2008 DENVER COUNTY PROPERTY ASSESSMENT STUDY

ROCKY MOUNTAIN
VALUATION SPECIALISTS

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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.

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Managing Director
Rocky Mountain Valuation Specialists LLC

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INTRODUCTION

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.

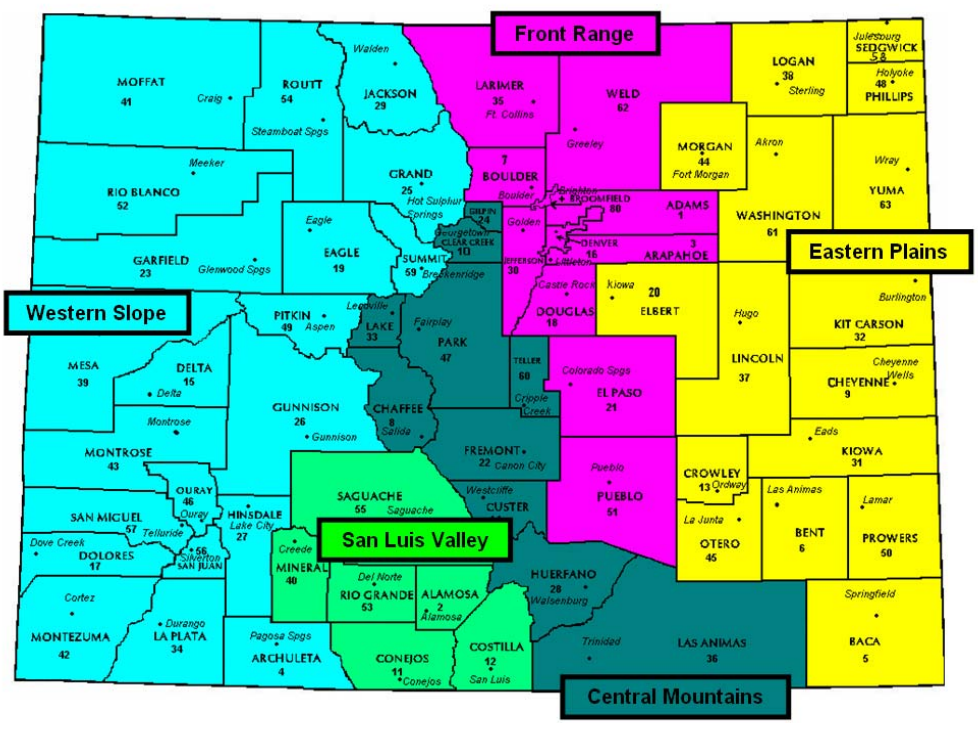
RMVS has completed the Property Assessment Study for 2008 and is pleased to report its findings for Denver County in the following report.

REGIONAL/HISTORICAL SKETCH OF DENVER COUNTY

Regional Information

Denver 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.

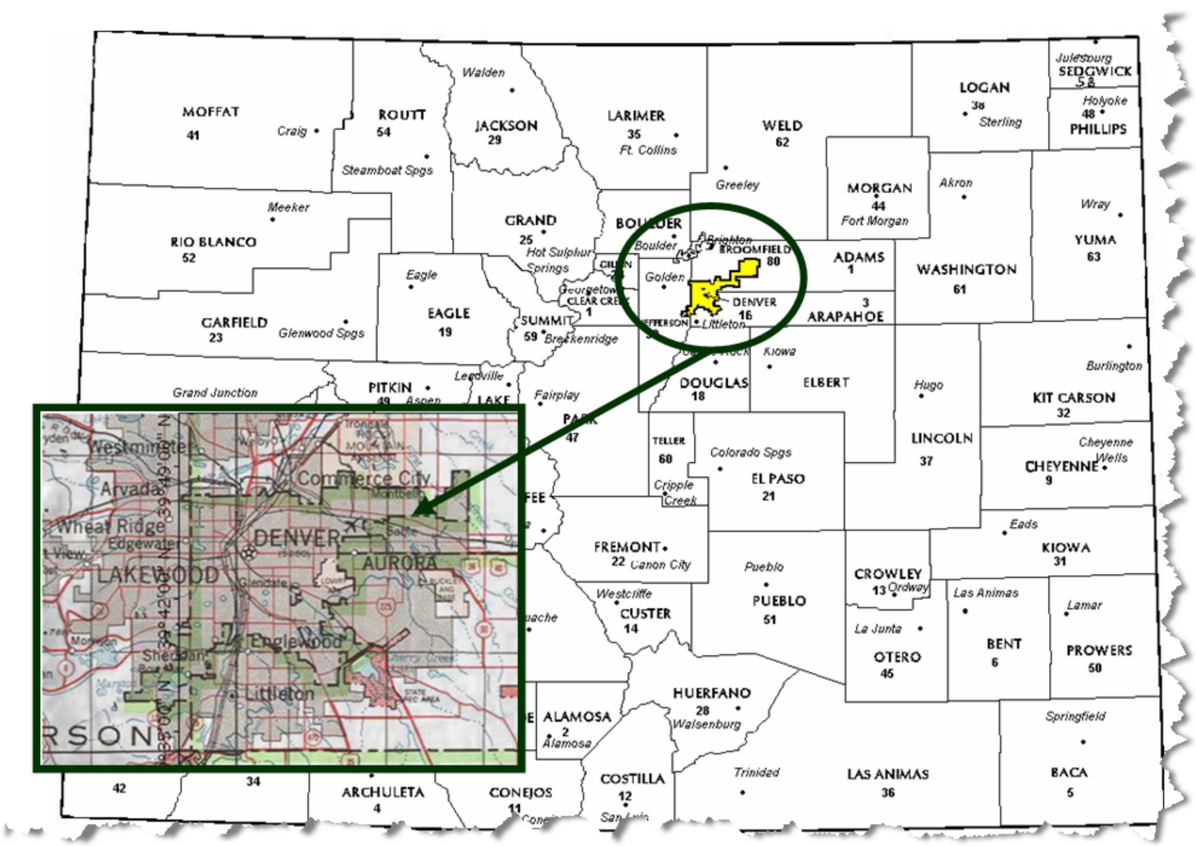


Historical Information

Denver County has a population of approximately 566,974 people with 3,616.8 people per square mile, according to the U.S. Census Bureau's 2006 estimated population data.

The County, established in 1857, has 95 square miles in area and, until the establishment of the City and County of Broomfield, was the only city-county in the state. Denver is the State capital of Colorado.

The area's first settlement followed the discovery of gold at Auraria on the west side of Cherry Creek. Another party, lead by General William Larimer of Leavenworth, Kansas, settled on the opposite side of the stream and formed the Denver City Company, named for James W. Denver, Governor of Kansas Territory. Rivalry between the two towns was ended when they consolidated into the municipality of Denver in 1860. Until 1902, when it became a separate Denver County, the city of Denver was county seat of Arapahoe County. (William Bright, Colorado Place Names, 3rd Edition, Johnson Books, 2004, p.51)



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

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The results for Denver County are:

Denver County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	336	0.974	1.041	12.5	Compliant
Condominium	6,087	1.000	1.007	3.4	Compliant
Single Family	13,872	1.000	1.003	5.1	Compliant
Vacant Land	31	0.998	1.055	11	Compliant

Ratio Statistics: Residential subclass 1112

ECON AREA	SALE COUNT	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
1	550	1.000	.999	1.002	.035
2	702	1.000	1.000	1.002	.037
3	335	1.000	1.011	1.003	.057
4	393	1.000	1.021	1.003	.056
5	529	1.002	1.002	1.005	.049
6	789	.999	.999	1.002	.034
7	452	1.002	1.005	1.003	.051
8	384	1.000	1.006	1.002	.047
9	248	1.001	1.002	1.004	.045
10	224	1.000	1.000	1.004	.044
11	450	1.000	1.000	1.004	.051
12	295	1.000	1.011	1.003	.055
13	451	1.000	1.018	1.006	.055
14	490	1.000	1.021	1.005	.080
15	311	1.000	1.043	1.016	.101
16	258	1.002	.999	1.002	.035
17	346	1.002	1.009	1.009	.050
18	200	1.000	1.016	1.013	.062
19	439	1.001	1.007	1.003	.045
20	199	1.000	.999	1.000	.033
21	239	1.000	1.001	1.002	.034
22	820	1.000	1.008	1.002	.039
23	394	1.000	1.004	1.003	.039
24	408	1.002	.999	1.003	.032
25	296	1.000	1.003	1.002	.032
26	297	1.003	1.024	1.004	.065
27	361	1.000	1.028	1.002	.064
28	202	.997	1.007	1.003	.048
29	198	1.000	1.009	1.003	.044
30	172	.998	.997	1.004	.052
31	252	1.000	1.004	1.004	.048
44	1	1.234	1.234	1.000	.000
MISSI NG	14	1.001	.995	1.001	.028
Overall	11,699	1.000	1.011	1.001	.048

After applying the above described methodologies, it is concluded from the sales ratios that Denver County is in compliance with SBOE, DPT, and Colorado State Statute valuation guidelines.

