



2018
EL PASO COUNTY
PROPERTY ASSESSMENT
STUDY



WILDROSE
APPRAISAL, INCORPORATED
Audit Division



September 15, 2018

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

RE: Final Report for the 2018 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2018 Colorado Property Assessment Study.

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

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

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

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

A handwritten signature in black ink that reads "Harry J. Fuller". The signature is written in a cursive style.

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

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INTRODUCTION



Colorado

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

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

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

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

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

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

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

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

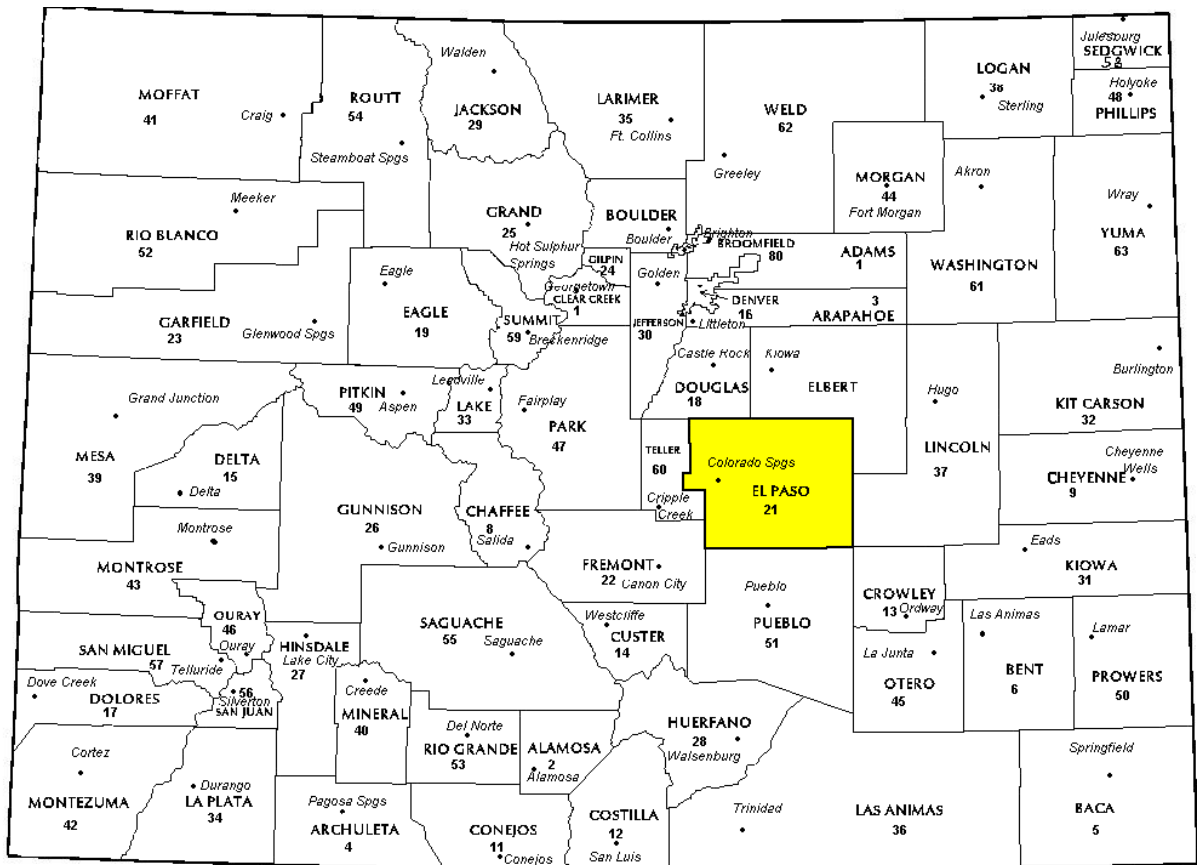
Wildrose Audit has completed the Property Assessment Study for 2018 and is pleased to report its findings for El Paso County in the following report.

REGIONAL/HISTORICAL SKETCH OF EL PASO COUNTY

Regional Information

El Paso 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

El Paso County had an estimated population of approximately 688,284 people with 323.59 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a 10.61 percent change from April 1, 2010 to July 1, 2016.

In July 1858, gold was discovered along the South Platte River in Arapahoe County, Kansas Territory. 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 Oct 24, 1859. The following month, the Jefferson Territorial Legislature organized 12 counties for the new territory including El Paso County. El Paso County was named for the Spanish language name for Ute Pass north of Pikes Peak. Colorado City served as the county seat of El Paso County.

The Jefferson Territory never received federal sanction, but on Feb. 2, 1861, U.S. President James Buchanan signed an act organizing the Territory of Colorado. El Paso County was

one of the original 17 counties created by the Colorado legislature on November 1, 1861. Part of its western territory was broken off to create Teller County in 1899. Originally based in Old Colorado City (now part of Colorado Springs, not today's Colorado City between Pueblo and Walsenburg), El Paso County's county seat was moved to Colorado Springs in 1873.

Colorado Springs was founded in August 1871 by General William Palmer, with the intention of creating a high quality resort community, and was soon nicknamed "Little London" because of the many English tourists who came. Nearby Pikes Peak and the Garden of the Gods made the city's location a natural choice. Colorado Springs covers 194.7 square miles, making it the most extensive municipality in Colorado. Colorado Springs was selected as the No. 1 Best Big City in "Best Places to Live" by Money magazine in 2006 and placed number one in Outside's 2009 list of America's Best Cities. The United States Air Force Academy is located in Colorado Springs.

(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 1, 2015 and June 30, 2016. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2016 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 El Paso County are:

El Paso County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	290	0.950	1.069	15.6	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	30,416	0.976	1.011	5.8	Compliant
Vacant Land	1,135	0.991	1.094	16.3	Compliant

Ratio Statistics for CURRTOT / TASP			
Group	Median	Price Related Differential	Coefficient of Dispersion
1	.976	1.006	.042
2	.983	1.024	.088
3	.983	1.025	.109
4	.976	1.010	.055
5	.980	1.024	.086
6	.990	1.023	.093
7	.982	1.025	.078
8	.986	1.037	.065
9	.988	1.004	.064
10	.980	1.031	.065
11	.990	1.004	.065
12	.976	1.004	.031
13	.984	1.011	.060
14	.965	1.002	.052
15	.992	1.004	.065
16	.980	1.006	.071
17	.980	1.018	.079
18	.985	1.013	.077
19	.981	1.023	.110
20	.976	1.004	.029
Overall	.976	1.011	.058

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

SBOE, DPT, and Colorado State Statute valuation guidelines.

Recommendations

None



TIME TRENDING VERIFICATION

Methodology

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

trending adequately, and a further examination is warranted. This validation method also considers the number of sales and the length of the sale period. Counties with few sales across the sale period were carefully examined to determine if the statistical results were valid.

Conclusions

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

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

We test the hypothesis that the assessor has valued unsold properties consistent with what is observed with the sold properties based on several units of comparison and tests. The units of comparison include the actual value per square foot and the change in value from the previous base year period to the current base year. The first test compares the actual value per square foot between sold and unsold properties by class. The median and mean value per square foot is compared and tested for any significant difference. This is tested using non-parametric methods, such as the Mann-Whitney test for differences in the distributions or medians between sold and unsold groups. It is also examined graphically and from an appraisal perspective. Data can be stratified based on location and subclass. The second test compares the difference in the median change in value from the previous base year to the current base year between sold and unsold properties by class. The same combination of non-parametric and appraisal testing is used as with the first test. A third test employing a valuation model testing a sold/unsold binary variable while controlling for property attributes such as location, size, age and other attributes. The model determines if the sold/unsold variable is statistically and empirically significant. If all three tests indicate a significant difference between sold and unsold properties for a given class, the Auditor may meet with the county to determine if sale chasing is actually occurring,

or if there are other explanations for the observed difference.

