2011
COSTILLA COUNTY
PROPERTY ASSESSMENT
STUDY

WILDROSE
APPRAISAL, INCORPORATED
Audit Division

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Audit Division

September 15, 2011

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

RE: Final Report for the 2011 Colorado Property Assessment Study

Dear Mr. Mauer:

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

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

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

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

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

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

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INTRODUCTION

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 2011 and is pleased to report its findings for Costilla County in the following report.

REGIONAL/HISTORICAL SKETCH OF COSTILLA COUNTY

Regional Information

Costilla County is located in the San Luis Valley region of Colorado. The San Luis Valley is a large, broad, alpine valley in the Rio Grande Basin of south-central Colorado. The valley is drained to the south by the Rio Grande River which rises in the San Juan Mountains to the west of the valley. The San Luis Valley includes Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties.

Historical Information

Costilla County has a population of approximately 3,524 people with 2.87 people per square mile, according to the U.S. Census Bureau's 2010 census data. This represents a -3.79 percent change from the 2000 Census.

Costilla County was the first area of the state of Colorado to be colonized, with recorded history dating back to 1540, the year Coronado explored the Southwest. Costilla County was one of the original 17 counties created by the Territory of Colorado on November 1, 1861. The county was named for the Costilla River. Although San Miguel was originally designated the county seat, the county government was moved to San Luis in 1863.

The county's original boundaries had the county extend over much of south-central Colorado. Much of the northern portion became part of Saguache County in 1866, and the western portions were folded into Hinsdale and Rio Grande counties in 1874. Costilla County arrived at its modern boundaries in 1913 when Alamosa County was created from its northwest portions.

Costilla County is part of the San Luis Valley, an 8,000 square mile alpine valley nicknamed the "American Tibet," with an average altitude of 7800 feet above sea level. Costilla County is the home to Colorado's oldest town, San Luis, founded in 1851. Many villages of the County were the last to be established on a Spanish/Mexican land grant in this country. It is home to Colorado's oldest Christian structure (the San Acacio Mission) and the nation's newest shrine, the Stations of the Cross, with hundreds of people walking on a pilgrimage from as far as Pueblo. The state's first water rights, the San Luis Peoples Ditch, is located in Costilla County. The County has the last working Commons in America where local residents have grazed their sheep, cattle and horses on six hundred shared, unfenced acres for hundreds of years. Colorado has fifty-four peaks that exceed 14,000 feet and four of those can be accessed from Costilla County: Little Bear, Lindsay, Culebra and Blanca, which at 14,345 is higher than Pikes Peak.
(*Wikipedia.org, costillacounty-co.gov* & *slvguide.com*)

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 2009 and June 2010. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2010 in 6-month increments. If there were still fewer than 30 sales, supplemental appraisals were performed and treated as proxy sales. Residential sales for all counties using this method totaled at least 30 per county. For commercial sales, the total number analyzed was allowed, in some cases, to fall below 30. There were no sale quantity issues for counties requiring vacant land analysis or condominium analysis. Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and 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 Costilla County are:

Costilla County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
*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	38	0.958	1.006	15.9	Compliant
Vacant Land	273	1.000	1.033	20.3	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 Costilla County is in compliance with SBOE, DPT, and Colorado State Statute valuation guidelines.

Recommendations

None

Random Deed Analysis

An additional analysis was performed as part of the Ratio Analysis. Ten randomly selected deeds with documentary fees were obtained from the Clerk and Recorder. These deeds were for sales that occurred from January 1, 2009 through June 30, 2010. These sales were then checked for inclusion on the Assessor's qualified or unqualified database.

Conclusions

After comparing the list of randomly selected deeds with the Assessor's database, Costilla County has accurately transferred sales data from the recorded deeds to the qualified or unqualified database.

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 methodology also considers the number of sales and the length of the sale period. Counties with few sales across the sale period were carefully examined to determine if the statistical results were valid.

Conclusions

After verification and analysis, it has been determined that Costilla County has complied with the statutory requirements to analyze the effects of time on value in their county. Costilla 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

Costilla County was tested for the equal treatment of sold and unsold properties to ensure that "sales chasing" has not occurred. The auditors employed a multi-step process to determine if sold and unsold properties were valued in a consistent manner.

