Teller County
COLORADO
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P R O P E R T Y   A S S E S S M E N T
S T U D Y

WILDROSE
APPRAISAL, INCORPORATED
Audit Division
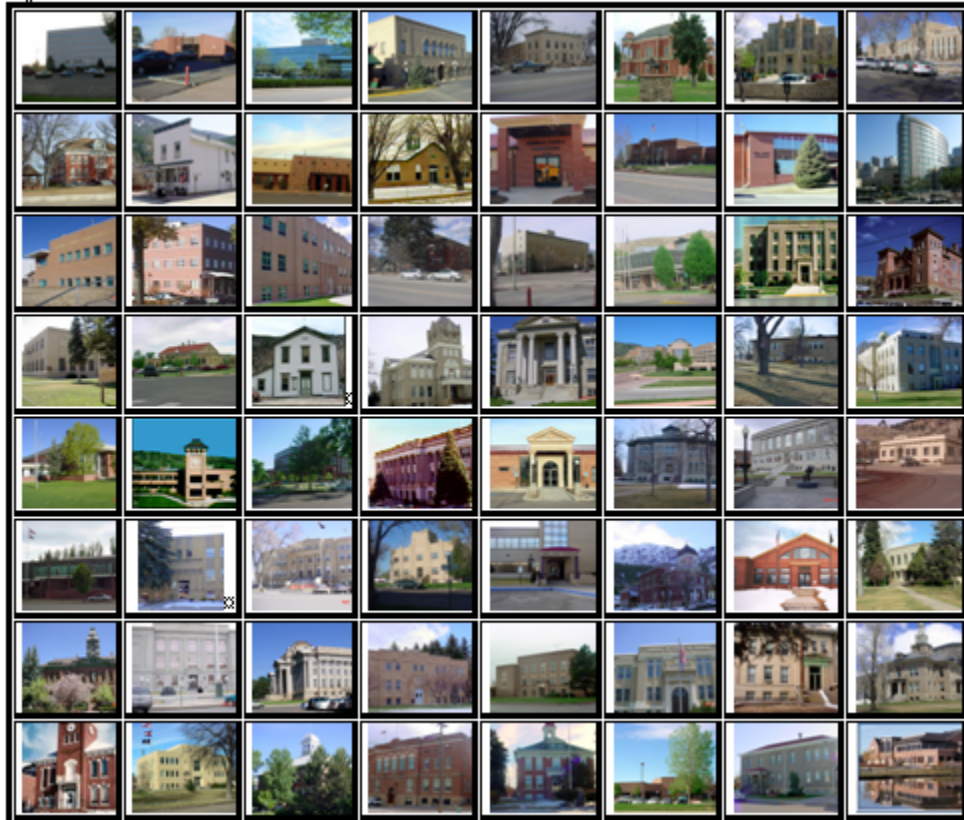
September 15, 2009

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

Harry J. Fuller
Project Manager
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 two-part analysis: A procedural analysis and a statistical analysis.

