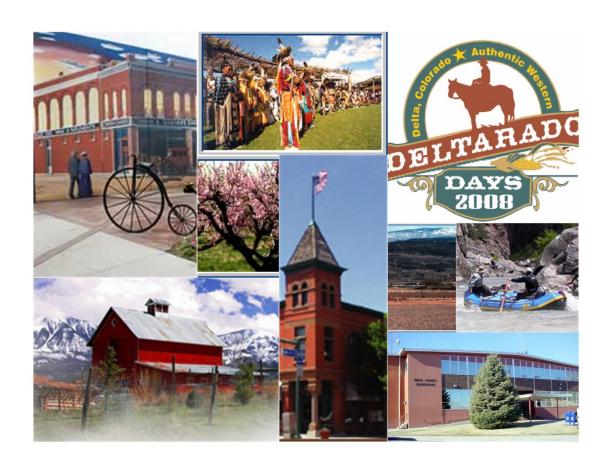


# 2019 DELTA COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2019

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

RE: Final Report for the 2019 Colorado Property Assessment Study

Dear Ms. Mullis:

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

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

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

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

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

Harry J. Fuller Project Manager

Harry J. Zulln

Wildrose Appraisal Inc. - 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 two-part analysis: A procedural analysis and a statistical analysis.

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

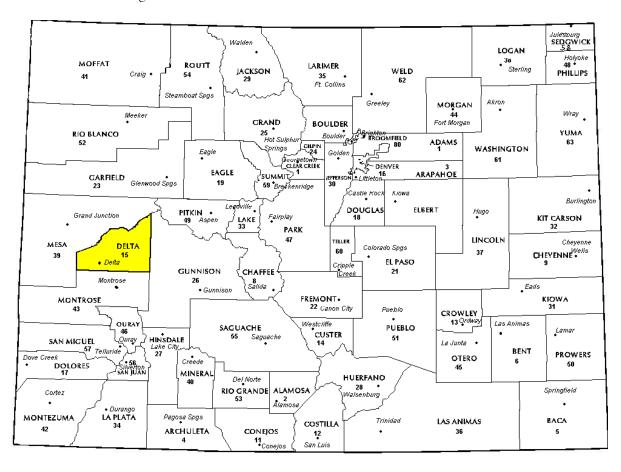
Wildrose Audit has completed the Property Assessment Study for 2019 and is pleased to report its findings for Delta County in the following report.



# REGIONAL/HISTORICAL SKETCH OF DELTA COUNTY

#### **Regional Information**

Delta 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**

Delta County had an estimated population of approximately 30,442 people with 26.7 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a -1.6 percent change from April 1, 2010 to July 1, 2016.

Delta County is located on Colorado's western slope at the base of Grand Mesa (one of the largest flat top mountains in the world) and was created by the Colorado legislature on February 11, 1883 out of portions of central Gunnison County. The county was named for the City of Delta, which was named for its location on the delta of the Uncompandere River. The county was primarily settled by a German populace, although many English, Irish and Mexican people brought their roots from the homeland to settle in Delta County.

The city of Delta is situated just west of the Black Canyon of the Gunnison. Seven buildings downtown act as canvasses for local artists displaying murals depicting the local economy, history and the natural surroundings. Another town symbol at the entrance to Delta is Ute Council Tree, an 85-foot cottonwood, once a gathering point for tribal discussions. Today the tree symbolizes the growing connections between Colorado Utes and the Western Slope's other residents.

The Delta County Museum, housed in an old firehouse, recounts the Western Slope's cultural heritage and natural history. The butterfly exhibit contains some of the only-known specimens from now extinct species. The Fort Uncompandere Living History Museum at the entrance to the 265-acre Confluence Park is staffed by authentically garbed interpreters who guide visitors through an old fur trading post. Just outside Delta is Dry Mesa Quarry, the site where archeologists first discovered Brachiosaurus and Ultrasaurus bones. This dig-in-process is open to the public. (Wikipedia.org, deltacolorado.org)



## RATIO ANALYSIS

#### Methodology

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

Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and price-related differential for each class of property. Counties were not passed or failed by these latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the qualification code used by each county, which were typically coded as either "Q" or "C." The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In

every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were "lost" because of trimming.

