



2010 PUEBLO COUNTY PROPERTY ASSESSMENT STUDY



WILDROSE
APPRAISAL, INCORPORATED
Audit Division



September 15, 2010

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

RE: Final Report for the 2010 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2010 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



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 2010 and is pleased to report its findings for Pueblo County in the following report.

REGIONAL/HISTORICAL SKETCH OF PUEBLO COUNTY

Regional Information

Pueblo County is located in the Front Range region of Colorado. The Colorado Front Range is a colloquial geographic term for the populated areas of the State that are just east of the foothills of the Front Range. It includes

Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld counties.





Historical Information

Pueblo County has a population of approximately 157,224 people with 59.2 people per square mile, according to the U.S. Census Bureau's 2009 estimated population data.

Pueblo County, one of the seventeen original territorial counties, was established in 1861 with an area of 2,405 square miles. The county was named for its county seat, Pueblo, Spanish for “town” or “village.” Originally called Independence, it had been a settlement for many years, occupied at times by Spaniards, trappers, Indian traders, and Mexicans.

Pueblo is a Home Rule Municipality and is the county seat and the most populous city of Pueblo County. It is situated at the confluence of the Arkansas River and Fountain Creek. The area is considered to be semi-arid with approximately 14 inches of precipitation annually; however with its location in the "banana belt," Pueblo tends to get less snow

than the other major cities in Colorado. Pueblo is one of the largest steel-producing cities in the United States. Because of this, Pueblo is referred to as the "Steel City." Many consider Pueblo to be the economic hub of south eastern Colorado. Due to this some people call Pueblo "Colorado's second city" even though Pueblo is the state's ninth most populous city. It is now home to a number of electronics and aviation companies. The Historic Arkansas River Project (HARP) is a beautiful river walk that graces the historic Union Avenue district. It shows the history of the Pueblo Flood.

Pueblo is also the home to Colorado's largest single event, the Colorado State Fair and the largest parade, the state fair parade. Pueblo also hosts an annual Chili Festival and the Wild West Fest.

(www.Wikipedia.org, William Bright, *Colorado Place Names*, 3rd Edition, Johnson Books, 2004, p. 143)

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 2007 and June 2008. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2008 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 Pueblo County are:

Pueblo County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	47	0.985	1.057	9.6	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	3,063	0.973	1.016	8.5	Compliant
Vacant Land	634	0.976	1.044	12.8	Compliant

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.982	1.032	.143
2	.974	1.014	.078
3	.978	1.018	.087
4	.976	1.024	.121
5	.969	1.020	.108
6	.978	1.004	.065
7	.973	1.004	.075
8	.971	1.013	.076
9	.963	1.020	.111
10	.994	1.008	.048
11	.974	1.016	.062
12	.979	1.025	.116
13	.963	1.008	.066
Overall	.973	1.016	.085

After applying the above described methodologies, it is concluded from the sales ratios that Pueblo 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, 2007 through June 30, 2008. 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, Pueblo 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 Pueblo County has complied with the statutory requirements to analyze the effects of time on value in their county. Pueblo 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

Pueblo 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 2009 and 2010 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	Compliant
Condominium	N/A
Single Family	Compliant
Vacant Land	Compliant

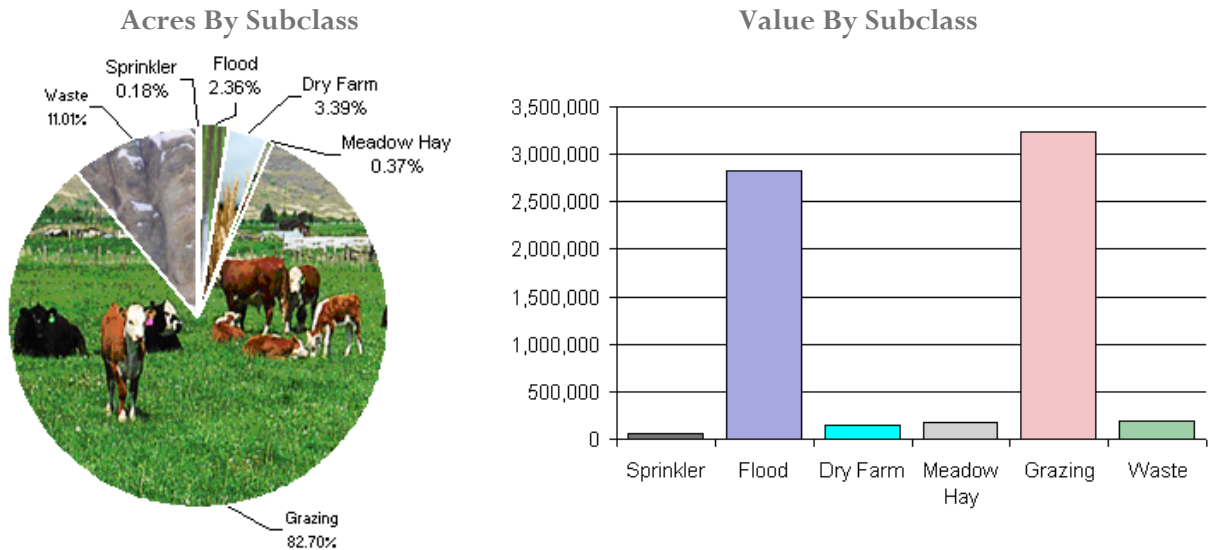
Conclusions

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



Pueblo 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	1,868	29.59	55,288	57,751	0.96
4117	Flood	24,392	116.09	2,831,523	2,769,184	1.02
4127	Dry Farm	35,087	4.13	144,795	154,978	0.93
4137	Meadow Hay	3,783	47.23	178,634	178,634	1.00
4147	Grazing	856,317	3.78	3,237,833	3,237,833	1.00
4167	Waste	113,966	1.62	184,063	184,063	1.00
Total/Avg		1,035,413	6.41	6,632,136	6,582,444	1.01

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

Pueblo 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 2010 for Pueblo County. This study was conducted by checking selected sales from the master sales list for the Jan 1, 2007 - June 30, 2008 valuation period. Specifically WRA selected 41 sales listed as unqualified.

