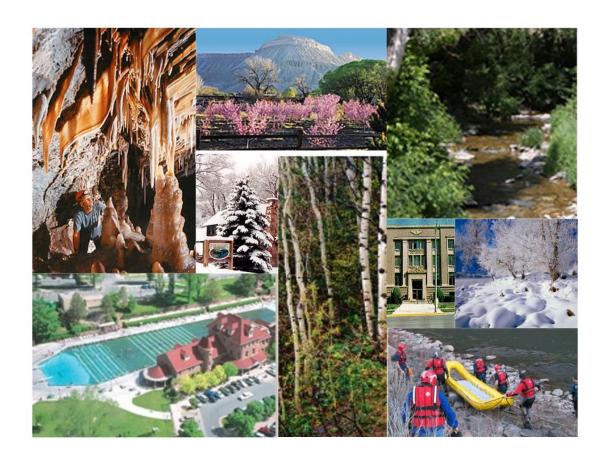
# Garfield County, Colorado 2 0 2 3

# GARFIELD COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2023

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

**RE:** Final Report for the 2023 Colorado Property Assessment Study

Dear Ms. Castle:

East West Econometrics - Audit Division is pleased to submit the Final Reports for the 2023 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 locally assessed 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.

East West Econometrics – Audit Division appreciates the opportunity to be of service to the State of Colorado. Please contact us with any questions or concerns.

Harry J. Fuller Project Manager

Harry J. Zulln

East West Econometrics – Audit Division



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# INTRODUCTION



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

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

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

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

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

The property assessment audit conducts a twopart analysis: A procedural analysis and a statistical analysis. The procedural analysis includes all classes of property and specifically looks at how the assessor develops economic areas, confirms and qualifies sales, and develops time adjustments. The audit also examines the procedures for adequately discovering, classifying and valuing agricultural outbuildings, discovering subdivision build-out 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.

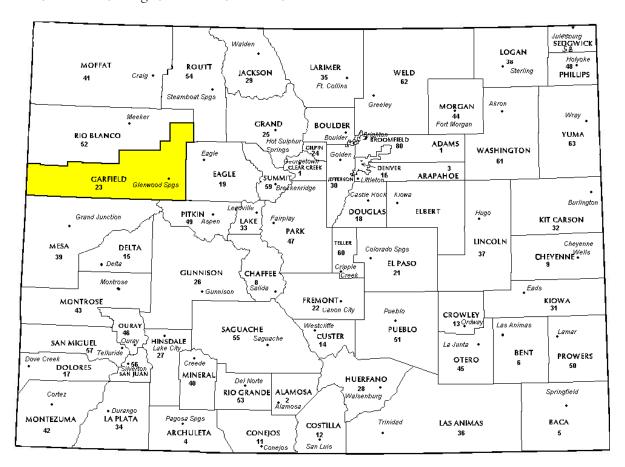
East West Econometrics Audit has completed the Property Assessment Study for 2023 and is pleased to report its findings for Garfield County in the following report.



# 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 has approximately 2,947.59 square miles and an estimated population of approximately 60,061 people with 19.1 people per square mile, according to the U.S. Census Bureau's 2020 estimated census data. This represents a 6.5 percent change from April 1, 2010 to July 1, 2019.

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, 2021 through June 30th, 2022. 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	
Residential Condominium	Between .95-1.05	Less than 15.99	
Residential	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	175	0.979	1.027	14.5	Compliant
Residential	2,628	0.995	1.010	4.2	Compliant
Vacant Land	739	1.000	1.019	7.2	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



# 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



# 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. 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 The second test is and unsold properties. 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 nonparametric 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 l	Results
Property Class	Results
Commercial/Industrial	Compliant
Residential	Compliant
Vacant Land	Compliant

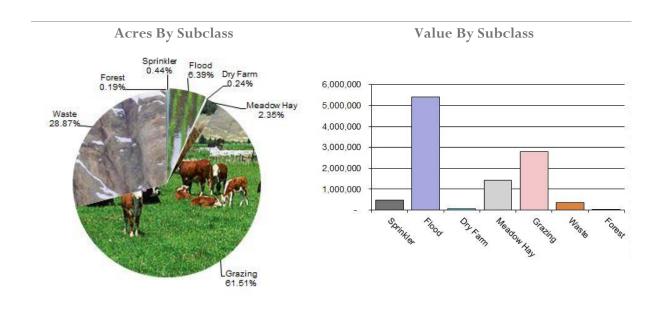
# **Conclusions**

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



# AGRICULTURAL LAND STUDY



# **Agricultural Land**

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

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

#### **Conclusions**

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



	Garfield County Agricultural Land Ratio Grid					
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Fotal Value	WRA Total Value	Ratio
4107	Sprinkler	2,582	188.15	485,802	507,643	0.96
4117	Flood	37,337	144.95	5,411,953	5,613,999	0.96
4127	Dry Farm	1,428	37.01	52,851	53,036	1.00
4137	Meadow Hay	13,740	104.25	1,432,367	1,432,367	1.00
4147	Grazing	359,448	7.78	2,795,347	2,795,347	1.00
4177	Forest	1,120	15.41	17,261	17,261	1.00
4167	Waste	168,675	2.19	369,087	369,087	1.00
Total/Avg		584,330	18.08	10,564,668	10,788,740	0.98

# Recommendations

None

# **Agricultural Outbuildings**

# Methodology

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

# **Conclusions**

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

of Property Taxation for the valuation of agricultural outbuildings.

