



2008  
WASHINGTON COUNTY  
PROPERTY ASSESSMENT  
STUDY



ROCKY MOUNTAIN  
VALUATION SPECIALISTS



September 15, 2008

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

**RE: Final Report for the 2008 Colorado Property Assessment Study  
for Colorado's sixty four counties**

Dear Mr. Mauer:

Rocky Mountain Valuation Specialists LLC is pleased to submit the Final Reports for the 2008 Colorado Property Assessment Study for all sixty four counties that make up the State of Colorado.

These reports represent the result of a two-part analysis and audit for each county: A procedural analysis and a statistical analysis.

The procedural analysis, for each county, included all classes of property and specifically looked at how the assessor developed economic areas, confirmed and qualified their sales, developed their time adjustments, and performed their periodic physical property inspections. The audit also reviewed the procedures for discovering, classifying and valuing agricultural outbuildings, discovering subdivision build-out and subdivision discounting procedures. Valuation methodology for residential properties and commercial properties was examined. Procedures for producing mines, oil and gas leaseholds and lands producing, producing coalmines, producing earth and stone products, severed mineral interests, and non-producing patented mining claims were also reviewed. Starting in 2007, procedural analyses of agricultural outbuildings were performed for each county.



Statistical analysis was also performed, for each county, on vacant land, residential properties, commercial/industrial properties, and agricultural land. A statistical analysis was performed to check for personal property compliance on the top 11 counties: Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo, and Weld. All other counties received a procedural study.

Throughout this project RMVS has remained committed to its belief that for an ad valorem system to be successful, values must be equitable and market-driven in all parts of Colorado. Only then is the taxpayer assured of a fair property tax.

RMVS appreciates the opportunity to be of service to the State of Colorado.

A handwritten signature in black ink, appearing to read "Mark R. Linné".

Mark R. Linné **MAI, CAE, ASA, CRE, FRICS**  
Managing Director  
*Rocky Mountain Valuation Specialists LLC*



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## INTRODUCTION



### Colorado

The Colorado Constitution directs that each property tax levy shall be uniform upon all real and personal property not exempt from taxation. The constitution goes on to direct that the actual value of all applicable real and personal property shall be determined under general laws, which shall prescribe such methods and regulations as shall secure just and equalized valuations (Colo. Const., Art. X, Sec. 3 (1)(a)).

In order to check that all applicable property has been valued with just and equalized valuations, the Constitution states that commencing in 1983 the general assembly shall cause a valuation for assessment study to be conducted. Such study shall determine whether or not the assessor of each county has complied with the property tax provisions of this constitution and of the statutes in valuing property and has determined the actual value and valuation for assessment of each and every class of taxable real and personal property consistent with such provisions. Such study shall sample at least one percent of each and every class of taxable real and personal property in the county (Colo. Const., Art. X, Sec. 3 (2)(a)).

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.

C.R.S. 39-1-104 (16)(a)(b) and (c) outlined how this was to be accomplished by stating that during each property tax year, the director of research of the legislative council shall contract with a private person for a valuation for assessment study to be conducted as set forth in this subsection (16). The study shall be conducted in all counties of the state to determine whether or not the assessor of each county has, in fact, used all manuals, formulas, and other directives required by law to arrive at the valuation for assessment of each and every class of real and personal property in the county. The person conducting the study shall sample each class of property in a statistically valid manner, and the aggregate of such sampling shall equal at least one percent of all properties in each county of the state. The sampling shall show that the various areas, ages of buildings, economic conditions, and uses of properties have been sampled. Such study shall be completed, and a final report of the findings and conclusions thereof shall be submitted to the state board of equalization, by September 15 of the year in which the study is conducted.

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.

RMVS has completed the Property Assessment Study for 2008 and is pleased to report its findings for Washington County in the following report.



# REGIONAL/HISTORICAL SKETCH OF WASHINGTON COUNTY

## Regional Information

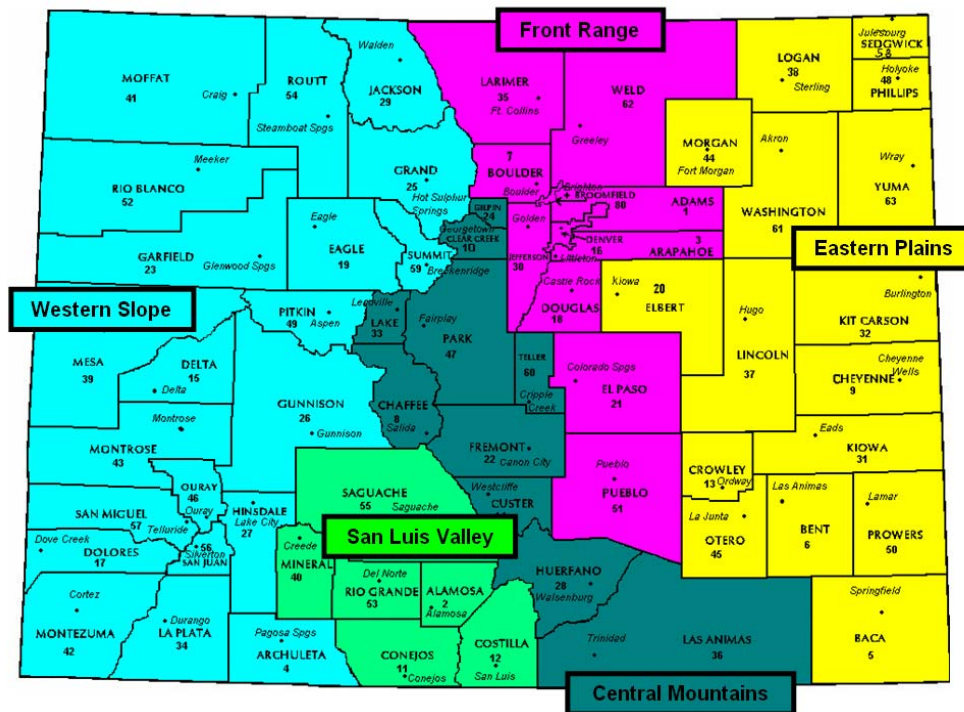
Washington County is located in the Eastern Plains region of Colorado. The Eastern Plains of Colorado refer to the region of the U.S. State of Colorado on the east side of the Rocky Mountains, and east of the population centers of the Front Range.