If the unsold properties have a higher median value per square foot than the sold properties, or if the median change in value is greater for the unsold properties than the sold properties, the analysis is stopped and the county is concluded to be in compliance with sold and unsold guidelines. All sold and unsold properties in a given class are first tested, although properties with extreme unit values or percent changes can be trimmed to stabilize the analysis. The median is the primary comparison metric, although the mean can also be used as a comparison metric if the distribution supports that type of measure of central tendency.

The first test (unit value method) is applied to both residential and commercial/industrial sold and unsold properties. The second test is applied to sold and unsold vacant land properties. The second test (change in value method) is also applied to residential or commercial sold and unsold properties if the first test results in a significant difference observed and/or tested between sold and unsold properties. The third test (valuation modeling) is used in instances where the results from the first two tests indicate a significant difference between sold and unsold properties. It can also be used when the number of sold and unsold properties is so large that the non-parametric testing is indicating a false rejection of the hypothesis that there is no difference between the sold and unsold property values.

These tests were supported by both tabular and graphics presentations, along with written documentation explaining the methodology used.

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

Conclusions

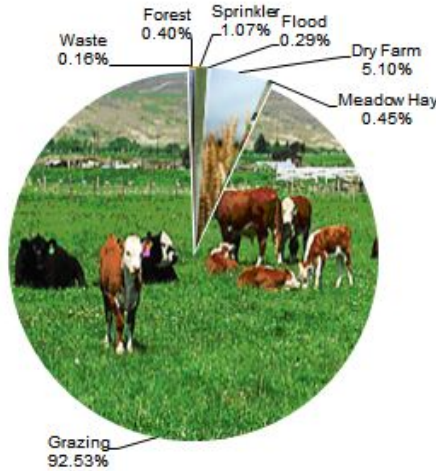
After applying the above described methodologies, it is concluded that El Paso County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

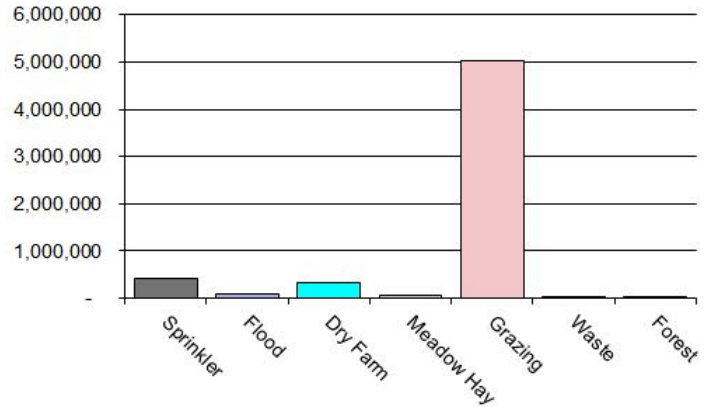
None

AGRICULTURAL LAND STUDY

Acres By Subclass



Value By Subclass



Agricultural Land

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

Administrator (PTA), were applied properly. (See Assessor Reference Library Volume 3 Chapter 5.)

Conclusions

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

El Paso 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	6,035	70.97	428,292	438,562	0.98
4117	Flood	1,608	65.37	105,139	106,845	0.98
4127	Dry Farm	28,660	11.69	334,936	343,453	0.98
4137	Meadow Hay	2,506	29.85	74,798	74,798	1.00
4147	Grazing	519,624	9.65	5,013,735	5,013,735	1.00
4177	Forest	2,224	13.40	29,805	29,805	1.00
4167	Waste	897	2.22	1,993	1,993	1.00
Total/Avg		561,554	10.66	5,988,697	6,009,190	1.00

Recommendations

None

Agricultural Outbuildings

Methodology

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

Property Taxation for the valuation of agricultural outbuildings.

Recommendations

None

Conclusions

El Paso County has substantially complied with the procedures provided by the Division of

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

El Paso County has used the following methods to discover land under a residential improvement on a farm or ranch that is determined to be not integral under 39-1-102, C.R.S.:

- Questionnaires
- Field Inspections
- Phone Interviews
- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

Assessor's staff knowledge of ag leases, where there was no evidence of an integral relationship between lessor and lessee's ag operation

El Paso County has used the following methods to discover the land area under a residential improvement that is determined to be not integral under 39-1-102, C.R.S.:

- Aerial Photography/Pictometry

El Paso 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 2018 for El Paso County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 56 sales listed as unqualified.

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

For residential, commercial, and vacant land sales with considerations over \$500, the contractor has examined and reported the ratio of qualified sales to total sales by class and performed the following analyses of unqualified sales:

The contractor has examined the manner in which sales have been classified as qualified or unqualified, including a listing of each step in the sales verification process, any adjustment procedures, and the county official responsible for making the final decision on qualification.

The contractor has reviewed with the assessor any analysis indicating that sales data are inadequate, fail to reflect typical properties, or have been disqualified for insufficient cause. In addition, the contractor has reviewed the disqualified sales by assigned code. If there appears to be any inconsistency in the coding, the contractor has

conducted further analysis to determine if the sales included in that code have been assigned appropriately.

Conclusions

El Paso County appears to be doing a good job of verifying their sales. WRA agreed with the

county's reason for disqualifying each of the sales selected in the sample. There are no recommendations or suggestions.

Recommendations

None

ECONOMIC AREA REVIEW AND EVALUATION

Methodology

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

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

Recommendations

None

NATURAL RESOURCES

Earth and Stone Products

Methodology

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

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

Conclusions

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

Recommendations

None

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2018 in El Paso 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 can be 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

El Paso 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.

El Paso 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

El Paso 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

El Paso 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.

El Paso 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
- MLS Listing and/or Sold Books
- 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
- CO Secretary of State
- Business Filing
- Volunteer Filing

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.

El Paso County submitted their personal property written audit plan and was current for the 2018 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Accounts with greater than 10% change



- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts - Best Information Available
- Accounts close to the \$7,400 actual value exemption status
- Lowest or highest quartile of value per square foot
- Accounts protested with substantial disagreement

El Paso 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

El Paso 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*

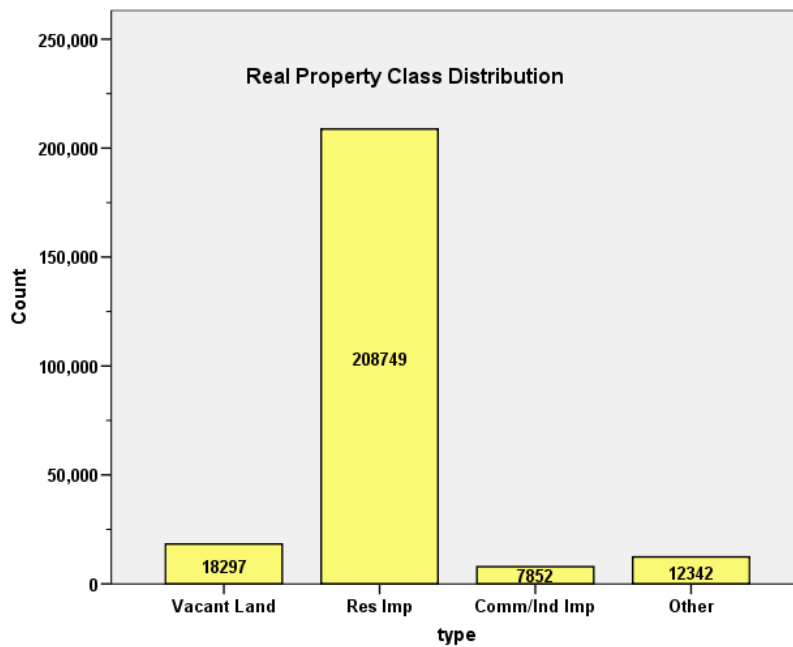
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

**STATISTICAL COMPLIANCE REPORT
FOR EL PASO COUNTY
2018**

I. OVERVIEW

El Paso County is an urban county located along Colorado’s Front Range. The county has a total of 247,240 real property parcels, according to data submitted by the county assessor’s office in 2018. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100 and 1112) accounted for 75.5% of all vacant land parcels.

