



2017

# LARIMER COUNTY PROPERTY ASSESSMENT STUDY

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



September 15, 2017

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

**RE: Final Report for the 2017 Colorado Property Assessment Study**

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2017 Colorado Property Assessment Study.

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

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

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

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

A handwritten signature in cursive script, reading "Harry J. Fuller".

Harry J. Fuller  
Project Manager  
Wildrose Appraisal Inc. – Audit Division

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## INTRODUCTION

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### Colorado

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

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

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

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

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

The property assessment audit conducts a two-part analysis: A procedural analysis and a statistical analysis.

The procedural analysis includes all classes of property and specifically looks at how the assessor develops economic areas, confirms and qualifies sales, and develops time adjustments. The audit also examines the procedures for adequately discovering, classifying and valuing agricultural outbuildings, discovering subdivision build-out and subdivision discounting procedures. Valuation methodology for vacant land, improved residential properties and commercial properties is examined. Procedures for producing mines, oil and gas leaseholds and lands producing, producing coal mines, producing earth and stone products, severed mineral interests and non-producing patented mining claims are also reviewed.

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

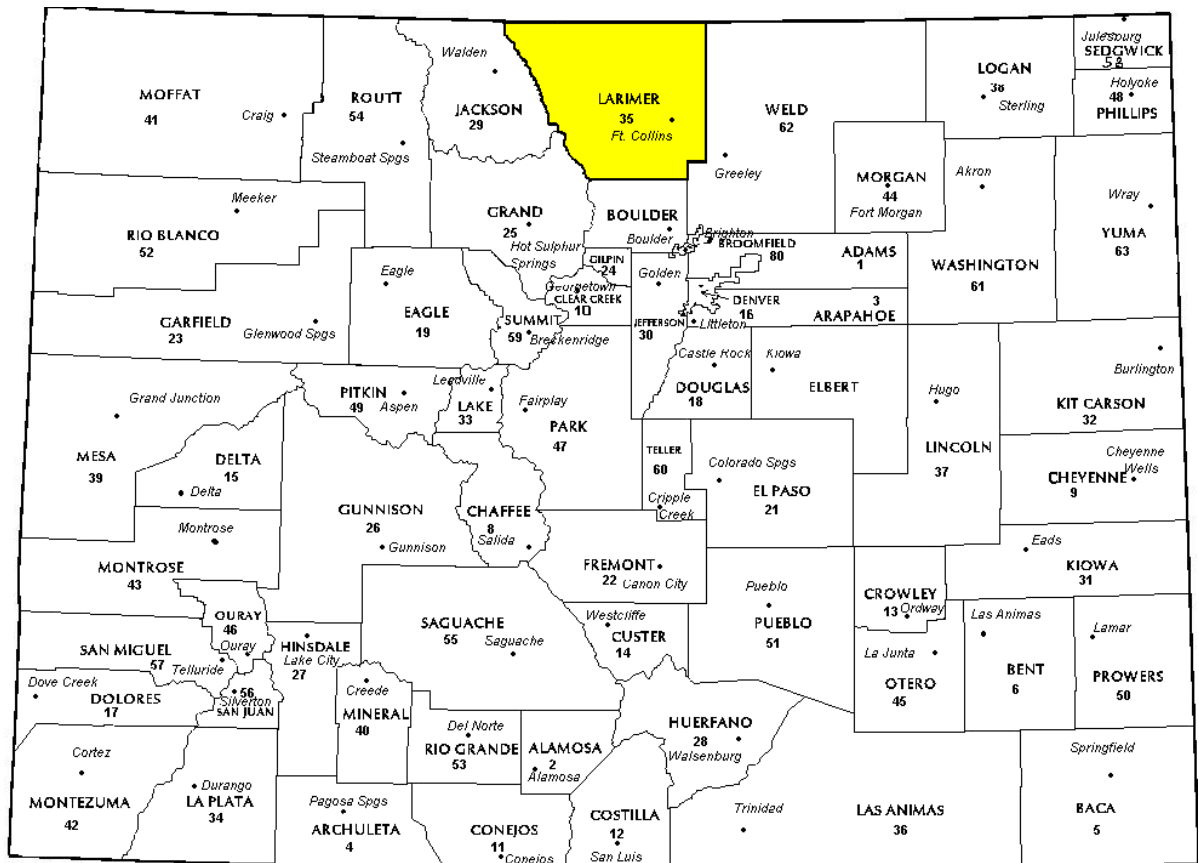
Wildrose Audit has completed the Property Assessment Study for 2017 and is pleased to report its findings for Larimer County in the following report.

# REGIONAL/HISTORICAL SKETCH OF LARIMER COUNTY

## Regional Information

Larimer County is located in the Front Range region of Colorado. The Colorado Front Range is a colloquial geographic term for the populated areas of the State that are just east of the foothills of the Front Range. It includes

Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld counties.





## Historical Information

Larimer County had an estimated population of approximately 339,993 people with 131.0 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a 13.5 percent change from April 1, 2010 to July 1, 2016.

Larimer County was created in 1861 as one of the seventeen original counties in the Colorado Territory; however, its western boundary was disputed. Controversy existed as to whether Larimer County ended at the Medicine Bow Range or at the Continental Divide thirty miles further west. An 1886 Colorado Supreme Court decision set the boundary at the Continental Divide, although the land between the Medicine Bow Range and the divide was made part of Jackson County in 1909.

Unlike that of much of Colorado, which was founded on the mining of gold and silver, the settlement of Larimer County was based almost entirely on agriculture, an industry that few thought possible in the region during the initial days of the Colorado Gold Rush. The mining boom almost entirely passed the county by. It would take the introduction of irrigation to the region in the 1860s to bring the first widespread settlement to the area.

In 1862, the United States Army established an outpost near Laporte that was designated as Camp Collins. A devastating flood in June 1864 wiped out the outpost, forcing the Army to seek a better location. At the urging of Joseph Mason, who had settled along the Poudre in 1860, the Army relocated its post downstream adjacent to Mason's land along the Overland stage route. The site of the new post became the nucleus of the town of Fort Collins, incorporated in 1873 after the withdrawal of the Army. By that time, Mason and others had convinced the legislature of the Colorado Territorial Legislature to designate the new town as the county seat. In 1870, the legislature designated Fort Collins as the location of the state agricultural college (later Colorado State University).

Cities and towns located in Larimer County, Colorado include Berthoud, Estes Park, Fort Collins, Loveland, Timnath, Wellington, Windsor, Bellvue, Buckeye, Campion, Cherokee Park, Drake, Glendevey, Glen Haven, LaPorte, Livermore, Kinikinik, Manhattan, Masonville, Pinewood Springs, Pingree Park, Poudre Park, Feather Lakes, Rustic, Teds Place, Virginia Dale and Waverly. (*Wikipedia.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, 2015 through June 20, 2016. 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. 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	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 Larimer County are:

Larimer County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	411	0.983	1.028	7.1	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	30,328	0.998	1.010	7.5	Compliant
Vacant Land	1,637	0.988	1.081	19.1	Compliant

Ratio Statistics for CURRTOT / TASP			
Group	Median	Price Related Differential	Coefficient of Dispersion
EA1	.998	1.008	.068
EA2	1.000	1.010	.074
EA3	.994	1.006	.102
EA4	.980	1.045	.156
Overall	.998	1.010	.075

After applying the above described methodologies, it is concluded from the sales ratios that Larimer County is in compliance

with SBOE, DPT, and Colorado State Statute valuation guidelines.

### Recommendations

None





# TIME TRENDING VERIFICATION

## Methodology

While we recommend that counties use the inverted ratio regression analysis method to account for market (time) trending, some counties have used other IAAO-approved methods, such as the weighted monthly median approach. We are not auditing the methods used, but rather the results of the methods used. Given this range of methodologies used to account for market trending, we concluded that the best validation method was to examine the sale ratios for each class across the appropriate sale period. To be specific, if a county has considered and adjusted correctly for market trending, then the sale ratios should remain stable (i.e. flat) across the sale period. If a residual market trend is detected, then the county may or may not have addressed market

trending adequately, and a further examination is warranted. This validation method also considers the number of sales and the length of the sale period. Counties with few sales across the sale period were carefully examined to determine if the statistical results were valid.

