

# 2012 SAN MIGUEL COUNTY PROPERTY ASSESSMENT STUDY





WILLDROSE Appraisal, INCORPORATED Audit Division



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. Dulla

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



# TABLE OF CONTENTS

Introduction	3
Regional/Historical Sketch of San Miguel County	4
Ratio Analysis	6
Random Deed Analysis	7
Time Trending Verification	8
Sold/Unsold Analysis	
Agricultural Land Study	
Agricultural Land	11
Agricultural Outbuildings	
Agricultural Land Under Improvements	12
Sales Verification	13
Economic Area Review and Evaluation	14
Natural Resources	15
Producing Oil and Gas Procedures	15
Vacant Land	16
Possessory Interest Properties	17
Personal Property Audit	
Wildrose Auditor Staff	
Appendices	21







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



# REGIONAL/HISTORICAL SKETCH OF SAN MIGUEL COUNTY

### **Regional Information**

San Miguel 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**

San Miguel County has a population of approximately 7,359 people with 5.72 people per square mile, according to the U.S. Census Bureau's 2010 census data. This represents a 11.6 percent change from the 2000 Census.

San Miguel County was given the Spanish language name for "Saint Michael" due to the nearby San Miguel River. On February 27, 1883 Ouray County was split to form San Miguel County. Originally the San Miguel County portion was to retain the name Ouray County with the new portion called Uncompander County.

San Miguel County encompasses a diverse region ranging from the rugged mountain resort communities of Telluride and Mountain Village to the arid ranching communities of the County's west end, Norwood and Egnar. A colorful history and unsurpassed scenic beauty are the hallmarks of San Miguel County, Colorado.

The Town of Telluride is a Home Rule Municipality and is the county seat as well as the most populous town. Telluride sits in a box canyon. Steep forested mountains and cliffs surround it. Bridal Veil Falls is at the head of the canyon. Numerous weathered ruins of old mining operations dot the hillsides. A free gondola connects the town with its companion town Mountain Village, Colorado at the base of the ski area.

The town is a former silver mining camp on the San Miguel River in the western San Juan Mountains. A Telluride Historic District which includes most of Telluride is listed on the National Register of Historic Places and is one of Colorado's 20 National Historic Landmarks.

Telluride is also known for its ski resort and slopes during the winter as well as an extensive festival schedule during the summer, including Mountainfilm in Telluride, Telluride Bluegrass Festival, Telluride Jazz Celebration and Telluride Film Festival. In addition to the summer festival calendar, camping, hiking, biking, flyfishing, rafting, jeeping and other outdoor activities are popular. (www.sanmiguelcounty.org, www.visittelluride.com, www.wikipedia.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 San Miguel County are:

San Miguel County Ratio Grid						
Number of UnweightedPriceCoefficientQualifiedMedianRelatedofProperty ClassSalesRatioDifferentialDispersion						
Commercial/Industrial	47	0.957	1.057	11.2	Compliant	
Condominium	125	0.966	1.057	12.8	Compliant	
Single Family	118	0.999	1.010	7.1	Compliant	
Vacant Land	130	0.952	1.017	9.3	Compliant	

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

San Miguel 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. 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 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 Re	esults
Property Class	Results
Commercial/Industrial	Compliant
Condominium	Compliant
Single Family	Compliant
Vacant Land	Compliant

### Conclusions

### Recommendations

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



## AGRICULTURAL LAND STUDY



### Value By Subclass

### **Agricultural Land**

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

(See Assessor Reference Library Volume 3 Chapter 5.)

### Conclusions

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



San Miguel County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre T	County Assessed Total Value	WRA Total Value	Ratio
4117	Flood	6,065	100.00	607,408	624,029	0.97
4127	Dry Farm	11,369	16.00	186,604	197,255	0.95
4137	Meadow Hay	10,531	90.00	952,571	952,571	1.00
4147	Grazing	198,181	9.00	1,860,155	1,860,155	1.00
4177	Forest	540	2.00	872	872	1.00
4167	Waste	16,457	2.00	26,561	26,561	1.00
Total/Avg		243,143	15.00	3,634,169	3,661,442	0.99

### 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

San Miguel 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

San Miguel 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)(1) 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 San Miguel 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 of the sales in the unqualified sales sample had reasons that were clear and supportable.

