



2008  
BROOMFIELD 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*



## TABLE OF CONTENTS

Introduction.....	3
Regional/Historical Sketch of Broomfield County.....	5
Ratio Analysis.....	7
Time Trending Verification .....	9
Sold/Unsold Analysis .....	10
Agricultural Land Study.....	12
<i>Agricultural Land</i> .....	12
<i>Agricultural Outbuildings</i> .....	13
Sales Verification .....	14
Economic Area Review and Evaluation .....	15
Natural Resources.....	16
Vacant Land.....	17
<i>Subdivision Discounting</i> .....	17
Possessory Interest Properties.....	18
Personal Property Audit .....	19
RMVS Auditor Staff.....	21
Appendices .....	22



## 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 Broomfield County in the following report.



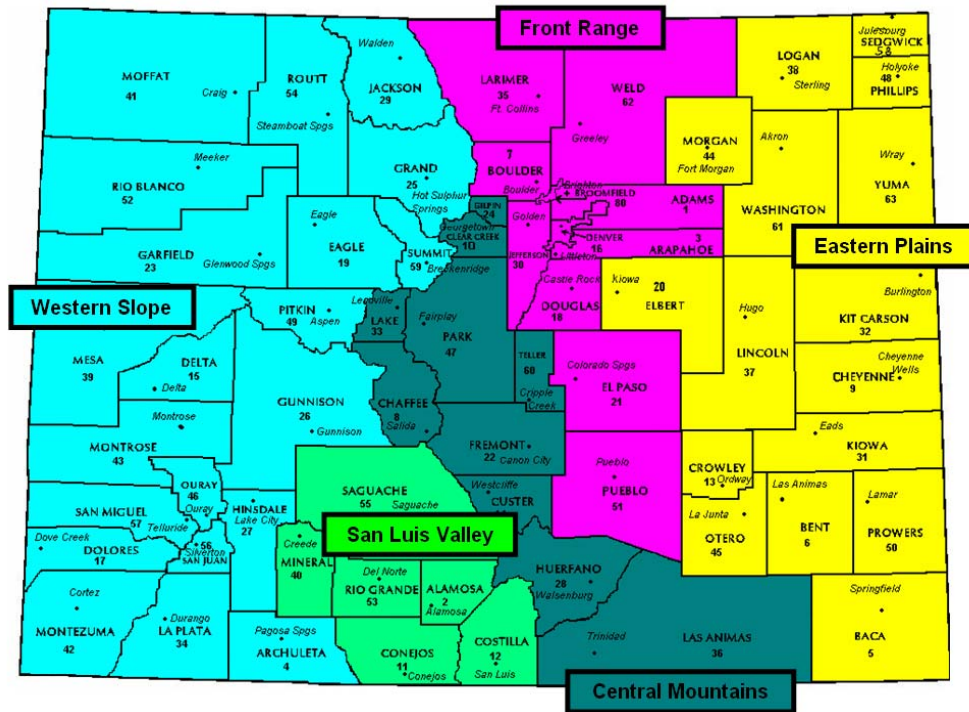
# REGIONAL/HISTORICAL SKETCH OF BROOMFIELD COUNTY

## Regional Information

Broomfield 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 of Colorado which are just east of the foothills of the Front Range, from which the region takes its name. The region contains the largest cities and the majority of the population of Colorado, aligned in a north-south configuration on the western edge of the Great Plains, where they meet the Rockies. Geologically, the region lies mostly within the Colorado Piedmont, in the valley

of the South Platte and Arkansas rivers on the east side of the Rockies.

The Front Range includes Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld counties. The Colorado Front Range communities include (in a roughly north-to-south order): Fort Collins, Greeley, Loveland, Longmont, Boulder, Denver-Aurora Metropolitan Area, Castle Rock, Colorado Springs, Pueblo.



