



2017

# CONEJOS COUNTY PROPERTY ASSESSMENT STUDY

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



September 15, 2017

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

**RE: Final Report for the 2017 Colorado Property Assessment Study**

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2017 Colorado Property Assessment Study.

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

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

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

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

A handwritten signature in dark ink, reading "Harry J. Fuller". The signature is fluid and cursive, with the first name "Harry" and last name "Fuller" clearly distinguishable.

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

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# INTRODUCTION

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## Colorado

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

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

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

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

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

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

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

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

Wildrose Audit has completed the Property Assessment Study for 2017 and is pleased to report its findings for Conejos County in the following report.





## Historical Information

Conejos County had an estimated population of approximately 8,129 people with 6.3 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a -1.5 percent change from April 1, 2010 to July 1, 2016.

In the early 1800's, current day Conejos County was in the possession of Mexico. In 1848, the war between Mexico and the United States was settled with the signing of the Treaty of Guadalupe Hidalgo. After the United States victory, the Conejos Land Grant became the territory of the U.S. When the territory of Colorado was created in 1861, the major part of the San Luis Valley was divided into two counties, Costilla County to the east and Guadalupe County to the west. Once the Colorado Territory was established, Guadalupe County was quickly renamed Conejos County.

Conejos County was one of the original 17 counties created by the General Assembly of the Territory of Colorado on January 11, 1861. Its name came from the Spanish term conejo, meaning rabbit, for the large abundance of rabbits in the area. Also early in its existence, the county seat was moved from the town of Guadalupe to Conejos.

In 1874, most of the western and northern portions of the county were broken away to form parts of Hinsdale, La Plata and Rio Grande counties, and Conejos County achieved its modern borders in 1885 when its western half was taken to create Archuleta County.

The town of Conejos boasts the oldest church in Colorado. Conejos County continues to be an ever-changing melting pot of cultures and perspectives. Although Guadalupe is considered the first established settlement (1851) in the county, other villages were being created at the same time. Guadalupe held the county seat until 1863 when its new neighbor, the town of Conejos, was established on the south side of the Conejos River.

Antonito, Spanish for "little Anthony," was first called San Antonio Junction. Founded by the Denver & Rio Grande Western (D&RGW) Railroad in 1880, Antonito is located in the south central part of Conejos County. When the railroad was extending south from Alamosa, company officials failed to get the desired concessions at the old town of Conejos, so they laid out a site of their own to the southeast of Conejos. Since that time, the town has been a shipping center for the southern end of the San Luis Valley and northern New Mexico. For many years, it was the junction for two branches of the railroad, one west over Cumbres Pass into the San Juan country and Durango, and the other into the ancient capital of Santa Fe, New Mexico. In the late 1930's, the southern branch was discontinued. Today, the San Luis and Rio Grande Railroad runs a freight train connecting perlite mine operations and lava rock to the north by hauling rail-cars loaded with these materials out of the area. The narrow gauge sections through the mountains are still in use as a historic tourist train.

*(Wikipedia.org & conejosvacation.com)*



# RATIO ANALYSIS

## Methodology

All significant classes of property were analyzed. Sales were collected for each property class over the eighteen month period from January 1, 2015 through June 20, 2016. Property classes with less than thirty sales had the sales period extended in six month increments up to an additional forty-two months. If this extended sales period did not produce the minimum thirty qualified sales, the Audit performed supplemental appraisals to reach the minimum.

Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and price-related differential for each class of property. Counties were not passed or failed by these latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the

qualification code used by each county, which were typically coded as either “Q” or “C.” The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were “lost” because of trimming. For the largest 11 counties, the residential ratio statistics were broken down by economic area as well.