### Conclusions

San Miguel 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**



# ECONOMIC AREA REVIEW AND EVALUATION

### Methodology

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

### **Producing Oil and Gas Procedures**

### 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.** 

### g *3)-1-102*, c.m.

Conclusions

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

Recommendations

None

Recommendations



## VACANT LAND

### **Subdivision Discounting**

Subdivisions were reviewed in 2012 in San Miguel 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

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

San Miguel 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

San Miguel 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

San Miguel 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, procedures, documentation classification, 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.

San Miguel 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
- 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
- Vacation Rental Websites

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.

San Miguel 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
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Businesses with no deletions or additions for 2 or more years



- Non-filing Accounts Best Information Available
- Accounts close to the \$5,500 actual value exemption status
- Accounts protested with substantial disagreement

### Conclusions

San Miguel 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



## **A P P E N D I C E S**



### STATISTICAL COMPLIANCE REPORT FOR SAN MIGUEL COUNTY 2012

### I. OVERVIEW

San Miguel County is located in southwestern Colorado. The county has a total of 9,967 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 and 400) accounted for 64.1% of all vacant land parcels.

For residential improved properties, single family properties accounted for 48.1% of all residential properties. Residential condominiums, coded as 1230, accounted for 47.5% of all residential properties. Based on the guidelines of the 2012 audit, we will analyze residential condominiums separately in the following analysis.



Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 6.7% 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 San Miguel 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. Total sales	5,821
2. Selected qualified sales	1,200
3. Select improved sales (non-duplicate)	583
4. Select residential sales only	243

We stratified our sales ratio analysis by residential non-condominiums and condominiums. The sales ratio analysis results were as follows:

### **Residential Non-Condo = 118**

Median	0.999
Price Related Differential	1.010
Coefficient of Dispersion	.071

### **Residential Condo = 125**

Median	0.966
Price Related Differential	1.057
Coefficient of Dispersion	.128

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 specified sale periods for each economic area to determine if there was any residual market trending. We again stratified the analysis between residential non-condominiums and condominiums, with the following results:

	Coefficients <sup>a</sup>							
Re	esCondo	Model		Unstandardized Coefficients		Standardized Coefficients		
				В	Std. Error	Beta	t	Sig.
	0	1	(Constant)	1.077	.033		32.500	.000
			SalePeriod	003	.002	163	-1.781	.078
	1	1	(Constant)	1.045	.023		46.423	.000
			SalePeriod	009	.001	539	-7.092	.000

a. Dependent Variable: salesratio







While the residential condominium sales indicated a statistically significant market trend in the sales ratios, the magnitude of this trend (at less than -0.4% per month) was not significant. The above graph for residential condominiums indicates that there was likely some residual market trending early in the sale period, but that overall the assessor effectively accounted for market trending for this subclass of property. The sales ratio analysis supports our conclusion. Residential non-condominiums had no residual market trending according to our analysis.

### Sold/Unsold Analysis

SubClass	Group	N	Median Val SF	Mean Val SF
Res Non-	Unsold	2,793	\$311	\$416
Condos	Sold	119	\$447	\$463
Res	Unsold	2,469	\$477	\$473
Condos	Sold	121	\$499	\$535

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square foot for 2012 between each group, as follows:

Because of the difference between the median and mean value per square foot for sold and unsold properties, we also compared the median and mean change in value from 2008 to 2010 between these groups, as follows:



SubClass	Group	N	Median Chg Val	Mean Chg Val
Res Non-	Unsold	2,768	.8921	.9461
Condos	Sold	120	.9032	.9202
Res	Unsold	2,235	.7809	.8318
Condos	Sold	123	.7294	.7674

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

### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

1. Total sales	5,821
2. Selected qualified sales	1,200
3. Select improved sales (non-duplicate)	583
4. Select commercial sales only	47

Median	0.957
Price Related Differential	1.057
Coefficient of Dispersion	.112

The above tables indicate that the San Miguel 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 48 commercial/industrial sales were next analyzed by subclass for any residual market trending, examining the sale ratios across the 60-month sale period with the following results:

ſ	Model		Unstandardize	d Coefficients	Standardized Coefficients		
L			В	Std. Error	Beta	t	Sig.
Γ	1	(Constant)	.943	.055		17.082	.000
L		SalePeriod	001	.001	160	-1.088	.283

a. Dependent Variable: salesratio





The market trend results indicated no statistically significant trends. We concluded that the assessor adequately considered market trending in their valuation of commercial/industrial properties.