All qualified residential and commercial class properties were examined using the unit value method, where the actual value per square foot was compared between sold and unsold properties. A class was considered qualified if it met the criteria for the ratio analysis. The median value per square foot for both groups was compared from an appraisal and statistical perspective. If no significant difference was indicated, then we concluded that no further testing was warranted and that the county was in compliance in terms of sold/unsold consistency.

If either residential or commercial differences were significant using the unit value method, or if data limitations made the comparison invalid, then the next step was to perform a ratio analysis comparing the 2010 and 2011 actual values for each qualified class of property. All qualified vacant land classes were tested using this method. The sale property ratios were arrayed using a range of 0.8 to 1.5, which theoretically excluded changes between years that were due to other unrelated changes in the property. These ratios were also stratified at the appropriate level of analysis. Once the percent change was determined for each appropriate class and sub-class, the next step was to select the unsold sample. This sample was at least 1% of the total population of unsold properties and excluded any sale properties. The unsold sample was filtered based on the attributes of the sold dataset to closely correlate both groups. The ratio analysis was then performed on the unsold properties and stratified. The median and mean ratio distribution was then compared between the sold and unsold group. A non-parametric test such as the Mann-Whitney test for differences between independent samples was undertaken to determine whether any observed differential was significant. If this test determined that the unsold properties were treated in a manner similar to the sold properties, it was concluded that no further testing was warranted and that the county was in compliance.

If a class or sub-class of property was determined to be significantly different by this method, the final step was to perform a multi-variate mass appraisal model that developed ratio statistics from the sold properties that were then applied to the unsold sample. This test compared the measures of central tendency and confidence intervals for the sold properties with the unsold property sample. If this comparison was also determined to be significantly different, then the conclusion was that the county had treated the unsold properties in a different manner than sold properties.

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

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

Conclusions

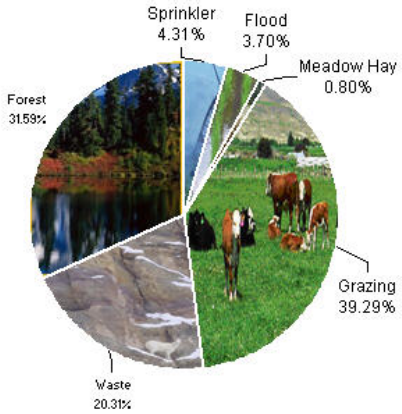
After applying the above described methodologies, it is concluded that Costilla County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

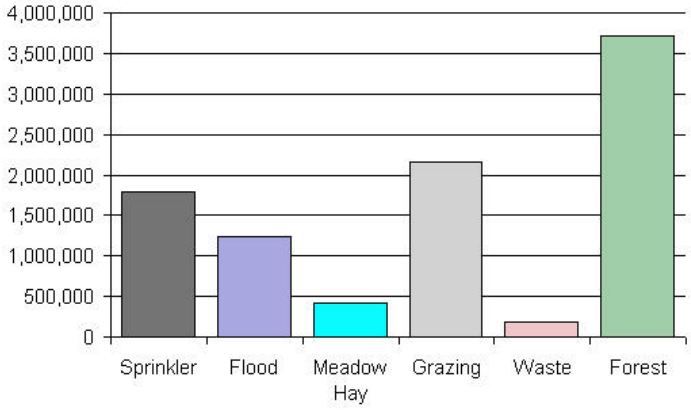
None

AGRICULTURAL LAND STUDY

Acres By Subclass



Value By Subclass



Agricultural Land

County records were reviewed to determine major land categories such as irrigated farm, dry farm, meadow hay, grazing and other lands. In addition, county records were reviewed in order to determine if: Aerial photographs are available and are being used; soil conservation guidelines have been used to classify lands based on productivity; crop rotations have been documented; typical commodities and yields have been determined; orchard lands have been properly classified and valued; expenses reflect a ten year average and are typical landlord expenses; grazing lands have been properly classified and valued; the number of acres in each class and subclass have been determined; the capitalization rate was properly applied. Also, documentation was required for the valuation methods used and any locally developed yields, carrying capacities, and expenses. Records were also checked to ensure that the commodity prices and expenses, furnished by the Property Tax Administrator (PTA), were applied properly. (See Assessor Reference Library Volume 3 Chapter 5.)

