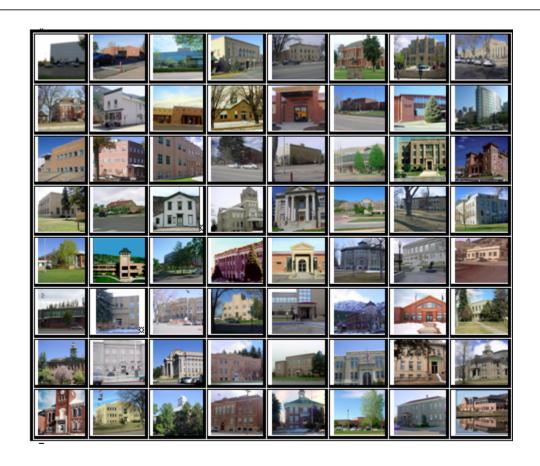


2009 MESA COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2009

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

RE: Final Report for the 2009 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2009 Colorado Property Assessment Study.

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

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

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

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

Harry J. Fuller Project Manager

Harry J. Zulla

Wildrose Appraisal Inc. – Audit Division



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INTRODUCTION



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

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

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

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

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

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

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

Wildrose Audit has completed the Property Assessment Study for 2009 and is pleased to report its findings for Mesa County in the following report.



REGIONAL/HISTORICAL SKETCH OF MESA COUNTY

Regional Information

Mesa County is located in the Western Slope region of Colorado. The Western Slope of Colorado refers to the region west of the Rocky Mountains. It includes Archuleta, Delta, Dolores, Eagle, Garfield, Grand, Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel, and Summit counties.





Historical Information

Mesa County has a population of approximately 134,189 people with 34.9 people per square mile, according to the U.S. Census Bureau's 2006 estimated population data.

The County, formed from a portion of Gunnison County, was established in 1883 with an area of 3,301 square miles. Its name is Spanish for 'table' and refers to the tablelands and plateaus prevalent in the county. county seat is Grand Junction, so named for its location at the junction of the Gunnison and Grand (later Colorado) rivers. The Grand Mesa National Forest encompasses the Grand Mesa, which is one of the world's largest flattop mountains and has an average elevation of 10,000 feet, dotted with over 300 alpine lakes and reservoirs. The Uncompangre National Forest includes the Uncompangre Plateau, portions of the San Juan Mountains and three wilderness areas.

Grand Junction which sits near the mid-point of a 30-mile arcing valley, known as the Grand Valley, is a major fruit-growing region, historically home to the Ute people and settled by white farmers in the 1880s. In recent years, several wineries have been established in the

area as well. The Colorado National Monument, a series of canyons and mesas similar to the Grand Canyon, overlooks the city, while most of the area is surrounded by public lands managed by the Bureau of Land Management.

Grand Junction has a strong history that dates back more than 100 years. In the 1880s, the area was part of the Northern Ute Reservation, although the Native Americans were later moved west into Utah. In September 1881, the area experienced a land rush settlement and a townsite was staked. This town, located in the Grand Valley, was first called Ute, then West Denver and finally came to be known as Grand Junction.

By 1883, Mesa County was created from neighboring counties, and Grand Junction was named the county seat. Grand Junction began to thrive when the main line of the Denver and Rio Grande Railroad came into the area in 1887. Soon after, major irrigation turned the Grand Valley into a fertile agricultural area. (www.rootsweb.com, www.gjchamber.org, Wikipedia.org)



RATIO ANALYSIS

Methodology

All significant classes of properties were Sales were collected for each analyzed. property class over the appropriate sale period, which was typically defined as the 18-month period between January 2007 and June 2008. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2008 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 pricerelated differential for each class of property. Counties were not passed or failed by these

latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the qualification code used by each county, which were typically coded as either "Q" or "C." The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were "lost" because of trimming. For the largest 11 counties, the residential ratio statistics were broken down by economic area as well.

Conclusions

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

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



The results for Mesa County are:

Mesa County Ratio Grid						
Number of Unweighted Price Coefficient Qualified Median Related of Time T Property Class Sales Ratio Differential Dispersion Ana						
Commercial/Industrial	148	0.974	1.004	8.3	Compliant	
Condominium	N/A	N/A	N/A	N/A	N/A	
Single Family	5,688	0.986	1.009	6.6	Compliant	
Vacant Land	723	0.983	1.062	13.2	Compliant	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
10.00	.969	1.017	.113
12.00	.978	1.010	.076
15.00	.987	1.011	.066
19.00	.983	1.007	.069
22.00	.985	1.004	.057
25.00	.980	1.004	.067
27.00	.988	1.006	.058
29.00	.979	1.011	.073
30.00	.988	1.003	.046
31.00	.994	1.014	.104
Overall	.986	1.009	.066

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

SBOE, DPT, and Colorado State Statute valuation guidelines.

Recommendations



Random Deed Analysis

An additional analysis was performed as part of the Ratio Analysis. Ten randomly selected deeds with documentary fees were obtained from the Clerk and Recorder. These deeds were for sales that occurred from January 1, 2007 through June 30, 2008. These sales were then checked for inclusion on the Assessor's qualified or unqualified database.

