2014

ARAPAHOE COUNTY PROPERTY ASSESSMENT STUDY

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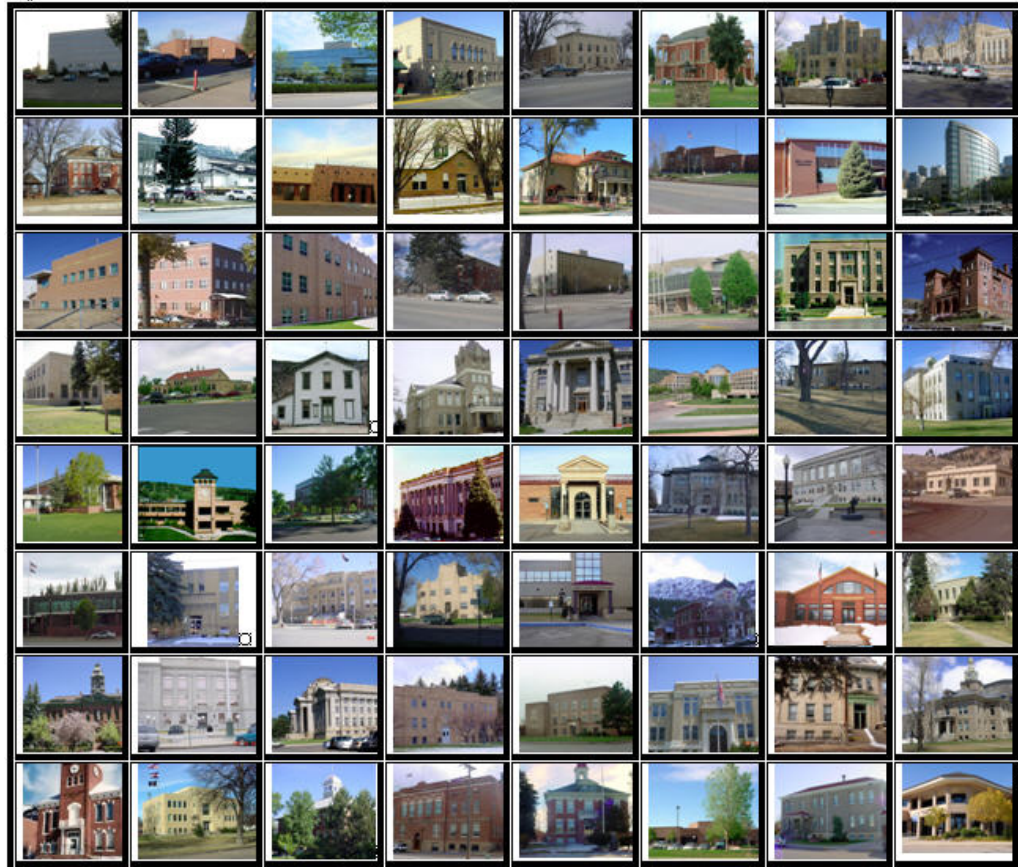
WILDROSE
APPRAISAL, INCORPORATED
Audit Division

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
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 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 2014 and is pleased to report its findings for Arapahoe County in the following report.

REGIONAL/HISTORICAL SKETCH OF ARAPAHOE COUNTY

Regional Information

Arapahoe 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

Arapahoe County has a population of approximately 572,003 people with 712.33 people per square mile, according to the U.S. Census Bureau's 2010 census data. This represents a 17 percent change from the 2000 Census.

Arapahoe County is the third most populous of the 64 Colorado counties. The county seat is Littleton and the most populous city is Aurora. Arapahoe County is part of the Denver-Aurora Metropolitan Statistical Area and the Denver-Aurora-Boulder Combined Statistical Area. Arapahoe County calls itself "Colorado's First County" since its origins predate the Pike's Peak Gold Rush.

On August 25, 1855, the Kansas Territorial Legislature created a huge Arapahoe County to govern the entire western portion of the Territory of Kansas. The county was named for the Arapaho Nation of Native Americans that lived in the region.

In July 1858, gold was discovered along the South Platte River in Arapahoe County (in present day Englewood). This discovery precipitated the Pike's Peak Gold Rush. Many residents of the mining region felt disconnected from the remote territorial governments of Kansas and Nebraska, so they voted to form their own Territory of Jefferson on October 24, 1859. The following month, the Jefferson Territorial Legislature organized 12 counties for the new territory, including a new Arapahoe County. Denver City served as the county seat of Arapahoe County.

The Jefferson Territory never received federal sanction, but on February 28, 1861, U.S. President James Buchanan signed an act organizing the Territory of Colorado. On November 1, 1861, the Colorado General Assembly organized the 17 original counties of Colorado including a new Arapahoe County. Arapahoe County originally stretched from the line of present-day Sheridan Boulevard 160 miles east to the Kansas state border, and from the line of present-day County Line Road 30 miles north to the Parallel 40° North (168th Avenue). Denver City served as the county seat of Arapahoe County until 1902.

In 1901, the Colorado General Assembly voted to split Arapahoe County into three parts: a new consolidated City and County of Denver, a new Adams County, and the remainder of the Arapahoe County to be renamed South Arapahoe County. A ruling by the Colorado Supreme Court, subsequent legislation, and a referendum delayed the reorganization until November 15, 1902. Governor James Bradley Orman designated Littleton as the temporary county seat of South Arapahoe County. On April 11, 1903, the Colorado General Assembly changed the name of South Arapahoe County back to Arapahoe County. On November 8, 1904, Arapahoe County voters chose Littleton over Englewood by a vote of 1310 to 829 to be the permanent county seat. *(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 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 Arapahoe County are:

Arapahoe County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	201	0.996	0.999	3.7	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	14,122	1.000	1.005	3.7	Compliant
Vacant Land	61	1.009	1.079	19.6	Compliant

Econ Area	Median	Price Related Differential	Coefficient of Dispersion
1	1.004	1.003	.028
2	1.000	1.006	.048
3	1.001	1.006	.042
4	1.002	1.009	.045
5	1.000	1.005	.042
6	1.000	1.007	.042
7	1.001	1.005	.041
8	1.000	1.004	.032
10	1.000	1.003	.037
11	1.000	1.001	.026
12	1.000	1.007	.039
13	1.004	1.006	.045
14	1.002	1.020	.056
15	1.004	1.006	.045
16	1.004	1.001	.037
17	.999	1.001	.034
18	1.000	1.004	.034
19	1.000	1.001	.054
20	1.001	1.004	.036
28	.999	1.003	.043
Overall	1.000	1.005	.037

After applying the above described methodologies, it is concluded from the sales ratios that Arapahoe County is in compliance with SBOE, DPT, and Colorado State Statute valuation guidelines.