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

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

#### **Conclusions**

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

ALLOWABLE STANDARDS RATIO GRID				
Property Class	Unweighted Median Ratio	Coefficient of Dispersion		
Commercial/Industrial	Between .95-1.05	Less than 20.99		
Condominium	Between .95-1.05	Less than 15.99		
Single Family	Between .95-1.05	Less than 15.99		
Vacant Land	Between .95-1.05	Less than 20.99		



#### The results for Delta County are:

Delta County Ratio Grid						
Number of Unweighted Price Coefficient Qualified Median Related of Time Tren Property Class Sales Ratio Differential Dispersion Analys						
Commercial/Industrial	46	1.002	1.001	4.9	Compliant	
Condominium	N/A	N/A	N/A	N/A	N/A	
Single Family	702	0.993	1.007	8.9	Compliant	
Vacant Land	142	1.001	1.036	10.9	Compliant	

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

Delta 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	N/A			
Single Family	Compliant			
Vacant Land	Compliant			

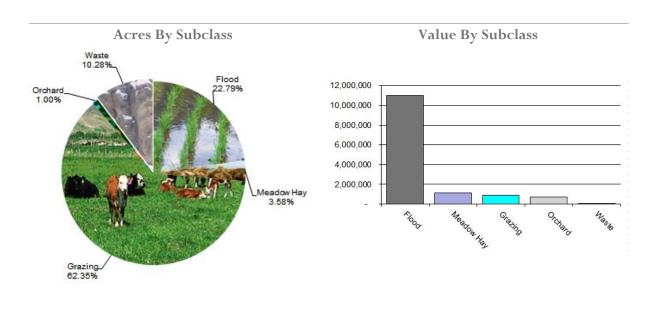
#### Conclusions

After applying the above described methodologies, it is concluded that Delta 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 lands. 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, any 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:



Delta County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio
4117	Flood	58,793	187.00	10,994,285	11,684,709	0.94
4137	Meadow Hay	9,245	120.84	1,117,136	1,117,136	1.00
4147	Grazing	160,858	5.68	913,427	913,427	1.00
4157	Orchard	2,571	284.61	731,725	731,725	1.00
4167	Waste	26,528	2.39	63,291	63,291	1.00
Total/Avg		257,995	53.57	13,819,864	14,510,288	0.95

#### 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**

Delta 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

Delta 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

Delta 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
- In-Person Interviews with Owners/Tenants
- Written Correspondence other than Questionnaire
- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

Delta 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 2019 for Delta County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 37 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 inadequate, fail to reflect typical properties, or have been disqualified for insufficient cause. In addition, the contractor has reviewed disqualified sales by assigned code. If there appears to be any inconsistency in the coding, the contractor has conducted further analysis 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 Delta County:

2112 Merchandising

2130 Special Purpose

2212 Merchandising

2230 Special Purpose

3115 Manufacturing/Processing

3215 Manufacturing/Processing

#### **Conclusions**

Delta 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

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



# VACANT LAND

#### **Subdivision Discounting**

Subdivisions were reviewed in 2019 in Delta County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14) and by applying the recommended methodology in ARL Vol 3, Chap 4. Subdivision Discounting in the intervening year can be accomplished by reducing the absorption period by one year.

#### Conclusions

Delta 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 C.R.S. 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 under lease, permit, concession, contract, or other agreement.

Delta County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural and commercial possessory interest properties. The county has also been queried as to their confidence that the possessory interest properties have been discovered and placed on the tax rolls.

#### Conclusions

Delta 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

Delta 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.

Delta 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.