Conclusions

After comparing the list of randomly selected deeds with the Assessor's database, Mesa County has accurately transferred sales data from the recorded deeds to the qualified or unqualified database.

Recommendations



TIME TRENDING VERIFICATION

Methodology

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

trending adequately, and a further examination is warranted. This validation 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 Mesa County has complied with the statutory requirements to analyze the effects of time on value in their county. Mesa County has also satisfactorily applied the results of their time trending analysis to arrive at the time adjusted sales price (TASP).

Recommendations



SOLD/UNSOLD ANALYSIS

Methodology

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

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 2008 and 2009 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. 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 nonparametric 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 multivariate 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 R	esults
Property Class	Results
Commercial/Industrial	Compliant
Condominium	N/A
Single Family	Compliant
Vacant Land	Compliant

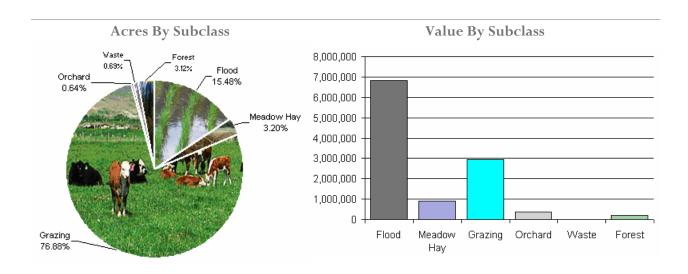
Conclusions

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

Recommendations



AGRICULTURAL LAND STUDY



Agricultural Land

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



	Mesa County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio	
4117	Flood	67,897	100.77	6,841,977	6,579,098	1.04	
4137	Meadow Hay	14,018	65.60	919,594	919,209	1.00	
4147	Grazing	337,180	8.70	2,933,477	2,933,477	1.00	
4157	Orchard	2,827	127.57	360,627	360,627	1.00	
4177	Forest	13,663	14.01	191,103	191,103	1.00	
4167	Waste	3,011	1.62	4,863	4,863	1.00	
Total/Avg		438,596	25.65	11,251,641	10,988,376	1.02	

Recommendations



Agricultural Outbuildings

Methodology

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

Conclusions

Mesa County has substantially complied with the procedures provided by the Division of Property Taxation for the valuation of agricultural outbuildings.

Recommendations



SALES VERIFICATION

According to Colorado Revised Statutes:

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

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

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

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

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

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

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

WRA reviewed the sales verification procedures in 2009 for Mesa County. This study was conducted by checking selected sales from the master sales list for the Jan 1, 2007 - June 30, 2008 valuation period. Specifically WRA selected 45 sales listed as unqualified.

All but one of the sales selected in the sample gave reasons that were clear and supportable. One sale had insufficient documentation.

Conclusions

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

Recommendations



ECONOMIC AREA REVIEW AND EVALUATION

Methodology

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

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

Recommendations



NATURAL RESOURCES

Earth and Stone Products

Methodology

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

Conclusions

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

Recommendations

None

Producing Oil and Gas Procedures

Methodology

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

STATUTORY REFERENCES

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

Actual value determined - when.

(2) The valuation for assessment of leaseholds and lands producing oil or gas shall be determined as provided in article 7 of this title. § 39-1-103, C.R.S.

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

Valuation:

Valuation for assessment.

- (1) Except as provided in subsection (2) of this section, on the basis of the information contained in such statement, the assessor shall value such oil and gas leaseholds and lands for assessment, as real property, at an amount equal to eighty-seven and one-half percent of:
- (a) The selling price of the oil or gas sold there from during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year;
- (b) The selling price of oil or gas sold in the same field area for oil or gas transported from the premises which is not sold during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year.

§ 39-7-102, C.R.S.

Conclusions

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

Recommendations:



VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2009 in Mesa County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14). Discounting procedures were applied to all subdivisions where less than 80 percent of all sites were sold using the present worth method. The market approach was applied where 80 percent or more of the subdivision sites were sold. An absorption period was estimated for each subdivision that was discounted. An appropriate discount rate was developed using the summation method.

Subdivision land with structures was appraised at full market value.

Conclusions

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

Recommendations



POSSESSORY INTEREST PROPERTIES

Possessory Interest

Possessory interest property discovery and valuation is described in the Assessor's Reference Library (ARL) Volume 3 section 7 in accordance with the requirements of 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: 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 agreement.

Mesa County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural, commercial and ski area 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

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

Recommendations



PERSONAL PROPERTY AUDIT

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

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

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

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

Mesa 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.

Mesa County submitted their personal property written audit plan and was current for the 2009 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Non-filing Accounts Best Information Available
- Accounts close to the \$4,000 actual value exemption status



Accounts protested with substantial disagreement

Mesa 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

Mesa County has employed adequate discovery, classification, documentation, valuation, and auditing procedures for their personal property assessment and is in statistical compliance with SBOE requirements.