Recommendations

None

TIME TRENDING VERIFICATION

Methodology

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

Arapahoe 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. 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.

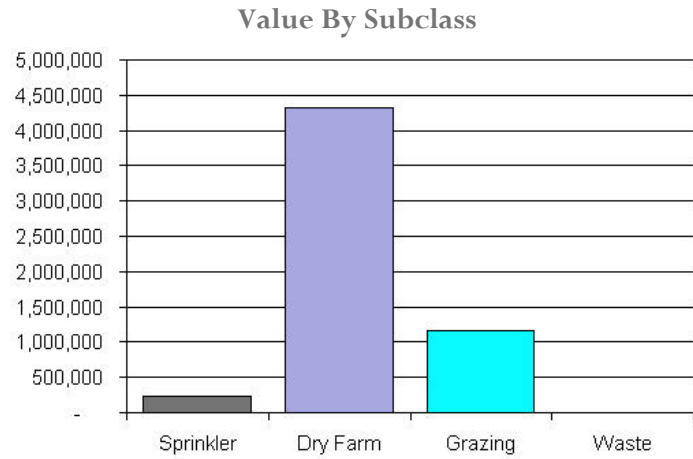| Sold/Unsold Results	
Property Class	**Results**
Commercial/Industrial	Compliant
Condominium	N/A
Single Family	Compliant
Vacant Land	Compliant

Conclusions

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

Recommendations

None

AGRICULTURAL LAND STUDY

Acres By Subclass	Value By Subclass

Acres By Subclass
Waste 0.63%
Sprinkler 0.68%
Grazing 44.36%
Dry Farm 54.33%

Value By Subclass (chart with values: Sprinkler, Dry Farm, Grazing, Waste; y-axis from - to 5,000,000)

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:

Arapahoe 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	2,093	113.00	235,770	235,864	1.00
4127	Dry Farm	168,084	26.00	4,316,496	4,173,267	1.03
4147	Grazing	137,242	8.00	1,166,288	1,166,288	1.00
4167	Waste	1,956	2.00	3,414	2,414	1.00
Total/Avg		209,375	18.00	5,721,969	5,578,833	1.03

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

Arapahoe 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

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

Recommendations

None

SALES VERIFICATION

According to Colorado Revised Statutes:

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

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

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

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

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

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

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

WRA reviewed the sales verification procedures in 2014 for Arapahoe County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 59 sales listed as unqualified.

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

Conclusions

Arapahoe 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

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

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

None

Subdivision Discounting

Subdivisions were reviewed in 2014 in Arapahoe 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

Arapahoe 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.

Arapahoe 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

Arapahoe 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

Arapahoe 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.

Arapahoe 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
- Visiting all new and existing businesses

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.

Arapahoe 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:

- New businesses filing for the first time
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts - Best Information Available
- Accounts protested with substantial disagreement

Arapahoe 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

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

Recommendations

None

WILDROSE AUDITOR STAFF

Harry J. Fuller, *Audit Project Manager*

Suzanne Howard, *Audit Administrative Manager*

Steve Kane, *Audit Statistician*

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

J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE REPORT
FOR ARAPAHOE COUNTY
2014

I. OVERVIEW

Arapahoe County is an urban county that is part of the Denver metropolitan area. The county has a total of 201,245 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:
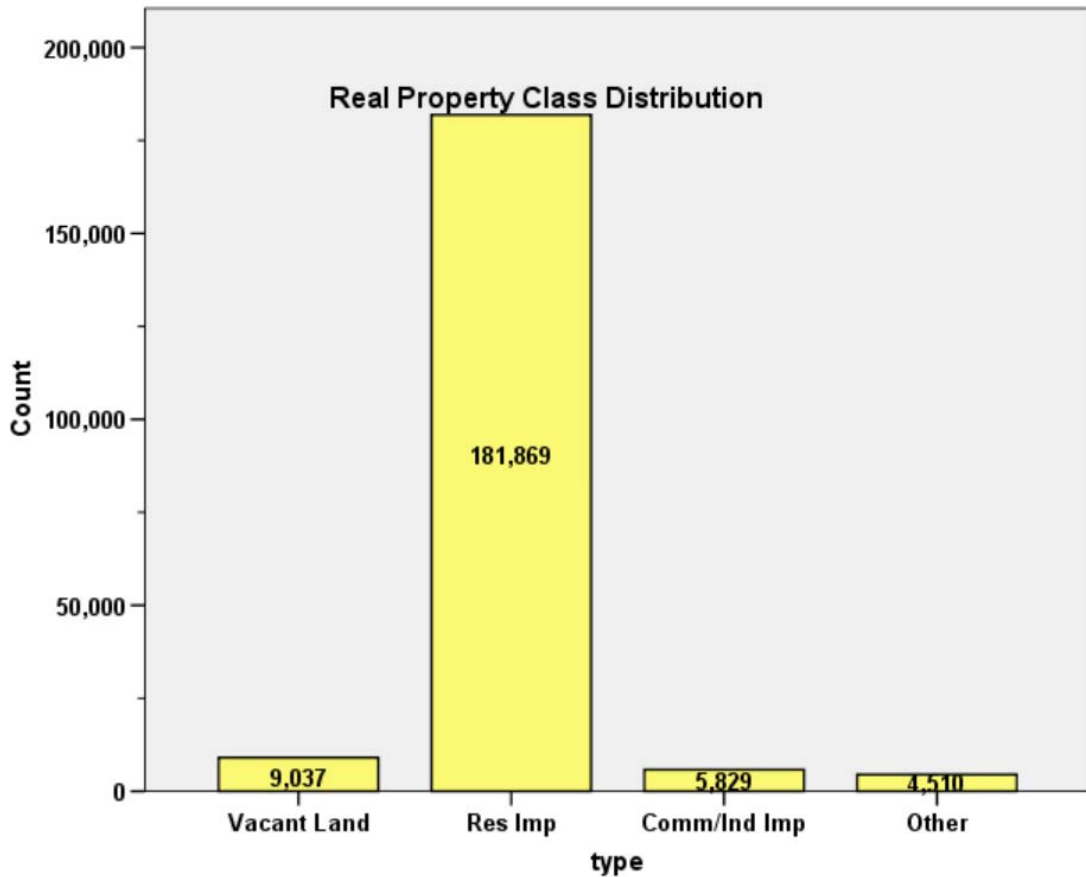
The vacant land class of properties was dominated by residential land. Residential and PUD lots (coded 100 and 400) accounted for 76.5% of all vacant land parcels.