For residential improved properties, single family properties accounted for 93.8% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 3.2% of all such properties in this county.

II. DATA FILES

The following sales analyses were based on the requirements of the 2018 Colorado Property Assessment Study. Information was provided by the El Paso Assessor’s Office in April 2018. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 30,416 qualified residential sales over the 24 month period ending on June 30, 2016. The sales ratio analysis was analyzed as follows:

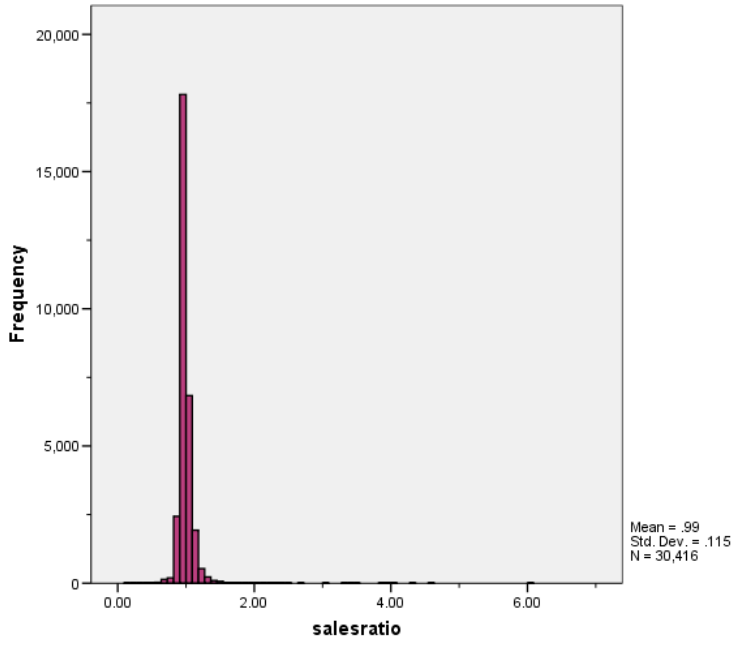
Case Processing Summary

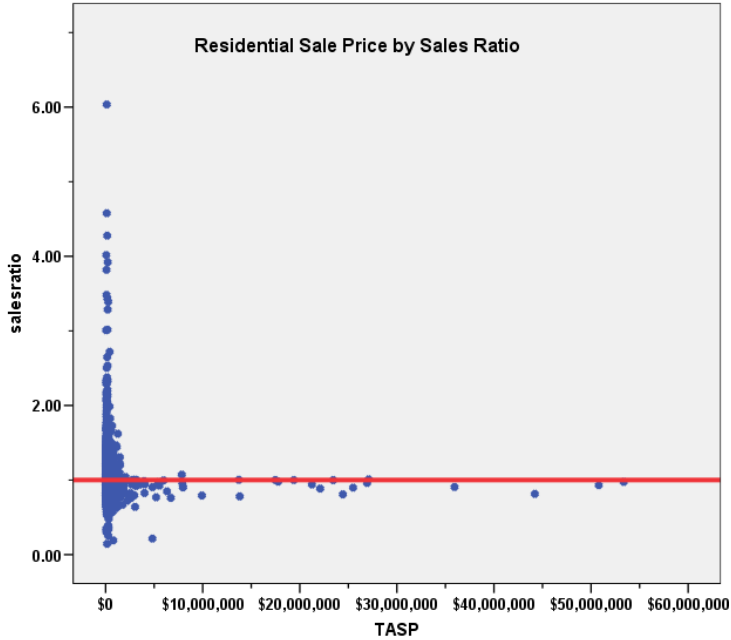
		Count	Percent
ECON	1	4801	15.8%
	2	1010	3.3%
	3	539	1.8%
	4	2198	7.2%
	5	1510	5.0%
	6	643	2.1%
	7	1146	3.8%
	8	899	3.0%
	9	709	2.3%
	10	772	2.5%
	11	1550	5.1%
	12	3883	12.8%
	13	1921	6.3%
	14	3047	10.0%
	15	1997	6.6%
	16	358	1.2%
	17	781	2.6%
	18	721	2.4%
	19	152	0.5%
	20	1779	5.8%
Overall		30416	100.0%
Excluded		0	
Total		30416	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.976	1.006	.042
2	.983	1.024	.088
3	.983	1.025	.109
4	.976	1.010	.055
5	.980	1.024	.086
6	.990	1.023	.093
7	.982	1.025	.078
8	.986	1.037	.065
9	.988	1.004	.064
10	.980	1.031	.065
11	.990	1.004	.065
12	.976	1.004	.031
13	.984	1.011	.060
14	.965	1.002	.052
15	.992	1.004	.065
16	.980	1.006	.071
17	.980	1.018	.079
18	.985	1.013	.077
19	.981	1.023	.110
20	.976	1.004	.029
Overall	.976	1.011	.058

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 and broken down by economic area. The following graphs describe further the sales ratio distribution for these properties:





The above graphs indicate that the distribution of the sale ratios was within state mandated limits.

Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period for any residual market trending and broken down by economic area, as follows:

Coefficients^a

ECON	Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	1	(Constant)	.987	.002		496.394	.000
		SalePeriod	9.824E-5	.000	.009	.621	.535
2	1	(Constant)	1.021	.009		118.948	.000
		SalePeriod	-.001	.001	-.068	-2.169	.030
3	1	(Constant)	1.011	.015		67.921	.000
		SalePeriod	.002	.001	.074	1.730	.084
4	1	(Constant)	.969	.004		275.369	.000
		SalePeriod	.002	.000	.123	5.801	.000
5	1	(Constant)	1.010	.008		129.680	.000
		SalePeriod	.000	.001	-.013	-.492	.622
6	1	(Constant)	1.039	.013		77.105	.000
		SalePeriod	.000	.001	-.012	-.294	.769
7	1	(Constant)	1.002	.008		118.857	.000
		SalePeriod	.000	.001	.020	.688	.492
8	1	(Constant)	.998	.006		155.198	.000
		SalePeriod	8.682E-5	.000	.006	.178	.859
9	1	(Constant)	1.007	.006		157.556	.000
		SalePeriod	.000	.000	-.023	-.617	.537