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

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

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

REGIONAL/HISTORICAL SKETCH OF TELLER COUNTY

Regional Information

Teller County is located in the Central Mountains region of Colorado. The Central Mountains Region is in the central portion of Colorado. It extends from the northern Gilpin county boundary approximately 210 miles southeasterly to the southern boundary of Colorado, including Chaffee, Clear Creek, Custer, Fremont, Gilpin, Huerfano, Lake, Las Animas, Park, and Teller counties.
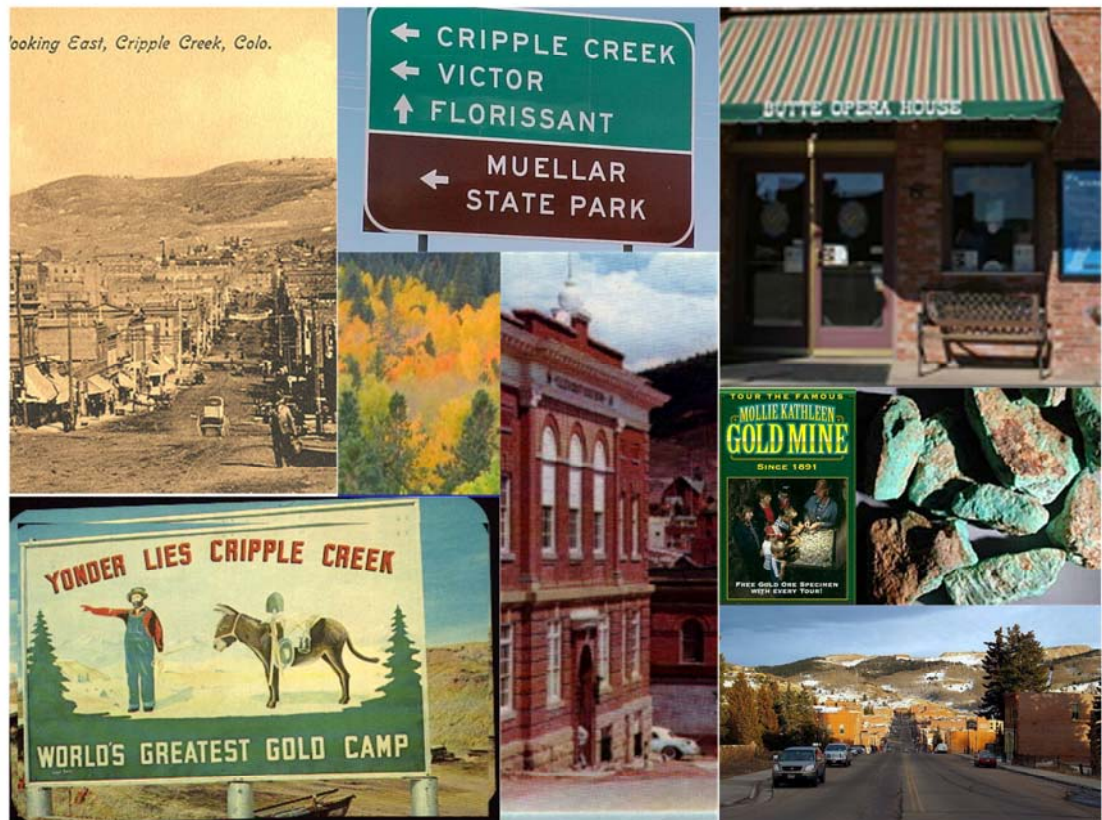
Historical Information

Teller County has a population of approximately 22,243 people with 36.9 people per square mile, according to the U.S. Census Bureau's 2006 estimated population data.

Teller County was named after United States Senator Henry M. Teller. Teller County was carved from the western slope of Pikes Peak, which had been entirely within El Paso County, in 1899.

The county seat is Cripple Creek. On October 20, 1890, Robert Miller "Bob" Womack discovered a rich ore and the last great Colorado gold rush was on. Thousands of prospectors flocked to the region, and before long W. S. Stratton located the famous Independence lode, one of the largest gold strikes in history. In three years, the population increased from 500 to 10,000. By 1900 Cripple Creek and its sister city, Victor, were substantial communities.

Through 2005, the Cripple Creek district produced about 23.5 million troy ounces (731 tons) of gold. The old underground mines are exhausted, but open pit mining has operated since 1994 east of Cripple Creek, near its sister city of Victor, Colorado.

With many empty storefronts and picturesque homes, Cripple Creek once drew interest as a ghost town. At one point the population dropped to a few hundred, although Cripple Creek was never entirely deserted.

Colorado voters allowed Cripple Creek to establish legalized gambling in 1991. Cripple Creek has a population of around 1500 residents and is currently more of a gambling and tourist town than a ghost town. Casinos now occupy many historic buildings. Casino gambling has been successful in bringing revenue and vitality back into the area. *(www.Wikipedia.org)*

R ATIO A NALYSIS

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 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 price-related differential for each class of property. Counties were not passed or failed by these latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the qualification code used by each county, which were typically coded as either "Q" or "C." The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were "lost" because of trimming. For the largest 11 counties, the residential ratio statistics were broken down by economic area as well.

Conclusions

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

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

The results for Teller County are:

Teller County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	63	0.974	1.114	17.5	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	820	0.991	1.020	12.5	Compliant
Vacant Land	312	0.988	1.091	20.8	Compliant

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

Recommendations

None

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, Teller County has accurately transferred sales data from the recorded deeds to the qualified or unqualified database.