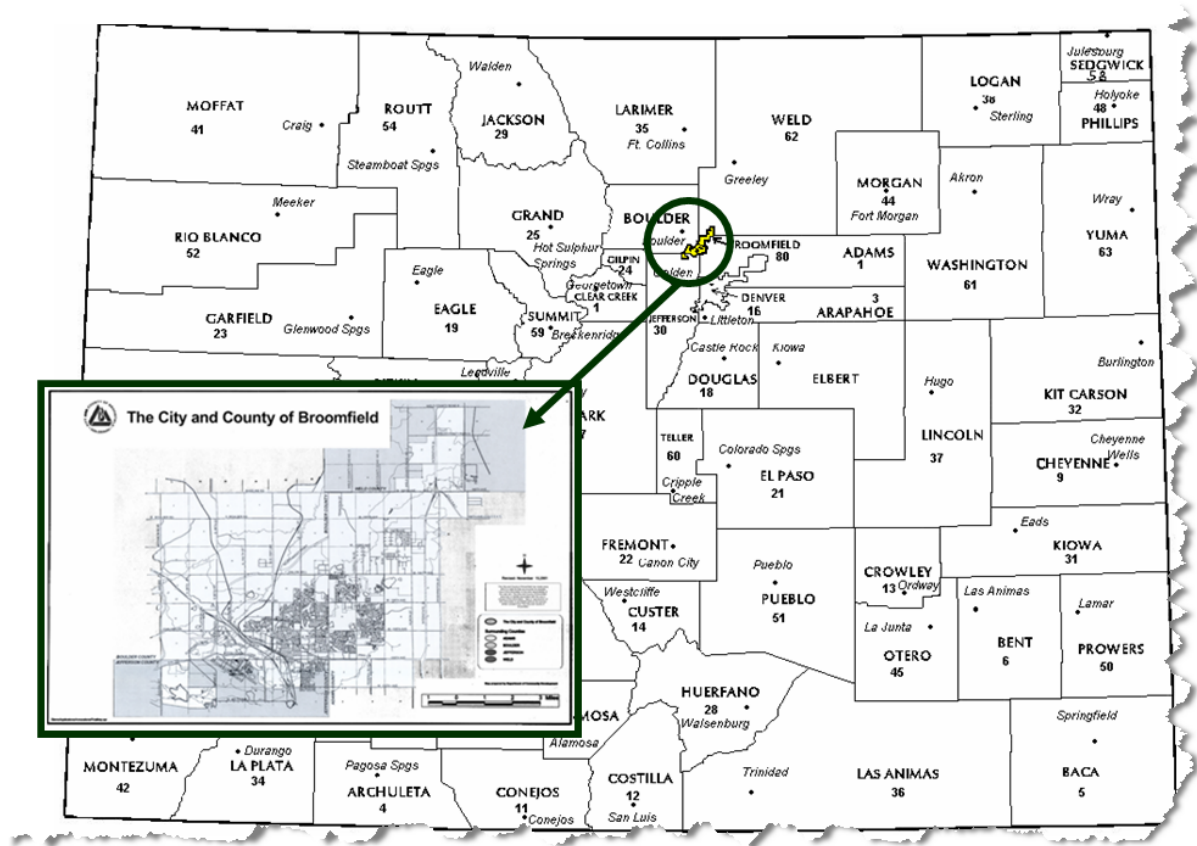


## Historical Information

Broomfield County has a population of approximately 45,116 people with 1263 people per square mile, according to the U.S. Census Bureau's 2006 estimated population data.

The city and county is on US 287, adjacent to Adams, Boulder, and Jefferson Counties. It became the newest county in Colorado in 2001 and was originally known as Zang's Spur, for Phillip Zang, Denver businessman and brewer, who bred percheron horses nearby. When the Denver and Salt Lake Railroad established a station here, the present name was adopted. Railroad officials noticed a small field of broom corn nearby, and suggested the name Broomfield.

Broomfield is the only city in the state to lie in portions of four counties. Due to the difficulties and confusion with services that needed to be provided from these four counties, the residents proposed a constitutional amendment creating a City and County of Broomfield so the services would come from one jurisdiction. The amendment passed on November 3, 1998 and the City and County of Broomfield became a recognized City and County in November of 2001 (William Bright, Colorado Place Names, 3rd Edition, Johnson Books, 2004, p.25).







# 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 Broomfield County are:

Broomfield County Ratio Grid						
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis	
Commercial/Industrial	38	0.991	1.051	5.4	Compliant	
Condominium	N/A	N/A	N/A	N/A	N/A	
Single Family	2,175	0.993	1.006	5	Compliant	
Vacant Land	34	0.993	1.063	8.2	Compliant	

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

Broomfield 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	Compliant

### Conclusions

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

sold and unsold properties in the same manner.

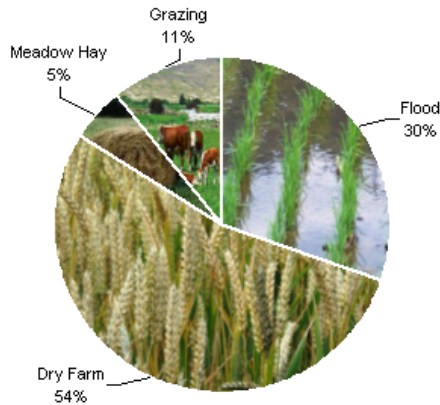
### Recommendations

None

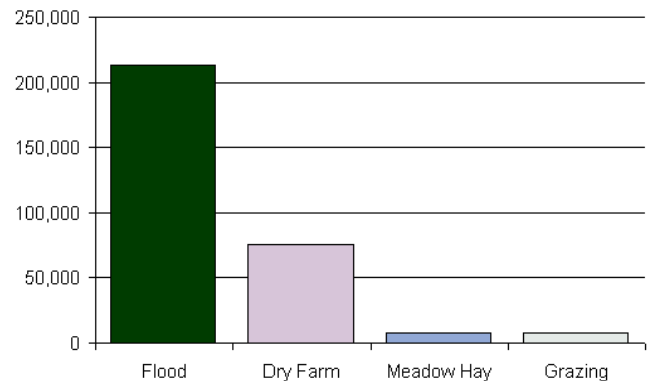


## AGRICULTURAL LAND STUDY

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:



Broomfield County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	RMVS Total Value	Ratio
4117	Flood	1,893	112.83	213,597	213,597	1.00
4127	Dry Farm	3,371	22.39	75,464	75,464	1.00
4137	Meadow Hay	321	23.88	7,665	7,665	1.00
4147	Grazing	683	10.99	7,505	7,505	1.00
Total/Avg		6,268	48.54	304,230	304,230	1.00

### 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

Broomfield County has developed a written plan for the implementation 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 Broomfield County. This study was conducted by checking selected sales from the master sales list for the valuation period. Specifically RMVS selected 30 sales listed as unqualified.

All but two of the sales selected in the sample gave reasons that were clear and supportable. Two sales had insufficient documentation.

### **Conclusions**

Broomfield County appears to be doing a good job of verifying their sales. There are no recommendations.

### **Recommendations**

None





## ECONOMIC AREA REVIEW AND EVALUATION

### **Methodology**

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

### **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

## Subdivision Discounting

In 2008 subdivisions were reviewed in Broomfield County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14) and by applying the recommended methodology in ARL Vol 3, Chap 4. Subdivision Discounting in the intervening year was accomplished by reducing the absorption period by one year. In instances where the number of sales within an approved plat was less than the absorption rate per year calculated for the

plat, the absorption period was left unchanged.

### Conclusions

Broomfield 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 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.