10	1	(Constant)	.973	.006		160.412	.000
		SalePeriod	.001	.000	.097	2.711	.007
11	1	(Constant)	1.000	.004		224.066	.000
		SalePeriod	.001	.000	.075	2.954	.003
12	1	(Constant)	.976	.002		583.897	.000
		SalePeriod	.001	.000	.106	6.617	.000
13	1	(Constant)	.986	.004		265.805	.000
		SalePeriod	.001	.000	.096	4.238	.000
14	1	(Constant)	.962	.002		449.200	.000
		SalePeriod	.001	.000	.054	2.977	.003
15	1	(Constant)	.992	.004		259.150	.000
		SalePeriod	.001	.000	.077	3.434	.001
16	1	(Constant)	1.010	.021		47.914	.000
		SalePeriod	-.001	.002	-.037	-.695	.487
17	1	(Constant)	1.006	.016		63.224	.000
		SalePeriod	.000	.001	.003	.091	.928
18	1	(Constant)	1.005	.012		84.716	.000
		SalePeriod	.000	.001	.009	.241	.810
19	1	(Constant)	1.014	.039		26.251	.000
		SalePeriod	.000	.003	.013	.157	.876
20	1	(Constant)	.991	.005		190.512	.000
		SalePeriod	.000	.000	.019	.819	.413

a. Dependent Variable: salesratio

There was no residual market trending present in the sale ratio data for most of the economic areas; those with trends were not significant in terms of magnitude. We therefore concluded that the assessor has adequately addressed market trending in the valuation of residential properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square foot for 2018 between each group. The data was analyzed as follows:

Report

VALSF			
sold	N	Median	Mean
UNSOLD	178,084	\$145	\$151
SOLD	30,409	\$149	\$156

We also examined this comparison by economic area, as follows:

Report

VALSF				
ECON	sold	N	Median	Mean
1	UNSOLD	23593	\$128.20	\$130.47
	SOLD	4801	\$135.33	\$139.12
2	UNSOLD	8133	\$174.83	\$186.53
	SOLD	1010	\$175.95	\$182.53
3	UNSOLD	4121	\$136.71	\$140.23
	SOLD	538	\$146.26	\$152.62
4	UNSOLD	14205	\$117.99	\$118.24

	SOLD	2196	\$125.22	\$126.28
5	UNSOLD	11865	\$165.36	\$169.10
	SOLD	1508	\$173.38	\$177.23
6	UNSOLD	4949	\$191.16	\$190.33
	SOLD	643	\$201.85	\$204.28
7	UNSOLD	9883	\$148.15	\$144.72
	SOLD	1145	\$154.89	\$152.12
8	UNSOLD	5855	\$161.75	\$171.09
	SOLD	899	\$164.49	\$176.24
9	UNSOLD	5183	\$154.85	\$163.63
	SOLD	709	\$153.71	\$158.79
10	UNSOLD	4842	\$142.92	\$147.39
	SOLD	772	\$124.83	\$135.86
11	UNSOLD	11042	\$140.19	\$143.03
	SOLD	1550	\$143.07	\$146.32
12	UNSOLD	16759	\$136.10	\$138.97
	SOLD	3883	\$143.71	\$147.21
13	UNSOLD	12314	\$147.03	\$151.97
	SOLD	1921	\$150.34	\$156.18
14	UNSOLD	13803	\$152.39	\$163.94
	SOLD	3047	\$155.25	\$167.80
15	UNSOLD	9128	\$173.11	\$183.68
	SOLD	1997	\$185.65	\$197.46
16	UNSOLD	2754	\$166.75	\$176.20
	SOLD	358	\$184.51	\$186.93
17	UNSOLD	6849	\$172.68	\$177.75
	SOLD	781	\$177.51	\$185.74
18	UNSOLD	5773	\$101.88	\$111.29
	SOLD	720	\$107.73	\$119.31
19	UNSOLD	1180	\$78.05	\$93.43
	SOLD	152	\$91.41	\$104.35
20	UNSOLD	5853	\$140.38	\$145.13
	SOLD	1779	\$148.36	\$157.26

Although the overall comparison indicated consistency in the valuation of sold and unsold properties by economic area, we also examined the percent change in actual value for taxable years 2016 and 2018 for sold and unsold residential properties, both overall and by economic area:

Report

DIFF				
	sold	N	Median	Mean
	UNSOLD	171,314	1.13	1.13
	SOLD	29,582	1.14	1.16

Report

DIFF				
ECON	sold	N	Median	Mean
1	UNSOLD	22,678	1.12	1.12
	SOLD	4,633	1.15	1.17
2	UNSOLD	8,069	1.08	1.09
	SOLD	1,004	1.09	1.12
3	UNSOLD	4,093	1.20	1.19
	SOLD	527	1.23	1.26
4	UNSOLD	13,946	1.11	1.13
	SOLD	2,172	1.17	1.19

5	UNSOLD	11,664	1.13	1.13
	SOLD	1,479	1.13	1.17
6	UNSOLD	4,930	1.17	1.16
	SOLD	636	1.17	1.21
7	UNSOLD	9,864	1.17	1.17
	SOLD	1,136	1.18	1.20
8	UNSOLD	5,781	1.14	1.14
	SOLD	885	1.14	1.15
9	UNSOLD	5,158	1.13	1.12
	SOLD	707	1.13	1.13
10	UNSOLD	4,810	1.13	1.12
	SOLD	770	1.13	1.14
11	UNSOLD	10,983	1.18	1.17
	SOLD	1,547	1.18	1.19
12	UNSOLD	16,190	1.11	1.11
	SOLD	3,767	1.13	1.15
13	UNSOLD	12,220	1.15	1.13
	SOLD	1,918	1.14	1.15
14	UNSOLD	12,407	1.09	1.09
	SOLD	2,855	1.09	1.10
15	UNSOLD	8,284	1.12	1.13
	SOLD	1,916	1.12	1.14
16	UNSOLD	2,467	1.15	1.15
	SOLD	350	1.16	1.20
17	UNSOLD	6,459	1.12	1.12
	SOLD	764	1.15	1.19
18	UNSOLD	5,629	1.15	1.15
	SOLD	702	1.19	1.23
19	UNSOLD	1,116	1.13	1.15
	SOLD	144	1.22	1.25
20	UNSOLD	4,566	1.10	1.09
	SOLD	1,670	1.11	1.14

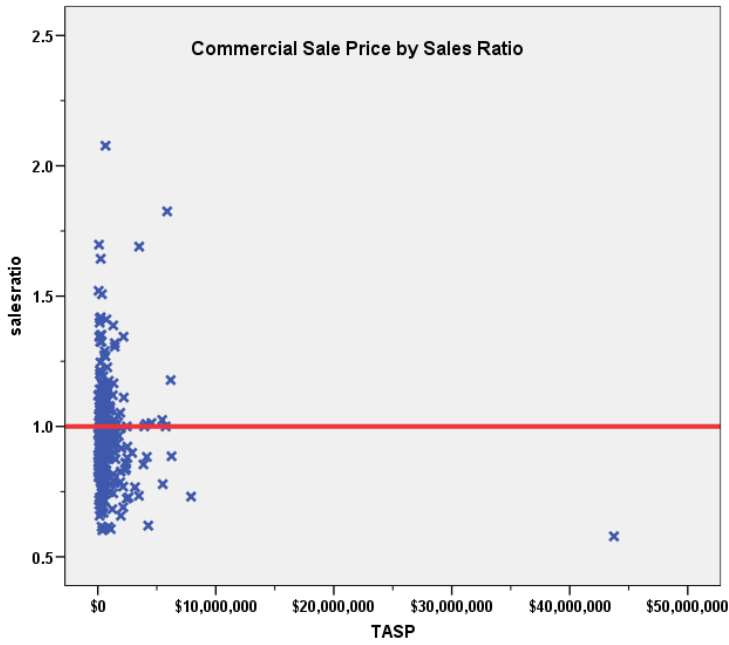
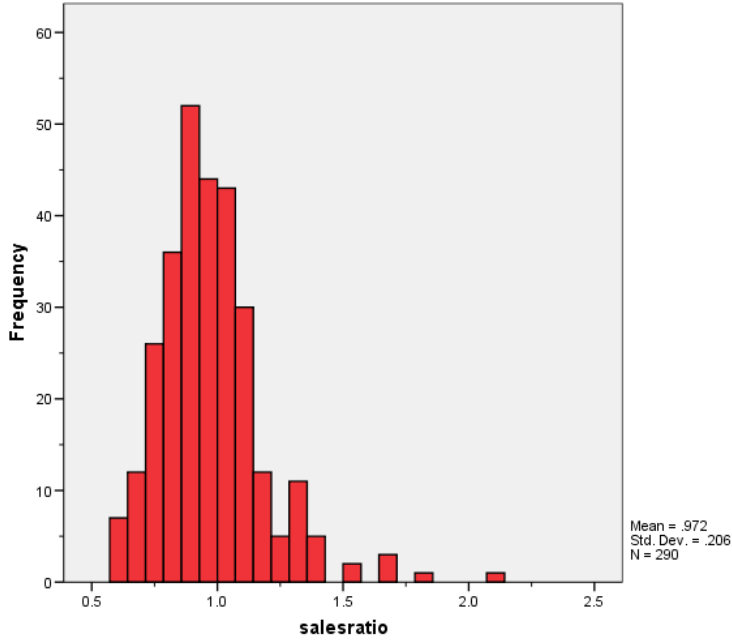
The above results indicate that sold and unsold residential properties were valued in a consistent manner overall.

IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 296 qualified commercial/industrial sales over the 24 month period ending June 30, 2016. We trimmed 5 sales for their extreme sale ratios, resulting in a final count of 290 qualified commercial sales. The sale ratios were analyzed as follows:

Median	0.949
Price Related Differential	1.069
Coefficient of Dispersion	15.6

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



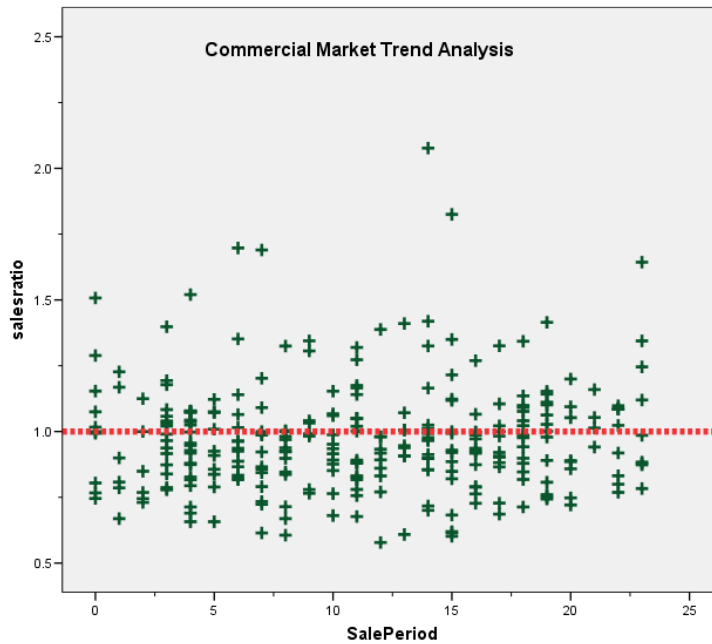
Commercial/Industrial Market Trend Analysis

The 290 commercial/industrial sales were analyzed, examining the sale ratios across the 24 month sale period with the following results:

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.955	.025		38.850	.000
	SalePeriod	.002	.002	.047	.799	.425

a. Dependent Variable: salesratio



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

Sold/Unsold Analysis

We compared the 2018 actual value per square foot between sold and unsold commercial/industrial properties to determine if sold and unsold properties were valued consistently, as follows:

Report			
VALSF			
	N	Median	Mean
UNSOLD	7,578	\$76	\$104
SOLD	290	\$82	\$99

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.016	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .01.

Report

ABSTRIMP	VALSF sold	N	Median	Mean
2212	UNSOLD	1,229	\$92	\$119
	SOLD	43	\$99	\$114
2215	UNSOLD	77	\$59	\$78
	SOLD	3	\$65	\$62
2220	UNSOLD	815	\$81	\$93
	SOLD	63	\$81	\$92
2230	UNSOLD	1,590	\$112	\$146
	SOLD	48	\$119	\$142
2235	UNSOLD	1,741	\$58	\$83
	SOLD	53	\$70	\$71
2245	UNSOLD	794	\$80	\$91
	SOLD	37	\$77	\$99
3215	UNSOLD	145	\$51	\$65
	SOLD	8	\$54	\$59
3230	UNSOLD	222	\$61	\$61
	SOLD	2	\$52	\$52

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

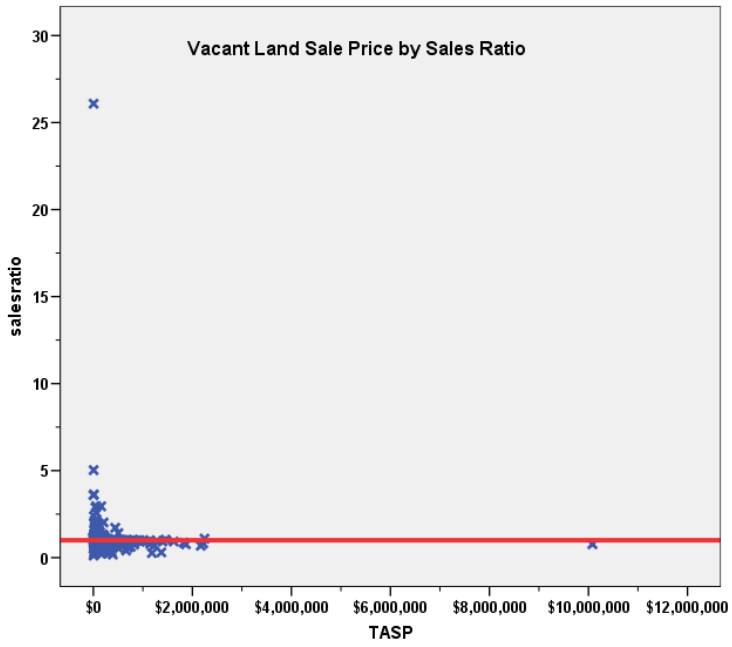
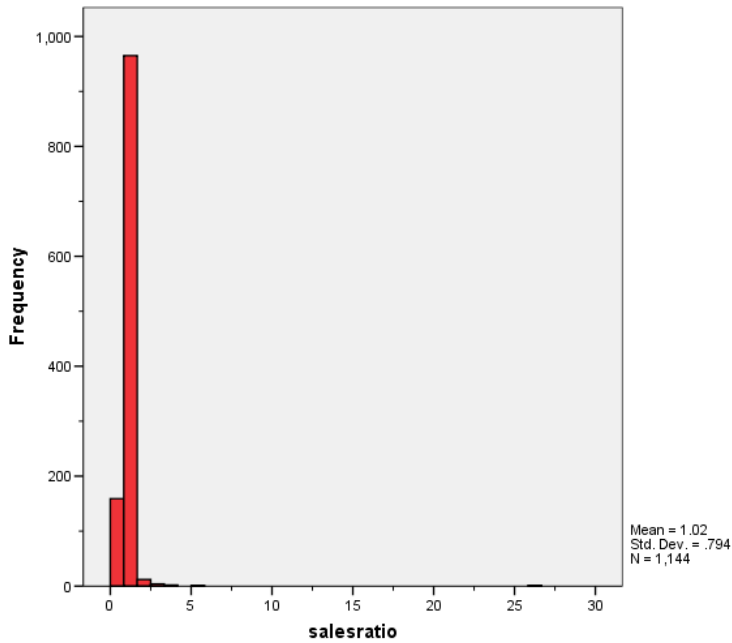
V. VACANT LAND SALE RESULTS

