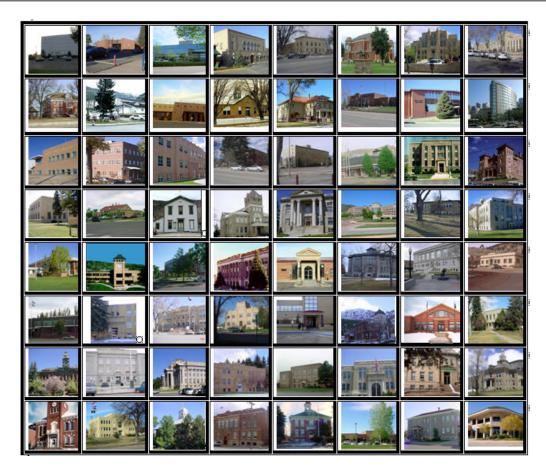


YUMA COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2014

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

RE: Final Report for the 2014 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2014 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

Harry J. Zulln

Wildrose Appraisal Inc. – Audit Division



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INTRODUCTION



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

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

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

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

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

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

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

Wildrose Audit has completed the Property Assessment Study for 2014 and is pleased to report its findings for Yuma County in the following report.

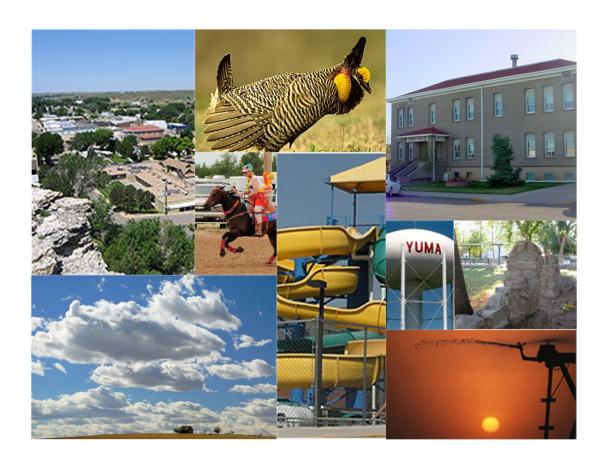


REGIONAL/HISTORICAL SKETCH OF YUMA COUNTY

Regional Information

Yuma County is located in the Eastern Plains region of Colorado. The Eastern Plains of Colorado refer to the region on the east side of the Rocky Mountain. It is east of the population centers of the Front Range,

including Baca, Bent, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln, Logan, Morgan, Otero, Phillips, Prowers, Sedgwick, Washington, and Yuma counties.





Historical Information

Yuma County has a population of approximately 10,043 people with 4.24 people per square mile, according to the U.S. Census Bureau's 2010 census data. This represents a 2.05 percent change from the 2000 Census.

Yuma County was formed in 1889 from a portion of Washington County and is located on the Northeastern Colorado Plains with Nebraska and Kansas at its border. The County Seat resides in Wray, which was named an "All-America City" in 1993 by the National Civic League. The County offers moderate summers, crisp falls, cool winters and warm springs. The county averages 260 days of sunshine and 16.7" of annual rainfall.

Yuma County offers many opportunities for recreation. Boating and fishing are popular.

Ponds, lakes and rivers are abundant, as is the wildlife. Hunters and nature lovers can see wild turkey, pheasant and deer. Visitors from all over come to Wray to view the unusual mating ritual of the Greater Prairie Chicken. Once an endangered species, the Greater Prairie Chicken has made a comeback in Northeast Colorado.

The Wray museum has a fine Smithsonian exhibit of an ancient buffalo hunt as well as Indian and prehistoric artifacts. History buffs can visit the Beecher Island Battleground, the site of one of the most bitter battles in the Indian Wars between Cheyenne Dog Soldiers and the US Calvary.

