

# 2018 GUNNISON COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2018

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

RE: Final Report for the 2018 Colorado Property Assessment Study

Dear Mr. Mauer:

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

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

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

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

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

Harry J. Fuller Project Manager

Harry J. Zulln

Wildrose Appraisal Inc. - Audit Division



# TABLE OF CONTENTS

Introduction	
Regional/Historical Sketch of Gunnison County	4
Ratio Analysis	6
Time Trending Verification	8
Sold/Unsold Analysis	
Agricultural Land Study	
Agricultural Land	
Agricultural Outbuildings	
Agricultural Land Under Improvements	
Sales Verification	
Economic Area Review and Evaluation	16
Natural Resources	17
Earth and Stone Products	
Producing Oil and Gas	17
Producing Coal Mines	
Producing Mines	
Vacant Land	
Possessory Interest Properties	20
Personal Property Audit	
Wildrose Auditor Staff	
Appendices	



# 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 subdivision and discounting procedures. Valuation methodology for vacant land, improved properties commercial residential and properties is examined. Procedures for producing mines, oil and gas leaseholds and lands producing, producing coal mines, producing earth and stone products, severed mineral interests and non-producing patented mining claims are also reviewed.

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

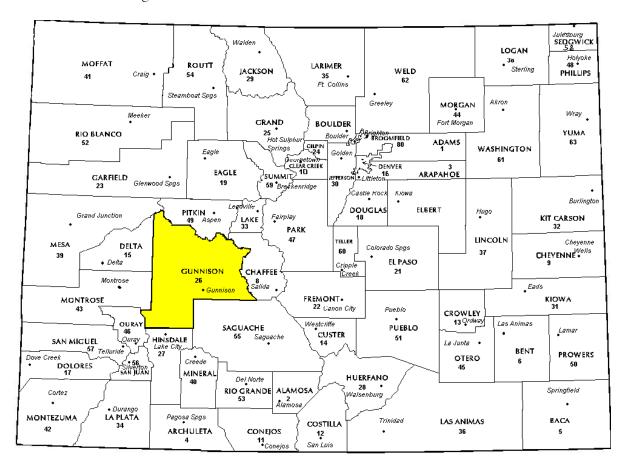
Wildrose Audit has completed the Property Assessment Study for 2018 and is pleased to report its findings for Gunnison County in the following report.



# REGIONAL/HISTORICAL SKETCH OF GUNNISON COUNTY

## **Regional Information**

Gunnison 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**

Gunnison County had an estimated population of approximately 16,408 people with 5.07 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a 7.07 percent change from April 1, 2010 to July 1, 2016.

The county was named for John W. Gunnison, a United States Army officer and captain in the Army Topographical Engineers, who surveyed for the transcontinental railroad in 1853. The county seat is the City of Gunnison.

Long before today's residents settled in, Ute Indians roamed the area's valleys and mountains. As early as 1810, fur traders came to the region in search of animal pelts. The 1860's brought placer miners to the rivers and streams. Sylvester Richardson, regarded as the founder of Gunnison, established a colony along the Gunnison River in 1874. Hopes of establishing a farming community were dashed as these early settlers learned the hardships imposed by a 70-day growing season. Ranching quickly emerged as the agricultural mainstay of

the region. Silver brought tens of thousands to the area during the 1870s and 80s and Gunnison developed into a smelting, railroad and supply town. After the turn of the century, coal and cattle ruled the area. Today, Western State College is a major employer, as are the county hospital, City of Gunnison and the recreation industry.

Crested Butte, a former coal mining town now called "the last great Colorado ski town," is a destination for skiing, mountain biking, and a variety of other outdoor activities.

The area has what many consider to be the country's best fly-fishing and big game hunting. Snow sports abound during winter, while warm summer months provide some of the most scenic hiking and camping in the Rockies. Bird watchers will enjoy sighting an American Bald Eagle or Red Tailed Hawk, while botanists will delight at the bloom of summer wildflowers throughout the local mountains.

(Wikipedia.org & Visitgunnison.com)



# RATIO ANALYSIS

## Methodology

All significant classes of properties were analyzed. Sales were collected for each property class over the appropriate sale period, which was typically defined as the 18-month period between January 1, 2015 and June 30, 2016. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2016 in 6-month increments. If there were still fewer than 30 sales, supplemental appraisals were performed and treated as proxy sales. Residential sales for all counties using this method totaled at least 30 per county. For commercial sales, the total number analyzed was allowed, in some cases, to fall below 30. There were no sale quantity issues for counties requiring vacant land analysis or condominium analysis. Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and pricerelated differential for each class of property. Counties were not passed or failed by these

latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the qualification code used by each county, which were typically coded as either "Q" or "C." The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were "lost" because of trimming. For the largest 11 counties, the residential ratio statistics were broken down by economic area as well.

