



2019
GARFIELD COUNTY
PROPERTY ASSESSMENT
STUDY



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

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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.

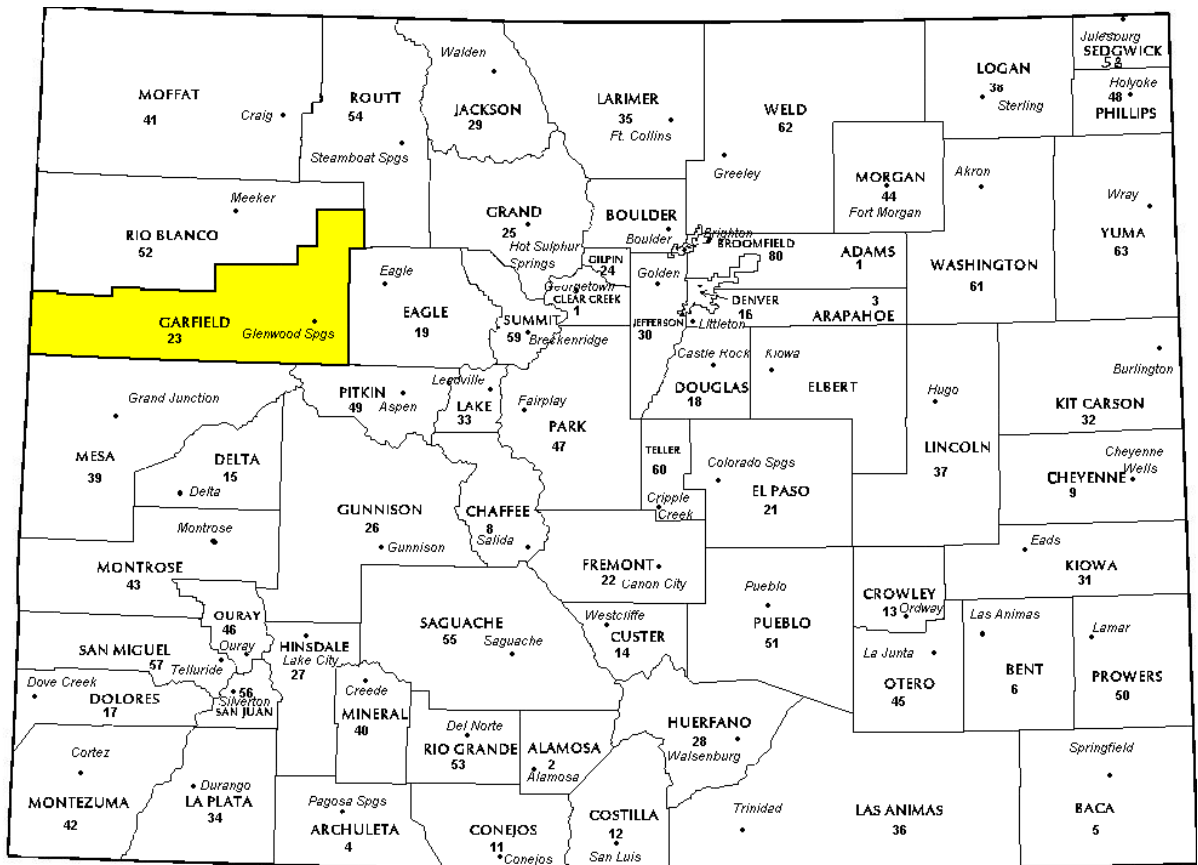
Wildrose Audit has completed the Property Assessment Study for 2019 and is pleased to report its findings for Garfield County in the following report.

REGIONAL/HISTORICAL SKETCH OF GARFIELD COUNTY

Regional Information

Garfield County is located in the Western Slope region of Colorado. The Western Slope of Colorado refers to the region west of the Rocky Mountains. It includes Archuleta, Delta, Dolores, Eagle, Garfield, Grand,

Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel, and Summit counties.



Historical Information

Garfield County had an estimated population of approximately 58,887 people with 20.0 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a 4.4 percent change from April 1, 2010 to July 1, 2016.

Garfield County is located in the scenic plateau and canyon country of western Colorado. Covering 3000 square miles, it is 110 miles long and extends to the Utah border. It was carved out of Summit County on February 10, 1883. In historical times, the earliest inhabitants were the Ute Indians, and the land was theirs by treaty until April 12, 1880, when they were removed to reservations after the "Meeker Massacre" of 1879. Although explorers, missionaries, miners, and a few settlers had already visited the area of Garfield County, the main influx of settlers began to arrive and towns were founded beginning in 1880.

The towns in Garfield County are located along the Colorado and Roaring Fork rivers in the eastern end of the county, while much of the western portion has only a few roads and fewer inhabitants.

The town of Defiance was founded in 1831 by Isaac Cooper who hoped to develop the natural hot springs into a resort. Unfortunately he died before his dream could be realized. It became the county seat in 1883 and was incorporated and renamed in 1885 as Glenwood Springs, which remains the county seat and largest city today. In 1887 a coal tycoon, Walter Devereaux purchased the hot springs and vapor caves for \$125,000 and began to build the famous pool and spa resort. This was the same year that the Denver and Rio Grande Railroad extended its tracks through the difficult Glenwood Canyon and into Glenwood Springs, Aspen and beyond.

While the county retains part of its ranching and farming heritage, and tourism is important, every town from Carbondale to Parachute has become a bedroom community to provide workers to the ever-booming and ever-expanding Aspen skiing economy. People commute to Aspen, 86 miles from Battlement Mesa, as well as to Grand Junction, 63 miles from Rifle.

(Garfield County, Colorado by Judy Crook and Vikki Gray)

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 Garfield County are:

Garfield County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	133	0.986	1.026	8.8	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	2,166	0.998	1.007	4.1	Compliant
Vacant Land	328	1.000	1.060	8.2	Compliant

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

Garfield 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

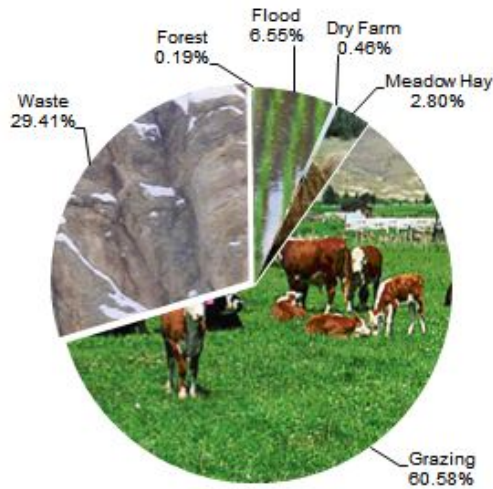
After applying the above described methodologies, it is concluded that Garfield County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

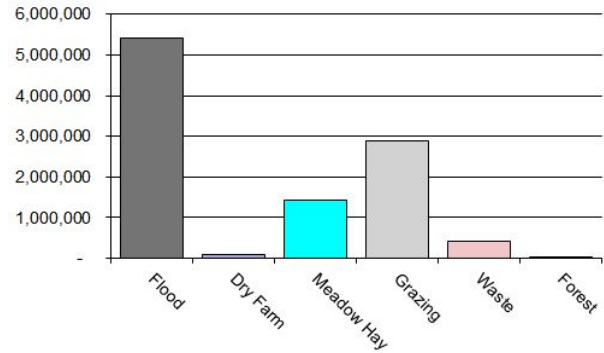
None

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:

Garfield County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio
4117	Flood	38,153	141.78	5,409,248	5,719,716	0.95
4127	Dry Farm	2,666	39.22	104,561	104,192	1.00
4137	Meadow Hay	16,277	87.78	1,428,863	1,428,863	1.00
4147	Grazing	352,656	8.15	2,873,248	2,873,248	1.00
4177	Forest	1,120	15.29	17,125	17,125	1.00
4167	Waste	171,220	2.39	408,498	408,498	1.00
Total/Avg		582,093	17.59	10,241,543	10,551,642	0.97

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.

of Property Taxation for the valuation of agricultural outbuildings.