There were 1,144 qualified commercial/industrial sales over the 24 month period ending June 30, 2016. We trimmed 9 sales due to their extreme sales ratios. The sales ratio analysis was analyzed as follows:

Ratio Statistics for currInd / Vtasp

Median	0.991
Price Related Differential	1.094
Coefficient of Dispersion	16.3

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



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

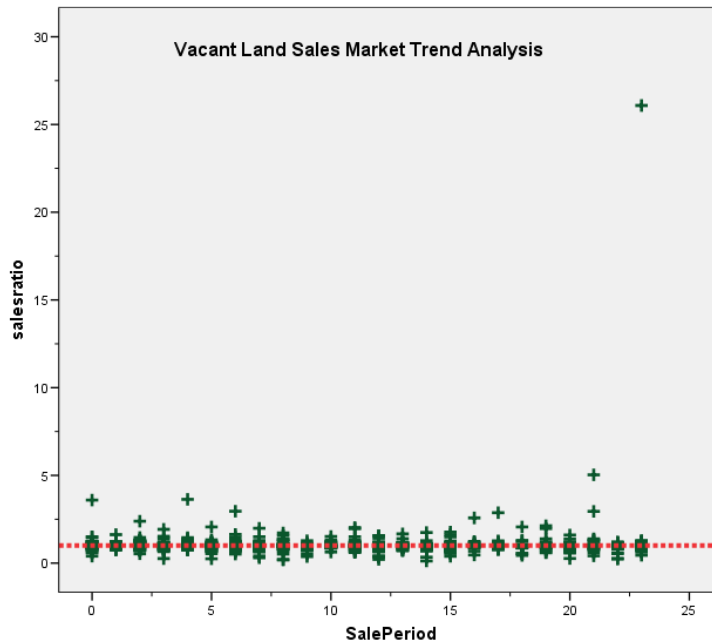
Vacant Land Market Trend Analysis

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

Coefficients^a

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	.975	.039		24.830	.000
	SalePeriod	.005	.003	.046	1.572	.116

a. Dependent Variable: salesratio



There was no significant trend. We therefore 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 and mean change in actual value for taxable years 2016 and 2018 for each group. The following results present the comparison results for sold and unsold properties:

Report			
DIFF			
	N	Median	Mean
UNSOLD	13,570	1.00	.89
SOLD	1,085	1.08	1.14

Given the difference in the overall comparison analysis, we next examined sold and unsold properties by subdivision with at least three sales. This breakdown indicated that sold and unsold properties were valued consistently. Due to the number of these subdivisions with at least three sales, we developed the following table with subdivision with at least 6 sales, which indicates the same overall value consistency between sold and unsold properties:

Report

DIFF

SUBDIVNO	sold	N	Median	Mean
871	UNSOLD	57	1.80	1.80
	SOLD	14	1.47	1.39
2462	UNSOLD	6	.99	.99
	SOLD	6	.98	.99
4369	UNSOLD	34	1.00	.92
	SOLD	9	.75	.82
9773	UNSOLD	3	1.04	1.04
	SOLD	6	1.04	1.04
11115	UNSOLD	4	.49	.51
	SOLD	7	1.08	1.04
11597	UNSOLD	7	1.00	.86
	SOLD	7	1.00	.89
11895	UNSOLD	6	.95	.95
	SOLD	7	.89	1.00
11982	UNSOLD	13	1.01	.70
	SOLD	7	1.06	1.07
12153	UNSOLD	5	.95	.95
	SOLD	10	.96	1.02
12234	UNSOLD	13	1.00	.94
	SOLD	6	1.00	1.07
12240	UNSOLD	4	.52	.52
	SOLD	6	1.35	1.36
12390	UNSOLD	2	.95	.95
	SOLD	9	.95	1.04
12407	UNSOLD	4	1.67	1.67
	SOLD	15	1.74	1.62
12536	UNSOLD	11	1.44	.86
	SOLD	8	1.71	1.55
13395	UNSOLD	2	.63	.63
	SOLD	7	.97	1.12
13406	UNSOLD	1	1.00	1.00
	SOLD	10	1.00	1.00
13431	UNSOLD	13	.91	.92
	SOLD	13	.91	.95
13472	UNSOLD	2	1.05	1.05
	SOLD	6	1.07	1.07
13494	UNSOLD	3	1.21	1.21
	SOLD	8	1.21	1.19
13498	UNSOLD	20	1.77	1.76
	SOLD	10	1.77	1.77
13547	UNSOLD	1	1.13	1.13
	SOLD	8	1.13	1.13
13588	UNSOLD	13	1.77	1.64
	SOLD	17	.89	1.12
13635	UNSOLD	11	1.00	1.00
	SOLD	10	1.00	1.00
13639	UNSOLD	5	.00	.21
	SOLD	15	1.01	1.01
13640	UNSOLD	7	1.58	1.58
	SOLD	7	1.63	1.61
13666	UNSOLD	1	1.00	1.00
	SOLD	33	1.22	1.22



13670	UNSOLD	1	.94	.94
	SOLD	18	1.02	1.02
13677	UNSOLD	2	1.13	1.13
	SOLD	7	1.13	1.13

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

VI. AGRICULTURAL IMPROVEMENTS ANALYSIS

Based on the parameters of the state audit analysis, this county was exempt from this analysis for 2018.

VII. CONCLUSIONS

Based on this 2018 audit statistical analysis, residential, commercial and vacant land properties were found to be in compliance with state guidelines.

STATISTICAL ABSTRACT
Residential

Ratio Statistics for CURRTOT / TASP													
ECON	Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median		Actual Coverage	Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Mean Centered
		Lower Bound	Upper Bound		Lower Bound	Upper Bound			Lower Bound	Upper Bound			
1	.988	.985	.990	.976	.976	.976	95.0%	.981	.980	.983	1.006	.042	7.8%
2	1.005	.996	1.014	.983	.979	.989	95.3%	.982	.961	1.003	1.024	.088	14.7%
3	1.032	1.016	1.048	.983	.980	.990	95.3%	1.007	.994	1.021	1.025	.109	18.8%
4	.986	.982	.990	.976	.976	.976	95.3%	.976	.964	.987	1.010	.055	9.4%
5	1.007	.999	1.015	.980	.979	.982	95.3%	.983	.972	.995	1.024	.086	16.2%
6	1.036	1.021	1.051	.990	.989	.994	95.1%	1.013	1.002	1.024	1.023	.093	18.3%
7	1.007	.998	1.016	.982	.980	.987	95.2%	.982	.950	1.014	1.025	.078	15.1%
8	.999	.992	1.006	.986	.981	.990	95.5%	.964	.934	.993	1.037	.065	10.4%
9	1.003	.996	1.010	.988	.982	.991	95.8%	.999	.991	1.007	1.004	.064	9.4%
10	.986	.980	.993	.980	.975	.983	95.2%	.957	.930	.984	1.031	.065	9.6%
11	1.011	1.007	1.016	.990	.986	.990	95.5%	1.008	1.003	1.012	1.004	.065	9.6%
12	.986	.984	.987	.976	.976	.976	95.3%	.982	.979	.984	1.004	.031	6.0%
13	.999	.995	1.003	.984	.981	.988	95.0%	.988	.977	.999	1.011	.060	8.7%
14	.967	.965	.969	.965	.963	.967	95.4%	.965	.963	.968	1.002	.052	6.9%
15	1.003	.999	1.007	.992	.990	.995	95.1%	.999	.994	1.003	1.004	.065	9.2%
16	.998	.976	1.021	.980	.976	.988	96.1%	.993	.976	1.009	1.006	.071	21.8%
17	1.007	.990	1.024	.980	.980	.985	95.5%	.989	.980	.999	1.018	.079	23.8%
18	1.007	.995	1.020	.985	.981	.990	95.6%	.994	.984	1.004	1.013	.077	16.9%
19	1.020	.982	1.057	.981	.972	.990	95.8%	.996	.975	1.018	1.023	.110	23.0%
20	.995	.989	1.001	.976	.976	.976	95.4%	.990	.987	.994	1.004	.029	12.4%