#### Conclusions

For this final analysis report, the minimum acceptable statistical standards allowed by the State Board of Equalization are:

ALLOWABLE STANDARDS RATIO GRID			
Property Class	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 Gunnison County are:

Gunnison County Ratio Grid							
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis		
Commercial/Industrial	52	1.001	1.076	13.6	Compliant		
Condominium	361	0.998	1.017	8.8	Compliant		
Single Family	678	0.997	1.023	10.7	Compliant		
Vacant Land	469	1.000	1.051	16.5	Compliant		

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

Gunnison 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. determines if the sold/unsold variable is statistically and empirically significant. 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 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 Results					
Property Class	Results				
Commercial/Industrial	Compliant				
Condominium	Compliant				
Single Family	Compliant				
Vacant Land	Compliant				

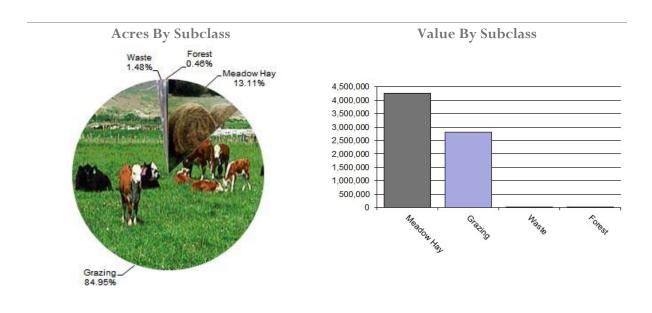
#### Conclusions

After applying the above described methodologies, it is concluded that Gunnison 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 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 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:



Gunnison County Agricultural Land Ratio Grid							
Number County County WRA Abstract Of Value Assessed Total Code Land Class Acres Per Acre Total Value Value Ratio							
4137	Meadow Hay	41,986	101.46	4,259,914	4,249,965	1.00	
4147	Grazing	272,021	10.36	2,817,031	2,817,031	1.00	
4177	Forest	1,463	2.22	11,494	11,494	1.00	
4167	Waste	4,741	2.22	10,534	10,534	1.00	
Total/Avg		320,211	22.17	7,098,974	7,089,024	1.00	

#### Recommendations

None

# **Agricultural Outbuildings**

# Methodology

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

#### **Conclusions**

Gunnison 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

Gunnison 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
- Personal Knowledge of Occupants at Assessment Date

Aerial Photography/Pictometry

Gunnison 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.:

- Field Inspections
- Aerial Photography/Pictometry
- Two acres typically assigned

Gunnison 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.

WRA reviewed the sales verification procedures in 2018 for Gunnison County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA 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 \$500, the contractor has examined and reported the ratio of qualified sales to total sales by class and performed the following analyses of unqualified sales:

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

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



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

Conclusions

Gunnison 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



# ECONOMIC AREA REVIEW AND EVALUATION

#### Methodology

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



# **Producing Coal Mines**

#### Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Section 6, Valuation of Producing Coal Leaseholds and Lands, the income approach is the primary method applied to find value for the valuation of coalmines. This methodology estimates annual economic royalty income based on previous year's production, then capitalizes that income to value using a Hoskold factor to estimate the present worth of the permitted acres. The operator provides production data and the life of the leases.

#### Conclusions

County has applied the correct formulas and state guidelines to coal mine valuation.

#### Recommendations

None

# **Producing Mines**

#### Methodology

Colorado Revised Statutes (CRS) Article 39, Section 6, and the Assessor's Reference Library (ARL), Volume 3 are the basis for valuing producing mine property. The gross value of the ore extracted during the preceding year is determined. All costs of treatment, reduction, transportation and sale are deducted to estimate gross proceeds. The costs of extraction are deducted from the gross proceeds to estimate net proceeds.

The current value for assessment is determined by determining if 25% of the gross proceeds or 100% of the net proceeds is greater, then applying that number as the valuation for assessment.

#### **Conclusions**

The County valued the producing mine production using acceptable appraisal procedures.

#### Recommendations



# VACANT LAND

#### **Subdivision Discounting**

Subdivisions were reviewed in 2018 in Gunnison County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14) and by applying the recommended methodology in ARL Vol 3, Chap 4. Subdivision Discounting in the intervening year can be accomplished by reducing the absorption period by one year. In instances where the number of sales within an approved plat was less than the absorption rate per year calculated

for the plat, the absorption period was left unchanged.

#### **Conclusions**

Gunnison 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)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 under lease, permit, concession, contract, or other agreement.

Gunnison 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

Gunnison 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

Gunnison 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, documentation procedures, classification, 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.

Gunnison 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.