The Eastern Plains are part of the High Plains, which are the westernmost portion of the Great Plains region. They are among the most sparsely populated areas in the continental United States. Most of the

Eastern Plains region lies within Colorado's 4th congressional district.

The Eastern Plains includes Baca, Bent, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln, Logan, Morgan, Otero, Phillips, Prowers, Sedgwick, Washington, and Yuma counties.

Even though Colorado is considered a quintessential Western state, this region is often considered the Midwest.



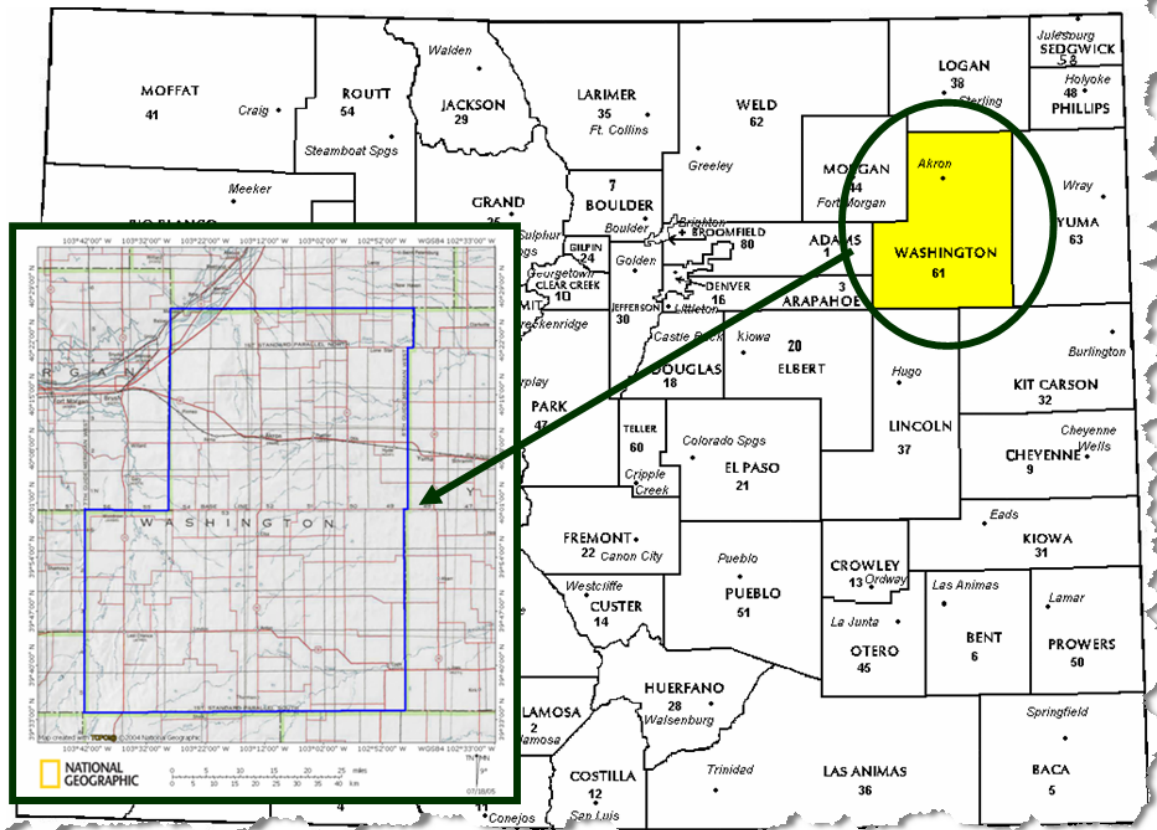


## Historical Information

Washington County has a population of approximately 4,630 people with 2 people per square mile, according to the U.S. Census Bureau's 2006 estimated population data.

The County, named for President George Washington, was established in 1887 with an area of 2,526 square miles. The county

seat, Akron, was named by Mrs. Calvert, wife of a railroad official, for her hometown of Akron, Ohio. The name is Greek for 'summit' and was deemed appropriate because the town was supposedly built on the highest point of the Chicago, Burlington & Quincy Railroad. (William Bright, Colorado Place Names, 3rd Edition, Johnson Books, 2004, p. 183 and 3)







# RATIO ANALYSIS

## Methodology

All significant classes of properties were analyzed. Sales were collected for each property class over the appropriate sale period, which was typically defined as the 18-month period between January 2005 and June 2006. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2006 in 6-month increments. If there were still fewer than 30 sales, supplemental appraisals were performed and treated as proxy sales. Residential sales for all counties using this method totaled at least 30 per county. For commercial sales, the total number analyzed was allowed, in some cases, to fall below 30. There were no sale quantity issues for counties requiring vacant land analysis or condominium analysis. Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and 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 insure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method were 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 Washington County are:

Washington County Ratio Grid						
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis	
Commercial/Industrial	32	0.992	1.150	18.9	Compliant	
Condominium	N/A	N/A	N/A	N/A	N/A	
Single Family	59	0.985	1.045	13.2	Compliant	
Vacant Land	N/A	N/A	N/A	N/A	N/A	

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

Washington County was tested for the equal treatment of sold and unsold properties to insure 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.