Recommendations

None

Conclusions

Garfield County has substantially complied with the procedures provided by the Division

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

Garfield 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
- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

Garfield 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.:

- Property Record Card Analysis
- Field Inspections
- In-Person Interviews with Owners/Tenants
- Written Correspondence other than Questionnaire
- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

Garfield 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 Garfield County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 48 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.

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

Conclusions

Garfield 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

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

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

Recommendations

None

NATURAL RESOURCES

Earth and Stone Products

Methodology

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

Conclusions

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

Recommendations

None

Producing Oil and Gas

Methodology

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

STATUTORY REFERENCES

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

Actual value determined - when.

(2) The valuation for assessment of leaseholds and lands producing oil or gas shall be determined as provided in article 7 of this title.

§ 39-1-103, C.R.S.

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

Valuation:

Valuation for assessment.

(1) Except as provided in subsection (2) of this section, on the basis of the information contained in such statement, the assessor shall value such oil and gas leaseholds and lands for assessment, as real property, at an amount equal to eighty-seven and one-half percent of:

(a) The selling price of the oil or gas sold there from during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year;

(b) The selling price of oil or gas sold in the same field area for oil or gas transported from the premises which is not sold during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year.

§ 39-7-102, C.R.S.

Conclusions

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

Recommendations

None

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2019 in Garfield 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

Garfield 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.

Garfield County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural, commercial

and ski area 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

Garfield 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

Garfield 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.

Garfield 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
- AirBNB
- VRBOP
- Various websites

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.

Garfield 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
- 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 \$7,700 actual value exemption status
- Lowest or highest quartile of value per square foot
- Accounts protested with substantial disagreement

Conclusions

Garfield 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*

STATISTICAL APPENDIX

STATISTICAL COMPLIANCE REPORT FOR GARFIELD COUNTY 2019

I. OVERVIEW

Garfield County is a mountain resort county located in west central Colorado. The county has a total of 27,438 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 land. Residential lots (coded 100 and 200) accounted for 47.2% of all vacant land parcels.

For residential improved properties, single family properties accounted for 87.1% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 5.7% of all such properties in this county.

Based on the Audit questionnaire, 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	V	N	V
Subdivision	N	N	N

Codes

V=Valid Geographic Level – used for modeling

N = Not used as Geographic Level for modeling

Note: Each economic area has specific groups of neighborhoods that are evaluated for similar market influences and time trending. **See attached “Time Adjustment write ups” for detailed stratifications for each type of property.

II. DATA FILES

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

III. RESIDENTIAL SALES RESULTS

There were 2,166 qualified residential sales for this analysis. The sale period ran from July 2016 through June 2018.

The sales ratio analysis was analyzed as follows:

Median	0.998
Price Related Differential	1.007
Coefficient of Dispersion	4.1

We next stratified the sale ratio analysis by economic, neighborhood, and subdivision. The minimum count for this analysis was 10 sales. The following are the results of this stratification analysis:

Economic Area

Case Processing Summary

		Count	Percent
ECONAREA	1.00	312	16.0%
	2.00	365	18.7%
	3.00	323	16.6%
	4.00	237	12.1%
	5.00	442	22.7%
	6.00	231	11.8%
	6.50	41	2.1%
Overall		1951	100.0%
Excluded		215	
Total		2166	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	.999	1.013	.039
2.00	.998	1.004	.044
3.00	.998	1.002	.031
4.00	.994	1.001	.044
5.00	.998	1.001	.039
6.00	.999	1.009	.049
6.50	.998	1.005	.062
Overall	.998	1.007	.041

**Neighborhood w/GT 10 Sales
Case Processing Summary**

		Count	Percent
NBHD	111015.00	12	1.6%
	111040.30	13	1.7%
	111040.40	10	1.3%
	112046.00	12	1.6%
	121012.00	11	1.4%
	121013.00	14	1.8%
	121031.00	13	1.7%
	121075.00	15	2.0%
	122125.50	16	2.1%
	131000.00	13	1.7%
	131004.00	42	5.5%
	131004.10	20	2.6%

131005.00	45	5.9%
141000.00	19	2.5%
141000.50	14	1.8%
141000.60	11	1.4%
141006.00	15	2.0%
141008.00	17	2.2%
141009.00	14	1.8%
141011.00	10	1.3%
142029.00	13	1.7%
151047.00	13	1.7%
151049.00	10	1.3%
151057.00	12	1.6%
151063.00	11	1.4%
151066.00	28	3.7%
151068.00	11	1.4%
151073.00	18	2.4%
151076.50	12	1.6%
162014.00	63	8.2%
162015.00	22	2.9%
162016.00	37	4.8%
162017.00	12	1.6%
162018.00	12	1.6%
162019.00	22	2.9%
212018.00	11	1.4%
212032.00	10	1.3%
232005.00	49	6.4%
232010.00	19	2.5%
252028.50	22	2.9%
262001.00	21	2.7%
Overall	764	100.0%
Excluded	215	
Total	979	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
111015.00	1.001	1.005	.044
111040.30	1.007	1.013	.055
111040.40	1.006	1.001	.034
112046.00	.995	1.000	.018
121012.00	.998	1.009	.066
121013.00	.998	1.036	.089
121031.00	1.006	1.006	.057
121075.00	.954	1.002	.043
122125.50	.996	.997	.060
131000.00	1.004	1.001	.017
131004.00	.989	1.001	.029
131004.10	.982	.999	.033
131005.00	.991	1.001	.035
141000.00	.993	1.003	.049
141000.50	1.001	1.019	.069
141000.60	1.011	1.001	.036
141006.00	.969	.998	.042
141008.00	.999	1.000	.027
141009.00	.979	1.003	.053
141011.00	.999	.999	.044

142029.00	.998	1.003	.049
151047.00	.994	1.000	.047
151049.00	.998	1.002	.059
151057.00	1.002	1.001	.046
151063.00	.991	1.000	.022
151066.00	.999	1.000	.038
151068.00	1.000	1.004	.054
151073.00	.999	1.000	.037
151076.50	1.015	1.000	.041
162014.00	1.000	1.002	.050
162015.00	.999	1.005	.058
162016.00	1.007	1.002	.058
162017.00	1.007	1.003	.045
162018.00	1.009	1.001	.058
162019.00	.991	1.002	.044
212018.00	.968	1.002	.059
212032.00	1.001	1.001	.024
232005.00	1.000	1.001	.029
232010.00	.999	1.002	.027
252028.50	1.008	1.001	.024
262001.00	.991	1.003	.047
Overall	.998	1.003	.044

**C. Subdivision w/GT 10 Sales
Case Processing Summary**

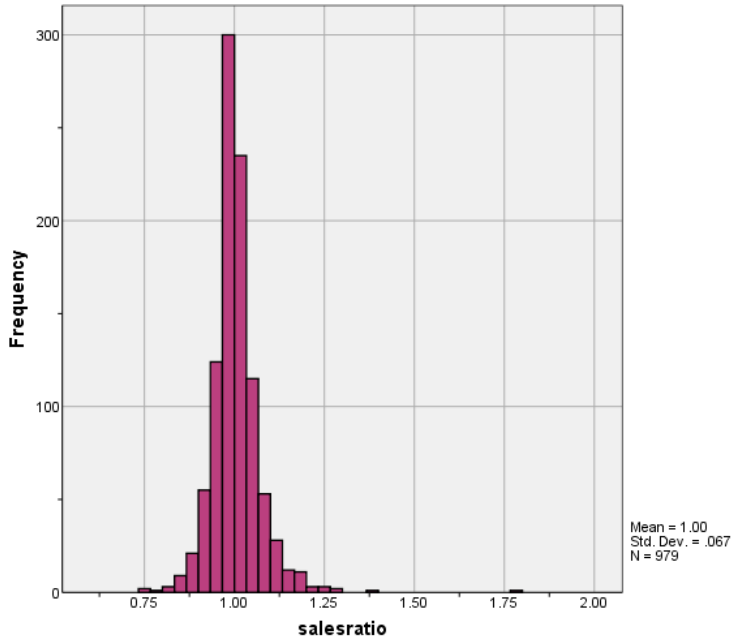
SUBDIVNO	Count	Percent
29	15	2.2%
87	14	2.1%
151	16	2.4%
155	12	1.8%
159	14	2.1%
165	18	2.7%
215	10	1.5%
340	11	1.6%
344	59	8.7%
352	11	1.6%
468	11	1.6%
482	44	6.5%
640	43	6.3%
908	19	2.8%
1061	20	2.9%
1211	12	1.8%
1301	11	1.6%
1373	15	2.2%
1409	15	2.2%
1586	11	1.6%
1722	10	1.5%
1740	21	3.1%
1823	11	1.6%
1843	14	2.1%
1868	24	3.5%
2008	11	1.6%
2013	18	2.7%
2119	12	1.8%
2147	15	2.2%
2151	13	1.9%