Delta County submitted their personal property written audit plan and was current for the 2019 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Accounts with greater than 10% change
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use



- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts Best Information Available
- Accounts close to the \$7,700 actual value exemption status
- Lowest or highest quartile of value per square foot
- Accounts protested with substantial disagreement
- Sales

#### **Conclusions**

Delta 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

Suzanne Howard, Audit Administrative Manager

Steve Kane, Audit Statistician

Carl W. Ross, Agricultural/Natural Resource Analyst

J. Andrew Rodriguez, Field Analyst



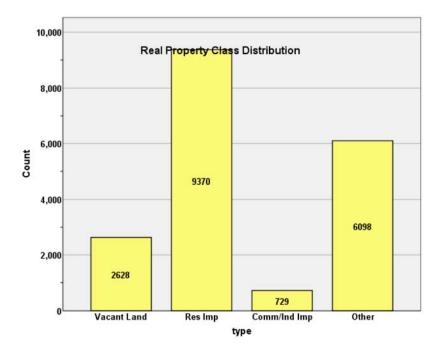
# STATISTICAL APPENDIX



#### STATISTICAL COMPLIANCE REPORT FOR DELTA COUNTY 2019

#### I. OVERVIEW

Delta County is located in western Colorado. The county has a total of 18,825 real property parcels, according to data submitted by the county assessor's office in 2019. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100 and 1112) accounted for 45.9% of all vacant land parcels, followed by mobile home lots (1135) at 20.4%.

For residential improved properties, single family properties accounted for 97.7% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 3.9% of all such properties in this county.

Based on the Audit questionnaire, the following geographic levels were used by the assessor to value residential, commercial and vacant land properties:



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

Codes

V=Valid Geographic Level – used for modeling

N = Not used as Geographic Level for modeling

Note: Commercial and vacant land models are modeled using economic areas due to the limited number of sales. The residential model is stratified down to the neighborhood levels.

#### II. DATA FILES

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

#### III. RESIDENTIAL SALES RESULTS

There were 702 qualified residential sales within the 18-month sale period ending June 30, 2018. The sales ratio analysis results were as follows:

Median	0.993
Price Related Differential	1.007
Coefficient of Dispersion	8.9

We next stratified the sale ratio analysis by economic area and neighborhood. The minimum count for the neighborhood analysis was 15 sales. The following are the results of this stratification analysis:

# **Economic Area Case Processing Summary**

		Count	Percent
ECONAREA	1.00	445	63.8%
	2.00	149	21.4%
	3.00	103	14.8%
Overall		697	100.0%
Excluded		5	
Total		702	

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

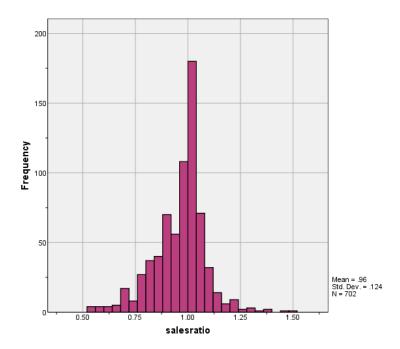
		Price Related	Coefficient of
Group	Median	Differential	Dispersion
1.00	.989	1.010	.086
2.00	1.005	.999	.061
3.00	.991	1.017	.134
Overall	.993	1.007	.088



NBHD w/gt 15 Sales

		Price Related	Coefficient of
Group	Median	Differential	Dispersion
10011	.980	1.006	.076
10012	.975	1.003	.063
10013	1.001	.999	.068
21001	1.007	1.004	.081
21002	1.000	1.001	.047
31001	1.002	1.002	.092
41001	.976	1.029	.138
60002	.976	1.004	.074
61001	.977	1.005	.098
73001	1.003	1.015	.100
80001	1.011	.998	.049
Overall	.989	1.007	.086

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







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

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

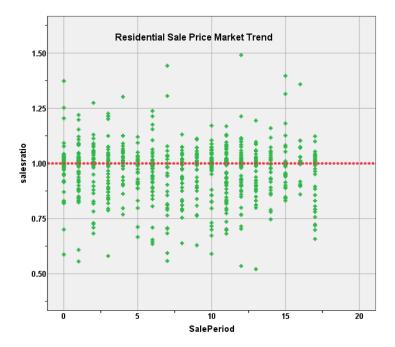
We next analyzed the residential dataset using the 18-month sale period for any residual market trending, with the following results:

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

	Unstandardized	Coefficients	Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	.971	.009		111.227	.000
SalePeriod	001	.001	032	840	.401
		(Constant) B	(Constant) .971 .009	Unstandardized Coefficients B Std. Error Beta  (Constant) .971 .009	Unstandardized Coefficients Coefficients B Std. Error Beta t  (Constant) .971 .009 1111.227

a. Dependent Variable: salesratio





With no significant statistical trend evident in the sales ratio data, the above analysis indicated that the assessor has adequately addressed market trending in the valuation of residential properties.