All qualified residential and commercial class properties were examined using the unit value method, where the actual value per square foot was compared between sold and unsold properties. A class was considered qualified if it met the criteria for the ratio analysis. The median value per square foot for both groups was compared from an appraisal and statistical perspective. If no significant difference was indicated, then we concluded that no further testing was warranted and that the county was in compliance in terms of sold/unsold consistency.

If either residential or commercial differences were significant using the unit value method, or if data limitations made the comparison invalid, then the next step was to perform a ratio analysis comparing the 2006 and 2008 actual values for each qualified class of property. All qualified vacant land classes were tested using this method. The sale property ratios were arrayed using a range of 0.8 to 1.5, which theoretically excluded changes between years that were due to other unrelated changes in the property. These ratios were also stratified at the appropriate level of analysis. Once the percent change was determined for each appropriate class and sub-class, the next step was to select the

unsold sample. This sample was at least 1% of the total population of unsold properties and excluded any sale properties. The unsold sample was filtered based on the attributes of the sold dataset to closely correlate both groups. The ratio analysis was then performed on the unsold properties and stratified. The median and mean ratio distribution was then compared between the sold and unsold group. A non-parametric test such as the Mann-Whitney test for differences between independent samples was undertaken to determine whether any observed differential was significant. If this test determined that the unsold properties were treated in a manner similar to the sold properties, it was concluded that no further testing was warranted and that the county was in compliance.

If a class or sub-class of property was determined to be significantly different by this method, the final step was to perform a multi-variate mass appraisal model that developed ratio statistics from the sold properties that were then applied to the unsold sample. This test compared the measures of central tendency and confidence intervals for the sold properties with the unsold property sample. If this comparison was also determined to be significantly different, then the conclusion was that the county had treated the unsold properties in a different manner than sold properties.

These tests were supported by both tabular and chart presentations, along with saved sold and unsold sample files.



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

### Conclusions

After applying the above described methodologies, it is concluded that Washington County is reasonably treating

its sold and unsold properties in the same manner.

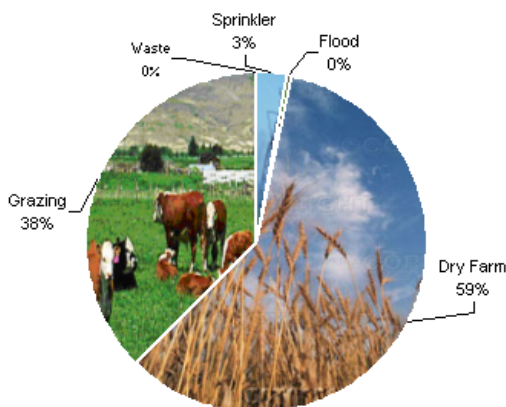
### Recommendations

None

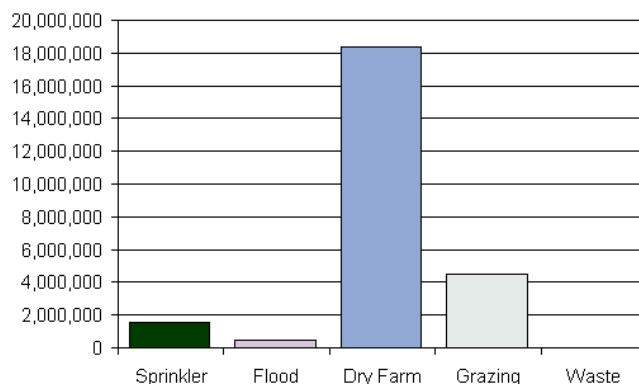


## AGRICULTURAL LAND STUDY

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:



Washington County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	RMVS Total Value	Ratio
4107	Sprinkler	41,034	38.43	1,577,133	1,706,804	0.92
4117	Flood	6,991	71.53	500,049	555,847	0.90
4127	Dry Farm	881,285	20.85	18,378,806	17,210,657	1.07
4147	Grazing	559,378	8.07	4,516,018	4,516,018	1.00
4167	Waste	187	1.63	305	305	1.00
<b>Total/Avg</b>		<b>1,488,875</b>	<b>16.77</b>	<b>24,972,311</b>	<b>23,989,631</b>	<b>1.04</b>

### Recommendations

None

## Agricultural Outbuildings

### Methodology

A sample of various use types of agricultural outbuildings with varying ages was reviewed to see if the guidelines found in the Assessor's Reference Library (ARL) Volume 3, pages 5.73 through 5.78 were being followed.

### Conclusions

Washington County has complied with all of the recommended procedures provided by the Division of Property Taxation for the valuation of agricultural outbuildings.

### 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. RMVS has used the above-cited statutes as a guide in our study of the county's procedures and practices for verifying sales.

RMVS reviewed the sales verification procedures in 2008 for Washington County. This study was conducted by checking selected sales from the master sales list for the valuation period. Specifically RMVS selected 8 sales listed as unqualified.

All of the sales in the unqualified sales sample had reasons that were clear and supportable.

### **Conclusions**

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

### **Recommendations**

None





## ECONOMIC AREA REVIEW AND EVALUATION

### **Methodology**

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

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

### **Recommendations**

None



## NATURAL RESOURCES

### Earth and Stone Products

#### Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Natural Resource Valuation Procedures, the income approach was the primary method applied to find value for production of earth and stone products. The number of tons was multiplied by an economic location factor that represented the landlord's royalty. The landlord's share was multiplied by a recommended Hoskold factor to determine the actual value. The Hoskold factor was determined by the life of the reserves, or the lease. The value was primarily 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

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

#### Recommendations

None

### Producing Oil and Gas Procedures

#### Methodology

The Colorado Revised Statutes (CRS) in Article 39, Section 7, and the Assessor's Reference Library (ARL), Volume 3 were the basis for valuing the production of gas property. For gas, the gross volume of thousand cubic feet (MCF) sold was multiplied by the current average field price per unit sold. For Oil, the gross volume of barrels sold was multiplied by the current average field price per unit sold. Any federal, state or local government ownership (royalty) was deducted from the gross value sold to arrive at actual value.