	2171	12	1.8%
	8023	10	1.5%
	8026	13	1.9%
	9203	12	1.8%
	9206	18	2.7%
	9235	25	3.7%
	9290	21	3.1%
	9292	12	1.8%
	9312	26	3.8%
Overall	679		100.0%
Excluded	370		
Total	1049		

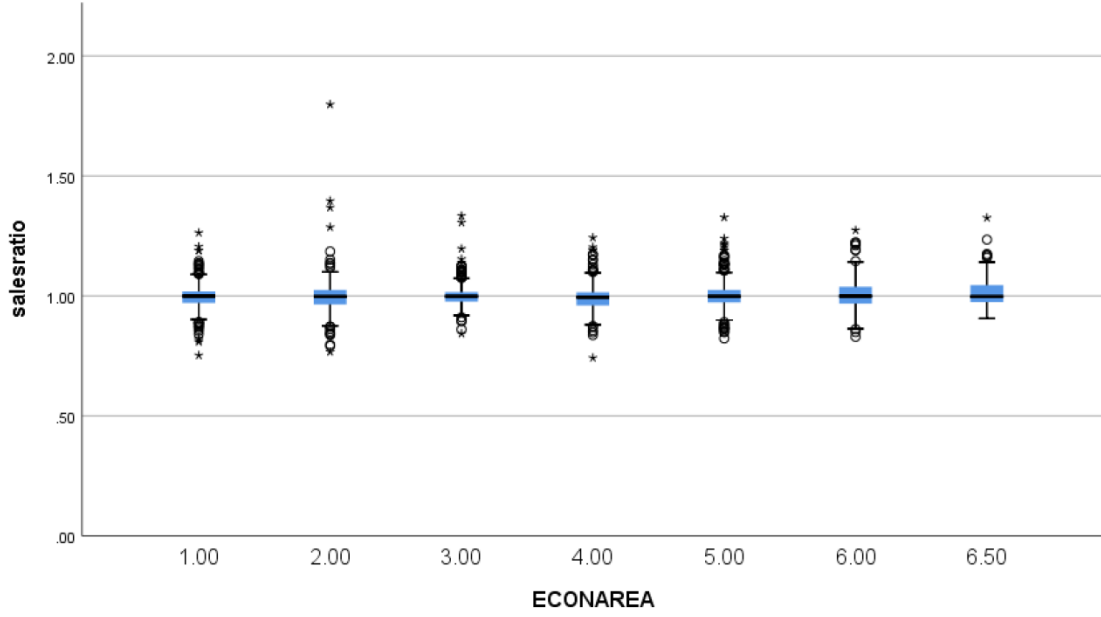
Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
29	.954	1.002	.043
87	.992	1.005	.060
151	1.002	.999	.042
155	1.009	1.001	.058
159	.996	1.002	.056
165	.970	1.001	.041
215	1.004	1.002	.012
340	1.007	1.004	.031
344	1.005	1.003	.058
352	1.001	.998	.022
468	1.000	1.004	.054
482	.998	1.011	.071
640	.991	1.001	.036
908	.978	1.004	.060
1061	.984	1.002	.045
1211	1.007	1.003	.045
1301	.998	1.001	.053
1373	.969	.997	.041
1409	1.000	1.004	.043
1586	.996	1.003	.040
1722	1.001	.999	.031
1740	.992	1.001	.030
1823	1.006	1.000	.023
1843	.979	1.003	.053
1868	1.015	1.002	.043
2008	.975	1.000	.024
2013	.999	1.000	.037
2119	1.030	1.000	.030
2147	1.000	1.000	.037
2151	.996	.999	.039
2171	1.002	1.001	.028
8023	1.006	1.001	.027
8026	.980	1.000	.014
9203	1.015	1.000	.041
9206	.998	1.002	.027
9235	1.010	1.000	.060
9290	.983	1.002	.034
9292	.995	1.000	.018
9312	1.004	1.000	.022
Overall	.998	1.003	.044

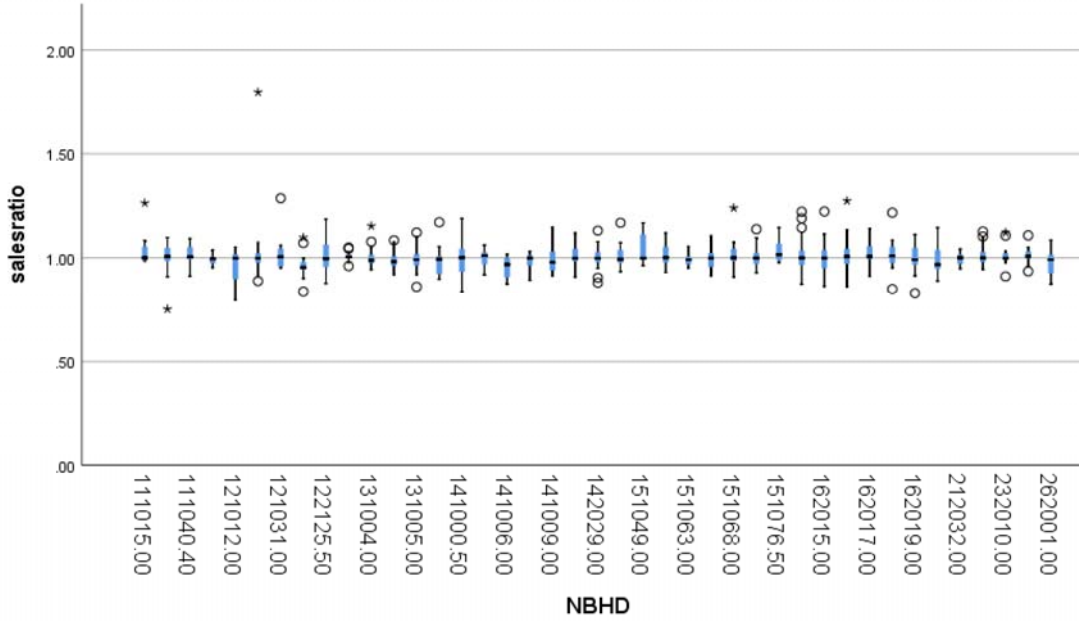
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. We also concluded that these ratios standards were also met when residential sale data is stratified by geographic area(s). The following graphs describe further the sales ratio distribution for these properties:

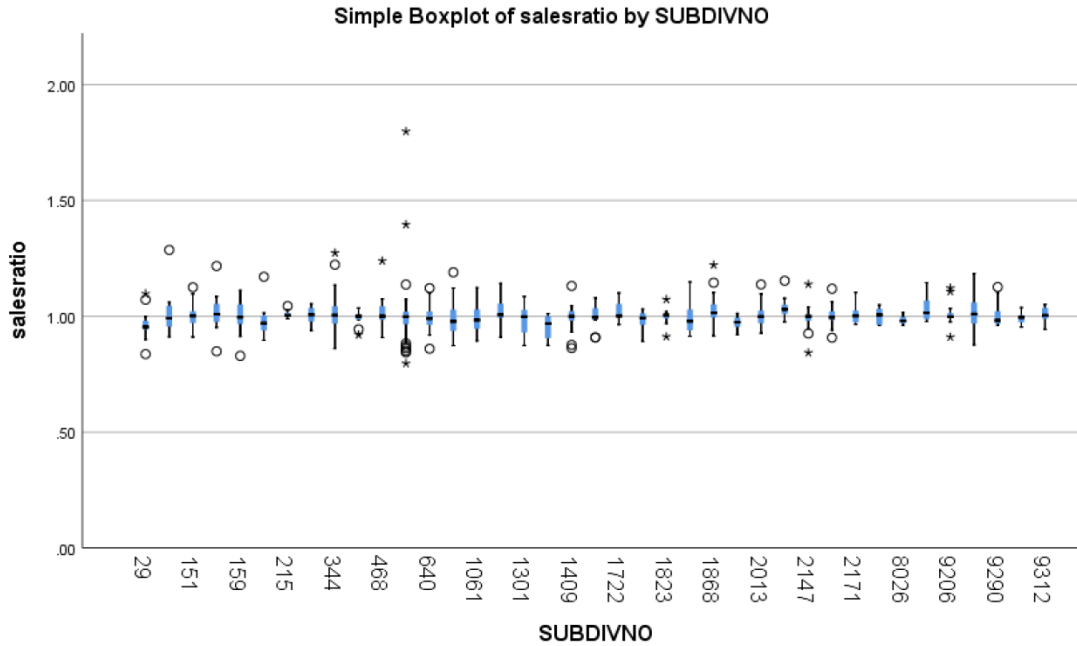


Simple Boxplot of salesratio by ECONAREA



Simple Boxplot of salesratio by NBHD





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

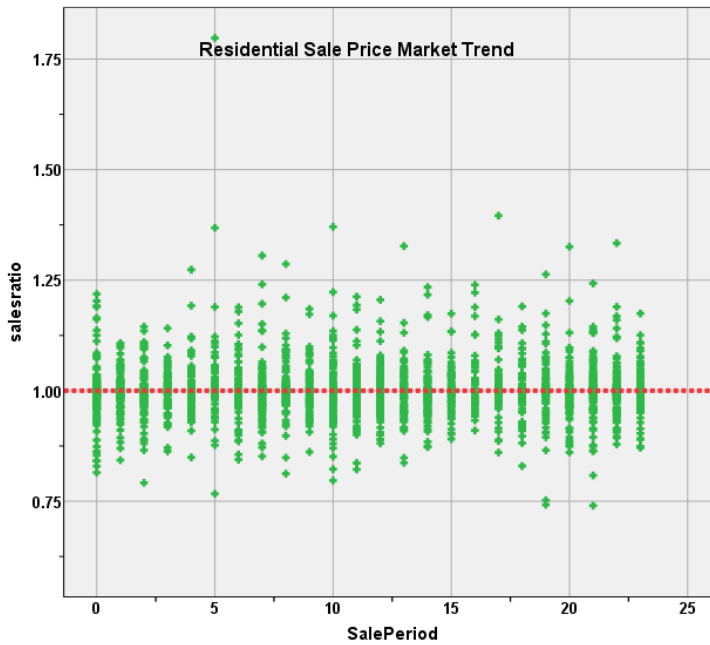
Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period for any residual market trending, as follows:

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.001	.003		394.405	.000
	SalePeriod	1.314E-5	.000	.001	.068	.946

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 median actual value per square foot for 2019 between each group, as follows:

Report
VALSF

sold	N	Median	Mean
0	14989	\$238	\$257
1	2160	\$224	\$242

At the class level, we found no evidence that sold properties were valued consistently higher than unsold properties.

We next stratified the sold/unsold analysis by economic area for residential sold and unsold properties:

Report
VALSF

ECONAREA	sold	N	Median	Mean
1.00	0	2973	\$338	\$357
	1	310	\$337	\$363
2.00	0	3347	\$291	\$309
	1	365	\$291	\$309
3.00	0	1819	\$225	\$233
	1	323	\$219	\$232
4.00	0	1690	\$209	\$217
	1	237	\$204	\$213

5.00	0	2616	\$187	\$191
	1	442	\$186	\$189
6.00	0	1060	\$147	\$156
	1	231	\$139	\$149
6.50	0	260	\$109	\$112
	1	40	\$117	\$113

As with the class level analysis, we found no evidence that sold residential properties were valued consistently higher than unsold residential properties. We next compared sold and unsold residential properties by neighborhood with at least 10 sales, as follows:

Report

VALSF

NBHD	sold	N	Median	Mean
111015.00	UNSOLD	61	\$369	\$391
	SOLD	12	\$368	\$392
111040.30	UNSOLD	77	\$344	\$365
	SOLD	13	\$341	\$367
111040.40	UNSOLD	49	\$335	\$334
	SOLD	10	\$318	\$331
112046.00	UNSOLD	18	\$275	\$282
	SOLD	11	\$260	\$269
121012.00	UNSOLD	91	\$321	\$325
	SOLD	11	\$329	\$324
121013.00	UNSOLD	136	\$320	\$331
	SOLD	14	\$326	\$331

121031.00	UNSOLD	84	\$362	\$367
	SOLD	13	\$341	\$370
121075.00	UNSOLD	108	\$298	\$325
	SOLD	15	\$336	\$360
122125.50	UNSOLD	100	\$237	\$241
	SOLD	16	\$258	\$262
131000.00	UNSOLD	154	\$229	\$233
	SOLD	13	\$232	\$248
131004.00	UNSOLD	159	\$241	\$238
	SOLD	42	\$228	\$232
131004.10	UNSOLD	100	\$229	\$224
	SOLD	20	\$207	\$219
131005.00	UNSOLD	283	\$234	\$243
	SOLD	45	\$249	\$262
141000.00	UNSOLD	139	\$194	\$198
	SOLD	19	\$220	\$227

141000.50	UNSOLD	97	\$125	\$132
	SOLD	14	\$129	\$142
141000.60	UNSOLD	141	\$221	\$224
	SOLD	11	\$224	\$227
141006.00	UNSOLD	60	\$171	\$176
	SOLD	15	\$182	\$183
141008.00	UNSOLD	51	\$213	\$214
	SOLD	17	\$221	\$217
141009.00	UNSOLD	74	\$215	\$226
	SOLD	14	\$204	\$220
141011.00	UNSOLD	58	\$197	\$201
	SOLD	10	\$189	\$192
142029.00	UNSOLD	135	\$238	\$251
	SOLD	13	\$252	\$257
151047.00	UNSOLD	65	\$208	\$212
	SOLD	13	\$216	\$216
151049.00	UNSOLD	46	\$199	\$220

	SOLD	10	\$204	\$207
151057.00	UNSOLD	83	\$191	\$189
	SOLD	12	\$191	\$190
151063.00	UNSOLD	29	\$185	\$188
	SOLD	11	\$196	\$205
151066.00	UNSOLD	114	\$197	\$205
	SOLD	28	\$222	\$220
151068.00	UNSOLD	32	\$218	\$222
	SOLD	11	\$206	\$208
151073.00	UNSOLD	78	\$190	\$204
	SOLD	18	\$209	\$224
151076.50	UNSOLD	28	\$195	\$203
	SOLD	12	\$190	\$197
162014.00	UNSOLD	225	\$125	\$124
	SOLD	63	\$126	\$124
162015.00	UNSOLD	122	\$159	\$167
	SOLD	22	\$157	\$172

162016.00	UNSOLD	107	\$158	\$164
	SOLD	37	\$158	\$164
162017.00	UNSOLD	55	\$122	\$124
	SOLD	12	\$121	\$122
162018.00	UNSOLD	63	\$155	\$158
	SOLD	12	\$158	\$163
162019.00	UNSOLD	78	\$171	\$176
	SOLD	22	\$175	\$183
212018.00	UNSOLD	62	\$342	\$324
	SOLD	11	\$295	\$312
212032.00	UNSOLD	38	\$324	\$324
	SOLD	10	\$330	\$332
232005.00	UNSOLD	92	\$216	\$220
	SOLD	49	\$216	\$221
232010.00	UNSOLD	49	\$174	\$178
	SOLD	19	\$175	\$178