Conclusions

An analysis of the agricultural land data indicates an acceptable appraisal of this property type. Directives, commodity prices and expenses provided by the PTA were 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:

Costilla 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	23,323	77.00	1,792,715	1,770,202	1.01
4117	Flood	20,027	62.00	1,245,476	1,260,629	0.99
4137	Meadow Hay	4,352	97.00	423,333	424,853	1.00
4147	Grazing	212,630	10.00	2,157,342	2,157,342	1.00
4177	Forest	170,956	2.00	3,719,056	3,719,056	1.00
4167	Waste	109,886	2.00	177,352	177,352	1.00
Total/Avg		**541,174**	**18.00**	**9,515,273**	**9,509,433**	**1.00**

Recommendations

None

Agricultural Outbuildings

Methodology

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

Conclusions

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

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 2011 for Costilla 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 but two of the sales selected in the sample gave reasons that were clear and supportable. Two sales had insufficient documentation.

Conclusions

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

Recommendations

None

ECONOMIC AREA REVIEW AND EVALUATION

Methodology

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

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

0

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2011 in Costilla 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

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

Recommendations

None

POSSESSORY INTEREST PROPERTIES

Costilla County is exempt from the Possessory Interest Study.

PERSONAL PROPERTY AUDIT

Costilla 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.

Costilla 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:

- 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.

Costilla County submitted their personal property written audit plan and was current for the 2011 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- New businesses filing for the first time
- Incomplete or inconsistent declarations
- Non-filing Accounts - Best Information Available
- Accounts protested with substantial disagreement
- Accounts not over $5,500 limit within the last 5 years

Conclusions

Costilla 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*

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Steve Kane, *Audit Statistician/Field Analyst*

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

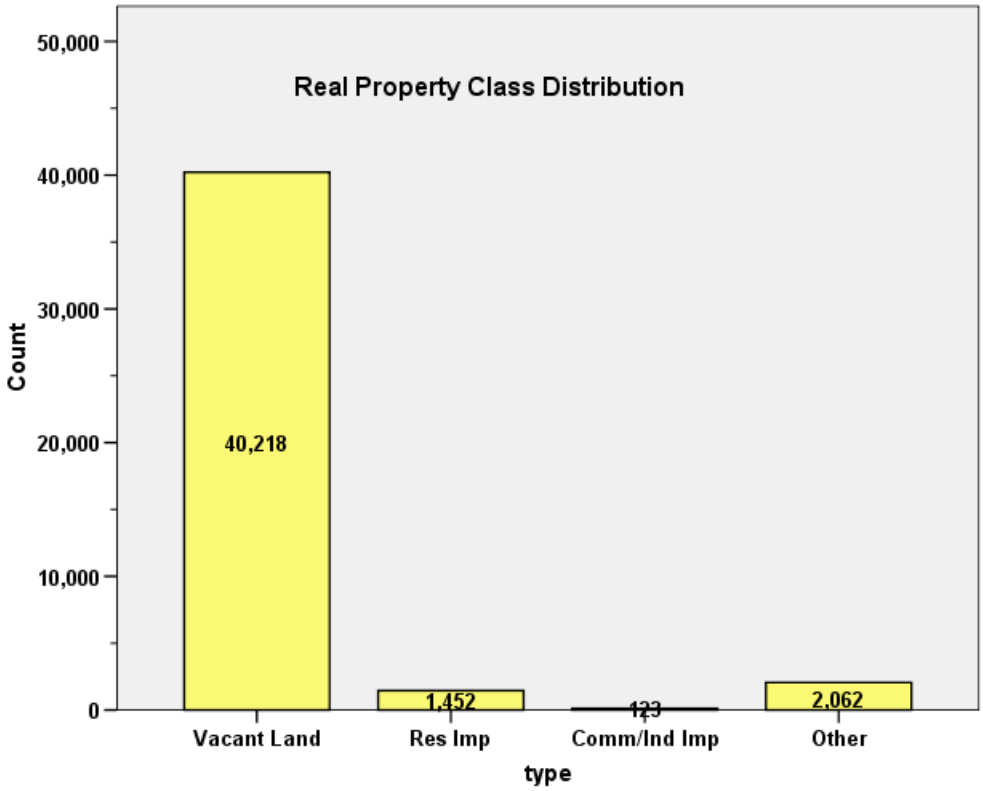
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE REPORT
FOR COSTILLA COUNTY
2011

I. OVERVIEW

Costilla County is located in south central Colorado. The county has a total of 43,855 real property parcels, according to data submitted by the county assessor's office in 2011. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100) accounted for 96% of all vacant land parcels.