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

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

<b>Report</b> VALSF			
sold	N	Median	Mean
UNSOLD	8566	\$115	\$118
SOLD	690	\$131	\$135

Because there was a gap between sold and unsold residential properties using this metric, we next compared the median and mean change in actual value from taxable years 2018 to 2019 for sold and unsold residential properties, This analysis was done at the class level and at the economic area level, as follows:

Report DIFF			
sold	N	Median	Mean
UNSOLD	8592	1.23	1.24
SOLD	693	1.31	1.34



#### Report

DIFF

<b>ECONAREA</b>	sold	N	Median	Mean
1.00	UNSOLD	4242	1.25	1.26
	SOLD	439	1.33	1.36
2.00	UNSOLD	2081	1.19	1.24
	SOLD	146	1.31	1.34
3.00	UNSOLD	1940	1.17	1.19
	SOLD	103	1.18	1.23

We next stratified the analysis by neighborhoods with at least 10 sales, as follows:

DIFF				
NBHD	sold	N	Median	Mean
10011	UNSOLD	1721	1.29	1.28
	SOLD	175	1.35	1.37
10012	UNSOLD	349	1.27	1.26
	SOLD	36	1.36	1.43
10013	UNSOLD	336	1.17	1.17
	SOLD	27	1.19	1.23
11201	UNSOLD	173	1.21	1.26
	SOLD	10	1.13	1.13
11301	UNSOLD	188	1.01	1.07
	SOLD	12	.96	1.01
21001	UNSOLD	689	1.21	1.25
	SOLD	66	1.22	1.27
21002	UNSOLD	147	1.20	1.18
	SOLD	15	1.13	1.14
31001	UNSOLD	282	1.12	1.13
	SOLD	28	1.16	1.19
41001	UNSOLD	538	1.35	1.39
	SOLD	75	1.61	1.57
51001	UNSOLD	144	1.12	1.21
	SOLD	11	1.18	1.21
60002	UNSOLD	591	1.30	1.31
	SOLD	37	1.35	1.40
60004	UNSOLD	276	1.18	1.22
	SOLD	14	1.28	1.33
61001	UNSOLD	931	1.31	1.31
	SOLD	56	1.44	1.44
73001	UNSOLD	370	1.07	1.15
	SOLD	30	1.24	1.29
80001	UNSOLD	376	1.05	1.08
	SOLD	28	1.21	1.21
92001	UNSOLD	247	1.21	1.28
	SOLD	11	1.20	1.21
Total	SOLD	631	1.32	1.35
	Total	7989	1.24	1.26

The above results when stratified by neighborhood eliminated most of the difference seen between sold and unsold properties by class or economic area. Any remaining difference between sold and unsold residential properties is likely due to the superior overall quality of sold properties as compared to



unsold residential properties. We therefore concluded that sold and unsold properties were valued in a consistent manner when these attributes were considered.

The assessor was contacted to confirm this qualitative difference between sold and unsold residential properties.

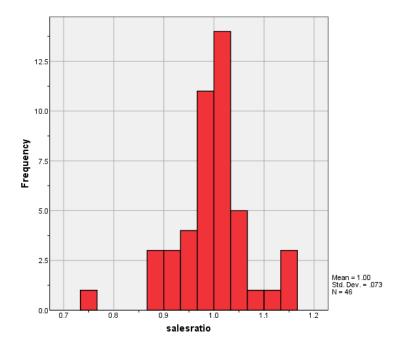
#### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 46 qualified commercial and industrial sales, spanning the 30 month period ending June 30, 2018.