Recommendations

None

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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 Denver County has complied with the statutory requirements to analyze the effects of time on value in their county. Denver 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

Denver 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	Compliant
Single Family	Compliant
Vacant Land	Compliant

Conclusions

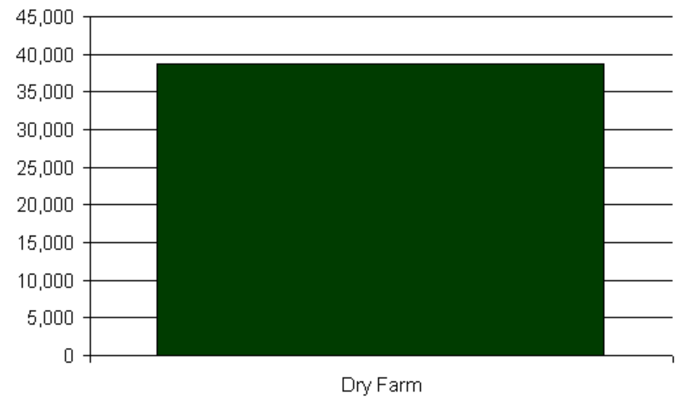
After applying the above described methodologies, it is concluded that Denver County is reasonably treating its sold and unsold properties in the same manner.

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:

Denver County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	RMVS Total Value	Ratio
4127	Dry Farm	1,652	23.49	38,805	38,805	1.00
Total/Avg		**1,652**	**23.49**	**38,805**	**38,805**	**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

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

Recommendations

None

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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 Denver County. This study was conducted by checking selected sales from the master sales list for the valuation period. Specifically RMVS selected 45 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 documentation.

Conclusions

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

Recommendations

None.

Economic Area Review and Evaluation

Methodology

Denver County has submitted a written narrative describing the economic areas that make up the county's market areas. Denver 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 Denver 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 Statues (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 Denver 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 accomlished 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

Denver 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.

Denver 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

Denver 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

Denver 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.

Denver 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.

Denver 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

- Accounts with greater than 10% change
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts - Best Information Available
- Accounts protested with substantial disagreement

Denver County's median ratio is 1.00. 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

Denver 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

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APPENDICES

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STATISTICAL ANALYSIS DENVER COUNTY
2008

I. OVERVIEW

Denver County is the largest county in terms of population in Colorado. The County has a total of 215,666 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	5,292	2.5
RESIDENTIAL	190,206	88.2
COMMERCIAL	9,768	4.5
INDUSTRIAL	319	.1
OTHER	10,081	4.7
Total	215,666	100.0

Vacant Land

The vacant land class of properties has a total of 5,292 parcels. The majority (70%) of these parcels have a residential use. The remaining vacant parcels are a mix of commercial/industrial and PUD, or have a subclass code that is delineated by the acreage of the parcel.

SUBCLASS CODE

	Frequency	Percent
10 Vacant Land - Possessory Int	8	.2
100 Residential Lots	2,818	53.3
101 Residential Lots	908	17.2
200 Commercial Lots	660	12.5
300 Industrial Lots	630	11.9
400 PUD Lots	179	3.4
510 Less Than 1.0 ACRES	89	1.7
Total	5,292	100.0

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Residential

The residential subclass category has a total of 190,206 parcels. Over 72% of the parcels have a single-family residential (1112,1114) subclass code. Condominiums (1130) represent a total of 24% of the total residential inventory. The remaining parcels in this category are multi-unit and mobile home properties.

SUBCLASS CODE

	Frequency	Percent
1112 Single Family Residence	127,337	66.9
1114 Single Family Residence	9,907	5.2
1115 Duplexes-Triplexes	3,989	2.1
1120 Multi-Units (4-8)	956	.5
1125 Multi-Units (9 & Up)	1,166	.6
1130 Condominiums	46,471	24.4
1135 Manuf Housing (Mobile Homes)	366	.2
1140 Manuf Housing (Land, Park, Etc.)	6	.0
1150 Partially Exempt (Taxable Part)	8	.0
Total	190,206	100.0

Commercial/Industrial

The commercial/industrial subclass category has a total of 10,087 properties. This category represents 4.6% of the total property inventory. The breakdown by subclass code is listed below.

SUBCLASS CODE

	Frequency	Percent
2020 Airport Possessory Interest	242	2.4
2022 Recreation Possessory Interest	1	.0
2023 Other Commercial Possessory Int	2	.0
2112 Merchandising	1,392	13.8
2115 Lodging	76	.8
2120 Offices	1,505	14.9
2125 Recreation	151	1.5
2130 Special Purpose	3,491	34.6
2135 WareHouse/Strg	2,035	20.2
2140 Multi-Use (3+)	2	.0
2150 Partially Exempt (Taxable Part)	12	.1
2230 Special Purpose	859	8.5
3115 Manuf/Processing	319	3.2
Total	10,087	100.0

Other

The majority of the remaining parcels have a subclass code describing exempt property.

II. SALES FILE

The sale file provided by the Denver County Assessor's Office contained 31,579 sales between the dates of January 2005 and June 2006. The breakdown of sales activity by sale month and year is as follows:

Count

		SALE YEAR 2005	SALE YEAR 2006	Total
SALE MONTH	January	1,141	1,260	2,401
	February	1,404	1,232	2,636
	March	1,761	1,647	3,408
	April	1,767	1,884	3,651
	May	1,930	1,949	3,879
	June	2,157	1,961	4,118
	July	1,741	0	1,741
	August	2,320	0	2,320
	September	1,939	0	1,939
	October	1,615	0	1,615
	November	1,546	0	1,546
	December	2,325	0	2,325
Total		21,646	9,933	31,579

**Note: sales without current assessed values were excluded from the analysis.*

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	20,381	71.0
UNQUALIFIED	8,307	29.0
Total	28,688	100.0

There were 20,381 sales that were classified as qualified. The breakdown of the sales by current property type is listed below.

SALE TYPE

	Frequency	Percent
VACANT	31	.2
RESIDENTIAL	20,010	98.2
COMM/IND	336	1.6
OTHER	4	.0
Total	20,381	100.0

III. RESIDENTIAL SALES RESULTS

For the residential analysis, 20,010 sales between the dates January 2005 and June 2006 were analyzed. A breakdown of the sales by subclass is listed below.

SUBCLASS CODE

	Frequency	Percent
1112 Single Family Residence	11,762	58.8
1114 Townhouse	1,788	8.9
1115 Duplexes-Triplexes	229	1.1
1120 Multi-Units (4-8)	75	.4
1125 Multi-Units (9 & Up)	61	.3
1130 Condominiums	6,095	30.5
Total	20,010	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 sales during this time period. The following graph illustrates the various time adjustment factors applied to the residential sales.