# Recommendations



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

### Recommendations



# SALES VERIFICATION

According to Colorado Revised Statutes:

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

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

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

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

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

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

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

EWE reviewed the sales verification procedures in 2023 for Garfield County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically EWE selected 35 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.

The following subclasses were analyzed for Garfield County:

0100 Residential Lots

#### **Conclusions**

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

# Recommendations



# ECONOMIC AREA REVIEW AND EVALUATION

# Methodology

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



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

#### Conclusions

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

### Recommendations

None

# **Producing Oil and Gas**

# Methodology

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

#### STATUTORY REFERENCES

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

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

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

#### Valuation:

#### Valuation for assessment.

- (1) Except as provided in subsection (2) of this section, on the basis of the information contained in such statement, the assessor shall value such oil and gas leaseholds and lands for assessment, as real property, at an amount equal to eighty-seven and one-half percent of:
- (a) The selling price of the oil or gas sold there from during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year;
- (b) The selling price of oil or gas sold in the same field area for oil or gas transported from the premises which is not sold during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year. § 39-7-102, C.R.S.

# Conclusions

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

#### Recommendations



# VACANT LAND

# **Subdivision Discounting**

Subdivisions were reviewed in 2023 in Garfield County. The review showed that subdivisions were discounted pursuant to 39-1-103 (14) C.R.S. Discounting procedures were applied to all subdivisions where less than 80 percent of vacant land parcels were sold. An absorption rate was estimated for each discounted subdivision. An appropriate discount rate was developed using the Summation Method,

following Division of Property Taxation guidelines.

## Conclusions

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

# Recommendations



# POSSESSORY INTEREST PROPERTIES

# **Possessory Interest**

Possessory interest property discovery and valuation is described in the Assessor's Reference Library (ARL) Volume 3 section 7 in accordance with the requirements of Chapter 39-1-103 (17)(a)(II)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, 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



# 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 This sample was levels of such property. selected from the personal property schedules audited by the assessor. In no event was the sample selected by the contractor less than 30 schedules. The counties to be included in this study are Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo, and Weld. All other counties received a procedural study.

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

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 2023 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 \$52,000 actual value exemption status
- Lowest or highest quartile of value per square foot
- Accounts protested with substantial disagreement
- Different Industry type picked each year

# **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



# EAST WEST ECONOMETRICS 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



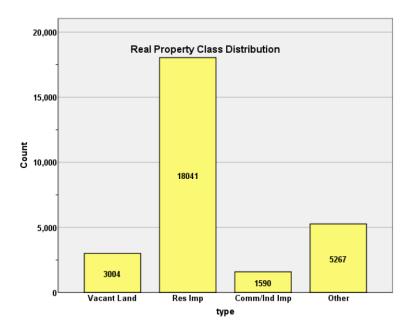
# STATISTICAL APPENDIX



# STATISTICAL COMPLIANCE REPORT FOR GARFIELD COUNTY 2023

#### I. OVERVIEW

Garfield County is a mountain resort county located in west central Colorado. The county has a total of 27,902 real property parcels, according to data submitted by the county assessor's office in 2023. 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 45.6% of all vacant land parcels.

For residential improved properties, single family properties accounted for 73.8% 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.

#### II. DATA FILES

The following sales analyses were based on the requirements of the 2023 Colorado Property Assessment Study. Information was provided by the Garfield Assessor's Office in April 2023. The data included all 5 property record files as specified by the Auditor.



## III. RESIDENTIAL SALES RESULTS

There were 2,628 qualified residential sales for this analysis. The sale period ran from July 2020 through June 2022.

The sales ratio analysis was analyzed as follows:

Median	0.995
Price Related Differential	1.010
Coefficient of Dispersion	4.2

We next stratified the sale ratio analysis by economic area and neighborhood. The following are the results of this stratification analysis:

**Economic Area Case Processing Summary** 

		Count	Percent
ECONAREA	1.00	391	15.0%
	2.00	502	19.3%
	3.00	310	11.9%
	4.00	282	10.8%
	5.00	530	20.4%
	6.00	261	10.0%
	6.50	62	2.4%
	99.00	265	10.2%
Overall		2603	100.0%
Excluded		25	
Total		2628	

NOTE: ECONAREA 99 ARE CONDOMINIUMS

# **Ratio Statistics for CURRTOT / TASP**

0	B.4. 11	Price Related	Coefficient of
Group	Median	Differential	Dispersion
1.00	.996	1.005	.034
2.00	.988	1.005	.053
3.00	.993	1.004	.039
4.00	.991	1.004	.040
5.00	.997	1.001	.041
6.00	.996	1.062	.043
6.50	1.007	.997	.034
99.00	.998	1.005	.038
Overall	.995	1.010	.042

# Neighborhood w/GE 15 Sales Case Processing Summary

		Count	Percent
NBHD	111040.5	17	2.3%
	112007.0	16	2.2%
	112046.0	21	2.8%
	121012.0	17	2.3%