Broomfield 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**

Broomfield 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

Broomfield 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.

Broomfield 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
- Chamber of Commerce/Economic Development Contacts
- 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.

Broomfield 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:

- Accounts with obvious discrepancies
- New businesses filing for the first time



- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Non-filing Accounts - Best Information Available
- Accounts close to the \$2,500 actual value exemption status
- Accounts protested with substantial disagreement

### **Conclusions**

Broomfield 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*

**Suzanne J. Howard,** *Audit Manager for RMVS*

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

**James Gresham,** *Audit Chief Data Analyst for RMVS*

**Garth Thimgan, CAE,** *General Audit Support and Consultant for RMVS*

**Helen D. Powszukiewicz,** *General Audit Support Administrative Assistant*

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

**Cathie E. Ross,** *General Audit Support Administrative Assistant*

**Katie Linné,** *Administrative Assistant*



# APPENDICES





## STATISTICAL ANALYSIS BROOMFIELD COUNTY 2008

### I. OVERVIEW

Broomfield County is located in the Denver metropolitan area. The county has a total of 20,415 real property parcels, according to 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	1,448	7.1%
Residential	16,647	81.5%
Commercial	477	2.3%
Industrial	152	0.7%
Other	1,691	8.3%
Total	20,415	100.0%

### Vacant Land

The vacant land class of properties has a total of 1,448 parcels. The majority of these parcels fall into the residential (100,1112) or support of residential use category (1100,1110). The remaining vacant parcels are mix of commercial, industrial, multi-family, mobile home or have a subclass codes that is delineated by the acreage of the parcel.



**SUBCLASS CODE**

	Frequency	Percent
100 Residential Lots	796	55.0
200 Commercial Lots	136	9.4
300 Industrial Lots	28	1.9
510 Less Than 1.0 ACRES	7	.5
520 1.0 to 4.99 ACRES	13	.9
530 5.0 to 9.99 ACRES	2	.1
540 10.0 to 34.99 ACRES	4	.3
550 35.0 to 99.99 ACRES	2	.1
600 Minor Structures on Vacant Land	5	.3
1100 Residential HOA Common Area Land	316	21.8
1110 Residential HOA Common Area Improvements	30	2.1
1112 Single Family Residence Land	27	1.9
1120 Multi-Units (4-8) Land	12	.8
1125 Multi-Units (9 & Up) Land	38	2.6
1135 Manuf Housing (Mobile Homes) Land	2	.1
2000 Commercial Condo Common Area	22	1.5
3000 Industrial Common Area	8	.6
Total	1448	100.0

**Residential**

The residential subclass category has a total of 16,647 parcels. Over 91% of the parcels have a single-family subclass code of 1212. The majority of the remaining parcels in this category are condominiums (1230).

**SUBCLASS CODE**

	Frequency	Percent
1212 Single Family Residence	15,200	91.3
1215 Duplexes-Triplexes	25	.2
1230 Condominiums	1,419	8.5
1240 Manuf Housing (Land, Park, Etc.)	3	.0
Total	16,647	100.0



## Commercial/Industrial

The commercial/industrial subclass category has a total of 629 properties. This category represents 3% of the total real property inventory. The majority (76%) of these parcels have a commercial use. The breakdown by subclass code is listed below.

### SUBCLASS CODE

	Frequency	Percent
2022 Recreation Possessory Interest	2	.3
2023 Other Commercial Possessory Int	3	.5
2112 Merchandising	5	.8
2120 Offices	3	.5
2125 Recreation	8	1.3
2130 Special Purpose	12	1.9
2135 WareHouse/Strg	7	1.1
2212 Merchandising	87	13.8
2215 Lodging	4	.6
2220 Offices	90	14.3
2225 Recreation	7	1.1
2230 Special Purpose	133	21.1
2235 WareHouse/Strg	55	8.7
2240 Multi-Use (3+)	1	.2
2245 Commercial Condo	60	9.5
3112 Contract/Service	30	4.8
3115 Manuf/Processing	3	.5
3212 Contract/Service	29	4.6
3215 Manuf/Processing	22	3.5
3230 Industrial Condos	68	10.8
Total	629	100.0

## Other

The remaining parcels are a mix of agricultural, natural resource and exempt properties.

## Missing Abstract Codes

There are a total of 177 parcels that do not have an improved or vacant abstract code. The majority (140) of these parcels are located in tax area 457.



## II. SALES FILE

The sale file provided by the Broomfield County Assessor's Office contained 4,251 sales of real property. These sales had a sale date range of July 2004 thru June 2006. The breakdown of sales activity by sale month and year is as follows:

		SALE YEAR			Total
		2004	2005	2006	
SALE MONTH	January	0	130	118	248
	February	0	133	149	282
	March	0	185	207	392
	April	0	185	194	379
	May	0	194	218	412
	June	0	234	242	476
	July	164	210	0	374
	August	179	215	0	394
	September	175	187	0	362
	October	153	148	0	301
	November	146	168	0	314
	December	180	137	0	317
Total		997	2,126	1,128	4,251

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
MISSING CODE	2	.1
QUALIFIED	2978	79.6
UNQUALIFIED	762	20.4
Total	3742	100.0

*Note: In the unqualified category, there are a total of 217 sales that had no consideration for sale prices (i.e. NetPrice = 0).*



There were 2,978 sales that were classified as qualified. The breakdown of the sale property type is listed below.

**SALE TYPE**

	Frequency	Percent
VACANT	34	1.1
RESIDENTIAL	2,897	97.3
COMM/IND	38	1.3
IMPROVED SALE WITH VACANT SUBCLASS	6	.2
EXEMPT	2	.1
AGRICULTURE	1	.0
Total	2,978	100.0

**III. RESIDENTIAL SALES RESULTS**

For the residential analysis, 2,175 sales between the dates January 2005 thru June 2006 were analyzed. A breakdown of the sales by subclass is listed below.