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

Conclusions

Pueblo 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

None

ECONOMIC AREA REVIEW AND EVALUATION

Methodology

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

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2010 in Pueblo County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14) and by applying the recommended methodology in ARL Vol 3, Chap 4. Subdivision Discounting in the intervening year was accomplished by reducing the absorption period by one year. In instances where the number of sales within an approved plat was less than the absorption rate

per year calculated for the plat, the absorption period was left unchanged.

Conclusions

Pueblo 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.

Pueblo 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

Pueblo 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

Pueblo 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.

Pueblo 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:

- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth

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.

Pueblo County submitted their personal property written audit plan and was current for the 2010 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Non-filing Accounts - Best Information Available
- Accounts close to the \$4,000 actual value exemption status
- Accounts protested with substantial disagreement

Pueblo County's median ratio is 1.00. This is in compliance with the State Board of Equalization (SBOE) compliance requirements which range from .90 to 1.10 with no COD requirements.

Conclusions

Pueblo 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/Field Analyst*

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

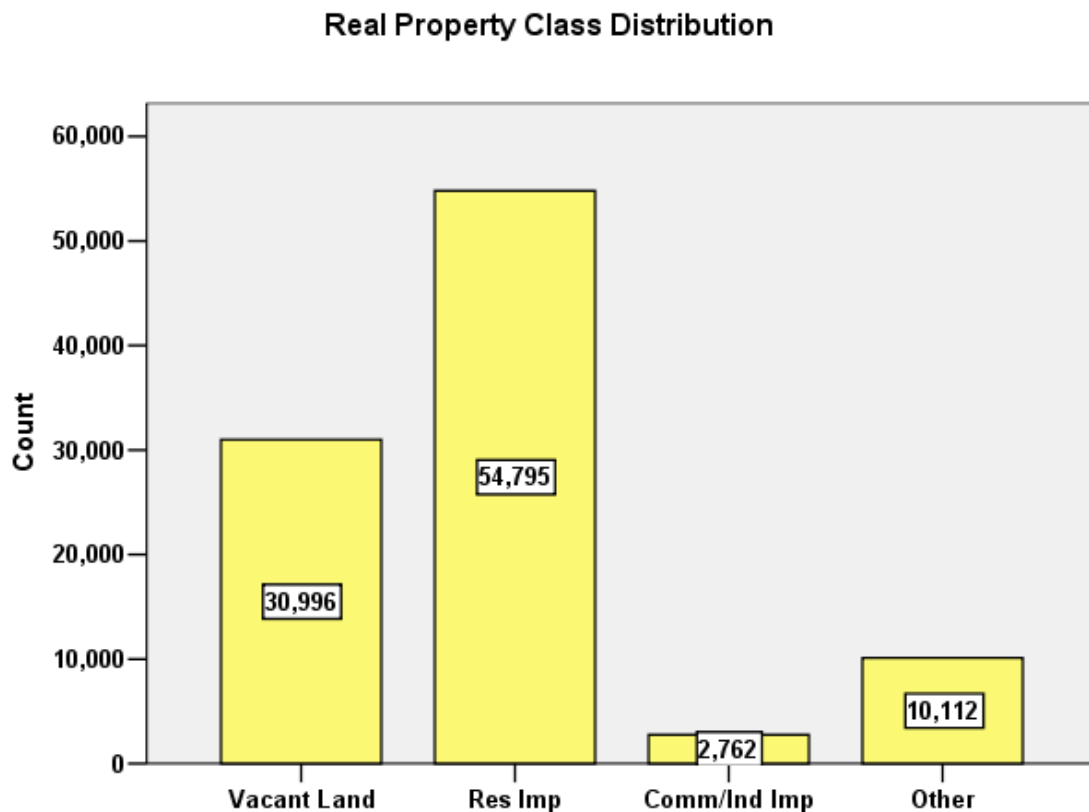
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL RESULTS FOR PUEBLO COUNTY 2010

I. OVERVIEW

Pueblo County is a southern county located along Colorado's Front Range urban corridor. The county has a total of 98,665 real property parcels, according to data submitted by the county assessor's office in 2010. 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 84% of all vacant land parcels.

For residential improved properties, single family properties accounted for 94% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 3% of all such properties in this county.

II. DATA FILES

The following sales analyses were based on the requirements of the 2010 Colorado Property Assessment Study. Information was provided by the Pueblo Assessor's Office in May 2010. 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. Qualified sales	3,784
2. Improved sales	3,138
3. Select residential sales only	3,063

The sales ratio analysis was analyzed as follows:

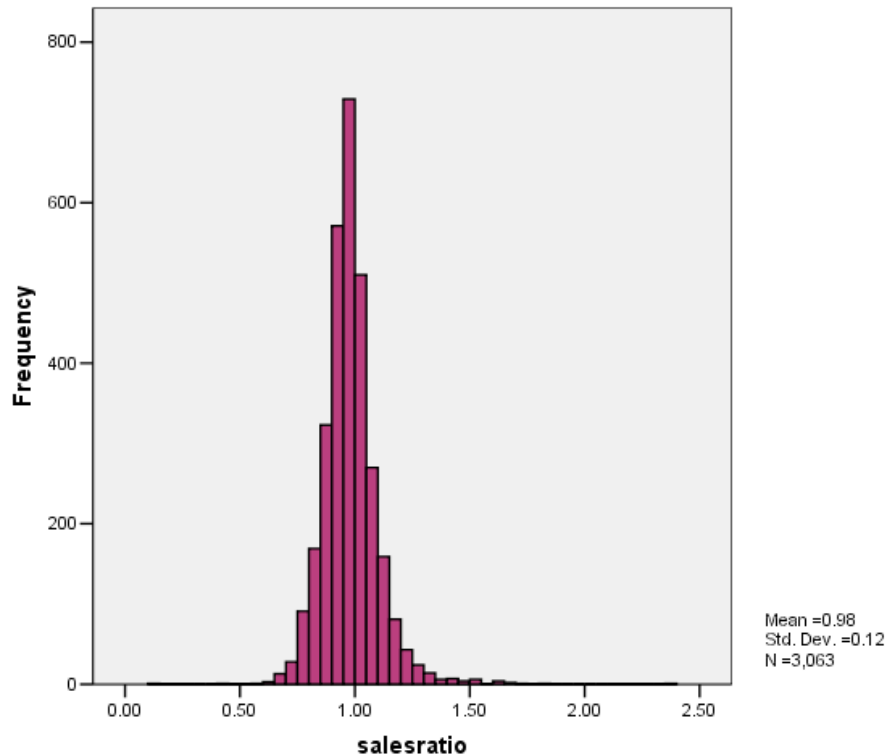
Case Processing Summary

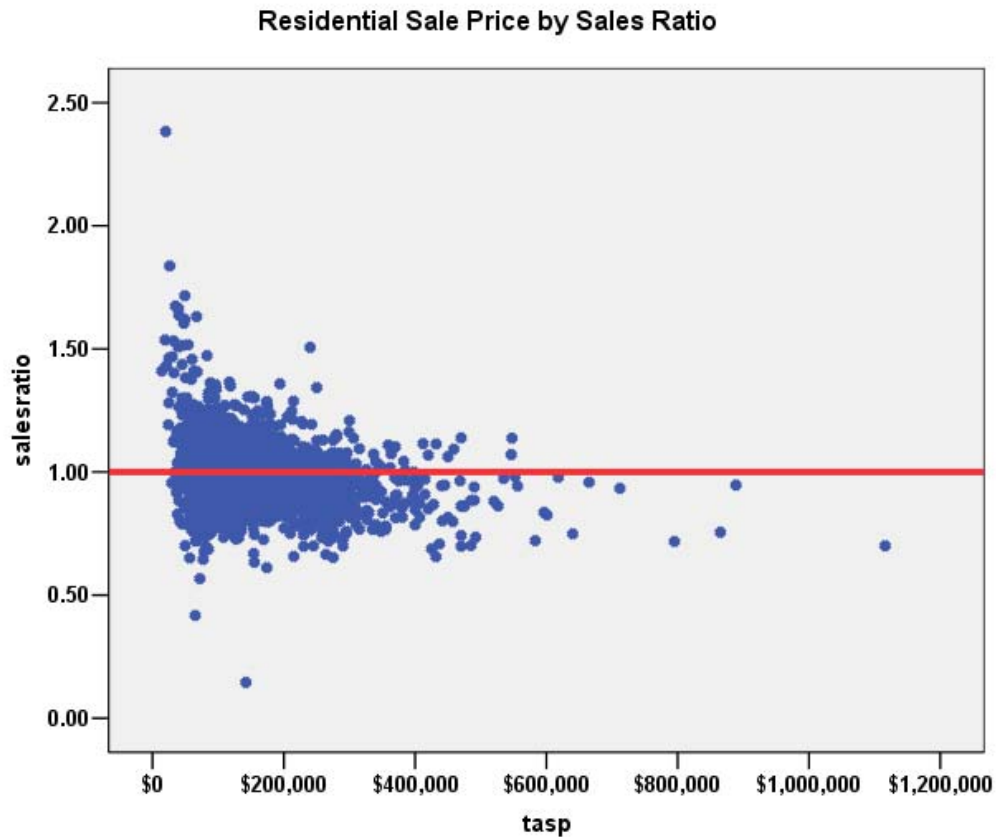
	Count	Percent
econarea 1	117	3.8%
2	208	6.8%
3	374	12.2%
4	89	2.9%
5	293	9.6%
6	229	7.5%
7	274	8.9%
8	651	21.3%
9	244	8.0%
10	104	3.4%
11	68	2.2%
12	84	2.7%
13	328	10.7%
Overall	3063	100.0%
Excluded	0	
Total	3063	

Ratio Statistics for currtot / tarp

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.982	1.032	.143
2	.974	1.014	.078
3	.978	1.018	.087
4	.976	1.024	.121
5	.969	1.020	.108
6	.978	1.004	.065
7	.973	1.004	.075
8	.971	1.013	.076
9	.963	1.020	.111
10	.994	1.008	.048
11	.974	1.016	.062
12	.979	1.025	.116
13	.963	1.008	.066
Overall	.973	1.016	.085

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.

Residential Market Trend Analysis

We next analyzed the residential dataset for any residual market trending using the 18-month sale period and broken down by economic area, as follows:



Coefficients^a

econarea	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
1	1	(Constant)	1.073	.039		27.515	.000
		SalePeriod	-.006	.003	-.159	-1.729	.087
2	1	(Constant)	1.002	.015		68.241	.000
		SalePeriod	-.002	.001	-.079	-1.139	.256
3	1	(Constant)	1.028	.014		72.038	.000
		SalePeriod	-.005	.001	-.178	-3.492	.001
4	1	(Constant)	1.071	.035		30.714	.000
		SalePeriod	-.008	.003	-.228	-2.182	.032
5	1	(Constant)	1.024	.016		62.360	.000
		SalePeriod	-.004	.002	-.132	-2.263	.024
6	1	(Constant)	.996	.011		86.869	.000
		SalePeriod	-.002	.001	-.109	-1.656	.099
7	1	(Constant)	.994	.013		79.103	.000
		SalePeriod	-.001	.001	-.051	-.849	.396
8	1	(Constant)	.979	.009		113.170	.000
		SalePeriod	-.001	.001	-.033	-.851	.395
9	1	(Constant)	.986	.020		49.867	.000
		SalePeriod	-.002	.002	-.083	-1.299	.195
10	1	(Constant)	1.006	.013		79.905	.000
		SalePeriod	-.002	.001	-.176	-1.805	.074
11	1	(Constant)	.983	.027		36.569	.000
		SalePeriod	-.001	.002	-.062	-.506	.614
12	1	(Constant)	.986	.037		26.768	.000
		SalePeriod	.003	.004	.099	.896	.373
13	1	(Constant)	.967	.010		94.585	.000
		SalePeriod	-.001	.001	-.065	-1.169	.243

a. Dependent Variable: salesratio

There was no significant residual market trending present in the sale ratio data for any of the economic areas. While several economic areas had statistically significant residual trends, the magnitude of those trends was not significant. We therefore concluded 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 2010 between each group. The data was analyzed broken down by economic area, as follows:

Econarea	Group	N	Median	Mean
1	Unsold	4480	\$67	\$516
	Sold	117	\$71	\$72
2	Unsold	3773	\$103	\$109
	Sold	208	\$106	\$114
3	Unsold	4603	\$95	\$99
	Sold	374	\$97	\$103
4	Unsold	3360	\$75	\$140
	Sold	89	\$74	\$77
5	Unsold	5431	\$91	\$94
	Sold	293	\$92	\$95
6	Unsold	3866	\$115	\$112
	Sold	229	\$114	\$117
7	Unsold	5068	\$113	\$281
	Sold	274	\$124	\$121
8	Unsold	7306	\$117	\$114
	Sold	651	\$122	\$120
9	Unsold	7138	\$106	\$984
	Sold	244	\$111	\$110
10	Unsold	943	\$108	\$110
	Sold	104	\$110	\$111
11	Unsold	1013	\$66	\$73
	Sold	68	\$99	\$97
12	Unsold	2314	\$68	\$71
	Sold	84	\$81	\$83
13	Unsold	1633	\$113	\$112
	Sold	328	\$115	\$115
Total	Unsold	50928	\$99	\$283
	Sold	3063	\$109	\$109

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



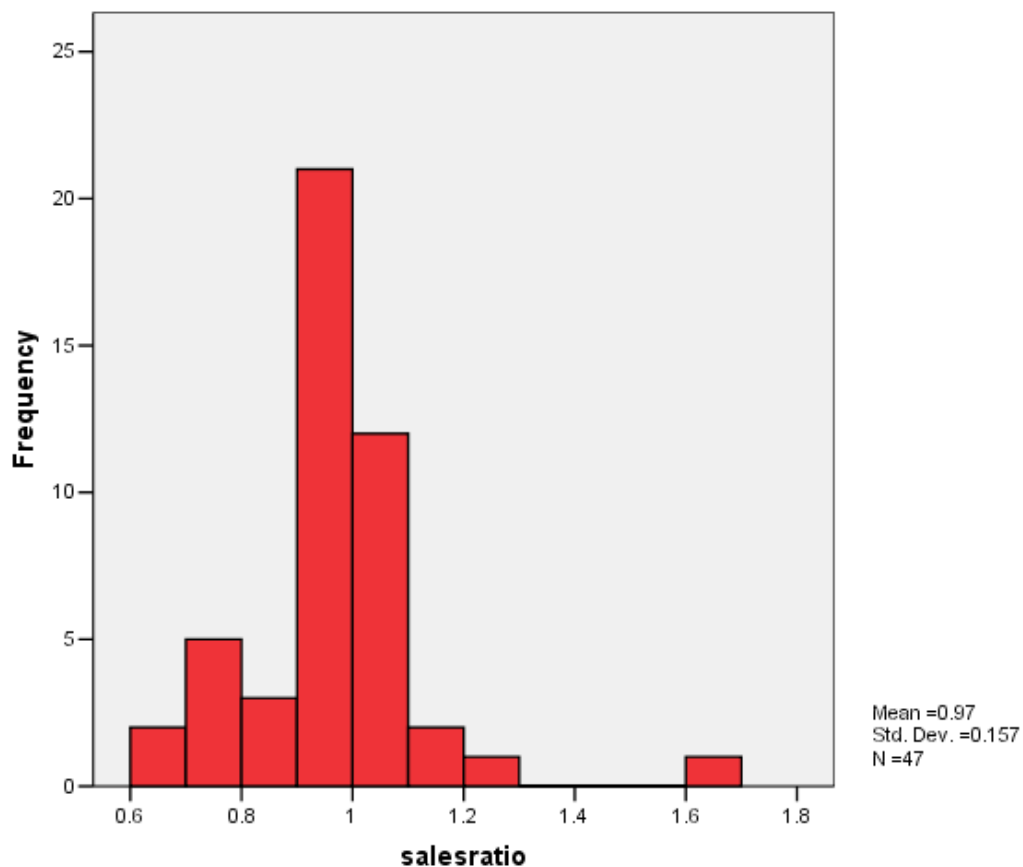
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

1. Qualified sales	3,787
2. Improved sales	3,118
3. Select commercial/industrial sales only	47
4. Sales between January 1, 2007 and June 30, 2008	47