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

- Accounts with obvious discrepancies
- New businesses filing for the first time
- Incomplete or inconsistent declarations
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts Best Information Available



Accounts protested with substantial disagreement

**Conclusions** 

Gunnison 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



# WILDROSE AUDITOR STAFF

Harry J. Fuller, Audit Project Manager

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Carl W. Ross, Agricultural/Natural Resource Analyst

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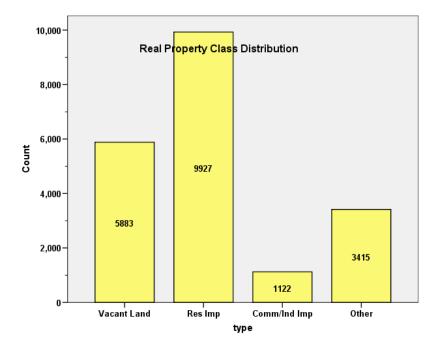
# APPENDICES



#### STATISTICAL COMPLIANCE REPORT FOR GUNNISON COUNTY 2018

#### I. OVERVIEW

Gunnison County is a mountain resort located in western Colorado. The county has a total of 20,347 real property parcels, according to data submitted by the county assessor's office in 2018. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100) accounted for 64.9% of all vacant land parcels.

For residential improved properties, single family properties accounted for 71.6% of all residential properties. Residential condominiums accounted for 24.6% of all residential improved properties. Based on the guidelines for the state audit statistical compliance analysis, we will analyze residential condominiums separately.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales accounted for 5.6% of all such properties in this county.

#### II. DATA FILES

The following sales analyses were based on the requirements of the 2018 Colorado Property Assessment Study. The data included all 5 property record files as specified by the Auditor.



#### III. RESIDENTIAL SALES RESULTS

There were 1,055 qualified residential sales. The sale periods varied by economic area as follows:

#### **Residential Improved**

- Econ Area 1 24 months (July 2014 June 2016)
- Econ Area 2 36 months (July 2013 June 2016)
- Econ Area 6 36 months (July 2013 June 2016)
- Econ Area 8 48 months (July 2012 June 2016)

#### **Residential Condos**

- All Econ Areas (excluding Mt Crested Butte) 36 months (July 2013 June 2016)
- Mt Crested Butte only\* 24 months (July 2014 June 2016)

The sales ratios were analyzed as follows:

#### Residential Non-Condominiums (678 Sales)

Median	0.997
Price Related Differential	1.023
Coefficient of Dispersion	10.7

#### Residential Condominiums (361 Sales)

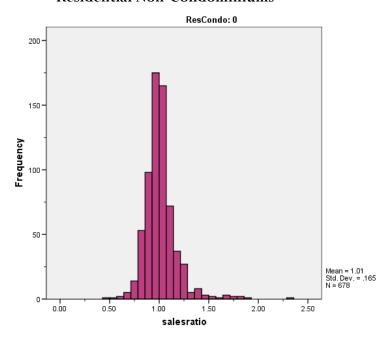
Median	0.998
Price Related Differential	1.017
Coefficient of Dispersion	8.8

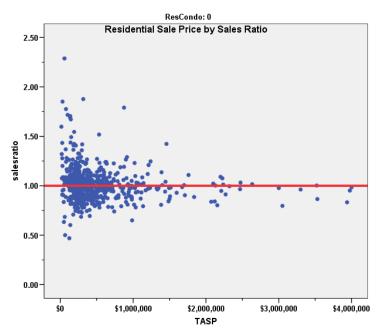
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. The following graphs describe further the sales ratio distribution for these properties:

<sup>\*</sup>Mt Crested Butte accounts are all associated with Tax Areas 500 and 501 in the Current Values file



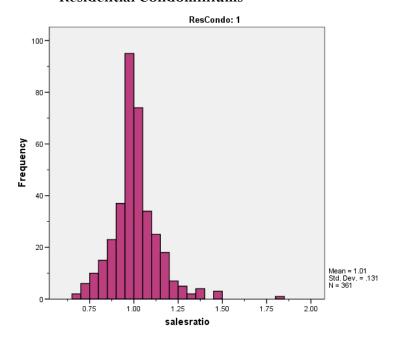
#### **Residential Non-Condominiums**

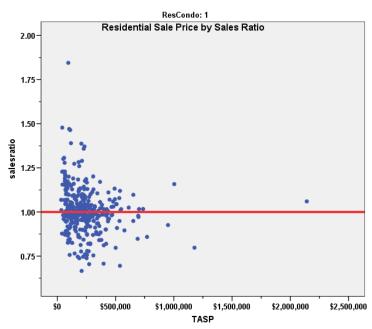






#### **Residential Condominiums**





The above graphs indicate that the distribution of the sale ratios was within state mandated limits. The analysis was stratified by residential non-condominiums and residential condominiums. No sales were trimmed.



#### **Residential Market Trend Analysis**

We next analyzed the residential dataset using the varying sale periods for any residual market trending. We stratified the sales by residential non-condominiums and residential condominiums (0 = residential non-condominiums), with the following results:

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

ResCondo	Model		Unstandard B	ized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
0	1	(Constant)	1.011	.011		91.435	.000
		SalePeriod	.000	.001	.008	.210	.834
1	1	(Constant)	1.005	.012		81.708	.000
		SalePeriod	.000	.001	.018	.339	.735

a. Dependent Variable: salesratio

#### 0 = Residential non-condominiums, 1 = residential condominiums

The above analysis indicated that the assessor has adequately addressed market trending in the valuation of residential properties (both condominium and non-condominium).