	121013.0	24	3.2%
	122125.0	17	2.3%
	122125.5	23	3.1%
	131004.0	40	5.4%
	131004.1	20	2.7%
	131005.0	48	6.5%
	141000.0	17	2.3%
	141008.0	18	2.4%
	141012.0	34	4.6%
	142029.0	24	3.2%
	151047.0	16	2.2%
	151057.0	20	2.7%
	151066.0	26	3.5%
	151073.0	21	2.8%
	151076.7	25	3.4%
	162013.0	16	2.2%
	162014.0	53	7.1%
	162015.0	22	3.0%
	162016.0	36	4.9%
	162017.0	17	2.3%
	162018.0	18	2.4%
	212041.0	22	3.0%
	222043.0	16	2.2%
	232005.0	29	3.9%
	252037.0	26	3.5%
	262001.0	27	3.6%
	321000.0	16	2.2%
Overall		742	100.0%
Excluded		290	
Total		1032	
		_	

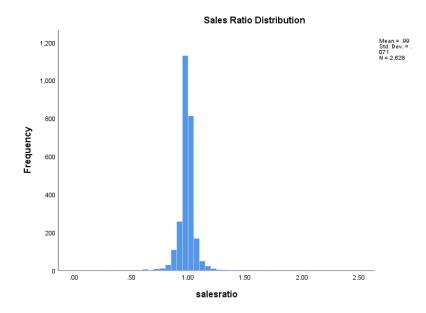
# **Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion
111040.5	.999	1.003	.022
112007.0	1.001	1.003	.027
112046.0	.982	1.004	.038
121012.0	.972	1.007	.063
121013.0	.967	1.002	.067
122125.0	.993	1.010	.066
122125.5	.967	1.007	.050
131004.0	.998	1.000	.040
131004.1	.983	1.003	.044
131005.0	.998	1.001	.041
141000.0	.978	.998	.030
141008.0	.978	1.000	.027
141012.0	.985	1.005	.062
142029.0	.999	1.004	.030
151047.0	.989	1.000	.047
151057.0	.995	1.000	.036
151066.0	1.003	1.000	.040
151073.0	.995	1.001	.051
151076.7	1.001	1.003	.065
162013.0	.999	1.001	.022
162014.0	.986	1.003	.053
162015.0	.991	1.005	.052

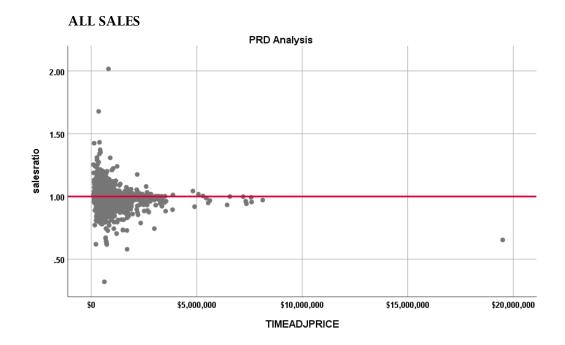


162016.0	.993	1.001	.035	
162017.0	1.008	1.004	.053	
162018.0	.994	1.001	.032	
212041.0	.994	1.008	.051	
222043.0	.940	.994	.165	
232005.0	.967	1.002	.034	
252037.0	.974	1.005	.054	
262001.0	1.005	1.003	.037	
321000.0	.999	1.024	.072	
Overall	.990	1.004	.049	

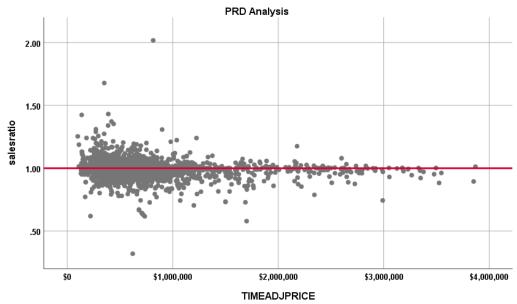
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. We also concluded that these ratios standards were also met when residential sale data is stratified by economic area and neighborhood. The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







# **SALES LESS THAN \$2,000,000**



# **Valuation Bias Analysis**

We focused next on 1212 sales to determine if any value bias was present in the values assigned by the assessor. The following tracks the sale ratios across the value spectrum





The Price-Related Differential (PRD) for all 1212 sales is 1.006; for the sales less than \$4,000,000 in the above graph, the PRD is also 1.006. Both were within the IAAO standards for the PRD. We also performed a regression analysis between the sales ratio and the assessor's current value to further test for regressivity or progressivity in the residential sales valuation, as follows:

Coefficients<sup>a</sup>

		Unstandardized Co	Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.993	.002		410.497	.000
	CURRTOT	00000000345	.000	037	-1.543	.123

a. Dependent Variable: salesratio

The slope of the line indicates that there is virtually no slope in the regression line, which indicates that sales ratios are similar across the entire actual value array. We also stratified the sales ratio analysis by the sale price range, as follows:

**Case Processing Summary** 

	_	-	
		Count	Percent
SPRec	LT \$200K	31	1.7%
	\$200K to \$300K	79	4.4%
	\$300K to \$400K	223	12.5%
	\$400K to \$500K	306	17.2%
	\$500K to \$600K	225	12.6%
	\$600K to \$700K	196	11.0%
	\$700K to \$800K	159	8.9%
	\$800K to \$900K	128	7.2%
	\$900K to \$1,000K	84	4.7%
	Over \$1,000K	353	19.8%



Overall	1784	100.0%
Excluded	0	
Total	1784	

# **Ratio Statistics for CURRTOT / TASP**

		Price Related	Coefficient of
Group	Median	Differential	Dispersion
LT \$200K	1.024	1.004	.065
\$200K to \$300K	1.001	.999	.058
\$300K to \$400K	.998	1.000	.043
\$400K to \$500K	.996	1.000	.039
\$500K to \$600K	.994	1.000	.038
\$600K to \$700K	.992	1.000	.053
\$700K to \$800K	.996	1.000	.037
\$800K to \$900K	.999	1.000	.039
\$900K to \$1,000K	.991	1.000	.041
Over \$1,000K	.989	1.000	.040
Overall	.995	1.006	.043

The above indicates that the sales ratio distribution was more or less consistent across the sale price range for Garfield County.