(www.northeastrpd.org, www.yumacounty.net, www.wikipedia.org)



RATIO ANALYSIS

Methodology

All significant classes of properties were analyzed. Sales were collected for each property class over the appropriate sale period, which was typically defined as the 18-month period between January 2011 and June 2012. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2012 in 6-month increments. If there were still fewer than 30 sales, supplemental appraisals were performed and treated as proxy sales. Residential sales for all counties using this method totaled at least 30 per county. For commercial sales, the total number analyzed was allowed, in some cases, to fall below 30. There were no sale quantity issues for counties requiring vacant land analysis or condominium analysis. Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and pricerelated differential for each class of property. Counties were not passed or failed by these

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

Conclusions

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

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



The results for Yuma County are:

Yuma County Ratio Grid						
Number of Unweighted Price Coefficient Qualified Median Related of Property Class Sales Ratio Differential Dispersion						
Commercial/Industrial	34	0.963	1.024	7.6	Compliant	
Condominium	N/A	N/A	N/A	N/A	N/A	
Single Family	157	1.000	1.040	11.9	Compliant	
Vacant Land	N/A	N/A	N/A	N/A	N/A	

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

SBOE, DPT, and Colorado State Statute valuation guidelines.

Recommendations



TIME TRENDING VERIFICATION

Methodology

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

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

Recommendations



SOLD/UNSOLD ANALYSIS

Methodology

Yuma 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 2012 and 2014 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. percent change was determined for each appropriate class and sub-class, the next step was to select the unsold sample. This sample

was at least 1% of the total population of unsold properties and excluded any sale properties. The unsold sample was filtered based on the attributes of the sold dataset to closely correlate both groups. The ratio analysis was then performed on the unsold properties and stratified. The median and mean ratio distribution was then compared between the sold and unsold group. A nonparametric test such as the Mann-Whitney test for differences between independent samples was undertaken to determine whether any observed differential was significant. If this test determined that the unsold properties were treated in a manner similar to the sold properties, it was concluded that no further testing was warranted and that the county was in compliance.

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

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



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

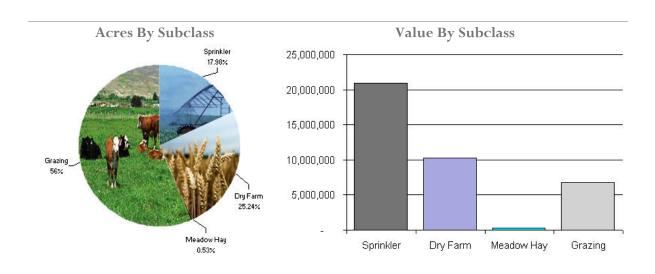
Conclusions

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

Recommendations



AGRICULTURAL LAND STUDY



Agricultural Land

County records were reviewed to determine major land categories such as irrigated farm, dry farm, meadow hay, grazing and other In addition, county records were lands. reviewed in order to determine if: 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 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:



	Yuma County Agricultural Land Ratio Grid						
Number County County WRA Abstract Of Value Assessed Total Code Land Class Acres Per Acre Total Value Ratio							
4107	Sprinkler	257,764	81.00	20,973,517	22,327,352	0.94	
4127	Dry Farm	361,864	28.00	10,225,261	10,819,372	0.95	
4137	Meadow Hay	7,638	35.00	266,995	266,995	1.00	
4147	Grazing	806,626	8.00	6,814,527	6,814,527	1.00	
Total/Avg		1,433,892	27.00	38,280,300	40,228,246	0.95	

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

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

Recommendations

None

Agricultural Land Under Improvements

Methodology

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

Conclusions

Yuma County has substantially complied with the procedures provided by the Division of Property Taxation for the valuation of land under residential improvements that may or may not be integral to an agricultural operation.

Recommendations



SALES VERIFICATION

According to Colorado Revised Statutes:

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

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

(a)(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 2014 for Yuma County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 28 sales listed as unqualified.

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

Conclusions

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

Recommendations



ECONOMIC AREA REVIEW AND EVALUATION

Methodology

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

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

Recommendations



NATURAL RESOURCES

Earth and Stone Products

Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Natural Resource Valuation Procedures, the income approach was applied to determine value for production of earth and stone products. The number of tons was multiplied by an economic royalty rate determined by the Division of Property Taxation to determine income. The income was multiplied by a recommended Hoskold factor to determine the actual value. The Hoskold factor is determined by the life of the reserves or the lease. Value is based on two variables: life and tonnage. The operator determines these since there is no other means to obtain production data through any state or private agency.

