

# SAN MIGUEL COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2015

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

## RE: Final Report for the 2015 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2015 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. Hullon

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



## TABLE OF CONTENTS

3
4
6
8
9
.11
. 11
. 12
. 13
. 14
. 16
. 17
. 17
. 17
. 18
. 19
. 20
. 22
. 23







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.

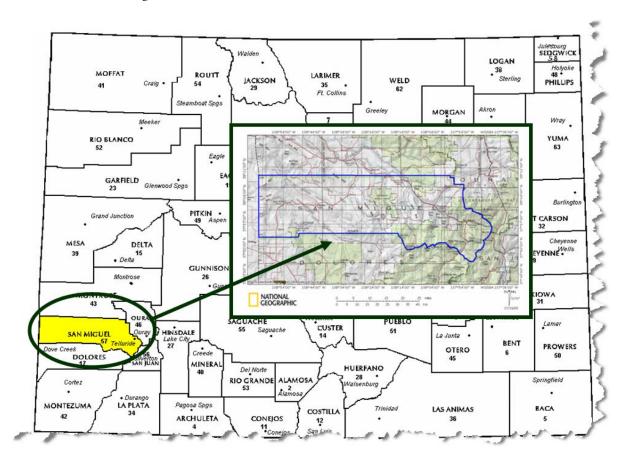
Wildrose Audit has completed the Property Assessment Study for 2015 and is pleased to report its findings for San Miguel County in the following report.



## 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 analyzed. Sales were collected for each property class over the appropriate sale period, which was typically defined as the 18-month period between January 1, 2013 and June 30, 2014. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2014 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							
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis		
Commercial/Industrial	33	0.985	1.036	10.7	Compliant		
Condominium	243	1.021	1.039	10.1	Compliant		
Single Family	133	1.002	0.995	6.3	Compliant		
Vacant Land	78	0.994	1.004	4.5	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



## 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 method 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.

We test the hypothesis that the assessor has valued unsold properties consistent with what is observed with the sold properties based on several units of comparison and tests. The units of comparison include the actual value per square foot and the change in value from the previous base year period to the current base year. The first test compares the actual value per square foot between sold and unsold properties by class. The median and mean value per square foot is compared and tested for any significant difference. This is tested using non-parametric methods, such as the Mann-Whitney test for differences in the distributions or medians between sold and unsold groups. It is also examined graphically and from an appraisal perspective. Data can be stratified based on location and subclass. The second test compares the difference in the median change in value from the previous base year to the current base year between sold and unsold properties by class. The same combination of non-parametric and appraisal testing is used as with the first test. A third test employing a valuation model testing a sold/unsold binary variable while controlling for property attributes such as location, size, age and other attributes. The model determines if the sold/unsold variable is statistically and empirically significant. If all three tests indicate a significant difference between sold and unsold properties for a given class, the Auditor may meet with the county to determine if sale chasing is actually occurring,

or if there are other explanations for the observed difference.

If the unsold properties have a higher median value per square foot than the sold properties, or if the median change in value is greater for the unsold properties than the sold properties, the analysis is stopped and the county is concluded to be in compliance with sold and unsold guidelines. All sold and unsold properties in a given class are first tested, although properties with extreme unit values or percent changes can be trimmed to stabilize the analysis. The median is the primary comparison metric, although the mean can also be used as a comparison metric if the distribution supports that type of measure of central tendency.

The first test (unit value method) is applied to both residential and commercial/industrial sold and unsold properties. The second test is applied to sold and unsold vacant land properties. The second test (change in value method) is also applied to residential or commercial sold and unsold properties if the first test results in a significant difference observed and/or tested between sold and unsold properties. The third test (valuation modeling) is used in instances where the results from the first two tests indicate a significant difference between sold and unsold properties. It can also be used when the number of sold and unsold properties is so large that the nonparametric testing is indicating a false rejection of the hypothesis that there is no difference between the sold and unsold property values.

These tests were supported by both tabular and graphics presentations, along with written documentation explaining the methodology used.



