Deviation		\$75.227	
		Minimum		\$4	
		Maximum		\$553	
		Range		\$549	
		Interquartile Range		\$83	
		Skewness		1.937	.119
		Kurtosis		6.521	.237

VI. CONCLUSIONS

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



STATISTICAL ABSTRACT Residential

Ratio Statistics for CURRTOT / TASP

ResCondo		95% Confider Me	nce Interval for an		95% Confidence Interval for Median			95% Confiden Weighte				Coefficient of Variation	
	Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	VVeighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
0	1.013	1.001	1.026	.998	.992	1.001	95.9%	.996	.983	1.009	1.017	.098	14.4%
1	1.004	.989	1.020	.999	.998	1.000	96.0%	.978	.964	.992	1.027	.086	15.1%

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

Commercial/Industrial

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
.954	.905	1.003	.981	.926	1.000	96.6%	.958	.916	1.001	.996	.104	15.6%

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

		95% Confider Me		l for 95% Confidence Interval for Median			95% Confiden Weighte	ce Interval for d 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
ı	.996	.950	1.043	.993	.948	1.000	96.0%	.958	.912	1.005	1.040	.155	25.4%

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	6	.7%
	\$25K to \$50K	10	1.2%
	\$50K to \$100K	50	5.8%
	\$100K to \$150K	122	14.1%
	\$150K to \$200K	140	16.2%
	\$200K to \$300K	230	26.6%
	\$300K to \$500K	206	23.8%
	\$500K to \$750K	73	8.4%
	\$750K to \$1,000K	17	2.0%
	Over \$1,000K	11	1.3%
Overall		865	100.0%
Excluded	I	0	
Total		865	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LT \$25K	1.030	1.028	.114	24.6%
\$25K to \$50K	1.011	1.015	.160	25.8%
\$50K to \$100K	1.055	1.003	.181	28.7%
\$100K to \$150K	1.000	1.004	.097	15.6%
\$150K to \$200K	1.000	.999	.083	12.9%
\$200K to \$300K	.999	1.000	.076	10.9%
\$300K to \$500K	.993	1.001	.086	12.4%
\$500K to \$750K	.997	1.000	.085	12.7%
\$750K to \$1,000K	.989	1.000	.122	16.7%
Over \$1,000K	.925	1.001	.060	7.6%
Overall	.999	1.019	.093	14.9%



Subclass

Case Processing Summary

		Count	Percent
Abstrimp	1212	498	57.6%
	1215	6	.7%
	1220	1	.1%
	1230	360	41.6%
Overall		865	100.0%
Excluded		0	
Total		865	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1212	.997	1.016	.097	14.4%
1215	1.186	1.108	.171	19.2%
1220	.968	1.000	.000	.%
1230	.999	1.027	.086	15.2%
Overall	.999	1.019	.093	14.9%



Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	4	.5%
	75 to 100	8	.9%
	50 to 75	39	4.5%
	25 to 50	249	28.8%
	5 to 25	343	39.7%
	5 or Newer	222	25.7%
Overall		865	100.0%
Excluded		0	
Total		865	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	.953	1.145	.108	16.1%
75 to 100	.993	1.016	.162	23.5%
50 to 75	.968	.995	.103	16.6%
25 to 50	.999	1.021	.085	15.3%
5 to 25	1.000	1.016	.090	14.0%
5 or Newer	.996	1.023	.101	15.2%
Overall	.999	1.019	.093	14.9%



Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	47	5.4%
	500 to 1,000 sf	221	25.5%
	1,000 to 1,500 sf	331	38.3%
	1,500 to 2,000 sf	152	17.6%
	2,000 to 3,000 sf	94	10.9%
	3,000 sf or Higher	20	2.3%
Overall		865	100.0%
Excluded		0	
Total		865	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	.999	1.048	.133	23.9%
500 to 1,000 sf	.998	1.019	.086	13.5%
1,000 to 1,500 sf	.999	1.019	.088	14.4%
1,500 to 2,000 sf	.997	1.016	.095	13.9%
2,000 to 3,000 sf	1.001	1.030	.091	14.3%
3,000 sf or Higher	1.015	1.035	.147	19.3%
Overall	.999	1.019	.093	14.9%



Improvement Quality

Case Processing Summary

	Count	Percent
QUALITY 2	3	.3%
3	75	8.7%
4	516	59.7%
5	245	28.3%
6	26	3.0%
Overall	865	100.0%
Excluded	0	
Total	865	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
2	.907	1.036	.206	33.2%
3	.999	1.004	.096	16.1%
4	.999	1.014	.094	14.9%
5	.997	1.019	.090	14.3%
6	.999	1.050	.067	16.0%
Overall	.999	1.019	.093	14.9%



Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	0	4	.5%
	1	7	.8%
	2	503	59.2%
	3	335	39.5%
Overall		849	100.0%
Excluded		16	
Total		865	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	1.032	1.047	.180	21.4%
1	.959	.981	.073	11.2%
2	.999	1.013	.090	15.2%
3	.997	1.020	.095	14.4%
Overall	.999	1.018	.092	14.9%



Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	\$50K to \$100K	1	2.6%
	\$100K to \$150K	3	7.9%
	\$150K to \$200K	6	15.8%
	\$200K to \$300K	9	23.7%
	\$300K to \$500K	8	21.1%
	\$500K to \$750K	7	18.4%
	\$750K to \$1,000K	3	7.9%
	Over \$1,000K	1	2.6%
Overall		38	100.0%
Excluded		0	
Total		38	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
\$50K to \$100K	.926	1.000	.000	.%
\$100K to \$150K	.825	1.000	.136	22.0%
\$150K to \$200K	1.039	1.002	.105	14.9%
\$200K to \$300K	.986	.997	.076	13.4%
\$300K to \$500K	.982	1.003	.187	26.4%
\$500K to \$750K	.961	.999	.035	4.8%
\$750K to \$1,000K	.948	1.006	.065	10.3%
Over \$1,000K	1.000	1.000	.000	.%
Overall	.981	.996	.104	15.4%



Subclass

Case Processing Summary

		Count	Percent
Abstrimp	1212	9	23.7%
	1712	1	2.6%
	1714	1	2.6%
	1726	1	2.6%
	2157	1	2.6%
	2212	8	21.1%
	2215	2	5.3%
	2220	4	10.5%
	2230	7	18.4%
	2235	2	5.3%
	2245	2	5.3%
Overall		38	100.0%
Excluded		0	
Total		38	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1212	.948	.990	.102	14.1%
1712	1.062	1.000	.000	.%
1714	.986	1.000	.000	.%
1726	.992	1.000	.000	.%
2157	1.000	1.000	.000	.%
2212	.878	1.046	.117	14.1%
2215	.904	.975	.114	16.1%
2220	.980	1.031	.157	31.4%
2230	.986	.959	.094	17.1%
2235	.999	1.017	.079	11.2%
2245	.964	.974	.145	20.5%
Overall	.981	.996	.104	15.4%



Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	2	5.3%
	75 to 100	4	10.5%
	50 to 75	11	28.9%
	25 to 50	13	34.2%
	5 to 25	8	21.1%
Overall		38	100.0%
Excluded		0	
Total		38	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	.891	.980	.096	13.6%
75 to 100	1.027	1.006	.105	18.3%
50 to 75	.926	.993	.150	23.7%
25 to 50	.992	.994	.071	11.9%
5 to 25	.974	1.007	.079	10.2%
Overall	.981	.996	.104	15.4%



Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	1	2.6%
	500 to 1,000 sf	4	10.5%
	1,000 to 1,500 sf	7	18.4%
	1,500 to 2,000 sf	5	13.2%
	2,000 to 3,000 sf	3	7.9%
	3,000 sf or Higher	18	47.4%
Overall		38	100.0%
Excluded		0	
Total		38	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	1.078	1.000	.000	.%
500 to 1,000 sf	.875	1.027	.153	20.9%
1,000 to 1,500 sf	.937	.982	.082	11.8%
1,500 to 2,000 sf	1.018	1.042	.060	10.0%
2,000 to 3,000 sf	.807	1.031	.110	18.8%
3,000 sf or Higher	.986	1.006	.096	16.8%
Overall	.981	.996	.104	15.4%



Improvement Quality

Case Processing Summary

	Count	Percent
QUALITY 2	3	7.9%
3	10	26.3%
4	21	55.3%
5	4	10.5%
Overall	38	100.0%
Excluded	0	
Total	38	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
2	.807	.967	.079	16.2%
3	.994	1.015	.114	20.3%
4	.937	.986	.098	12.9%
5	1.011	1.051	.063	11.2%
Overall	.981	.996	.104	15.4%



Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	1	1	2.6%
	2	33	86.8%
	3	4	10.5%
Overall		38	100.0%
Excluded		0	
Total		38	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1	1.512	1.000	.000	.%
2	.972	.983	.093	12.8%
3	1.014	1.082	.070	11.9%
Overall	.981	.996	.104	15.4%



Vacant Land Median Ratio Stratification

Case Processing Summary

		Count	Percent
abstrind	100	95	82.6%
	510	1	.9%
	1112	18	15.7%
	9110	1	.9%
Overall		115	100.0%
Excluded		0	
Total		115	

Group				Coefficient o Variation	f
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered	
100	.995	1.036	.140	19.79	%
510	.766	1.000	.000	.%	
1112	.984	1.083	.225	47.09	%
9110	.800	1.000	.000	.%	
Overall	.993	1.040	.155	25.59	%