Recommendations



WILDROSE AUDITOR STAFF

Harry J. Fuller, Audit Project Manager

Suzanne Howard, Audit Administrative Manager

Steve Kane, Audit Statistician/Field Analyst

Carl W. Ross, Agricultural/Natural Resource Analyst

Andy Rodriguez, Field Analyst



APPENDICES

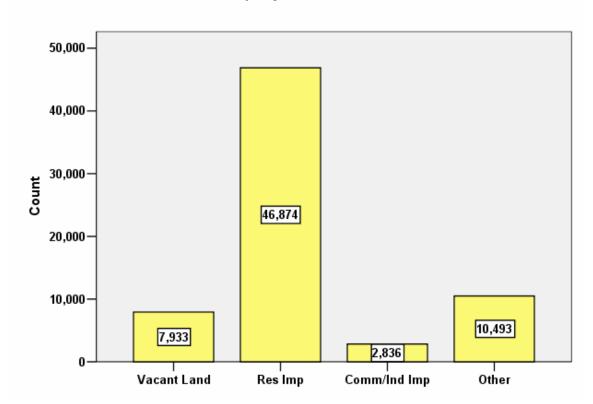


STATISTICAL COMPLIANCE REPORT FOR MESA COUNTY 2009

I. OVERVIEW

Mesa County is an urban county located along Colorado's western slope. The county has a total of 68,136 real property parcels, according to data submitted by the county assessor's office in 2009. The following provides a breakdown of property classes for this county:

Real Property Class Distribution



The vacant land class of properties was dominated by residential and commercial lots. These land subclasses (coded 100 and 200) accounted for 61% of all vacant land parcels.

For residential improved properties, single family properties accounted for 93% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 4% of all such properties in this county.



II. DATA FILES

The following sales analyses were based on the requirements of the 2009 Colorado Property Assessment Study. Information was provided by the Mesa Assessor's Office June 17, 2009. The data included all 5 property record files as specified by the Auditor. A separate sale file for residential sales in Economic Area 10 was provided as well.

III. RESIDENTIAL SALES RESULTS

The following steps were taken to analyze the residential sales:

1. All sales	10,919
2. Qualified sales	7,268
3. Improved sales	6,008
4. Select residential sales only	5,698
5. Trimmed 10 sales in Economic Area 10	5,688

The sales ratio analysis results were as follows:

Case Processing Summary

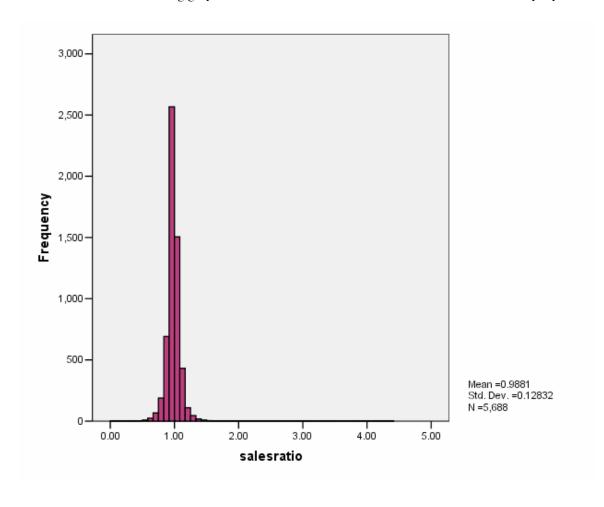
		Count	Percent
ECONAREA	10.00	134	2.9%
1	12.00	430	7.9%
1	15.00	849	15.7%
1	19.00	745	13.7%
1	22.00	938	17.3%
1	25.00	133	2.5%
1	27.00	739	13.6%
1	29.00	549	10.1%
1	30.00	763	14.1%
1	31.00	115	2.1%
Overall		5395	100.0%
Excluded		279	
Total		5698	



Ratio Statistics for CURRIOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
10.00	.969	1.017	.113
12.00	.978	1.010	.076
15.00	.987	1.011	.066
19.00	.983	1.007	.069
22.00	.985	1.004	.057
25.00	.980	1.004	.067
27.00	.988	1.006	.058
29.00	.979	1.011	.073
30.00	.988	1.003	.046
31.00	.994	1.014	.104
Overall	.986	1.009	.066

All of the residential sales in economic areas were within the median sales ratio compliance range of 0.95 to 1.05. The following graphs describe further the sales ratio distribution for these properties:







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

TASP

\$1,500,000

\$2,000,000

\$2,500,000

\$1,000,000

Residential Market Trend Analysis

\$500,000

\$0

0.00

We next analyzed the residential dataset using the 18-month sale period for any residual market trending and broken down by economic area, as follows:



Coefficientsa

			Unstandardized Coefficients		Standardized Coefficients		
ECONAREA	Model		В	Std. Error	Beta	t	Sig.
	1	(Constant)	.859	.028		30.437	.000
		SalePeriod	.006	.003	.126	2.110	.036
10.00	1	(Constant)	.967	.023		41.845	.000
		SalePeriod	.001	.002	.236	2.937	.799
12.00	1	(Constant)	.974	.010		93.701	.000
		SalePeriod	.001	.001	.073	1.519	.130
15.00	1	(Constant)	.973	.009		114.449	.000
		SalePeriod	.002	.001	.080	2.327	.020
19.00	1	(Constant)	.981	.012		81.898	.000
		SalePeriod	.001	.001	.042	1.137	.256
22.00	1	(Constant)	.991	.006		165.766	.000
		SalePeriod	.000	.001	017	533	.594
25.00	1	(Constant)	.962	.017		57.632	.000
		SalePeriod	.001	.002	.052	.591	.556
27.00	1	(Constant)	1.000	.008		124.319	.000
		SalePeriod	.000	.001	022	597	.551
29.00	1	(Constant)	.968	.012		82.924	.000
		SalePeriod	.002	.001	.070	1.647	.100
30.00	1	(Constant)	.986	.005		196.573	.000
		SalePeriod	.001	.000	.082	2.284	.023
31.00	1	(Constant)	.987	.035		28.221	.000
		SalePeriod	.002	.003	.068	.724	.471