Sold/Unsold Results	3
Property Class	Results
Commercial/Industrial	Compliant
Condominium	Compliant
Single Family	Compliant
Vacant Land	Compliant

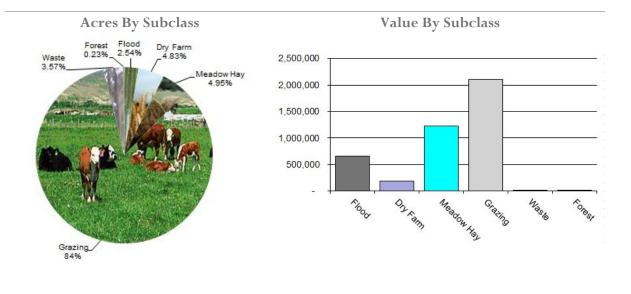
## Conclusions

## 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



## Agricultural Land

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

(See Assessor Reference Library Volume 3 Chapter 5.)

## Conclusions

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



	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	5,937	106.90	634,682	659,704	0.96		
4127	Dry Farm	11,281	16.16	182,258	185,973	0.98		
4137	Meadow Hay	11,552	106.29	1,227,886	1,227,886	1.00		
4147	Grazing	195,878	10.75	2,104,868	2,104,868	1.00		
4177	Forest	540	25.00	13,499	13,499	1.00		
4167	Waste	8,340	1.99	16,567	16,567	1.00		
Total/Avg		233,528	17.90	4,179,760	4,208,497	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



## 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 used the following methods to discover land under a residential improvement on a farm or ranch that is determined to be not integral under 39-1-102, C.R.S.:

- Questionnaires
- Phone Interviews
- In-Person Interviews with Owners/Tenants
- Written Correspondence other than Questionnaire
- Aerial Photography/Pictometry

• Plats with building envelopes

San Miguel County has used the following methods to discover the land area under a residential improvement that is determined to be not integral under 39-1-102, C.R.S.:

- Aerial Photography/Pictometry
- Plats with building envelopes

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 2015 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 37 sales listed as unqualified.

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

For residential, commercial, and vacant land sales with considerations over \$500, the contractor has examined and reported the ratio of qualified sales to total sales by class and performed the following analyses of unqualified sales:

> The contractor has examined the manner in which sales have been classified as qualified or unqualified, including a listing of each step in the sales verification process, any adjustment procedures, and the county official responsible for making the final decision on qualification.

> When less than 50 percent of sales are qualified in any of the three property classes (residential, commercial, and vacant land), the contractor analyzed the reasons for disqualifying sales in any subclass that constitutes at least 20 percent of the class, either by number of properties or by value, from the prior year. The contractor has



reviewed with the assessor any analysis indicating that sales data are inadequate, fail to reflect typical properties, or have been disqualified for insufficient cause. In addition, the the contractor has reviewed disqualified sales by assigned code. If there appears to be any inconsistency in the coding, the contractor has conducted further analysis to determine if the sales included in that code have been assigned appropriately.

If 50 percent or more of the sales are qualified, the contractor has reviewed a statistically significant sample of

unqualified sales, excluding sales that were disqualified for obvious reasons.

San Miguel County did not qualify for in-depth subclass analysis.

### 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

## 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

None

## **Producing Oil and Gas**

#### Methodology

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

#### STATUTORY REFERENCES

Section § 39-1-103, C.R.S., specifies that producing oil or gas leaseholds and lands are valued according to article 7 of title 39, C.R.S. Actual value determined - when. (2) The valuation for assessment of leaseholds and lands producing oil or gas shall be determined as provided in article 7 of this title. § 39-1-103, C.R.S.

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

#### Valuation:

Valuation for assessment.

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

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

(b) The selling price of oil or gas sold in the same field area for oil or gas transported from the premises which is not sold during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year. § 39-7-102, C.R.S.

#### Conclusions

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

#### Recommendations



## VACANT LAND

#### **Subdivision Discounting**

Subdivisions were reviewed in 2015 in San Miguel County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14). Discounting procedures were applied to all subdivisions where less than 80 percent of all sites were sold using the present worth method. The market approach was applied where 80 percent or more of the subdivision sites were sold. An absorption period was estimated for each subdivision that was discounted. An appropriate discount rate was developed using the summation method. Subdivision land with structures was appraised at full market value.