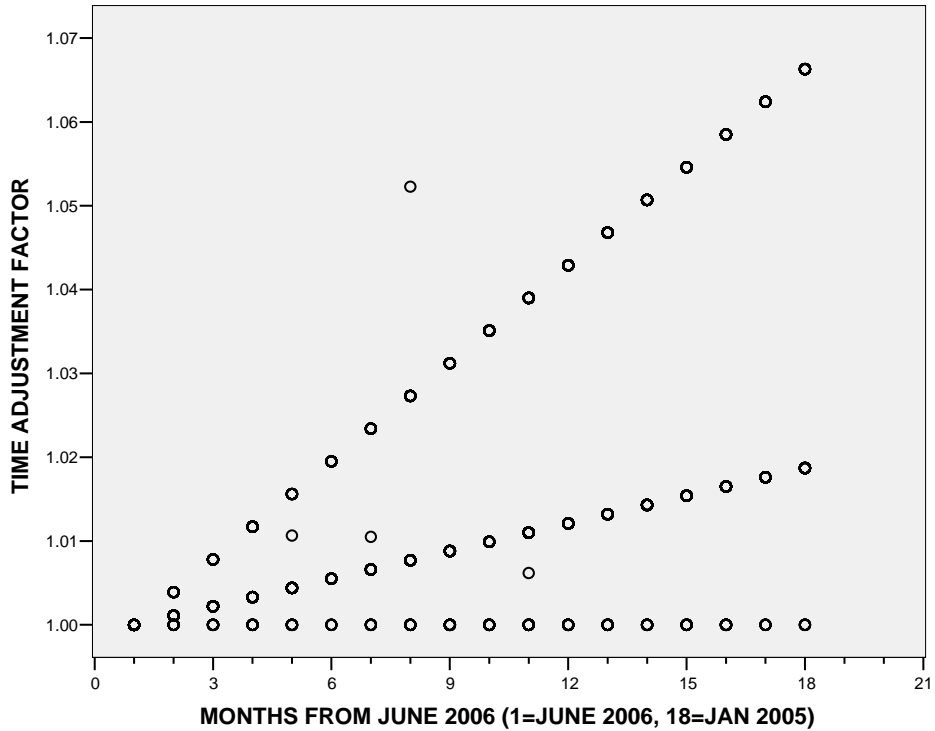
**SUBCLASS CODE**

	Frequency	Percent
1212 Single Family Residence	1,883	86.6
1230 Condominiums	292	13.4
Total	2,175	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 applied time adjustments to the majority of sales during this time period. The following graph illustrates the various time adjustment factors that were applied to the residential sales.



### BROOMFIELD COUNTY RESIDENTIAL TIME ADJUSTMENT FACTORS



The following table outlines sales ratio statistics for all residential properties in Broomfield County.

#### Ratio Statistics

Mean	.994
Median	.993
Weighted Mean	.988
Minimum	.714
Maximum	1.752
Price Related Differential	1.006
Coefficient of Dispersion	.050

Ratio = Current Asmt / TASP



A breakdown of the sales ratio statistics by residential subclass is described in the table below.

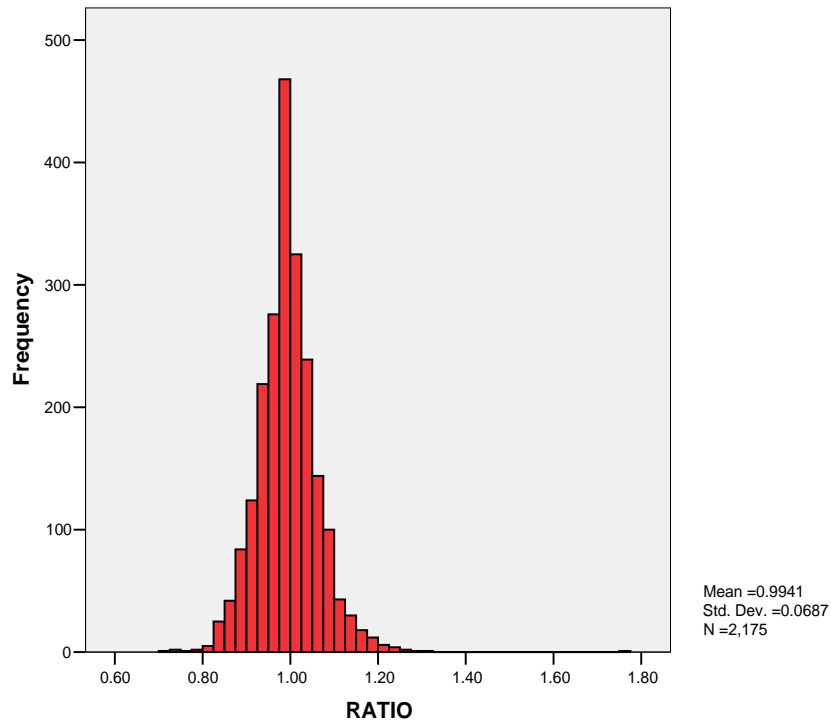
**Ratio Statistics**

Group	Mean	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
1212 Single Family Residence	.995	.993	.988	1.006	.053
1230 Condominiums	.989	.992	.987	1.003	.035
Overall	.994	.993	.988	1.006	.050