a. Dependent Variable: salesratio

The sales ratios in all economic areas either had insignificant trends statistically, or had trends with insignificant monthly rates. This indicates that the assessor has adequately considered market trending in the residential valuation of Mesa County.

Overall, the residential sales indicated no significant residual trend, as follows:

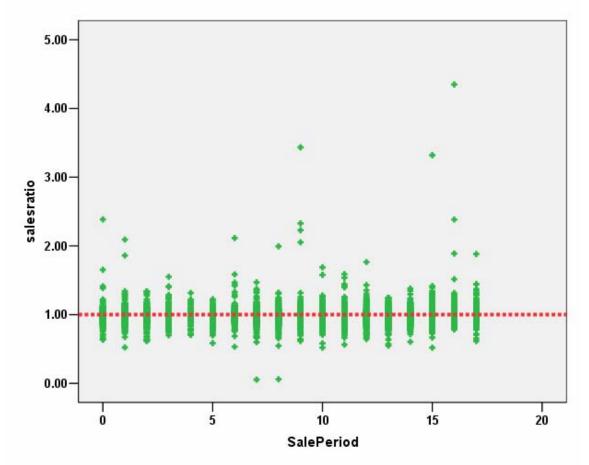
Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.976	.003		288.598	.000
	SalePeriod	.001	.000	.053	4.005	.000

a. Dependent Variable: salesratio







Again, the significance level of 0.000 was a function of the number of sales; the resulting rate of 0.1% per month was not significant.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square foot for 2009 between each group. The data was analyzed both as a whole and broken down by economic area, as follows:

Group	N	Median	Mean
Unsold	41,178	\$151	\$151
Sold	5,695	\$153	\$151

ECONAREA	Group	N	Median	Mean
10	Unsold	1,308	\$149	\$147
	Sold	134	\$150	\$154
12	Unsold	3,244	\$143	\$141
	Sold	430	\$149	\$147



15	Unsold	6,511	\$155	\$158
	Sold	846	\$158	\$159
19	Unsold	4,958	\$148	\$146
	Sold	745	\$154	\$150
22	Unsold	4,999	\$150	\$145
	Sold	938	\$151	\$147
25	Unsold	1,317	\$163	\$165
	Sold	133	\$149	\$155
27	Unsold	3,960	\$160	\$162
	Sold	739	\$159	\$157
29	Unsold	5,395	\$165	\$170
	Sold	549	\$165	\$170
30	Unsold	5,809	\$149	\$147
	Sold	763	\$152	\$150
31	Unsold	1,446	\$158	\$170
	Sold	115	\$160	\$162

The above results indicate that sold and unsold residential properties were valued in a consistent manner.

IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

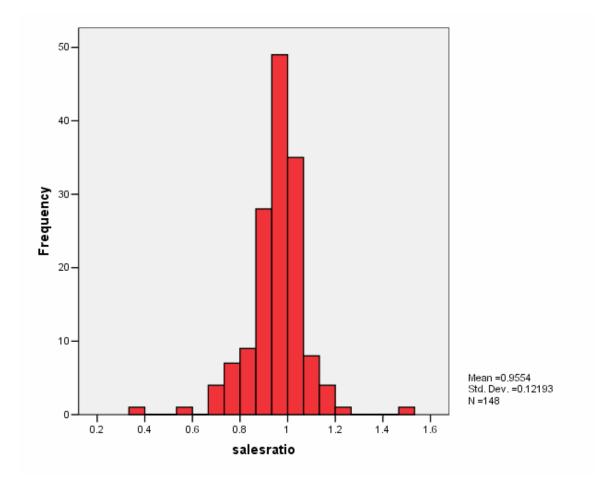
1. All sales	10,919
2. Qualified sales	7,268
3. Improved sales	6,008
4. Select commercial/industrial sales only	148

The sales ratio analysis results were as follows:

Median	0.974
Price Related Differential	1.004
Coefficient of Dispersion	.083

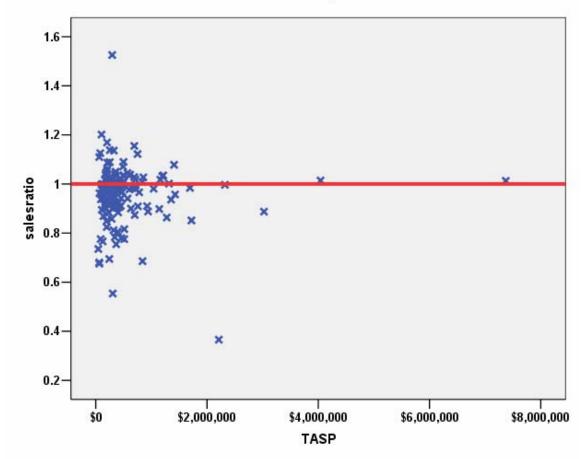
The above table indicates that the Mesa County commercial/industrial sales ratios were in compliance with the SBOE standards. The following histogram and scatter plot describe the sales ratio distribution further:











Commercial/Industrial Market Trend Analysis

The 148 commercial/industrial sales were next analyzed for residual market trending. We examined the sales ratios across the 18-month sale period with the following results:

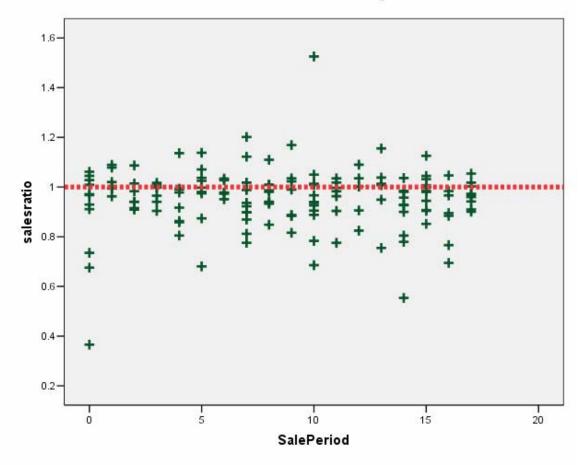
Coefficientsa

		Unstand Coeffi		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.957	.019		49.390	.000
	SalePeriod	.000	.002	010	123	.902

a. Dependent Variable: salesratio







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

Sold/Unsold Analysis

We compared the median actual value per square foot between sold and unsold commercial properties (stratified by subclass) to determine if sold and unsold properties were valued consistently, as follows:

Abstrimp	Group	N	Median	Mean
2212.00	Unsold	446	\$85	\$101
	Sold	27	\$106	\$135
2215.00	Unsold	29	\$71	\$85
	Sold	1	\$101	\$101
2220.00	Unsold	228	\$110	\$118
	Sold	11	\$152	\$155
2230.00	Unsold	783	\$109	\$144
	Sold	43	\$106	\$127



2235.00	Unsold	196	\$44	\$62
	Sold	5	\$61	\$259
2240.00	Unsold	79	\$66	\$73
	Sold	3	\$115	\$100
2245.00	Unsold	439	\$149	\$155
	Sold	27	\$154	\$152
3212.00	Unsold	193	\$90	\$103
	Sold	10	\$93	\$95
3215.00	Unsold	127	\$58	\$66
	Sold	3	\$94	\$95
3225.00	Unsold	7	\$368	\$402
	Sold	1	\$35	\$35
3230.00	Unsold	65	\$90	\$94
	Sold	11	\$76	\$94

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

V. VACANT LAND SALE RESULTS

The following steps were taken to analyze the vacant land sales:

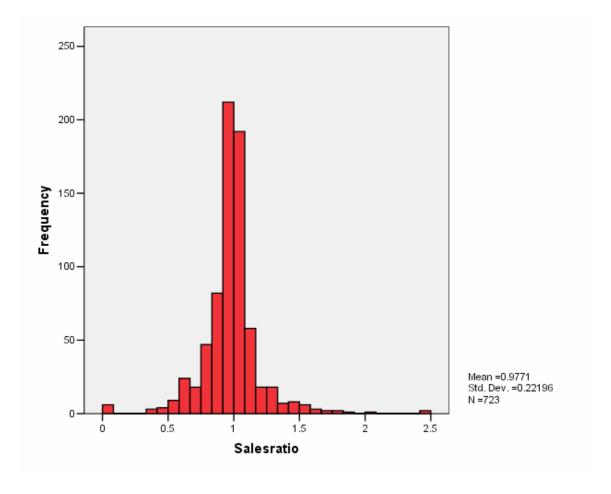
1. All sales	10,919
2. Qualified sales	7,268
3. Vacant land sales	840
4. Residential & commercial/ind vacant land sales	723

The sales ratio analysis results were as follows:

Median	0.983
Price Related Differential	1.062
Coefficient of Dispersion	.132

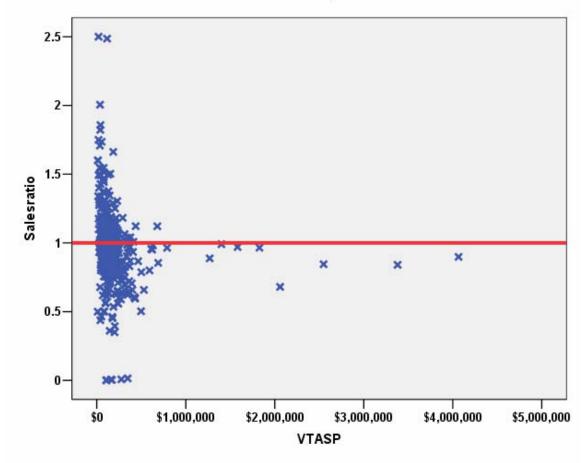
The above ratio statistics were in compliance overall with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall vacant land sales. The following graphs describe further the sales ratio distribution for all of these properties:











The above histogram indicates that the distribution of the vacant land sale ratios was within state mandated limits. No sales were trimmed.