Conclusions

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

Recommendations

None

Producing Oil and Gas

Methodology

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

STATUTORY REFERENCES

Section § 39-1-103, C.R.S., specifies that producing oil or gas leaseholds and lands are valued according to article 7 of title 39, C.R.S.

Actual value determined - when.

(2) The valuation for assessment of leaseholds and lands producing oil or gas shall be determined as provided in article 7 of this title. § 39-1-103, C.R.S.

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

Valuation:

Valuation for assessment.

- (1) Except as provided in subsection (2) of this section, on the basis of the information contained in such statement, the assessor shall value such oil and gas leaseholds and lands for assessment, as real property, at an amount equal to eighty-seven and one-half percent of:
- (a) The selling price of the oil or gas sold there from during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year;
- (b) The selling price of oil or gas sold in the same field area for oil or gas transported from the premises which is not sold during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year.

§ 39-7-102, C.R.S.

Conclusions

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

Recommendations



VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2014 in Yuma 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.

Conclusions

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

Recommendations



POSSESSORY INTEREST PROPERTIES

Possessory Interest

Possessory interest property discovery and valuation is described in the Assessor's Reference Library (ARL) Volume 3 section 7 in accordance with the requirements of Chapter 39-1-103 (17)(a)(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 under lease, permit, concession, contract, or other agreement.

Yuma 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

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

Recommendations



PERSONAL PROPERTY AUDIT

Yuma 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 This sample was levels of such property. 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.

Yuma County is compliant with the guidelines set forth in ARL Volume 5 regarding discovery procedures, using the following methods to discover personal property accounts in the county:

- Public Record Documents
- Chamber of Commerce/Economic Development Contacts
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth
- Questionnaires, Letters and/or Phone Calls to Buyer, Seller and/or Realtor
- Internet
- Declarations

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.

Yuma County submitted their personal property written audit plan and was current for the 2014 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
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Non-filing Accounts Best Information Available



- Accounts close to the \$7,000 actual value exemption status
- Accounts protested with substantial disagreement

Conclusions

Yuma County has employed adequate discovery, classification, documentation,

valuation, and auditing procedures for their personal property assessment and is in statistical compliance with SBOE requirements.

Recommendations



WILDROSE AUDITOR STAFF

Harry J. Fuller, Audit Project Manager

Suzanne Howard, Audit Administrative Manager

Steve Kane, Audit Statistician

Carl W. Ross, Agricultural/Natural Resource Analyst

J. Andrew Rodriguez, Field Analyst



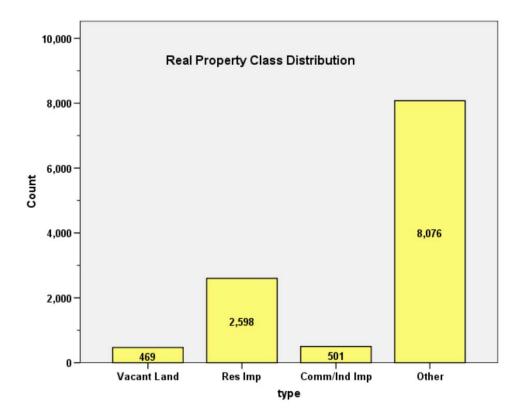
APPENDICES



STATISTICAL COMPLIANCE REPORT FOR YUMA COUNTY 2014

I. OVERVIEW

Yuma County is an agricultural county located in eastern Colorado. The county has a total of 11,644 real property parcels, according to data submitted by the county assessor's office in 2014. 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 or 1112) accounted for 52.9% of all vacant land parcels, while mobile home land accounted for 20.5%. Based on the number of vacant land parcels in Yuma County, we were not required to analyze this class of property for audit compliance.

For residential improved properties, single family properties accounted for 95.5% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 4.3% of all such properties in this county.