# **Residential Market Trend Analysis**

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

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

				Standardized			
		Unstandardized	Coefficients	Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	.988	.003		357.787	.000	
	SalePeriod	.000	.000	.024	1.231	.219	

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 2023 between each group, as follows:

Report				
VALSF				
sold	N	Median	Mean	
UNSOLD	15295	\$377	\$424	
SOLD	2627	\$355	\$400	

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:

<b>Report</b> VALSF				
ECONAREA	sold	N	Median	Mean
1.00	UNSOLD	3195	\$585	\$625
	SOLD	390	\$596	\$637
2.00	UNSOLD	3319	\$470	\$503
	SOLD	502	\$470	\$499
3.00	UNSOLD	1902	\$343	\$361
	SOLD	310	\$344	\$374
4.00	UNSOLD	1700	\$307	\$322
	SOLD	282	\$311	\$326
5.00	UNSOLD	2660	\$285	\$295
	SOLD	530	\$284	\$292
6.00	UNSOLD	1062	\$232	\$251
	SOLD	261	\$234	\$243
6.50	UNSOLD	259	\$209	\$210
	SOLD	62	\$193	\$198
99.00	UNSOLD	1167	\$389	\$397
	SOLD	273	\$391	\$403

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 15 sales, as follows:

Report VALSF		N	la a - ti	h.a
NBHD	sold	N	Median	Mean
111040.5	UNSOLD	56	\$691	\$714
	SOLD	17	\$753	\$770
112007.0	UNSOLD	85	\$719	\$766
	SOLD	16	\$708	\$809
112046.0	UNSOLD	38	\$418	\$458



	001.0	00	<b>0.440</b>	0.404
	SOLD	20	\$416	\$461
121012.0	UNSOLD	83	\$482	\$508
	SOLD	17	\$562	\$568
121013.0	UNSOLD	115	\$557	\$567
	SOLD	24	\$587	\$609
122125.0	UNSOLD	58	\$368	\$394
	SOLD	17	\$381	\$399
122125.5	UNSOLD	98	\$391	\$365
	SOLD	23	\$392	\$418
131004.0	UNSOLD	178	\$356	\$355
101004.0	SOLD	40	\$355	\$348
131004.1	UNSOLD	100	\$338	\$331
131004.1	SOLD	20		\$308
101005.0			\$297	-
131005.0	UNSOLD	280	\$365	\$377
	SOLD	48	\$367	\$385
141000.0	UNSOLD	140	\$280	\$288
	SOLD	17	\$332	\$315
141008.0	UNSOLD	50	\$306	\$301
	SOLD	18	\$308	\$306
141012.0	UNSOLD	49	\$282	\$289
	SOLD	34	\$294	\$295
142029.0	UNSOLD	133	\$377	\$404
	SOLD	24	\$421	\$417
151047.0	UNSOLD	62	\$308	\$317
101017.0	SOLD	16	\$332	\$333
151057.0	UNSOLD	76	\$291	\$289
151057.0	SOLD	20		-
4540000			\$299	\$294
151066.0	UNSOLD	117	\$310	\$316
	SOLD	26	\$333	\$333
151073.0	UNSOLD	75	\$288	\$302
	SOLD	21	\$294	\$295
151076.7	UNSOLD	6	\$277	\$272
	SOLD	25	\$268	\$280
162013.0	UNSOLD	45	\$232	\$247
	SOLD	16	\$254	\$267
162014.0	UNSOLD	235	\$204	\$205
	SOLD	53	\$206	\$204
162015.0	UNSOLD	121	\$243	\$261
	SOLD	22	\$275	\$276
162016.0	UNSOLD	113	\$256	\$263
10201010	SOLD	36	\$254	\$256
162017.0	UNSOLD	50	\$207	\$208
102017.0	SOLD	17	\$207	
162019.0				\$208
162018.0	UNSOLD	60	\$241	\$239
000040	SOLD	18	\$242	\$241
222043.0	UNSOLD	13	\$266	\$285
	SOLD	16	\$417	\$366
232005.0	UNSOLD	124	\$333	\$341
	SOLD	29	\$334	\$337
262001.0	UNSOLD	58	\$214	\$235
	SOLD	27	\$221	\$233
321000.0	UNSOLD	105	\$386	\$412
	SOLD	16	\$457	\$480
			···	

The neighborhoods highlighted in red had over a 10 percent difference between sold and unsold properties using the median actual value per square foot, as well as a greater than 10 percent difference



in the median change in value between taxable years 2020 and 2022. These two neighborhoods had among the lowest number of sales for neighborhoods with 15 or more sales. Given that it was only two neighborhoods, we concluded that sold and unsold residential properties were valued in a consistent manner.