## Conclusions

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

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

The results for Conejos County are:

<b>Conejos County Ratio Grid</b>					
<b>Property Class</b>	<b>Number of Qualified Sales</b>	<b>Unweighted Median Ratio</b>	<b>Price Related Differential</b>	<b>Coefficient of Dispersion</b>	<b>Time Trend Analysis</b>
*Commercial/Industrial	N/A	N/A	N/A	N/A	N/A
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	89	0.981	1.029	12.1	Compliant
Vacant Land	61	0.995	0.997	17.4	Compliant

*\*Due to the small number of sales, a procedural audit was performed.*

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

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

### **Recommendations**

None





# TIME TRENDING VERIFICATION

## Methodology

While we recommend that counties use the inverted ratio regression analysis method to account for market (time) trending, some counties have used other IAAO-approved methods, such as the weighted monthly median approach. We are not auditing the methods used, but rather the results of the methods used. Given this range of methodologies used to account for market trending, we concluded that the best validation method was to examine the sale ratios for each class across the appropriate sale period. To be specific, if a county has considered and adjusted correctly for market trending, then the sale ratios should remain stable (i.e. flat) across the sale period. If a residual market trend is detected, then the county may or may not have addressed market

trending adequately, and a further examination is warranted. This validation 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 Conejos County has complied with the statutory requirements to analyze the effects of time on value in their county. Conejos County has also satisfactorily applied the results of their time trending analysis to arrive at the time adjusted sales price (TASP).

## Recommendations

None

## SOLD / UNSOLD ANALYSIS

### Methodology

Conejos 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 non-parametric 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	
Property Class	Results
Commercial/Industrial	N/A
Condominium	N/A
Single Family	Compliant
Vacant Land	Compliant

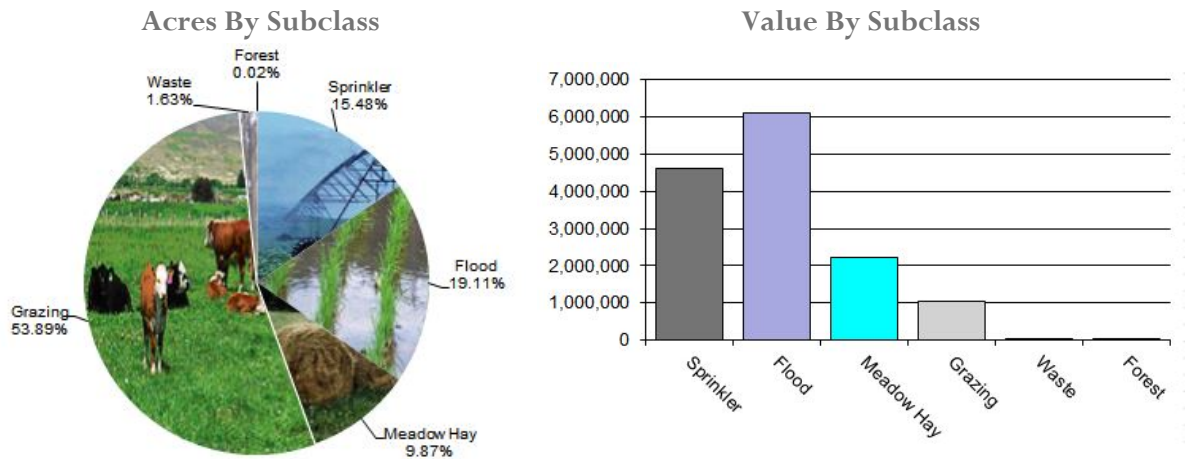
### Conclusions

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

### Recommendations

None

# AGRICULTURAL LAND STUDY



## Agricultural Land

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

(See Assessor Reference Library Volume 3 Chapter 5.)

### Conclusions

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



Conejos County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio
4107	Sprinkler	34,294	134.95	4,627,949	4,865,281	0.95
4117	Flood	42,334	144.63	6,122,795	6,478,380	0.95
4137	Meadow Hay	21,866	101.24	2,213,634	2,213,634	1.00
4147	Grazing	119,375	8.87	1,058,488	1,058,488	1.00
4177	Forest	40	6.60	264	264	1.00
4167	Waste	3,609	2.22	3,959	8,019	0.49
Total/Avg		221,518	63.32	14,027,090	14,624,066	0.96

### Recommendations

None

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## Agricultural Outbuildings

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### Methodology

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

of Property Taxation for the valuation of agricultural outbuildings.