252028.50	UNSOLD	30	\$138	\$139
	SOLD	22	\$139	\$141
262001.00	UNSOLD	64	\$102	\$96
	SOLD	21	\$108	\$100

The neighborhoods highlighted in red had noted differences between the median value per square foot when stratified by neighborhood. We performed a follow-up comparison using the median change in value for these neighborhoods and found that there was no notable difference. We next stratified this analysis by subdivisions with at least 10 sales:

Report

VALSF

SUBDIVNO	sold	N	Median	Mean
29	0	107	\$301	\$325
	1	15	\$336	\$360
87	0	77	\$368	\$367
	1	13	\$341	\$370
155	0	63	\$155	\$158
	1	12	\$158	\$163
159	0	50	\$167	\$173
	1	14	\$169	\$180
165	0	70	\$188	\$191

	1		13	\$209	\$208
344	0		229	\$158	\$166
	1		59	\$158	\$167
468	0		30	\$218	\$223
	1		11	\$206	\$208
482	0		217	\$318	\$326
	1		23	\$319	\$322
640	0		238	\$231	\$240
	1		43	\$249	\$259
908	0		102	\$120	\$120
	1		19	\$117	\$119
1061	0		39	\$121	\$121
	1		20	\$124	\$123
1211	0		55	\$122	\$124
	1		12	\$121	\$122
1301	0		27	\$102	\$98
	1		11	\$110	\$108

1373	0	57	\$171	\$176
	1	14	\$184	\$184
	Total	71	\$172	\$178
1740	0	51	\$213	\$214
	1	17	\$221	\$217
1843	0	74	\$215	\$226
	1	14	\$204	\$220
1868	0	84	\$129	\$129
	1	24	\$130	\$129
2008	0	55	\$230	\$228
	1	11	\$210	\$219
2013	0	77	\$190	\$203
	1	18	\$209	\$224
2119	0	74	\$233	\$234
	1	12	\$235	\$232
2151	0	58	\$197	\$201
	1	10	\$189	\$192
			\$197	\$200

8023	0	7	\$139	\$139
	1	10	\$139	\$139
				\$139
8026	0	4	\$212	\$218
	1	13	\$220	\$217
9203	0	28	\$195	\$203
	1	12	\$190	\$197
9206	0	44	\$174	\$178
	1	18	\$175	\$178
9235	0	100	\$237	\$241
	1	16	\$258	\$262
9290	0	63	\$216	\$219
	1	21	\$232	\$226
9292	0	18	\$275	\$282
	1	11	\$260	\$269
9312	0	19	\$214	\$219
	1	26	\$213	\$216

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

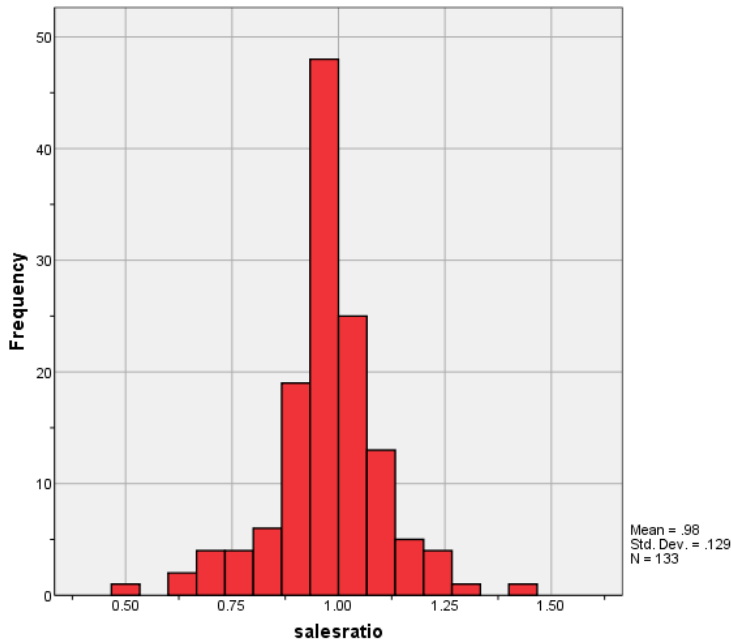
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

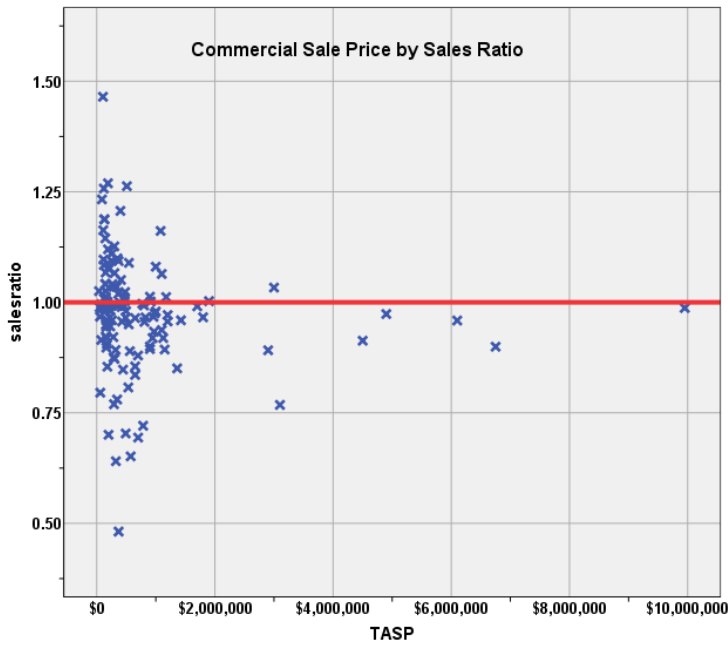
There were 133 qualified commercial sales for this analysis. The sale period ran from July 2016 through June 2018.

The sales ratio analysis was analyzed as follows:

Median	0.986
Price Related Differential	1.026
Coefficient of Dispersion	8.8

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





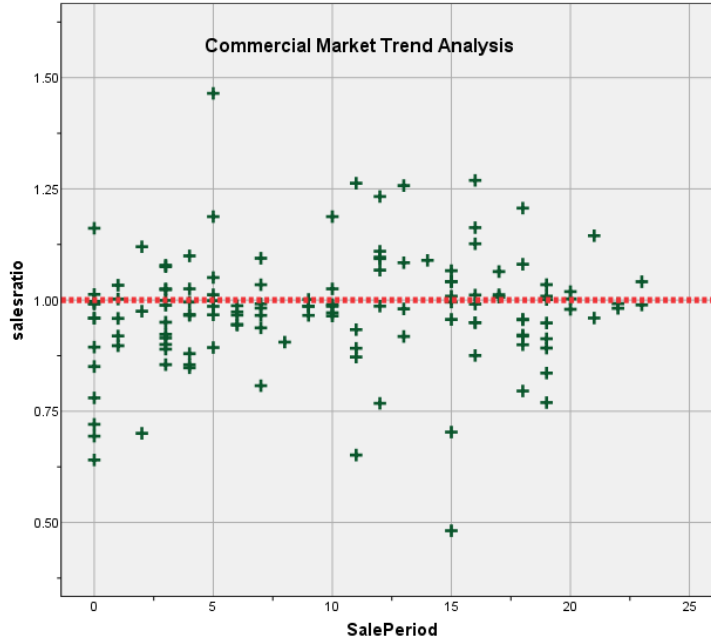
Commercial Market Trend Analysis

The commercial sales were analyzed for market trending; we examined the sale ratios across the 24-month sale period with the following results:

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.955	.019		49.146	.000
	SalePeriod	.002	.002	.118	1.364	.175

a. Dependent Variable: salesratio



The market trend results indicated no statistically significant trend. We concur that no market trend adjustments were warranted for properties in this class for Garfield County.