## Conclusions

After verification and analysis, it has been determined that Larimer County has complied with the statutory requirements to analyze the effects of time on value in their county. Larimer County has also satisfactorily applied the results of their time trending analysis to arrive at the time adjusted sales price (TASP).

## Recommendations

None

## SOLD / UNSOLD ANALYSIS

### Methodology

Larimer County was tested for the equal treatment of sold and unsold properties to ensure that “sales chasing” has not occurred. The auditors employed a multi-step process to determine if sold and unsold properties were valued in a consistent manner.

We test the hypothesis that the assessor has valued unsold properties consistent with what is observed with the sold properties based on several units of comparison and tests. The units of comparison include the actual value per square foot and the change in value from the previous base year period to the current base year. The first test compares the actual value per square foot between sold and unsold properties by class. The median and mean value per square foot is compared and tested for any significant difference. This is tested using non-parametric methods, such as the Mann-Whitney test for differences in the distributions or medians between sold and unsold groups. It is also examined graphically and from an appraisal perspective. Data can be stratified based on location and subclass. The second test compares the difference in the median change in value from the previous base year to the current base year between sold and unsold properties by class. The same combination of non-parametric and appraisal testing is used as with the first test. A third test employing a valuation model testing a sold/unsold binary variable while controlling for property attributes such as location, size, age and other attributes. The model determines if the sold/unsold variable is statistically and empirically significant. If all three tests indicate a significant difference between sold and unsold properties for a given class, the Auditor may meet with the county to determine if sale chasing is actually occurring,

or if there are other explanations for the observed difference.

If the unsold properties have a higher median value per square foot than the sold properties, or if the median change in value is greater for the unsold properties than the sold properties, the analysis is stopped and the county is concluded to be in compliance with sold and unsold guidelines. All sold and unsold properties in a given class are first tested, although properties with extreme unit values or percent changes can be trimmed to stabilize the analysis. The median is the primary comparison metric, although the mean can also be used as a comparison metric if the distribution supports that type of measure of central tendency.

The first test (unit value method) is applied to both residential and commercial/industrial sold and unsold properties. The second test is applied to sold and unsold vacant land properties. The second test (change in value method) is also applied to residential or commercial sold and unsold properties if the first test results in a significant difference observed and/or tested between sold and unsold properties. The third test (valuation modeling) is used in instances where the results from the first two tests indicate a significant difference between sold and unsold properties. It can also be used when the number of sold and unsold properties is so large that the non-parametric testing is indicating a false rejection of the hypothesis that there is no difference between the sold and unsold property values.

These tests were supported by both tabular and graphics presentations, along with written documentation explaining the methodology used.

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

### Conclusions

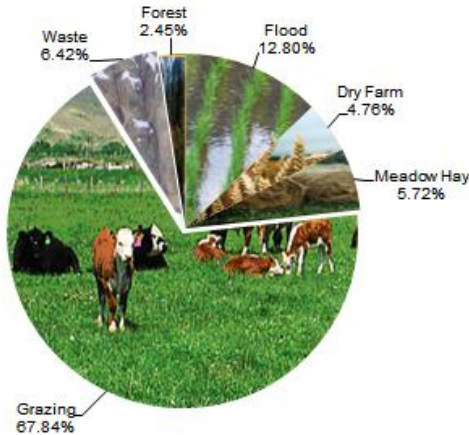
After applying the above described methodologies, it is concluded that Larimer County is reasonably treating its sold and unsold properties in the same manner.

### Recommendations

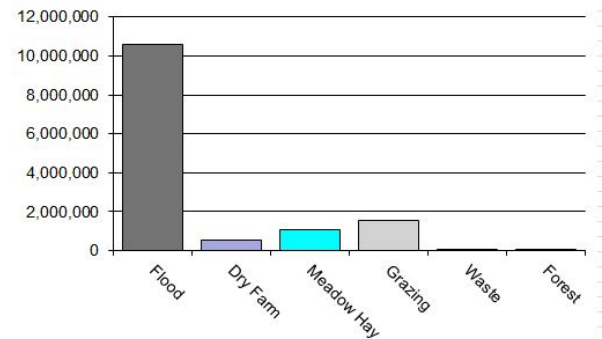
None

# AGRICULTURAL LAND STUDY

Acres By Subclass



Value By Subclass



## Agricultural Land

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

(See Assessor Reference Library Volume 3 Chapter 5.)

### Conclusions

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



Larimer 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	50,365	210.30	10,591,620	11,104,351	0.95
4127	Dry Farm	18,728	29.00	543,123	517,143	1.05
4137	Meadow Hay	22,487	48.07	1,080,900	1,080,900	1.00
4147	Grazing	266,858	5.85	1,560,017	1,560,017	1.00
4177	Forest	9,646	6.54	63,074	63,071	1.00
4167	Waste	25,256	2.22	56,115	56,115	1.00
Total/Avg		393,340	35.33	13,894,849	14,381,596	0.97

## Recommendations

None

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## Agricultural Outbuildings

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### Methodology

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

of Property Taxation for the valuation of agricultural outbuildings.

### Recommendations

None

### Conclusions

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

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## Agricultural Land Under Improvements

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### Methodology

Data was collected and reviewed to determine if the guidelines found in the Assessor's Reference Library (ARL) Volume 3, pages 5.19 and 5.20 were being followed.

### Conclusions

Larimer 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
- In-Person Interviews with Owners/Tenants
- Aerial Photography/Pictometry

Larimer 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

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

### Recommendations

None

## SALES VERIFICATION

According to Colorado Revised Statutes:

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

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

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

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

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

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

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

WRA reviewed the sales verification procedures in 2017 for Larimer County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 311 sales listed as unqualified.

All but three of the sales selected in the sample gave reasons that were clear and supportable. Three sales had insufficient reason for disqualification.

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.

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





of properties or by value, from the prior year. The contractor has reviewed with the assessor any analysis indicating that sales data are inadequate, fail to reflect typical properties, or have been disqualified for insufficient cause. In addition, the contractor has reviewed the disqualified sales by assigned code. If there appears to be any inconsistency in the coding, the contractor has conducted further analysis to determine if the sales included in that code have been assigned appropriately.

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

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

The following subclasses were analyzed for Larimer County:

2112 Merchandising  
2130 Special Purpose  
3115 Manufacturing/Processing  
3215 Manufacturing/Processing

### **Conclusions**

Larimer County appears to be doing a good job of verifying their sales.

### **Recommendations**

None

# ECONOMIC AREA REVIEW AND EVALUATION

## **Methodology**

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

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

## **Recommendations**

None

## NATURAL RESOURCES

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### Earth and Stone Products

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#### Methodology

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

#### Conclusions

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

#### Recommendations

None

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### Producing Oil and Gas

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#### Methodology

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

#### STATUTORY REFERENCES

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

#### Actual value determined - when.

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

#### § 39-1-103, C.R.S.

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

#### Valuation:

##### Valuation for assessment.

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

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

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

#### § 39-7-102, C.R.S.

#### Conclusions

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

#### Recommendations

None

## VACANT LAND

### **Subdivision Discounting**

Subdivisions were reviewed in 2017 in Larimer County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14). Discounting procedures were applied to all subdivisions where less than 80 percent of all sites were sold using the present worth method. The market approach was applied where 80 percent or more of the subdivision sites were sold. An absorption period was estimated for each subdivision that was discounted. An appropriate discount rate was

developed using the summation method. Subdivision land with structures was appraised at full market value.