### Recommendations

None

### Conclusions

Conejos County has substantially complied with the procedures provided by the Division

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## Agricultural Land Under Improvements

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### Methodology

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

### Conclusions

Conejos 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
- Field Inspections
- In-Person Interviews with Owners/Tenants
- Aerial Photography/Pictometry

Conejos 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.:

- Questionnaires
- Field Inspections
- Aerial Photography/Pictometry

Conejos 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

None

## SALES VERIFICATION

According to Colorado Revised Statutes:

*A representative body of sales is required when considering the market approach to appraisal.*

*(8) In any case in which sales prices of comparable properties within any class or subclass are utilized when considering the market approach to appraisal in the determination of actual value of any taxable property, the following limitations and conditions shall apply:*

*(a)(I) Use of the market approach shall require a representative body of sales, including sales by a lender or government, sufficient to set a pattern, and appraisals shall reflect due consideration of the degree of comparability of sales, including the extent of similarities and dissimilarities among properties that are compared for assessment purposes. In order to obtain a reasonable sample and to reduce sudden price changes or fluctuations, all sales shall be included in the sample that reasonably reflect a true or typical sales price during the period specified in section 39-1-104 (10.2). Sales of personal property exempt pursuant to the provisions of sections 39-3-102, 39-3-103, and 39-3-119 to 39-3-122 shall not be included in any such sample.*

*(b) Each such sale included in the sample shall be coded to indicate a typical, negotiated sale, as screened and verified by the assessor. (39-1-103, C.R.S.)*

*The assessor is required to use sales of real property only in the valuation process.*

*(8)(f) Such true and typical sales shall include only those sales which have been determined on an individual basis to reflect the selling price of the real property only or which have been adjusted on an individual basis to reflect the selling price of the real property only. (39-1-103, C.R.S.)*

Part of the Property Assessment Study is the sales verification analysis. WRA has used the above-cited statutes as a guide in our study of the county's procedures and practices for verifying sales.

WRA reviewed the sales verification procedures in 2017 for Conejos County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 33 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 contractor has reviewed the 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.

The following subclasses were analyzed for Conejos County:

2112 Merchandising  
2130 Special Purpose  
2215 Lodging  
2230 Special Purpose  
3115 Manufacturing/Processing  
3215 Manufacturing/Processing

### **Conclusions**

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

### **Recommendations**

None

# ECONOMIC AREA REVIEW AND EVALUATION

## **Methodology**

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

adequately identified homogeneous economic areas comprised of smaller neighborhoods. Each economic area defined is equally subject to a set of economic forces that impact the value of the properties within that geographic area and this has been adequately addressed. Each economic area defined adequately delineates an area that will give "similar values for similar properties in similar areas."

## **Recommendations**

None

# NATURAL RESOURCES

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## Earth and Stone Products

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### Methodology

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

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

### Conclusions

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

### Recommendations

None

## VACANT LAND

### **Subdivision Discounting**

Subdivisions were reviewed in 2017 in Conejos 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**

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

### **Recommendations**

None

# POSSESSORY INTEREST PROPERTIES

## Possessory Interest

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

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

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

## Conclusions

Conejos County has implemented a discovery process to place possessory interest properties on the roll. They have also correctly and consistently applied the correct procedures and valuation methods in the valuation of possessory interest properties.

## Recommendations

None

# PERSONAL PROPERTY AUDIT

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

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

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

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

Conejos 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
- Questionnaires, Letters and/or Phone Calls to Buyer, Seller and/or Realtor

The county uses the Division of Property Taxation (DPT) recommended classification and documentation procedures. The DPT's recommended cost factor tables, depreciation tables and level of value adjustment factor tables are also used.

Conejos County submitted their personal property written audit plan and was current for the 2017 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
- Same business type or use
- Non-filing Accounts - Best Information Available