#### **Sold/Unsold Analysis**

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

Re	port
V/AI	SF

VILOI				
ResCondo	sold	N	Median	Mean
NON-CONDO		6,768	\$189	\$242
		678	\$208	\$254
CONDO		2,037	\$211	\$235
		358	\$220	\$236

We next used the Mann-Whitney test for both sets of properties to determine if sold and unsold properties were valued consistently. The following tests the hypothesis that the distributions were the same for sold and unsold properties, as follows:



#### RESIDENTIAL NON-CONDOMINIUMS

#### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is the same across categories of sold	Independent- Samples ne Mann- J. Whitney U Test	.000	Reject the null hypothesis.

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

#### RESIDENTIAL CONDOMINIUMS

#### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is t same across categories of sol	Independent- Samples he Mann- d. Whitney U Test	.456	Retain the null hypothesis.

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

While the null hypothesis was retained for condominium sold and unsold properties, the hypothesis that the sold and unsold distributions for residential non-condominiums were the same was rejected. While this non-parametric result was likely due to the high number of properties in both groups, we tested this set of properties using the change in actual value from taxable years 2016 to 2018 for residential non-condominium sold and unsold groups, as follows:

#### RESIDENTIAL NON-CONDOMINIUMS

#### Report

DIFF

ResCondo	sold	N	Median	Mean	
NON-CONDO	UNSOLD	6,474	1.10	1.12	
	SOLD	671	1.12	1.15	



#### **Hypothesis Test Summary**

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

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

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

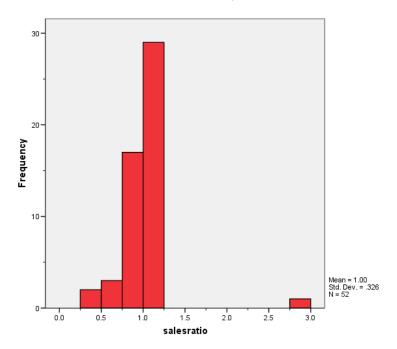
#### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

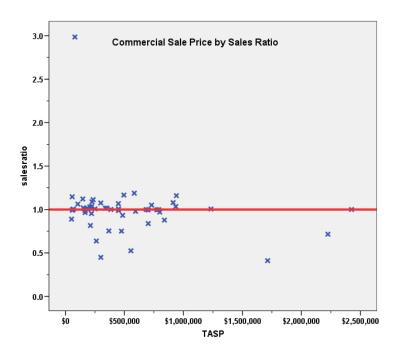
There were 52 qualified commercial/industrial sales. The sale period for this class was 60 months, ending June 30, 2016. The sales ratio analysis was analyzed as follows:

Median	1.001
Price Related Differential	1.076
Coefficient of Dispersion	13.6

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









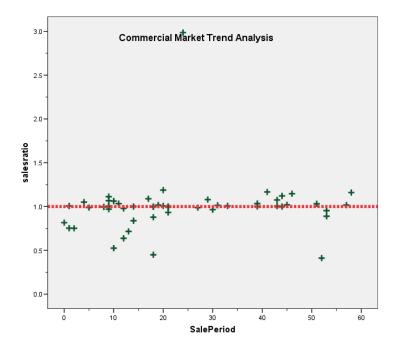
#### **Commercial Market Trend Analysis**

We next analyzed the 52 commercial/industrial sales to determine if there was any residual market trending across the 60 month sale period, with the following results:

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

		Unstandardized		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.954	.080		11.949	.000
	SalePeriod	.002	.003	.096	.680	.500

a. Dependent Variable: salesratio



The market trend results indicated no statistically significant trend. We concur that the assessor has adequately accounted for market trending in Gunnison County.

#### **Sold/Unsold Analysis**

We compared the 2018 median actual value per square foot between sold and unsold commercial properties to determine if the assessor was valuing each group consistently, as follows:

Report VALSF				
sold	N	Median	Mean	
UNSOLD	957	\$88	\$133	
SOLD	50	\$143	\$176	

Based on the above difference between sold and unsold commercial properties, we next compared the change in actual value between taxable years 2016 and 2018, as follows:



Report VALSF

sold	N	Median	Mean
UNSOLD	1,040	\$68	\$114
SOLD	52	\$127	\$162

# **Hypothesis Test Summary**

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is t same across categories of sol	Independent- Samples the Mann- d. Whitney U Test	.007	Retain the null hypothesis.