Vacant Land Market Trend Analysis

We next analyzed the vacant land dataset using the 18-month sale period, with the following results:

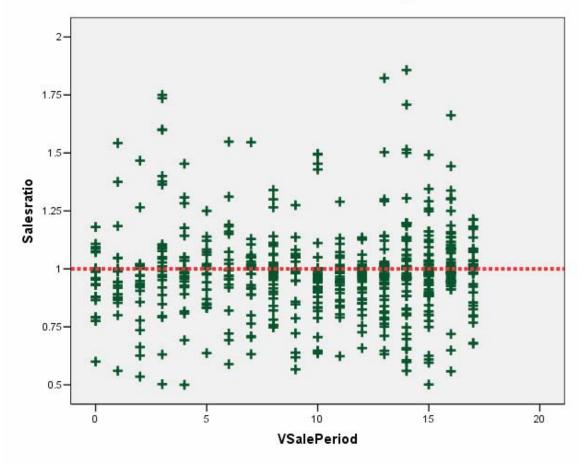
Coefficientsa

		Unstand Coeffi		Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.976	.015		65.297	.000
	VSalePeriod	.001	.001	.028	.752	.452

a. Dependent Variable: Salesratio







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

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold vacant land properties, we compared the median lot value of sold and unsold parcels by subdivision. We examined subdivisions with at least 6 sales, as follows:

NBHD	Group	N	Median	Mean
15.47	Unsold	12	\$205,000.00	\$217,812.50
	Sold	10	\$205,000.00	\$225,500.00
18.43	Unsold	32	\$125,000.00	\$125,000.00
	Sold	13	\$125,000.00	\$125,000.00
19.13	Unsold	4	\$60,000.00	\$60,000.00
	Sold	37	\$60,000.00	\$60,000.00
21.94	Unsold	13	\$60,000.00	\$69,230.77



	Sold	39	\$60,000.00	\$60,000.00
21.99	Unsold	2	\$75,000.00	\$75,000.00
	Sold	9	\$75,000.00	\$75,000.00
22.21	Unsold	14	\$63,000.00	\$63,000.00
	Sold	11	\$63,000.00	\$63,000.00
24.10	Unsold	6	\$113,000.00	\$113,000.00
	Sold	9	\$113,000.00	\$113,000.00
26.47	Unsold	21	\$75,000.00	\$81,250.00
	Sold	37	\$75,000.00	\$80,574.32
26.48	Unsold	3	\$105,000.00	\$105,000.00
	Sold	8	\$105,000.00	\$105,000.00
26.72	Unsold	23	\$80,000.00	\$80,000.00
	Sold	17	\$80,000.00	\$80,000.00
26.75	Unsold	4	\$98,000.00	\$98,000.00
	Sold	13	\$98,000.00	\$98,000.00
27.41	Unsold	9	\$85,000.00	\$85,000.00
	Sold	13	\$85,000.00	\$85,000.00
28.00	Unsold	308	\$52,500.00	\$71,103.93
	Sold	23	\$66,750.00	\$83,833.91
29.55	Unsold	5	\$190,000.00	\$190,000.00
	Sold	10	\$190,000.00	\$190,000.00
30.71	Unsold	6	\$70,000.00	\$70,000.00
	Sold	7	\$70,000.00	\$70,000.00
31.00	Unsold	256	\$116,395.00	\$110,347.11
	Sold	10	\$119,500.00	\$124,277.00
140.26	Unsold	3	\$110,000.00	\$110,000.00
	Sold	7	\$110,000.00	\$110,000.00
180.23	Unsold	8	\$70,000.00	\$70,000.00
	Sold	9	\$70,000.00	\$70,000.00
180000.44	Unsold	70	\$125,000.00	\$125,000.00
	Sold	11	\$125,000.00	\$125,000.00
180000.45	Unsold	9	\$102,000.00	\$102,000.00
	Sold	9	\$102,000.00	\$102,000.00
Total	Unsold	808	\$80,000.00	\$94,751.08
	Sold	353	\$75,000.00	\$88,227.20

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

V. AGRICULTURAL IMPROVEMENTS ANALYSIS

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

The following indicates that both groups were valued in essentially the same manner: $\frac{1}{2}$



Descriptives

	Abstrimp			Statistic	Std. Error
ImpValSF	1212.00	Mean		\$103.79	\$.129
		95% Confidence	Lower Bound	\$103.53	
		Interval for Mean	Upper Bound	\$104.04	
		5% Trimmed Mean		\$104.23	
		Median		\$105.56)
		Variance		721.482	
		Std. Deviation		\$26.860	
		Minimum		\$4	
		Maximum		\$375	
		Range		\$371	
		Interquartile Range		\$29	
		Skewness		046	.012
		Kurtosis		3.450	.023
	4277.00	Mean		\$106.70	\$.656
		95% Confidence	Lower Bound	\$105.41	
		Interval for Mean	Upper Bound	\$107.99	
		5% Trimmed Mean		\$106.18	
		Median		\$106.68)
		Variance		1575.486	
		Std. Deviation		\$39.692	
		Minimum		\$0	
		Maximum		\$726	
		Range		\$726	
		Interquartile Range		\$46	
		Skewness		1.777	.040
		Kurtosis		22.444	.081

VI. CONCLUSIONS

Based on this 2009 audit statistical analysis, residential, commercial/industrial and vacant land properties were found to be in compliance with state guidelines.