## Conclusions

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

## Recommendations

None

## WILDROSE AUDITOR STAFF

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

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

**Steve Kane**, *Audit Statistician*

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

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

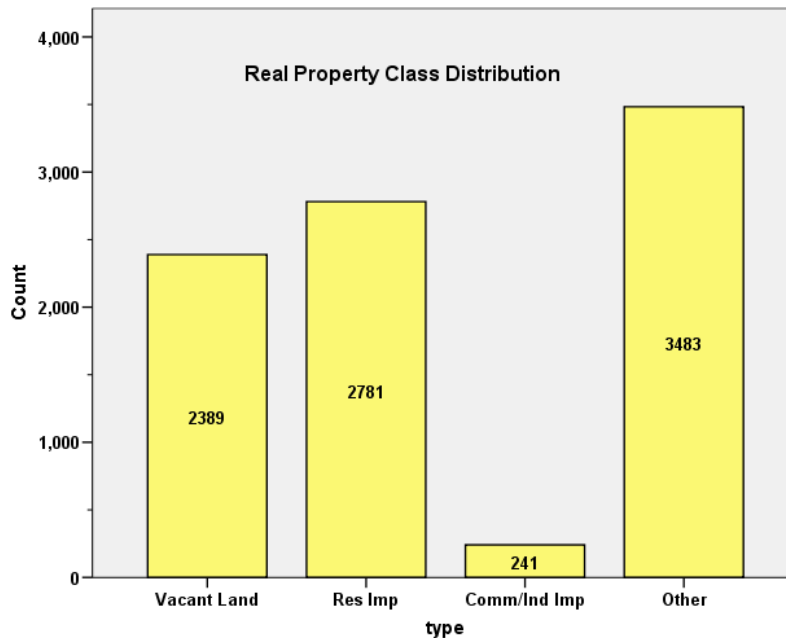


# APPENDICES

## STATISTICAL COMPLIANCE REPORT FOR CONEJOS COUNTY 2017

### I. OVERVIEW

Conejos County is located in south central Colorado. The county has a total of 8,894 real property parcels, according to data submitted by the county assessor's office in 2017. 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 1112) accounted for 51.5 percent of all vacant land parcels.

For residential improved properties, single family properties accounted for 97.2 percent of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 2.8 percent of all such properties in this county.

## II. DATA FILES

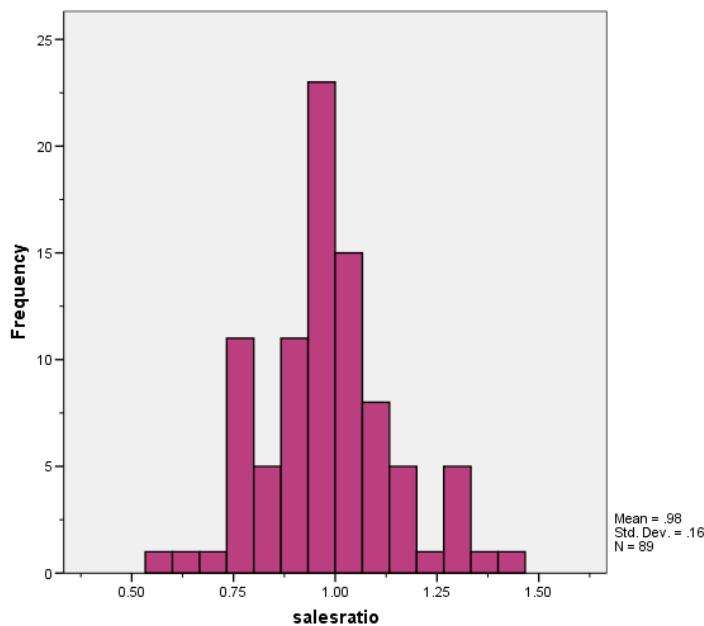
The following sales analyses were based on the requirements of the 2017 Colorado Property Assessment Study. Information was provided by the Conejos Assessor's Office in April 2017. The data included all 5 property record files as specified by the Auditor.