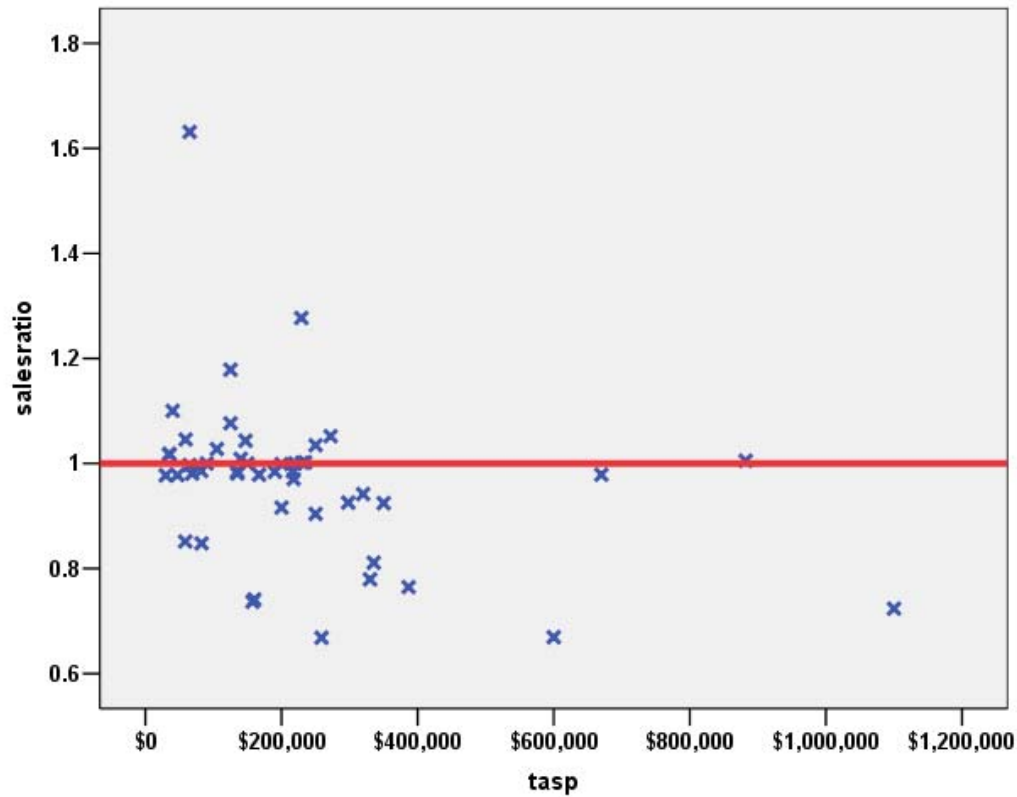
The sales ratio analysis was analyzed as follows:

Median	0.985
Price Related Differential	1.057
Coefficient of Dispersion	.096

The above table indicates that the Pueblo County commercial/industrial sales ratios were in compliance with the SBOE standards. The following histogram and scatter plot describe the sales ratio distribution further:



Commercial Sale Price by Sales Ratio



Commercial/Industrial Market Trend Analysis

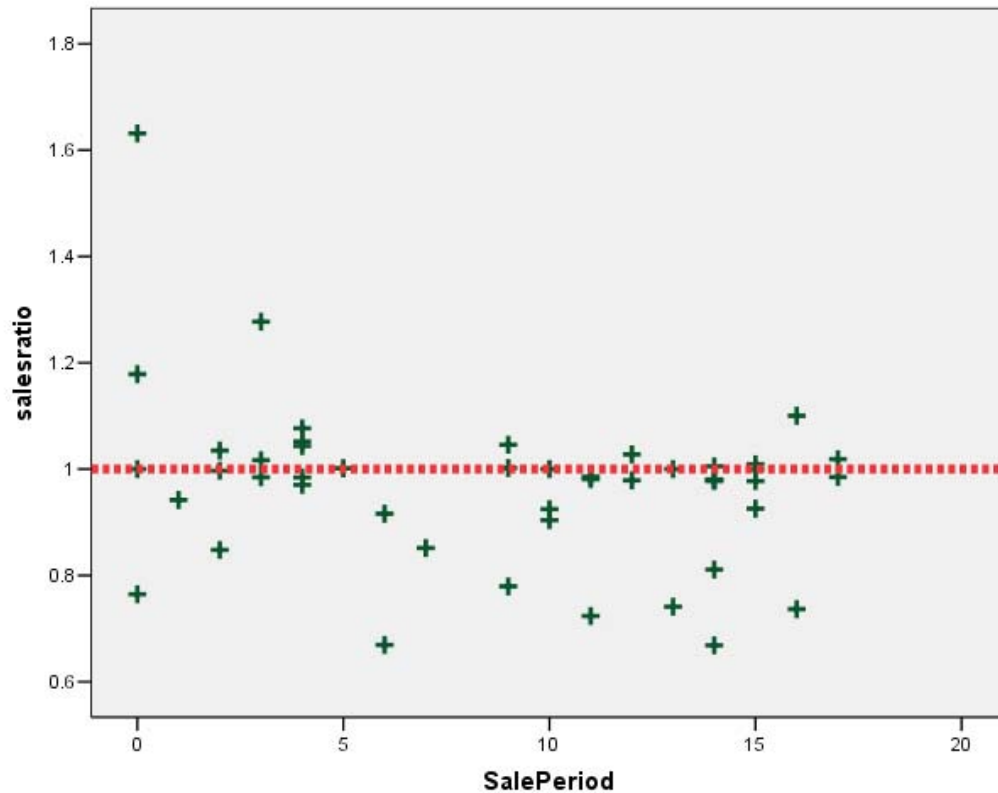
The 47 commercial/industrial sales were analyzed, examining the sale ratios across the 18 month sale period with the following results:

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.040	.042		24.742	.000
	SalePeriod	-.008	.004	-.287	-2.006	.051

a. Dependent Variable: salesratio

Commercial Market Trend Analysis



There was no residual market trending present in the commercial sale ratios. We concluded that the assessor has adequately considered market trending adjustments as part of the commercial/industrial valuation.

Sold/Unsold Analysis

We compared the median actual value per square foot for commercial/industrial properties to determine if sold and unsold properties were valued consistently, as follows:

Group	No.	Median	Mean
Unsold	2,397	\$47	\$64
Sold	47	\$54	\$69

The above results indicated that sold and unsold commercial/industrial properties were valued consistently.