### **Conclusions**

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

### **Recommendations**

None

## POSSESSORY INTEREST PROPERTIES

### Possessory Interest

Possessory interest property discovery and valuation is described in the Assessor's Reference Library (ARL) Volume 3 section 7 in accordance with the requirements of Chapter 39-1-103 (17)(a) (II) C.R.S. Possessory Interest is defined by the Property Tax Administrator's Publication ARL Volume 3, Chapter 7: A private property interest in government-owned property or the right to the occupancy and use of any benefit in government-owned property that has been granted under lease, permit, license, concession, contract, or other agreement.

Larimer 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

Larimer County has implemented a discovery process to place possessory interest properties on the roll. They have also correctly and consistently applied the correct procedures and valuation methods in the valuation of possessory interest properties.

### Recommendations

None

## PERSONAL PROPERTY AUDIT

Larimer County was studied for its procedural compliance with the personal property assessment outlined in the Assessor's Reference Library (ARL) Volume 5, and in the State Board of Equalization (SBOE) requirements for the assessment of personal property. The SBOE requires that counties use ARL Volume 5, including current discovery, classification, documentation procedures, current economic lives table, cost factor tables, depreciation table, and level of value adjustment factor table.

The personal property audit standards narrative must be in place and current. A listing of businesses that have been audited by the assessor within the twelve-month period reflected in the plan is given to the auditor. The audited businesses must be in conformity with those described in the plan.

Aggregate ratio will be determined solely from the personal property accounts that have been physically inspected. The minimum assessment sample is one percent or ten schedules, whichever is greater, and the maximum assessment audit sample is 100 schedules.

For the counties having over 100,000 population, WRA selected a sample of all personal property schedules to determine whether the assessor is correctly applying the provisions of law and manuals of the Property Tax Administrator in arriving at the assessment levels of such property. This sample was selected from the personal property schedules audited by the assessor. In no event was the sample selected by the contractor less than 30 schedules. The counties to be included in this study are Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo, and Weld. All other counties received a procedural study.

Larimer 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
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth

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.

Larimer County submitted their personal property written audit plan and was current for the 2017 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
- Accounts with omitted property
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts - Best Information Available
- Accounts close to the \$7,400 actual value exemption status
- Accounts protested with substantial disagreement



Larimer County's median ratio is 1.03. This is in compliance with the State Board of Equalization (SBOE) compliance requirements which range from .90 to 1.10 with no COD requirements.

### **Conclusions**

Larimer County has employed adequate discovery, classification, documentation,

valuation, and auditing procedures for their personal property assessment and is in statistical compliance with SBOE requirements.

### **Recommendations**

None



## WILDROSE AUDITOR STAFF

**Harry J. Fuller**, *Audit Project Manager*

**Suzanne Howard**, *Audit Administrative Manager*

**Steve Kane**, *Audit Statistician*

**Carl W. Ross**, *Agricultural/Natural Resource Analyst*

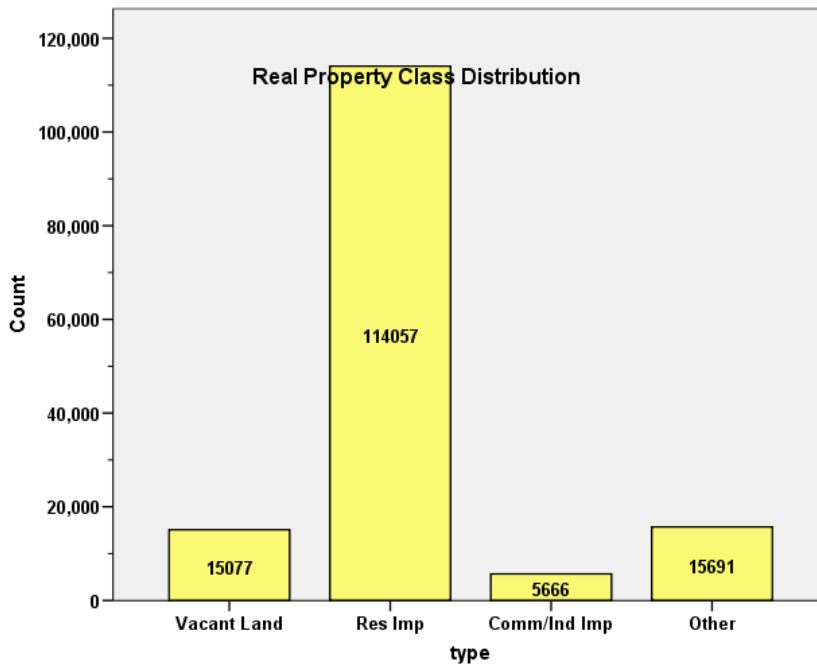
**J. Andrew Rodriguez**, *Field Analyst*

# APPENDICES

## STATISTICAL COMPLIANCE REPORT FOR LARIMER COUNTY 2017

### I. OVERVIEW

Larimer County is a northern county located along Colorado's Front Range urban corridor. The county has a total of 150,491 real property parcels, according to data submitted by the county assessor's office in 2017. 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 73.2% of all vacant land parcels.

For residential improved properties, single family properties accounted for 87.4% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 3.8% of all such properties in this county.

## II. DATA FILES

The following sales analyses were based on the requirements of the 2017 Colorado Property Assessment Study. Information was provided by the Larimer Assessor's Office in May 2017. The data included all 5 property record files as specified by the Auditor.

## III. RESIDENTIAL SALES RESULTS

There were 30,328 qualified residential sales for the 60-month period ending June 30, 2016. The sales ratio analysis results were as follows:

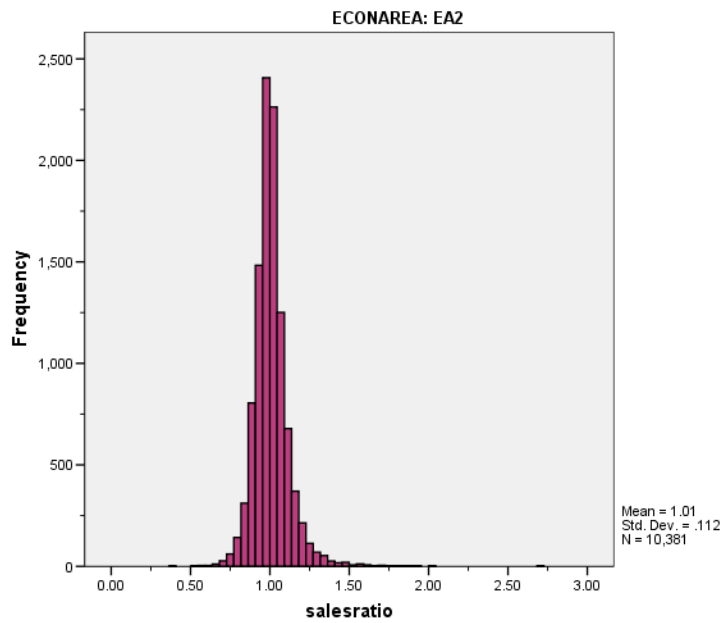
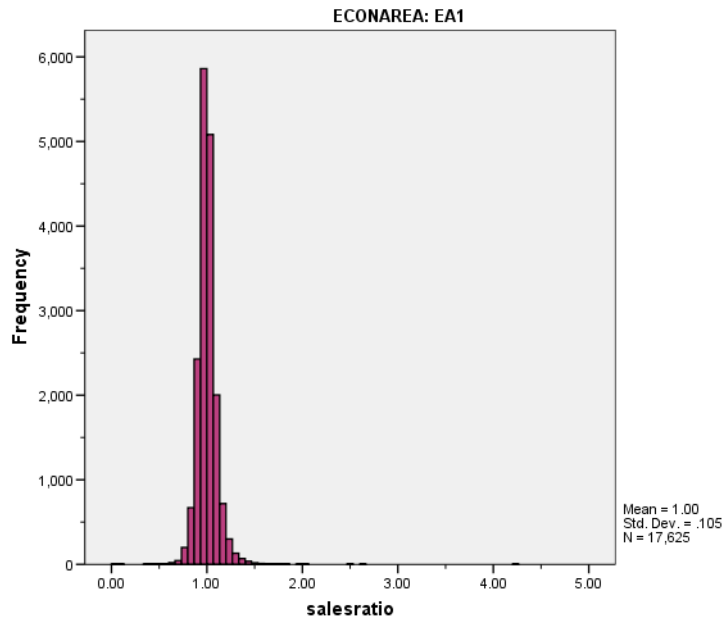
### Case Processing Summary