### Sold/Unsold Analysis

For the sold/unsold analysis of commercial properties, we compared the median and mean change in value between 2010 and 2012 for sold and unsold commercial properties, as follows:

Group	N		Mean Chg/Val
Unsold	590	.90	.96
Sold	47	.90	.90

Based on the results of these comparisons, we concluded that the San Miguel County assessor was valuing sold and unsold commercial properties consistently.



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

The following steps were taken to analyze vacant land sales:

1. Total sales	5,821
2. Selected qualified sales	1,200
3. Select vacant land sales (non-duplicate)	282
4. Select non-agricultural sales	281
5. Sales within the specified sale period for each economic area	130

The sales ratio analysis resulted in the following ratio statistics:

Median	0.952
Price Related Differential	1.017
Coefficient of Dispersion	.093

The above tables indicate that the San Miguel 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 adjustments to the vacant land dataset. The 190 vacant land sales were analyzed, examining the sale ratios across the specified sale periods by economic area with the following results:

#### Coefficients<sup>a</sup>

N	lodel	Unstandardize	ndardized Coefficients Coefficients			
		В	Std. Error	Beta	t	Sig.
1	(Constant)	.952	.039		24.644	.000
	VSalePeriod	002	.001	105	-1.192	.235

a. Dependent Variable: SalesRatio





The market trend results indicated no statistically significant trend. We concluded that the assessor has adequately considered market tending in San Miguel County's vacant land valuation for 2012.

### Sold/Unsold Analysis

We compared the median change in actual value between 2010 and 2012 for vacant land properties to determine if sold and unsold properties were valued consistently (stratified by subdivision), as follows:

SUBDIVNO	Group	N	Median Chg Val	Mean Chg Val
Total	Unsold	1,623	.9967	.9279
	Sold	129	.9844	1.0120

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 San Miguel County.

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



### Report

ImpValSF				
ECONAREA	ABSTRIMP	N	Median	Mean
1	1212.00	1122	\$157.82	\$209.29
	4277.00	13	\$121.05	\$134.38
	Total	1135	\$156.60	\$208.43
2	1212.00	415	\$82.88	\$82.00
	4277.00	19	\$91.38	\$92.23
	Total	434	\$82.88	\$82.45
3	1212.00	20	\$28.13	\$42.31
	4277.00	9	\$60.35	\$57.32
	Total	29	\$29.02	\$46.97
Total	1212.00	1557	\$133.12	\$173.22
	4277.00	41	\$85.33	\$97.93
	Total	1598	\$130.51	\$171.28

### **VI. CONCLUSIONS**

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



### STATISTICAL ABSTRACT Residential

#### Ratio Statistics for CURRTOT / TASP

ſ	ResCondo		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
1	0	1.029	.991	1.067	.999	.986	1.008	96.6%	1.019	.994	1.044	1.010	.071	20.4%
	1	.912	.883	.941	.966	.928	.990	95.1%	.863	.820	.906	1.057	.128	17.9%

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.

#### 0 = Residential Non-Condominiums, 1 = Residential Condominiums

#### Commercial/Industrial

#### Ratio Statistics for CURRTOT / TASP

	95% Confidence Interval for Mean 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
.887	.845	.929	.957	.851	.985	96.0%	.839	.768	.910	1.057	.112	16.1%

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.