Recommendations

None

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

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

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

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

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

Conclusions

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

Recommendations

None

AGRICULTURAL LAND STUDY

Acres By Subclass

Forest 3.51%
Meadow Hay 0.70%
Waste 16.84%
Grazing 78.95%

Value By Subclass
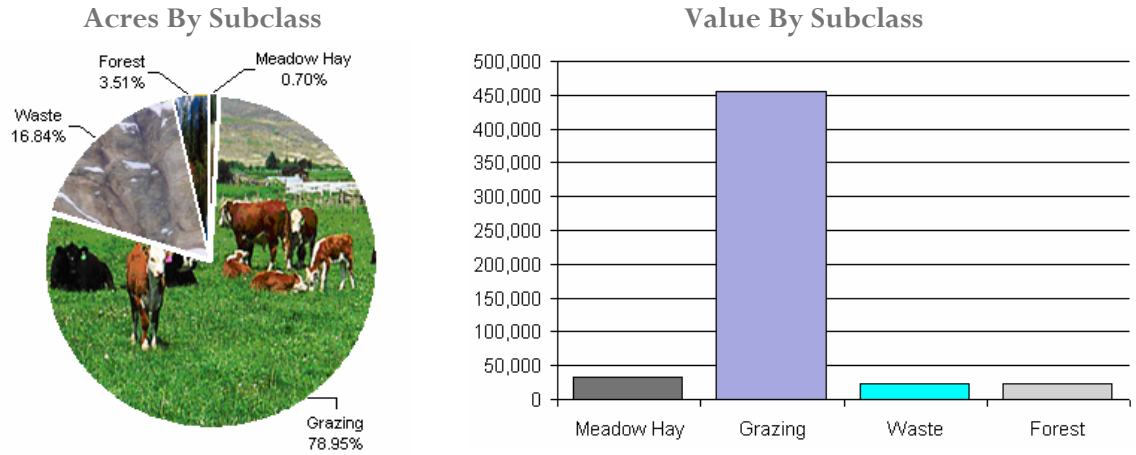
Agricultural Land

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:

Teller County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio
4137	Meadow Hay	620	54.43	33,769	33,850	1.00
4147	Grazing	70,160	6.49	455,039	455,039	1.00
4177	Forest	3,120	7.71	24,057	24,110	1.00
4167	Waste	14,967	1.62	24,173	24,173	1.00
Total/Avg		88,867	6.04	537,037	537,171	1.00

Recommendations

None

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

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

Recommendations

None

S ALES   V ERIFICATION

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 Teller 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 31 sales listed as unqualified. All of the sales in the unqualified sales sample had reasons that were clear and supportable.

Conclusions

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

Recommendations

None

ECONOMIC AREA REVIEW AND EVALUATION

Methodology

Teller County has submitted a written narrative describing the economic areas that make up the county's market areas. Teller 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 Teller County has adequately identified homogeneous economic areas comprised of smaller neighborhoods. Each economic area defined is equally subject to a set of economic forces that impact the value of the properties within that geographic area and this has been adequately addressed. Each economic area defined adequately delineates an area that will give "similar values for similar properties in similar areas."

Recommendations

None

NATURAL RESOURCES

Earth and Stone Products

Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Natural Resource Valuation Procedures, the income approach was 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 Mine Valuation Procedures

Methodology

Colorado Revised Statutes (CRS) Article 39, Section 6, and the Assessor's Reference Library (ARL), Volume 3 are the basis for valuing producing mine property. The gross value of the ore extracted during the preceding year is determined. All costs of treatment, reduction, transportation and sale are deducted to estimate gross proceeds. The costs of extraction are deducted from the gross proceeds to estimate net proceeds.

The current value for assessment is determined by determining if 25% of the gross proceeds or 100% of the net proceeds is greater, then applying that number as the valuation for assessment.

Conclusions

The County valued the producing mine production using acceptable appraisal procedures.

Recommendations

None

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2009 in Teller 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

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

Recommendations

None

POSSESSORY INTEREST PROPERTIES

Possessory Interest

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

Teller County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural and commercial possessory interest properties. The county has also been queried as to their confidence that the possessory interest properties have been discovered and placed on the tax rolls.