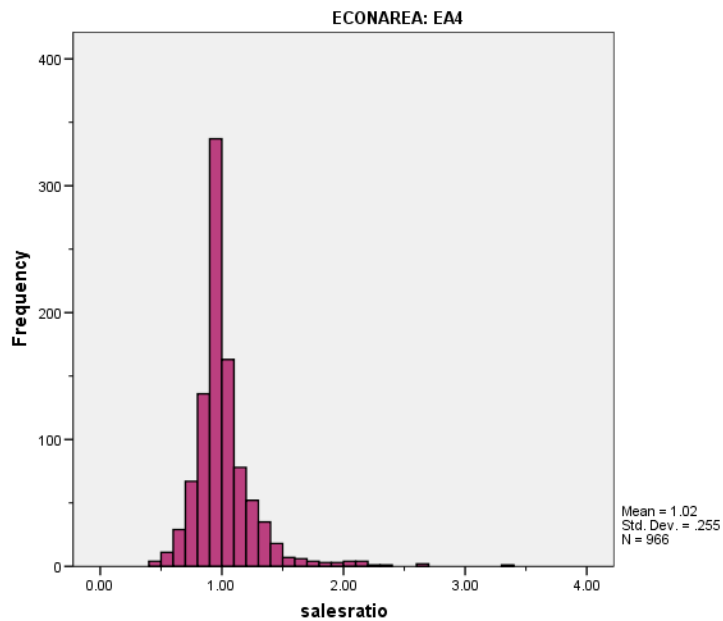
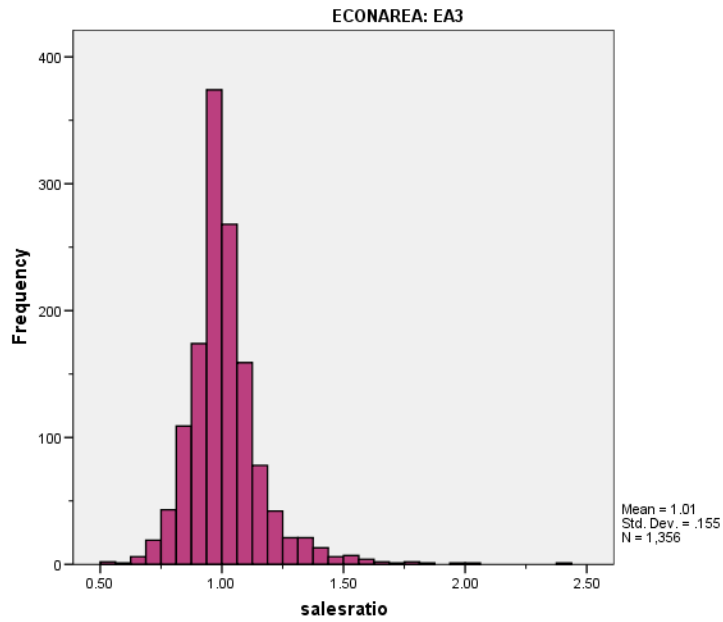
		Count	Percent
ECONAREA	EA1	17625	58.1%
	EA2	10381	34.2%
	EA3	1356	4.5%
	EA4	966	3.2%
Overall		30328	100.0%
Excluded		0	
Total		30328	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
EA1	.998	1.008	.068
EA2	1.000	1.010	.074
EA3	.994	1.006	.102
EA4	.980	1.045	.156
Overall	.998	1.010	.075

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





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

## Residential Market Trend Analysis

We next analyzed the residential dataset using the 60-month sale period for any residual market trending and broken down by economic area, as follows:

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

ECONAREA	Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
EA1	1	(Constant)	1.001	.001		674.411	.000
		SalePeriod	8.614E-5	.000	.014	1.800	.072
EA2	1	(Constant)	.999	.002		493.075	.000
		SalePeriod	.000	.000	.057	5.779	.000
EA3	1	(Constant)	1.005	.008		133.261	.000
		SalePeriod	.000	.000	.035	1.295	.196
EA4	1	(Constant)	.991	.014		68.682	.000
		SalePeriod	.001	.000	.078	2.415	.016

a. Dependent Variable: salesratio

There was no residual market trending present in the sale ratio data for any of the economic areas. In Economic Areas 2 and 4, where marginally statistical significant trends were present, the magnitude of those trends (each at or less than 0.1% per month) was not significant. We therefore concluded 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 2017 between each group. The data was analyzed broken down by economic area, as follows:

### Report

VALSF

ECONAREA	sold	N	Median	Mean
EA1	UNSOLD	\$44,137	\$205	\$217
	SOLD	\$17,623	\$205	\$218
EA2	UNSOLD	\$26,985	\$190	\$194
	SOLD	\$10,381	\$196	\$203
EA3	UNSOLD	\$5,196	\$244	\$253
	SOLD	\$1,356	\$243	\$261
EA4	UNSOLD	\$6,124	\$184	\$191
	SOLD	\$966	\$200	\$212

We next checked the median and mean change in actual value for taxable years 2016 and 2017 for sold and unsold residential properties by economic area, as follows:



## Report

DIFF

ECONAREA	sold	N	Median	Mean
EA1	UNSOLD	43,304	1.28	1.28
	SOLD	17,334	1.27	1.27
EA2	UNSOLD	26,491	1.24	1.25
	SOLD	10,254	1.24	1.24
EA3	UNSOLD	5,179	1.13	1.15
	SOLD	1,353	1.12	1.14
EA4	UNSOLD	5,985	1.23	1.26
	SOLD	951	1.20	1.24

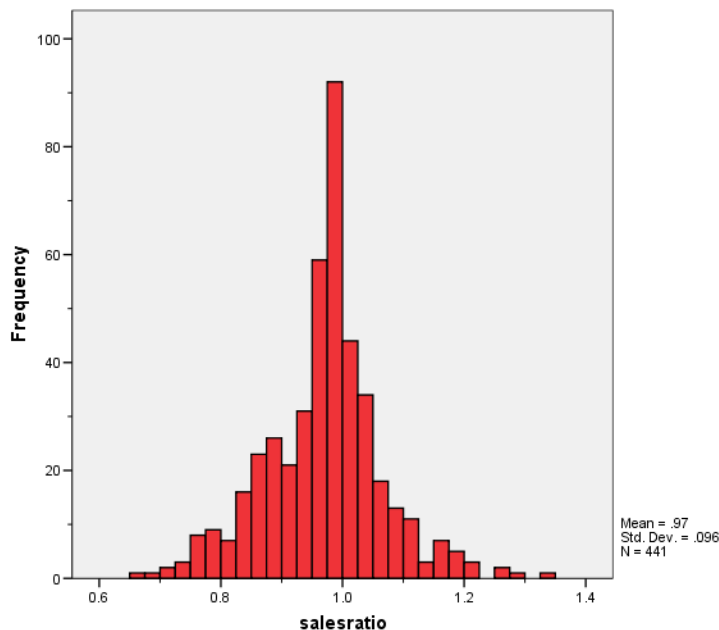
The above results indicate that sold and unsold residential properties were valued in a consistent manner. Some sales were trimmed due to extreme values.