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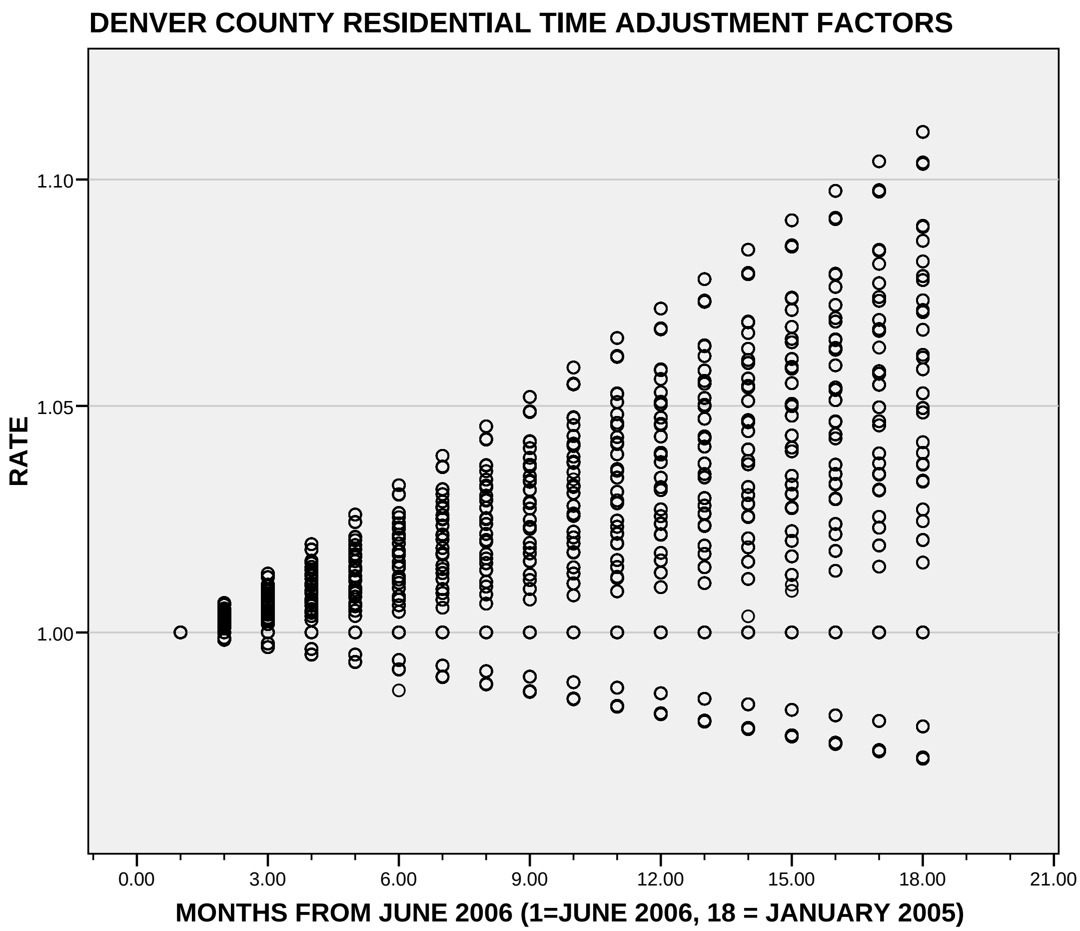

The following table outlines the sales ratio statistics for all residential properties in Denver County.

Ratio Statistics: All Residential

Mean	1.005
Median	1.000
Weighted Mean	1.003
Price Related Differential	1.003
Coefficient of Dispersion	.045

RATIO = CURRENT ASMT / TASP

**Note: An outlier trim removed 24 sales that were outside a sale ratio range of .30-2.50.*

The following section provides the ratio statistics for each residential subtype in Denver County.

Ratio Statistics: Residential subclass 1112

ECON AREA	SALE COUNT	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
1	550	1.000	.999	1.002	.035
2	702	1.000	1.000	1.002	.037
3	335	1.000	1.011	1.003	.057
4	393	1.000	1.021	1.003	.056
5	529	1.002	1.002	1.005	.049
6	789	.999	.999	1.002	.034
7	452	1.002	1.005	1.003	.051
8	384	1.000	1.006	1.002	.047
9	248	1.001	1.002	1.004	.045
10	224	1.000	1.000	1.004	.044
11	450	1.000	1.000	1.004	.051
12	295	1.000	1.011	1.003	.055
13	451	1.000	1.018	1.006	.055
14	490	1.000	1.021	1.005	.080
15	311	1.000	1.043	1.016	.101
16	258	1.002	.999	1.002	.035
17	346	1.002	1.009	1.009	.050
18	200	1.000	1.016	1.013	.062
19	439	1.001	1.007	1.003	.045
20	199	1.000	.999	1.000	.033
21	239	1.000	1.001	1.002	.034
22	820	1.000	1.008	1.002	.039
23	394	1.000	1.004	1.003	.039
24	408	1.002	.999	1.003	.032
25	296	1.000	1.003	1.002	.032
26	297	1.003	1.024	1.004	.065
27	361	1.000	1.028	1.002	.064
28	202	.997	1.007	1.003	.048
29	198	1.000	1.009	1.003	.044
30	172	.998	.997	1.004	.052
31	252	1.000	1.004	1.004	.048
44	1	1.234	1.234	1.000	.000
MISSI NG	14	1.001	.995	1.001	.028
Overall	11,699	1.000	1.011	1.001	.048

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Ratio Statistics: Townhomes/Rowhomes

Group	SALE COUNT	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
31*	2	.733	.733	1.000	.000
51	136	.982	.971	1.005	.044
53	404	1.000	.992	1.004	.040
54	763	.998	.995	1.009	.068
55	478	1.000	.982	1.008	.056
999*	1	.919	.919	1.000	.000
Overall	1,784	.997	.985	1.010	.057

**Note: nominal sale counts in each area (<=2).*

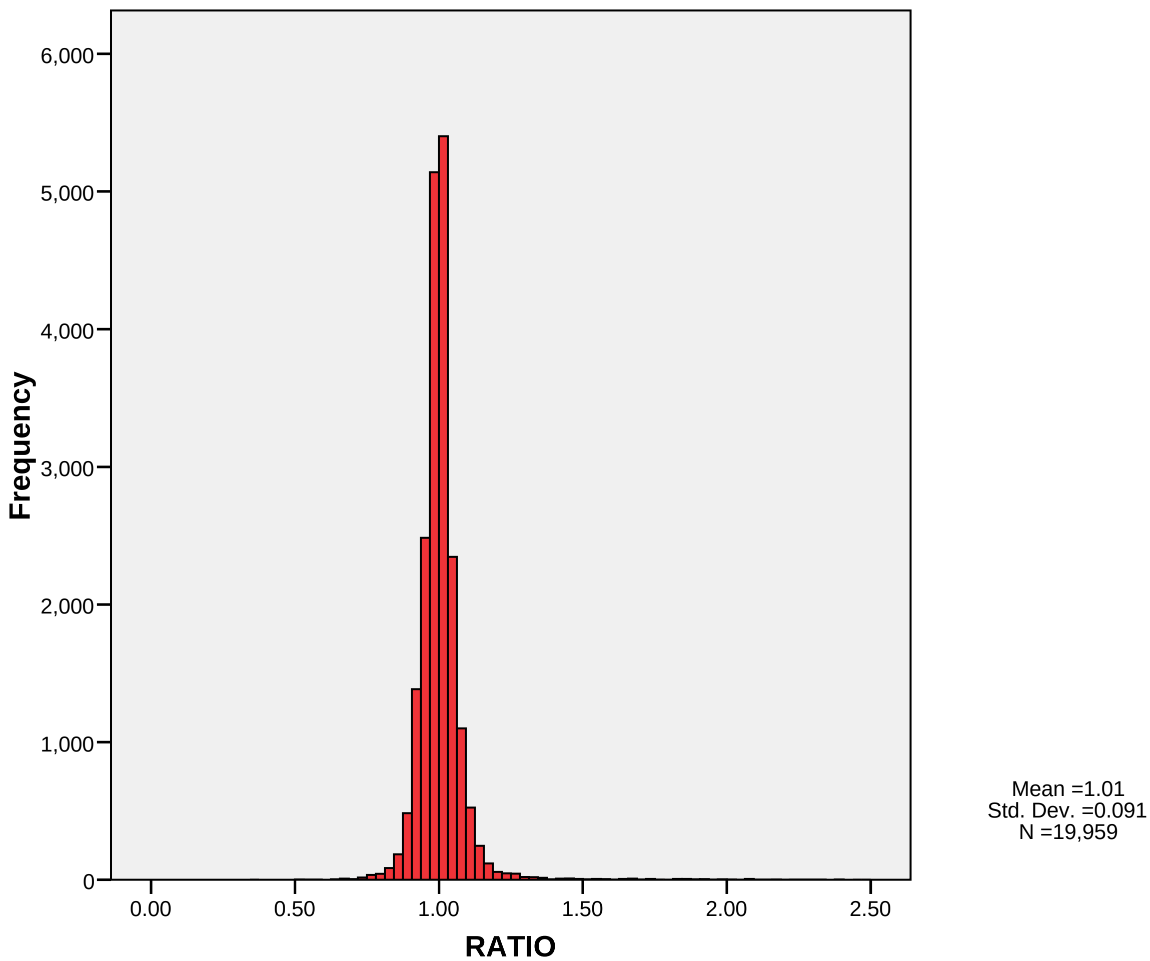
Ratio Statistics: Condominiums

Group	Mean	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
38	327	1.000	.988	1.005	.032
39	199	1.000	.991	1.002	.031
40	670	.996	.973	1.013	.051
41	745	1.000	1.002	1.004	.040
42	795	1.000	.994	1.002	.026
43	700	1.000	.992	1.003	.028
44	948	1.000	.993	1.003	.030
45	200	1.000	.995	1.004	.029
46	370	.998	.974	1.003	.044
47	492	1.000	.998	1.003	.024
48	230	1.000	.990	1.003	.041
49	411	1.000	.989	1.004	.029
Overall	6,087	1.000	.988	1.007	.034