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

We also examined the median change in value stratified by subclass:

DIFF				
ABSTRIMP	sold	N	Median	Mean
2212	UNSOLD	74	1.09	1.15
	SOLD	6	1.15	1.15
2215	UNSOLD	14	1.10	1.10
	SOLD	4	1.23	1.24
2220	UNSOLD	36	.89	.97
	SOLD	5	1.14	1.10
2225	UNSOLD	9	1.23	1.27
	SOLD	1	1.22	1.22
2230	UNSOLD	106	1.20	1.37
	SOLD	9	1.20	1.29
2235	UNSOLD	48	1.36	2.68
	SOLD	5	1.11	1.27
2245	UNSOLD	561	.80	1.00
	SOLD	19	1.11	1.15

Based on the above results, we concluded that sold commercial properties and unsold properties were valued in a consistent manner.



#### V. VACANT LAND SALE RESULTS

There were 469 qualified vacant land sales. The sale period for this class varied by economic area, as follows:

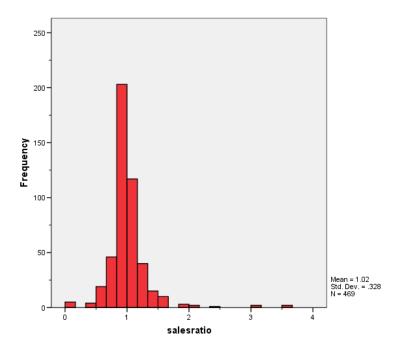
#### Vacant Land

- Econ Area 1 48 months (July 2012 June 2016)
- Econ Area 2 60 months (July 2011 June 2016)
- Econ Area 6 (excluding Crested Butte South) 36 months (July 2013 June 2016)
- Econ Area 6 (Crested Butte South only\*) 24 months (July 2014 July 2016)
  - \*Crested Butte South accounts are all associated with Subdivision Code 370 in the Land file
- Econ Area 8 60 months (July 2011 June 2016)

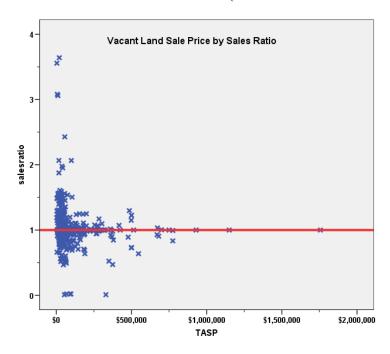
The overall sales ratio analysis was analyzed as follows:

Median	1.000
Price Related Differential	1.051
Coefficient of Dispersion	16.5

The above tables indicate that the Gunnison 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**

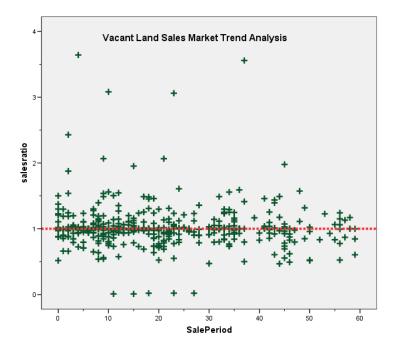
The 469 vacant land sales were analyzed, examining the sale ratios across the sale period with the following results:

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

		Unstandardized		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.046	.026		40.217	.000
	SalePeriod	001	.001	058	-1.249	.212

a. Dependent Variable: salesratio





The market trend results indicated a statistically significant trend, but the magnitude of that trend was not significant. We concur that the assessor has adequately addressed market trending for vacant land in Gunnison County.

### **Sold/Unsold Analysis**

We compared the median change in actual value between taxable years 2016 and 2018 for vacant land properties to determine if sold and unsold properties were valued consistently, with the following results:

Report

DIFF				
sold	N	Median	Mean	
UNSOLD	4,836	1.09	1.07	
SOLD	444	1.08	1.10	



### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DIFF is the sam across categories of sold.	Independent- Samples Mann- Whitney U Test	.170	Retain the null hypothesis.

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

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

#### VI. AGRICULTURAL IMPROVEMENTS ANALYSIS

The final statistical verification concerned the assigned actual values for agricultural residential improvements. We compared the actual value per square foot rate for this group and compared it to rates assigned to residential single family improvements in Gunnison County.

The following indicates that agricultural residential improvements were valued in a manner similar to the single family residential improvements in this county:

Report			
<b>IMPVALSF</b>			
ABSTRIMP	N	Median	Mean
1212	2,349	\$120.76	\$119.07
4277	116	\$101.51	\$111.51

### **Hypothesis Test Summary**

Null Hypothesis	Test	Sig.	Decision
The medians of IMPVALSF 1 same across categories of ABSTRIMP.	are thendependent- Samples Median Test	.046	Retain the null hypothesis.

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

#### VII. CONCLUSIONS

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



#### **STATISTICAL ABSTRACT**

#### Residential

						Ratio Statistic	s for CURRT	OT / TASP					
			nce Interval for ean		95% Coi	nfidence Interval fo	r Median			nce Interval for ed Mean			Coefficient of Variation
ResCondo	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
0	1.013	1.001	1.026	.997	.989	1.004	95.8%	.990	.978	1.003	1.023	.107	16.3%
1	1.009	.995	1.022	.998	.989	1.007	95.5%	.992	.978	1.007	1.017	.088	12.9%

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.