#### Conclusions

County valued oil and gas production using acceptable appraisal procedures.

#### Recommendations:

None



## VACANT LAND

**Washington County is exempt from the Vacant Land Subdivision  
Discount Study.**

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## POSSESSORY INTEREST PROPERTIES

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 39-1-103 (17)(a) (II) C.R.S. Possessory Interest is defined by the Property Tax Administrator's Publication ARL Volume 3, Section 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.

Washington County has been reviewed for their procedures and adherence to guidelines when assessing and valuing

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**

Washington 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

Washington 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 requirements are outlined as follows:

Use ARL Volume 5 including current discovery, classification, and documentation procedures, and including 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, RMVS 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.

Washington 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
- 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.

Washington County submitted their personal property written audit plan and was current for the 2008 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
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Non-filing Accounts - Best Information Available
- Accounts close to the \$2,500 actual value exemption status
- Accounts protested with substantial disagreement

### **Conclusions**

Washington 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



## RMVS AUDITOR STAFF

**Mark Linné, MAI, CRE, CAE, ASA, FRICS,** *Corporate Managing Director of RMVS*

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**Uwe Hohoff,** *Chief Statistician for RMVS, Audit Division*

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**Carl W. Ross,** *Agricultural Coordinator and Supervisor for RMVS*

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**Katie Linné,** *Administrative Assistant*



# APPENDICES





## STATISTICAL ANALYSIS WASHINGTON COUNTY 2008

### I. OVERVIEW

Washington County is located in eastern Colorado. The County has a total of 7,148 parcels based on the data submitted by the County Assessor's office in 2008. The breakdown by property type is listed in the table below.

**PROPERTY TYPE**

	Frequency	Percent
VACANT LAND	326	4.6
RESIDENTIAL	1,262	17.7
COMMERCIAL	224	3.1
INDUSTRIAL	3	.0
OTHER	5,333	74.6
Total	7,148	100.0

#### **Vacant Land**

The vacant land class of properties has a total of 326 parcels. Since the total parcel count for vacant land is less than 1,200, it does not meet the audit requirements for performing a sales ratio study.

#### **Residential**

The residential subclass category has a total of 1,262 parcels. Over 91% of the parcels have a single-family (1212) subclass code. The remaining parcels in this category are mobile homes and multi-unit properties.



**SUBCLASS CODE**

	Frequency	Percent
1212 Single Family Residence	1,154	91.4
1215 Duplexes-Triplexes	5	.4
1220 Multi-Units (4-8)	1	.1
1225 Multi-Units (9 & Up)	7	.6
1235 Manuf Housing (Mobile Homes)	94	7.4
1240 Manuf Housing (Land, Park, Etc.)	1	.1
Total	1,262	100.0

**Commercial/Industrial**

The commercial/industrial subclass category has a total of 227 properties. This category represents 3.1% of the total property inventory. The majority (98%) of these parcels have a commercial use. The breakdown by subclass code is listed below.

**SUBCLASS CODE**

	Frequency	Percent
2120 Offices	1	.4
2125 Recreation	2	.9
2130 Special Purpose	8	3.5
2135 WareHouse/Strg	19	8.4
2212 Merchandising	28	12.3
2215 Lodging	8	3.5
2220 Offices	22	9.7
2225 Recreation	4	1.8
2230 Special Purpose	69	30.4
2235 WareHouse/Strg	63	27.8
3215 Manuf/Processing	3	1.3
Total	227	100.0

**Other**

The majority of the remaining 5,333 parcels have an agricultural subclass code.



## II. SALES FILE

The sale file provided by the Washington County Assessor's Office contained 2,581 sales between the dates of July 2001 and June 2006. The breakdown of sales activity by sale month and year is as follows:

Count		SALE YEAR						Total
		2001	2002	2003	2004	2005	2006	
SALE MONTH	January	0	76	37	49	38	26	226
	February	0	48	57	42	34	40	221
	March	0	37	53	42	58	40	230
	April	0	71	62	40	26	34	233
	May	0	45	55	55	38	77	270
	June	0	56	35	39	29	41	200
	July	31	38	40	40	25	0	174
	August	37	43	38	36	65	0	219
	September	44	45	49	36	44	0	218
	October	54	36	35	36	37	0	198
	November	22	39	42	25	27	0	155
	December	40	47	51	58	41	0	237
Total		228	581	554	498	462	258	2,581

Once the sales were edited to keep the most recent sale, transactions that were coded as unqualified by the County were excluded from the analysis. The following table provides a breakdown of the qualified and unqualified sales.

### SALE INVESTIGATION CODE

	Frequency	Percent
QUALIFIED	267	15.6
UNQUALIFIED	1,449	84.4
Total	1,716	100.0

There were 267 sales that were classified as qualified. The breakdown of the sale property type for each sale year is as follows:



Count		SALE YEAR						Total
		2001	2002	2003	2004	2005	2006	
SALE TYPE	VACANT	1	2	5	2	4	0	14
	VACANT SALE WITH NON-VACANT LAND SUBCLASS	0	4	2	5	2	4	17
	RESIDENTIAL	19	35	45	48	41	18	206
	COMM/IND	1	8	2	5	5	3	24
	IMPROVED SALE WITH VACANT SUBCLASS	0	1	1	0	1	0	3
	OTHER	0	1	0	0	2	0	3
Total		21	51	55	60	55	25	267

### III. RESIDENTIAL SALES RESULTS

For the residential analysis, 59 sales between the dates of January 2005 and June 2006 were analyzed. A breakdown of the sales by subclass is listed below.