#### Conclusions

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 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 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 of Equalization Board (SBOE) requirements for the assessment of personal property. The SBOE requires that counties use ARL Volume 5, including current discovery, documentation classification, procedures, current economic lives table, cost factor tables, depreciation table, and level of value adjustment factor table.

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

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

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

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
- 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
- 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 2015 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:

- 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 \$7,300 actual value exemption status
- Lowest or highest quartile of value per square foot
- 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



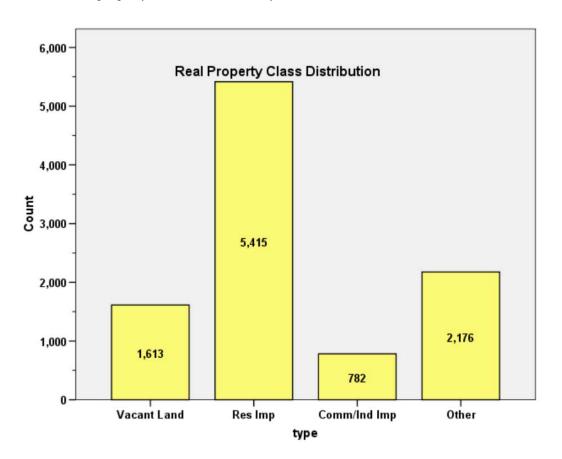
## **A P P E N D I C E S**



#### STATISTICAL COMPLIANCE REPORT FOR SAN MIGUEL COUNTY 2015

### I. OVERVIEW

San Miguel County is located in southwestern Colorado. The county has a total of 9,986 real property parcels, according to data submitted by the county assessor's office in 2015. 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 66.6% of all vacant land parcels.

For residential improved properties, single family properties accounted for 50.3% of all residential properties. Residential condominiums, coded as 1230, accounted for 47.1% of all residential properties. Based on the guidelines of the 2015 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 7.8% of all such properties in this county.



## **II. DATA FILES**

The following sales analyses were based on the requirements of the 2015 Colorado Property Assessment Study. Information was provided by the San Miguel Assessor's Office in June 2015. The data included all 5 property record files as specified by the Auditor.

## **III. RESIDENTIAL SALES RESULTS**

There were **376 qualified residential sales** that occurred during the 24 month sale period prior to June 2014. We stratified our sales ratio analysis by residential non-condominiums and condominiums. The sales ratio analysis results were as follows:

#### **Residential Non-Condo = 133**

Median	1.002
Price Related Differential	0.995
Coefficient of Dispersion	6.3

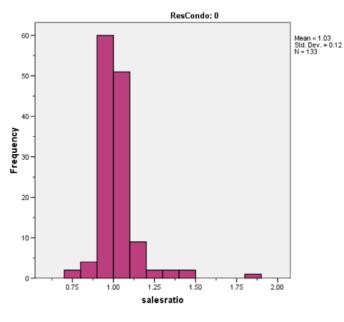
#### **Residential Condo = 243**

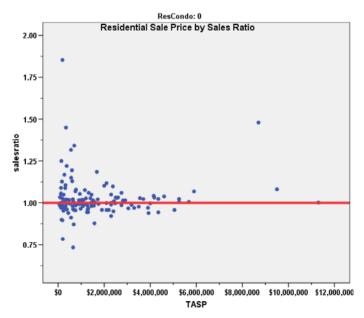
Median	1.021
Price Related Differential	1.039
Coefficient of Dispersion	10.1

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:



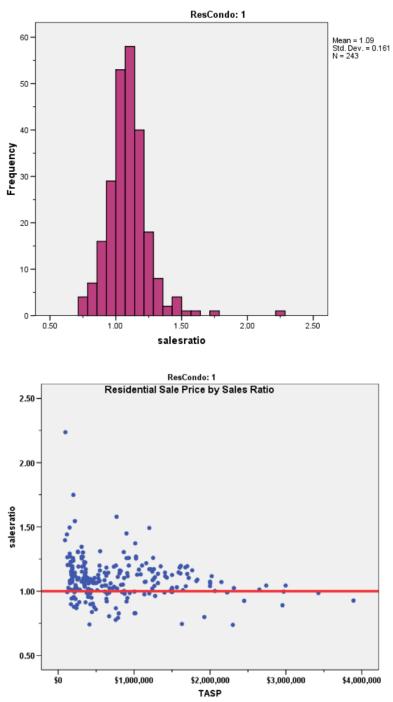
#### **RESIDENTIAL NON-CONDOMINIUMS**







**RESIDENTIAL CONDOMINIUMS** 



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



## **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>								
ResCondo	Model		Unstandardized Coefficients		Standardized Coefficients				
			В	Std. Error	Beta	t	Sig.		
0	1	(Constant)	.997	.013		75.181	.000		
		SalePeriod	.001	.001	.121	1.382	.169		
1	1	(Constant)	1.029	.014		74.385	.000		
		SalePeriod	.004	.001	.244	3.827	.000		

a. Dependent Variable: salesratio

Both residential non-condominiums and residential condominiums had no residual market trending according to our analysis. While the residential condominium trend was statistically significant, the magnitude of the trend at less than 0.4% per month was not. The assessor has therefore accounted for market trending adequately, in our opinion.

## Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median and mean change in value from 2014 to 2015 between these groups, as follows:

SubClass	Group	No. Props	Median Chg Val	Mean Chg Val
Res Non-	Unsold	2,725	1.06	1.07
Condos	Sold	133	1.17	1.18
Res Condos	Unsold	2,294	1.23	1.21
	Sold	243	1.23	1.23

The residential condominiums showed overall consistency between sold and unsold valuations change, although the gap seen between sold and unsold non-condominium properties was such that we next analyzed the median and mean change in value by subdivisions with at least 3 sales:



SUBDIVNO	Group	No. Props	<u>Median</u>	<mark>Mean</mark>
	-	· ·	Chg Val	Chg Val
998	Unsold	88	1.09	1.16
	Sold	6	1.34	1.32
	Total	94	1.10	1.17
999	Unsold	139	1.25	1.23
	Sold	13	1.27	1.26
	Total	152	1.26	1.23
1000	Unsold	144	1.25	1.25
	Sold	8	1.04	1.09
	Total	152	1.25	1.24
1049	Unsold	27	1.09	1.11
	Sold	3	1.25	1.31
	Total	30	1.10	1.13
2005	Unsold	134	1.13	1.22
	Sold	13	1.20	1.27
	Total	147	1.14	1.22
2010	Unsold	308	1.09	1.11
	Sold	17	1.11	1.20
	Total	325	1.09	1.12
2035	Unsold	64	.77	.78
	Sold	7	1.03	.99
	Total	71	.78	.80
2090	Unsold	74	1.17	1.18
	Sold	4	1.00	1.09
	Total	78	1.17	1.17
3010	Unsold	10	1.18	1.20
	Sold	5	1.36	1.32
	Total	15	1.21	1.24
5000	Unsold	188	.93	1.00
	Sold	5	1.12	1.20
	Total	193	.94	1.01
7000	Unsold	17	.90	.95
	Sold	4	.91	1.02
	Total	21	.90	.96
Total	Unsold	1193	1.10	1.12
	Sold	85	1.17	1.20
	Total	1278	1.10	1.13

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

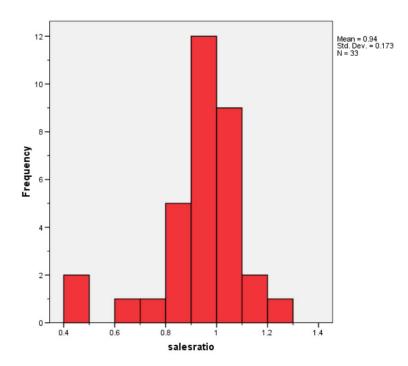


## IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 33 qualified commercial sales for the 60 month period prior to June 30, 2014. The sales ratio analysis was as follows:

Median	0.985
Price Related Differential	1.036
Coefficient of Dispersion	10.7

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:







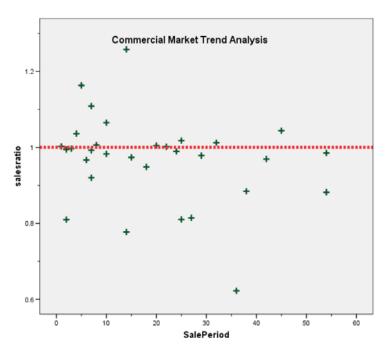
## **Commercial Market Trend Analysis**

The 33 commercial/industrial actual sales were next analyzed for any residual market trending, examining the sale ratios across the 60-month sale period with the following results:

Model		Unstandardized Coefficients		Standardized Coefficients			
L			в	Std. Error	Beta	t	Sig.
Г	1 (Co	onstant)	1.008	.034		29.796	.000
L	Sal	ePeriod	002	.001	266	-1.488	.148

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

We compared the median change in actual value between 2014 and 2015 for commercial/industrial properties to determine if sold and unsold properties were valued consistently, as follows:

Group	N		Mean Chg/Val
Unsold	736	1.00	1.03
Sold	33	1.00	1.05

## Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DIFF is the same across categories of sold.	Independent- Samples Mann- Whitney U Test	.160	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

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

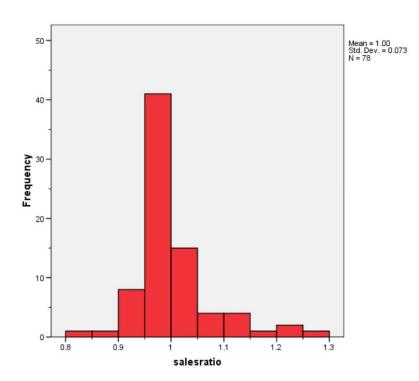


## **V. VACANT LAND SALE RESULTS**

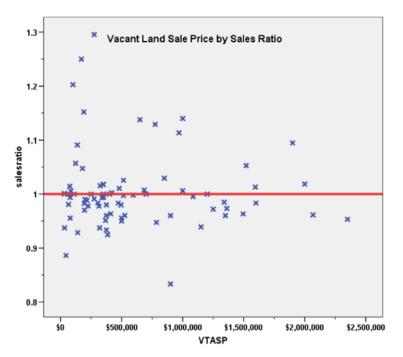
There were 78 qualified vacant land sales in San Miguel County for the 24 month sale period prior to June 30, 2014. The sales ratio analysis resulted in the following ratio statistics:

Median	0.994
Price Related Differential	1.004
Coefficient of Dispersion	4.5

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

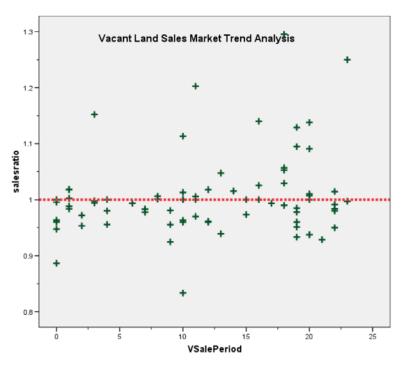
The 78 vacant land sales were analyzed, examining the sale ratios across the 24 month sale period by economic area with the following results:

Coefficients <sup>a</sup>	
COCINCICING	

Model			Unstandardize	d Coefficients	Standardized Coefficients		
			В	Std. Error	Beta	t	Sig.
	1	(Constant)	.979	.015		63.711	.000
		VSalePeriod	.002	.001	.223	1.991	.050

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 2015.



## Sold/Unsold Analysis

We compared the median change in actual value between 2014 and 2015 for vacant land properties to determine if sold and unsold properties were valued consistently (stratified by subdivision), as follows:

	Group	No. Props	Median Chg Val	Mean Chg Val
998	Unsold	40	1.00	<b>City val</b> 1.09
990	Sold	3	1.56	1.40
	Total	3 43	1.00	1.40
1073	Unsold	43 35	1.00	1.12
1073				
	Sold	4	.98	1.03
0000	Total	39	1.00	1.11
2000	Unsold	14	1.31	1.31
	Sold	3	1.31	1.31
	Total	17	1.31	1.31
2005	Unsold	45	1.46	1.48
	Sold	7	1.38	1.45
	Total	52	1.42	1.47
2010	Unsold	202	1.00	1.14
Annual 1	Sold	16	1.04	1.17
	Total	218	1.00	1.14
4035	Unsold	6	1.30	1.30
	Sold	3	1.30	1.30
	Total	9	1.30	1.30
5000	Unsold	153	.98	1.24
	Sold	3	1.00	1.09
	Total	156	.99	1.23
5008	Unsold	2	1.05	1.05
	Sold	4	1.05	1.05
	Total	6	1.05	1.05
Total	Unsold	497	1.00	1.20
	Sold	43	1.13	1.22
	Total	540	1.00	1.20