#### Commercial/Industrial

#### Ratio Statistics for CURRTOT / TASP

	95% Confiden Me	ce Interval for		95% Cor	nfidence Interval fo	r Median	95% Confidence Interval for Weighted Mean				Coefficient of Variation	
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
.999	.908	1.089	1.001	.991	1.016	96.4%	.928	.840	1.016	1.076	.136	32.7%

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**

	95% Confiden	ce Interval for an		95% Cor	5% Confidence Interval for Median		95% Confidence Interval for Weighted Mean				Coefficient of Variation	
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
1.020	.990	1.050	1.000	.999	1.000	95.8%	.970	.944	.996	1.051	.165	32.2%

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.



### **Residential Median Ratio Stratification**

#### **Sale Price**

### **Case Processing Summary**

		Count	Percent
SPRec	LT \$25K	3	0.3%
	\$25K to \$50K	19	1.8%
	\$50K to \$100K	84	8.1%
	\$100K to \$150K	92	8.9%
	\$150K to \$200K	110	10.6%
	\$200K to \$300K	278	26.8%
	\$300K to \$500K	216	20.8%
	\$500K to \$750K	122	11.7%
	\$750K to \$1,000K	44	4.2%
	Over \$1,000K	71	6.8%
Overall		1039	100.0%
Excluded		0	
Total		1039	

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

				Coefficient of
		Price Related	Coefficient of	Variation
Group	Median	Differential	Dispersion	Median Centered
LT \$25K	1.320	1.025	.132	19.8%
\$25K to \$50K	1.069	1.021	.191	26.1%
\$50K to \$100K	1.045	1.002	.134	22.8%
\$100K to \$150K	1.007	.998	.125	20.1%
\$150K to \$200K	.996	.999	.092	13.7%
\$200K to \$300K	.999	1.002	.096	12.9%
\$300K to \$500K	.989	1.002	.082	12.3%
\$500K to \$750K	1.004	1.000	.081	11.5%
\$750K to \$1,000K	.956	1.001	.117	18.6%
Over \$1,000K	.978	1.009	.083	11.9%
Overall	.998	1.021	.101	15.5%

#### **Subclass**

		Count	Percent
ABSTRIMP	1212	652	62.8%
	1215	21	2.0%
	1220	2	0.2%
	1230	361	34.7%
	4277	1	0.1%
	5250	1	0.1%
	9270	1	0.1%
Overall		1039	100.0%
Excluded		0	
Total		1039	



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

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212	.997	1.023	.106	16.5%
1215	1.000	1.041	.113	18.7%
1220	1.022	1.013	.042	6.0%
1230	.998	1.018	.088	13.2%
4277	.469	1.000	.000	
5250	1.158	1.000	.000	
9270	.756	1.000	.000	
Overall	.998	1.021	.101	15.5%

### Age

### **Case Processing Summary**

		Count	Percent
AgeRec	75 to 100	12	1.2%
	50 to 75	57	5.5%
	25 to 50	432	41.6%
	5 to 25	516	49.7%
	5 or Newer	22	2.1%
Overall	•	1039	100.0%
Excluded		0	
Total		1039	

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

				Coefficient of
		Price Related	Coefficient of	Variation
Group	Median	Differential	Dispersion	Median Centered
75 to 100	.986	1.092	.156	23.8%
50 to 75	.955	1.032	.164	27.6%
25 to 50	1.004	1.011	.102	15.1%
5 to 25	.994	1.020	.092	14.2%
5 or Newer	1.004	1.044	.071	9.9%
Overall	.998	1.021	.101	15.5%

### Improved Area

		Count	Percent
ImpSFRec	LE 500 sf	61	5.9%
	500 to 1,000 sf	235	22.6%
	1,000 to 1,500 sf	329	31.7%
	1,500 to 2,000 sf	182	17.5%
	2,000 to 3,000 sf	163	15.7%
	3,000 sf or Higher	69	6.6%
Overall		1039	100.0%
Excluded		0	
Total		1039	



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

		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
LE 500 sf	1.005	1.014	.094	12.7%
500 to 1,000 sf	.987	1.031	.118	18.9%
1,000 to 1,500 sf	.990	1.018	.096	14.1%
1,500 to 2,000 sf	1.000	1.036	.100	15.5%
2,000 to 3,000 sf	1.006	1.021	.084	12.0%
3,000 sf or Higher	1.007	1.047	.110	19.2%
Overall	.998	1.021	.101	15.5%

### **Improvement Quality**

### **Case Processing Summary**

		Count	Percent
CONDITION	Average	696	67.0%
	Below Average	36	3.5%
	Excellent	18	1.7%
	Good	187	18.0%
	Minimum	1	0.1%
	Very Good	101	9.7%
Overall		1039	100.0%
Excluded		0	
Total		1039	