STATISTICAL ABSTRACT

Residential

Ratio Statistics for CURRTOT / TASP

Mean		.989
95% Confidence Interval	Lower Bound	.986
for Mean	Upper Bound	.992
Median		.984
95% Confidence Interval	Lower Bound	.983
for Median	Upper Bound	.986
	Actual Coverage	95.2%
Weighted Mean		.981
95% Confidence Interval	Lower Bound	.978
for Weighted Mean	Upper Bound	.984
Price Related Differential		1.008
Coefficient of Dispersion		.072
Coefficient of Variation	Mean Centered	13.1%

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

Commercial Land

Ratio Statistics for CURRTOT / TASP

Mean		.955
95% Confidence Interval	Lower Bound	.936
for Mean	Upper Bound	.975
Median		.974
95% Confidence Interval	Lower Bound	.951
for Median	Upper Bound	.987
	Actual Coverage	96.0%
Weighted Mean		.952
95% Confidence Interval	Lower Bound	.914
for Weighted Mean	Upper Bound	.989
Price Related Differential		1.004
Coefficient of Dispersion		.083
Coefficient of Variation	Mean Centered	12.8%

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



Vacant Land

Ratio Statistics for CURRLND / VTASP

Mean		.977
95% Confidence Interval	Lower Bound	.961
for Mean	Upper Bound	.993
Median		.983
95% Confidence Interval	Lower Bound	.980
for Median	Upper Bound	.994
	Actual Coverage	95.5%
Weighted Mean		.920
95% Confidence Interval	Lower Bound	.900
for Weighted Mean	Upper Bound	.940
Price Related Differential		1.062
Coefficient of Dispersion		.132
Coefficient of Variation	Mean Centered	22.7%

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

Residential Median Ratio Stratification

Sale Price

		Count	Percent
SPRec	LT \$25K	1	.0%
	\$25K to \$50K	6	.1%
	\$50K to \$100K	128	2.3%
	\$100K to \$150K	522	9.2%
	\$150K to \$200K	1275	22.4%
	\$200K to \$300K	2524	44.4%
	\$300K to \$500K	1000	17.6%
	\$500K to \$750K	173	3.0%
	\$750K to \$1,000K	35	.6%
	Over \$1,000K	24	.4%
Overall		5688	100.0%
Excluded		0	
Total		5688	



				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
LT \$25K	.815	1.000	.000	
\$25K to \$50K	1.485	1.026	.207	29.9%
\$50K to \$100K	1.037	1.014	.179	37.3%
\$100K to \$150K	.985	1.003	.113	19.6%
\$150K to \$200K	.983	1.000	.078	13.6%
\$200K to \$300K	.987	1.000	.055	8.5%
\$300K to \$500K	.978	1.000	.057	8.5%
\$500K to \$750K	.976	1.001	.076	10.6%
\$750K to \$1,000K	.960	1.000	.085	10.8%
Over \$1,000K	.919	.996	.118	16.4%
Overall	.984	1.008	.071	13.0%

Subclass

Case Processing Summary

		Count	Percent
Preduse	1212	5216	91.7%
	1215	62	1.1%
	1220	51	.9%
	1225	2	.0%
	1230	357	6.3%
Overall		5688	100.0%
Excluded		0	
Total		5688	

Ratio Statistics for CURRTOT / TASP

				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
1212	.984	1.006	.069	12.0%
1215	.980	1.057	.153	48.9%
1220	.976	1.032	.105	14.0%
1225	.968	1.003	.008	1.2%
1230	.981	1.015	.076	13.5%
Overall	.984	1.008	.071	13.0%



Age

Case Processing Summary

		Count	Percent
AgeRec	0	3	.1%
	Over 100	116	2.0%
	75 to 100	146	2.6%
	50 to 75	554	9.7%
	25 to 50	1440	25.3%
	5 to 25	1742	30.6%
	5 or Newer	1687	29.7%
Overall		5688	100.0%
Excluded		0	
Total		5688	

Ratio Statistics for CURRTOT / TASP

				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
0	.059	4.000	4.283	902.3%
Over 100	.972	1.025	.117	15.5%
75 to 100	.987	1.020	.122	18.0%
50 to 75	.977	1.009	.090	14.0%
25 to 50	.980	1.007	.078	11.8%
5 to 25	.983	1.009	.066	12.2%
5 or Newer	.990	1.007	.055	13.5%
Overall	.984	1.008	.071	13.0%

Improved Area

		Count	Percent
ImpSFRec	0	3	.1%
	LE 500 sf	2	.0%
	500 to 1,000 sf	524	9.2%
	1,000 to 1,500 sf	2207	38.8%
	1,500 to 2,000 sf	1788	31.4%
	2,000 to 3,000 sf	925	16.3%
	3,000 sf or Higher	239	4.2%
Overall		5688	100.0%
Excluded		0	
Total		5688	