For residential improved properties, single family properties accounted for 83.8% of all residential properties. The next significant subclass of properties was condominiums (coded 1230), which accounted for 14.7% of all properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 2.9% 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. Information was provided by the Arapahoe Assessor's Office in April 2014. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 14,122 qualified residential sales for the 24-month sale period prior to June 30, 2012. The sales ratio analysis was as follows:

Case Processing Summary

		Count	Percent
ECONAREA	1	21	.1%
	2	70	.5%
	3	287	2.0%
	4	335	2.4%
	5	579	4.1%
	6	605	4.3%
	7	800	5.7%
	8	1368	9.7%
	10	1769	12.5%
	11	1959	13.9%
	12	431	3.1%
	13	421	3.0%
	14	647	4.6%
	15	121	.9%
	16	151	1.1%
	17	308	2.2%
	18	3549	25.1%
	19	104	.7%
	20	313	2.2%
	28	284	2.0%
Overall		14122	100.0%
Excluded		0	
Total		14122	

Ratio Statistics for currtot / tasp

Econ Area	Median	Price Related Differential	Coefficient of Dispersion
1	1.004	1.003	.028
2	1.000	1.006	.048
3	1.001	1.006	.042
4	1.002	1.009	.045
5	1.000	1.005	.042
6	1.000	1.007	.042
7	1.001	1.005	.041
8	1.000	1.004	.032
10	1.000	1.003	.037
11	1.000	1.001	.026
12	1.000	1.007	.039
13	1.004	1.006	.045
14	1.002	1.020	.056
15	1.004	1.006	.045
16	1.004	1.001	.037
17	.999	1.001	.034
18	1.000	1.004	.034
19	1.000	1.001	.054
20	1.001	1.004	.036
28	.999	1.003	.043
Overall	**1.000**	**1.005**	**.037**

The above ratio statistics, stratified by economic area, 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 describe the sales ratio distribution for all of these properties:
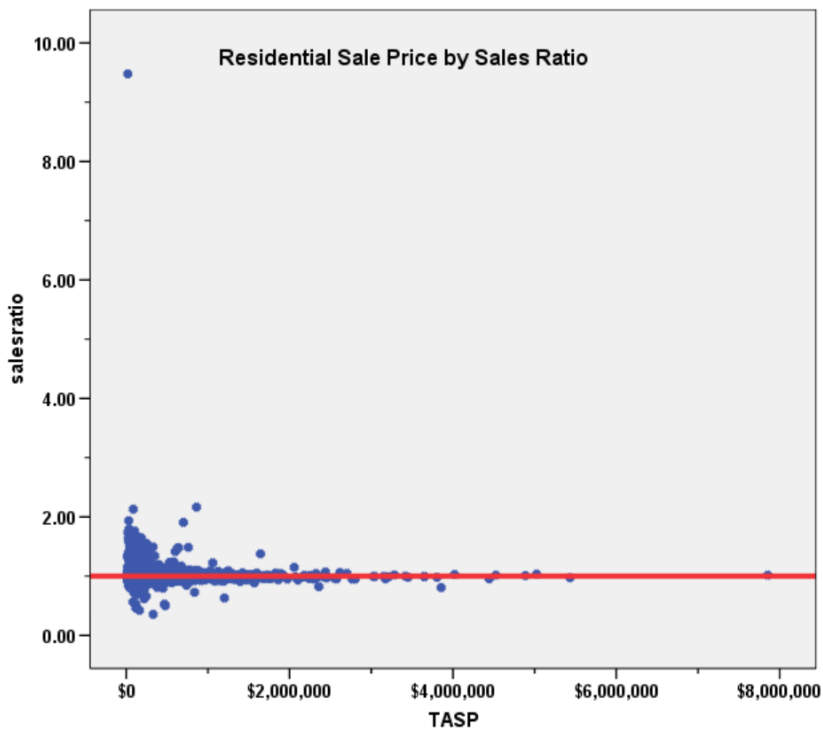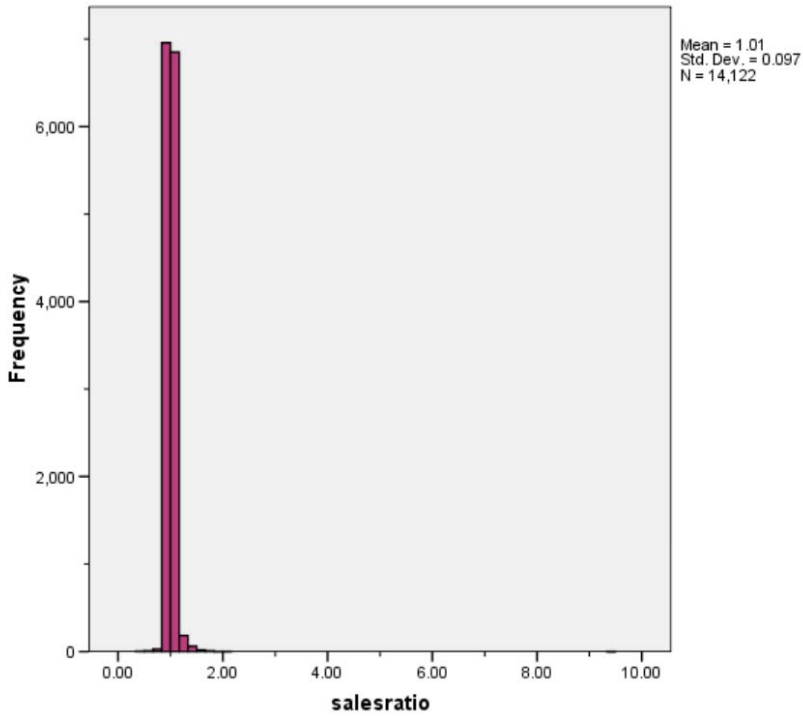
Mean = 1.01
Std. Dev. = 0.097
N = 14,122

