



2019

# ELBERT COUNTY PROPERTY ASSESSMENT STUDY

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



September 15, 2019

Ms. Natalie Mullis  
Director of Research  
Colorado Legislative Council  
Room 029, State Capitol Building  
Denver, Colorado 80203

**RE: Final Report for the 2019 Colorado Property Assessment Study**

Dear Ms. Mullis:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2019 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

## TABLE OF CONTENTS

Introduction .....	3
Regional/Historical Sketch of Elbert County .....	4
Ratio Analysis.....	6
Time Trending Verification .....	8
Sold/Unsold Analysis .....	9
Agricultural Land Study .....	11
<i>Agricultural Land</i> .....	11
<i>Agricultural Outbuildings</i> .....	12
<i>Agricultural Land Under Improvements</i> .....	13
Sales Verification.....	14
Economic Area Review and Evaluation .....	16
Natural Resources .....	17
<i>Earth and Stone Products</i> .....	17
<i>Producing Oil and Gas</i> .....	17
Vacant Land.....	18
Possessory Interest Properties .....	19
Personal Property Audit .....	20
Wildrose Auditor Staff.....	22
STATISTICAL APPENDIX .....	23

# INTRODUCTION

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## 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.

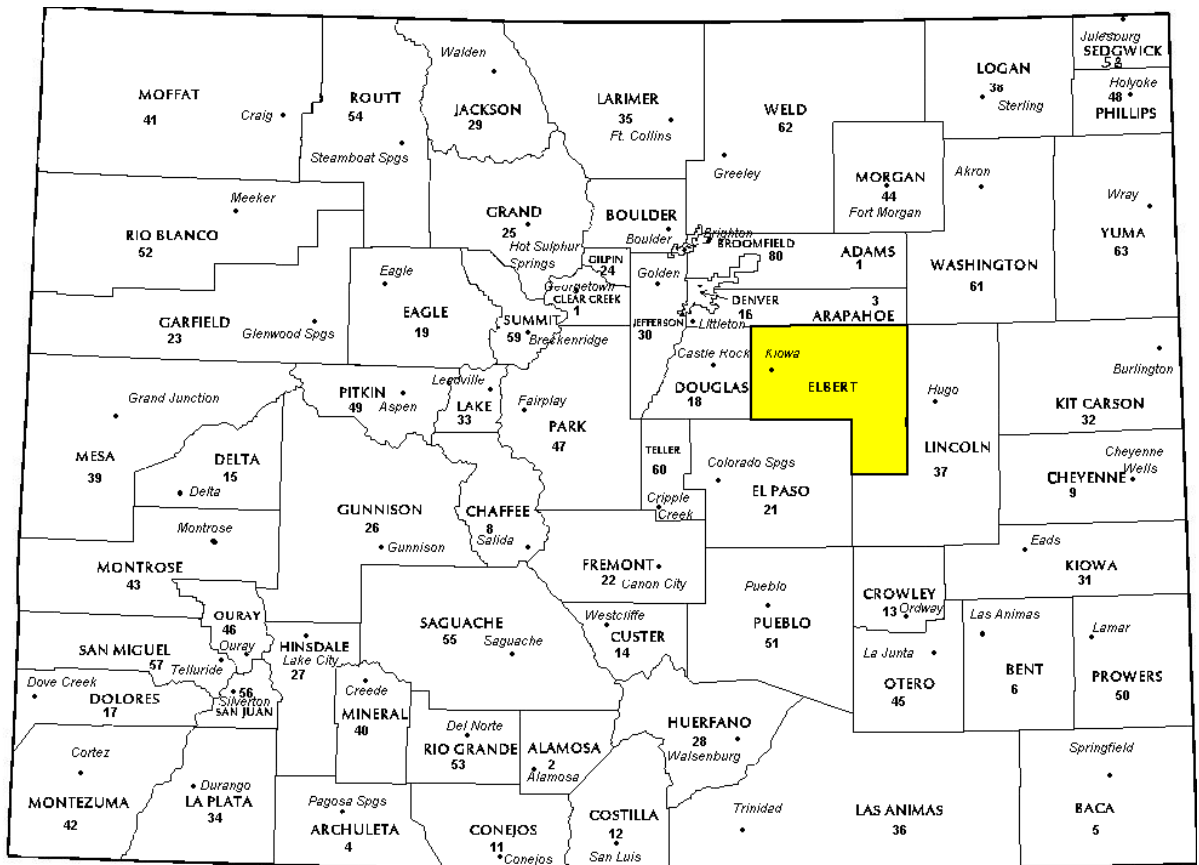
Wildrose Audit has completed the Property Assessment Study for 2019 and is pleased to report its findings for Elbert County in the following report.

# REGIONAL/HISTORICAL SKETCH OF ELBERT COUNTY

## Regional Information

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

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



## Historical Information

Elbert County had an estimated population of approximately 25,231 people with 13.6 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a 9.3 percent change from April 1, 2010 to July 1, 2016.

Elbert County was created on February 2, 1874, from the eastern portions of Douglas County. On February 6, 1874, the county was enlarged to include part of northern Greenwood County upon Greenwood's dissolution, and originally extended south and east of its present boundaries to reach to the Kansas state line. The county was named for Samuel Hitt Elbert, the Governor of the Territory of Colorado when the county was formed. In 1889, Elbert County was reduced to its modern size when its eastern portions

were taken to create Lincoln, Kit Carson, and Cheyenne counties. The county seat is Kiowa, named for the Kiowa Indian tribe of the southern Plains, who called themselves Kae-gua.

Elbert County is bordered on the west by Douglas, the north by Arapahoe and the south by El Paso County. During the 1990's Elbert was the second fastest growing county in Colorado (after Douglas) and it continues to grow at a rapid pace. It currently has over 20,000 residents, mostly living on two to 60-acre lots on the western side. Most residents commute to Denver or Colorado Springs for work. The eastern side of the county continues to be sparsely populated ranchland. (*Wikipedia.org & centennialmhc.org*)

# RATIO ANALYSIS

## Methodology

All significant classes of property were analyzed. Sales were collected for each property class over the eighteen month period from January 1, 2017 through June 30, 2018. Property classes with less than thirty sales had the sales period extended in six month increments up to an additional forty-two months. If this extended sales period did not produce the minimum thirty qualified sales, the Audit performed supplemental appraisals to reach the minimum.