V. VACANT LAND SALE RESULTS

The following steps were taken to analyze the vacant land sales:

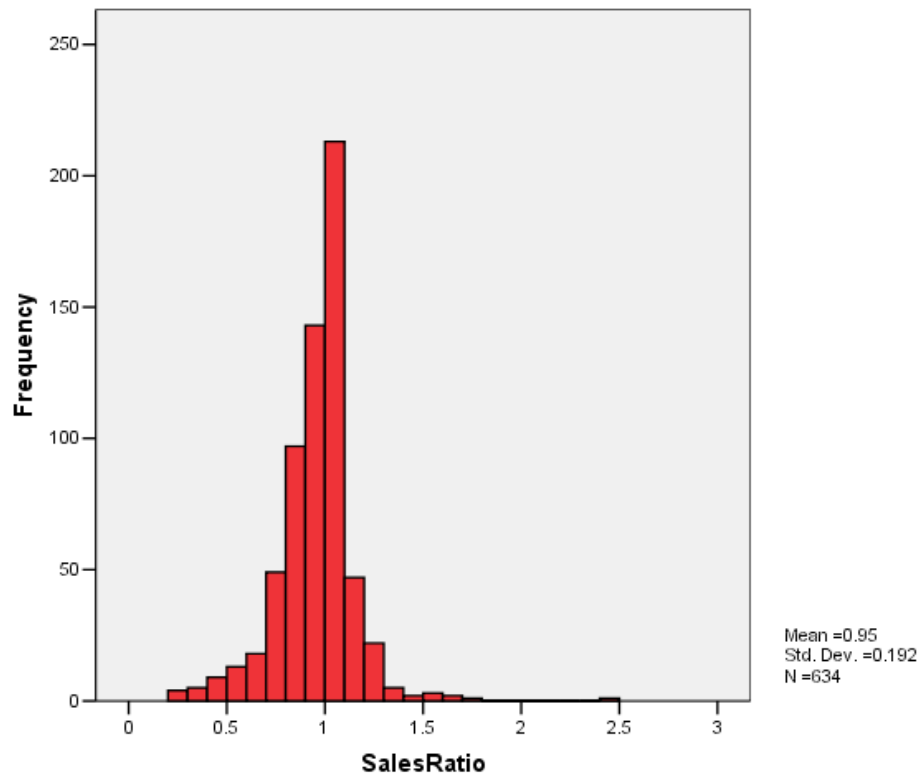
- | | |
|----------------------|-------|
| 1. Qualified sales | 3,787 |
| 2. Vacant land sales | 634 |

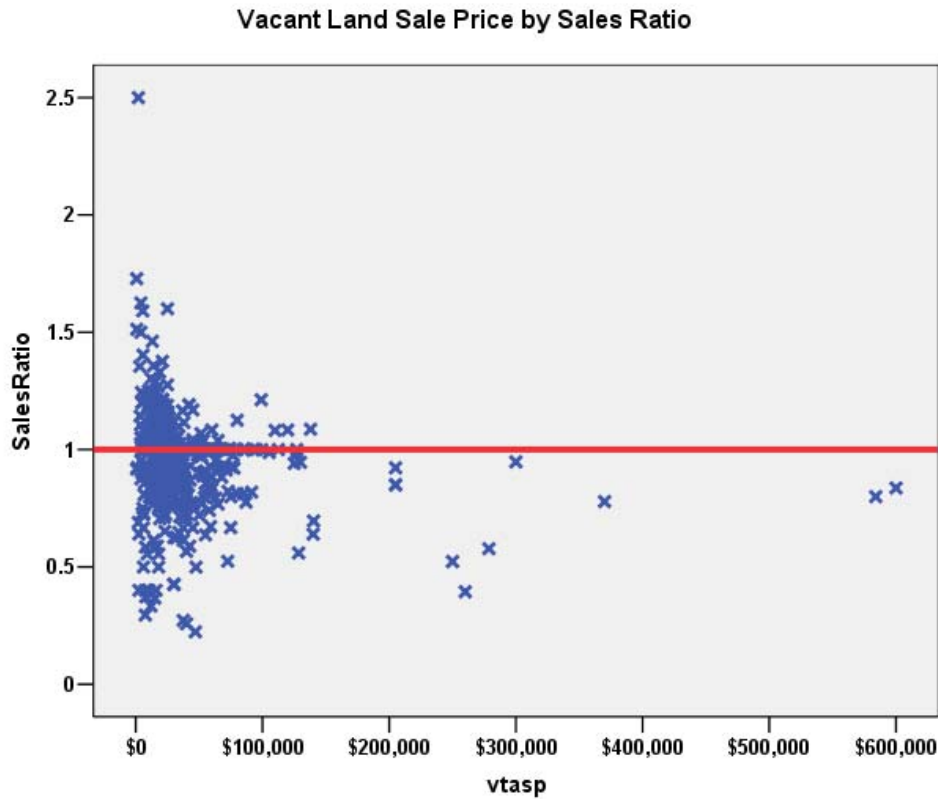
The sales ratio analysis was analyzed as follows:

Ratio Statistics for currInd / Vtasp

Median	0.976
Price Related Differential	1.044
Coefficient of Dispersion	.128

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





The above histogram indicates that the distribution of the vacant land sale ratios was within state mandated limits, while the above scatter plot indicated that there were no price related differential issues. No sales were trimmed.