				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
0	.059	4.000	4.283	902.3%
LE 500 sf	1.002	1.000	.023	3.2%
500 to 1,000 sf	.971	1.018	.101	16.2%
1,000 to 1,500 sf	.982	1.005	.067	11.0%
1,500 to 2,000 sf	.988	1.005	.061	9.4%
2,000 to 3,000 sf	.988	1.011	.069	14.6%
3,000 sf or Higher	.982	1.034	.111	28.4%
Overall	.984	1.008	.071	13.0%

Quality

		Count	Percent
QUAL	1.00	5	.1%
	2.00	118	2.1%
	2.25	1	.0%
	2.33	1	.0%
	2.50	4	.1%
	3.00	4666	82.1%
	3.33	1	.0%
	4.00	794	14.0%
	5.00	85	1.5%
	6.00	8	.1%
	7.00	1	.0%
	8.00	1	.0%
Overall		5685	100.0%
Excluded	I	3	
Total		5688	



				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
1.00	.800	1.088	.160	24.3%
2.00	.976	1.050	.165	26.2%
2.25	.804	1.000	.000	
2.33	.652	1.000	.000	
2.50	1.012	1.007	.086	12.3%
3.00	.984	1.006	.069	12.5%
3.33	.820	1.000	.000	
4.00	.991	1.011	.063	12.3%
5.00	.983	1.020	.080	11.0%
6.00	.997	1.031	.054	7.4%
7.00	1.021	1.000	.000	
8.00	1.329	1.000	.000	
Overall	.984	1.008	.071	12.9%

Commercial Median Ratio Stratification

Sale Price

		Count	Percent
SPRec	\$25K to \$50K	1	.7%
	\$50K to \$100K	8	5.4%
	\$100K to \$150K	12	8.1%
	\$150K to \$200K	17	11.5%
	\$200K to \$300K	18	12.2%
	\$300K to \$500K	49	33.1%
	\$500K to \$750K	18	12.2%
	\$750K to \$1,000K	8	5.4%
	Over \$1,000K	17	11.5%
Overall		148	100.0%
Excluded		0	
Total		148	



				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
\$25K to \$50K	.735	1.000	.000	
\$50K to \$100K	.949	.993	.143	19.3%
\$100K to \$150K	.977	1.004	.067	10.6%
\$150K to \$200K	.965	1.001	.053	6.7%
\$200K to \$300K	1.011	.997	.103	16.5%
\$300K to \$500K	.963	.997	.072	10.5%
\$500K to \$750K	.992	.996	.063	9.2%
\$750K to \$1,000K	.938	1.003	.097	13.7%
Over \$1,000K	.984	.997	.087	17.1%
Overall	.974	1.004	.083	12.7%

Subclass

		Count	Percent
Preduse	2212	27	18.2%
	2215	5	3.4%
	2220	11	7.4%
	2230	44	29.7%
	2235	6	4.1%
	2240	3	2.0%
	2245	27	18.2%
	3212	10	6.8%
	3215	3	2.0%
	3225	1	.7%
	3230	11	7.4%
Overall		148	100.0%
Excluded		0	
Total		148	



				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
2212	.990	.991	.064	8.6%
2215	1.014	1.015	.037	6.5%
2220	.944	1.024	.045	6.3%
2230	.956	.986	.107	14.3%
2235	.985	.979	.045	5.4%
2240	.978	1.000	.013	2.3%
2245	.984	1.013	.082	13.6%
3212	.941	1.016	.078	12.0%
3215	.973	.974	.058	11.7%
3225	.366	1.000	.000	
3230	.960	.993	.067	10.9%
Overall	.974	1.004	.083	12.7%

Vacant Land Median Ratio Stratification

		Count	Percent
VPreduse	100	217	30.0%
	200	19	2.6%
	300	17	2.4%
	510	3	.4%
	520	10	1.4%
	530	6	.8%
	540	6	.8%
	550	18	2.5%
	600	8	1.1%
	1112	1	.1%
	1135	3	.4%
	1212	404	55.9%
	1215	3	.4%
	2230	4	.6%
	3212	3	.4%
	3215	1	.1%
Overall		723	100.0%
Excluded		0	
Total		723	



				Coefficient of Variation
		Price Related	Coefficient of	Median
Group	Median	Differential	Dispersion	Centered
100	.982	1.052	.135	21.2%
200	.898	1.066	.137	18.8%
300	.962	1.033	.088	12.7%
510	.800	1.117	.188	39.7%
520	.807	1.127	.293	34.1%
530	.928	1.145	.315	45.9%
540	.984	1.159	.274	35.2%
550	1.091	1.141	.367	49.8%
600	.751	1.035	.321	44.4%
1112	1.212	1.000	.000	
1135	1.005	1.285	.299	45.8%
1212	.990	1.036	.104	19.4%
1215	.914	.995	.037	6.8%
2230	.972	.969	.109	19.7%
3212	.831	.967	.134	25.0%
3215	.991	1.000	.000	
Overall	.983	1.062	.132	22.6%