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.

All sixty-four counties were examined for compliance on the economic area level. Where there were sufficient sales data, the neighborhood and subdivision levels were tested for compliance. Although counties are determined to be in or out of compliance at the class level, non-compliant economic areas, neighborhoods and subdivisions (where applicable) were discussed with the Assessor.

**Data on the individual economic areas, neighborhoods and subdivisions are found in the STATISTICAL APPENDIX.**

## 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 Elbert County are:

<b>Elbert County Ratio Grid</b>					
<b>Property Class</b>	<b>Number of Qualified Sales</b>	<b>Unweighted Median Ratio</b>	<b>Price Related Differential</b>	<b>Coefficient of Dispersion</b>	<b>Time Trend Analysis</b>
Commercial/Industrial	30	0.987	1.023	14.8	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	1,076	0.977	1.005	9.7	Compliant
Vacant Land	189	0.996	1.052	18	Compliant

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

Elbert 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.

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

**Conclusions**

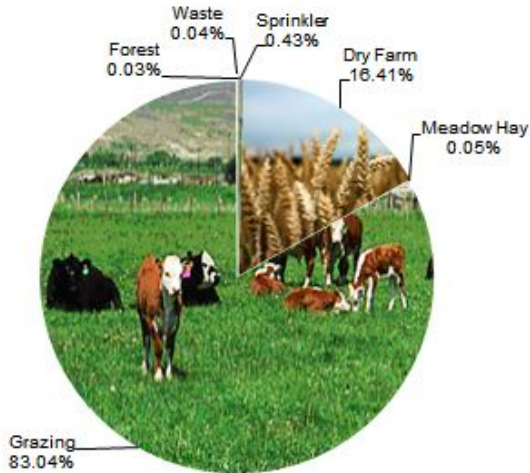
After applying the above described methodologies, it is concluded that Elbert County is reasonably treating its sold and unsold properties in the same manner.

**Recommendations**

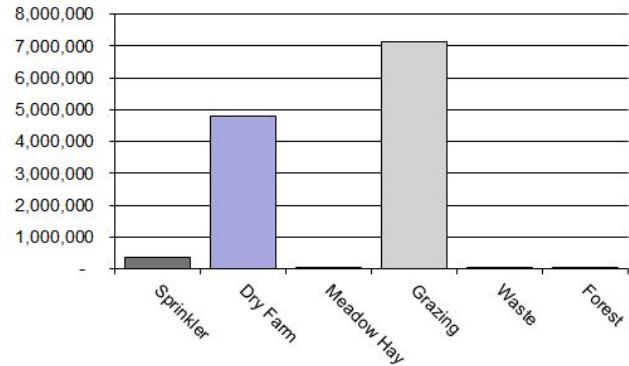
None

# 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:

<b>Elbert County Agricultural Land Ratio Grid</b>						
<b>Abstract Code</b>	<b>Land Class</b>	<b>Number Of Acres</b>	<b>County Value Per Acre</b>	<b>County Assessed Total Value</b>	<b>WRA Total Value</b>	<b>Ratio</b>
4107	Sprinkler	4,235	83.13	352,068	360,514	0.98
4127	Dry Farm	163,489	29.38	4,803,725	4,901,652	0.98
4137	Meadow Hay	532	32.65	17,367	17,367	1.00
4147	Grazing	827,270	8.62	7,128,020	7,128,020	1.00
4177	Forest	311	8.25	2,569	2,569	1.00
4167	Waste	422	2.39	1,007	1,007	1.00
<b>Total/Avg</b>		<b>996,260</b>	<b>12.35</b>	<b>12,304,757</b>	<b>12,411,129</b>	<b>0.99</b>

### Recommendations

None

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## Agricultural Outbuildings

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### 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

Elbert County has substantially complied with the procedures provided by the Division of

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## Agricultural Land Under Improvements

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### 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

Elbert 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
- In-Person Interviews with Owners/Tenants
- Written Correspondence other than Questionnaire
- Aerial Photography/Pictometry

Elbert 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.:

- Questionnaires
- Field Inspections
- Phone Interviews
- In-Person Interviews with Owners/Tenants
- Aerial Photography/Pictometry

Elbert 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 2019 for Elbert County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 30 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 \$100,000, 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.

When less than 50 percent of sales are qualified in any of the three property classes (residential, commercial, and vacant land), the contractor analyzed the reasons for disqualifying sales in any subclass that constitutes at least 20 percent of the class, either by number of properties or by value, from the prior year. 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.

If 50 percent or more of the sales are qualified, the contractor has reviewed a statistically significant sample of

unqualified sales, excluding sales that were disqualified for obvious reasons.

Elbert County did not qualify for in-depth subclass analysis.

### **Conclusions**

Elbert 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**

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

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## Earth and Stone Products

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### 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

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## Producing Oil and Gas

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### 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

## VACANT LAND

### **Subdivision Discounting**

Subdivisions were reviewed in 2019 in Elbert 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.

### **Conclusions**

Elbert 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.

Elbert 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

Elbert 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

Elbert 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.

Elbert 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
- Internet

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.