### Ratio Statistics for CURRTOT / TASP

		D: D	0 (5 ) (	Coefficient of
		Price Related	Coefficient of	Variation
Group	Median	Differential	Dispersion	Median Centered
Average	1.000	1.016	.100	15.3%
Below Average	1.046	1.070	.185	29.0%
Excellent	1.014	1.060	.070	10.1%
Good	.987	1.021	.095	13.3%
Minimum	.685	1.000	.000	
Very Good	.985	1.007	.081	13.0%
Overall	.998	1.021	.101	15.5%

# **Improvement Condition**

		Count	Percent
ECONAREA	1	250	36.9%
	2	51	7.5%
	6	211	31.2%
	8	165	24.4%
Overall		677	100.0%
Excluded		362	
Total		1039	



# Ratio Statistics for CURRTOT / TASP Price Related | Coefficient of

		Price Related	Coefficient of
Group	Median	Differential	Dispersion
1	.998	1.019	.106
2	.982	1.010	.099
6	.993	1.016	.093
8	1.004	1.026	.129
Overall	.997	1.023	.107

#### **Economic Area**

### **Case Processing Summary**

		Count	Percent
ECONAREA	1	250	36.9%
	2	51	7.5%
	6	211	31.2%
	8	165	24.4%
Overall	_	677	100.0%
Excluded		362	
Total		1039	

# Ratio Statistics for CURRTOT / TASP

		Price Related	Coefficient of
Group	Median	Differential	Dispersion
1	.998	1.019	.106
2	.982	1.010	.099
6	.993	1.016	.093
8	1.004	1.026	.129
Overall	.997	1.023	.107

### **Commercial Median Ratio Stratification**

#### Sale Price

		Count	Percent
SPRec	\$50K to \$100K	6	11.5%
	\$100K to \$150K	2	3.8%
	\$150K to \$200K	6	11.5%
	\$200K to \$300K	10	19.2%
	\$300K to \$500K	10	19.2%
	\$500K to \$750K	7	13.5%
	\$750K to \$1,000K	7	13.5%
	Over \$1,000K	4	7.7%
Overall		52	100.0%
Excluded		0	
Total		52	



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

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
\$50K to \$100K	1.002	.936	.375	88.9%
\$100K to \$150K	1.092	.996	.027	3.8%
\$150K to \$200K	1.004	1.000	.015	2.1%
\$200K to \$300K	1.019	1.014	.145	23.9%
\$300K to \$500K	1.004	.998	.084	13.4%
\$500K to \$750K	.995	.993	.129	21.9%
\$750K to \$1,000K	.998	.996	.061	9.1%
Over \$1,000K	.858	.998	.256	34.4%
Overall	1.001	1.076	.136	32.6%

#### **Subclass**

### **Case Processing Summary**

		Count	Percent
ABSTRIMP	2212	6	11.5%
	2215	4	7.7%
	2220	5	9.6%
	2225	1	1.9%
	2230	9	17.3%
	2235	5	9.6%
	2240	2	3.8%
	2245	19	36.5%
	3212	1	1.9%
Overall		52	100.0%
Excluded		0	
Total		52	

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
2212	1.025	1.017	.057	6.8%
2215	.583	1.078	.438	63.1%
2220	.816	.946	.224	31.4%
2225	2.986	1.000	.000	
2230	1.000	.996	.041	9.2%
2235	1.007	1.005	.056	8.0%
2240	.999	.977	.161	22.8%
2245	1.003	1.011	.054	10.3%
3212	1.034	1.000	.000	
Overall	1.001	1.076	.136	32.6%



### Age

### **Case Processing Summary**

		Count	Percent
AgeRec	75 to 100	1	1.9%
	50 to 75	6	11.5%
	25 to 50	28	53.8%
	5 to 25	16	30.8%
	5 or Newer	1	1.9%
Overall	•	52	100.0%
Excluded		0	
Total		52	

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

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
75 to 100	1.160	1.000	.000	
50 to 75	1.000	.927	.173	28.4%
25 to 50	1.001	1.185	.188	42.7%
5 to 25	1.006	1.009	.029	4.7%
5 or Newer	.878	1.000	.000	
Overall	1.001	1.076	.136	32.6%

### **Improved Area**

### **Case Processing Summary**

Percent
11.5%
11.5%
7.7%
7.7%
9.6%
51.9%
100.0%

		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
LE 500 sf	1.009	.996	.055	8.4%
500 to 1,000 sf	.971	1.149	.149	25.7%
1,000 to 1,500 sf	.986	1.002	.088	12.8%
1,500 to 2,000 sf	.967	.981	.095	14.1%
2,000 to 3,000 sf	.998	.991	.056	12.4%
3,000 sf or Higher	1.014	1.128	.175	42.4%
Overall	1.001	1.076	.136	32.6%



# **Improvement Condition**

### **Case Processing Summary**

		Count	Percent
CONDITION	Average	40	76.9%
	Below Average	9	17.3%
	Excellent	1	1.9%
	Good	1	1.9%
	Minimum	1	1.9%
Overall		52	100.0%
Excluded		0	
Total		52	