#### SUBCLASS CODE

	Frequency	Percent
1212 Single Family Residence	58	98.3
1220 Multi-Units (4-8)	1	1.7
Total	59	100.0

These sales were used to perform a sales ratio analysis to determine whether the statutory guidelines for the level and quality of the assessments have been satisfied. In order to perform a sales ratio analysis all sales must reflect market conditions as of June 30, 2006.

Based on an examination of the sales file, the County did not apply time adjustments to the sales during this time period. The following table outlines the sales ratio statistics for all residential properties in Washington County.

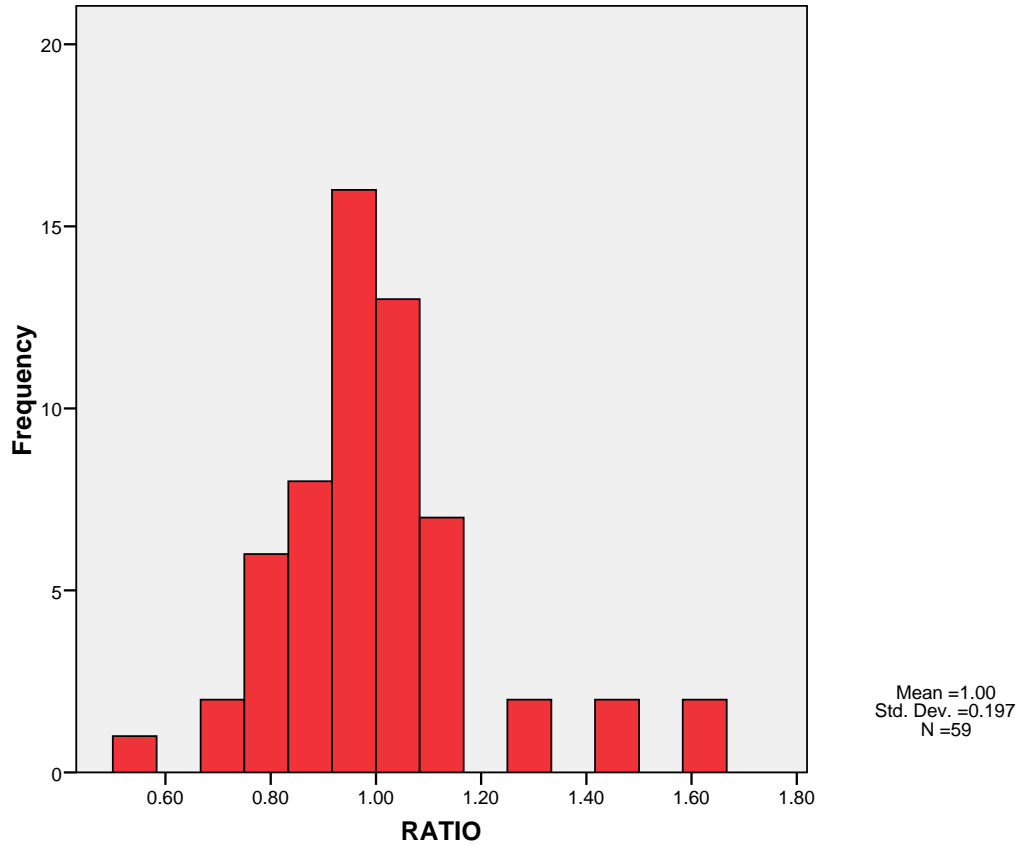
#### Ratio Statistics

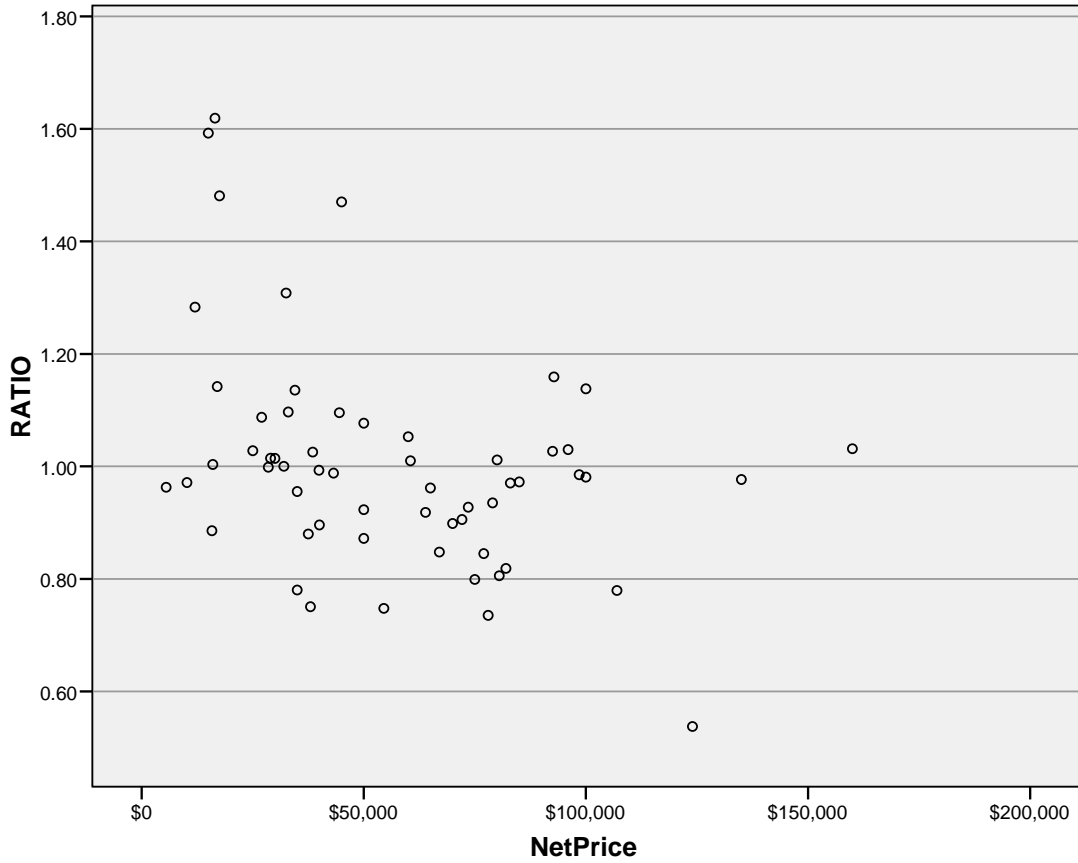
Mean	1.002
Median	.985
Weighted Mean	.959
Price Related Differential	1.045
Coefficient of Dispersion	.132