Elbert County submitted their personal property written audit plan and was current for the 2019 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



- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts - Best Information Available
- Accounts close to the \$7,700 actual value exemption status

### **Conclusions**

Elbert 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*

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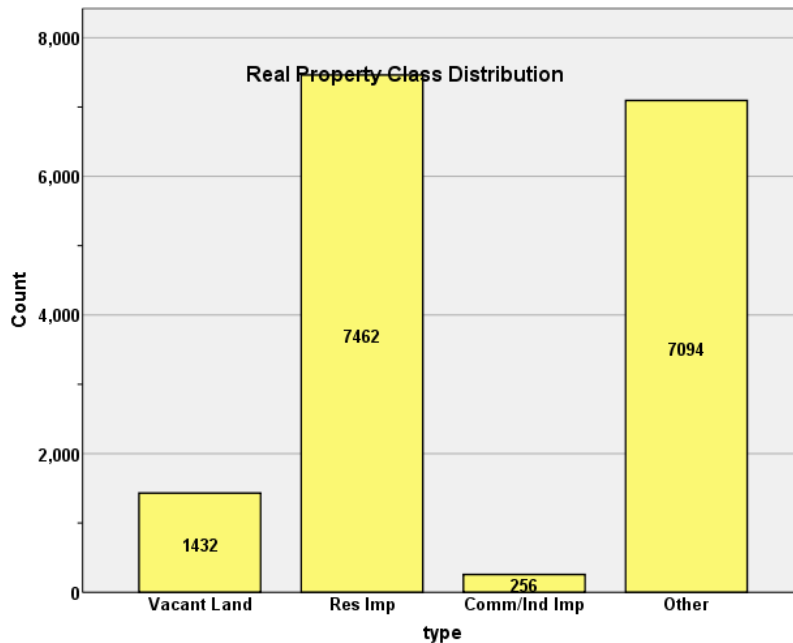
# STATISTICAL APPENDIX



## STATISTICAL COMPLIANCE REPORT FOR ELBERT COUNTY 2019

### I. OVERVIEW

Elbert County is located in eastern Colorado. The county has a total of 16,244 real property parcels, according to data submitted by the county assessor's office in 2019. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential and PUD land. Residential lots (coded 100, 400 and 1112) accounted for 74.1% of all vacant land parcels.

For residential improved properties, single family properties accounted for 98.7% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 1.6% of all such properties in this county.

Based on the Audit questionnaire filled out by the assessor (see below), the following geographic levels were used by the assessor to value residential, commercial and vacant land properties:

Geo Area	Residential	Comm/Ind	Vacant Land
Economic Area	V	V	V
Neighborhood			
Subdivision	V		V

*Codes*

*V=Valid Geographic Level – used for modeling*

*N = Not used as Geographic Level for modeling*

## II. DATA FILES

The following sales analyses were based on the requirements of the 2019 Colorado Property Assessment Study. Information was provided by the Elbert Assessor’s Office in May 2019. The data included all 5 property record files as specified by the Auditor.

## III. RESIDENTIAL SALES RESULTS

There were 1,076 qualified residential sales for the 24-month sale period ending June 30, 2018 in Elbert County. The sales ratio analysis results were as follows:

Median	<b>0.977</b>
Price Related Differential	<b>1.005</b>
Coefficient of Dispersion	<b>9.7</b>

We next stratified the sale ratio analysis by economic area and neighborhood. One sale was trimmed for EA 1 using IAAO standards. The minimum count for the neighborhood stratification is 15 sales. The following are the results of this stratification analysis:

### Economic Area Case Processing Summary

		Count	Percent
ECONAREA	1.00	69	6.5%
	2.00	997	93.5%
Overall		1066	100.0%
Excluded		9	
Total		1075	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	.987	1.027	.156
2.00	.977	1.002	.091
Overall	.977	1.004	.095

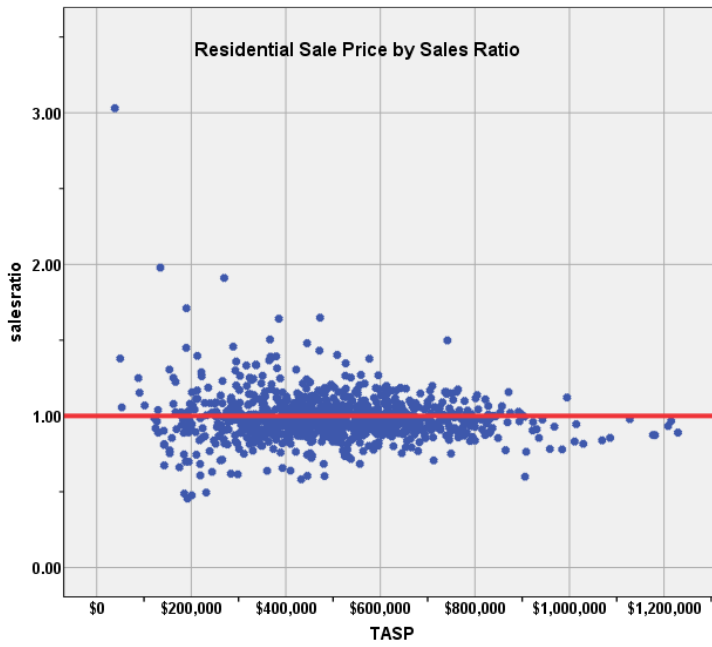
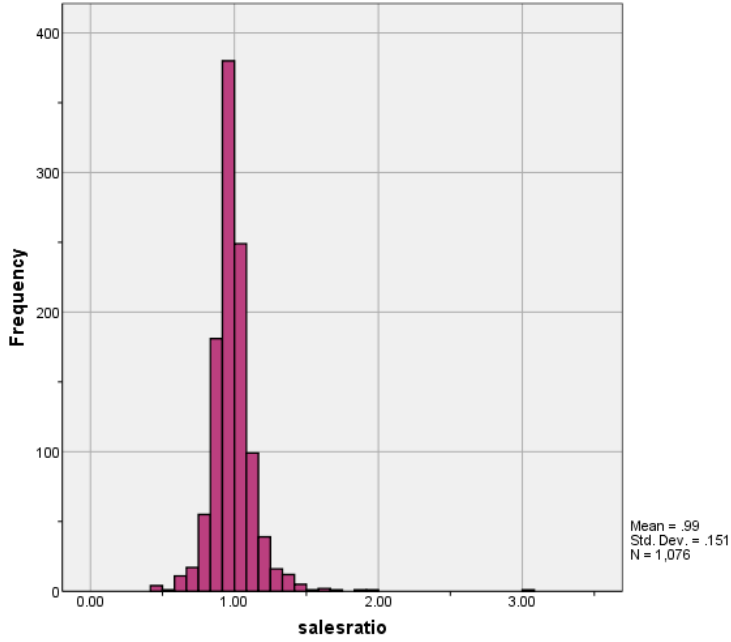
**Neighborhoods with 15 or more sales  
Case Processing Summary**