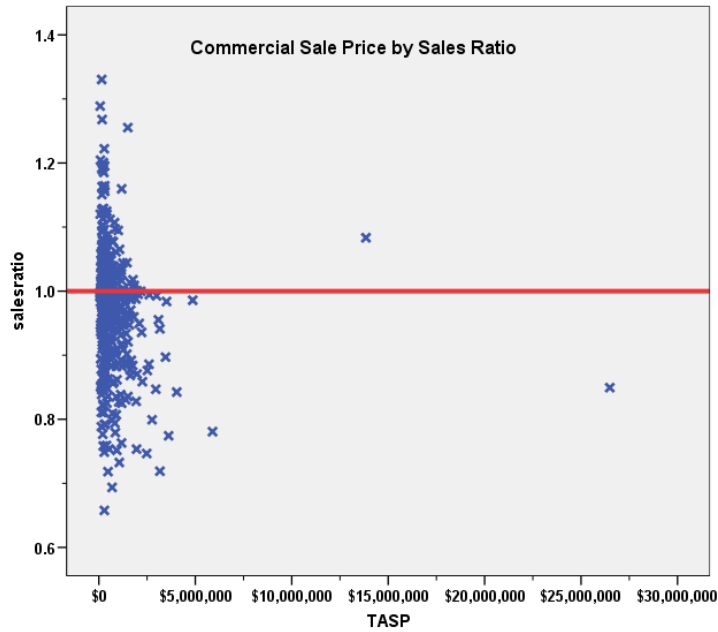
## IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 441 qualified commercial and industrial sales for the 60 month period ending June 30, 2016. The sales ratio analysis results were as follows:

Median	<b>0.983</b>
Price Related Differential	<b>1.028</b>
Coefficient of Dispersion	<b>7.1</b>

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





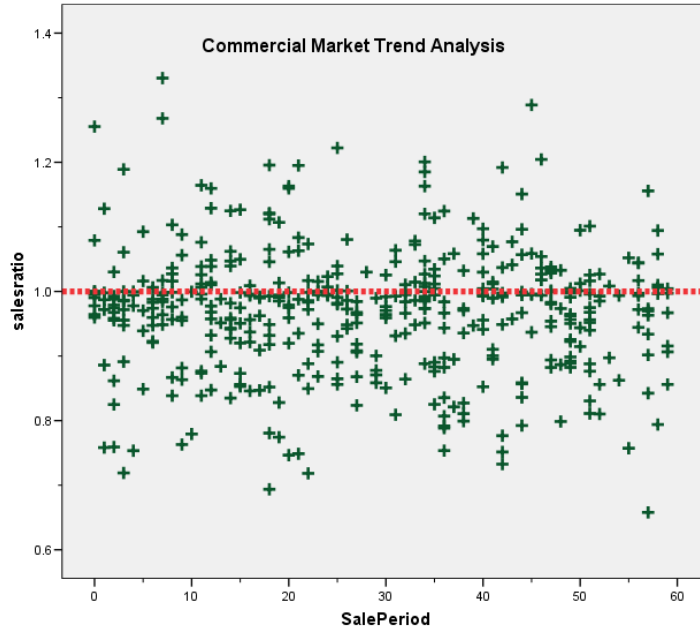
### Commercial/Industrial Market Trend Analysis

The assessor did apply market trend adjustments to the commercial/industrial dataset. The commercial/industrial sales were analyzed, examining the sale ratios across the 60 month sale period with the following results:

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

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.977	.009		110.238	.000
	SalePeriod	.000	.000	-.044	-.918	.359

a. Dependent Variable: salesratio



There was no residual market trending present in the commercial sale ratios. We concluded that the assessor has adequately considered market trending adjustments as part of the commercial sales valuation.

### Sold/Unsold Analysis

We compared the 2017 median value per square feet between sold and unsold properties, stratified by subclass and economic area, to determine if both groups were valued consistently, as follows:

## Report

VALSF

ABSTRIMP	ECONAREA	sold	N	Median	Mean
2212.00	EA1	UNSOLD	390	\$120.27	\$139.10
		SOLD	18	\$107.88	\$128.50
	EA2	UNSOLD	204	\$103.73	\$130.07
		SOLD	20	\$136.33	\$139.37
2220.00	EA1	UNSOLD	270	\$148.25	\$154.74
		SOLD	22	\$184.61	\$202.47
	EA2	UNSOLD	174	\$152.32	\$144.03
		SOLD	23	\$133.24	\$167.52
2230.00	EA1	UNSOLD	572	\$147.57	\$166.46
		SOLD	32	\$161.97	\$172.94
	EA2	UNSOLD	327	\$119.79	\$147.49
		SOLD	26	\$121.15	\$127.92
2235.00	EA1	UNSOLD	310	\$65.69	\$73.62
		SOLD	26	\$80.86	\$79.88
	EA2	UNSOLD	229	\$61.77	\$72.82
		SOLD	25	\$73.78	\$77.79
	EA3	UNSOLD	42	\$72.83	\$80.04
		SOLD	3	\$82.91	\$77.16
2245.00	EA1	UNSOLD	788	\$149.97	\$148.48
		SOLD	105	\$175.00	\$169.46
	EA2	UNSOLD	618	\$106.20	\$117.07
		SOLD	78	\$105.10	\$131.48
	EA3	UNSOLD	123	\$156.01	\$181.91
		SOLD	11	\$269.59	\$260.57

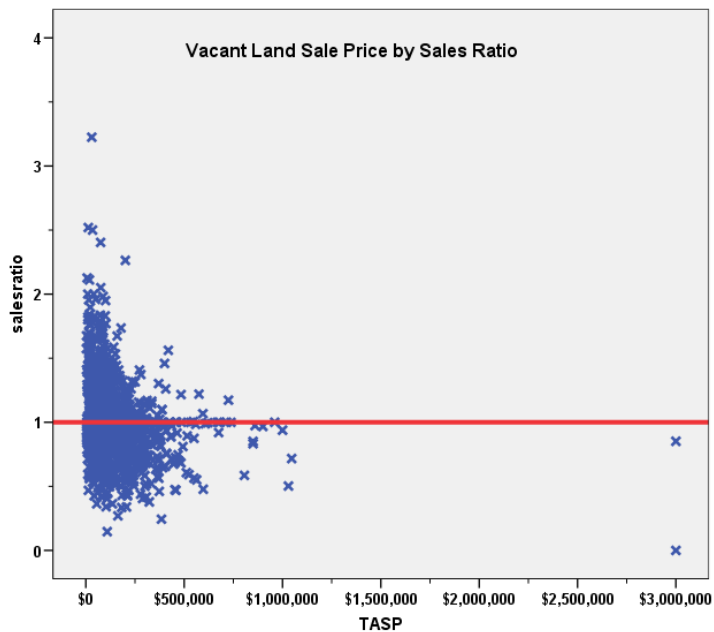
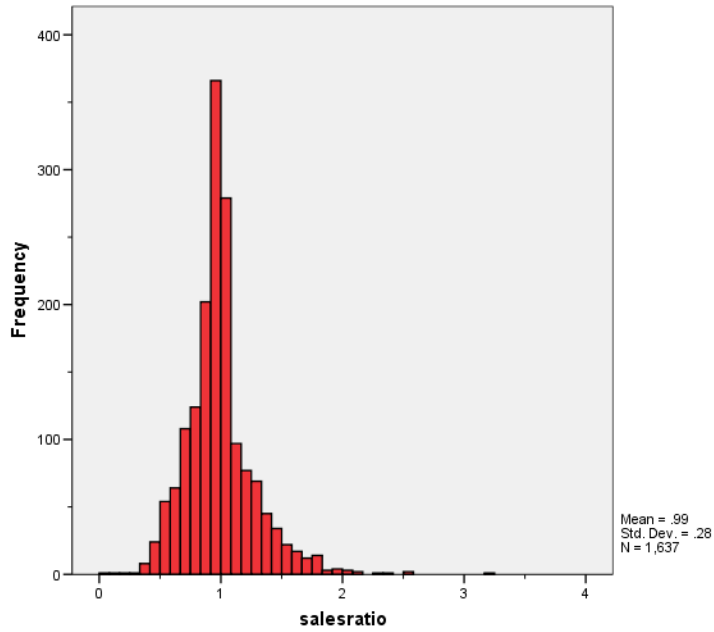
The above results indicated that sold and unsold commercial/industrial land properties were valued consistently.