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

Commercial Land

Ratio Statistics for CURRTOT / TASP

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Mean Centered
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
.972	.948	.996	.949	.923	.986	96.0%	.910	.802	1.017	1.069	.156	21.2%

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

Vacant Land

Ratio Statistics for CURRLND / TASP

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Mean Centered
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
1.025	.979	1.071	.991	.983	.997	95.2%	.936	.911	.962	1.094	.163	77.5%

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	5	0.0%
	\$25K to \$50K	42	0.1%
	\$50K to \$100K	744	2.4%
	\$100K to \$150K	2450	8.1%
	\$150K to \$200K	5863	19.3%
	\$200K to \$300K	11741	38.6%
	\$300K to \$500K	7810	25.7%
	\$500K to \$750K	1408	4.6%
	\$750K to \$1,000K	199	0.7%
	Over \$1,000K	154	0.5%
Overall		30416	100.0%
Excluded		0	
Total		30416	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	.953	.993	.169	22.8%
\$25K to \$50K	1.059	1.004	.162	33.0%
\$50K to \$100K	.992	.999	.140	28.7%
\$100K to \$150K	.995	1.002	.093	20.2%
\$150K to \$200K	.980	1.000	.059	12.0%
\$200K to \$300K	.976	1.001	.045	8.5%
\$300K to \$500K	.976	1.000	.051	8.5%
\$500K to \$750K	.976	1.000	.070	10.5%
\$750K to \$1,000K	.970	.999	.073	12.2%
Over \$1,000K	.947	1.013	.100	15.8%
Overall	.976	1.011	.058	11.9%

Subclass
Case Processing Summary

	Count	Percent
ABSTRIMP	0	0.0%
	600	0.0%
	753	0.0%
	1212	93.6%
	1213	0.0%
	1213	0.0%
	1214	0.0%
	1214	0.0%
	1215	0.6%
	1217	0.0%
	1218	0.0%
	1218	0.0%
	1220	0.6%
	1221	0.0%
	1223	0.0%
	1225	0.2%
	1230	4.8%
	1240	0.0%
	1549	0.0%
	1617	0.0%
	1715	0.0%
	1716	0.0%
	1721	0.0%
	1724	0.0%
	1814	0.0%
	1825	0.0%
	1826	0.0%
	1889	0.0%
	1891	0.0%
	1979	0.0%
	2215	0.0%
	2220	0.0%
	2234	0.0%
	2348	0.0%
	2574	0.0%
	2746	0.0%
	3257	0.0%
	3512	0.0%
	3768	0.0%
	4277	0.0%
	4279	0.0%
	9215	0.0%
	9250	0.0%
	9255	0.0%
Overall	30416	100.0%
Excluded	0	
Total	30416	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.145	1.000	.000	.
600	.318	1.000	.000	.
753	.914	1.000	.000	.
1212	.976	1.007	.057	11.9%
1213	.990	1.000	.000	.
1213	.980	1.000	.000	.
1214	.980	1.001	.020	3.5%
1214	.970	1.000	.000	.
1215	.990	1.015	.091	14.4%
1217	1.614	1.165	.228	32.2%
1218	1.602	.997	.054	7.7%
1218	.826	1.000	.000	.
1220	.969	1.019	.095	13.3%
1221	.998	1.080	.133	18.8%
1223	1.004	1.000	.000	.
1225	.946	1.020	.098	15.2%
1230	.976	1.004	.057	9.1%
1240	.215	1.000	.000	.
1549	1.828	1.000	.000	.
1617	1.048	1.000	.000	.
1715	.867	1.000	.000	.
1716	1.163	1.000	.000	.
1721	1.624	1.000	.000	.
1724	.945	1.000	.000	.
1814	.996	1.000	.000	.
1825	1.053	1.000	.000	.
1826	1.658	1.000	.000	.
1889	1.421	1.000	.000	.
1891	1.080	1.000	.000	.
1979	.999	1.000	.000	.
2215	.990	1.000	.000	.
2220	1.107	1.000	.000	.
2234	.986	1.000	.000	.
2348	.769	1.000	.000	.
2574	.946	1.000	.000	.
2746	.998	1.007	.043	5.7%
3257	.976	1.045	.117	18.8%
3512	1.527	1.000	.000	.
3768	1.048	1.000	.000	.
4277	.686	1.000	.000	.
4279	.688	1.000	.000	.
9215	1.029	1.000	.000	.
9250	.974	1.000	.000	.
9255	1.621	1.000	.000	.
Overall	.976	1.011	.058	11.9%

Age

Case Processing Summary

		Count	Percent
AgeRec	0	1	0.0%
	Over 100	735	2.4%
	75 to 100	387	1.3%
	50 to 75	3069	10.1%
	25 to 50	8713	28.6%
	5 to 25	12035	39.6%
	5 or Newer	5476	18.0%
Overall		30416	100.0%
Excluded		0	
Total		30416	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.145	1.000	.000	.
Over 100	.980	1.030	.113	24.2%
75 to 100	.984	1.021	.104	18.6%
50 to 75	.980	1.019	.079	14.7%
25 to 50	.976	1.013	.067	11.7%
5 to 25	.977	1.007	.048	8.2%
5 or Newer	.976	1.004	.041	13.7%
Overall	.976	1.011	.058	11.9%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	0	1	0.0%
	LE 500 sf	23	0.1%
	500 to 1,000 sf	3243	10.7%
	1,000 to 1,500 sf	9105	29.9%
	1,500 to 2,000 sf	8910	29.3%
	2,000 to 3,000 sf	7190	23.6%
	3,000 sf or Higher	1944	6.4%
Overall		30416	100.0%
Excluded		0	
Total		30416	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.145	1.000	.000	.
LE 500 sf	.980	.997	.094	13.6%
500 to 1,000 sf	.976	1.008	.072	13.1%
1,000 to 1,500 sf	.976	1.006	.054	10.6%
1,500 to 2,000 sf	.976	1.004	.050	9.2%
2,000 to 3,000 sf	.976	1.006	.057	13.1%
3,000 sf or Higher	.987	1.047	.087	18.6%
Overall	.976	1.011	.058	11.9%

Improvement Quality

Case Processing Summary

	Count	Percent
QUALITY 0	2	0.0%
1	715	2.4%
2	21904	72.0%
3	7258	23.9%
4	497	1.6%
5	39	0.1%
Overall	30415	100.0%
Excluded	1	
Total	30416	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.985	1.001	.015	2.1%
1	.987	1.032	.095	23.0%
2	.976	1.013	.055	10.5%
3	.980	1.005	.061	12.5%
4	.985	1.021	.087	22.7%
5	.960	1.087	.207	38.7%
Overall	.976	1.011	.058	11.9%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	1	0.3%
	\$25K to \$50K	2	0.7%
	\$50K to \$100K	14	4.8%
	\$100K to \$150K	12	4.1%
	\$150K to \$200K	22	7.6%
	\$200K to \$300K	42	14.5%
	\$300K to \$500K	61	21.0%
	\$500K to \$750K	50	17.2%
	\$750K to \$1,000K	18	6.2%
	Over \$1,000K	68	23.4%
Overall		290	100.0%
Excluded		0	
Total		290	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	.890	1.000	.000	.
\$25K to \$50K	1.045	.991	.070	9.9%
\$50K to \$100K	.898	.984	.196	33.3%
\$100K to \$150K	.953	.998	.186	24.1%
\$150K to \$200K	1.031	1.003	.126	16.6%
\$200K to \$300K	.973	1.008	.145	20.9%
\$300K to \$500K	.919	1.004	.144	19.5%
\$500K to \$750K	.988	1.000	.152	22.9%
\$750K to \$1,000K	.989	1.003	.116	15.6%
Over \$1,000K	.924	1.071	.166	24.1%
Overall	.949	1.069	.156	21.8%