For residential improved properties, single family properties accounted for over 99% of all residential real property.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 0.3% of all such properties in this county.

II. DATA FILES

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

III. RESIDENTIAL SALES RESULTS

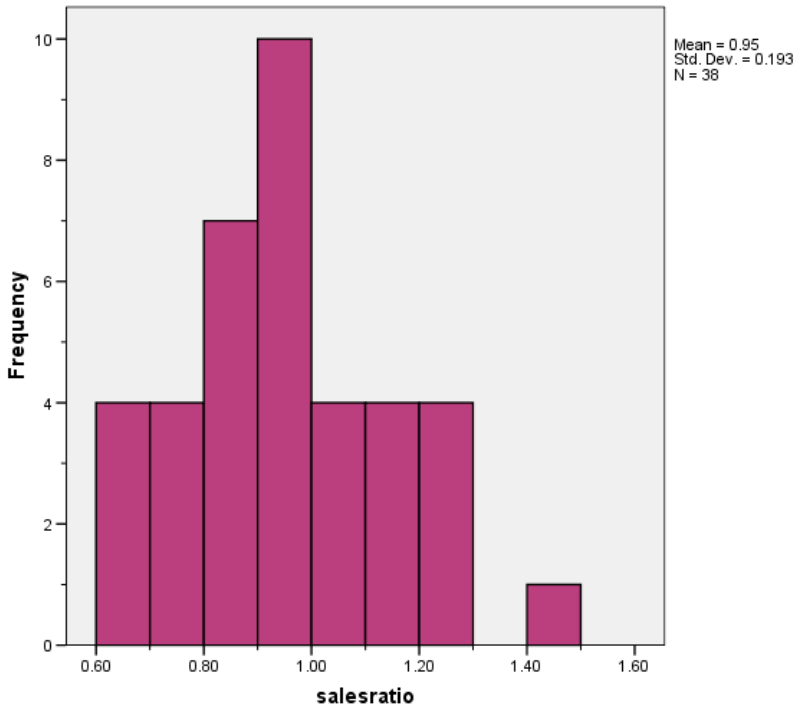
The following steps were taken to analyze the residential sales:

1. Total sales	2,038
2. Select qualified sales	330
3. Select improved sales	45
4. Select residential sales only	38

The sales ratio analysis results were as follows:

Median	**0.958**
Price Related Differential	**1.006**
Coefficient of Dispersion	**.159**

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.

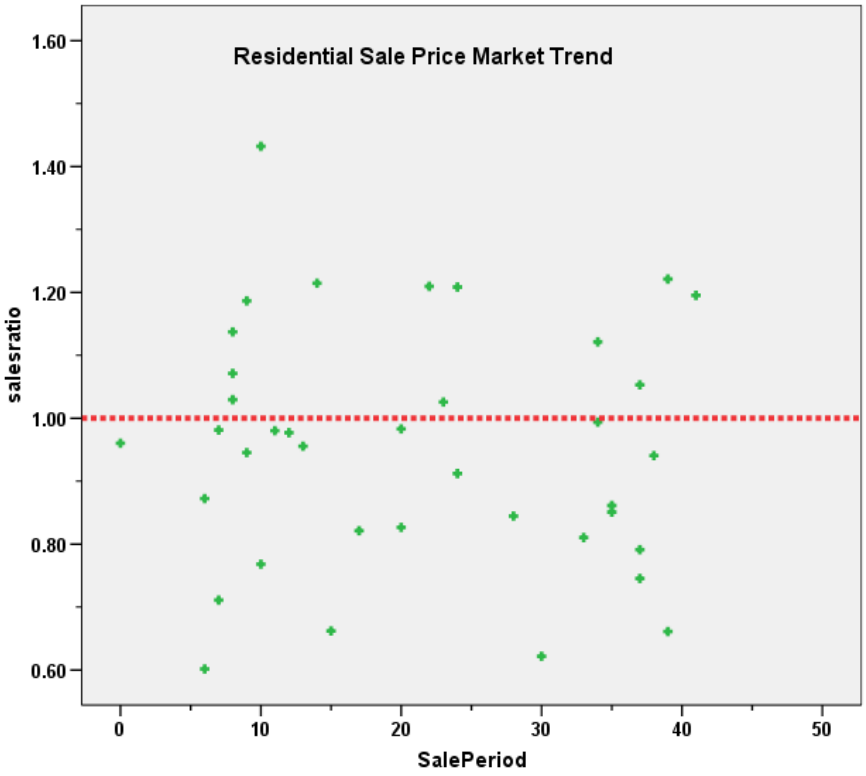
Residential Market Trend Analysis

We next analyzed the residential dataset using the 42-month sale period for any residual market trending, with the following results:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.974	.062		15.594	.000
	SalePeriod	-.001	.003	-.068	-.406	.687