## V. VACANT LAND SALE RESULTS

There were 1,637 qualified vacant land sales for the 60 month period ending June 30, 2016. The sales ratio analysis results were as follows:

Median	<b>0.988</b>
Price Related Differential	<b>1.081</b>
Coefficient of Dispersion	<b>19.1</b>

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



The above histogram indicates that the distribution of the vacant land sale ratios was within state mandated limits, while the above scatter plot indicates that there was no price related differential issues. No sales were trimmed.

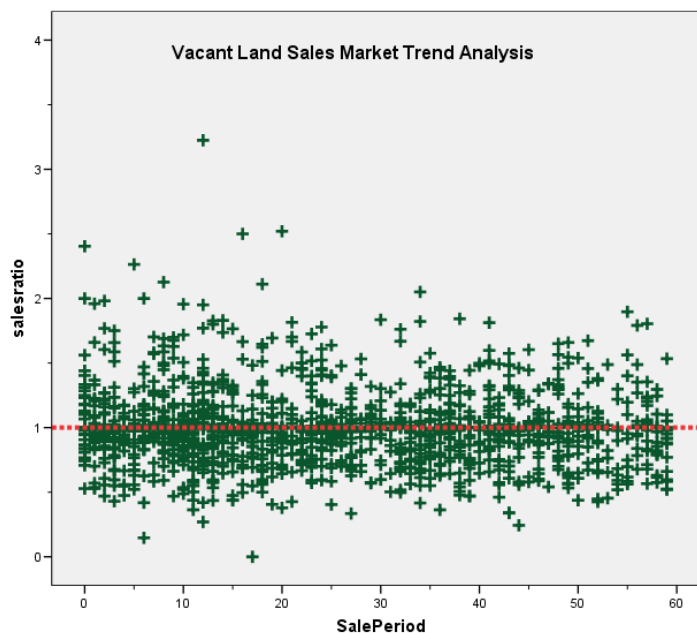
## Vacant Land Market Trend Analysis

We next analyzed the vacant land dataset using the 60-month sale period and stratified by economic area, with the following results:

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

Model		Unstandardized Coefficients	Standardized Coefficients	t	Sig.
1	(Constant)	1.015	.012	82.630	.000
	SalePeriod	-.001	-.056	-2.248	.025

a. Dependent Variable: salesratio



The above analysis indicated that no significant market trending was present in the vacant land sale data. We concluded that the assessor has adequately dealt with market trending for vacant land properties.

## Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold vacant land properties, we compared the median change in actual value for 2016 and 2017 between each group, as follows:

### Report

DIFF			
sold	N	Median	Mean
UNSOLD	10,381	1.06	1.20
SOLD	1,575	1.17	1.22

We next examined sold and unsold properties with at least 10 sales to determine if sold and unsold properties were valued differently, as follows:

## Report

DIFF

SUBDIVNO	sold	N	Median	Mean
0272120	UNSOLD	95	1.14	1.08
	SOLD	32	1.14	1.09
0272150	UNSOLD	58	1.28	1.27
	SOLD	12	1.28	1.31
02726	UNSOLD	47	.86	1.00
	SOLD	10	1.01	1.01
02728	UNSOLD	46	1.04	.99
	SOLD	13	1.04	1.01
0327120	UNSOLD	113	1.43	1.41
	SOLD	27	1.33	1.36
03276	UNSOLD	21	1.31	1.32
	SOLD	14	1.31	1.21
0647	UNSOLD	6	1.03	1.03
	SOLD	10	1.03	1.00
0707	UNSOLD	9	1.55	1.44
	SOLD	16	1.31	1.37
0724001001	UNSOLD	3	.98	.98
	SOLD	16	.98	.98
0754	UNSOLD	5	1.06	1.06
	SOLD	12	1.06	1.04
2792001000	UNSOLD	10	1.64	1.64
	SOLD	13	1.50	1.57
4087	UNSOLD	13	1.30	1.23
	SOLD	10	1.30	1.30
5006	UNSOLD	9	1.00	1.05
	SOLD	13	1.24	1.42
5006002000	UNSOLD	43	1.00	1.09
	SOLD	24	1.24	1.36
5006004000	UNSOLD	21	1.72	1.70
	SOLD	14	1.72	1.55
5010001000	UNSOLD	42	1.26	1.26
	SOLD	16	1.26	1.26
5013001001	UNSOLD	2	1.08	1.08
	SOLD	34	1.28	1.26
5507	UNSOLD	1	1.18	1.18
	SOLD	11	1.18	1.23
5510	UNSOLD	80	1.27	1.26
	SOLD	38	1.27	1.27
5513	UNSOLD	10	1.00	1.00
	SOLD	17	1.17	1.09
5514	UNSOLD	19	1.50	1.42
	SOLD	81	1.50	1.50
5803	UNSOLD	5	1.16	1.11
	SOLD	13	1.16	1.09
6034	UNSOLD	9	1.15	1.12
	SOLD	25	1.24	1.22
7003390	UNSOLD	22	.92	.94
	SOLD	16	1.17	1.17
8116	UNSOLD	38	1.53	1.46
	SOLD	10	1.84	1.84

Overall, we concluded that the county assessor valued sold and unsold vacant properties consistently.



## VI. AGRICULTURAL IMPROVEMENTS ANALYSIS

The final verification concerned the assigned actual values for agricultural residential improvements. We compared the median improved value per square foot rate for this subclass and compared it to the median improved value per square foot for residential single family improvements in Larimer County.

The following indicates that both groups were valued in essentially the same manner:

Report			
IMPVALSF			
ABSTRIMP	N	Median	Mean
1212.00	98609	\$168.10	\$174.83
4277.00	567	\$156.20	\$166.18

## VII. CONCLUSIONS

Based on this 2017 audit statistical analysis for Larimer County, residential, commercial/industrial, vacant land and agricultural residential properties were found to be in compliance with state guidelines.

## **STATISTICAL ABSTRACT**

### **Residential**

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

ECONA REA	Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Mean Centered
		Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
EA1	1.003	1.002	1.005	.998	.997	.999	95.2%	.995	.993	.997	1.008	.068	10.4%
EA2	1.009	1.006	1.011	1.000	.999	1.000	95.0%	.999	.997	1.001	1.010	.074	11.1%
EA3	1.013	1.005	1.022	.994	.991	.999	95.3%	1.007	.997	1.017	1.006	.102	15.3%
EA4	1.019	1.003	1.036	.980	.980	.981	95.0%	.976	.961	.991	1.045	.156	25.0%

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

### **Commercial Land**

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

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Mean Centered
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
.970	.961	.979	.983	.973	.988	95.5%	.943	.921	.965	1.028	.071	9.9%

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.