II. DATA FILES

The following sales analyses were based on the requirements of the 2014 Colorado Property Assessment Study. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

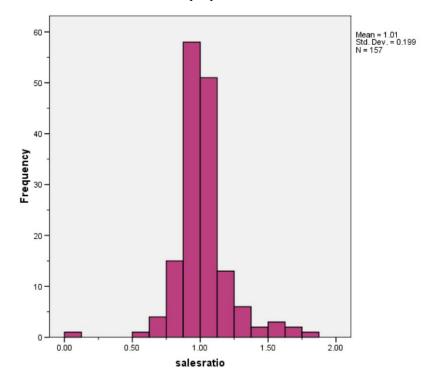
The following steps were taken to analyze the residential sales:

1. Selected qualified residential improved sales	161
2. Sales between January 1, 2011 and June 30, 2012	161
3. Remove multiple sales	157

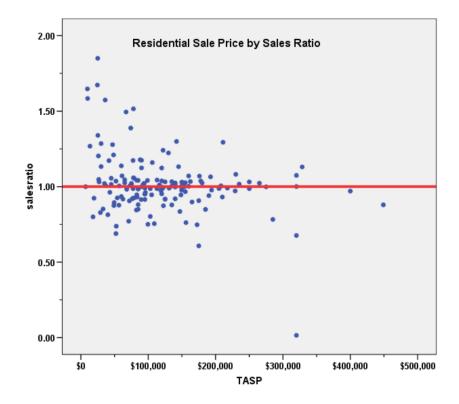
The sales ratio analysis was analyzed as follows:

Median	1.000
Price Related Differential	1.040
Coefficient of Dispersion	.119

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 all of these properties:







The above graphs indicate that the distribution of the sale ratios was within state mandated limits, and that there were no significant price-related differential issues. No sales were trimmed.

Residential Market Trend Analysis

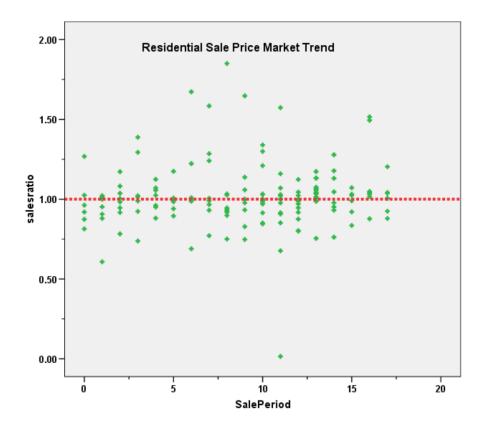
We next analyzed the residential dataset using the 18-month sale period, with the following results:

Coefficients^a

Mo	del	Unstandardize	d Coefficients	Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	.995	.033		29.840	.000
	SalePeriod	.002	.003	.055	.681	.497

a. Dependent Variable: salesratio





The above analysis indicated that no market trend was present in the sale ratio data. We concur with the assessor that no market trend adjustments were warranted.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square feet for 2014 between each group, as follows:

Group	No. Props	Median Act Val/SF	Mean Act Val/SF
Unsold	2,442	\$45	\$50
Sold	156	\$54	\$59

Given that there was some difference between sold and unsold residential properties, we also compared the mean and median percent change in value between 2011 and 2014 for both groups, as follows:

Group	No. Props	Median Chg Val/SF	Mean Chg Val/SF
Unsold	2,441	1.000	1.045
Sold	157	1.035	1.092

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



IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

The following steps were taken to analyze the commercial sales:

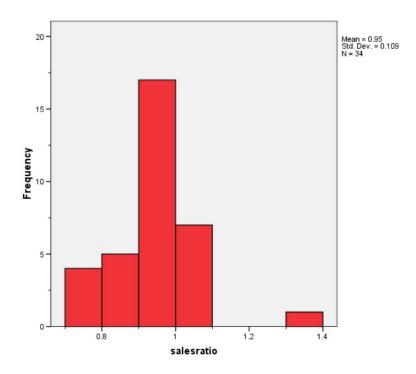
- 1. Select commercial sales only
- 2. Sales between July 1, 2007 and June 30, 2012 34