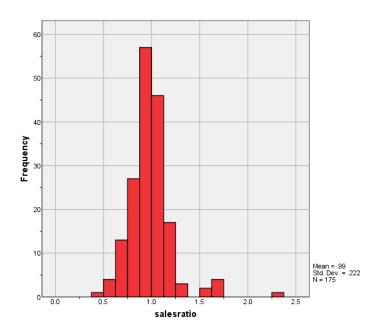
### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 175 qualified commercial sales for this analysis. The sale period ran from July 2020 through June 2022.

The sales ratio analysis was analyzed as follows:

Median	0.979
Price Related Differential	1.027
Coefficient of Dispersion	14.5

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:





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, based on the median actual value, are as follows:

Report VALSF			
sold	N	Median	Mean
UNSOLD	1347	\$150	\$190
SOLD	175	\$178	\$287

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

Report				
VALSF				
ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD	161	\$138	\$166
	SOLD	33	\$260	\$401
2215.00	UNSOLD	40	\$219	\$279
	SOLD	4	\$183	\$202
2220.00	UNSOLD	96	\$168	\$218
	SOLD	12	\$185	\$243
2225.00	UNSOLD	19	\$126	\$241
	SOLD	2	\$465	\$465
2230.00	UNSOLD	287	\$154	\$234
	SOLD	29	\$284	\$475



2235.00	UNSOLD	193	\$86	\$109
	SOLD	30	\$105	\$130
2240.00	UNSOLD	10	\$123	\$204
	SOLD	3	\$78	\$83
2245.00	UNSOLD	414	\$167	\$171
	SOLD	39	\$206	\$209

Commercial properties coded 2212 sold properties on the average were approximately 50 percent of the size of the unsold properties and were 10 years older on average.

Commercial properties coded as 2215 or 2225 had too few sales to perform a credible comparison analysis.

Commercial properties coded as 2220 were retested using the comparison of the median change in value between taxable years 2020 and 2022 with no significant difference between sold and unsold properties observed.

Commercial properties coded as 2230 had a higher sold value per square foot than unsold properties, but the sold properties were newer and smaller in size on average than the unsold properties.

Commercial properties coded as 2235 also showed a higher sold value per square foot than unsold properties, but the sold properties were on the average smaller.

Commercial properties coded as 2245 had very similar median change in values between sold and unsold properties.

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

#### V. VACANT LAND SALE RESULTS

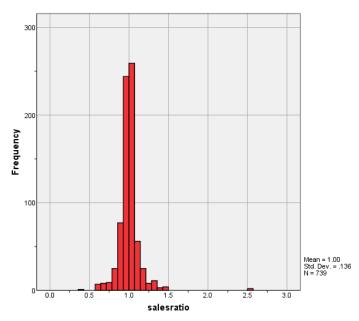
There were 740 total qualified vacant land sales for this analysis. The sale period ran from July 2020 through June 2022. One sale was trimmed using IAAO standards, resulting in a final total of 739 sales.

The sales ratios were analyzed as follows:

Median	1.000
Price Related Differential	1.019
Coefficient of Dispersion	7.2

The above table indicates 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**

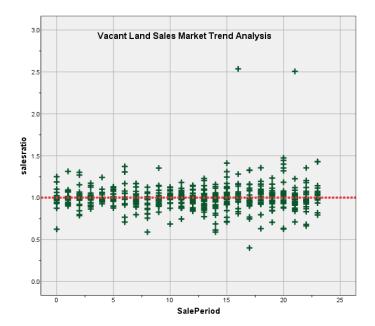
The vacant land sales were next analyzed for market trending; we examined the sale ratios across the 24-month sale period with the following results:

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

		Unstandardized		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.990	.010		101.047	.000
	SalePeriod	.001	.001	.043	1.169	.243

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 2020 and 2022 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:

# Report

DIFF			
sold	N	Median	Mean
UNSOLD	1692	1.29	1.30
SOLD	394	1.48	1.46

#### Report DIFF

SUBDIVNO	sold	N	Median	Mean
372	UNSOLD	54	1.10	1.11
	SOLD	7	1.10	1.10
1736	UNSOLD	17	1.46	1.39
	SOLD	10	1.29	1.33
1865	UNSOLD	1	1.43	1.43
	SOLD	5	1.43	1.43
2077	UNSOLD	7	1.48	1.50
	SOLD	7	1.55	1.59
2147	UNSOLD	9	1.90	1.75
	SOLD	6	1.89	1.79
2151	UNSOLD	2	1.78	1.78
	SOLD	5	1.78	1.69



2169	UNSOLD	44	1.39	1.36
	SOLD	9	1.14	1.24
2171	UNSOLD	6	1.79	1.79
	SOLD	10	1.80	1.81
2205	UNSOLD	1	1.38	1.38
	SOLD	6	1.93	1.75
8019	UNSOLD	6	1.75	1.75
	SOLD	54	1.52	1.56
9209	UNSOLD	12	1.58	1.61
	SOLD	6	1.58	1.66
9212	UNSOLD	10	1.48	1.50
	SOLD	14	1.49	1.57
9295	UNSOLD	3	1.33	1.44
	SOLD	8	1.29	1.37
9305	UNSOLD	3	1.61	1.58
	SOLD	13	1.55	1.58
9306	SOLD	5	1.32	1.36
9320	UNSOLD	27	1.34	1.39
	SOLD	14	1.34	1.40
9330	UNSOLD	14	1.69	1.73
	SOLD	9	1.69	1.72
9359	UNSOLD	53	.87	.91
	SOLD	28	1.17	1.16