### Vacant Land

#### Ratio Statistics for CURRLND / VTASP

	95% Confidence Interval for Mean 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
.910	.880	.941	.952	.938	.966	95.7%	.895	.859	.931	1.017	.093	19.3%

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						
ResCo	ondo	Count	Percent			
0	SPRec	\$50K to \$100K	4	3.4%		
		\$100K to \$150K	7	5.9%		
		\$150K to \$200K	18	15.3%		
		\$200K to \$300K	10	8.5%		
		\$300K to \$500K	11	9.3%		
		\$500K to \$750K	3	2.5%		
		\$750K to \$1,000K	4	3.4%		
		Over \$1,000K	61	51.7%		
	Overall		118	100.0%		
	Excluded	ł	0			
	Total		118			
1	SPRec	\$200K to \$300K	16	12.8%		
		\$300K to \$500K	31	24.8%		
		\$500K to \$750K	23	18.4%		
		\$750K to \$1,000K	10	8.0%		
		Over \$1,000K	45	36.0%		
	Overall		125	100.0%		
	Excluded	ł	0			
	Total		125			



ResCondo	Group				Coefficient of Variation
		Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	\$50K to \$100K	.943	.996	.117	18.8%
	\$100K to \$150K	.980	.997	.052	8.7%
	\$150K to \$200K	.971	.998	.046	6.3%
	\$200K to \$300K	1.012	1.009	.231	63.0%
	\$300K to \$500K	1.015	.998	.034	4.6%
	\$500K to \$750K	1.010	1.003	.026	4.0%
	\$750K to \$1,000K	1.109	1.001	.084	14.2%
	Over \$1,000K	.993	1.006	.050	13.7%
	Overall	.999	1.010	.071	21.2%
1	\$200K to \$300K	1.025	.999	.120	15.6%
	\$300K to \$500K	.990	1.002	.101	14.3%
	\$500K to \$750K	.982	1.005	.118	18.1%
	\$750K to \$1,000K	.856	.988	.139	17.7%
	Over \$1,000K	.947	1.033	.141	20.0%
	Overall	.966	1.057	.128	17.8%



# Improved Area

ResCo	ndo		Count	Percent
0	AgeRec	Over 100	9	7.6%
		75 to 100	8	6.8%
		50 to 75	10	8.5%
		25 to 50	26	22.0%
		5 to 25	52	44.1%
		5 or Newer	13	11.0%
	Overall		118	100.0%
	Excluded		0	
	Total		118	
1	AgeRec	Over 100	2	1.6%
		25 to 50	36	28.8%
		5 to 25	60	48.0%
		5 or Newer	26	20.8%
		0	1	.8%
	Overall		125	100.0%
	Excluded		0	
	Total		125	



ResCondo	Group				Coefficient of Variation
		Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	Over 100	.984	1.005	.024	4.2%
	75 to 100	.982	.989	.065	10.2%
	50 to 75	.985	.807	.155	34.3%
	25 to 50	1.010	1.005	.138	39.2%
	5 to 25	1.006	1.010	.034	4.1%
	5 or Newer	.992	.998	.042	10.6%
	Overall	.999	1.010	.071	21.2%
1	Over 100	.899	.954	.114	16.2%
	25 to 50	.979	1.022	.126	18.0%
	5 to 25	.988	1.042	.117	16.6%
	5 or Newer	.932	1.034	.149	20.7%
	0	.888	1.000	.000	.%
	Overall	.966	1.057	.128	17.8%



Age

ResCo	ndo		Count	Percent
0	ImpSFRec	500 to 1,000 sf	8	6.8%
		1,000 to 1,500 sf	30	25.4%
		1,500 to 2,000 sf	13	11.0%
		2,000 to 3,000 sf	16	13.6%
		3,000 sf or Higher	51	43.2%
	Overall		118	100.0%
	Excluded		0	
	Total		118	
1	ImpSFRec	500 to 1,000 sf	38	30.4%
		1,000 to 1,500 sf	25	20.0%
		1,500 to 2,000 sf	11	8.8%
		2,000 to 3,000 sf	25	20.0%
		3,000 sf or Higher	14	11.2%
		0	1	.8%
		LE 500 sf	11	8.8%
	Overall		125	100.0%
	Excluded		0	
	Total		125	