### **Vacant Land**

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

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Mean Centered
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
.992	.979	1.006	.988	.980	.994	95.2%	.918	.891	.944	1.081	.191	28.2%

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	1	0.0%
	\$25K to \$50K	7	0.0%
	\$50K to \$100K	106	0.3%
	\$100K to \$150K	524	1.7%
	\$150K to \$200K	1773	5.8%
	\$200K to \$300K	9944	32.8%
	\$300K to \$500K	13859	45.7%
	\$500K to \$750K	3286	10.8%
	\$750K to \$1,000K	586	1.9%
	Over \$1,000K	242	0.8%
Overall		30328	100.0%
Excluded		0	
Total		30328	

#### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	.518	1.000	.000	.
\$25K to \$50K	1.508	1.007	.258	34.0%
\$50K to \$100K	1.141	1.012	.280	44.1%
\$100K to \$150K	1.029	1.002	.145	23.3%
\$150K to \$200K	1.009	1.000	.096	17.5%
\$200K to \$300K	1.004	1.001	.070	10.4%
\$300K to \$500K	.994	1.001	.067	9.7%
\$500K to \$750K	.982	1.001	.078	11.1%
\$750K to \$1,000K	.976	.999	.095	13.2%
Over \$1,000K	.965	.991	.105	15.5%
Overall	.998	1.010	.075	11.8%

## Subclass

### Case Processing Summary

		Count	Percent
ABSTRIMP	.00	1	0.0%
	1212.00	26102	86.1%
	1213.50	1	0.0%
	1215.00	331	1.1%
	1216.00	1	0.0%
	1217.33	1	0.0%
	1220.00	104	0.3%
	1224.75	1	0.0%
	1225.00	17	0.1%
	1230.00	3749	12.4%
	1466.50	1	0.0%
	1545.33	1	0.0%
	1546.33	1	0.0%
	1712.00	1	0.0%
	1713.50	2	0.0%
	1716.00	5	0.0%
	1725.00	1	0.0%
	1889.00	1	0.0%
	2026.40	1	0.0%
	2089.63	1	0.0%
	2133.08	1	0.0%
	2220.00	1	0.0%
	2230.00	1	0.0%
	9250.00	2	0.0%
Overall		30328	100.0%
Excluded		0	
Total		30328	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.516	1.000	.000	.
1212.00	.998	1.009	.077	12.2%
1213.50	.879	1.000	.000	.
1215.00	.998	1.009	.051	8.2%
1216.00	1.067	1.000	.000	.
1217.33	.869	1.000	.000	.
1220.00	.988	1.005	.066	9.3%
1224.75	.977	1.000	.000	.
1225.00	.973	.990	.053	8.7%
1230.00	.999	1.007	.061	9.3%
1466.50	.905	1.000	.000	.
1545.33	1.079	1.000	.000	.
1546.33	1.335	1.000	.000	.
1712.00	1.025	1.000	.000	.
1713.50	.888	1.043	.059	8.4%
1716.00	.884	1.004	.120	17.3%
1725.00	1.120	1.000	.000	.
1889.00	.918	1.000	.000	.
2026.40	.983	1.000	.000	.
2089.63	.719	1.000	.000	.
2133.08	.937	1.000	.000	.
2220.00	1.043	1.000	.000	.
2230.00	1.071	1.000	.000	.
9250.00	.830	.968	.118	16.7%
Overall	.998	1.010	.075	11.8%

### Age

#### Case Processing Summary

		Count	Percent
AgeRec	0	1	0.0%
	Over 100	555	1.8%
	75 to 100	519	1.7%
	50 to 75	2109	7.0%
	25 to 50	8638	28.5%
	5 to 25	12914	42.6%
	5 or Newer	5592	18.4%
Overall		30328	100.0%
Excluded		0	
Total		30328	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.516	1.000	.000	.
Over 100	.998	1.025	.130	21.4%
75 to 100	.996	1.025	.123	19.5%
50 to 75	.997	1.015	.104	16.1%
25 to 50	.999	1.010	.082	13.0%
5 to 25	.998	1.008	.068	10.2%
5 or Newer	.998	1.006	.058	8.9%
Overall	.998	1.010	.075	11.8%

### Improved Area

### Case Processing Summary

	Count	Percent
ImpSFRec 0	1	0.0%
LE 500 sf	76	0.3%
500 to 1,000 sf	3081	10.2%
1,000 to 1,500 sf	9668	31.9%
1,500 to 2,000 sf	9480	31.3%
2,000 to 3,000 sf	6744	22.2%
3,000 sf or Higher	1278	4.2%
Overall	30328	100.0%
Excluded	0	
Total	30328	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.516	1.000	.000	.
LE 500 sf	.973	1.128	.163	25.7%
500 to 1,000 sf	.985	1.017	.090	14.6%
1,000 to 1,500 sf	.996	1.010	.073	11.7%
1,500 to 2,000 sf	.999	1.010	.069	10.3%
2,000 to 3,000 sf	1.003	1.012	.074	11.7%
3,000 sf or Higher	1.010	1.026	.092	14.8%
Overall	.998	1.010	.075	11.8%

## Improvement Quality

### Case Processing Summary

	Count	Percent
QUALITY	1	0.0%
Average	23115	76.2%
Average Plus	4714	15.5%
Excellent	7	0.0%
Fair	1014	3.3%
Good	1182	3.9%
Good Plus	199	0.7%
Low	23	0.1%
Very Good	73	0.2%
Overall	30328	100.0%
Excluded	0	
Total	30328	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.516	1.000	.000	.
Average	.998	1.008	.071	11.1%
Average Plus	.999	1.010	.075	10.5%
Excellent	.986	1.040	.045	9.0%
Fair	.991	1.021	.116	19.6%
Good	.999	1.019	.093	17.2%
Good Plus	.999	1.016	.109	15.9%
Low	1.035	1.124	.258	44.5%
Very Good	1.002	1.031	.096	14.4%
Overall	.998	1.010	.075	11.8%

## Improvement Condition

### Case Processing Summary

	Count	Percent
CONDITION	1	0.0%
Average	30288	99.9%
Badly Worn	7	0.0%
Excellent	1	0.0%
Good	27	0.1%
Worn Out	4	0.0%
Overall	30328	100.0%
Excluded	0	
Total	30328	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.516	1.000	.000	.
Average	.998	1.009	.075	11.8%
Badly Worn	1.019	1.168	.311	57.3%
Excellent	1.003	1.000	.000	.
Good	.988	1.036	.057	8.1%
Worn Out	.982	1.268	.346	45.9%
Overall	.998	1.010	.075	11.8%

### Commercial Median Ratio Stratification

#### Sale Price

#### Case Processing Summary

		Count	Percent
SPRec	\$50K to \$100K	14	3.2%
	\$100K to \$150K	34	7.7%
	\$150K to \$200K	51	11.6%
	\$200K to \$300K	89	20.2%
	\$300K to \$500K	69	15.6%
	\$500K to \$750K	46	10.4%
	\$750K to \$1,000K	38	8.6%
	Over \$1,000K	100	22.7%
Overall		441	100.0%
Excluded		0	
Total		441	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
\$50K to \$100K	.996	1.009	.074	11.9%
\$100K to \$150K	.998	.997	.071	10.5%
\$150K to \$200K	.995	1.001	.065	9.1%
\$200K to \$300K	.974	1.002	.085	11.3%
\$300K to \$500K	.983	1.002	.063	8.8%
\$500K to \$750K	.977	1.001	.060	8.6%
\$750K to \$1,000K	.983	1.000	.061	9.0%
Over \$1,000K	.959	1.014	.072	9.5%
Overall	.983	1.028	.071	9.9%