RATIO = Current Asmt / TASP

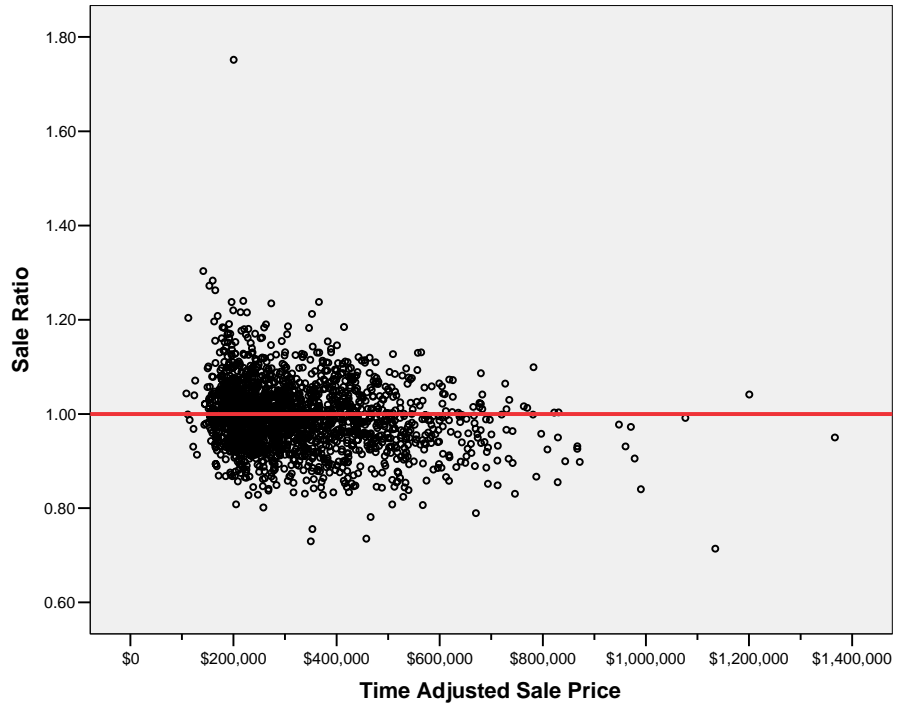
The above ratios are in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall sales. The following graphical exhibits describe further the sales ratio distribution for all of these properties:

**RESIDENTIAL SALE RATIO ANALYSIS**





### Sale Ratio By Sale Price



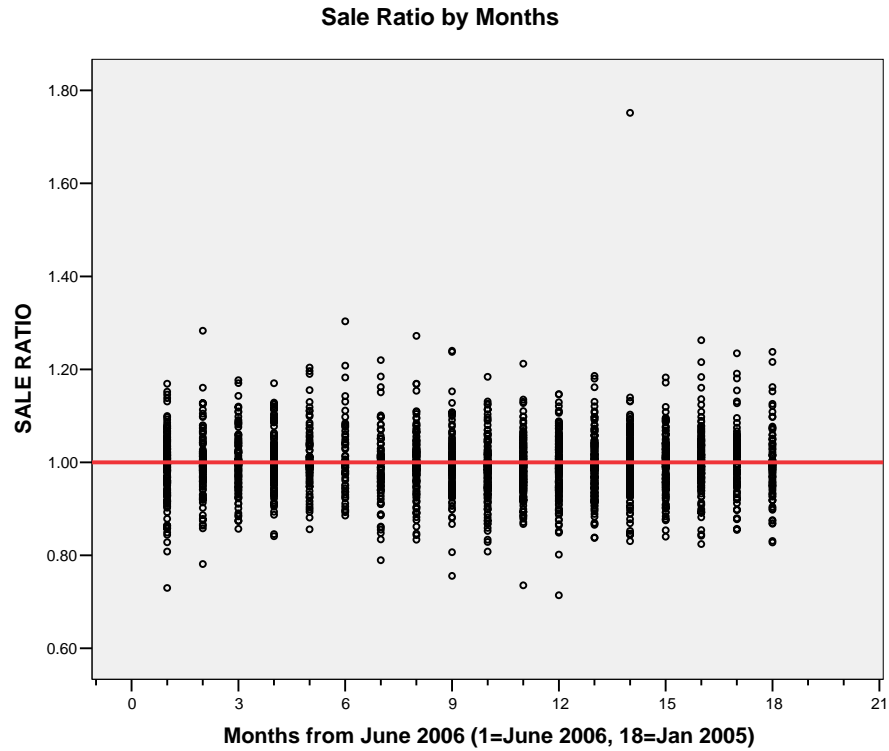
The above graphs indicate the distribution of the sale ratios are within state mandated limits, and that there are no significant price related differential issues.





## 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 horizontal pattern indicating no significant changes in sale ratios during this time period.



## Sold/Unsold Analysis

For the 2007 revaluation year audit, an analysis was performed that confirmed the average unit values of the sold and unsold residential properties were 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.



**Report**

**CHANGE**

SUBCLASS CODE	CATEGORY	Median	N
1212 Single Family Residence	SOLD	.0000	1,883
	UNSOLD	.0000	13,317
1230 Condominiums	SOLD	.0000	292
	UNSOLD	.0000	1,119

The above median percent change table of sold and unsold residential properties indicates 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 tax year.

**IV. COMMERCIAL/INDUSTRIAL SALES RESULTS**

For the commercial/industrial analysis, 38 sales between the dates of July 2004 and June 2006 were analyzed. A breakdown of the sales by subclass is listed below.

**SUBCLASS CODE**

	Frequency	Percent
2212 Merchandising	3	7.9
2220 Offices	6	15.8
2230 Special Purpose	6	15.8
2235 WareHouse/Strg	1	2.6
2245 Commercial Condo	7	18.4
3112 Contract/Service	1	2.6
3212 Contract/Service	2	5.3
3230 Industrial Condos	12	31.6
Total	38	100.0

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 any time adjustments to the commercial/industrial sales during this time period.