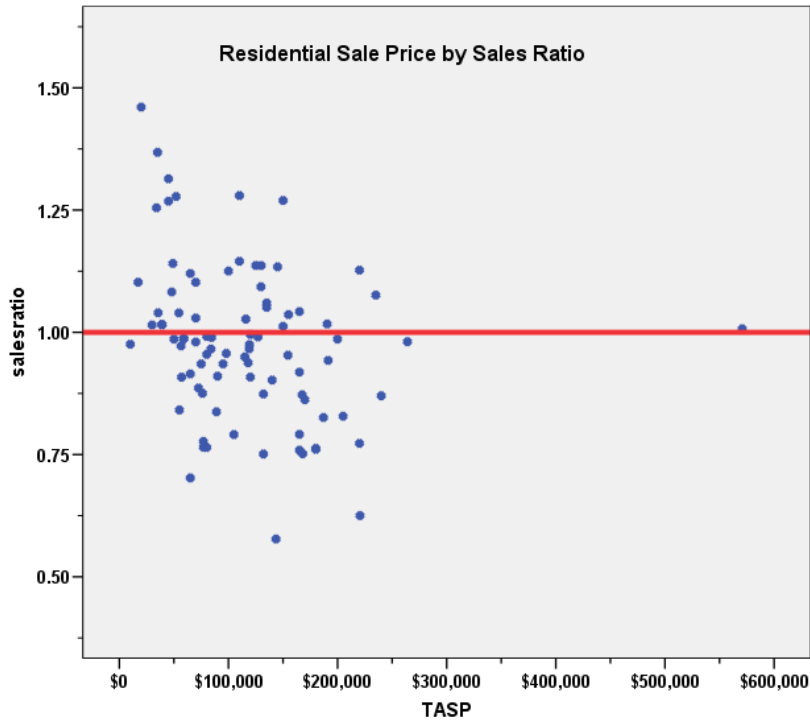
## III. RESIDENTIAL SALES RESULTS

There were 89 qualified residential sales in the 24-month sale period ending June 30, 2016. The sales ratio analysis results were as follows:

Median	<b>0.981</b>
Price Related Differential	<b>1.029</b>
Coefficient of Dispersion	<b>12.1</b>

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





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

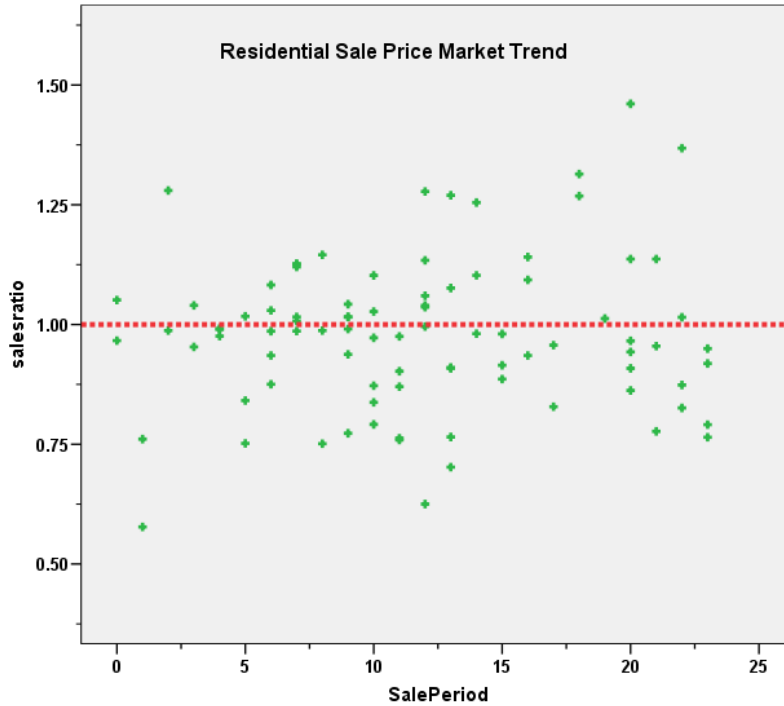
### Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period for any residual market trending, with the following results:

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

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.955	.037		26.160	.000
	SalePeriod	.002	.003	.078	.727	.469

a. Dependent Variable: salesratio



With no significant statistical trend evident in the sales ratio data, the above analysis indicated that the assessor has adequately addressed market trending in the valuation of residential properties.

### Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square foot for 2017 between each group, as follows:

#### Report

VALSF

VALSF	N	Median	Mean
UNSOLD	2,694	\$57	\$71
SOLD	88	\$71	\$74

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.022	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .02.