**Subclass**
**Case Processing Summary**

		Count	Percent
ABSTRIMP	1712.00	1	0.2%
	1713.50	2	0.5%
	1716.00	1	0.2%
	1721.00	1	0.2%
	1878.67	2	0.5%
	1890.67	1	0.2%
	1894.00	1	0.2%
	2071.71	1	0.2%
	2088.86	1	0.2%
	2192.16	1	0.2%
	2212.00	39	8.8%
	2216.00	2	0.5%
	2219.67	2	0.5%
	2220.00	47	10.7%
	2223.50	3	0.7%
	2225.00	3	0.7%
	2227.50	4	0.9%
	2230.00	61	13.8%
	2232.00	1	0.2%
	2232.50	1	0.2%
	2235.00	54	12.2%
	2240.00	2	0.5%
	2245.00	194	44.0%
	2725.00	1	0.2%
	3215.00	8	1.8%
	3230.00	3	0.7%
	5264.50	1	0.2%
	9249.00	1	0.2%
	9269.00	1	0.2%
	9279.00	1	0.2%
Overall		441	100.0%
Total		441	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1712.00	.825	1.000	.000	.
1713.50	1.024	1.011	.071	10.1%
1716.00	.996	1.000	.000	.
1721.00	.931	1.000	.000	.
1878.67	.941	1.014	.062	8.8%
1890.67	.973	1.000	.000	.
1894.00	1.112	1.000	.000	.
2071.71	.964	1.000	.000	.
2088.86	1.000	1.000	.000	.
2192.16	.886	1.000	.000	.
2212.00	.971	1.076	.074	10.1%
2216.00	.919	1.055	.099	14.0%
2219.67	1.021	.947	.061	8.6%
2220.00	.995	1.007	.060	8.5%
2223.50	.955	1.010	.033	4.9%
2225.00	.993	.995	.072	15.2%
2227.50	.968	1.000	.075	9.6%
2230.00	.970	1.024	.063	9.1%
2232.00	.984	1.000	.000	.
2232.50	.994	1.000	.000	.
2235.00	.986	1.024	.047	7.4%
2240.00	.958	1.006	.023	3.3%
2245.00	.974	1.029	.084	11.1%
2725.00	.909	1.000	.000	.
3215.00	.995	1.043	.045	8.8%
3230.00	.968	1.008	.008	1.3%
5264.50	1.008	1.000	.000	.
9249.00	1.330	1.000	.000	.
9269.00	.984	1.000	.000	.
9279.00	.970	1.000	.000	.
Overall	.983	1.028	.071	9.9%

### Age

#### Case Processing Summary

		Count	Percent
AgeRec	Over 100	35	7.9%
	75 to 100	11	2.5%
	50 to 75	42	9.5%
	25 to 50	136	30.8%
	5 to 25	214	48.5%
	5 or Newer	3	0.7%
Overall		441	100.0%
Excluded		0	
Total		441	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.965	1.042	.083	10.9%
75 to 100	.972	1.029	.057	7.5%
50 to 75	.988	1.008	.053	8.3%
25 to 50	.993	.993	.053	7.6%
5 to 25	.968	1.051	.083	11.3%
5 or Newer	.877	.994	.055	9.7%
Overall	.983	1.028	.071	9.9%

### Improved Area

#### Case Processing Summary

	Count	Percent
ImpSFRRec		
LE 500 sf	6	1.4%
500 to 1,000 sf	36	8.2%
1,000 to 1,500 sf	79	17.9%
1,500 to 2,000 sf	48	10.9%
2,000 to 3,000 sf	53	12.0%
3,000 sf or Higher	219	49.7%
Overall	441	100.0%
Excluded	0	
Total	441	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.990	.998	.033	6.6%
500 to 1,000 sf	.994	1.018	.094	12.9%
1,000 to 1,500 sf	.990	1.008	.072	9.9%
1,500 to 2,000 sf	.971	1.021	.085	12.2%
2,000 to 3,000 sf	.965	1.026	.068	9.7%
3,000 sf or Higher	.985	1.027	.064	8.8%
Overall	.983	1.028	.071	9.9%

## Improvement Quality

### Case Processing Summary

		Count	Percent
QUALITY	Average	345	78.2%
	Average Plus	36	8.2%
	Fair	12	2.7%
	Good	48	10.9%
Overall		441	100.0%
Excluded		0	
Total		441	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	.986	1.012	.064	9.1%
Average Plus	.929	1.055	.113	13.5%
Fair	.985	.997	.059	9.8%
Good	.954	1.028	.088	11.8%
Overall	.983	1.028	.071	9.9%

## Improvement Condition

### Case Processing Summary

		Count	Percent
CONDITION	Average	398	90.2%
	Badly Worn	1	0.2%
	Good	18	4.1%
	Very Good	24	5.4%
Overall		441	100.0%
Excluded		0	
Total		441	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	.986	1.038	.065	9.2%
Badly Worn	.943	1.000	.000	.
Good	.925	.931	.124	14.9%
Very Good	.879	.991	.095	14.1%
Overall	.983	1.028	.071	9.9%

## Economic Area

### Case Processing Summary

		Count	Percent
ECONAREA	EA1	226	51.2%
	EA2	187	42.4%
	EA3	28	6.3%
Overall		441	100.0%
Excluded		0	
Total		441	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
EA1	.987	1.013	.071
EA2	.973	1.048	.071
EA3	1.000	1.026	.055
Overall	.983	1.028	.071

## Vacant Land Median Ratio Stratification

### Sale Price

### Case Processing Summary

		Count	Percent
SPRec	LT \$25K	152	9.3%
	\$25K to \$50K	223	13.6%
	\$50K to \$100K	341	20.8%
	\$100K to \$150K	342	20.9%
	\$150K to \$200K	228	13.9%
	\$200K to \$300K	221	13.5%
	\$300K to \$500K	99	6.0%
	\$500K to \$750K	20	1.2%
	\$750K to \$1,000K	7	0.4%
	Over \$1,000K	4	0.2%
Overall		1637	100.0%
Excluded		0	
Total		1637	

### Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.180	.997	.238	30.1%
\$25K to \$50K	.984	1.002	.182	30.8%
\$50K to \$100K	1.000	.996	.197	29.4%
\$100K to \$150K	.997	1.000	.161	22.8%
\$150K to \$200K	.946	1.002	.142	20.1%
\$200K to \$300K	.878	.998	.195	25.7%
\$300K to \$500K	.896	1.001	.194	25.0%
\$500K to \$750K	.993	.988	.152	23.9%
\$750K to \$1,000K	.938	.993	.102	16.8%
Over \$1,000K	.610	1.094	.437	63.8%
Overall	.988	1.081	.191	28.3%

### Subclass

### Case Processing Summary

		Count	Percent
ABSTRLND	.00	1	0.1%
	100.00	594	36.3%
	200.00	45	2.7%
	400.00	121	7.4%
	510.00	3	0.2%
	520.00	19	1.2%
	530.00	17	1.0%
	540.00	18	1.1%
	550.00	82	5.0%
	1112.00	695	42.5%
	1115.00	1	0.1%
	1125.00	1	0.1%
	1135.00	2	0.1%
	2112.00	3	0.2%
	2120.00	3	0.2%
	2121.00	1	0.1%
	2123.50	1	0.1%
	2130.00	15	0.9%
	2135.00	10	0.6%
	2140.00	2	0.1%
	3115.00	1	0.1%
	9149.00	1	0.1%
9159.00	1	0.1%	
Overall		1637	100.0%
Excluded		0	
Total		1637	

### Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.000	.	.	.
100.00	.997	1.067	.189	29.4%
200.00	1.000	1.001	.119	19.0%
400.00	1.000	1.065	.202	29.8%
510.00	.976	.873	.186	31.9%
520.00	.979	1.133	.181	29.9%
530.00	.993	1.028	.132	22.6%
540.00	.906	1.097	.226	30.0%
550.00	.992	1.074	.183	26.9%
1112.00	.962	1.067	.198	27.7%
1115.00	1.201	1.000	.000	.
1125.00	1.459	1.000	.000	.
1135.00	.994	.999	.006	0.9%
2112.00	1.220	.960	.099	18.8%
2120.00	.866	1.111	.122	24.6%
2121.00	1.000	1.000	.000	.
2123.50	.894	1.000	.000	.
2130.00	1.000	1.121	.233	44.2%
2135.00	1.001	1.034	.081	13.6%
2140.00	1.190	1.060	.160	22.6%
3115.00	.968	1.000	.000	.
9149.00	1.240	1.000	.000	.
9159.00	.500	1.000	.000	.
Overall	.988	1.081	.191	28.3%

### Economic Area

#### Case Processing Summary

	Count	Percent
ECONAREA	1	0.1%
EA1	462	28.2%
EA2	509	31.1%
EA3	118	7.2%
EA4	547	33.4%
Overall	1637	100.0%
Excluded	0	
Total	1637	

### Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
	.000	.	.
EA1	.970	1.049	.210
EA2	.985	1.057	.172
EA3	1.000	1.024	.121
EA4	.997	1.098	.205
Overall	.988	1.081	.191