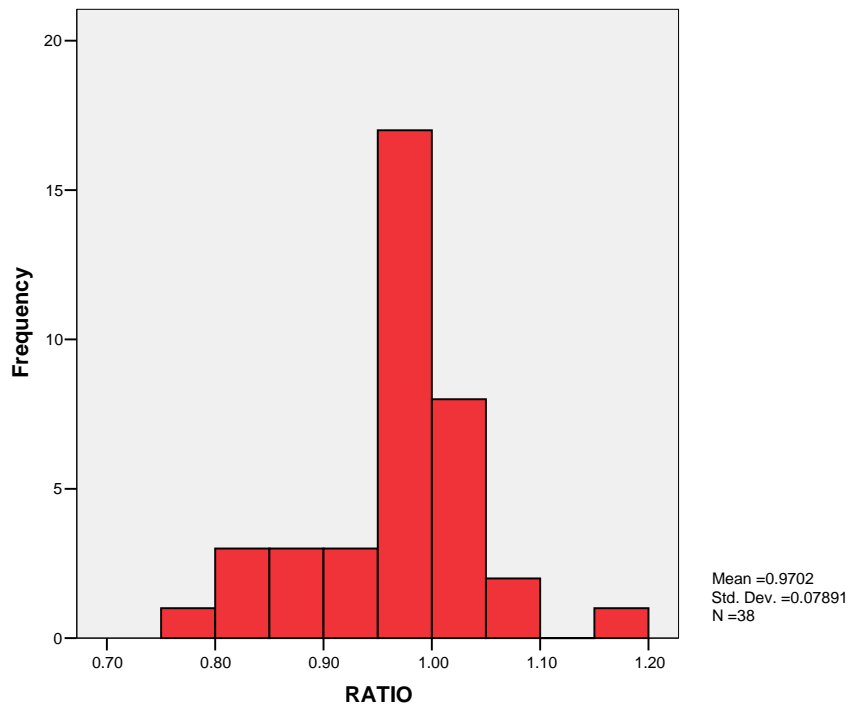
The following table outlines sales ratio statistics for commercial and industrial properties in Broomfield County.

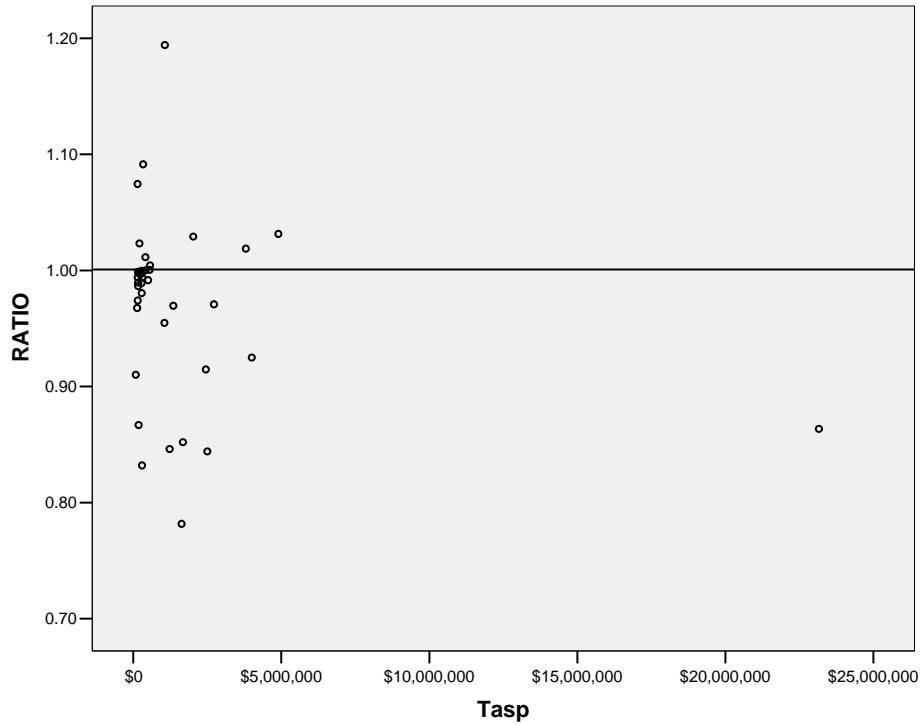
**Ratio Statistics**

Mean	.970
Median	.991
Weighted Mean	.923
Minimum	.782
Maximum	1.194
Price Related Differential	1.051
Coefficient of Dispersion	.054

RATIO = Current Total Asmt / TASP

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:



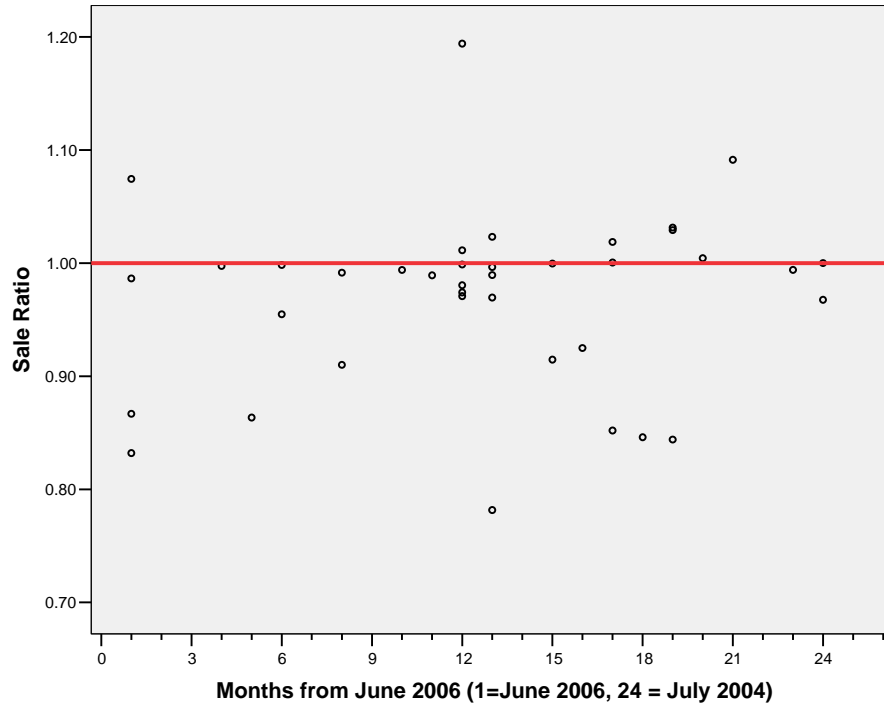


### Commercial Market Trend Analysis

The “Sales Ratio by Months” graph describes the sales ratios over the 24 month time period. Since a significant number of the commercial sales form a relatively tight cluster around 1.0, there is no bias in sales ratios during this time period.



### Sale Ratio By Months



### Sold/Unsold Analysis

For the 2007 revaluation year audit, an analysis was performed that confirmed the median change in value between sold and unsold commercial/industrial 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 for the current year.



**2007-2008 PERCENT CHANGE**

CHANGE

SUBCLASS CODE	CATEGORY	Median	N
2212 Merchandising	SOLD	.0000	3
	UNSOLD	.0000	83
2220 Offices	SOLD	.0000	6
	UNSOLD	.0000	84
2230 Special Purpose	SOLD	.0000	6
	UNSOLD	.0000	127
2235 WareHouse/Strg	SOLD	.0000	1
	UNSOLD	.0000	54
2245 Commercial Condo	SOLD	.0000	7
	UNSOLD	.0000	53
3112 Contract/Service	SOLD	.0000	1
	UNSOLD	.0000	29
3212 Contract/Service	SOLD	.0000	2
	UNSOLD	.0000	27
3230 Industrial Condos	SOLD	.0000	12
	UNSOLD	.0000	56

The above median percent change table of sold and unsold commercial/industrial property indicate 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 tax year.

**V. VACANT LAND SALE RESULTS**

For the vacant land analysis, 34 sales between the dates of July 2004 and June 2006 were analyzed. A breakdown of the sales by the current use subclass is listed below.

**SUBCLASS CODE**

	Frequency	Percent
100 Residential Lots	4	11.8
200 Commercial Lots	1	2.9
530 5.0 to 9.99 ACRES	1	2.9
1212 Single Family Residence	22	64.7
2212 Merchandising	2	5.9
2230 Special Purpose	1	2.9
2235 WareHouse/Strg	1	2.9
3112 Contract/Service	1	2.9
3212 Contract/Service	1	2.9
Total	34	100.0



In order to perform a sales ratio analysis all vacant land sales must reflect market conditions as of June 30, 2006. Based on an examination of the sales file, the county did not apply any time adjustments to the vacant land sales during this time period.

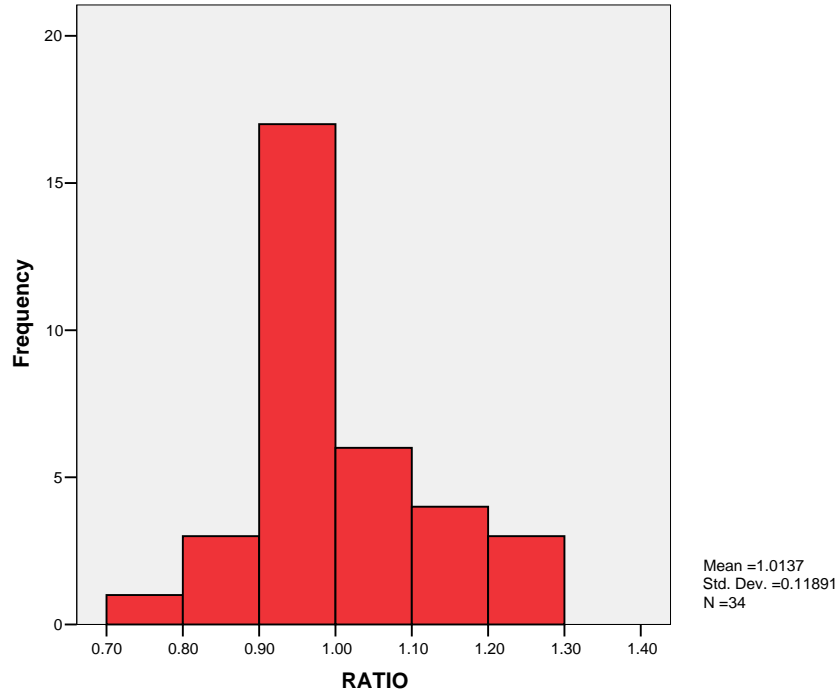
The following table outlines sales ratio statistics for land in Broomfield County.