$$\text{RATIO} = \text{CURRENT ASMT} / \text{TASP}$$



The residential sale ratios are in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall sales. The following graphical exhibits describe further the sales ratio distribution for all of these properties:



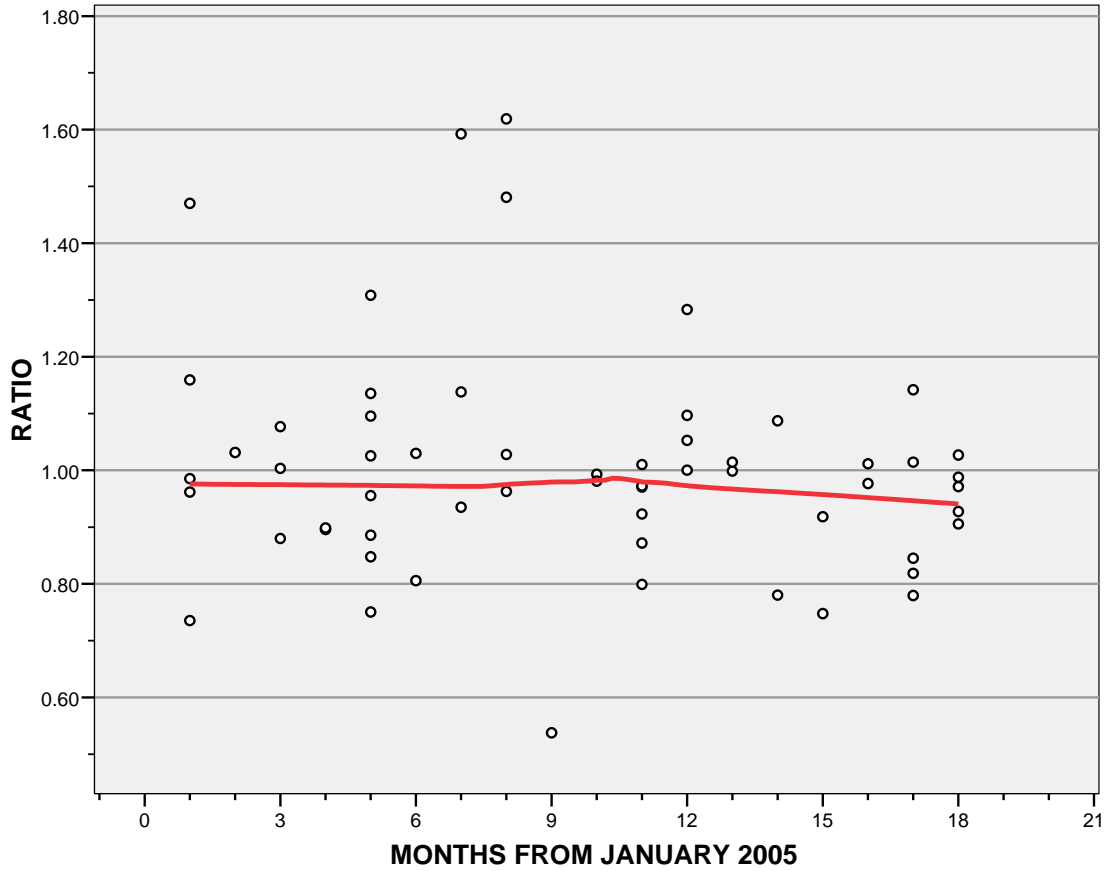


### Residential Market Trend Analysis

We verified that market trending was accounted for in the residential valuations by analyzing the sale ratios over the 18 month time period. The following graph illustrates a relatively horizontal pattern indicating no significant trend in sale ratios during this time period.



### Sale Ratio by Months



### Sold/Unsold Analysis

For the 2007 revaluation year audit, an analysis was performed that confirmed that the median assessed value per square foot for sold and unsold residential property was similar. Since tax year 2008 is the intervening year, this relationship should not change. If there is no change in either category, the conclusions from the 2007 audit would also be applicable to the current year.



**2007 - 2008 PERCENT CHANGE**

CHANGE		
CATEGORY	Median	N
SOLD	.0000	59
UNSOLD	.0000	1,196

The median percent change table of sold and unsold residential properties indicates that there is no change in the residential category. Therefore, we can conclude that the analysis performed for the 2007 audit is also applicable for the 2008 intervening year.