Vacant Land Market Trend Analysis

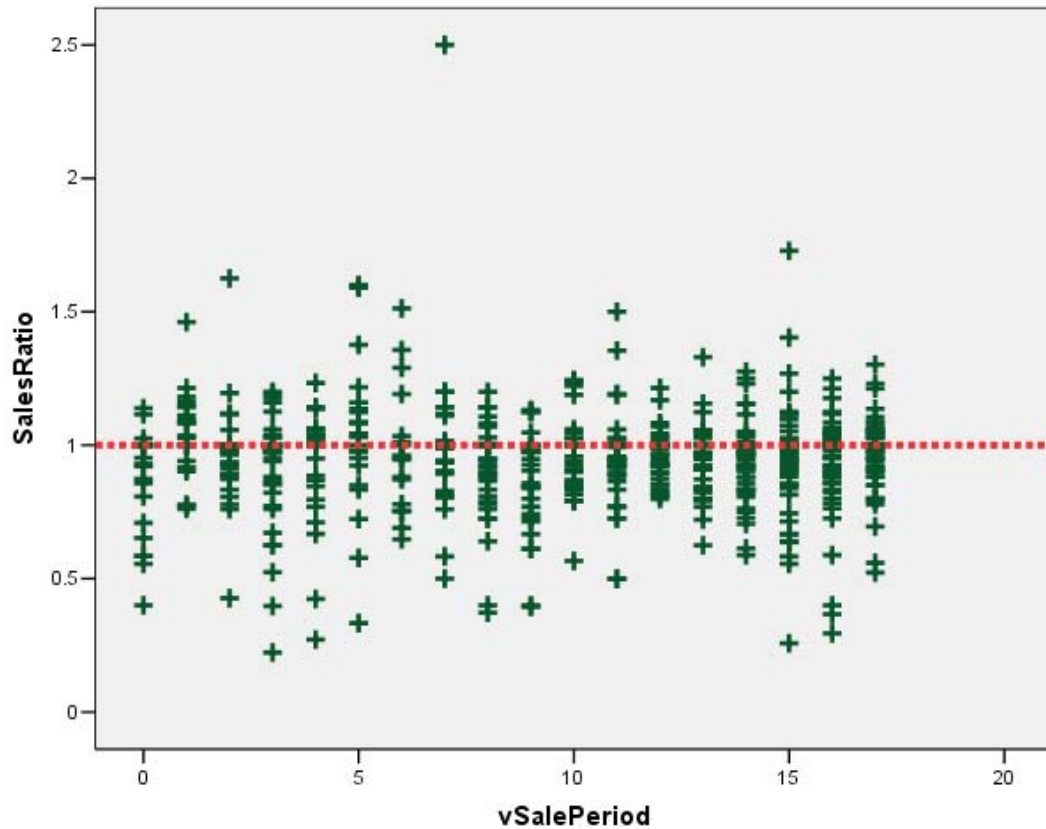
We next analyzed the vacant land dataset using the 18-month sale period and stratified by economic area, with the following results:

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.946	.017		57.090	.000
vSalePeriod	.000	.001	.004	.095	.925

a. Dependent Variable: SalesRatio

Vacant Land Sales Market Trend Analysis



The above analysis indicated that no significant market trending was present in the vacant land sale data. We concluded that the assessor has adequately dealt with market trending for vacant land properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold vacant land properties, we compared the median change in value for 2008 and 2010 between each group, as follows:

Group	N	Median	Mean
Unsold	30,265	1.00	1.00
Sold	634	1.00	1.00

Overall, we concluded that the county assessor valued sold and unsold vacant land properties consistently.

V. AGRICULTURAL IMPROVEMENTS ANALYSIS

The final verification concerned the assigned actual values for agricultural residential improvements. We compared the median improved value per square foot rate for this subclass and compared it to the median improved value per square foot for residential single family improvements in Pueblo County.

The following indicates that both groups were valued in essentially the same manner:

Descriptives				Statistic	Std. Error
abstrimp					
ImpValSF	1212	Mean		\$89.49	\$.113
		95% Confidence Interval for Mean	Lower Bound	\$89.26	
			Upper Bound	\$89.71	
		5% Trimmed Mean		\$89.15	
		Median		\$88.56	
		Variance		663.774	
		Std. Deviation		\$25.764	
		Minimum		\$0	
		Maximum		\$637	
		Range		\$637	
		Interquartile Range		\$34	
		Skewness		.692	.011
		Kurtosis		7.213	.022
	4277	Mean		\$96.58	\$1.599
		95% Confidence Interval for Mean	Lower Bound	\$93.44	
			Upper Bound	\$99.72	
		5% Trimmed Mean		\$94.71	
		Median		\$91.94	
		Variance		1527.217	
		Std. Deviation		\$39.080	
		Minimum		\$13	
		Maximum		\$313	
		Range		\$300	
		Interquartile Range		\$51	
		Skewness		.890	.100
		Kurtosis		1.812	.200

VI. Conclusions

Based on this 2010 audit statistical analysis for Pueblo County, residential, commercial industrial, vacant land and agricultural residential properties were found to be in compliance with state guidelines.



STATISTICAL ABSTRACT

Residential

Ratio Statistics for currtot / tasp

Mean		.980
95% Confidence Interval for Mean	Lower Bound	.976
	Upper Bound	.984
Median		.973
95% Confidence Interval for Median	Lower Bound	.969
	Upper Bound	.976
	Actual Coverage	95.3%
Weighted Mean		.965
95% Confidence Interval for Weighted Mean	Lower Bound	.960
	Upper Bound	.969
Price Related Differential		1.016
Coefficient of Dispersion		.085
Coefficient of Variation	Mean Centered	12.3%

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

Commercial Land

Ratio Statistics for currtot / tasp

Mean		.968
95% Confidence Interval for Mean	Lower Bound	.922
	Upper Bound	1.014
Median		.985
95% Confidence Interval for Median	Lower Bound	.978
	Upper Bound	1.000
	Actual Coverage	96.0%
Weighted Mean		.916
95% Confidence Interval for Weighted Mean	Lower Bound	.854
	Upper Bound	.978
Price Related Differential		1.057
Coefficient of Dispersion		.096
Coefficient of Variation	Mean Centered	16.2%

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 currInd / vtask

Mean		.947
95% Confidence Interval for Mean	Lower Bound	.932
	Upper Bound	.962
Median		.976
95% Confidence Interval for Median	Lower Bound	.957
	Upper Bound	1.000
	Actual Coverage	95.7%
Weighted Mean		.907
95% Confidence Interval for Weighted Mean	Lower Bound	.885
	Upper Bound	.930
Price Related Differential		1.044
Coefficient of Dispersion		.128
Coefficient of Variation	Mean Centered	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.

Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	7	.2%
	\$25K to \$50K	62	2.0%
	\$50K to \$100K	597	19.5%
	\$100K to \$150K	900	29.4%
	\$150K to \$200K	855	27.9%
	\$200K to \$300K	497	16.2%
	\$300K to \$500K	127	4.1%
	\$500K to \$750K	14	.5%
	\$750K to \$1,000K	3	.1%
	Over \$1,000K	1	.0%
Overall		3063	100.0%
Excluded		0	
Total		3063	



Ratio Statistics for currtot / tarp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
LT \$25K	1.432	1.010	.150	28.5%
\$25K to \$50K	1.087	1.006	.187	25.2%
\$50K to \$100K	.986	1.002	.108	14.5%
\$100K to \$150K	.978	1.000	.074	10.0%
\$150K to \$200K	.981	1.000	.065	8.7%
\$200K to \$300K	.947	1.002	.076	10.4%
\$300K to \$500K	.907	1.002	.090	11.3%
\$500K to \$750K	.938	1.002	.094	12.5%
\$750K to \$1,000K	.755	.995	.101	18.3%
Over \$1,000K	.700	1.000	.000	.
Overall	.973	1.016	.085	12.4%

Subclass

Case Processing Summary

	Count	Percent
PredUse 1112	2993	97.7%
1115	1	.0%
1130	69	2.3%
Overall	3063	100.0%
Excluded	0	
Total	3063	

Ratio Statistics for currtot / tarp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
1112	.973	1.016	.086	12.4%
1115	1.104	1.000	.000	.
1130	.972	1.015	.062	9.3%
Overall	.973	1.016	.085	12.4%



Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	158	5.2%
	75 to 100	177	5.8%
	50 to 75	485	15.8%
	25 to 50	532	17.4%
	5 to 25	718	23.4%
	5 or Newer	993	32.4%
Overall		3063	100.0%
Excluded		0	
Total		3063	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
Over 100	.967	1.052	.147	23.7%
75 to 100	.977	1.026	.126	17.3%
50 to 75	.983	1.011	.101	13.6%
25 to 50	.964	1.005	.083	11.5%
5 to 25	.978	1.010	.076	10.6%
5 or Newer	.971	1.013	.068	9.3%
Overall	.973	1.016	.085	12.4%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	2	.1%
	500 to 1,000 sf	647	21.1%
	1,000 to 1,500 sf	1299	42.4%
	1,500 to 2,000 sf	793	25.9%
	2,000 to 3,000 sf	304	9.9%
	3,000 sf or Higher	18	.6%
Overall		3063	100.0%
Excluded		0	
Total		3063	



Ratio Statistics for currtot / tarp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
LE 500 sf	.925	1.390	.549	77.6%
500 to 1,000 sf	.960	1.021	.109	16.7%
1,000 to 1,500 sf	.983	1.008	.075	10.7%
1,500 to 2,000 sf	.965	1.013	.080	10.7%
2,000 to 3,000 sf	.969	1.023	.085	12.1%
3,000 sf or Higher	.949	1.019	.078	11.8%
Overall	.973	1.016	.085	12.4%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	\$25K to \$50K	5	10.6%
	\$50K to \$100K	8	17.0%
	\$100K to \$150K	8	17.0%
	\$150K to \$200K	6	12.8%
	\$200K to \$300K	11	23.4%
	\$300K to \$500K	5	10.6%
	\$500K to \$750K	2	4.3%
	\$750K to \$1,000K	1	2.1%
	Over \$1,000K	1	2.1%
Overall		47	100.0%
Excluded		0	
Total		47	



Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
\$25K to \$50K	1.017	.999	.032	4.9%
\$50K to \$100K	.991	1.007	.127	25.7%
\$100K to \$150K	1.018	1.002	.043	6.7%
\$150K to \$200K	.947	.991	.100	14.4%
\$200K to \$300K	1.000	1.004	.083	14.4%
\$300K to \$500K	.811	1.003	.079	11.2%
\$500K to \$750K	.824	.990	.188	26.6%
\$750K to \$1,000K	1.005	1.000	.000	.
Over \$1,000K	.724	1.000	.000	.
Overall	.985	1.057	.096	16.1%

Subclass

Case Processing Summary

		Count	Percent
PredUse	2112	8	17.0%
	2120	6	12.8%
	2121	1	2.1%
	2125	2	4.3%
	2130	17	36.2%
	2135	1	2.1%
	2145	6	12.8%
	3112	3	6.4%
	3115	3	6.4%
Overall		47	100.0%
Excluded		0	
Total		47	



Ratio Statistics for currtot / tarp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
2112	1.016	1.054	.113	23.8%
2120	.983	1.021	.042	9.3%
2121	1.019	1.000	.000	.
2125	.697	.989	.039	5.5%
2130	.981	1.018	.065	9.6%
2135	.985	1.000	.000	.
2145	.977	1.024	.155	22.2%
3112	.916	.985	.057	8.7%
3115	.904	.976	.110	16.6%
Overall	.985	1.057	.096	16.1%

Vacant Land Median Ratio Stratification

Case Processing Summary

		Count	Percent
vPredUse	100	192	30.3%
	200	29	4.6%
	300	6	.9%
	520	3	.5%
	530	1	.2%
	550	1	.2%
	1112	363	57.3%
	1114	22	3.5%
	1115	3	.5%
	1135	1	.2%
	2120	4	.6%
	2125	1	.2%
	2130	4	.6%
	2135	2	.3%
	3112	1	.2%
	3115	1	.2%
Overall		634	100.0%
Excluded		0	
Total		634	

Ratio Statistics for currInd / vtasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
100	.978	1.056	.171	26.9%
200	.850	1.010	.191	27.1%
300	.716	1.116	.299	37.6%
520	.762	1.091	.204	31.5%
530	.917	1.000	.000	.
550	.578	1.000	.000	.
1112	.988	1.011	.094	13.8%
1114	.941	1.033	.126	17.0%
1115	1.042	1.008	.050	10.1%
1135	1.190	1.000	.000	.
2120	.736	.952	.188	24.6%
2125	.813	1.000	.000	.
2130	.887	.998	.140	17.0%
2135	.921	.903	.174	24.6%
3112	.903	1.000	.000	.
3115	1.005	1.000	.000	.
Overall	.976	1.044	.128	19.8%