Sold/Unsold Analysis

We compared the median actual value per square foot between sold and unsold commercial properties to determine if the assessor was valuing each group consistently. The following results indicate that based on the median actual value, sold and unsold commercial properties were valued consistently:

Group	No. Props	Median Val / SF	Mean Val / SF
Unsold	1,378	\$104	\$130
Sold	94	\$123	\$150

We next ran the comparison between sold and unsold commercial properties using the change in value between taxable years 2018 and 2019, as follows:

Group	No. Props	Median % Chg Val	Mean % Chg Val
Unsold	1,434	1.01	1.03
Sold	91	1.09	1.15

We next stratified this comparison by abstract improvement code for properties with at least three sales within each abstract group:

Report

DIFF	ABSTRIMP	sold	N	Median	Mean
2212.00		0	181	1.03	1.06
		1	15	1.03	1.11
	Total		196	1.03	1.06
2215.00		0	40	1.04	1.13
		1	7	1.55	1.69
	Total		47	1.06	1.21
2220.00		0	109	1.08	1.09
		1	7	1.01	1.08
	Total		116	1.08	1.09
2230.00		0	302	1.01	1.06
		1	21	1.22	1.23
	Total		323	1.02	1.07
2235.00		0	199	1.00	1.04
		1	17	1.20	1.28
	Total		216	1.00	1.06
2245.00		0	418	1.10	1.16
		1	54	1.24	1.36
	Total		472	1.11	1.18

Commercial properties coded 2212 had similar median change in value between sold and unsold properties.

Commercial properties coded 2215 and 2225 each had too few sales to perform a valid comparison analysis.

Commercial properties coded as 2230 indicated a greater increase in the median value for sold properties, but the sold properties had a higher quality rating on average than the unsold properties.

Commercial properties coded as 2235 also showed a greater median increase in value for sold properties, but the sold properties were on the average of higher quality, were smaller and were newer than the unsold properties.

Commercial properties coded as 2245 also showed a greater median increase in value for sold properties, but the value per square foot were virtually the same between sold and unsold groups.

Based on the above comparison analyses, we concluded that there is no pattern of sold properties being valued consistently above unsold properties, either overall or by abstract improvement subclass, when property attributes are considered.

V. VACANT LAND SALE RESULTS

There were 328 total qualified vacant land sales for this analysis. The sale period ran from July 2016 through June 2018.

The sales ratios were analyzed as follows:

Median	1.000
Price Related Differential	1.060
Coefficient of Dispersion	8.2

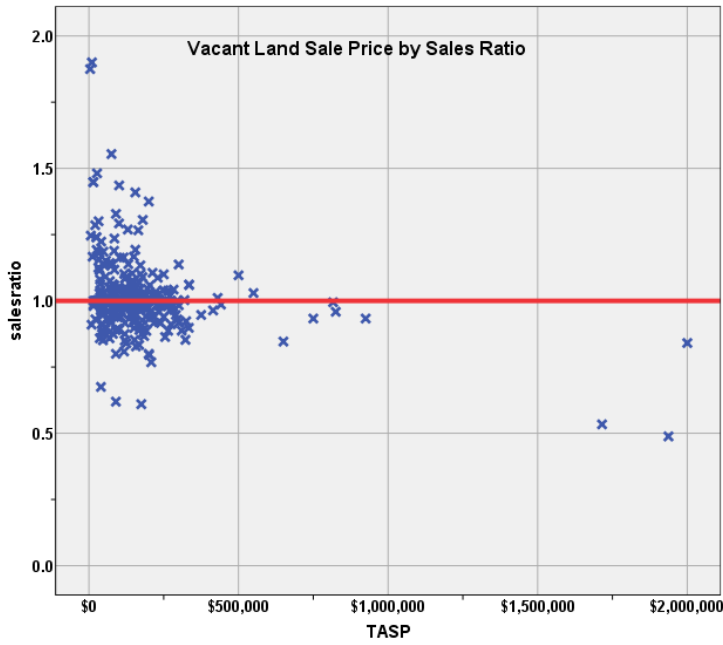
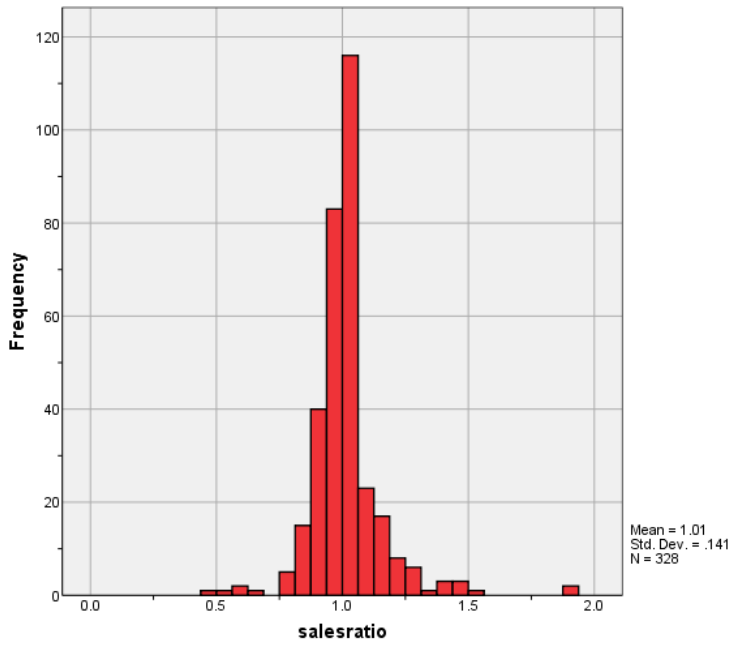
Case Processing Summary

	Count	Percent
ECONAREA 1.00	126	38.4%
2.00	68	20.7%
3.00	34	10.4%
4.00	44	13.4%
5.00	28	8.5%
6.00	18	5.5%
6.50	10	3.0%
Overall	328	100.0%
Excluded	0	
Total	328	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	1.000	1.017	.070
2.00	.995	1.158	.082
3.00	.995	1.001	.046
4.00	1.003	1.012	.088
5.00	1.000	.993	.087
6.00	1.017	1.079	.172
6.50	1.002	1.081	.139
Overall	1.000	1.060	.082

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



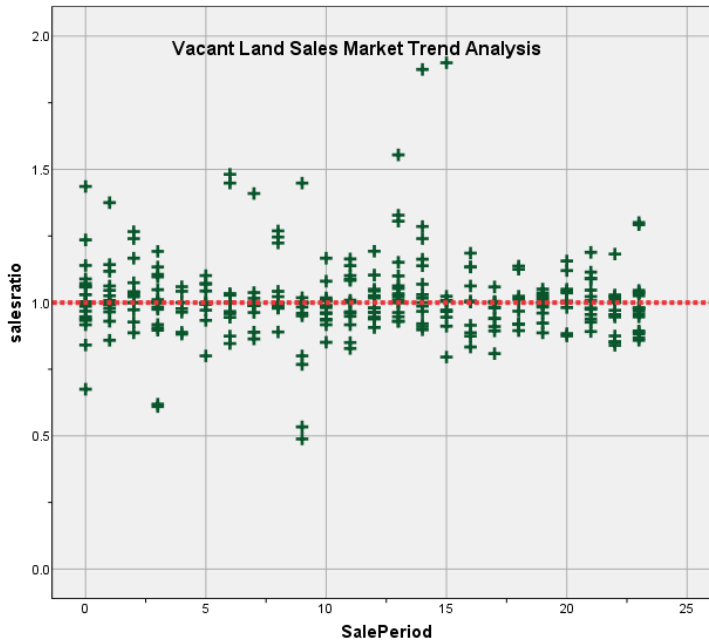
Vacant Land Market Trend Analysis

The vacant land sales were next analyzed for market trending; we examined the sale ratios across the 24-month sale period with the following results:

Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.017	.014		71.754	.000
	SalePeriod	-.001	.001	-.027	-.490	.625

a. Dependent Variable: salesratio



The above analysis indicated that there was no significant residual market trending in the sales ratio across the 24-month 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 between taxable year 2018 and 2019 for vacant land properties to determine if sold and unsold properties were valued consistently. The analysis was performed both overall and by subdivision with at least 5 sales, as follows:

Group	N	Median	Mean
Unsold	3.067	1.05	1.11
Sold	320	1.13	1.17

Report

DIFF		N	Median	Mean
159	UNSOLD	10	1.22	1.04
	SOLD	7	1.23	1.07
	Total	17	1.23	1.05
1373	UNSOLD	26	.87	.89
	SOLD	5	.84	.91

	Total	31	.87	.89
1409	UNSOLD	56	.79	.84
	SOLD	10	.91	.95
	Total	66	.91	.85
2040	UNSOLD	17	1.06	1.06
	SOLD	7	1.06	1.08
	Total	24	1.06	1.06
2052	UNSOLD	17	1.26	1.26
	SOLD	7	1.26	1.24
	Total	24	1.26	1.26
2077	UNSOLD	9	1.15	1.18
	SOLD	8	1.23	1.21
	Total	17	1.20	1.19
2094	UNSOLD	19	1.06	1.08
	SOLD	5	1.22	1.17
	Total	24	1.07	1.10
2151	UNSOLD	3	1.25	1.25
	SOLD	7	1.25	1.25
	Total	10	1.25	1.25
2156	UNSOLD	29	1.09	1.13
	SOLD	5	1.02	1.03
	Total	34	1.02	1.11
2311	UNSOLD	22	1.22	1.22
	SOLD	5	1.15	1.17
	Total	27	1.22	1.21
9212	UNSOLD	23	1.04	1.07
	SOLD	6	1.05	1.09
	Total	29	1.04	1.07
9233	UNSOLD	3	1.08	1.08
	SOLD	5	1.27	1.23
	Total	8	1.17	1.17
9235	UNSOLD	27	.92	.95
	SOLD	7	.94	.97
	Total	34	.92	.95
9274	UNSOLD	12	1.24	1.25
	SOLD	6	1.20	1.22
	Total	18	1.23	1.24
9286	UNSOLD	17	1.27	1.28
	SOLD	5	1.41	1.38
	Total	22	1.33	1.30
9330	UNSOLD	21	.96	1.04
	SOLD	7	1.08	1.24
	Total	28	.96	1.09
Total	UNSOLD	311	1.04	1.05
	SOLD	102	1.15	1.13
	Total	413	1.06	1.07

While the median change in value using all vacant land properties indicated a somewhat significant difference between sold and unsold, when subdivisions with at least 5 sales were analyzed, there was no consistent pattern where sold properties were valued differently than unsold properties. The above results indicated that sold and unsold vacant land properties were valued consistently.

V. CONCLUSIONS

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

STATISTICAL ABSTRACT
Residential Median Ratio

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				
1.001	.999	1.004	.998	.997	.999	95.4%	.994	.989	.998	1.007	.041	6.4%	

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/Industrial Median Ratio

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				
.977	.955	.999	.986	.966	.993	96.3%	.952	.931	.973	1.026	.088	13.2%	

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 Median Ratio

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				
1.011	.996	1.027	1.000	.995	1.000	95.9%	.954	.910	.999	1.060	.082	13.9%	

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	LT \$25K	3	0.1%
	\$25K to \$50K	1	0.0%
	\$50K to \$100K	36	1.7%
	\$100K to \$150K	77	3.6%
	\$150K to \$200K	201	9.3%
	\$200K to \$300K	482	22.3%
	\$300K to \$500K	846	39.1%
	\$500K to \$750K	340	15.7%
	\$750K to \$1,000K	106	4.9%
	Over \$1,000K	74	3.4%
Overall		2166	100.0%
Excluded		0	
Total		2166	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.019	1.001	.016	3.3%
\$25K to \$50K	1.046	1.000	.000	.
\$50K to \$100K	1.041	1.007	.074	10.3%
\$100K to \$150K	.997	1.000	.055	8.3%
\$150K to \$200K	1.005	1.000	.051	9.0%
\$200K to \$300K	.997	1.000	.041	6.0%
\$300K to \$500K	.999	1.001	.038	5.8%
\$500K to \$750K	.994	1.000	.037	5.5%
\$750K to \$1,000K	.998	.999	.031	4.9%
Over \$1,000K	.987	1.017	.047	6.4%
Overall	.998	1.007	.041	6.4%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1212.00	1890	87.3%
	1215.00	45	2.1%
	1216.50	1	0.0%
	1220.00	10	0.5%
	1225.00	4	0.2%
	1230.00	215	9.9%
	1240.00	1	0.0%
Overall		2166	100.0%
Excluded		0	
Total		2166	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212.00	.998	1.004	.041	6.4%
1215.00	.998	.999	.031	4.2%
1216.50	1.000	1.000	.000	.
1220.00	1.035	1.022	.087	13.5%
1225.00	.957	1.030	.044	6.9%
1230.00	1.001	1.005	.041	6.7%
1240.00	.841	1.000	.000	.
Overall	.998	1.007	.041	6.4%

Age

Case Processing Summary

	Count	Percent
AgeRec		
Over 100	1	0.0%
75 to 100	11	0.5%
50 to 75	72	3.3%
25 to 50	585	27.0%
5 to 25	1355	62.6%
5 or Newer	142	6.6%
Overall	2166	100.0%
Excluded	0	
Total	2166	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.996	1.000	.000	.
75 to 100	.990	1.009	.038	6.2%
50 to 75	.999	1.013	.060	12.7%
25 to 50	.998	1.015	.046	7.1%
5 to 25	.999	1.004	.039	5.8%
5 or Newer	.999	1.004	.029	4.5%
Overall	.998	1.007	.041	6.4%

Improved Area

Case Processing Summary

	Count	Percent
ImpSFRec		
LE 500 sf	21	1.0%
500 to 1,000 sf	168	7.8%
1,000 to 1,500 sf	806	37.2%
1,500 to 2,000 sf	649	30.0%
2,000 to 3,000 sf	396	18.3%
3,000 sf or Higher	126	5.8%
Overall	2166	100.0%
Excluded	0	
Total	2166	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.995	1.136	.085	13.9%
500 to 1,000 sf	.997	1.010	.050	7.4%
1,000 to 1,500 sf	.997	1.003	.040	6.1%
1,500 to 2,000 sf	.999	1.005	.039	6.4%
2,000 to 3,000 sf	.999	1.005	.041	5.9%
3,000 sf or Higher	1.000	1.020	.041	6.9%
Overall	.998	1.007	.041	6.4%

Improvement Quality

Case Processing Summary

	Count	Percent
QUALITY	6	0.3%
1 - LOW	2	0.1%
2 - AVERAGE	7	0.3%
2 - FAIR	156	7.2%
2.5 - FAIR TO AVERAGE	3	0.1%
2.5 - FAIR TO AVG	118	5.4%
3 - AVERAGE	1544	71.3%
3.5 - AVERAGE TO GOOD	33	1.5%
3.5 - AVG TO GOOD	168	7.8%
4 - GOOD	88	4.1%
4.5 - GOOD TO VERY GOOD	29	1.3%
5 - FAIR	2	0.1%
5 - VERY GOOD	5	0.2%
5.5 - FAIR TO AVERAGE	2	0.1%
5.5 - VERY GOOD TO EXCELLENT	3	0.1%
Overall	2166	100.0%
Excluded	0	
Total	2166	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.988	1.121	.040	7.0%
1 - LOW	1.056	1.098	.133	18.8%
2 - AVERAGE	.967	1.056	.055	7.6%
2 - FAIR	.998	1.010	.050	9.6%
2.5 - FAIR TO AVERAGE	.989	.999	.016	3.0%
2.5 - FAIR TO AVG	.996	1.001	.035	5.0%
3 - AVERAGE	.998	1.004	.041	6.2%
3.5 - AVERAGE TO GOOD	.998	1.000	.022	3.6%
3.5 - AVG TO GOOD	.999	1.002	.039	5.6%
4 - GOOD	1.002	1.004	.033	4.7%
4.5 - GOOD TO VERY GOOD	1.000	1.008	.052	7.5%
5 - FAIR	1.244	.974	.122	17.3%
5 - VERY GOOD	.985	1.006	.035	6.1%