The sales ratio analysis resulted in the following ratio statistics:

Median	1.002
Price Related Differential	1.001
Coefficient of Dispersion	4.90

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







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

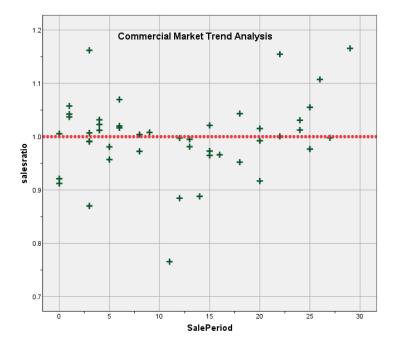
The commercial/industrial sales were next analyzed by subclass for any residual market trending, examining the sale ratios across the 30-month sale period with the following results:

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

		Unstandardized	Coefficients	Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.	
1	(Constant)	.981	.018		54.937	.000	
	SalePeriod	.002	.001	.189	1.274	.210	

a. Dependent Variable: salesratio





The market trend results indicated no significant residual sales ratio trend in the commercial/industrial data. We therefore concluded that the assessor adequately considered market trending in their valuation of commercial and industrial properties.

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

We compared the 2019 median actual value per square feet between sold and unsold commercial/industrial properties to determine if the assessor was valuing each group consistently, as follows:

Report

VALSF				
sold	N	Median	Mean	
UNSOLD	691	\$67	\$77	
SOLD	38	\$61	\$71	_



#### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is th same across categories of sold	Independent- Samples eMann- Whitney U Test	.478	Retain the null hypothesis.

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

We also stratified this comparison by commercial subclass, as follows:

Report VALSF				
ABSTRIMP	sold	N	Median	Mean
2212	UNSOLD	168	\$59	\$67
	SOLD	9	\$61	\$68
2215	UNSOLD	18	\$105	\$124
	SOLD	2	\$62	\$62
2220	UNSOLD	95	\$78	\$84
	SOLD	8	\$86	\$96
2230	UNSOLD	179	\$72	\$88
	SOLD	12	\$55	\$70
2235	UNSOLD	54	\$26	\$27
	SOLD	2	\$21	\$21
2245	UNSOLD	28	\$79	\$80
	SOLD	1	\$118	\$118
3215	UNSOLD	28	\$34	\$38
	SOLD	2	\$35	\$35

Based on the above results, we concluded that the Delta County assessor was valuing sold and unsold commercial properties consistently.

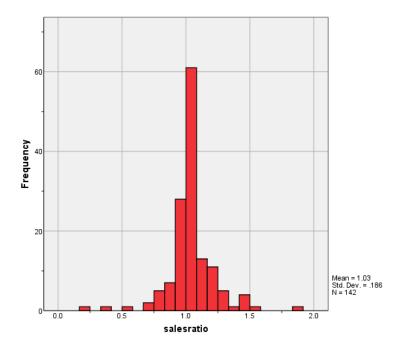
#### V. VACANT LAND SALE RESULTS

There were 142 qualified vacant land sales for the 18-month sale period ending June 30, 2018, with the following results:

Median	1.001
Price Related Differential	1.036
Coefficient of Dispersion	10.9

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









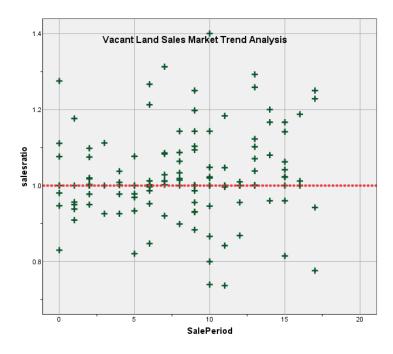
#### **Vacant Land Market Trend Analysis**

The vacant land sales were next analyzed, examining the sale ratios across the 18-month sale period with the following results:

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

		Unstandardized		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.001	.019		51.847	.000
	SalePeriod	.003	.002	.117	1.343	.182

a. Dependent Variable: salesratio



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

#### Sold/Unsold Analysis

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

Report				
DIFF				
sold	N	Median	Mean	
UNSOLD	2467	1.03	1.14	
SOLD	141	1.07	1.16	



#### **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	.579	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

We next stratified the comparison by neighborhood with at least 5 sales, as follows:

Report DIFF				
NBHD	sold	N	Median	Mean
10011	UNSOLD	193	1.43	1.32
	SOLD	5	1.11	1.11
10013	UNSOLD	134	1.00	1.02
	SOLD	5	.89	1.03
21001	UNSOLD	219	1.03	1.19
	SOLD	5	1.03	1.06
21002	UNSOLD	161	1.58	1.64
	SOLD	17	1.58	1.49
41001	UNSOLD	85	.92	.93
	SOLD	5	.92	.94
60002	UNSOLD	110	1.10	1.22
	SOLD	12	1.41	1.33
60004	UNSOLD	61	1.06	1.23
	SOLD	11	1.28	1.38
61001	UNSOLD	164	1.00	1.07
	SOLD	14	1.00	1.04
73001	UNSOLD	81	1.00	1.05
	SOLD	11	1.00	1.15
80001	UNSOLD	72	1.05	1.14
	SOLD	8	1.22	1.22
92001	UNSOLD	179	.95	.96
	SOLD	15	.58	.70

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

#### V. CONCLUSION

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



# STATISTICAL ABSTRACT Residential

#### Ratio Statistics for CURRTOT / TASP

	95% Confidence Interval for 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
.964	.955	.974	.993	.988	1.000	95.5%	.958	.948	.968	1.007	.089	12.8%

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	ce Interval for an		95% Cor	nfidence Interval fo	r Median		95% Confiden Weighte	ice Interval for ed 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	.977	1.020	1.002	.981	1.017	97.4%	.998	.974	1.021	1.001	.049	7.3%

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

#### **Vacant Land**

#### Ratio Statistics for CURRLND / TASP

	95% Confiden	ce Interval for		95% Cor	nfidence Interval fo	r Median		95% Confider Weighte	nce Interval for ed 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
1.032	1.001	1.063	1.001	1.000	1.018	96.4%	.996	.966	1.026	1.036	.109	18.1%

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.



#### **Residential Median Ratio Stratification**

#### **Sale Price**

#### **Case Processing Summary**

		Count	Percent
SPRec	\$25K to \$50K	3	0.4%
	\$50K to \$100K	32	4.6%
	\$100K to \$150K	96	13.7%
	\$150K to \$200K	167	23.8%
	\$200K to \$300K	256	36.5%
	\$300K to \$500K	137	19.5%
	\$500K to \$750K	10	1.4%
	\$750K to \$1,000K	1	0.1%
Overall		702	100.0%
Excluded		0	
Total		702	

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

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
\$25K to \$50K	.991	.998	.012	2.1%
\$50K to \$100K	1.039	1.002	.072	10.7%
\$100K to \$150K	.993	1.001	.090	12.4%
\$150K to \$200K	1.002	1.000	.087	12.4%
\$200K to \$300K	.993	1.001	.088	12.9%
\$300K to \$500K	.986	.999	.094	13.8%
\$500K to \$750K	.997	1.002	.086	14.3%
\$750K to \$1,000K	1.019	1.000	.000	
Overall	.993	1.007	.089	12.8%

#### **Subclass**

		Count	Percent
ABSTRIMP	0	6	0.9%
	1212	689	98.1%
	1215	1	0.1%
	1230	5	0.7%
	4277	1	0.1%
Overall		702	100.0%
Excluded		0	
Total		702	



		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
0	.942	1.000	.113	16.0%
1212	.993	1.007	.088	12.7%
1215	1.021	1.000	.000	
1230	.991	.975	.106	17.4%
4277	.831	1.000	.000	
Overall	.993	1.007	.089	12.8%

#### Age

#### **Case Processing Summary**

		Count	Percent
AgeRec	0	11	1.6%
	Over 100	82	11.7%
	75 to 100	58	8.3%
	50 to 75	107	15.2%
	25 to 50	199	28.3%
	5 to 25	221	31.5%
	5 or Newer	24	3.4%
Overall		702	100.0%
Excluded		0	
Total		702	

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

		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
0	.963	1.004	.114	16.2%
Over 100	.929	1.040	.124	16.0%
75 to 100	.944	1.030	.100	13.4%
50 to 75	.964	1.014	.109	14.5%
25 to 50	.999	1.012	.086	12.0%
5 to 25	1.004	1.005	.061	9.7%
5 or Newer	.998	.990	.080	13.1%
Overall	.993	1.007	.089	12.8%

#### Improved Area

		Count	Percent
ImpSFRec	0	11	1.6%
	LE 500 sf	3	0.4%
	500 to 1,000 sf	75	10.7%
	1,000 to 1,500 sf	238	33.9%
	1,500 to 2,000 sf	196	27.9%
	2,000 to 3,000 sf	149	21.2%
	3,000 sf or Higher	30	4.3%
Overall		702	100.0%
Excluded		0	
Total		702	