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 and mean change in value between both groups between 2010 and 2011, as follows:

Group	No. Props	Median Val Chg	Mean Val Chg
Unsold	1,388	.9934	1.0274
Sold	38	.9899	1.0240

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

IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

Costilla County did not have enough qualified commercial/industrial sales to be statistically significant. A procedural audit was completed for taxable year 2011. 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 Costilla County is in compliance due to the lack of substantive data to support a revaluation decision.

V. VACANT LAND SALE RESULTS

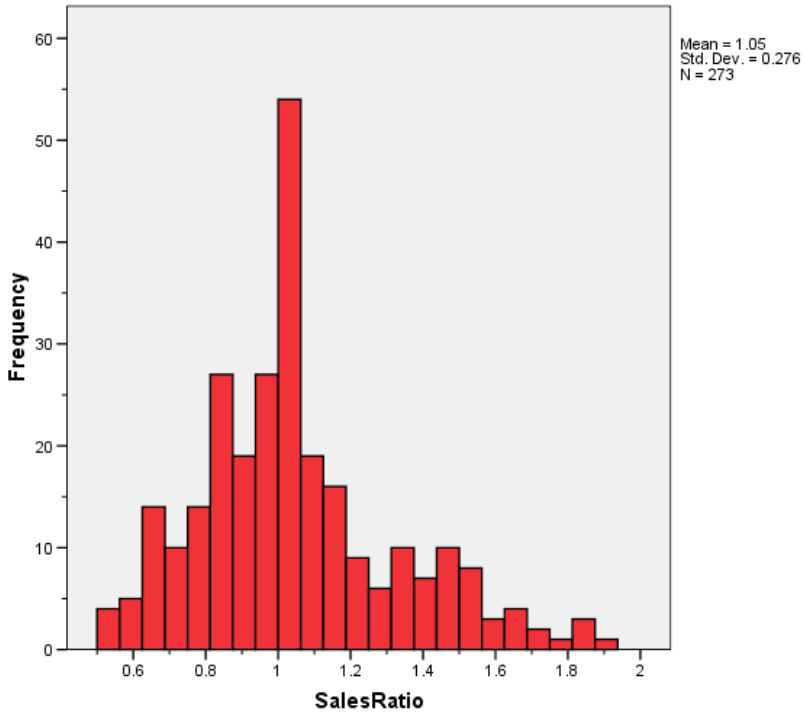
The following steps were taken to analyze vacant land sales:

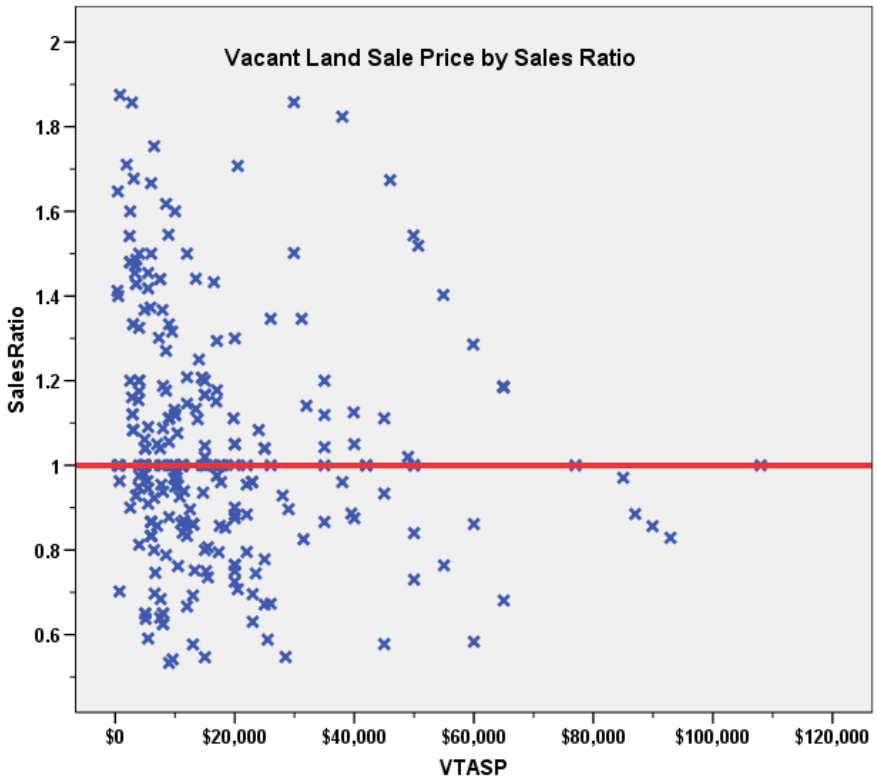
1. Total sales	2,038
2. Select qualified sales	330
3. Select vacant land sales	281
4. Select non-agricultural sales	279
5. Remove 6 extreme ratios	273