	Count	Percent
NBHD		
347	26	7.1%
960	23	6.3%
985	30	8.2%
1960	17	4.6%
3090	16	4.4%
3250	18	4.9%
3510	31	8.4%
3512	52	14.2%
3514	37	10.1%
3590	21	5.7%
3880	20	5.4%
3938	45	12.3%
Overall	367	100.0%
Excluded	16	
Total	383	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion
347	1.001	1.006	.074
960	.957	1.001	.056
985	.985	1.006	.061
1960	.999	.992	.106
3090	.994	.998	.075
3250	.982	1.002	.053
3510	.983	1.002	.049
3512	.979	1.000	.051
3514	1.000	1.002	.049
3590	.974	1.006	.111
3880	.971	1.001	.071
3938	.980	1.000	.074
Overall	.981	1.005	.075

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



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

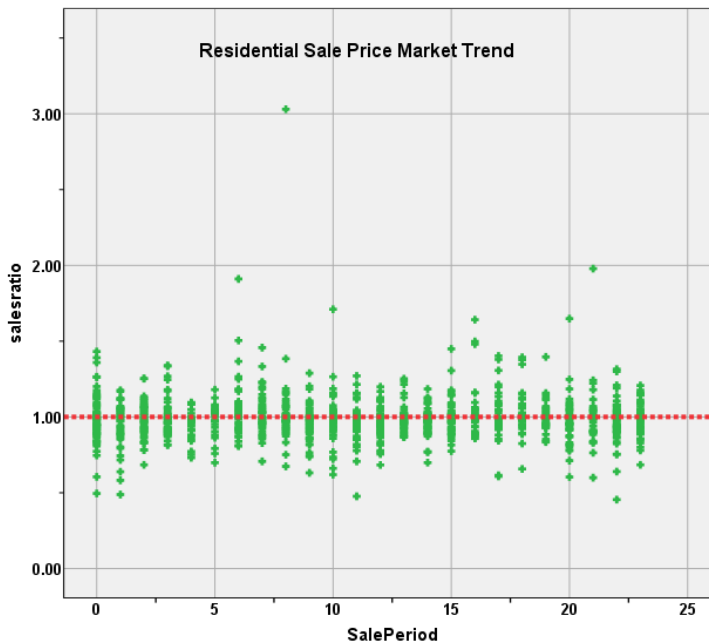
## Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period for any residual market trending, with the following results:

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	.985	.009		114.349	.000
	SalePeriod	.000	.001	.014	.474	.635

a. Dependent Variable: salesratio



The above analysis indicated that the assessor has adequately addressed market trending in the valuation of residential properties.

### Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the 2019 median actual value per square foot, as follows:

Report			
VALSF			
	N	Median	Mean
UNSOLD	6386	\$130	\$127
SOLD	1076	\$138	\$133

### 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	.000	Reject the null hypothesis.

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

Given the difference observed in the above test, we next compared the median change in actual value for taxable years 2018 and 2019 between each group, as follows:

#### Report

DIFF		N	Median	Mean
sold	UNSOLD	6248	1.18	1.20
	SOLD	1058	1.19	1.21

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DIFF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.013	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .00.

We next performed this second test stratified by economic area, as follows:

#### Report

DIFF	ECONAREA	sold	N	Median	Mean
1.00	UNSOLD		478	1.27	1.30
	SOLD		70	1.30	1.34
2.00	UNSOLD		5759	1.17	1.19
	SOLD		979	1.18	1.20

Next, we performed this second test stratified by neighborhood (with at least 10 sales), as follows:

**Report**

DIFF

ECONAREA	NBHD	sold	N	Median	Mean
1.00	0	UNSOLD	66	1.44	1.45
		SOLD	9	1.48	1.51
	3405	UNSOLD	60	1.15	1.17
		SOLD	10	1.19	1.28
	Total	UNSOLD	126	1.24	1.32
		SOLD	19	1.32	1.39
2.00	0	UNSOLD	173	1.23	1.26
		SOLD	21	1.27	1.25
	347	UNSOLD	33	1.17	1.18
		SOLD	24	1.17	1.17
	610	UNSOLD	40	1.10	1.13
		SOLD	12	1.16	1.17
	665	UNSOLD	38	1.20	1.20
		SOLD	10	1.21	1.20
	820	UNSOLD	52	1.16	1.19
		SOLD	10	1.19	1.22
	960	UNSOLD	53	1.12	1.14
		SOLD	23	1.15	1.16
	985	UNSOLD	161	1.18	1.21
		SOLD	30	1.19	1.21
	1440	UNSOLD	62	1.10	1.10
		SOLD	11	1.09	1.12
	1960	UNSOLD	69	1.32	1.32
		SOLD	17	1.32	1.34
	2570	UNSOLD	37	1.21	1.27
		SOLD	11	1.12	1.16
	2590	UNSOLD	101	1.13	1.14
		SOLD	12	1.15	1.18
	2730	UNSOLD	58	1.13	1.14
		SOLD	10	1.12	1.12
	3090	UNSOLD	65	1.21	1.21
		SOLD	16	1.25	1.24
	3250	UNSOLD	75	1.12	1.13
		SOLD	18	1.14	1.17
	3420	UNSOLD	63	1.08	1.08
		SOLD	14	1.06	1.07
	3510	UNSOLD	104	1.08	1.08
		SOLD	31	1.08	1.10
	3512	UNSOLD	63	1.09	1.09
		SOLD	52	1.08	1.10
	3514	UNSOLD	28	1.12	1.12
		SOLD	25	1.11	1.11
	3580	UNSOLD	94	1.18	1.19
		SOLD	12	1.22	1.26
	3590	UNSOLD	101	1.15	1.16
		SOLD	21	1.20	1.21
3600	UNSOLD	63	1.09	1.10	
	SOLD	13	1.12	1.13	
3610	UNSOLD	58	1.10	1.10	
	SOLD	10	1.11	1.13	