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

#### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

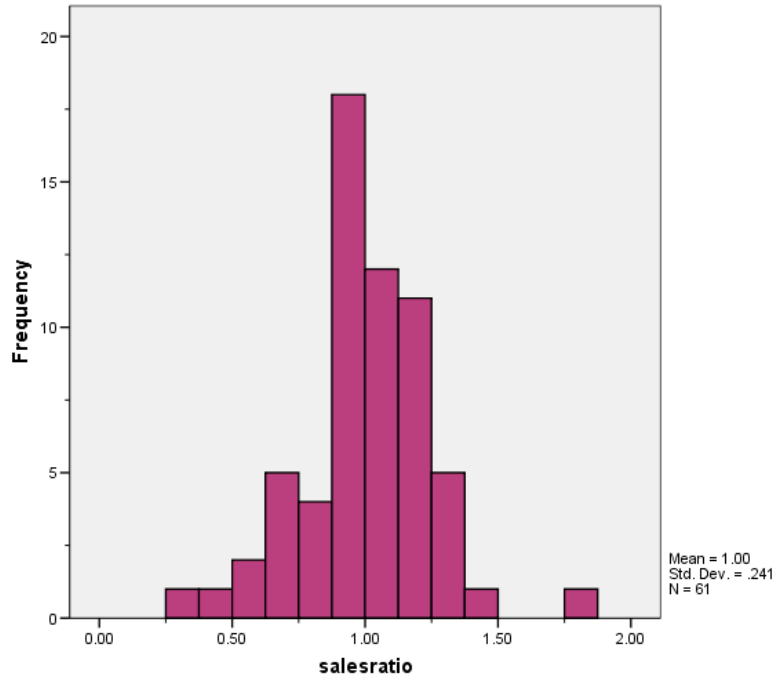
The County did not have enough qualified commercial/industrial sales to be statistically significant. A procedural audit was completed for taxable year 2017. This analysis reviewed all qualified commercial sales. Information was gathered concerning class of property, year built, improvement size, type and quality of construction, condition at the time of sale, sale date and amount and the Assessor value. The audit then determined sale price per square foot and the sales ratio. The audit concluded that the County is in compliance due to the lack of substantive data to support a revaluation decision.

#### V. VACANT LAND SALE RESULTS

There were 63 qualified vacant land sales in the 24-month sale period ending June 30, 2016; two sales were excluded due to their extreme sale ratios, which reduced the sale total to 61. The sales ratio analysis results were as follows:

Median	0.995
Price Related Differential	0.997
Coefficient of Dispersion	17.4

The above tables indicate that the Conejos County vacant land sale ratios were in compliance with the SBOE standards. The following histogram and scatter plot describe the sales ratio distribution further:





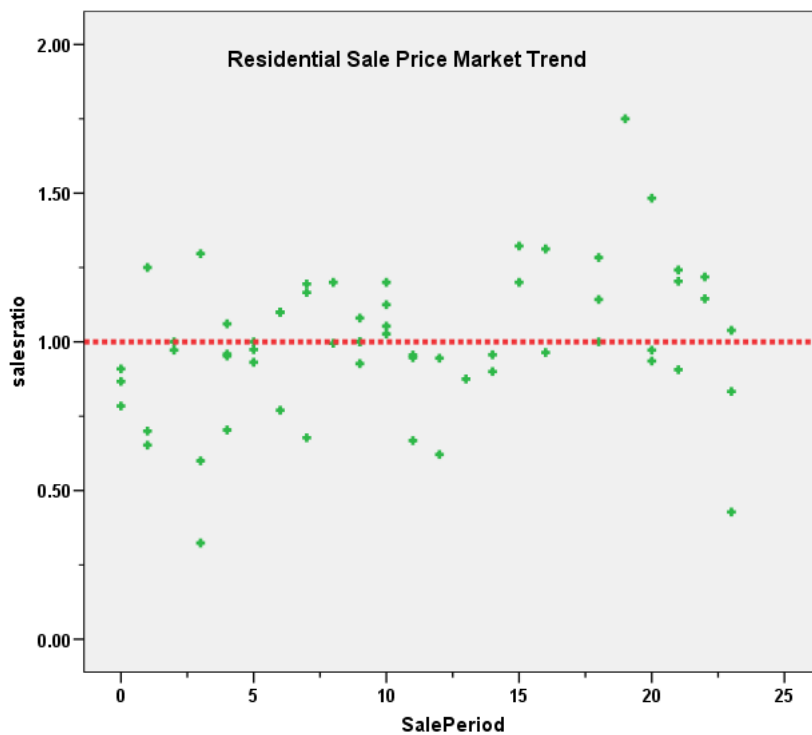
## Vacant Land Market Trend Analysis

The assessor did not apply any market trend adjustments to the vacant land dataset. The 63 vacant land sales were analyzed, examining the sale ratios across the 24-month sale period with the following results:

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

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.887	.054		16.546	.000
	SalePeriod	.010	.004	.304	2.448	.017

a. Dependent Variable: salesratio



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

## Sold/Unsold Analysis

We compared the median change in actual value between taxable years 2016 and 2017 for vacant land properties to determine if sold and unsold properties were valued consistently, as follows:

### Report

DIFF			
sold	N	Median	Mean
UNSOLD	2,255	1.00	1.21
SOLD	50	1.01	1.32

### 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	.075	Retain the null hypothesis.

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

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

## VI. 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 Conejos County.

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

### Report

IMPVALSF			
ABSTRIMP	N	Median	Mean
1212.00	2,702	\$49.16	\$58.52
4277.00	223	\$54.34	\$55.61

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of IMPVALSF is the same across categories of ABSTRIMP.	Independent-Samples Mann-Whitney U Test	.922	Retain the null hypothesis.