Ratio Statistics

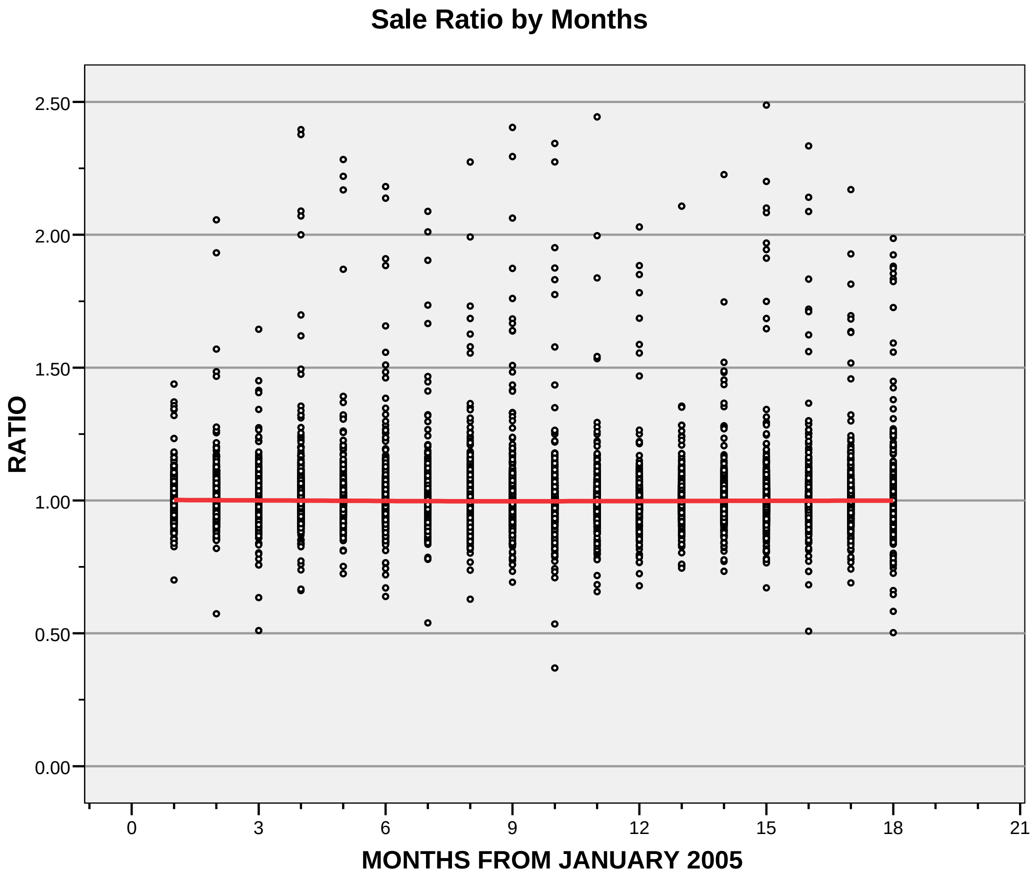
SUBCLASS	SALE COUNT	Median	Weighted Mean	Price Related Differential	Coefficient of Dispersion
1115 Duplexes-Triplexes Land	229	1.005	.993	1.017	.099
1120 Multi-Units (4-8) Land	75	1.021	1.011	1.014	.098
1125 Multi-Units (9 & Up) Land	61	.990	.952	1.034	.082

The ratio statistics for each residential subclass are in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE). The following histogram indicates the overall ratio distribution for residential properties in Denver County:



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 that there is no trend in sale ratios during this time period when evaluated on a county-wide basis.



Time trends were next analyzed for each property type by economic area. The results are as follows:

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RESIDENTIAL TIME TREND SIGNIFICANCE TEST BY ECONOMIC AREA[a]

EconArea	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	1	(Constant)	-.004	.004		-1.044	.297
		MONTHS	.000	.000	.047	1.105	.269
2	1	(Constant)	-.004	.004		-1.009	.313
		MONTHS	.001	.000	.063	1.675	.094
3	1	(Constant)	.010	.010		.962	.337
		MONTHS	-6.3E-006	.001	.000	-.007	.995
4	1	(Constant)	.027	.011		2.547	.011
		MONTHS	-.001	.001	-.057	-1.125	.261
5	1	(Constant)	-.003	.006		-.452	.652
		MONTHS	.001	.001	.059	1.346	.179
6	1	(Constant)	.001	.003		.233	.816
		MONTHS	.000	.000	-.015	-.432	.666
7	1	(Constant)	.004	.007		.562	.575
		MONTHS	8.81E-005	.001	.006	.129	.898
8	1	(Constant)	.008	.008		1.004	.316
		MONTHS	.000	.001	-.019	-.381	.703
9	1	(Constant)	.014	.009		1.572	.117
		MONTHS	-.001	.001	-.079	-1.243	.215
10	1	(Constant)	.005	.009		.566	.572
		MONTHS	.000	.001	-.024	-.351	.726
11	1	(Constant)	.006	.007		.783	.434
		MONTHS	.000	.001	-.030	-.637	.524
12	1	(Constant)	.005	.011		.435	.664
		MONTHS	.000	.001	.024	.417	.677
13	1	(Constant)	.017	.012		1.480	.140
		MONTHS	.001	.001	.022	.468	.640
14	1	(Constant)	.035	.013		2.710	.007
		MONTHS	-.002	.001	-.067	-1.495	.135
15	1	(Constant)	.039	.021		1.899	.058
		MONTHS	.001	.002	.017	.303	.762
16	1	(Constant)	-.002	.006		-.318	.751
		MONTHS	.000	.001	.014	.220	.826
17	1	(Constant)	.005	.013		.407	.684
		MONTHS	.002	.001	.076	1.431	.153
18	1	(Constant)	.002	.017		.137	.891
		MONTHS	.002	.002	.078	1.104	.271
19	1	(Constant)	.004	.007		.550	.583
		MONTHS	.000	.001	.021	.440	.660
20	1	(Constant)	-.010	.014		-.732	.465
		MONTHS	.000	.001	.024	.334	.738
21	1	(Constant)	.015	.007		2.128	.034
		MONTHS	-.001	.001	-.138	-2.138	.034
22	1	(Constant)	.014	.004		3.288	.001
		MONTHS	-.001	.000	-.052	-1.488	.137
23	1	(Constant)	-.012	.006		-2.070	.039
		MONTHS	.002	.001	.170	3.409	.001
24	1	(Constant)	.014	.006		2.307	.022
		MONTHS	-.001	.001	-.119	-2.422	.016
25	1	(Constant)	-.004	.005		-.669	.504
		MONTHS	.001	.001	.093	1.598	.111
26	1	(Constant)	.017	.015		1.124	.262
		MONTHS	.001	.001	.025	.432	.666
27	1	(Constant)	.010	.013		.775	.439
		MONTHS	.001	.001	.060	1.140	.255
28	1	(Constant)	.018	.013		1.372	.172
		MONTHS	-.001	.001	-.077	-1.094	.275
29	1	(Constant)	.022	.011		2.003	.047
		MONTHS	-.001	.001	-.101	-1.427	.155
30	1	(Constant)	.005	.011		.457	.648
		MONTHS	-.001	.001	-.050	-.658	.511
31	1	(Constant)	.003	.009		.297	.766
		MONTHS	.000	.001	.029	.460	.646
999	1	(Constant)	-.011	.024		-.473	.645
		MONTHS	.001	.003	.082	.284	.781

a. Dependent Variable: LNRATIO

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TOWNHOMES/ROWHOMES[a]