ResCondo	Group				Coefficient of Variation
		Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	500 to 1,000 sf	.964	.968	.064	12.7%
	1,000 to 1,500 sf	.989	.973	.055	7.5%
	1,500 to 2,000 sf	1.010	.976	.063	13.2%
	2,000 to 3,000 sf	1.012	1.106	.150	48.4%
	3,000 sf or Higher	.993	1.009	.055	14.9%
	Overall	.999	1.010	.071	21.2%
1	500 to 1,000 sf	.993	1.035	.135	18.1%
	1,000 to 1,500 sf	.982	1.012	.097	15.9%
	1,500 to 2,000 sf	.852	.998	.123	15.7%
	2,000 to 3,000 sf	.969	1.041	.129	21.0%
	3,000 sf or Higher	.918	1.049	.153	19.0%
	0	.888.	1.000	.000	.%
	LE 500 sf	.964	1.011	.111	14.4%
	Overall	.966	1.057	.128	17.8%



### Improvement Quality Case Processing Summary

case i recessing caninary					
ResC	ondo		Count	Percent	
0	QUALITY	1	6	5.1%	
		2	27	22.9%	
		3	30	25.4%	
		4	21	17.8%	
		5	25	21.2%	
		6	9	7.6%	
	Overall		118	100.0%	
	Excluded		0		
	Total		118		
1	QUALITY	3	50	40.3%	
		4	58	46.8%	
		5	15	12.1%	
		6	1	.8%	
	Overall		124	100.0%	
	Excluded		1		
	Total		125		

ResCondo	Group				Coefficient of Variation
		Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	1	1.000	.891	.118	17.7%
	2	1.002	.988	.058	8.8%
	3	.998	1.027	.109	36.4%
	4	1.011	1.005	.071	20.9%
	5	.989	.993	.040	8.2%
	6	.990	.999	.021	2.6%
	Overall	.999	1.010	.071	21.2%
1	3	.979	1.011	.119	16.8%
	4	.972	1.037	.127	18.7%
	5	.852	1.082	.139	17.3%
	6	1.003	1.000	.000	.%
	Overall	.967	1.057	.128	17.9%



# Improvement Condition

#### **Case Processing Summary**

ResCondo			Count	Percent
0	CONDITION	0	9	7.6%
		1	1	.8%
		3	72	61.0%
		4	27	22.9%
		5	9	7.6%
	Overall		118	100.0%
	Excluded		0	
	Total		118	
1	CONDITION	3	111	89.5%
		4	13	10.5%
	Overall		124	100.0%
	Excluded		1	
	Total		125	

ResCondo	Group				Coefficient of Variation
		Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	0	1.015	.971	.080	14.0%
	1	1.037	1.000	.000	.%
	3	1.006	1.019	.068	23.4%
	4	.989	.994	.085	21.1%
	5	.962	.992	.021	3.2%
	Overall	.999	1.010	.071	21.2%
1	3	.973	1.043	.121	17.5%
	4	.852	1.084	.158	19.9%
	Overall	.967	1.057	.128	17.9%



## **Commercial Median Ratio Stratification**

## Sale Price

#### **Case Processing Summary**

		Count	Percent
SPRec	\$50K to \$100K	4	8.5%
	\$100K to \$150K	3	6.4%
	\$150K to \$200K	2	4.3%
	\$200K to \$300K	4	8.5%
	\$300K to \$500K	10	21.3%
	\$500K to \$750K	6	12.8%
	\$750K to \$1,000K	3	6.4%
	Over \$1,000K	15	31.9%
Overall		47	100.0%
Excluded	I	0	
Total		47	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
\$50K to \$100K	.916	1.006	.124	16.7%
\$100K to \$150K	.968	1.001	.024	4.2%
\$150K to \$200K	.985	1.001	.010	1.5%
\$200K to \$300K	.741	1.031	.314	36.6%
\$300K to \$500K	.951	.988	.095	13.8%
\$500K to \$750K	.988	1.001	.042	10.5%
\$750K to \$1,000K	.837	1.001	.026	4.5%
Over \$1,000K	.901	1.060	.136	17.5%
Overall	.957	1.057	.112	16.6%



## Subclass

Case Processing Summary				
		Count	Percent	
ABSTRIMP	1557.33	1	2.1%	
	1712.00	1	2.1%	
	1716.00	1	2.1%	
	1727.50	1	2.1%	
	2212.00	8	17.0%	
	2215.00	2	4.3%	
	2220.00	6	12.8%	
	2230.00	5	10.6%	
	2232.50	1	2.1%	
	2245.00	20	42.6%	
	3212.00	1	2.1%	
Overall		47	100.0%	
Excluded		0		
Total		47		