Residential Sale Price by Sales Ratio

The above histogram indicates that the distribution of the sale ratios was within state mandated limits. No individual sales were trimmed; although all residential properties coded 1235 (mobile homes) were excluded.

Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period, with the following results:

Coefficients[a]

ECONAREA	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
1	1	(Constant)	1.003	.021		47.490	.000
		SalePeriod	.000	.001	.020	.088	.931
2	1	(Constant)	1.014	.014		70.187	.000
		SalePeriod	.001	.001	.058	.476	.636
3	1	(Constant)	1.001	.008		133.421	.000
		SalePeriod	.001	.001	.056	.947	.344
4	1	(Constant)	1.028	.009		114.251	.000
		SalePeriod	-.001	.001	-.066	-1.201	.231
5	1	(Constant)	1.014	.006		166.830	.000
		SalePeriod	-.001	.000	-.055	-1.328	.185
6	1	(Constant)	.999	.007		148.857	.000
		SalePeriod	.001	.001	.081	2.002	.046
7	1	(Constant)	1.001	.004		244.008	.000
		SalePeriod	.001	.000	.076	2.158	.031
8	1	(Constant)	1.009	.003		333.850	.000
		SalePeriod	.000	.000	-.016	-.578	.563
10	1	(Constant)	1.010	.003		370.336	.000
		SalePeriod	.000	.000	-.043	-1.805	.071
11	1	(Constant)	1.005	.002		594.606	.000
		SalePeriod	.000	.000	-.022	-.976	.329
12	1	(Constant)	1.010	.008		129.643	.000
		SalePeriod	-7.311E-5	.001	-.006	-.119	.905
13	1	(Constant)	1.015	.006		170.698	.000
		SalePeriod	.000	.000	-.046	-.948	.344
14	1	(Constant)	1.035	.024		42.777	.000
		SalePeriod	-.001	.002	-.023	-.574	.566
15	1	(Constant)	1.006	.015		68.822	.000
		SalePeriod	.000	.001	.041	.447	.655
16	1	(Constant)	1.016	.010		102.541	.000
		SalePeriod	.000	.001	-.022	-.273	.785
17	1	(Constant)	1.007	.005		198.853	.000
		SalePeriod	-.001	.000	-.097	-1.698	.091
18	1	(Constant)	1.004	.002		564.266	.000
		SalePeriod	4.789E-5	.000	.006	.340	.734
19	1	(Constant)	1.006	.019		53.568	.000
		SalePeriod	-.003	.001	-.187	-1.918	.058
20	1	(Constant)	1.001	.006		172.081	.000

		SalePeriod	.001	.000	.111	1.978	.049
28	1	(Constant)	.996	.007		144.065	.000
		SalePeriod	.001	.001	.063	1.068	.286

a. Dependent Variable: salesratio

The above analysis indicated that no significant residential market trend was present in the sale data within each economic area. Where there was a statistically significant trend within an economic area (EA 6, 7, 20), the actual trend was insignificant. We concluded that the assessor has adequately dealt with market trending for 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 2014 between each group. We stratified the residential properties by economic area and found overall consistency. The following results present the overall results, as well as by subclass, for sold and unsold properties:

Group	No. Props	Median	Mean
Unsold	167,701	$116	$126
Sold	14,119	$123	$132

Type	Group	No. Props	Median	Mean
1212	Unsold	140,553	$121	$133
	Sold	11,885	$126	$137
1215	Unsold	845	$98	$106
	Sold	66	$100	$109
1230	Unsold	24,619	$78	$86
	Sold	2,156	$90	$101

IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 201 qualified commercial/industrial sales for the 18-month sale period prior to June 30, 2014. The sales ratio analysis was as follows:

Ratio Statistics for currtot / tasp	
Median	0.996
Price Related Differential	0.999
Coefficient of Dispersion	.037