EconArea	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
51	1	(Constant)	-.066	.012		-5.372	.000
		MONTHS	.004	.001	.291	3.518	.001
53	1	(Constant)	.003	.006		.468	.640
		MONTHS	-.001	.001	-.078	-1.565	.118
54	1	(Constant)	.003	.008		.349	.728
		MONTHS	.000	.001	-.021	-.588	.557
55	1	(Constant)	-.007	.009		-.823	.411
		MONTHS	-.001	.001	-.037	-.814	.416

a. Dependent Variable: LNRATIO

CONDOMINIUM[a]

EconArea	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
38	1	(Constant)	-.010	.008		-1.155	.249
		MONTHS	3.50E-005	.001	.003	.046	.964
39	1	(Constant)	-.005	.007		-.703	.483
		MONTHS	.000	.001	-.034	-.473	.637
40	1	(Constant)	-.010	.007		-1.478	.140
		MONTHS	-.001	.001	-.041	-1.065	.287
41	1	(Constant)	-.004	.005		-.727	.468
		MONTHS	.001	.000	.065	1.775	.076
42	1	(Constant)	-.003	.003		-.857	.392
		MONTHS	.000	.000	-.025	-.716	.474
43	1	(Constant)	-.010	.003		-2.888	.004
		MONTHS	.000	.000	.048	1.258	.209
44	1	(Constant)	-.006	.003		-1.727	.084
		MONTHS	8.63E-005	.000	.009	.285	.776
45	1	(Constant)	.005	.007		.668	.505
		MONTHS	-.001	.001	-.080	-1.136	.257
46	1	(Constant)	-.012	.009		-1.342	.180
		MONTHS	-.001	.001	-.090	-1.736	.083
47	1	(Constant)	.012	.006		2.102	.036
		MONTHS	-.001	.000	-.102	-2.265	.024
48	1	(Constant)	-.014	.008		-1.706	.089
		MONTHS	.001	.001	.050	.750	.454
49	1	(Constant)	-.010	.004		-2.522	.012
		MONTHS	.000	.000	.025	.506	.613

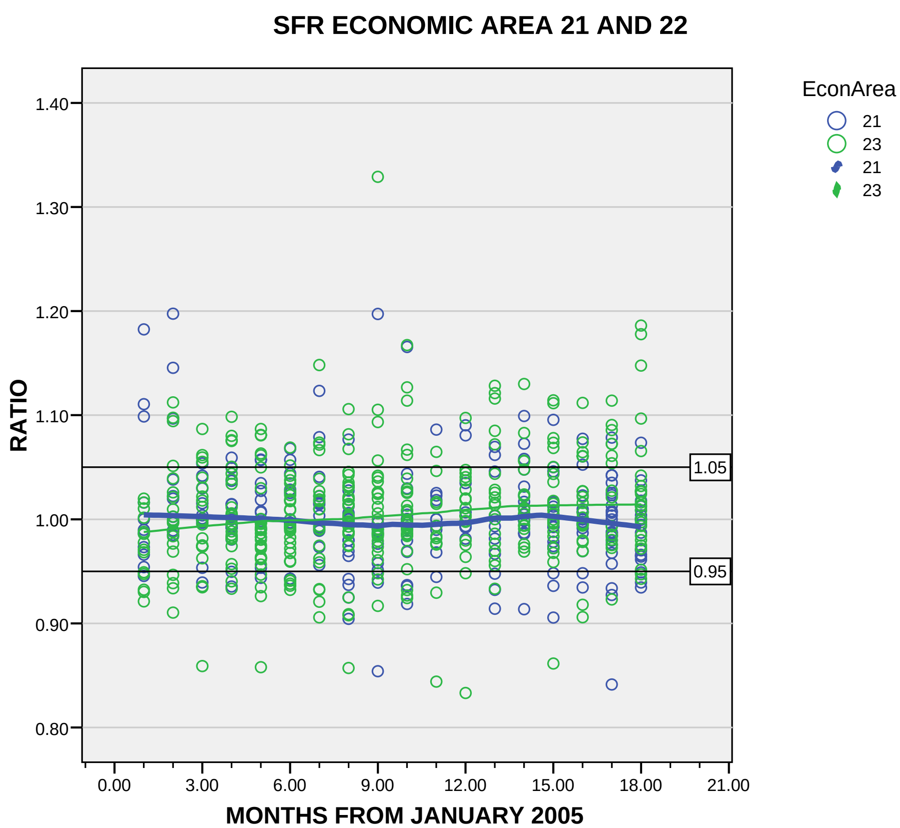
a. Dependent Variable: LNRATIO

MULTI-UNIT[a]

SUBCLASS CODE	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1115 Duplexes-Triplexes	1	(Constant)	.002	.018		.126	.900
		MONTHS	.000	.002	-.005	-.082	.935
1120 Multi-Units (4-8)	1	(Constant)	.028	.035		.816	.417
		MONTHS	-.002	.003	-.053	-.457	.649
1125 Multi-Units (9 & Up)	1	(Constant)	-.044	.028		-1.578	.120
		MONTHS	.003	.003	.122	.946	.348

a. Dependent Variable: LNRATIO

The time trend significance test by residential subclass identified four areas with a significant time trend at a 95% confidence level. The magnitudes of these trends were quite small in three out of the four subtypes and suggested nominal time adjustments. The following graphs outline the sales ratio trend in each of these areas.