3880	UNSOLD	111	1.12	1.14
	SOLD	20	1.14	1.17
3938	UNSOLD	98	1.14	1.15
	SOLD	43	1.13	1.14

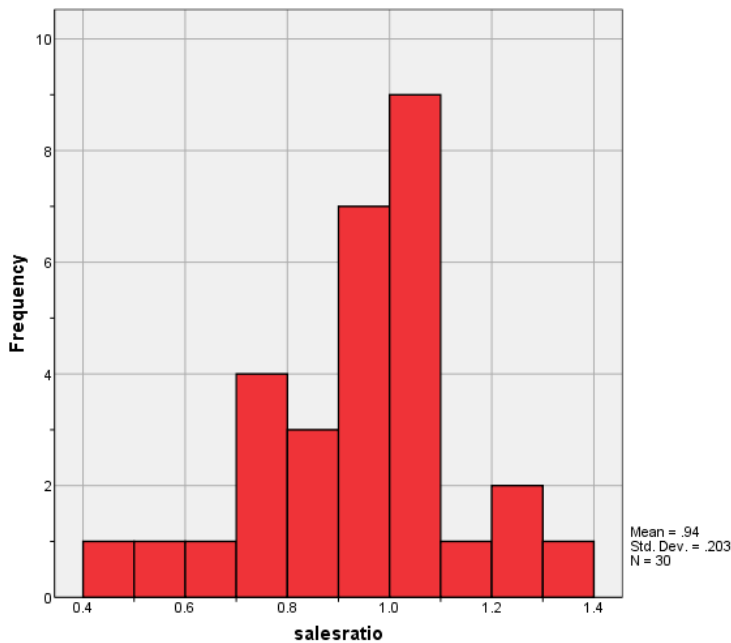
The above results indicate that sold and unsold residential properties were valued in a consistent manner overall.

#### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

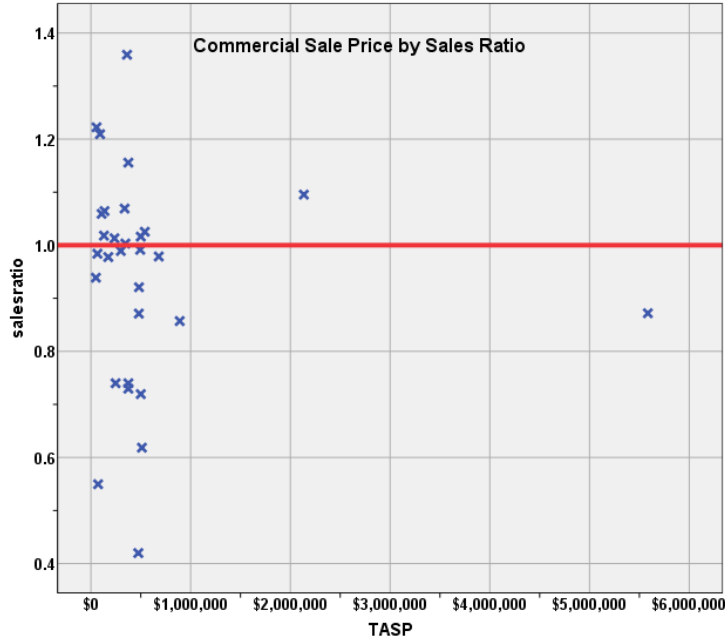
There were 30 qualified commercial sales for the 60 month sale period ending June 30, 2018. The sales ratio analysis results were as follows:

Median	<b>0.987</b>
Price Related Differential	<b>1.023</b>
Coefficient of Dispersion	<b>14.8</b>

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







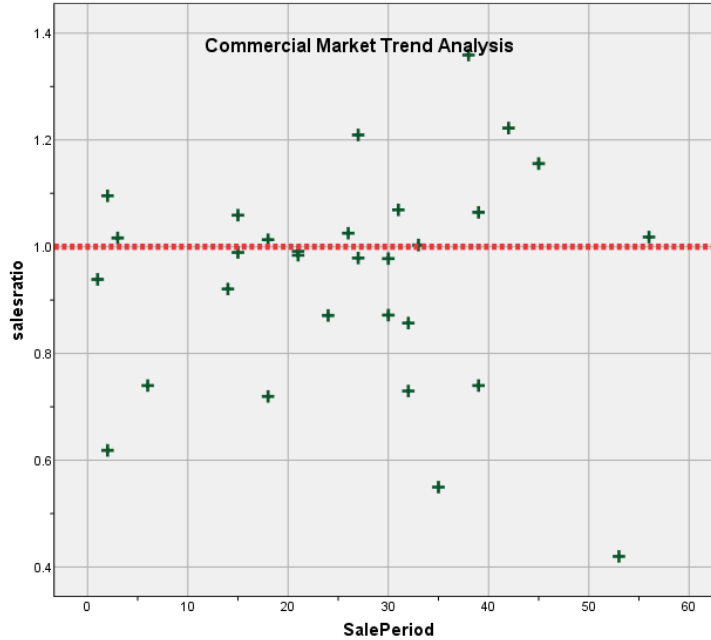
### Commercial Market Trend Analysis

The commercial/industrial sales were next analyzed, examining the sales ratios across the 60-month sale period with the following results:

#### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	.930	.077		12.021	.000
	SalePeriod	.000	.003	.028	.149	.882

a. Dependent Variable: salesratio



The market trend results indicated no statistically significant trend, indicating that the assessor has adequately addressed the issue of market trending for commercial/industrial properties in Elbert County.

### Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold commercial/industrial properties, we compared the 2019 actual value per square foot between each group, as follows:

#### Report

VALSF			
sold	N	Median	Mean
UNSOLD	231	\$56	\$66
SOLD	30	\$64	\$79

#### 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	.053	Retain the null hypothesis.

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

We also stratified this analysis by subclass, as follows:

<b>Report</b>				
VALSF				
ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD	25	\$54	\$58
	SOLD	9	\$98	\$107
2220.00	UNSOLD	19	\$72	\$82
	SOLD	2	\$83	\$83
2230.00	UNSOLD	68	\$68	\$95
	SOLD	6	\$64	\$68
2235.00	UNSOLD	20	\$24	\$33
	SOLD	3	\$30	\$36