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:



Descriptives

	ABSTR	IMP		Statistic	Std. Error
ImpValSF	SFR	Mean		\$63.07	\$4.842
		95% Confidence Interval for	Lower Bound	\$53.32	
		Mean	Upper Bound	\$72.83	
		5% Trimmed Mean		\$61.81	
		Median		\$57.44	
		Variance		1078.663	
		Std. Deviation		\$32.843	
		Minimum		\$15	
		Maximum		\$151	
		Range		<mark>\$1</mark> 36	
		Interquartile Range		\$51	
		Skewness		.809	.350
		Kurtosis		184	.688
	Ag	Mean		\$76.92	\$10.543
	Res	95% Confidence Interval for	Lower Bound	\$55.65	
		Mean	Upper Bound	\$98.20	
		5% Trimmed Mean		\$67.45	-
		Median		\$63.89	ž
		Variance		4779.644	-0
		Std. Deviation		\$69.135	
		Minimum		\$15	
		Maximum		<mark>\$</mark> 380	
		Range		<mark>\$365</mark>	
		Interquartile Range		\$85	
		Skewness		2.515	.361
		Kurtosis		8.537	.709

#### **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

ResCondo		95% Confider Me	ice Interval for an		95% Cor	fidence Interval fo	or Median		95% Confider 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
0	1.026	1.006	1.047	1.002	.995	1.015	96.3%	1.031	.994	1.068	.995	.063	11.7%
1	1.048	1.028	1.068	1.021	1.002	1.041	96.0%	1.009	.993	1.025	1.039	.101	15.0%

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

Γ		95% Confiden Me	ce interval for an		95% Con	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
Г	.936	.874	.997	.985	.948	1.003	96.5%	.903	.830	.977	1.036	.107	18.5%

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% Confiden Me			95% Con	fidence Interval fo	or Median		95% Confiden Weighte				Coefficient of Variation
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
1.005	.988	1.021	.994	.983	1.000	96.9%	1.001	.983	1.018	1.004	.045	7.2%

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



## **Residential Median Ratio Stratification**

## Sale Price

### **Case Processing Summary**

		Count	Percent
SPRec	\$50K to \$100K	8	2.1%
	\$100K to \$150K	13	3.5%
	\$150K to \$200K	37	9.8%
	\$200K to \$300K	28	7.4%
	\$300K to \$500K	67	17.8%
	\$500K to \$750K	47	12.5%
	\$750K to \$1,000K	35	9.3%
	Over \$1,000K	141	37.5%
Overall		376	100.0%
Excluded	I	0	
Total		376	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
\$50K to \$100K	.996	.973	.213	49.5%
\$100K to \$150K	1.056	.999	.131	19.0%
\$150K to \$200K	1.125	.999	.111	17.7%
\$200K to \$300K	1.017	.999	.099	15.0%
\$300K to \$500K	1.035	1.009	.097	13.1%
\$500K to \$750K	1.008	1.002	.082	12.1%
\$750K to \$1,000K	1.000	1.000	.064	10.2%
Over \$1,000K	1.000	.991	.056	9.0%
Overall	1.012	1.019	.088	14.7%



## Improved Area

## **Case Processing Summary**

		Count	Percent
ImpSFRec	LE 500 sf	35	9.3%
	500 to 1,000 sf	72	19.1%
	1,000 to 1,500 sf	66	17.6%
	1,500 to 2,000 sf	44	11.7%
	2,000 to 3,000 sf	66	17.6%
	3,000 sf or Higher	93	24.7%
Overall		376	100.0%
Excluded		0	
Total		376	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	1.095	1.012	.091	11.8%
500 to 1,000 sf	1.049	1.042	.135	21.8%
1,000 to 1,500 sf	1.003	1.015	.082	11.4%
1,500 to 2,000 sf	.999	1.006	.060	9.4%
2,000 to 3,000 sf	.999	1.019	.078	14.1%
3,000 sf or Higher	1.006	1.000	.060	10.7%
Overall	1.012	1.019	.088	14.7%