				Coefficient of
		Price Related	Coefficient of	Variation
Group	Median	Differential	Dispersion	Median Centered
0	.963	1.004	.114	16.2%
LE 500 sf	.948	.977	.062	9.5%
500 to 1,000 sf	.930	1.023	.117	14.9%
1,000 to 1,500 sf	.981	1.021	.093	13.1%
1,500 to 2,000 sf	1.003	1.012	.081	11.6%
2,000 to 3,000 sf	1.003	1.012	.081	12.4%
3,000 sf or Higher	1.008	1.002	.042	6.8%
Overall	.993	1.007	.089	12.8%

#### **Improvement Quality**

#### **Case Processing Summary**

		Count	Percent
QUALITY	2	42	6.1%
	3	622	90.0%
	4	27	3.9%
Overall		691	100.0%
Excluded		11	
Total		702	

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

				Coefficient of
		Price Related	Coefficient of	Variation
Group	Median	Differential	Dispersion	Median Centered
2	1.002	1.020	.123	16.0%
3	.992	1.007	.087	12.7%
4	1.013	1.005	.041	6.5%
Overall	.993	1.007	.088	12.7%

#### **Improvement Condition**

	_	-	
		Count	Percent
CONDITION	6	1	3.6%
	7	3	10.7%
	8	2	7.1%
	9	6	21.4%
	10	6	21.4%
	11	10	35.7%
Overall		28	100.0%
Excluded		674	
Total		702	



Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
6	.910	1.000	.000	
7	1.042	.970	.085	14.3%
8	1.270	.928	.174	24.7%
9	.995	1.018	.063	9.1%
10	1.006	1.006	.085	13.9%
11	1.042	.999	.072	13.0%
Overall	1.025	.995	.091	14.4%

# **Commercial Median Ratio Stratification**

#### **Sale Price**

#### **Case Processing Summary**

		Count	Percent
SPRec	LT \$25K	1	2.2%
	\$25K to \$50K	1	2.2%
	\$50K to \$100K	12	26.1%
	\$100K to \$150K	7	15.2%
	\$150K to \$200K	14	30.4%
	\$200K to \$300K	4	8.7%
	\$300K to \$500K	2	4.3%
	\$500K to \$750K	4	8.7%
	Over \$1,000K	1	2.2%
Overall		46	100.0%
Excluded		0	
Total		46	

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

		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
LT \$25K	.952	1.000	.000	
\$25K to \$50K	.972	1.000	.000	
\$50K to \$100K	1.002	.998	.064	8.6%
\$100K to \$150K	1.021	1.003	.038	6.0%
\$150K to \$200K	1.002	.999	.049	8.6%
\$200K to \$300K	1.004	1.000	.037	5.3%
\$300K to \$500K	.977	1.003	.021	2.9%
\$500K to \$750K	.993	.998	.049	7.2%
Over \$1,000K	1.031	1.000	.000	
Overall	1.002	1.001	.049	7.3%



#### Subclass

#### **Case Processing Summary**

		Count	Percent
ABSTRIMP	0	8	17.4%
	1714	1	2.2%
	2212	9	19.6%
	2215	2	4.3%
	2220	8	17.4%
	2230	12	26.1%
	2235	2	4.3%
	2245	1	2.2%
	3215	2	4.3%
	9279	1	2.2%
Overall		46	100.0%
Excluded		0	
Total		46	

#### Ratio Statistics for CURRTOT / TASP

		Dries Deleted	Coefficient of	Coefficient of
		Price Related	Coefficient of	Variation
Group	Median	Differential	Dispersion	Median Centered
0	.986	.987	.041	5.7%
1714	.888	1.000	.000	
2212	1.012	1.011	.036	6.0%
2215	1.031	1.000	.025	3.6%
2220	1.002	1.000	.025	3.2%
2230	.996	1.009	.067	10.2%
2235	1.060	1.011	.090	12.7%
2245	1.043	1.000	.000	
3215	.994	.985	.037	5.2%
9279	.912	1.000	.000	
Overall	1.002	1.001	.049	7.3%