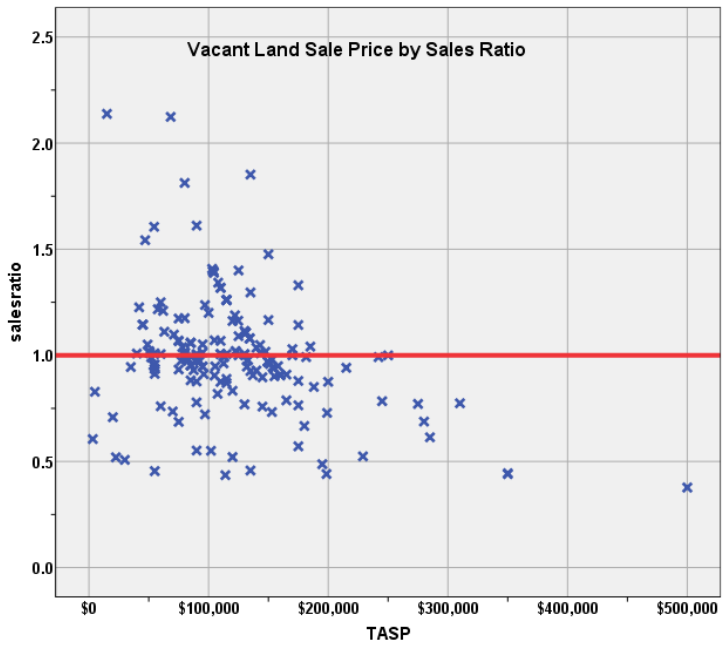
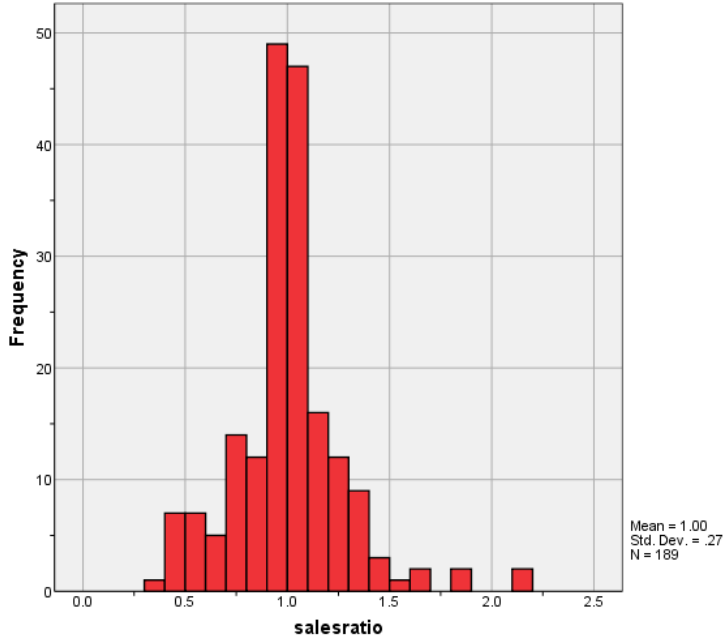
Based on the similar results in the overall analysis, we concluded that the assessor has valued sold and unsold commercial properties in a similar manner. The subclass stratification is presented only for illustration purposes, as there are too few sales within each subclass.

#### V. VACANT LAND SALE RESULTS

There were 196 qualified vacant land sales for the 24-month sale period ending June 30, 2018. Seven sales were trimmed using IAAO standards, resulting in 189 sales in the following analysis. The sales ratio analysis results were as follows:

Median	<b>0.996</b>
Price Related Differential	<b>1.052</b>
Coefficient of Dispersion	<b>18.0</b>

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



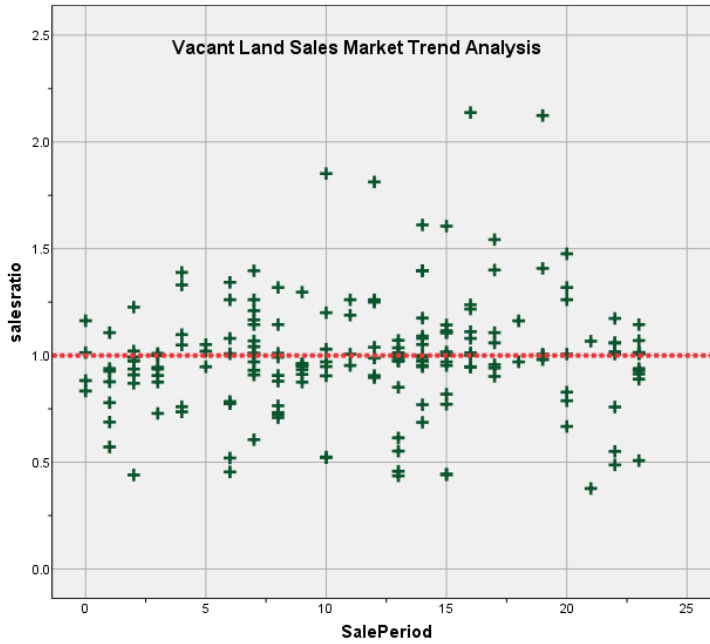
### Vacant Land Market Trend Analysis

The vacant land sales were analyzed, examining the sale ratios across the 24- month sale period with the following results:

**Coefficients<sup>a</sup>**

Model	Unstandardized Coefficients		Standardized	t	Sig.	
	B	Std. Error	Coefficients Beta			
1	(Constant)	.953	.040		23.683	.000
	SalePeriod	.004	.003	.096	1.321	.188

a. Dependent Variable: salesratio



The results indicated that there was no significant market trending present in the sales ratios across the sale period. We concluded that the assessor has applied market trending adjustments in an appropriate manner.

**Sold/Unsold Analysis**

We compared the median change in actual value for taxable years 2018 and 2019 for vacant land properties to determine if sold and unsold properties were valued consistently, as follows:

<b>Report</b>			
DIFF			
	N	Median	Mean
UNSOLD	893	1.15	1.15
SOLD	186	1.26	1.19

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DIFF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.004	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .00.