The sales ratio analysis was analyzed as follows:

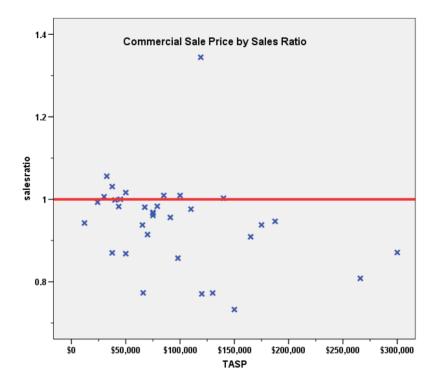
Median	0.963
Price Related Differential	1.024
Coefficient of Dispersion	.076

The above tables indicate that the Yuma County commercial/industrial sale ratios were in compliance with the SBOE standards. The following histogram and scatter plot describe the sales ratio distribution further:

34







Commercial Market Trend Analysis

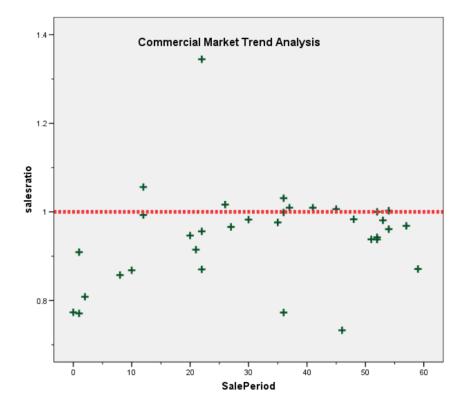
The assessor did not apply any market trend adjustment to the commercial dataset. The 34 commercial sales were analyzed, examining the sale ratios across the 60 month sale period with the following results:

Coefficients^a

Model	I	Unstandardized Coefficients		Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	.907	.037		24.341	.000
	SalePeriod	.001	.001	.210	1.215	.233

a. Dependent Variable: salesratio





The market trend results indicated no statistically significant trend. We therefore concluded that the assessor has adequately addressed market trending in the commercial/industrial valuation in Yuma County.

Sold/Unsold Analysis

We compared the median change in value per square foot between sold and unsold commercial properties between 2012 and 2014 to determine if the assessor was valuing each group consistently. While this is a challenge to prove in this county, given the small number of sales and the overall small number and diversity of commercial/industrial properties in general, the following results indicate that both groups were valued in a consistent manner:

Group	No, Props	Median % Chg Value	Mean % Chg Value
Unsold	455	1.00	1.01
Sold	34	1.00	1.01

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 Yuma County.



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

		Descrip	otives		
	ABSTR	IMP		Statistic	Std. Error
<u>ImpValSF</u>	1212	Mean		\$45.42	\$.564
		95% Confidence Interval for	Lower Bound	\$44.32	
		Mean	Upper Bound	\$46.53	
		5% Trimmed Mean		\$43.58	
		Median		\$40.44)
		Variance		780.308	
		Std. Deviation		\$27.934	
		Minimum		\$2	
		Maximum		\$192	
		Range		\$189	
		Interquartile Range		\$36	
		Skewness		1.030	.049
		Kurtosis		1.362	.099
	4277	Mean		\$52.06	\$2.682
		95% Confidence Interval for	Lower Bound	\$46.75	
		Mean	Upper Bound	\$57.37	
		5% Trimmed Mean		\$50.92	9
		Median		\$47.88	
		Variance		906.173	0
		Std. Deviation		\$30.103	
		Minimum		\$3	
		Maximum		\$141	
		Range		\$138	
		Interquartile Range		\$44	
		Skewness		.498	.216
		Kurtosis		135	.428

VI. CONCLUSIONS

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



STATISTICAL ABSTRACT

Residential

Ratio Statistics for CURRTOT / TASP

	95% Confidence Interval for Mean 95% Confidence Interval for Median 95% Confidence Interval for Median 95% Confidence Interval for Median					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
1.015	.983	1.046	1.000	.987	1.014	96.2%	.976	.935	1.016	1.040	.119	19.6%