#### Age

		Count	Percent
AgeRec	0	10	21.7%
	Over 100	8	17.4%
	75 to 100	3	6.5%
	50 to 75	12	26.1%
	25 to 50	7	15.2%
	5 to 25	6	13.0%
Overall	-	46	100.0%
Excluded		0	
Total		46	



		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
0	.986	.973	.041	5.3%
Over 100	1.003	1.040	.054	8.2%
75 to 100	.912	1.034	.125	18.9%
50 to 75	1.009	1.009	.048	7.2%
25 to 50	1.005	.988	.029	5.2%
5 to 25	1.004	.994	.030	3.7%
Overall	1.002	1.001	.049	7.3%

#### Improved Area

#### **Case Processing Summary**

		Count	Percent
ImpSFRec	0	8	17.4%
	LE 500 sf	1	2.2%
	500 to 1,000 sf	3	6.5%
	1,000 to 1,500 sf	4	8.7%
	1,500 to 2,000 sf	3	6.5%
	2,000 to 3,000 sf	11	23.9%
	3,000 sf or Higher	16	34.8%
Overall		46	100.0%
Excluded		0	
Total		46	

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

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.986	.987	.041	5.7%
LE 500 sf	.977	1.000	.000	
500 to 1,000 sf	1.032	.997	.017	2.9%
1,000 to 1,500 sf	.990	.989	.041	6.5%
1,500 to 2,000 sf	1.020	1.018	.034	5.1%
2,000 to 3,000 sf	.998	1.014	.069	10.5%
3,000 sf or Higher	1.011	1.013	.047	6.8%
Overall	1.002	1.001	.049	7.3%

#### **Improvement Quality**

		Count	Percent
QUALITY	2	4	10.5%
	3	34	89.5%
Overall		38	100.0%
Excluded		8	
Total		46	



				Coefficient of
		Price Related	Coefficient of	Variation
Group	Median	Differential	Dispersion	Median Centered
2	1.105	.991	.061	7.6%
3	1.002	1.001	.045	6.9%
Overall	1.006	1.006	.050	7.5%

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

#### Sale Price

#### **Case Processing Summary**

		Count	Percent
SPRec	LT \$25K	28	19.7%
	\$25K to \$50K	53	37.3%
	\$50K to \$100K	46	32.4%
	\$100K to \$150K	10	7.0%
	\$150K to \$200K	3	2.1%
	\$200K to \$300K	2	1.4%
Overall		142	100.0%
Excluded		0	
Total		142	

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

		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
LT \$25K	1.048	1.005	.170	26.0%
\$25K to \$50K	1.001	1.006	.098	18.8%
\$50K to \$100K	1.000	1.002	.078	12.6%
\$100K to \$150K	.936	1.004	.093	12.3%
\$150K to \$200K	1.029	1.000	.012	2.1%
\$200K to \$300K	.807	1.000	.009	1.3%
Overall	1.001	1.036	.109	18.9%



#### Subclass

# **Case Processing Summary**

		Count	Percent
ABSTRLND	100	76	53.5%
	200	4	2.8%
	400	2	1.4%
	510	2	1.4%
	520	6	4.2%
	530	4	2.8%
	540	4	2.8%
	550	6	4.2%
	1112	32	22.5%
	1135	3	2.1%
	1614	1	0.7%
	1621	1	0.7%
	2135	1	0.7%
Overall		142	100.0%
Excluded		0	
Total		142	

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

		Price Related	Coefficient of	Coefficient of Variation
Group	Median	Differential	Dispersion	Median Centered
100	1.003	1.029	.105	19.4%
200	.934	1.159	.304	49.4%
400	1.099	.978	.090	12.7%
510	1.333	1.052	.172	24.4%
520	.988	1.011	.141	18.5%
530	.972	1.018	.064	8.3%
540	.900	1.047	.123	14.3%
550	1.015	1.088	.082	14.2%
1112	1.000	1.028	.094	14.5%
1135	1.000	.993	.015	3.1%
1614	1.250	1.000	.000	
1621	1.141	1.000	.000	
2135	1.000	1.000	.000	
Overall	1.001	1.036	.109	18.9%