5.5 - FAIR TO AVERAGE	1.068	1.003	.065	9.2%
5.5 - VERY GOOD TO EXCELLENT	.957	.993	.019	3.9%
Overall	.998	1.007	.041	6.4%

Improvement Condition

NOT AVAILABLE

Commercial Sale Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	\$25K to \$50K	2	1.5%
	\$50K to \$100K	6	4.5%
	\$100K to \$150K	20	15.0%
	\$150K to \$200K	19	14.3%
	\$200K to \$300K	16	12.0%
	\$300K to \$500K	23	17.3%
	\$500K to \$750K	11	8.3%
	\$750K to \$1,000K	15	11.3%
	Over \$1,000K	21	15.8%
Overall		133	100.0%
Excluded		0	
Total		133	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
\$25K to \$50K	1.007	1.003	.018	2.6%
\$50K to \$100K	.977	.985	.092	14.7%
\$100K to \$150K	1.041	1.008	.081	12.6%
\$150K to \$200K	.959	.999	.075	11.8%
\$200K to \$300K	.986	1.003	.079	10.0%
\$300K to \$500K	.992	.997	.101	16.9%
\$500K to \$750K	.880	1.010	.136	19.6%
\$750K to \$1,000K	.967	.998	.052	8.4%
Over \$1,000K	.959	1.009	.058	8.4%
Overall	.986	1.026	.088	13.1%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1339.88	1	0.8%
	1381.67	1	0.8%
	1548.00	1	0.8%
	1712.00	2	1.5%
	1723.50	1	0.8%
	2212.00	15	11.3%
	2215.00	7	5.3%
	2215.83	1	0.8%
	2220.00	7	5.3%
	2227.50	1	0.8%
	2228.00	1	0.8%
	2230.00	21	15.8%
	2235.00	17	12.8%
	2245.00	54	40.6%
	9249.00	1	0.8%
	9259.00	1	0.8%
9279.00	1	0.8%	
Overall		133	100.0%
Excluded		0	
Total		133	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1339.88	.652	1.000	.000	.
1381.67	.950	1.000	.000	.
1548.00	.872	1.000	.000	.
1712.00	.919	1.005	.029	4.1%
1723.50	1.064	1.000	.000	.
2212.00	1.002	1.058	.133	16.8%
2215.00	.974	.996	.024	3.8%
2215.83	.880	1.000	.000	.
2220.00	1.001	1.004	.050	6.7%
2227.50	.894	1.000	.000	.
2228.00	.979	1.000	.000	.
2230.00	.967	1.032	.092	13.3%
2235.00	.966	1.011	.067	8.8%
2245.00	.989	1.017	.089	14.6%
9249.00	.975	1.000	.000	.
9259.00	1.145	1.000	.000	.
9279.00	1.019	1.000	.000	.
Overall	.986	1.026	.088	13.1%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	0	74	55.6%
	Over 100	1	0.8%
	75 to 100	1	0.8%
	50 to 75	7	5.3%
	25 to 50	20	15.0%
	5 to 25	29	21.8%
	5 or Newer	1	0.8%
Overall		133	100.0%
Excluded		0	
Total		133	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.986	1.044	.094	14.6%
Over 100	.900	1.000	.000	.
75 to 100	1.001	1.000	.000	.
50 to 75	.959	.967	.102	15.4%
25 to 50	.980	1.056	.093	12.7%
5 to 25	.987	1.018	.067	9.5%
5 or Newer	1.002	1.000	.000	.
Overall	.986	1.026	.088	13.1%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	4	3.0%
	500 to 1,000 sf	15	11.3%
	1,000 to 1,500 sf	33	24.8%
	1,500 to 2,000 sf	13	9.8%
	2,000 to 3,000 sf	12	9.0%
	3,000 sf or Higher	56	42.1%
Overall		133	100.0%
Excluded		0	
Total		133	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.978	1.031	.038	5.6%
500 to 1,000 sf	.996	1.012	.078	11.8%
1,000 to 1,500 sf	.992	1.051	.108	16.9%
1,500 to 2,000 sf	.949	1.030	.113	16.3%
2,000 to 3,000 sf	1.018	1.018	.089	12.2%
3,000 sf or Higher	.967	1.010	.072	10.4%
Overall	.986	1.026	.088	13.1%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	2 - AVERAGE	107	80.5%
	2 - FAIR	1	0.8%
	2.5 - AVERAGE TO GOOD	2	1.5%
	3 - AVERAGE	2	1.5%
	3 - GOOD	15	11.3%
	5 - FAIR	3	2.3%
	6 - VERY GOOD	3	2.3%
Overall		133	100.0%
Excluded		0	
Total		133	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
2 - AVERAGE	.986	1.028	.090	13.1%
2 - FAIR	.950	1.000	.000	.
2.5 - AVERAGE TO GOOD	.944	1.021	.033	4.6%
3 - AVERAGE	.948	1.039	.056	8.0%
3 - GOOD	.987	1.033	.108	17.5%
5 - FAIR	.982	.996	.011	1.7%
6 - VERY GOOD	.971	.992	.014	2.7%
Overall	.986	1.026	.088	13.1%

Improvement Condition

NOT AVAILABLE

Vacant Land Sale Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	18	5.5%
	\$25K to \$50K	47	14.3%
	\$50K to \$100K	60	18.3%
	\$100K to \$150K	69	21.0%
	\$150K to \$200K	61	18.6%
	\$200K to \$300K	52	15.9%
	\$300K to \$500K	12	3.7%
	\$500K to \$750K	3	0.9%
	\$750K to \$1,000K	3	0.9%
	Over \$1,000K	3	0.9%
Overall		328	100.0%
Excluded		0	
Total		328	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.083	1.047	.207	30.0%
\$25K to \$50K	1.000	1.010	.085	13.1%
\$50K to \$100K	1.000	1.001	.080	12.9%
\$100K to \$150K	1.000	1.001	.060	9.9%
\$150K to \$200K	.995	1.000	.081	12.8%
\$200K to \$300K	.989	.999	.050	6.9%
\$300K to \$500K	.975	.994	.064	7.8%
\$500K to \$750K	.933	1.005	.066	9.8%
\$750K to \$1,000K	.959	1.001	.021	3.3%
Over \$1,000K	.534	.991	.220	41.2%
Overall	1.000	1.060	.082	14.1%

Land Subclass

Case Processing Summary

	Count	Percent
ABSTRRLND	139	42.4%
100.00	12	3.7%
200.00	34	10.4%
400.00	3	0.9%
510.00	14	4.3%
520.00	9	2.7%
530.00	8	2.4%
540.00	18	5.5%
550.00	1	0.3%
560.00	79	24.1%
1112.00	2	0.6%
1125.00	3	0.9%
1135.00	3	0.9%
2135.00	2	0.6%
9149.00	1	0.3%
9159.00		
Overall	328	100.0%
Excluded	0	
Total	328	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	1.000	1.010	.062	9.5%
200.00	.922	.982	.125	17.0%
400.00	1.000	1.013	.100	15.6%
510.00	1.074	1.250	.318	55.9%
520.00	.974	1.001	.040	5.4%
530.00	.995	.998	.031	5.2%
540.00	.992	.994	.034	4.4%
550.00	.993	1.015	.042	6.3%
560.00	.989	1.000	.000	.
1112.00	1.000	1.040	.095	14.9%
1125.00	.511	1.003	.045	6.3%
1135.00	1.071	.962	.043	6.4%
2135.00	1.246	1.153	.239	38.7%
9149.00	1.113	1.102	.138	19.5%
9159.00	1.024	1.000	.000	.
Overall	1.000	1.060	.082	14.1%