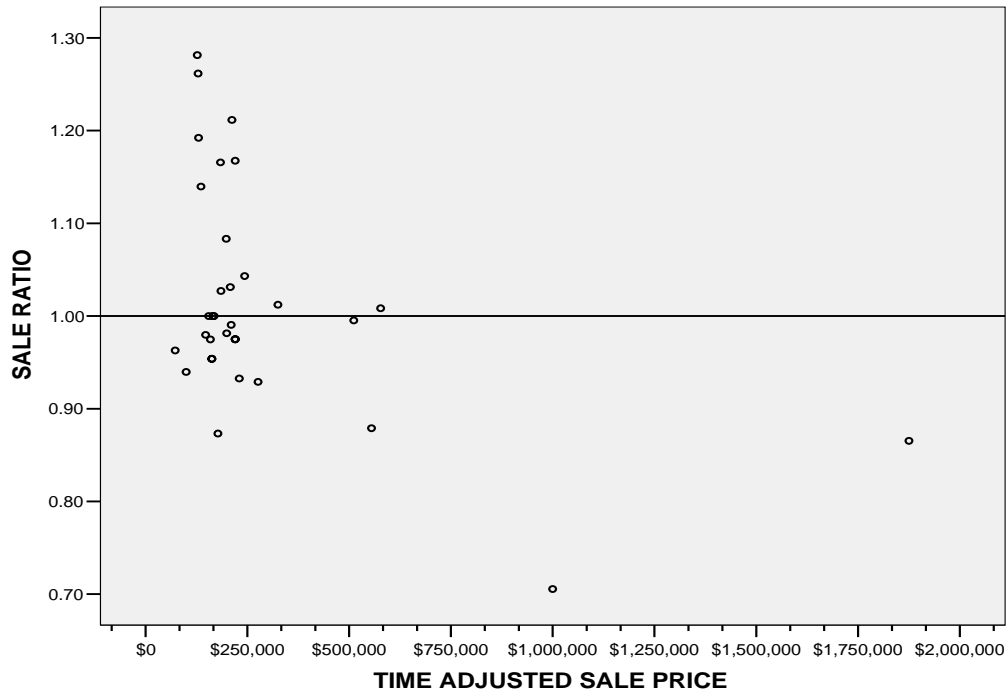
**Ratio Statistics**

Mean	1.014
Median	.993
Weighted Mean	.954
Minimum	.706
Maximum	1.281
Price Related Differential	1.063
Coefficient of Dispersion	.082

RATIO = Current Land Value / TASP

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:





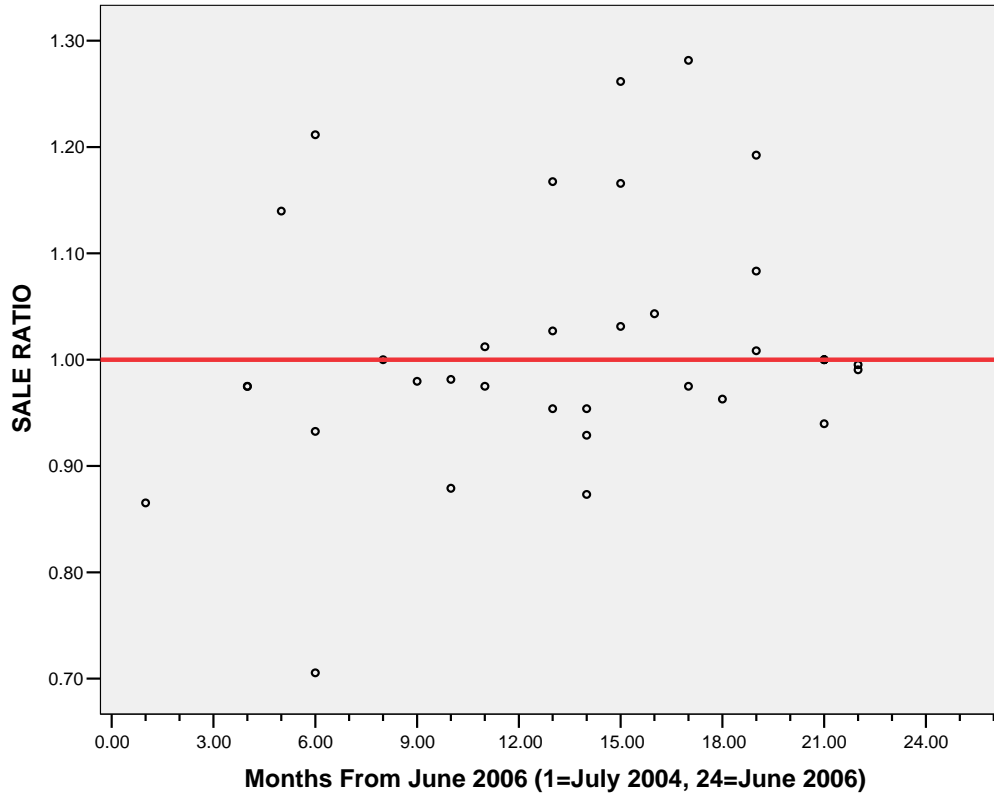
### Vacant Land Market Trend Analysis

The “Sales Ratio by Months” graph describes the sales ratios over the 24 month time period. Although there appears to be a slight upward trend (based on limited sales) in the ratios during the first 12 months, there is no significant bias in the ratios during this time period.





### Sale Ratio By Months



### Sold/Unsold Analysis

For the 2007 revaluation year audit, an analysis was performed that confirmed the median change in value between sold and unsold land in selected subdivisions 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

SUBDIVISION #	CATEGORY	Median	N
1039	SOLD	.0000	4
	UNSOLD	.0000	73
1221	SOLD	.0000	2
	UNSOLD	.0000	4
2171	SOLD	.0000	10
	UNSOLD	.0000	115
3015	SOLD	.0000	1
	UNSOLD	.0000	17
6034	SOLD	.0000	4
	UNSOLD	.0000	1
6052	SOLD	.0000	3
	UNSOLD	.0000	5

The above median percent change table of sold and unsold land in the selected subdivisions indicate 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 tax year.

### VI. AGRICULTURAL IMPROVEMENTS ANALYSIS

Based on the parameters of the 2008 audit, no analysis of agricultural residential properties was undertaken.

### VII. CONCLUSIONS

Based on this 2008 audit statistical analysis, residential, commercial/industrial, and vacant land properties are in compliance with state guidelines. This included sale ratio compliance, time trend validation, and sold/unsold valuation consistency.