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/Industrial

Ratio Statistics for CURRTOT / TASP

	95% Confiden Me	ice Interval for an		95% Con	fidence Interval fo	or Median		95% Confiden Weighte				Coefficient of Variation
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
.946	.908	.984	.963	.915	.993	97.6%	.924	.874	.973	1.024	.076	11.6%

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

Not applicable



Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	8	5.1%
	\$25K to \$50K	20	12.7%
	\$50K to \$100K	51	32.5%
	\$100K to \$150K	39	24.8%
	\$150K to \$200K	18	11.5%
	\$200K to \$300K	14	8.9%
	\$300K to \$500K	7	4.5%
Overall		157	100.0%
Excluded	1	0	
Total		157	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LT \$25K	1.426	.973	.242	28.6%
\$25K to \$50K	1.040	1.007	.144	19.3%
\$50K to \$100K	.989	.999	.105	15.9%
\$100K to \$150K	.997	.998	.073	10.9%
\$150K to \$200K	.988	1.000	.094	13.8%
\$200K to \$300K	.999	1.005	.057	10.7%
\$300K to \$500K	.970	.989	.241	43.0%
Overall	1.000	1.040	.119	19.9%



Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	0	1	.6%
	1212	151	96.2%
	1215	3	1.9%
	1220	1	.6%
	1225	1	.6%
Overall		157	100.0%
Excluded		0	
Total		157	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	.015	1.000	.000	.%
1212	1.000	1.029	.116	18.6%
1215	1.042	1.009	.055	8.3%
1220	.984	1.000	.000	.%
1225	1.015	1.000	.000	.%
Overall	1.000	1.040	.119	19.9%



Age

Case Processing Summary

		Count	Percent
AgeRec	.00	1	.6%
	Over 100	22	14.0%
	75 to 100	30	19.1%
	50 to 75	43	27.4%
	25 to 50	42	26.8%
	5 to 25	17	10.8%
	5 or Newer	2	1.3%
Overall		157	100.0%
Excluded		0	
Total		157	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
.00	.015	1.000	.000	.%
Over 100	.995	1.076	.189	30.0%
75 to 100	.993	1.017	.118	20.0%
50 to 75	.997	1.029	.111	17.3%
25 to 50	1.017	1.024	.104	14.3%
5 to 25	1.001	1.012	.040	6.8%
5 or Newer	1.059	.991	.068	9.6%
Overall	1.000	1.040	.119	19.9%



Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	.00	1	.6%
	500 to 1,000 sf	8	5.1%
	1,000 to 1,500 sf	37	23.6%
	1,500 to 2,000 sf	47	29.9%
	2,000 to 3,000 sf	37	23.6%
	3,000 sf or Higher	27	17.2%
Overall		157	100.0%
Excluded		0	
Total		157	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
.00	.015	1.000	.000	.%
500 to 1,000 sf	.876	.981	.126	14.9%
1,000 to 1,500 sf	.993	1.015	.101	14.0%
1,500 to 2,000 sf	.997	1.042	.117	20.8%
2,000 to 3,000 sf	1.023	1.071	.137	21.4%
3,000 sf or Higher	1.000	.994	.082	13.9%
Overall	1.000	1.040	.119	19.9%



Quality

Case Processing Summary

		Count	Percent
QUALITY		1	.6%
	Average	130	82.8%
	Fair	13	8.3%
	Good	10	6.4%
	Low	3	1.9%
Overall		157	100.0%
Excluded		0	
Total		157	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
	.015	1.000	.000	.%
Average	.999	1.025	.108	17.6%
Fair	1.042	1.087	.186	27.2%
Good	.986	.979	.064	9.3%
Low	1.015	1.045	.144	21.9%
Overall	1.000	1.040	.119	19.9%