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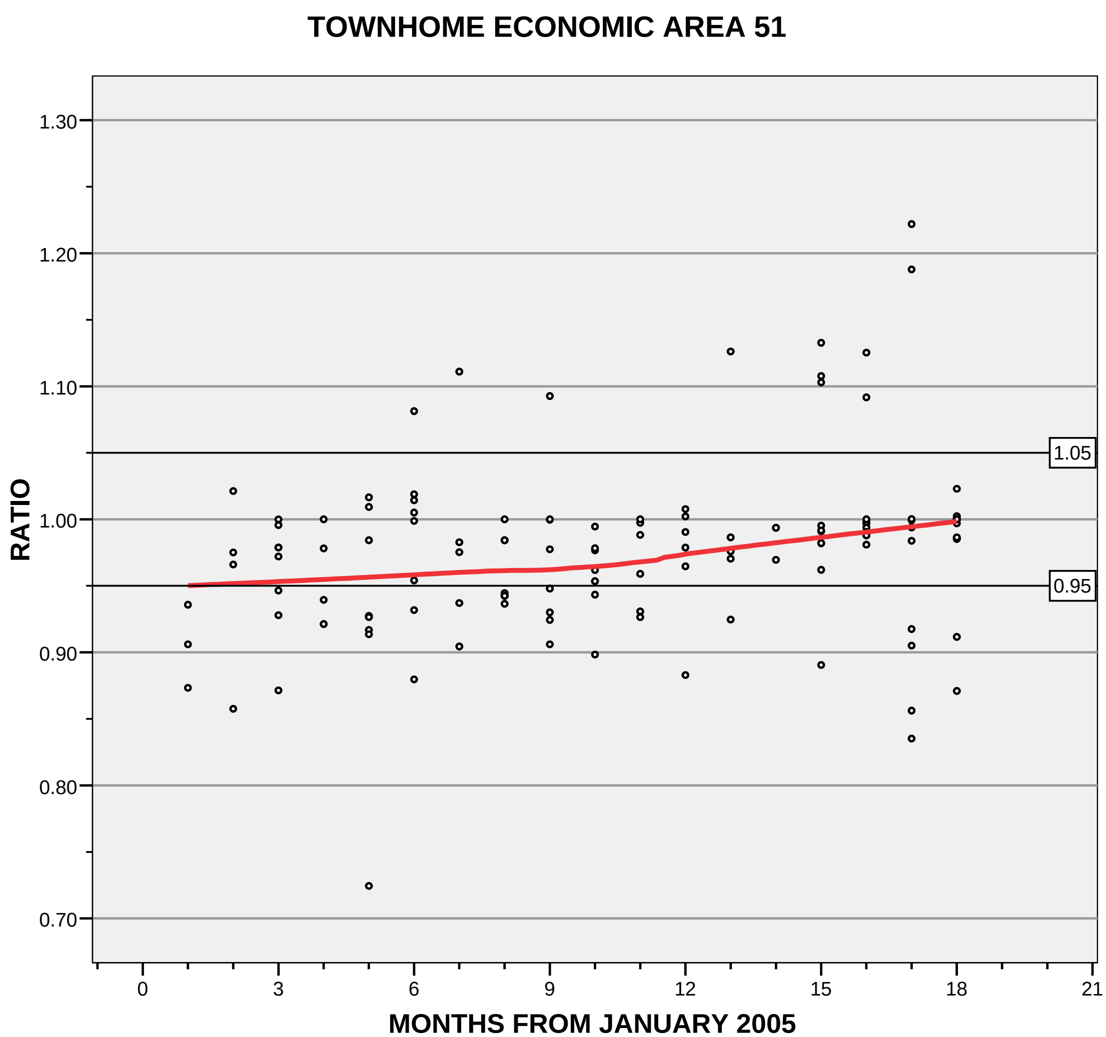
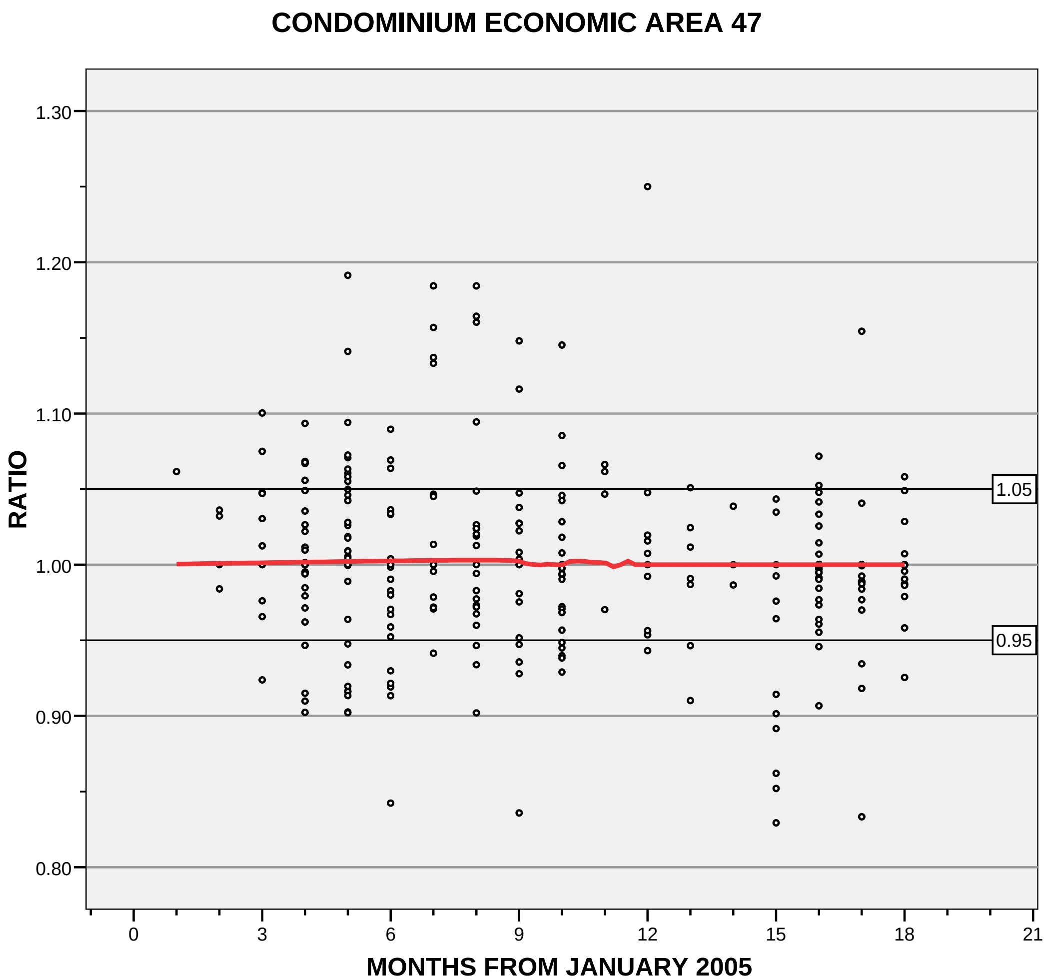




Since the target level of .95-1.05 is maintained throughout the entire study period in each of the above residential subclass types and economic areas, no further analysis is necessary.

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	20,000
UNSOLD	.0000	169,352

The above median percent change table of sold and unsold residential properties indicates that there is no change. 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, 336 sales between the dates of January 2005 and June 2006 were analyzed. A breakdown of the sales by subclass is as follows:

SUBCLASS CODE

	Frequency	Percent
2112 Merchandising	52	15.5
2115 Lodging	3	.9
2120 Offices	88	26.2
2125 Recreation	2	.6
2130 Special Purpose	43	12.8
2135 WareHouse/Strg	93	27.7
2230 Special Purpose	47	14.0
3115 Manuf/Processing	8	2.4
Total	336	100.0

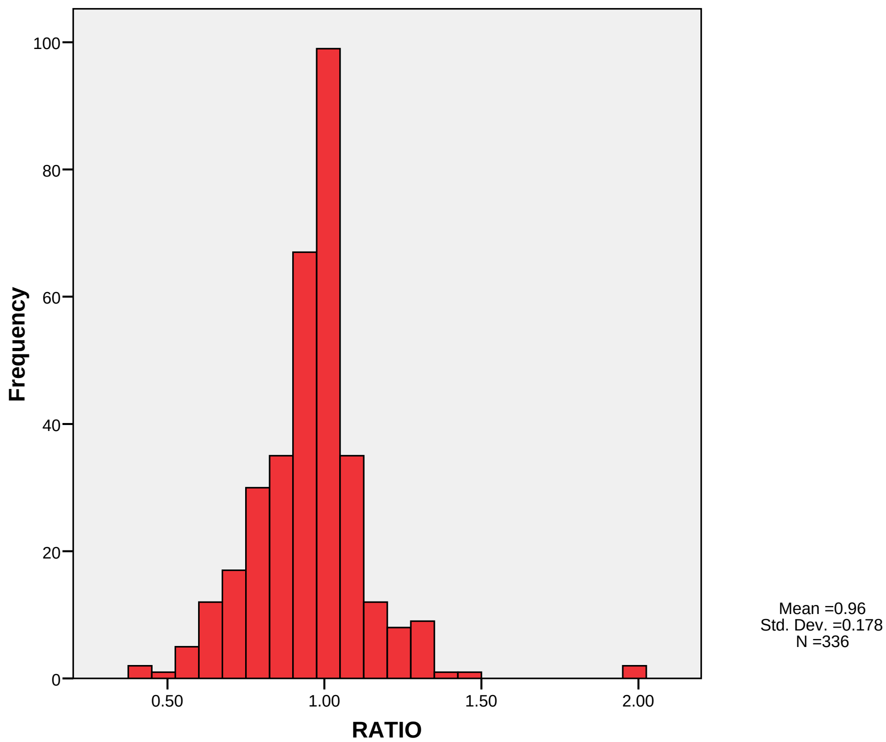
In order to perform a sales ratio analysis all commercial/industrial sales must reflect market conditions as of June 30, 2006. Based on an examination of the sales file, the majority of commercial sales did not receive a time adjustment during this time period. The following table outlines sales ratio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