**IV. COMMERCIAL/INDUSTRIAL SALES RESULTS**

For the commercial/industrial analysis, 24 sales between the dates of July 2001 and June 2006 were analyzed. In addition to the 24 sales, 8 supplemental sales were added to bring the total sale count to 32.

In order to perform a sales ratio analysis all commercial/industrial sales must reflect market conditions as of June 30, 2006. Based on an examination of the sales file, the County did not apply time adjustments to the sales during this time period. The following table outlines the sales ratio statistics for all commercial/industrial properties in Washington County.

**Ratio Statistics**

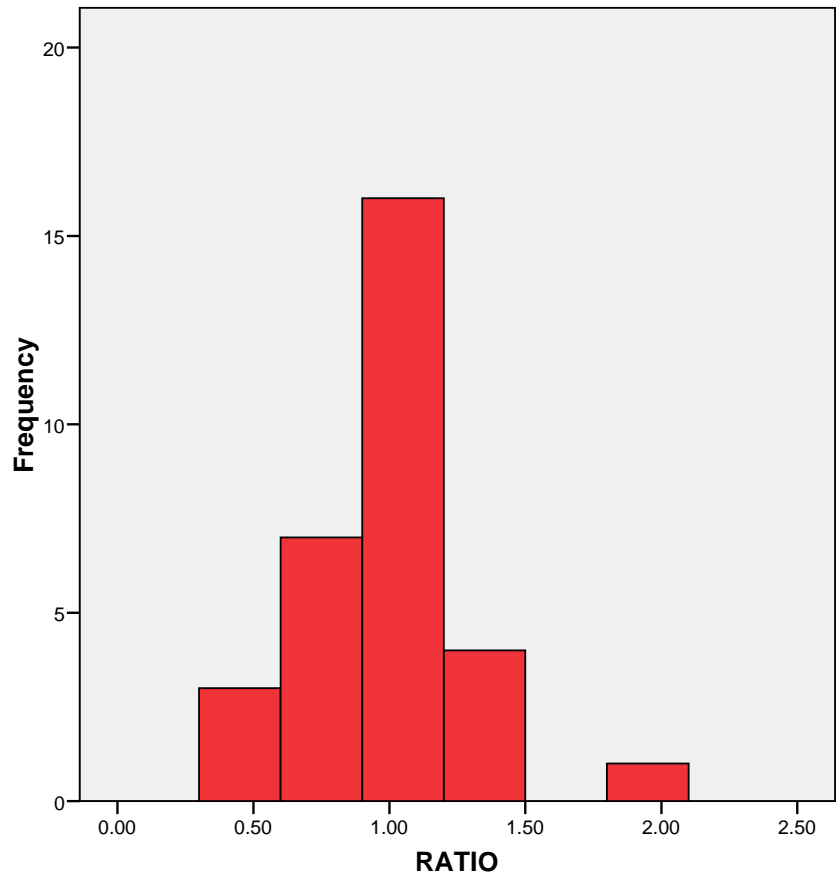
Mean	.974
Median	.992
Weighted Mean	.847
Price Related Differential	1.150
Coefficient of Dispersion	.189

RATIO = CURRENT ASMT / NETPRICE

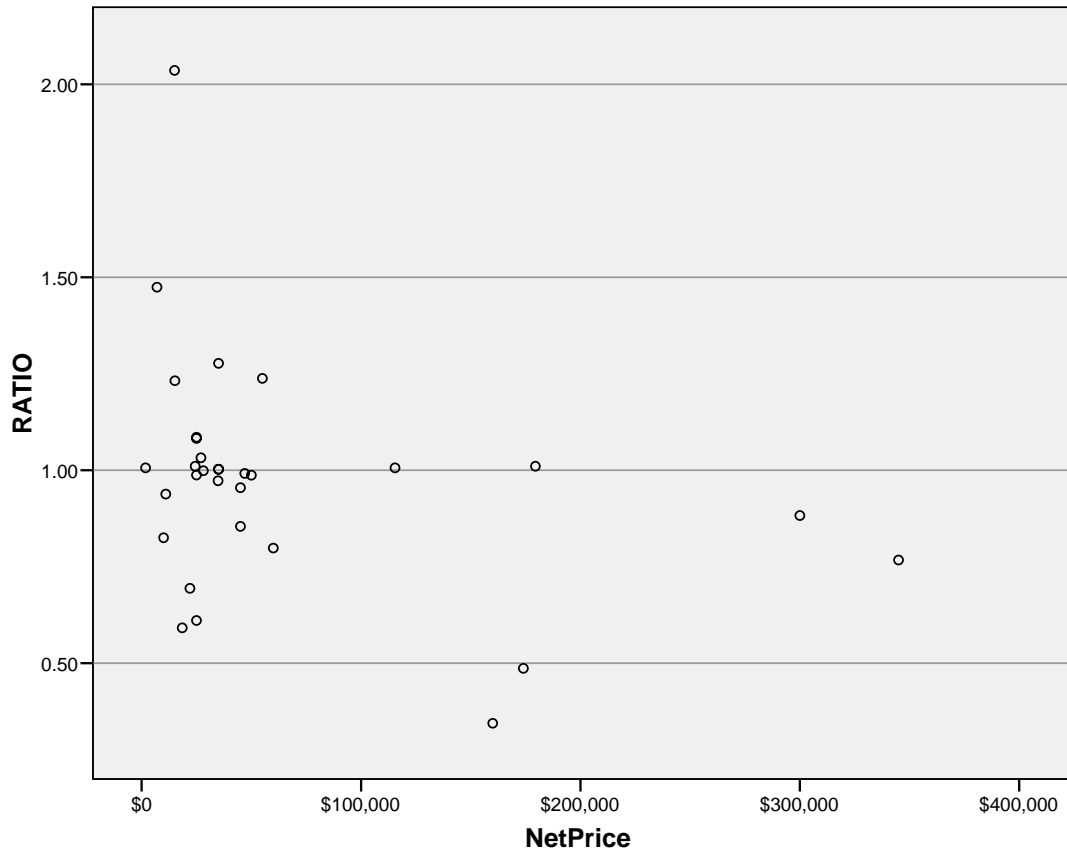
*Note: 1 non-supplemental sale with a sale ratio > 2.7 was excluded from the analysis.*