Condition

Case Processing Summary

		Count	Percent
CONDITION		1	.6%
	Average	140	89.2%
	Badly Worn	3	1.9%
	Fair	13	8.3%
Overall		157	100.0%
Excluded		0	
Total		157	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
	.015	1.000	.000	.%
Average	.998	1.021	.105	17.1%
Badly Worn	1.015	1.045	.144	21.9%
Fair	1.042	1.087	.186	27.2%
Overall	1.000	1.040	.119	19.9%



Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	2	5.9%
	\$25K to \$50K	9	26.5%
	\$50K to \$100K	12	35.3%
	\$100K to \$150K	6	17.6%
	\$150K to \$200K	3	8.8%
	\$200K to \$300K	2	5.9%
Overall		34	100.0%
Excluded	1	0	
Total		34	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LT \$25K	.968	.991	.026	3.7%
\$25K to \$50K	1.000	1.004	.043	7.0%
\$50K to \$100K	.963	.998	.045	7.4%
\$100K to \$150K	.874	1.010	.200	27.5%
\$150K to \$200K	.938	.999	.013	2.3%
\$200K to \$300K	.840	.998	.037	5.3%
Overall	.963	1.024	.076	11.5%



Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1714	1	2.9%
	2212	13	38.2%
	2220	6	17.6%
	2224	1	2.9%
	2230	4	11.8%
	2235	8	23.5%
	3215	1	2.9%
Overall		34	100.0%
Excluded		0	
Total		34	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1714	1.345	1.000	.000	.%
2212	.968	1.027	.060	10.1%
2220	.863	1.008	.065	8.6%
2224	1.000	1.000	.000	.%
2230	.937	1.029	.097	12.4%
2235	.959	1.006	.042	4.9%
3215	1.016	1.000	.000	.%
Overall	.963	1.024	.076	11.5%



Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	9	26.5%
	75 to 100	6	17.6%
	50 to 75	5	14.7%
	25 to 50	8	23.5%
	5 to 25	5	14.7%
	5 or Newer	1	2.9%
Overall		34	100.0%
Excluded		0	
Total		34	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	.966	1.033	.044	6.3%
75 to 100	.988	.985	.033	5.8%
50 to 75	1.000	1.006	.128	20.9%
25 to 50	.926	1.028	.103	13.2%
5 to 25	.947	1.029	.066	9.4%
5 or Newer	.909	1.000	.000	.%
Overall	.963	1.024	.076	11.5%



Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	1	2.9%
	500 to 1,000 sf	2	5.9%
	1,000 to 1,500 sf	5	14.7%
	1,500 to 2,000 sf	7	20.6%
	2,000 to 3,000 sf	9	26.5%
	3,000 sf or Higher	10	29.4%
Overall		34	100.0%
Excluded		0	
Total		34	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	.966	1.000	.000	.%
500 to 1,000 sf	.913	.981	.047	6.7%
1,000 to 1,500 sf	.993	1.117	.117	17.6%
1,500 to 2,000 sf	.943	1.012	.041	5.7%
2,000 to 3,000 sf	.961	1.032	.050	7.5%
3,000 sf or Higher	1.001	.996	.098	16.2%
Overall	.963	1.024	.076	11.5%



Quality

Case Processing Summary

		Count	Percent
QUALITY	Average	30	88.2%
	Average Plus	1	2.9%
	Fair	2	5.9%
	Low	1	2.9%
Overall		34	100.0%
Excluded		0	
Total		34	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Average	.963	1.022	.065	9.3%
Average Plus	.808	1.000	.000	.%
Fair	1.175	.921	.144	20.3%
Low	.915	1.000	.000	.%
Overall	.963	1.024	.076	11.5%



Condition

Case Processing Summary

		Count	Percent
CONDITION	Average	30	88.2%
	Badly Worn	1	2.9%
	Fair	2	5.9%
	Good	1	2.9%
Overall		34	100.0%
Excluded		0	
Total		34	

Ratio Statistics for CURRTOT / TASP

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Average	.963	1.022	.065	9.3%
Badly Worn	.915	1.000	.000	.%
Fair	1.175	.921	.144	20.3%
Good	.808	1.000	.000	.%
Overall	.963	1.024	.076	11.5%

Vacant Land Median Ratio Stratification

Not applicable