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1557.33	.767	1.000	.000	.%
1712.00	.765	1.000	.000	.%
1716.00	.487	1.000	.000	.%
1727.50	.889	1.000	.000	.%
2212.00	.992	.993	.042	5.5%
2215.00	.733	1.024	.032	4.5%
2220.00	.972	.989	.066	10.2%
2230.00	.807	.968	.152	22.8%
2232.50	.997	1.000	.000	.%
2245.00	.971	.991	.094	16.1%
3212.00	.962	1.000	.000	.%
Overall	.957	1.057	.112	16.6%



Age

#### **Case Processing Summary**

		Count	Percent
AgeRec	Over 100	9	19.1%
	75 to 100	1	2.1%
	50 to 75	3	6.4%
	25 to 50	12	25.5%
	5 to 25	20	42.6%
	5 or Newer	2	4.3%
Overall		47	100.0%
Excluded		0	
Total		47	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	.810	1.043	.173	23.7%
75 to 100	1.000	1.000	.000	.%
50 to 75	.744	1.032	.225	34.1%
25 to 50	.938	1.062	.087	11.4%
5 to 25	.965	1.049	.080	12.8%
5 or Newer	.947	.987	.056	8.0%
Overall	.957	1.057	.112	16.6%



# Improved Area

## **Case Processing Summary**

		Count	Percent
ImpSFRec	LE 500 sf	6	12.8%
	500 to 1,000 sf	12	25.5%
	1,000 to 1,500 sf	8	17.0%
	1,500 to 2,000 sf	4	8.5%
	2,000 to 3,000 sf	4	8.5%
	3,000 sf or Higher	13	27.7%
Overall		47	100.0%
Excluded		0	
Total		47	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	.974	.993	.080	14.5%
500 to 1,000 sf	.987	.975	.076	17.1%
1,000 to 1,500 sf	.906	1.011	.059	7.7%
1,500 to 2,000 sf	.896	.920	.165	25.2%
2,000 to 3,000 sf	.887	1.086	.163	18.9%
3,000 sf or Higher	.825	1.056	.147	19.0%
Overall	.957	1.057	.112	16.6%



# Improvement Quality

## **Case Processing Summary**

	Count	Percent
QUALITY 2	2	4.3%
3	30	63.8%
4	11	23.4%
5	4	8.5%
Overall	47	100.0%
Excluded	0	
Total	47	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
2	1.017	1.009	.012	1.7%
3	.956	1.079	.114	17.4%
4	.964	1.059	.092	13.1%
5	.865	.960	.149	24.1%
Overall	.957	1.057	.112	16.6%



# Improvement Condition

## Case Processing Summary

		Count	Percent
CONDITION	0	3	6.4%
	1	1	2.1%
	3	34	72.3%
	4	8	17.0%
	5	1	2.1%
Overall		47	100.0%
Excluded		0	
Total		47	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	.988	1.074	.061	10.4%
1	1.005	1.000	.000	.%
3	.956	1.060	.113	16.8%
4	.955	.997	.111	18.9%
5	.709	1.000	.000	.%
Overall	.957	1.057	.112	16.6%



## Vacant Land Median Ratio Stratification

		Count	Percent
ABSTRLND	0	1	.8%
	100	31	23.8%
	200	4	3.1%
	300	1	.8%
	400	41	31.5%
	530	1	.8%
	540	1	.8%
	550	10	7.7%
	1112	33	25.4%
	1115	1	.8%
	1135	3	2.3%
	4117	1	.8%
	4147	2	1.5%
Overall		130	100.0%
Excluded		0	
Total		130	



Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	.200	1.000	.000	.%
100	.966	1.002	.051	7.1%
200	.751	1.077	.144	24.1%
300	.888	1.000	.000	.%
400	.955	1.016	.070	10.6%
530	.854	1.000	.000	.%
540	1.026	1.000	.000	.%
550	.960	1.003	.078	12.6%
1112	.943	.994	.047	6.2%
1115	1.042	1.000	.000	.%
1135	1.038	1.003	.021	3.8%
4117	.030	1.000	.000	.%
4147	.015	1.079	.123	17.5%
Overall	.952	1.017	.093	19.0%