Subclass

Case Processing Summary

	Count	Percent
ABSTRIMP 1212	1	0.3%
1225	1	0.3%
1716	7	2.4%
1720	1	0.3%
1725	1	0.3%
1728	1	0.3%
2032	1	0.3%
2149	1	0.3%
2181	1	0.3%
2212	43	14.8%
2215	1	0.3%
2215	3	1.0%
2216	1	0.3%
2220	63	21.7%
2221	1	0.3%
2224	2	0.7%
2228	3	1.0%
2230	48	16.6%
2235	53	18.3%
2245	37	12.8%
2250	1	0.3%
2333	1	0.3%
2562	1	0.3%
2718	1	0.3%
3215	8	2.8%
3230	2	0.7%
3255	1	0.3%
3593	1	0.3%
5750	1	0.3%
5755	1	0.3%
9229	1	0.3%
9259	1	0.3%
Overall	290	100.0%
Excluded	0	
Total	290	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212	1.037	1.000	.000	.
1225	1.325	1.000	.000	.
1716	.779	1.120	.235	40.2%
1720	1.031	1.000	.000	.
1725	1.043	1.000	.000	.
1728	.929	1.000	.000	.
2032	1.010	1.000	.000	.
2149	.731	1.000	.000	.
2181	.886	1.000	.000	.
2212	.912	1.086	.161	21.2%
2215	1.344	1.000	.000	.
2215	.969	1.028	.068	10.7%
2216	.986	1.000	.000	.
2220	.983	.991	.177	26.1%
2221	.880	1.000	.000	.
2224	.823	.984	.019	2.7%
2228	.874	1.052	.125	22.9%
2230	.916	1.164	.181	25.4%
2235	.981	1.051	.099	13.2%
2245	.965	.973	.136	18.4%
2250	.669	1.000	.000	.
2333	1.690	1.000	.000	.
2562	1.076	1.000	.000	.
2718	1.077	1.000	.000	.
3215	.985	1.032	.113	17.2%
3230	.923	1.046	.068	9.6%
3255	.791	1.000	.000	.
3593	.805	1.000	.000	.
5750	.997	1.000	.000	.
5755	.947	1.000	.000	.
9229	.965	1.000	.000	.
9259	1.319	1.000	.000	.
Overall	.949	1.069	.156	21.8%

Age

Case Processing Summary

AgeRec		Count	Percent
AgeRec	Over 100	20	6.9%
	75 to 100	8	2.8%
	50 to 75	39	13.4%
	25 to 50	133	45.9%
	5 to 25	81	27.9%
	5 or Newer	9	3.1%
Overall		290	100.0%
Excluded		0	
Total		290	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.846	1.061	.172	23.0%
75 to 100	.905	.990	.080	9.6%
50 to 75	.941	1.070	.174	24.2%
25 to 50	.987	1.040	.139	19.9%
5 to 25	.936	.963	.160	23.4%
5 or Newer	.998	1.508	.177	23.4%
Overall	.949	1.069	.156	21.8%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	3	1.0%
	500 to 1,000 sf	7	2.4%
	1,000 to 1,500 sf	26	9.0%
	1,500 to 2,000 sf	23	7.9%
	2,000 to 3,000 sf	27	9.3%
	3,000 sf or Higher	204	70.3%
Overall		290	100.0%
Excluded		0	
Total		290	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.879	1.067	.072	14.4%
500 to 1,000 sf	.918	1.139	.199	31.5%
1,000 to 1,500 sf	.997	1.017	.136	20.2%
1,500 to 2,000 sf	.866	1.038	.149	21.7%
2,000 to 3,000 sf	.929	1.027	.141	18.2%
3,000 sf or Higher	.978	1.086	.153	21.5%
Overall	.949	1.069	.156	21.8%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	1	61	21.0%
	2	223	76.9%
	3	6	2.1%
Overall		290	100.0%
Excluded		0	
Total		290	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1	.929	1.032	.170	25.3%
2	.964	1.002	.148	20.5%
3	.776	1.399	.210	35.0%
Overall	.949	1.069	.156	21.8%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

SPRec		Count	Percent
	LT \$25K	52	4.5%
	\$25K to \$50K	108	9.4%
	\$50K to \$100K	387	33.8%
	\$100K to \$150K	234	20.5%
	\$150K to \$200K	165	14.4%
	\$200K to \$300K	105	9.2%
	\$300K to \$500K	38	3.3%
	\$500K to \$750K	23	2.0%
	\$750K to \$1,000K	12	1.0%
	Over \$1,000K	20	1.7%
Overall		1144	100.0%
Excluded		0	
Total		1144	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.072	1.399	.822	335.8%
\$25K to \$50K	1.027	1.001	.216	33.4%
\$50K to \$100K	1.003	1.003	.129	22.9%
\$100K to \$150K	.989	1.003	.097	15.2%
\$150K to \$200K	.980	1.001	.097	21.0%
\$200K to \$300K	.973	1.000	.107	19.3%
\$300K to \$500K	.956	.994	.133	25.3%
\$500K to \$750K	.965	1.006	.137	22.5%
\$750K to \$1,000K	.977	.998	.066	13.1%
Over \$1,000K	.920	1.018	.161	25.7%
Overall	.991	1.094	.163	80.2%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100	268	23.4%
	200	41	3.6%
	300	7	0.6%
	510	6	0.5%
	520	13	1.1%
	530	10	0.9%
	540	7	0.6%
	550	40	3.5%
	560	2	0.2%
	1112	665	58.1%
	1115	1	0.1%
	1120	2	0.2%
	1125	1	0.1%
	1126	2	0.2%
	1135	31	2.7%
	2112	11	1.0%
	2120	1	0.1%
	2125	1	0.1%
	2130	23	2.0%
	2135	9	0.8%
	9159	2	0.2%
	9170	1	0.1%
Overall		1144	100.0%
Excluded		0	
Total		1144	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100	.990	1.063	.168	35.7%
200	.972	1.006	.142	36.5%
300	.981	1.076	.162	23.9%
510	.981	1.051	.068	9.2%
520	.986	1.882	.477	89.1%
530	1.013	1.061	.059	10.5%
540	.875	.790	.308	50.7%
550	.987	1.225	.167	26.4%
560	1.063	1.120	.185	26.2%
1112	1.000	1.058	.149	99.5%
1115	.622	1.000	.000	.
1120	2.319	1.668	.566	80.0%
1125	.924	1.000	.000	.
1126	1.016	1.000	.119	16.9%
1135	.917	1.100	.268	36.2%
2112	.974	.990	.056	10.0%
2120	.983	1.000	.000	.
2125	.971	1.000	.000	.
2130	.963	1.066	.136	23.9%
2135	.993	1.130	.098	14.2%
9159	.842	1.134	.256	36.3%
9170	.812	1.000	.000	.
Overall	.991	1.094	.163	80.2%