While the median change in value using all vacant land properties indicated a marginal 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											
	95% Confidence Interval for Mean 95% Confidence Interval for Median				95% Confiden Weighte				Coefficient of Variation			
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
.991	.988	.994	.995	.994	.997	95.1%	.981	.974	.988	1.010	.042	7.1%

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											
	95% Confidence Interval for Mean 95% Confidence Interval for Median				95% Confiden Weighte				Coefficient of Variation			
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
.985	.952	1.018	.979	.963	.996	95.1%	.959	.927	.990	1.027	.145	22.5%

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

#### **Vacant Land Median Ratio**

	Ratio Statistics for CURRLND / TASP											
	95% Confiden Me			95% Cor	nfidence Interval fo	or Median		95% Confiden Weighte				Coefficient of Variation
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
.999	.990	1.009	1.000	.996	1.000	95.3%	.981	.966	.995	1.019	.072	13.6%

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.



# Residential Sale Ratio Stratification

#### **Sub Class**

# **Case Processing Summary**

		Count	Percent
ABSTRIMP	1212.00	1784	67.9%
	1212.25	1	0.0%
	1212.60	1	0.0%
	1212.75	4	0.2%
	1212.83	1	0.0%
	1212.86	1	0.0%
	1213.00	485	18.5%
	1214.00	2	0.1%
	1214.08	1	0.0%
	1215.00	64	2.4%
	1216.00	1	0.0%
	1220.00	8	0.3%
	1225.00	2	0.1%
	1230.00	273	10.4%
Overall		2628	100.0%
Excluded		0	
Total		2628	

		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
1212.00	.995	1.006	.043	6.9%
1212.25	.994	1.000	.000	
1212.60	.935	1.000	.000	
1212.75	.993	1.001	.014	1.9%
1212.83	.994	1.000	.000	
1212.86	.990	1.000	.000	
1213.00	.996	1.009	.038	6.6%
1214.00	1.484	1.009	.359	50.8%
1214.08	.918	1.000	.000	
1215.00	.997	1.014	.056	7.7%
1216.00	.921	1.000	.000	
1220.00	.975	1.002	.024	3.8%
1225.00	.826	1.106	.209	29.5%
1230.00	.998	1.005	.038	6.7%
Overall	.995	1.010	.042	7.1%



# Age

## **Case Processing Summary**

		Count	Percent
AgeRec	0	1	0.0%
	Over 100	1	0.0%
	75 to 100	23	0.9%
	50 to 75	153	5.8%
	25 to 50	789	30.0%
	5 to 25	1335	50.8%
	5 or Newer	326	12.4%
Overall		2628	100.0%
Excluded		0	
Total		2628	

## **Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	1.083	1.000	.000	
Over 100	.889	1.000	.000	
75 to 100	.971	1.015	.064	9.3%
50 to 75	.991	1.002	.062	12.0%
25 to 50	.995	1.018	.039	6.7%
5 to 25	.997	1.008	.038	5.8%
5 or Newer	.991	1.005	.055	9.4%
Overall	.995	1.010	.042	7.1%

## **Improved Area**

# **Case Processing Summary**

		Count	Percent
ImpSFRec	LE 500 sf	20	0.8%
	500 to 1,000 sf	290	11.0%
	1,000 to 1,500 sf	906	34.5%
	1,500 to 2,000 sf	766	29.1%
	2,000 to 3,000 sf	454	17.3%
	3,000 sf or Higher	192	7.3%
Overall		2628	100.0%
Excluded		0	
Total		2628	

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.984	1.053	.060	10.2%
500 to 1,000 sf	.993	1.007	.041	6.9%
1,000 to 1,500 sf	.994	1.004	.040	6.3%
1,500 to 2,000 sf	.997	1.007	.043	7.3%
2,000 to 3,000 sf	.996	1.012	.045	7.0%
3,000 sf or Higher	.998	1.025	.043	9.8%
Overall	.995	1.010	.042	7.1%



# **Improvement Quality**

# **Case Processing Summary**

		Count	Percent
QUALITY		1	0.0%
	1 - LOW	1	0.0%
	2 - AVERAGE	11	0.4%
	2 - FAIR	180	6.8%
	2.5 - FAIR TO AVERAGE	2	0.1%
	2.5 - FAIR TO AVG	149	5.7%
	3 - AVERAGE	1840	70.0%
	3.5 - AVERAGE TO GOOD	43	1.6%
	3.5 - AVG TO GOOD	206	7.8%
	4 - GOOD	130	4.9%
	4.5 - GOOD TO VERY GOOD	38	1.4%
	5 - FAIR	2	0.1%
	5 - VERY GOOD	20	0.8%
	5.5 - VERY GOOD TO EXCELLENT	4	0.2%
	6 - EXCELLENT	1	0.0%
Overall		2628	100.0%
Excluded		0	
Total		2628	