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

Commercial Sale Price by Sales Ratio
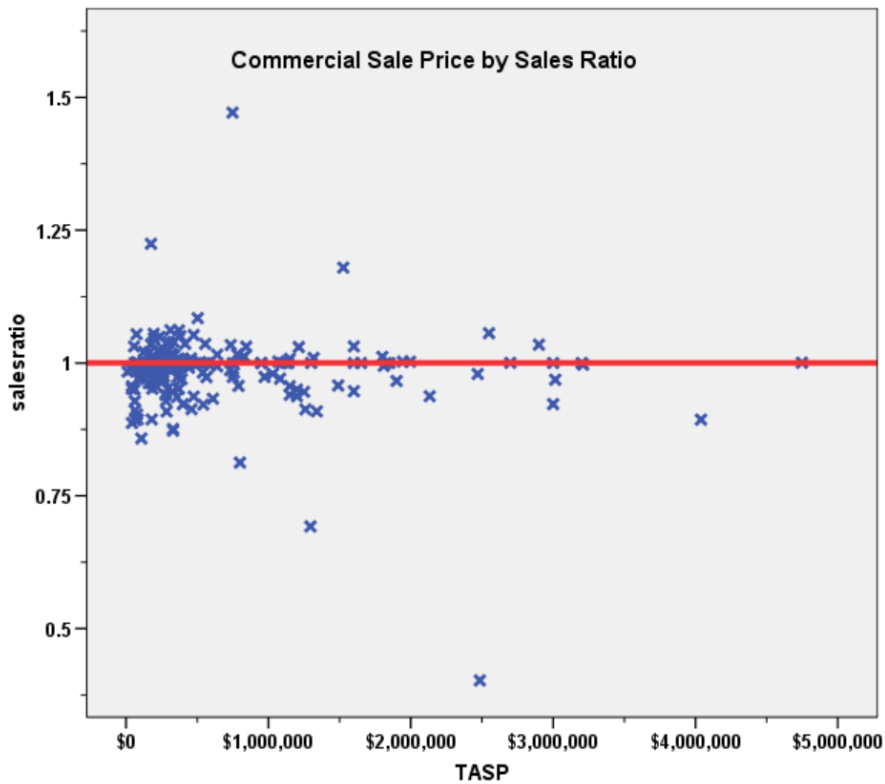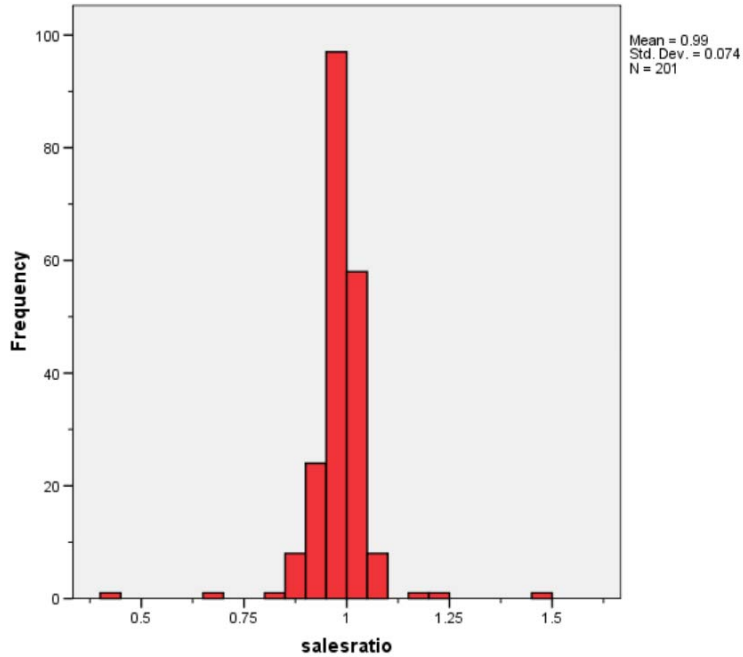
NOTE: SALES TRIMMED TO UNDER $5,000,000 FOR 2ND GRAPH FOR CLARITY

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

Commercial Market Trend Analysis

We next analyzed the commercial dataset using the 24-month sale period, with the following results:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.985	.010		101.092	.000
	SalePeriod	4.498E-5	.001	.003	.045	.964

a. Dependent Variable: salesratio
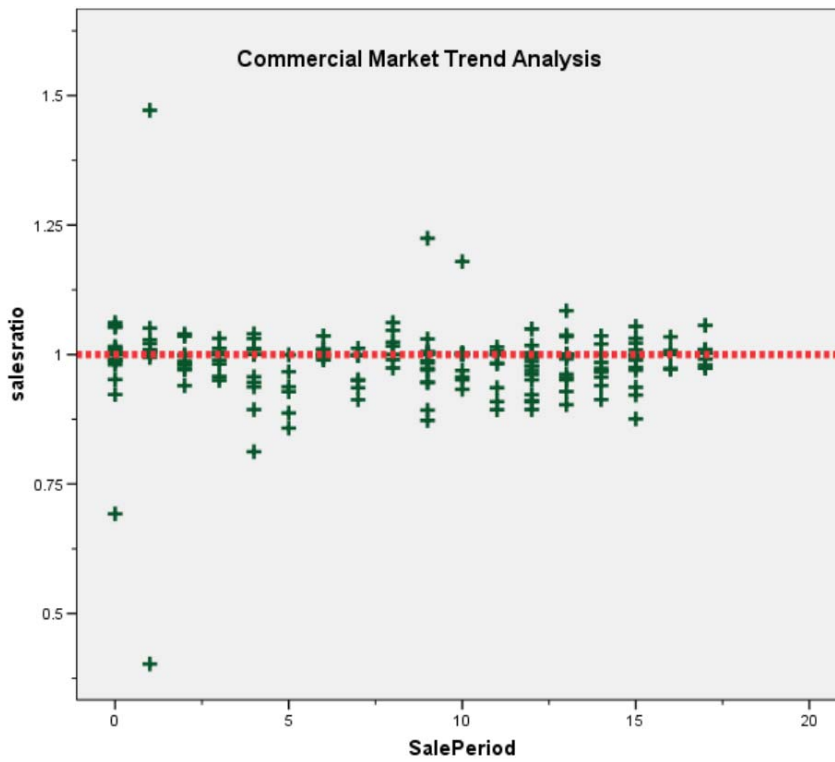
Based on a lack of a statistically significant trend, we concluded that the assessor has adequately dealt with market trending for commercial properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold commercial properties, we compared the median change in value from 2012 to 2014 between sold and unsold groups. The following results indicate that the assessor overall has valued sold and unsold commercial properties in a similar manner:

Group	No. Props	Median	Mean
Unsold	5,545	1.000	1.0186
Sold	201	1.030	1.1163

Because of the low COD for commercial properties, we also examined the value per square foot for sold and unsold properties. We stratified this analysis by subclass and economic area, which indicted no pattern of different treatment as sold and unsold properties.