The above ratios are in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall sales. The following graphical exhibits describe further the sales ratio distribution for all of these properties:





Mean =0.97  
Std. Dev. =0.303  
N =31

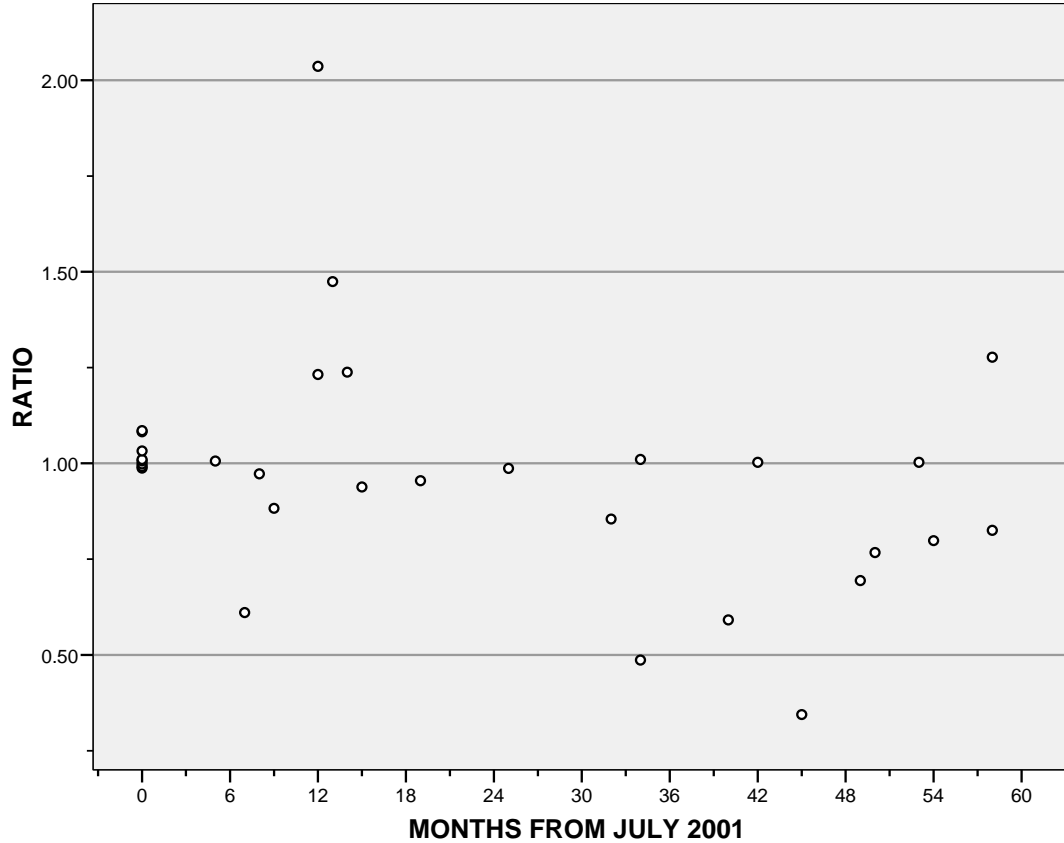


### Commercial Market Trend Analysis

Sale ratios were analyzed over the 60-month time period to determine whether market trending was accounted for in the commercial valuations. The following graph illustrates that there is no consistent trend in sale ratios during this time period.



### Sale Ratio by Months



### Sold/Unsold Analysis

For the 2007 revaluation year audit, an analysis was performed that confirmed that the median change in value between sold and unsold commercial/industrial property was consistent. Since tax year 2008 is the intervening year, this relationship should not change. If there is no change in either category, the conclusions from the 2007 audit would also be applicable for the current year.



**2007 - 2008 PERCENT CHANGE**

CHANGE

CATEGORY	Median	N
SOLD	.0000	27
UNSOLD	.0000	199

The median percent change table of sold and unsold commercial/industrial property indicates that there is no change in either category. Therefore, we can conclude that the analysis performed for the 2007 audit is also applicable for the 2008 intervening year.

**V. VACANT LAND SALE RESULTS**

Based on the number of properties classified as vacant land (less than 1,200), this class of properties was excluded from ratio analysis for Washington County.

**VI. AGRICULTURAL IMPROVEMENTS ANALYSIS**

For the 2007 revaluation year audit, a comparison was made between the improvement value per square foot of agricultural residential improvements and the rates assigned to single-family residential improvements in Washington County. This analysis concluded that the County valued its agricultural residential improvements in a manner consistent with the single-family residential improvements. Since tax year 2008 is the intervening year, this relationship should not change. If there is no change in the improvement values for both categories, the conclusions from the 2007 audit would also be applicable for the current year.

**2007 - 2008 IMPROVEMENT CHANGE**

IMPCHANGE

SUBCLASS CODE	Median	N
1212 Single Family Residence	.0000	1,148
4277 Farm/Ranch Residences	.0000	847

Since single family and agricultural improvement values did not change, we can conclude that the analysis performed for the 2007 audit is applicable for the 2008 intervening year.

**VII. CONCLUSIONS**

Based on this statistical analysis, there are no intervening year compliance issues concluded for Washington County.