#### **Ratio Statistics for CURRTOT / TASP**

		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
	.861	1.000	.000	
1 - LOW	.959	1.000	.000	
2 - AVERAGE	.979	1.276	.155	35.4%
2 - FAIR	.992	1.007	.058	10.0%
2.5 - FAIR TO AVERAGE	1.001	1.000	.001	0.1%
2.5 - FAIR TO AVG	.997	1.001	.036	5.4%
3 - AVERAGE	.996	1.006	.042	6.8%
3.5 - AVERAGE TO GOOD	1.000	1.009	.042	7.3%
3.5 - AVG TO GOOD	.997	1.006	.038	5.8%
4 - GOOD	.992	1.002	.036	6.0%
4.5 - GOOD TO VERY GOOD	.994	1.002	.028	3.9%
5 - FAIR	.948	1.000	.028	4.0%
5 - VERY GOOD	.987	1.004	.027	3.7%
5.5 - VERY GOOD TO	.959	1.000	.021	2.8%
EXCELLENT				
6 - EXCELLENT	.992	1.000	.000	
Overall	.995	1.010	.042	7.1%

Improvement Condition NOT AVAILABLE



# **Commercial Sale Ratio Stratification**

#### Sale Price

# **Case Processing Summary**

		Count	Percent
SPRec	LT \$25K	6	3.4%
	\$25K to \$50K	1	0.6%
	\$50K to \$100K	6	3.4%
	\$100K to \$150K	2	1.1%
	\$150K to \$200K	10	5.7%
	\$200K to \$300K	14	8.0%
	\$300K to \$500K	32	18.3%
	\$500K to \$750K	18	10.3%
	\$750K to \$1,000K	21	12.0%
	Over \$1,000K	65	37.1%
Overall		175	100.0%
Excluded		0	
Total		175	

# **Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.630	1.161	.178	27.7%
\$25K to \$50K	1.080	1.000	.000	
\$50K to \$100K	1.006	1.029	.238	58.4%
\$100K to \$150K	.841	.999	.185	26.1%
\$150K to \$200K	.980	.999	.140	16.7%
\$200K to \$300K	.944	1.002	.128	18.3%
\$300K to \$500K	1.000	.999	.125	16.5%
\$500K to \$750K	.991	.996	.140	18.9%
\$750K to \$1,000K	.977	1.005	.164	24.4%
Over \$1,000K	.965	.988	.111	15.3%
Overall	.979	1.027	.145	22.7%

#### **Subclass**

# **Case Processing Summary**

		Count	Percent
ABSTRIMP	1360.00	1	0.6%
	1420.00	1	0.6%
	1670.18	1	0.6%
	1670.64	1	0.6%
	1713.50	1	0.6%
	1721.00	1	0.6%
	1723.50	1	0.6%
	1774.78	1	0.6%
	1897.33	1	0.6%
	2212.00	33	18.9%
	2215.00	4	2.3%
	2215.42	1	0.6%
	2215.83	1	0.6%



	_		
	2216.50	1	0.6%
	2220.00	12	6.9%
	2221.00	1	0.6%
	2224.00	1	0.6%
	2225.00	2	1.1%
	2226.40	1	0.6%
	2226.67	1	0.6%
	2227.50	1	0.6%
	2229.00	1	0.6%
	2230.00	29	16.6%
	2231.67	1	0.6%
	2233.75	1	0.6%
	2235.00	30	17.1%
	2240.00	3	1.7%
	2245.00	39	22.3%
	3215.00	3	1.7%
Overall		175	100.0%
Excluded		0	
Total		175	

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1360.00	1.074	1.000	.000	
1420.00	1.000	1.000	.000	
1670.18	1.123	1.000	.000	
1670.64	.975	1.000	.000	
1713.50	.847	1.000	.000	
1721.00	1.060	1.000	.000	
1723.50	1.178	1.000	.000	
1774.78	.975	1.000	.000	
1897.33	.724	1.000	.000	
2212.00	.931	.986	.114	15.5%
2215.00	1.027	1.012	.147	17.4%
2215.42	1.008	1.000	.000	
2215.83	.895	1.000	.000	
2216.50	1.067	1.000	.000	
2220.00	1.018	.982	.114	17.3%
2221.00	.821	1.000	.000	
2224.00	.683	1.000	.000	
2225.00	1.051	1.000	.001	0.2%
2226.40	1.061	1.000	.000	
2226.67	1.175	1.000	.000	
2227.50	.788	1.000	.000	
2229.00	.600	1.000	.000	
2230.00	1.004	1.015	.139	19.8%
2231.67	1.683	1.000	.000	
2233.75	.855	1.000	.000	
2235.00	.912	.998	.123	16.3%
2240.00	1.007	1.006	.014	2.4%
2245.00	.980	1.114	.186	34.3%
3215.00	1.219	.979	.076	15.3%
Overall	.979	1.027	.145	22.7%



# Improvement Age

# **Case Processing Summary**

		Count	Percent
AgeRec	0	75	42.9%
	75 to 100	1	0.6%
	50 to 75	13	7.4%
	25 to 50	51	29.1%
	5 to 25	34	19.4%
	5 or Newer	1	0.6%
Overall		175	100.0%
Excluded		0	
Total		175	

## **Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.983	1.066	.157	27.2%
75 to 100	1.060	1.000	.000	
50 to 75	.950	1.049	.176	24.8%
25 to 50	1.000	.999	.114	16.9%
5 to 25	.895	.987	.142	18.1%
5 or Newer	.852	1.000	.000	
Overall	.979	1.027	.145	22.7%