The sales ratio analysis results were as follows:

Median	**1.000**
Price Related Differential	**1.033**
Coefficient of Dispersion	**0.203**

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





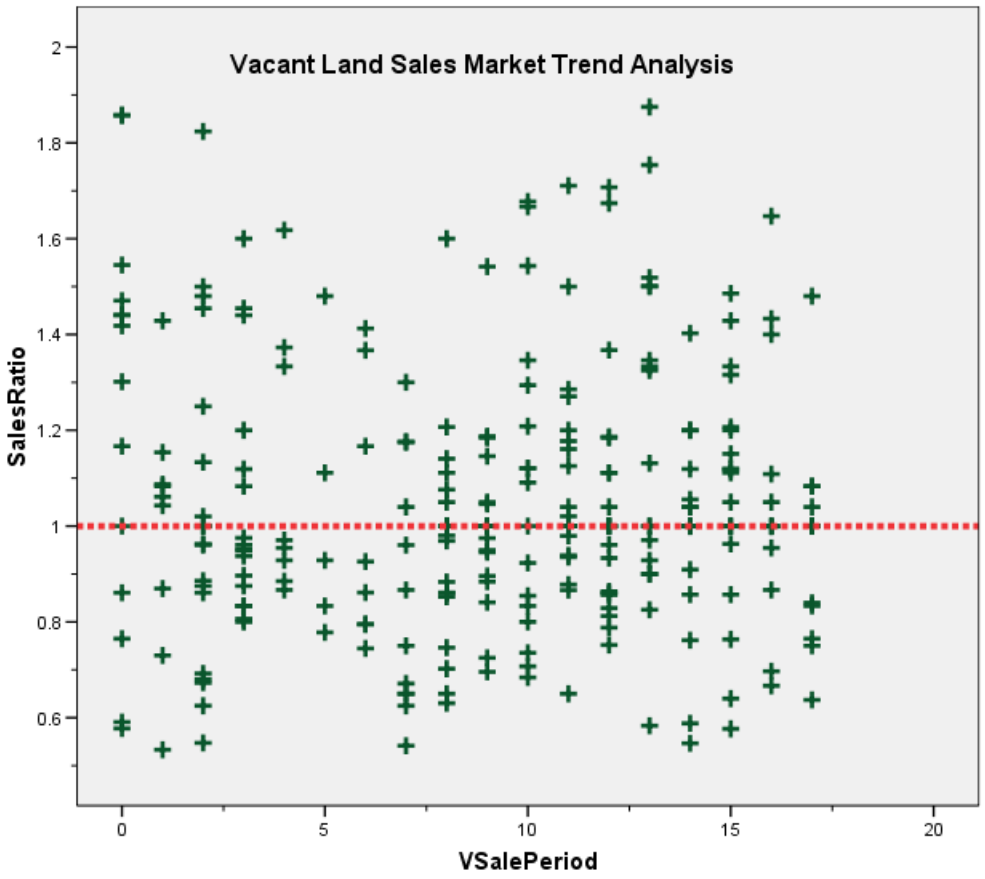
Vacant Land Market Trend Analysis

The assessor did not apply any market trend adjustments to the vacant land dataset. The 273 vacant land sales were analyzed, examining the sale ratios across the 18 month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.059	.035		30.439	.000
	VSalePeriod	-.001	.003	-.026	-.428	.669

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 Costilla County.