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

## VII. CONCLUSIONS

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

## STATISTICAL ABSTRACT

### Residential

**Ratio Statistics for CURRTOT / TASP**

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Mean Centered
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
.979	.945	1.013	.981	.950	1.012	96.7%	.952	.917	.986	1.029	.121	16.4%

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

### Vacant Land

**Ratio Statistics for CURRLND / TASP**

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Mean Centered
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
.997	.935	1.058	.995	.952	1.053	96.0%	1.000	.933	1.067	.997	.174	24.1%

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



### Residential Median Ratio Stratification

#### Sale Price

#### Case Processing Summary

		Count	Percent
SPRec	LT \$25K	3	3.4%
	\$25K to \$50K	12	13.5%
	\$50K to \$100K	28	31.5%
	\$100K to \$150K	23	25.8%
	\$150K to \$200K	15	16.9%
	\$200K to \$300K	7	7.9%
	\$500K to \$750K	1	1.1%
Overall		89	100.0%
Excluded		0	
Total		89	

#### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.103	.961	.147	24.4%
\$25K to \$50K	1.061	1.000	.105	14.5%
\$50K to \$100K	.956	1.004	.094	12.9%
\$100K to \$150K	.996	1.000	.119	16.2%
\$150K to \$200K	.872	1.000	.106	12.4%
\$200K to \$300K	.870	.995	.157	20.6%
\$500K to \$750K	1.007	1.000	.000	.
Overall	.981	1.029	.121	16.3%

#### Subclass

#### Case Processing Summary

		Count	Percent
ABSTRIMP	.00	1	1.1%
	1212.00	81	91.0%
	1230.00	5	5.6%
	1235.00	1	1.1%
	2213.50	1	1.1%
Overall		89	100.0%
Excluded		0	
Total		89	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	1.461	1.000	.000	.
1212.00	.975	1.022	.123	16.2%
1230.00	1.016	1.003	.011	2.0%
1235.00	1.120	1.000	.000	.
2213.50	.870	1.000	.000	.
Overall	.981	1.029	.121	16.3%

### Age

#### Case Processing Summary

		Count	Percent
AgeRec	0	1	1.1%
	Over 100	12	13.5%
	75 to 100	12	13.5%
	50 to 75	19	21.3%
	25 to 50	15	16.9%
	5 to 25	27	30.3%
	5 or Newer	3	3.4%
Overall		89	100.0%
Excluded		0	
Total		89	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	1.461	1.000	.000	.
Over 100	.967	1.050	.110	15.3%
75 to 100	.946	1.049	.127	20.4%
50 to 75	.935	1.023	.139	16.0%
25 to 50	.919	1.016	.112	14.5%
5 to 25	1.016	1.020	.094	13.7%
5 or Newer	1.017	1.000	.042	6.4%
Overall	.981	1.029	.121	16.3%

## Improved Area

### Case Processing Summary

		Count	Percent
ImpSFRec	0	1	1.1%
	LE 500 sf	3	3.4%
	500 to 1,000 sf	10	11.2%
	1,000 to 1,500 sf	37	41.6%
	1,500 to 2,000 sf	21	23.6%
	2,000 to 3,000 sf	9	10.1%
	3,000 sf or Higher	8	9.0%
Overall		89	100.0%
Excluded		0	
Total		89	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	1.461	1.000	.000	.
LE 500 sf	1.016	1.000	.000	0.0%
500 to 1,000 sf	.981	1.063	.158	22.5%
1,000 to 1,500 sf	.966	1.046	.133	16.9%
1,500 to 2,000 sf	.986	1.013	.090	13.7%
2,000 to 3,000 sf	1.060	1.003	.098	14.0%
3,000 sf or Higher	.948	.982	.067	10.0%
Overall	.981	1.029	.121	16.3%