## Improved Area

## **Case Processing Summary**

		Count	Percent
ImpSFRec	LE 500 sf	9	5.1%
	500 to 1,000 sf	19	10.9%
	1,000 to 1,500 sf	16	9.1%
	1,500 to 2,000 sf	15	8.6%
	2,000 to 3,000 sf	21	12.0%
	3,000 sf or Higher	95	54.3%
Overall		175	100.0%
Excluded		0	
Total		175	

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	1.052	1.636	.380	47.0%
500 to 1,000 sf	.976	1.047	.135	33.6%
1,000 to 1,500 sf	.969	1.042	.104	12.6%
1,500 to 2,000 sf	.996	.962	.150	23.1%
2,000 to 3,000 sf	.975	1.025	.139	19.6%
3,000 sf or Higher	.975	1.000	.129	17.4%
Overall	.979	1.027	.145	22.7%



# **Improvement Quality**

## **Case Processing Summary**

		Count	Percent
QUALITY	2 - AVERAGE	126	72.0%
	2.5 - AVERAGE TO GOOD	8	4.6%
	3 - AVERAGE	5	2.9%
	3 - GOOD	22	12.6%
	3.5 - GOOD TO VERY GOOD	2	1.1%
	5 - FAIR	7	4.0%
	5.5 - FAIR TO AVERAGE	1	0.6%
	6 - VERY GOOD	4	2.3%
Overall		175	100.0%
Excluded		0	
Total		175	

#### **Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
2 - AVERAGE	.989	.999	.138	21.5%
2.5 - AVERAGE TO GOOD	1.268	1.418	.314	34.1%
3 - AVERAGE	.975	.975	.080	12.2%
3 - GOOD	.915	1.001	.093	12.0%
3.5 - GOOD TO VERY GOOD	.855	.953	.186	26.2%
5 - FAIR	.906	1.027	.120	17.4%
5.5 - FAIR TO AVERAGE	1.178	1.000	.000	
6 - VERY GOOD	.914	.976	.165	27.6%
Overall	.979	1.027	.145	22.7%

# Improvement Condition NOT AVAILABLE

## **Vacant Land Sale Ratio Stratification**

#### **Sale Price**

# **Case Processing Summary**

		-	
		Count	Percent
SPRec	LT \$25K	8	1.1%
	\$25K to \$50K	14	1.9%
	\$50K to \$100K	136	18.4%
	\$100K to \$150K	78	10.6%
	\$150K to \$200K	63	8.5%
	\$200K to \$300K	198	26.8%
	\$300K to \$500K	139	18.8%
	\$500K to \$750K	69	9.3%
	\$750K to \$1,000K	15	2.0%
	Over \$1,000K	19	2.6%
Overall		739	100.0%
Excluded		0	
Total		739	



# **Ratio Statistics for CURRLND / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.031	1.048	.077	11.5%
\$25K to \$50K	.998	1.001	.066	10.2%
\$50K to \$100K	1.000	1.003	.073	12.2%
\$100K to \$150K	1.000	1.003	.086	21.5%
\$150K to \$200K	1.001	1.001	.049	8.5%
\$200K to \$300K	1.000	1.002	.060	9.7%
\$300K to \$500K	.994	1.000	.071	10.4%
\$500K to \$750K	.986	.999	.097	21.7%
\$750K to \$1,000K	.959	.995	.142	20.4%
Over \$1,000K	.968	.986	.067	13.0%
Overall	1.000	1.019	.072	13.6%

# **Land Subclass**

## **Case Processing Summary**

		Count	Percent
ABSTRLND	100.00	298	40.3%
	200.00	28	3.8%
	300.00	1	0.1%
	400.00	165	22.3%
	450.00	1	0.1%
	510.00	2	0.3%
	520.00	35	4.7%
	530.00	11	1.5%
	540.00	14	1.9%
	550.00	41	5.5%
	560.00	1	0.1%
	615.00	1	0.1%
	640.00	1	0.1%
	643.33	2	0.3%
	660.00	1	0.1%
	666.00	1	0.1%
	1112.00	123	16.6%
	1113.00	1	0.1%
	1115.00	5	0.7%
	1125.00	1	0.1%
	1135.00	2	0.3%
	1140.00	1	0.1%
	2135.00	3	0.4%
Overall		739	100.0%
Excluded		0	
Total		739	



Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	.996	1.020	.068	10.3%
200.00	1.015	1.022	.084	10.9%
300.00	.948	1.000	.000	
400.00	1.000	1.020	.060	11.3%
450.00	.990	1.000	.000	
510.00	.958	.973	.043	6.1%
520.00	.991	.994	.081	14.4%
530.00	.994	.995	.031	4.8%
540.00	1.008	1.094	.138	42.3%
550.00	1.000	1.005	.038	7.5%
560.00	.796	1.000	.000	
615.00	.978	1.000	.000	
640.00	1.062	1.000	.000	
643.33	1.014	1.000	.008	1.1%
660.00	1.143	1.000	.000	
666.00	.935	1.000	.000	
1112.00	1.000	1.024	.099	19.1%
1113.00	.877	1.000	.000	
1115.00	1.000	.996	.036	5.8%
1125.00	.766	1.000	.000	
1135.00	1.090	.961	.086	12.2%
1140.00	1.000	1.000	.000	
2135.00	1.109	1.099	.101	15.2%
Overall	1.000	1.019	.072	13.6%