We also stratified this analysis by subdivision (with at least 5 sales), as follows:

#### Report

DIFF	SUBDIVNO	sold	N	Median	Mean
32	UN SOLD	20	1.37	1.37	
	SOLD	9	1.37	1.37	
162	UN SOLD	18	1.32	1.24	
	SOLD	6	1.15	1.21	
248	UN SOLD	8	1.25	1.25	
	SOLD	5	1.25	1.25	
356	UN SOLD	15	1.26	1.12	
	SOLD	43	1.26	1.26	
437	UN SOLD	5	1.13	1.13	
	SOLD	6	1.13	1.13	
438	UN SOLD	4	1.01	1.01	
	SOLD	10	1.01	1.01	
439	UN SOLD	4	.98	.98	
	SOLD	5	.96	.96	
487	UN SOLD	19	1.46	1.46	
	SOLD	5	1.46	1.46	

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

#### VI. CONCLUSIONS

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

**STATISTICAL ABSTRACT**

**Residential**

**Ratio Statistics for CURRTOT / TASP**

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				
.988	.979	.997	.977	.972	.984	95.3%	.983	.975	.990	1.005	.097	15.3%	

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

**Commercial/Industrial**

**Ratio Statistics for CURRTOT / TASP**

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				
.940	.864	1.016	.987	.872	1.018	95.7%	.919	.845	.992	1.023	.148	21.6%	

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

**Vacant Land**

**Ratio Statistics for CURRLND / TASP**

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				
1.000	.961	1.038	.996	.970	1.008	95.9%	.951	.902	.999	1.052	.180	27.0%	

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 Sale Ratio Stratification**

**Sale Price**

**Case Processing Summary**

		Count	Percent
SPRec	\$25K to \$50K	2	0.2%
	\$50K to \$100K	3	0.3%
	\$100K to \$150K	11	1.0%
	\$150K to \$200K	32	3.0%
	\$200K to \$300K	83	7.7%
	\$300K to \$500K	434	40.3%
	\$500K to \$750K	418	38.8%
	\$750K to \$1,000K	82	7.6%
	Over \$1,000K	11	1.0%
Overall		1076	100.0%
Excluded		0	
Total		1076	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
\$25K to \$50K	2.205	1.051	.374	53.0%
\$50K to \$100K	1.154	.987	.056	8.4%
\$100K to \$150K	.919	1.005	.193	38.5%
\$150K to \$200K	.938	1.002	.185	27.0%
\$200K to \$300K	.999	.997	.151	21.5%
\$300K to \$500K	.979	1.001	.092	13.6%
\$500K to \$750K	.979	1.000	.079	10.8%
\$750K to \$1,000K	.967	1.002	.077	10.3%
Over \$1,000K	.875	.998	.052	6.8%
Overall	.977	1.005	.097	15.5%

**Subclass**

**Case Processing Summary**

		Count	Percent
ABSTRIMP	1212.00	1066	99.1%
	1215.00	1	0.1%
	1220.00	1	0.1%
	1230.00	8	0.7%
Overall		1076	100.0%
Excluded		0	
Total		1076	



### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212.00	.977	1.006	.097	15.6%
1215.00	.986	1.000	.000	.
1220.00	.661	1.000	.000	.
1230.00	.991	.999	.056	6.8%
Overall	.977	1.005	.097	15.5%

### Improvement Age

#### Case Processing Summary

	Count	Percent
AgeRec 0	1	0.1%
Over 100	17	1.6%
75 to 100	29	2.7%
50 to 75	16	1.5%
25 to 50	235	21.8%
5 to 25	592	55.0%
5 or Newer	186	17.3%
Overall	1076	100.0%
Excluded	0	
Total	1076	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.661	1.000	.000	.
Over 100	.840	1.032	.290	33.2%
75 to 100	.915	1.021	.177	23.4%
50 to 75	.972	1.114	.259	57.7%
25 to 50	.982	1.007	.104	15.1%
5 to 25	.975	1.007	.090	13.6%
5 or Newer	.988	1.003	.065	8.8%
Overall	.977	1.005	.097	15.5%

### Improved Area

#### Case Processing Summary

	Count	Percent
ImpSFRec 500 to 1,000 sf	7	0.7%
1,000 to 1,500 sf	36	3.3%
1,500 to 2,000 sf	81	7.5%
2,000 to 3,000 sf	201	18.7%
3,000 sf or Higher	751	69.8%
Overall	1076	100.0%
Excluded	0	
Total	1076	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
500 to 1,000 sf	.698	.996	.154	21.7%
1,000 to 1,500 sf	.878	1.034	.158	20.3%
1,500 to 2,000 sf	.957	1.035	.125	28.6%
2,000 to 3,000 sf	.967	1.012	.096	13.5%
3,000 sf or Higher	.982	1.008	.088	13.4%
Overall	.977	1.005	.097	15.5%

### Improvement Quality

#### Case Processing Summary

	Count	Percent
QUALITY 1	5	0.5%
2	129	12.0%
3	853	79.3%
4	84	7.8%
5	4	0.4%
Overall	1075	100.0%
Excluded	1	
Total	1076	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1	.754	1.152	.411	83.1%
2	.958	1.028	.177	28.8%
3	.977	1.004	.085	12.5%
4	.993	1.007	.070	9.1%
5	.996	1.011	.071	10.3%
Overall	.977	1.006	.097	15.5%

### Improvement Condition

#### Case Processing Summary

	Count	Percent
CONDITION 1	4	0.4%
2	51	4.7%
3	915	85.1%
4	105	9.8%
Overall	1075	100.0%
Excluded	1	
Total	1076	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1	.735	.981	.111	19.3%
2	.967	1.023	.187	27.2%
3	.975	1.007	.094	15.1%
4	1.000	1.005	.067	9.3%
Overall	.977	1.006	.097	15.5%

### Commercial Sale Ratio Stratification

#### Sale Price

#### Case Processing Summary

		Count	Percent
SPRec	\$25K to \$50K	1	3.3%
	\$50K to \$100K	4	13.3%
	\$100K to \$150K	3	10.0%
	\$150K to \$200K	1	3.3%
	\$200K to \$300K	3	10.0%
	\$300K to \$500K	12	40.0%
	\$500K to \$750K	3	10.0%
	\$750K to \$1,000K	1	3.3%
	Over \$1,000K	2	6.7%
Overall		30	100.0%
Excluded		0	
Total		30	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
\$25K to \$50K	.939	1.000	.000	.
\$50K to \$100K	1.097	.997	.205	30.7%
\$100K to \$150K	1.059	1.000	.015	2.8%
\$150K to \$200K	.978	1.000	.000	.
\$200K to \$300K	.989	.996	.092	17.9%
\$300K to \$500K	.956	1.015	.191	25.9%
\$500K to \$750K	.979	.986	.139	26.2%
\$750K to \$1,000K	.857	1.000	.000	.
Over \$1,000K	.984	1.053	.114	16.1%
Overall	.987	1.023	.148	21.2%