## Improvement Quality

### Case Processing Summary

		Count	Percent
QUALITY		1	1.1%
	AVERAGE	50	56.2%
	FAIR	36	40.4%
	LOW	1	1.1%
	LOW COST	1	1.1%
Overall		89	100.0%
Excluded		0	
Total		89	



### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	1.461	1.000	.000	.
AVERAGE	.987	1.008	.116	15.5%
FAIR	.974	1.039	.117	16.3%
LOW	1.103	1.000	.000	.
LOW COST	.870	1.000	.000	.
Overall	.981	1.029	.121	16.3%

### Improvement Condition

#### Case Processing Summary

	Count	Percent
CONDITION	1	1.1%
AVERAGE	64	71.9%
FAIR	19	21.3%
N/A	2	2.2%
POOR	3	3.4%
Overall	89	100.0%
Excluded	0	
Total	89	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	1.461	1.000	.000	.
AVERAGE	.961	1.007	.116	15.2%
FAIR	1.042	1.036	.108	14.7%
N/A	.903	1.016	.036	5.1%
POOR	1.083	1.002	.027	4.6%
Overall	.981	1.029	.121	16.3%

## Neighborhood

### Case Processing Summary

		Count	Percent
NBHD	1	13	15.5%
	2	9	10.7%
	3	3	3.6%
	4	9	10.7%
	5	7	8.3%
	6	23	27.4%
	7	4	4.8%
	8	8	9.5%
	9	2	2.4%
	10	1	1.2%
	11	3	3.6%
	13	2	2.4%
	Overall	84	100.0%
Excluded		5	
Total		89	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.975	1.034	.124
2	.955	1.034	.128
3	1.103	.996	.065
4	.980	1.008	.102
5	.957	1.006	.063
6	1.015	1.023	.107
7	.842	.982	.130
8	.867	1.007	.161
9	.796	.997	.041
10	1.007	1.000	.000
11	.902	1.028	.184
13	1.105	1.056	.239
Overall	.975	1.028	.127

### Vacant Land Median Ratio Stratification

#### Sale Price

#### Case Processing Summary

		Count	Percent
SPRec	LT \$25K	45	73.8%
	\$25K to \$50K	7	11.5%
	\$50K to \$100K	8	13.1%
	\$300K to \$500K	1	1.6%
Overall		61	100.0%
Excluded		0	
Total		61	

#### Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	.974	1.024	.172	24.3%
\$25K to \$50K	1.039	1.007	.261	33.6%
\$50K to \$100K	1.000	.998	.131	21.2%
\$300K to \$500K	.959	1.000	.000	.
Overall	.995	.997	.174	24.2%

#### Sale Price

#### Case Processing Summary

		Count	Percent
ABSTRRLND	100.00	24	39.3%
	520.00	3	4.9%
	530.00	1	1.6%
	540.00	2	3.3%
	550.00	11	18.0%
	560.00	3	4.9%
	1112.00	10	16.4%
	1115.25	1	1.6%
	1135.00	5	8.2%
	9151.00	1	1.6%
Overall		61	100.0%
Excluded		0	
Total		61	

### Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	1.000	1.012	.148	25.0%
520.00	1.204	.992	.055	9.3%
530.00	1.218	1.000	.000	.
540.00	1.058	.946	.080	11.3%
550.00	.867	.896	.244	33.7%
560.00	.653	.954	.264	40.0%
1112.00	.998	1.035	.095	14.2%
1115.25	.927	1.000	.000	.
1135.00	1.200	.992	.166	28.2%
9151.00	.833	1.000	.000	.
Overall	.995	.997	.174	24.2%

### Neighborhood

#### Case Processing Summary

	Count	Percent
NBHD	1	1.6%
	2	3.3%
	4	8.2%
	6	57.4%
	7	4.9%
	8	11.5%
	9	6.6%
	10	4.9%
	13	1.6%
Overall	61	100.0%
Excluded	0	
Total	61	

### Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.600	1.000	.000
2	1.200	1.000	.000
4	.952	.987	.083
6	.947	1.033	.190
7	1.143	.971	.064
8	1.100	1.011	.084
9	1.123	.914	.136
10	1.195	1.028	.097
13	.974	1.000	.000
Overall	.995	.997	.174