Age

## **Case Processing Summary**

		Count	Percent
AgeRec	Over 100	11	2.9%
	75 to 100	9	2.4%
	50 to 75	4	1.1%
	25 to 50	112	29.8%
	5 to 25	176	46.8%
	5 or Newer	64	17.0%
Overall		376	100.0%
Excluded		0	
Total		376	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	1.003	.992	.014	2.3%
75 to 100	1.003	1.034	.050	9.8%
50 to 75	1.017	.978	.043	5.7%
25 to 50	1.003	1.038	.112	18.0%
5 to 25	1.006	1.029	.079	13.4%
5 or Newer	1.040	.991	.090	14.0%
Overall	1.012	1.019	.088	14.7%



# Improvement Quality

## **Case Processing Summary**

		Count	Percent
QUALITY	Average	337	89.6%
	Below Average	1	.3%
	Excellent	1	.3%
	Fair	1	.3%
	Good	25	6.6%
	Very Good	11	2.9%
Overall		376	100.0%
Excluded		0	
Total		376	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Average	1.012	1.018	.090	15.1%
Below Average	1.150	1.000	.000	.%
Excellent	.939	1.000	.000	.%
Fair	1.127	1.000	.000	.%
Good	.988	1.013	.088	12.7%
Very Good	1.006	1.005	.028	3.5%
Overall	1.012	1.019	.088	14.7%



# Improvement Condition

## **Case Processing Summary**

		Count	Percent
CONDITION	Average	107	28.5%
	Average Plus	14	3.7%
	Excellent	13	3.5%
	Fair	9	2.4%
	Fair Plus	8	2.1%
	Good	101	26.9%
	Good Plus	23	6.1%
	Low Plus	2	.5%
	Very Good	90	23.9%
	Very Good Plus	9	2.4%
Overall		376	100.0%
Excluded		0	
Total		376	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Average	1.022	1.024	.113	17.9%
Average Plus	.995	1.024	.065	14.7%
Excellent	1.006	.967	.080	14.8%
Fair	.995	1.008	.029	5.2%
Fair Plus	.996	.999	.039	5.2%
Good	1.000	1.032	.093	15.9%
Good Plus	.997	1.002	.046	6.4%
Low Plus	.994	.998	.004	.5%
Very Good	1.033	1.039	.079	12.2%
Very Good Plus	1.023	.999	.029	4.2%
Overall	1.012	1.019	.088	14.7%



# **Commercial Median Ratio Stratification**

## Sale Price

## Case Processing Summary

		Count	Percent
SPRec	\$50K to \$100K	5	15.2%
	\$100K to \$150K	2	6.1%
	\$150K to \$200K	3	9.1%
	\$200K to \$300K	6	18.2%
	\$300K to \$500K	6	18.2%
	\$500K to \$750K	6	18.2%
	Over \$1,000K	5	15.2%
Overall		33	100.0%
Excluded	1	0	
Total		33	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
\$50K to \$100K	1.002	1.003	.022	3.5%
\$100K to \$150K	1.083	1.001	.074	10.5%
\$150K to \$200K	.810	.997	.097	17.9%
\$200K to \$300K	.969	.996	.094	11.4%
\$300K to \$500K	.982	.998	.024	3.4%
\$500K to \$750K	.981	.994	.242	37.6%
Over \$1,000K	.882	.978	.124	17.5%
Overall	.985	1.036	.107	18.3%



## Subclass

### **Case Processing Summary**

		Count	Percent
ABSTRIMP	2212	5	15.2%
	2215	2	6.1%
	2220	3	9.1%
	2230	1	3.0%
	2245	21	63.6%
	3212	1	3.0%
Overall		33	100.0%
Excluded		0	
Total		33	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
2212	.985	.977	.052	9.3%
2215	.866	1.210	.281	39.7%
2220	.995	.996	.039	7.8%
2230	.990	1.000	.000	.%
2245	.983	1.052	.122	20.8%
3212	.882	1.000	.000	.%
Overall	.985	1.036	.107	18.3%