V. VACANT LAND SALE RESULTS

There were 61 qualified vacant land sales for the 24-month sale period prior to June 30, 2014. The sales ratio analysis was as follows:

Ratio Statistics for currInd / Vtasp

Median	1.009
Price Related Differential	1.079
Coefficient of Dispersion	.196

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:

Mean = 1.09
Std. Dev. = 0.288
N = 61

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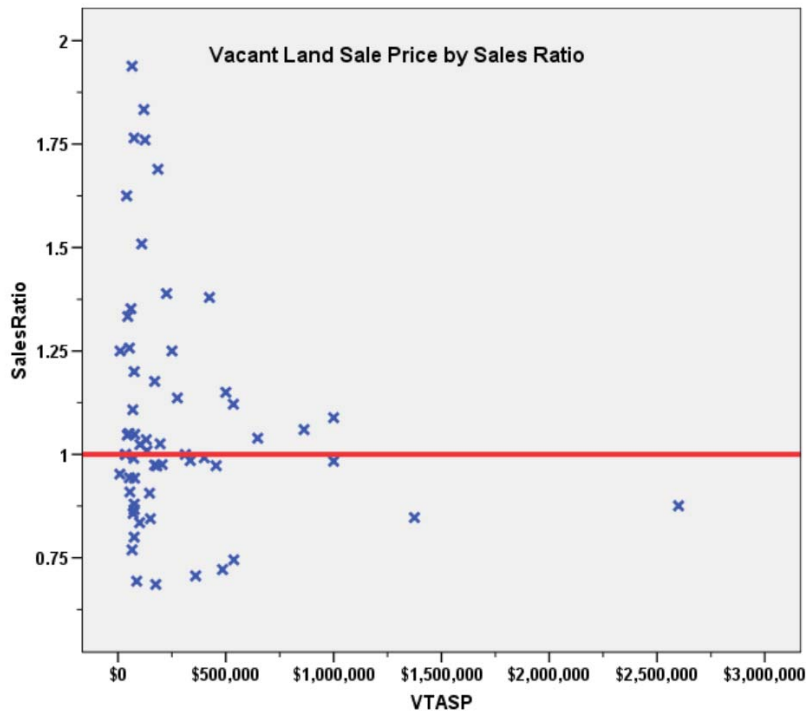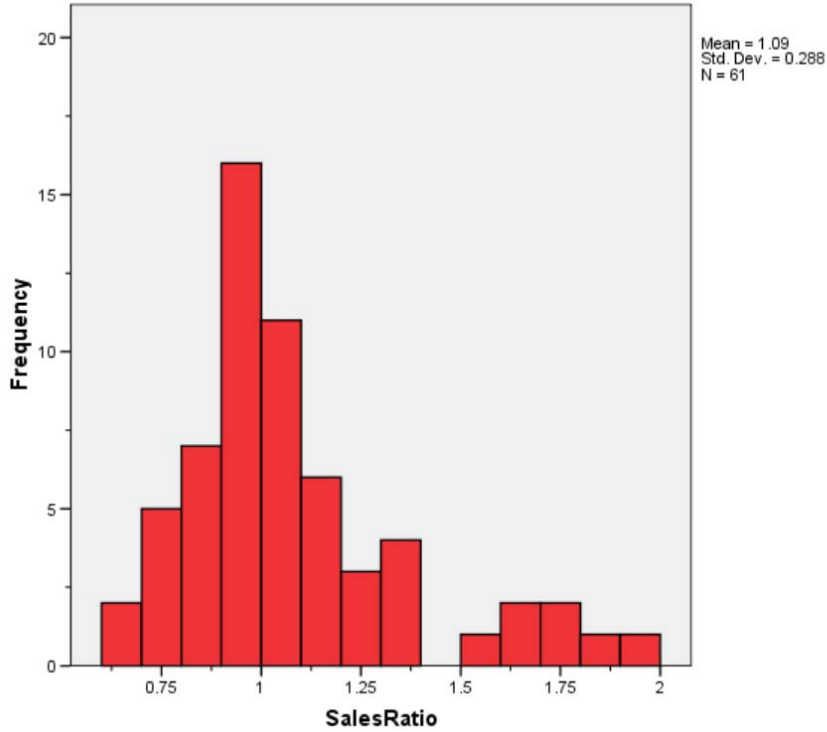
The above histogram indicates that the distribution of the vacant land sale ratios was within state mandated limits, while the above scatter plot indicated that there was no price related differential issues. No sales were trimmed.

Vacant Land Market Trend Analysis

We next analyzed the vacant land dataset using the 24-month sale period, with the following results:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.088	.069		15.792	.000
	VSalePeriod	.000	.006	-.003	-.020	.984

a. Dependent Variable: SalesRatio

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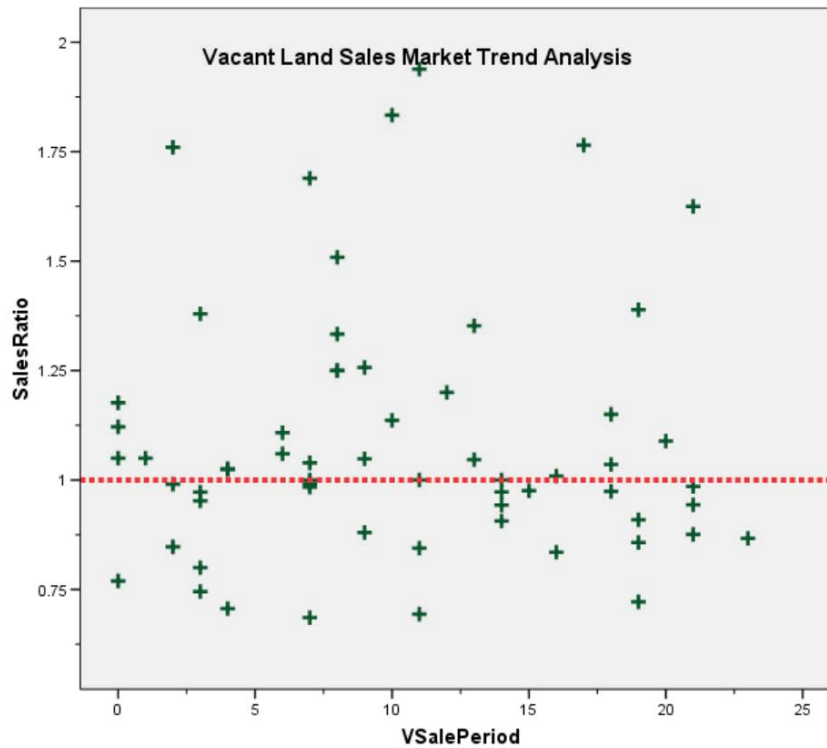
The above analysis indicated that no significant market trending was present in the vacant land sale data. We concluded that the assessor has adequately dealt with market trending for vacant land properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold vacant land properties, we compared the median change in value for 2012 and 2014 between each group. We stratified the vacant land properties by subdivision and found overall consistency. The following results present the comparison results by subdivision for sold and unsold properties for subdivision with at least 6 sales:

Group	No. Props	Median	Mean
Unsold	7,699	1.0000	0.9586
Sold	59	0.9286	0.9573

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

VI. AGRICULTURAL IMPROVEMENTS ANALYSIS

Based on the parameters of the 2014 Colorado Property Assessment Audit, this county was excluded from the Agricultural Improvement portion of the statistical compliance audit.