**Subclass**

**Case Processing Summary**

		Count	Percent
ABSTRIMP	1545.33	1	3.3%
	1712.00	1	3.3%
	1713.50	1	3.3%
	1721.00	1	3.3%
	1936.14	1	3.3%
	2212.00	9	30.0%
	2220.00	2	6.7%
	2226.67	1	3.3%
	2227.50	1	3.3%
	2230.00	6	20.0%
	2235.00	3	10.0%
	2236.67	1	3.3%
	3215.00	1	3.3%
	3220.00	1	3.3%
	Overall		30
Excluded		0	
Total		30	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1545.33	.921	1.000	.000	.
1712.00	.719	1.000	.000	.
1713.50	.991	1.000	.000	.
1721.00	1.359	1.000	.000	.
1936.14	.871	1.000	.000	.
2212.00	1.013	1.113	.087	13.3%
2220.00	1.099	1.056	.100	14.2%
2226.67	1.069	1.000	.000	.
2227.50	.857	1.000	.000	.
2230.00	.857	1.052	.270	32.8%
2235.00	.740	1.018	.175	26.3%
2236.67	1.095	1.000	.000	.
3215.00	1.003	1.000	.000	.
3220.00	1.025	1.000	.000	.
Overall	.987	1.023	.148	21.2%

## Improvement Age

### Case Processing Summary

		Count	Percent
AgeRec	0	26	86.7%
	75 to 100	1	3.3%
	50 to 75	1	3.3%
	25 to 50	1	3.3%
	5 to 25	1	3.3%
Overall		30	100.0%
Excluded		0	
Total		30	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.987	1.018	.140	20.7%
75 to 100	.719	1.000	.000	.
50 to 75	1.069	1.000	.000	.
25 to 50	.921	1.000	.000	.
5 to 25	1.359	1.000	.000	.
Overall	.987	1.023	.148	21.2%

## Improved Area

### Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	1	3.3%
	500 to 1,000 sf	2	6.7%
	1,000 to 1,500 sf	1	3.3%
	1,500 to 2,000 sf	2	6.7%
	2,000 to 3,000 sf	6	20.0%
	3,000 sf or Higher	18	60.0%
Overall		30	100.0%
Excluded		0	
Total		30	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	1.059	1.000	.000	.
500 to 1,000 sf	1.143	1.030	.069	9.8%
1,000 to 1,500 sf	.550	1.000	.000	.
1,500 to 2,000 sf	.849	1.079	.152	21.5%
2,000 to 3,000 sf	.961	1.036	.098	14.9%
3,000 sf or Higher	.997	1.031	.150	22.1%
Overall	.987	1.023	.148	21.2%

## Improvement Quality

### Case Processing Summary

	Count	Percent
QUALITY 2	2	50.0%
3	2	50.0%
Overall	4	100.0%
Excluded	26	
Total	30	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
2	.894	1.039	.195	27.6%
3	1.140	1.028	.192	27.2%
Overall	.995	1.033	.198	27.2%

## Improvement Condition

### Case Processing Summary

	Count	Percent
CONDITION 2	1	25.0%
3	3	75.0%
Overall	4	100.0%
Excluded	26	
Total	30	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
2	.719	1.000	.000	.
3	1.069	1.017	.137	21.5%
Overall	.995	1.033	.198	27.2%

## Economic Area

### Case Processing Summary

	Count	Percent
ECONAREA 1.00	2	6.7%
2.00	28	93.3%
Overall	30	100.0%
Excluded	0	
Total	30	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	1.074	.964	.126
2.00	.987	1.015	.149
Overall	.987	1.023	.148

**Vacant Land Sales Ratio Stratification**

**Sale Price**

**Case Processing Summary**

		Count	Percent
SPRec	LT \$25K	5	2.6%
	\$25K to \$50K	10	5.3%
	\$50K to \$100K	61	32.3%
	\$100K to \$150K	73	38.6%
	\$150K to \$200K	28	14.8%
	\$200K to \$300K	8	4.2%
	\$300K to \$500K	4	2.1%
Overall		189	100.0%
Excluded		0	
Total		189	

**Ratio Statistics for CURRLND / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	.709	.985	.520	102.3%
\$25K to \$50K	1.098	.978	.153	23.7%
\$50K to \$100K	1.000	1.003	.144	25.7%
\$100K to \$150K	1.017	1.004	.167	23.8%
\$150K to \$200K	.908	1.007	.140	20.8%
\$200K to \$300K	.778	1.007	.180	22.9%
\$300K to \$500K	.442	1.041	.227	44.1%
Overall	.996	1.052	.180	27.1%

**Subclass**

**Case Processing Summary**

		Count	Percent
ABSTRLND	100.00	77	40.7%
	200.00	8	4.2%
	300.00	3	1.6%
	400.00	16	8.5%
	520.00	1	0.5%
	540.00	2	1.1%
	550.00	35	18.5%
	1112.00	43	22.8%
	1135.00	2	1.1%
	2130.00	2	1.1%
Overall		189	100.0%
Excluded		0	
Total		189	

**Ratio Statistics for CURRLND / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	1.008	1.014	.193	28.6%
200.00	.658	1.092	.372	43.3%
300.00	1.006	1.011	.022	4.6%
400.00	.930	1.030	.180	26.5%
520.00	.571	1.000	.000	.
540.00	.880	1.034	.108	15.3%
550.00	.988	1.100	.148	28.5%
1112.00	1.016	1.017	.135	18.7%
1135.00	.661	.929	.167	23.6%
2130.00	.639	1.276	.410	58.0%
Overall	.996	1.052	.180	27.1%