Sold/Unsold Analysis

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

Group	N	Median	Mean
Unsold	39,915	1.00	1.09
Sold	273	1.00	1.02

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 Costilla County. We focused on Neighborhood 100, where most agricultural residential properties are located.

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

Type	N	Median	Mean
1212	269	$38.44	$39.26
4277	128	$34.70	$35.84

VI. CONCLUSIONS

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

STATISTICAL ABSTRACT
Residential

Ratio Statistics for Current Total / TASP

	95% Confidence Interval for Mean			95% Confidence Interval for Median				95% Confidence Interval for Weighted Mean				Coefficient of Variation
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
.952	.889	1.016	.958	.851	1.026	96.6%	.947	.884	1.010	1.006	.159	20.2%

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

Vacant Land

Ratio Statistics for Current Land / VTASP

	95% Confidence Interval for Mean			95% Confidence Interval for Median				95% Confidence Interval for Weighted Mean				Coefficient of Variation
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
1.046	1.013	1.079	1.000	.999	1.000	96.1%	1.012	.969	1.055	1.033	.203	26.4%

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

Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	1	2.6%
	$25K to $50K	2	5.3%
	$50K to $100K	10	26.3%
	$100K to $150K	20	52.6%
	$150K to $200K	3	7.9%
	$200K to $300K	1	2.6%
	$300K to $500K	1	2.6%
Overall		38	100.0%
Excluded		0	
Total		38	

Ratio Statistics for Current Total / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	.980	1.000	.000	.%
$25K to $50K	.847	1.005	.030	4.3%
$50K to $100K	1.106	1.001	.106	11.6%
$100K to $150K	.836	1.005	.177	24.7%
$150K to $200K	.981	1.011	.086	16.5%
$200K to $300K	1.053	1.000	.000	.%
$300K to $500K	1.071	1.000	.000	.%
Overall	.958	1.006	.159	20.1%

Age

Case Processing Summary

		Count	Percent
AgeRec	75 to 100	2	5.3%
	50 to 75	3	7.9%
	25 to 50	18	47.4%
	5 to 25	13	34.2%
	5 or Newer	2	5.3%
Overall		38	100.0%
Excluded		0	
Total		38	

Ratio Statistics for Current Total / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
75 to 100	.926	1.011	.058	8.2%
50 to 75	1.195	.996	.071	13.9%
25 to 50	.839	1.035	.176	23.3%
5 to 25	.981	.987	.123	17.2%
5 or Newer	1.252	1.071	.144	20.4%
Overall	.958	1.006	.159	20.1%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	1	2.6%
	500 to 1,000 sf	7	18.4%
	1,000 to 1,500 sf	17	44.7%
	1,500 to 2,000 sf	8	21.1%
	2,000 to 3,000 sf	4	10.5%
	3,000 sf or Higher	1	2.6%
Overall		38	100.0%
Excluded		0	
Total		38	

Ratio Statistics for Current Total / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.980	1.000	.000	.%
500 to 1,000 sf	.861	1.049	.215	28.1%
1,000 to 1,500 sf	.873	1.011	.166	20.8%
1,500 to 2,000 sf	.970	1.015	.149	22.3%
2,000 to 3,000 sf	1.051	1.013	.094	11.6%
3,000 sf or Higher	1.071	1.000	.000	.%
Overall	.958	1.006	.159	20.1%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	0	1	2.6%
	1	9	23.7%
	2	23	60.5%
	3	3	7.9%
	4	1	2.6%
	9	1	2.6%
Overall		38	100.0%
Excluded		0	
Total		38	

Ratio Statistics for Current Total / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.873	1.000	.000	.%
1	.960	1.036	.121	18.4%
2	.956	1.026	.185	22.6%
3	1.053	.996	.110	16.6%
4	1.071	1.000	.000	.%
9	.941	1.000	.000	.%
Overall	.958	1.006	.159	20.1%

Vacant Land Median Ratio Stratification

Case Processing Summary

		Count	Percent
AbstrInd	100	262	96.0%
	530	1	.4%
	540	2	.7%
	550	4	1.5%
	1112	4	1.5%
Overall		273	100.0%
Excluded		0	
Total		273	

Ratio Statistics for Current Land / VTASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100	1.000	1.041	.199	27.5%
530	.900	1.000	.000	.%
540	1.096	1.157	.368	52.1%
550	1.250	.924	.270	33.6%
1112	.923	.856	.244	33.8%
Overall	1.000	1.033	.203	28.0%