VII. CONCLUSIONS

Based on this statistical analysis, there were no significant compliance issues concluded for Arapahoe 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 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
1.007	1.005	1.009	1.000	1.000	1.000	95.0%	1.002	1.001	1.004	1.005	.037	9.6%

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% 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
.986	.975	.996	1.000	.991	1.000	95.2%	.987	.974	1.000	.999	.037	7.5%

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

Vacant Land

Ratio Statistics for CurrLnd / VTASP

	95% 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
1.087	1.014	1.161	1.009	.976	1.050	96.0%	1.008	.938	1.078	1.079	.196	26.5%

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

Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	64	.5%
	$25K to $50K	357	2.5%
	$50K to $100K	1269	9.0%
	$100K to $150K	2415	17.1%
	$150K to $200K	2732	19.3%
	$200K to $300K	3845	27.2%
	$300K to $500K	2437	17.3%
	$500K to $750K	567	4.0%
	$750K to $1,000K	189	1.3%
	Over $1,000K	247	1.7%
Overall		14122	100.0%
Excluded		0	
Total		14122	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	1.011	1.012	.203	106.7%
$25K to $50K	1.005	.999	.061	12.9%
$50K to $100K	1.008	1.001	.063	11.4%
$100K to $150K	1.004	1.000	.040	6.7%
$150K to $200K	1.000	1.000	.035	5.4%
$200K to $300K	.999	1.000	.030	4.7%
$300K to $500K	.999	1.000	.026	4.2%
$500K to $750K	.998	1.000	.033	6.7%
$750K to $1,000K	.999	1.000	.035	10.0%
Over $1,000K	.997	1.001	.030	5.2%
Overall	1.000	1.005	.037	9.7%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	0	3	.0%
	1212	11885	84.2%
	1215	66	.5%
	1230	2156	15.3%
	1277	12	.1%
Overall		14122	100.0%
Excluded		0	
Total		14122	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.632	.970	.253	43.6%
1212	1.000	1.004	.035	10.0%
1215	.998	1.010	.055	9.0%
1230	1.000	1.006	.047	8.0%
1277	.804	.964	.184	23.7%
Overall	1.000	1.005	.037	9.7%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	.00	3	.0%
	Over 100	29	.2%
	75 to 100	143	1.0%
	50 to 75	1206	8.5%
	25 to 50	6693	47.4%
	5 to 25	4505	31.9%
	5 or Newer	1543	10.9%
Overall		14122	100.0%
Excluded		0	
Total		14122	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.632	.970	.253	43.6%
Over 100	.999	1.022	.127	27.7%
75 to 100	1.005	1.008	.044	9.2%
50 to 75	1.000	1.006	.042	7.7%
25 to 50	1.000	1.007	.041	12.5%
5 to 25	1.000	1.002	.033	5.7%
5 or Newer	1.000	1.000	.023	5.1%
Overall	1.000	1.005	.037	9.7%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	.00	3	.0%
	LE 500 sf	14	.1%
	500 to 1,000 sf	1568	11.1%
	1,000 to 1,500 sf	4298	30.4%
	1,500 to 2,000 sf	3527	25.0%
	2,000 to 3,000 sf	3416	24.2%
	3,000 sf or Higher	1296	9.2%
Overall		14122	100.0%
Excluded		0	
Total		14122	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.632	.970	.253	43.6%
LE 500 sf	1.002	.965	.072	19.9%
500 to 1,000 sf	1.001	1.008	.050	8.9%
1,000 to 1,500 sf	1.000	1.006	.042	7.6%
1,500 to 2,000 sf	1.000	1.005	.034	15.3%
2,000 to 3,000 sf	1.000	1.002	.029	4.6%
3,000 sf or Higher	1.000	1.003	.031	6.8%
Overall	1.000	1.005	.037	9.7%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY		3	.0%
	Average	3919	27.8%
	Average Minus	779	5.5%
	Average Plus	2624	18.6%
	Economy	30	.2%
	Excellent	34	.2%
	Excellent Minus	164	1.2%
	Excellent Plus	30	.2%
	Fair	150	1.1%
	Fair Minus	77	.5%
	Fair Plus	556	3.9%
	Good	1332	9.4%
	Good Minus	2197	15.6%
	Good Plus	987	7.0%
	Premier	6	.0%
	Premier Minus	12	.1%
	Premier Plus	1	.0%
	Very Good	395	2.8%
	Very Good Minus	551	3.9%
	Very Good Plus	275	1.9%
Overall		14122	100.0%
Excluded		0	
Total		14122	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.632	.970	.253	43.6%
Average	1.002	1.007	.048	15.8%
Average Minus	1.008	1.003	.034	6.4%
Average Plus	.998	1.001	.034	5.9%
Economy	1.011	1.011	.098	20.0%
Excellent	1.003	.995	.034	7.2%
Excellent Minus	.999	1.005	.028	9.7%
Excellent Plus	.995	1.000	.020	2.6%
Fair	1.009	.999	.050	8.2%
Fair Minus	1.011	1.003	.052	9.2%
Fair Plus	1.007	1.004	.046	8.6%
Good	.998	.997	.028	4.5%
Good Minus	.999	1.001	.028	4.6%
Good Plus	1.000	1.000	.031	5.6%
Premier	.987	.999	.012	1.8%
Premier Minus	.993	1.002	.033	4.2%
Premier Plus	1.018	1.000	.000	.%
Very Good	.997	.999	.024	3.6%
Very Good Minus	.997	1.003	.029	4.6%
Very Good Plus	.997	1.002	.031	7.6%
Overall	1.000	1.005	.037	9.7%