Age

## **Case Processing Summary**

		Count	Percent
AgeRec	Over 100	4	12.1%
	50 to 75	1	3.0%
	25 to 50	10	30.3%
	5 to 25	18	54.5%
Overall		33	100.0%
Excluded		0	
Total		33	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	.988	.999	.017	2.2%
50 to 75	.967	1.000	.000	.%
25 to 50	.993	1.058	.104	17.1%
5 to 25	.978	1.039	.133	21.7%
Overall	.985	1.036	.107	18.3%



## Improved Area

## **Case Processing Summary**

		Count	Percent
ImpSFRec	LE 500 sf	9	27.3%
	500 to 1,000 sf	4	12.1%
	1,000 to 1,500 sf	7	21.2%
	1,500 to 2,000 sf	3	9.1%
	2,000 to 3,000 sf	3	9.1%
	3,000 sf or Higher	7	21.2%
Overall		33	100.0%
Excluded		0	
Total		33	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	.920	1.293	.191	28.4%
500 to 1,000 sf	.961	.998	.061	9.7%
1,000 to 1,500 sf	1.012	1.006	.067	11.8%
1,500 to 2,000 sf	.969	1.000	.040	6.6%
2,000 to 3,000 sf	.990	1.173	.128	26.3%
3,000 sf or Higher	.985	1.041	.069	10.0%
Overall	.985	1.036	.107	18.3%



# Improvement Quality

## **Case Processing Summary**

		Count	Percent
QUALITY	Average	27	81.8%
	Below Average	4	12.1%
	Good	2	6.1%
Overall		33	100.0%
Excluded		0	
Total		33	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Average	.985	1.039	.122	20.0%
Below Average	.988	.999	.017	2.2%
Good	.908	1.103	.103	14.6%
Overall	.985	1.036	.107	18.3%



# Improvement Condition

## Case Processing Summary

		Count	Percent
CONDITION	Average	26	78.8%
	Fair	1	3.0%
	Good	3	9.1%
	Very Good	3	9.1%
Overall		33	100.0%
Excluded		0	
Total		33	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Average	.986	1.062	.117	20.0%
Fair	.997	1.000	.000	.%
Good	.974	1.016	.059	11.6%
Very Good	1.003	.962	.089	16.2%
Overall	.985	1.036	.107	18.3%



## Vacant Land Median Ratio Stratification

## Sale Price

## **Case Processing Summary**

		Count	Percent
SPRec	\$25K to \$50K	4	5.1%
	\$50K to \$100K	6	7.7%
	\$100K to \$150K	5	6.4%
	\$150K to \$200K	6	7.7%
	\$200K to \$300K	5	6.4%
	\$300K to \$500K	22	28.2%
	\$500K to \$750K	7	9.0%
	\$750K to \$1,000K	8	10.3%
	Over \$1,000K	15	19.2%
Overall		78	100.0%
Excluded	1	0	
Total		78	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
\$25K to \$50K	.969	1.008	.046	5.9%
\$50K to \$100K	.997	1.000	.015	2.2%
\$100K to \$150K	1.057	1.006	.069	9.7%
\$150K to \$200K	1.019	1.004	.083	12.2%
\$200K to \$300K	.991	.993	.066	15.4%
\$300K to \$500K	.982	1.001	.023	2.9%
\$500K to \$750K	1.000	.998	.031	6.0%
\$750K to \$1,000K	1.018	.998	.082	10.4%
Over \$1,000K	.983	.998	.030	4.2%
Overall	.994	1.004	.045	7.4%



## Subclass

### **Case Processing Summary**

		Count	Percent
ABSTRLND	0	1	1.3%
	100	25	32.1%
	200	1	1.3%
	400	29	37.2%
	520	1	1.3%
	540	2	2.6%
	550	6	7.7%
	560	1	1.3%
	1112	12	15.4%
Overall		78	100.0%
Excluded		0	
Total		78	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	.991	1.000	.000	.%
100	.994	.993	.037	5.6%
200	1.203	1.000	.000	.%
400	.984	.994	.042	6.4%
520	.994	1.000	.000	.%
540	1.008	.997	.007	.9%
550	.993	1.001	.017	2.3%
560	1.018	1.000	.000	.%
1112	1.000	1.045	.079	12.8%
Overall	.994	1.004	.045	7.4%