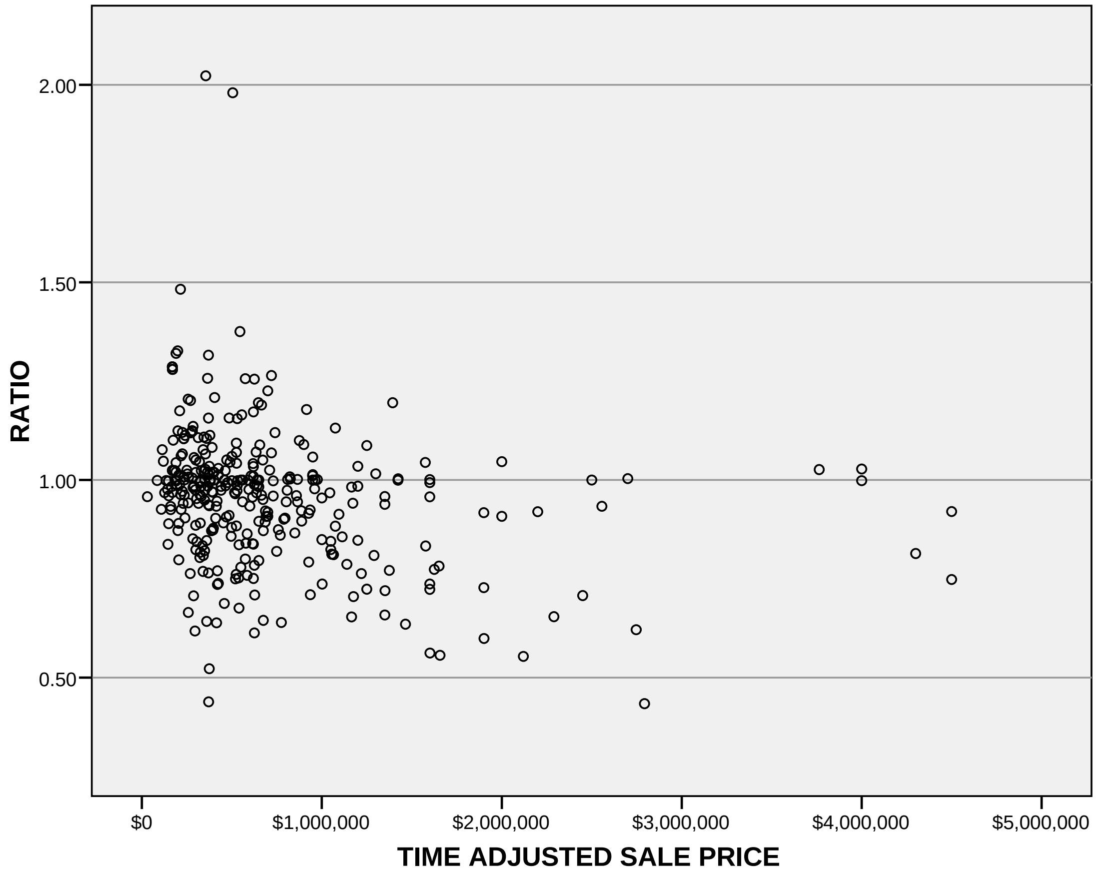
Ratio Statistics

Mean	.956
Median	.974
Weighted Mean	.918
Price Related Differential	1.041
Coefficient of Dispersion	.125

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:



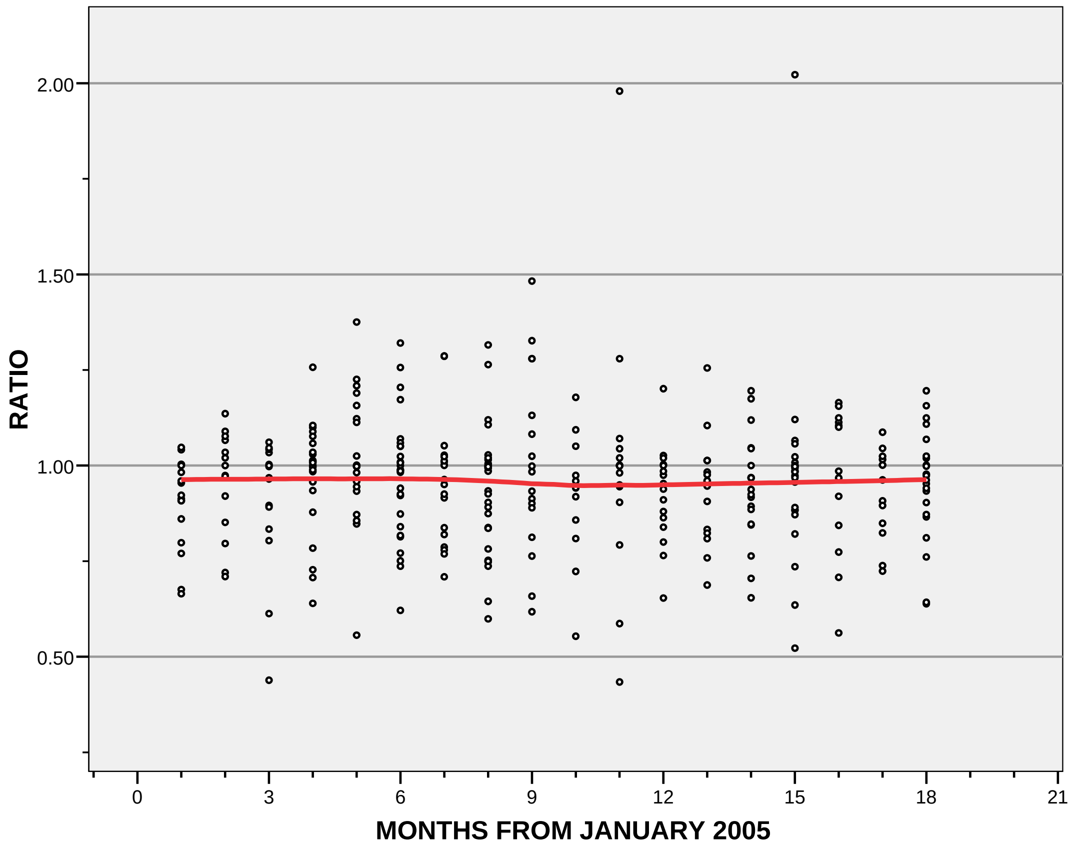


**Note: For interpretation purposes, 8 sales > $5,000,000 were excluded from the above graph*

Commercial Market Trend Analysis

We verified that market trending was accounted for in the commercial valuations by analyzing the sale ratios over the 18 month time period. The following graph illustrates a horizontal pattern in sales ratios indicating that there is no significant trend 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	336
UNSOLD	.0000	9,635

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 tax year.

V. VACANT LAND SALE RESULTS

For the vacant land analysis, 31 sales between the dates of January 2005 and June 2006 were analyzed. A breakdown of the sales by vacant land subclass code is listed below.

SUBCLASS CODE

	Frequency	Percent
100 Residential Lots	14	45.2
101 Residential Lots	4	12.9
200 Commercial Lots	5	16.1
300 Industrial Lots	6	19.4
510 Less Than 1.0 ACRES	2	6.5
Total	31	100.0

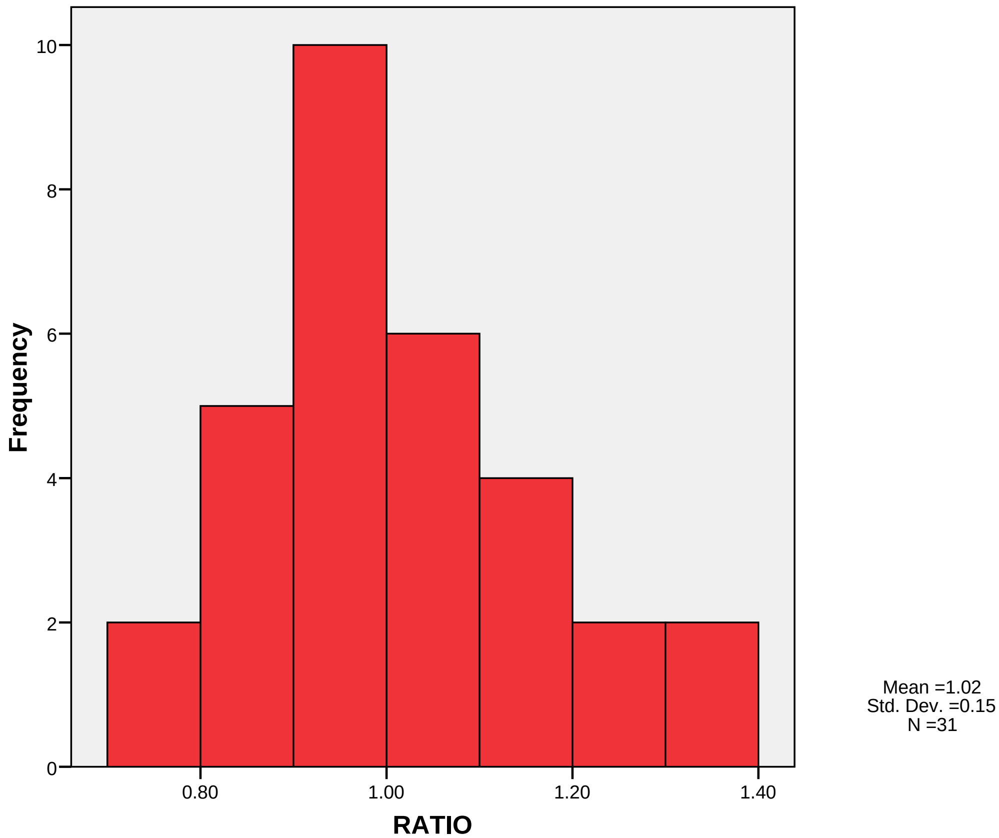
In order to perform a sales ratio analysis all vacant land sales must reflect market conditions as of June 30, 2006. Based on an examination of the sales file, the majority of the vacant land sales did not receive a time adjustment during this time period. The following table outlines the sales ratio statistics for vacant land in Denver County.