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

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	1.002	1.053	.081	14.8%
Below Average	1.000	1.158	.347	73.5%
Excellent	.878	1.000	.000	
Good	1.089	1.000	.000	
Minimum	.525	1.000	.000	
Overall	1.001	1.076	.136	32.6%

### **Improvement Quality**

### **Case Processing Summary**

		Count	Percent
QUALITY	Average	22	42.3%
	Fair	23	44.2%
	Good	3	5.8%
	Low	4	7.7%
Overall	-	52	100.0%
Excluded		0	
Total		52	

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	1.000	1.029	.071	12.9%
Fair	1.016	1.071	.159	42.6%
Good	1.005	1.005	.036	5.4%
Low	.487	1.040	.325	58.2%
Overall	1.001	1.076	.136	32.6%



#### **Economic Area**

# **Case Processing Summary**

		Count	Percent
ECONAREA	1	18	54.5%
	2	13	39.4%
	6	1	3.0%
	8	1	3.0%
Overall		33	100.0%
Excluded		19	
Total		52	

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

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.998	1.242	.236
2	1.000	.986	.093
6	1.034	1.000	.000
8	.449	1.000	.000
Overall	1.000	1.090	.183

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

#### Sale Price

		Count	Percent
SPRec	LT \$25K	104	22.2%
	\$25K to \$50K	99	21.1%
	\$50K to \$100K	134	28.6%
	\$100K to \$150K	42	9.0%
	\$150K to \$200K	34	7.2%
	\$200K to \$300K	20	4.3%
	\$300K to \$500K	24	5.1%
	\$500K to \$750K	7	1.5%
	\$750K to \$1,000K	3	0.6%
	Over \$1,000K	2	0.4%
Overall		469	100.0%
Excluded		0	
Total		469	



# Ratio Statistics for CURRLND / TASP

				Coefficient of
		Price Related	Coefficient of	Variation
Group	Median	Differential	Dispersion	Median Centered
LT \$25K	1.014	1.043	.259	52.0%
\$25K to \$50K	1.000	1.000	.181	26.5%
\$50K to \$100K	.998	1.003	.150	28.9%
\$100K to \$150K	1.000	1.001	.087	14.2%
\$150K to \$200K	1.000	1.001	.079	13.2%
\$200K to \$300K	1.000	.999	.029	5.2%
\$300K to \$500K	1.000	.988	.181	29.4%
\$500K to \$750K	1.000	.992	.080	15.6%
\$750K to \$1,000K	.994	.996	.056	11.4%
Over \$1,000K	1.000	1.000	.000	0.0%
Overall	1.000	1.051	.165	32.9%

#### **Subclass**

		Count	Percent
ABSTRLND	100	292	62.3%
	200	10	2.1%
	300	5	1.1%
	400	2	0.4%
	510	1	0.2%
	520	6	1.3%
	530	7	1.5%
	540	19	4.1%
	550	12	2.6%
	1112	96	20.5%
	1115	1	0.2%
	1135	6	1.3%
	1140	1	0.2%
	1624	1	0.2%
	2112	1	0.2%
	2130	3	0.6%
	3112	1	0.2%
	4137	2	0.4%
	4147	3	0.6%
Overall		469	100.0%
Excluded		0	
Total		469	



### **Ratio Statistics for CURRLND / TASP**

		D: D. ( )	0 (": 1 (	Coefficient of
_		Price Related	Coefficient of	Variation
Group	Median	Differential	Dispersion	Median Centered
100	1.000	1.032	.160	31.5%
200	1.005	1.101	.280	52.1%
300	1.000	.997	.094	13.5%
400	.730	1.000	.000	0.0%
510	1.000	1.000	.000	
520	1.057	1.041	.135	18.7%
530	1.071	.952	.110	14.8%
540	.995	1.124	.232	52.1%
550	.956	.973	.108	14.1%
1112	.992	1.045	.114	27.3%
1115	1.011	1.000	.000	
1135	1.118	1.045	.309	43.2%
1140	.827	1.000	.000	
1624	.998	1.000	.000	
2112	.472	1.000	.000	
2130	1.142	.990	.156	23.6%
3112	.923	1.000	.000	
4137	.016	.960	.382	54.1%
4147	.021	1.251	.182	38.3%
Overall	1.000	1.051	.165	32.9%

#### **Economic Area**

### **Case Processing Summary**

		Count	Percent
ECONAREA	1	82	17.5%
	2	16	3.4%
	6	154	32.8%
	8	217	46.3%
Overall		469	100.0%
Excluded		0	
Total		469	

Group	Median	Price Related Differential	Coefficient of Dispersion
1	1.166	1.159	1.852
2	1.029	1.426	.669
6	1.019	1.174	1.496
8	.995	1.138	.583
Overall	1.001	1.104	1.171