Commercial Median Ratio Stratification
Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	1	.5%
	$25K to $50K	4	2.0%
	$50K to $100K	15	7.5%
	$100K to $150K	6	3.0%
	$150K to $200K	21	10.4%
	$200K to $300K	36	17.9%
	$300K to $500K	34	16.9%
	$500K to $750K	17	8.5%
	$750K to $1,000K	10	5.0%
	Over $1,000K	57	28.4%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	.984	1.000	.000	.%
$25K to $50K	.954	1.002	.028	4.5%
$50K to $100K	.987	1.000	.042	5.6%
$100K to $150K	.982	.997	.030	5.9%
$150K to $200K	1.000	1.000	.034	6.2%
$200K to $300K	1.000	1.000	.022	3.2%
$300K to $500K	.997	1.000	.035	4.9%
$500K to $750K	1.000	.995	.052	12.4%
$750K to $1,000K	1.000	.999	.034	6.6%
Over $1,000K	1.000	.987	.040	10.0%
Overall	1.000	.999	.037	7.5%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	0	1	.5%
	1212	58	28.9%
	2212	8	4.0%
	2215	1	.5%
	2220	31	15.4%
	2225	1	.5%
	2230	21	10.4%
	2235	59	29.4%
	2240	2	1.0%
	2245	19	9.5%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.984	1.000	.000	.%
1212	1.000	1.002	.026	4.2%
2212	1.017	1.029	.086	17.4%
2215	1.000	1.000	.000	.%
2220	1.000	.988	.032	11.5%
2225	.978	1.000	.000	.%
2230	1.000	1.002	.028	5.1%
2235	.970	1.004	.038	4.6%
2240	.830	.938	.166	23.5%
2245	.987	.989	.032	4.9%
Overall	1.000	.999	.037	7.5%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	.00	1	.5%
	Over 100	1	.5%
	75 to 100	1	.5%
	50 to 75	8	4.0%
	25 to 50	68	33.8%
	5 to 25	100	49.8%
	5 or Newer	22	10.9%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.984	1.000	.000	.%
Over 100	1.034	1.000	.000	.%
75 to 100	1.000	1.000	.000	.%
50 to 75	.971	.999	.028	3.7%
25 to 50	1.000	.986	.032	8.4%
5 to 25	.997	1.020	.039	7.6%
5 or Newer	.992	.980	.041	5.5%
Overall	1.000	.999	.037	7.5%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	.00	1	.5%
	LE 500 sf	2	1.0%
	500 to 1,000 sf	13	6.5%
	1,000 to 1,500 sf	38	18.9%
	1,500 to 2,000 sf	23	11.4%
	2,000 to 3,000 sf	34	16.9%
	3,000 sf or Higher	90	44.8%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.984	1.000	.000	.%
LE 500 sf	.938	1.005	.054	7.6%
500 to 1,000 sf	.956	.994	.044	5.6%
1,000 to 1,500 sf	1.000	.996	.030	5.4%
1,500 to 2,000 sf	.973	1.000	.024	3.2%
2,000 to 3,000 sf	1.000	1.005	.027	4.2%
3,000 sf or Higher	1.000	.995	.043	9.9%
Overall	1.000	.999	.037	7.5%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY		1	.5%
	Average	113	56.2%
	Excellent Minus	1	.5%
	Fair	11	5.5%
	Good	21	10.4%
	Good Minus	4	2.0%
	Good Plus	25	12.4%
	Very Good	7	3.5%
	Very Good Minus	15	7.5%
	Very Good Plus	3	1.5%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CurrTot / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.984	1.000	.000	.%
Average	1.000	.993	.042	8.8%
Excellent Minus	1.000	1.000	.000	.%
Fair	1.000	1.000	.021	2.7%
Good	1.000	.992	.038	7.8%
Good Minus	.994	1.002	.023	3.3%
Good Plus	1.003	1.004	.029	5.3%
Very Good	.990	.999	.014	2.4%
Very Good Minus	.991	.993	.034	5.0%
Very Good Plus	1.004	1.003	.037	5.5%
Overall	1.000	.999	.037	7.5%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	2	3.3%
	$25K to $50K	7	11.5%
	$50K to $100K	18	29.5%
	$100K to $150K	8	13.1%
	$150K to $200K	6	9.8%
	$200K to $300K	4	6.6%
	$300K to $500K	8	13.1%
	$500K to $750K	3	4.9%
	$750K to $1,000K	3	4.9%
	Over $1,000K	2	3.3%
Overall		61	100.0%
Excluded		0	
Total		61	

Ratio Statistics for CurrLnd / VTASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	1.101	.988	.135	19.1%
$25K to $50K	1.050	1.000	.131	25.1%
$50K to $100K	.943	1.014	.239	38.0%
$100K to $150K	1.030	1.018	.286	44.3%
$150K to $200K	1.000	.996	.210	34.9%
$200K to $300K	1.193	.997	.110	14.7%
$300K to $500K	.988	.996	.144	22.0%
$500K to $750K	1.039	.995	.121	20.8%
$750K to $1,000K	1.060	1.001	.033	5.5%
Over $1,000K	.862	.995	.017	2.3%
Overall	1.009	1.079	.196	29.6%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100	9	14.8%
	200	1	1.6%
	400	11	18.0%
	550	1	1.6%
	1112	30	49.2%
	2112	1	1.6%
	2120	1	1.6%
	2130	4	6.6%
	2135	3	4.9%
Overall		61	100.0%
Excluded		0	
Total		61	

Ratio Statistics for CurrLnd / VTASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100	.974	.929	.058	9.1%
200	1.765	1.000	.000	.%
400	1.035	1.164	.170	26.7%
550	1.024	1.000	.000	.%
1112	1.050	1.111	.234	32.4%
2112	.706	1.000	.000	.%
2120	1.150	1.000	.000	.%
2130	.982	.965	.141	24.7%
2135	1.039	.965	.049	9.2%
Overall	1.009	1.079	.196	29.6%