Ratio Statistics

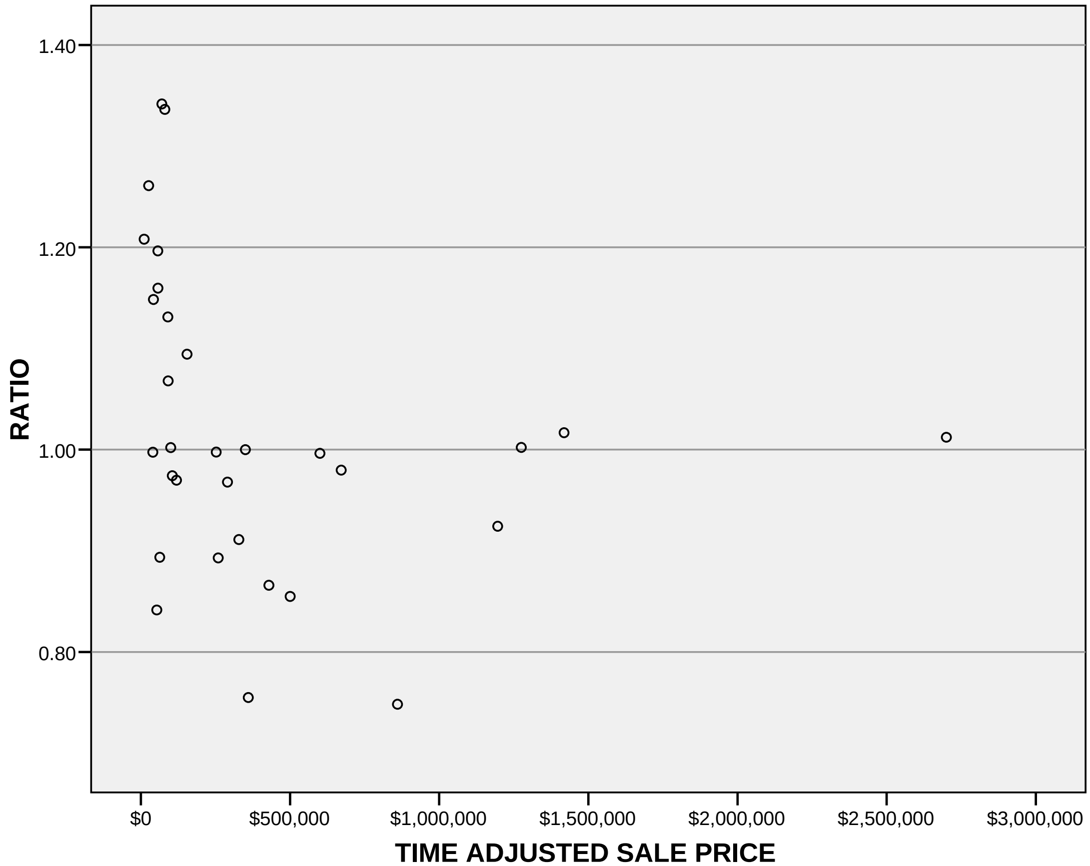
Mean	1.018
Median	.998
Weighted Mean	.964
Price Related Differential	1.055
Coefficient of Dispersion	.110

RATIO = CURRENT ASMT / TASP

The sales 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:



10
8
6
4
2
0
Frequency
0.80
1.00
1.20
1.40
RATIO
Mean =1.02
Std. Dev. =0.15
N =31



Vacant Land Market Trend Analysis

The "Sales Ratio by Months" graph describes the vacant land sale ratios over the 18 month time period. The following graph illustrates a consistent pattern in sale ratios during this time period.

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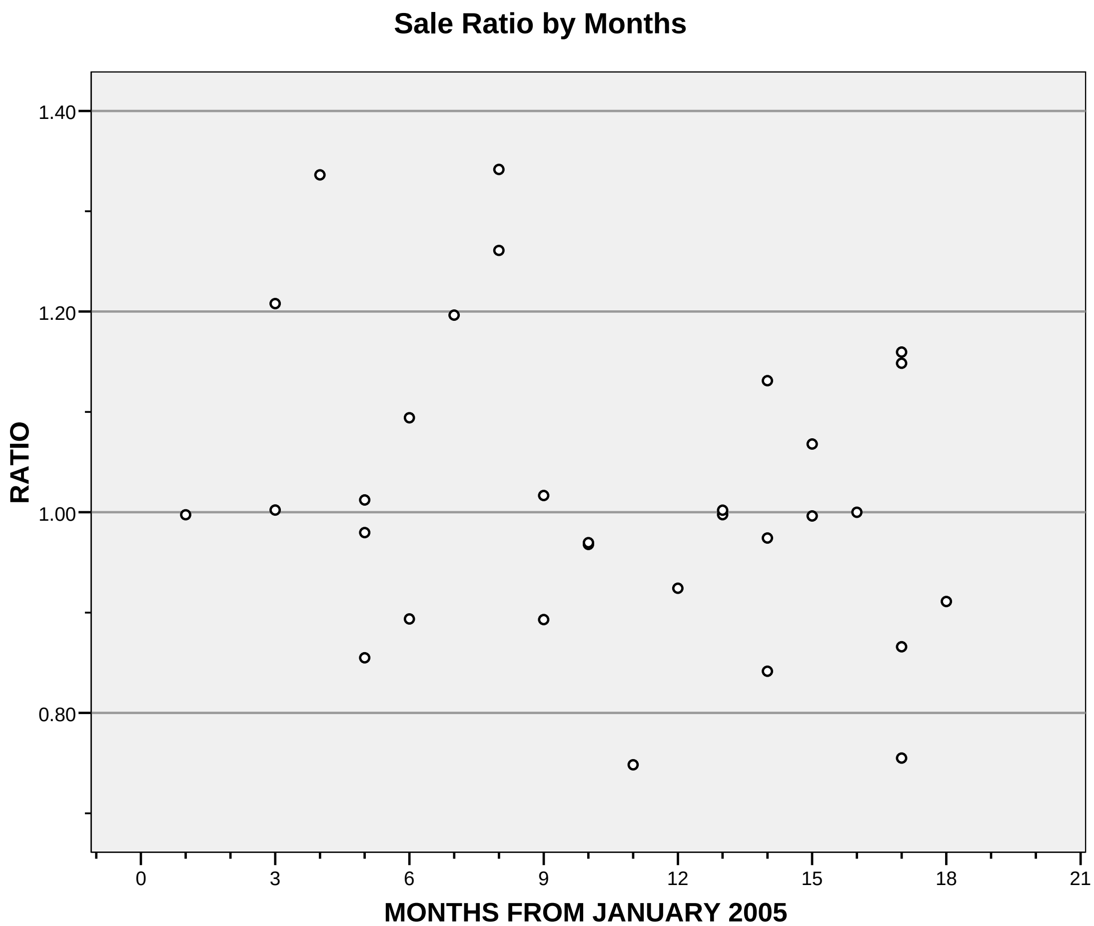

Sold/Unsold Analysis

For the 2007 revaluation year audit, an analysis was performed that confirmed that the median change in value between sold and unsold land 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	31
UNSOLD	.0000	4,961

VI. CONCLUSIONS

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