Conclusions

Teller 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

Teller 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.

Teller 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
- 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.

Teller 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:

- Accounts with obvious discrepancies
- Accounts with greater than 10% change
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts - Best Information Available

- Accounts close to the $4,000 actual value exemption status

Conclusions

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

Recommendations

None

WILDROSE AUDITOR STAFF

Harry J. Fuller, *Audit Project Manager*

Suzanne Howard, *Audit Administrative Manager*

Steve Kane, *Audit Statistician / Field Analyst*

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

Andy Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE REPORT
FOR TELLER COUNTY
2009

I. OVERVIEW

Teller County is located in central Colorado. The county has a total of 24,399 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

Class	Count
Vacant Land	10,719
Res Imp	11,053
Comm/Ind Imp	444
Other	2,183
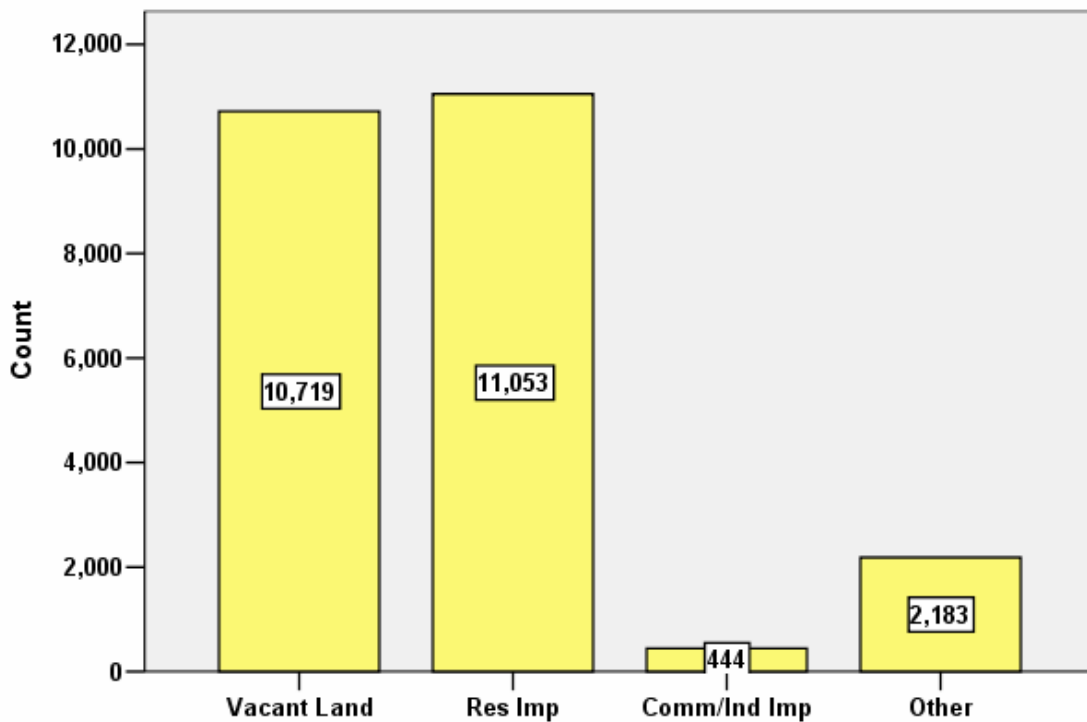
The vacant land class of properties was dominated by residential land. Residential lots (coded 100 and 1112) accounted for 77% of all vacant land parcels.

For residential improved properties, single family properties accounted for 94% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial sales 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 Teller Assessor's Office on May 30, 2009. The data included all 5 property record files as specified by the Auditor. The assessor's sale file had three separate files for residential, commercial and vacant land sales.

III. RESIDENTIAL SALES RESULTS

As noted, the assessor provided a separate sales file of the qualified residential sales used by the assessor to determine values; there were **820 qualified residential sales** for the 18-month residential period between January 2007 and June 2008. The sales ratio analysis results were as follows:

Median	0.991
Price Related Differential	1.020
Coefficient of Dispersion	.125

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

Mean =1.0049
Std. Dev. =0.16667
N =820
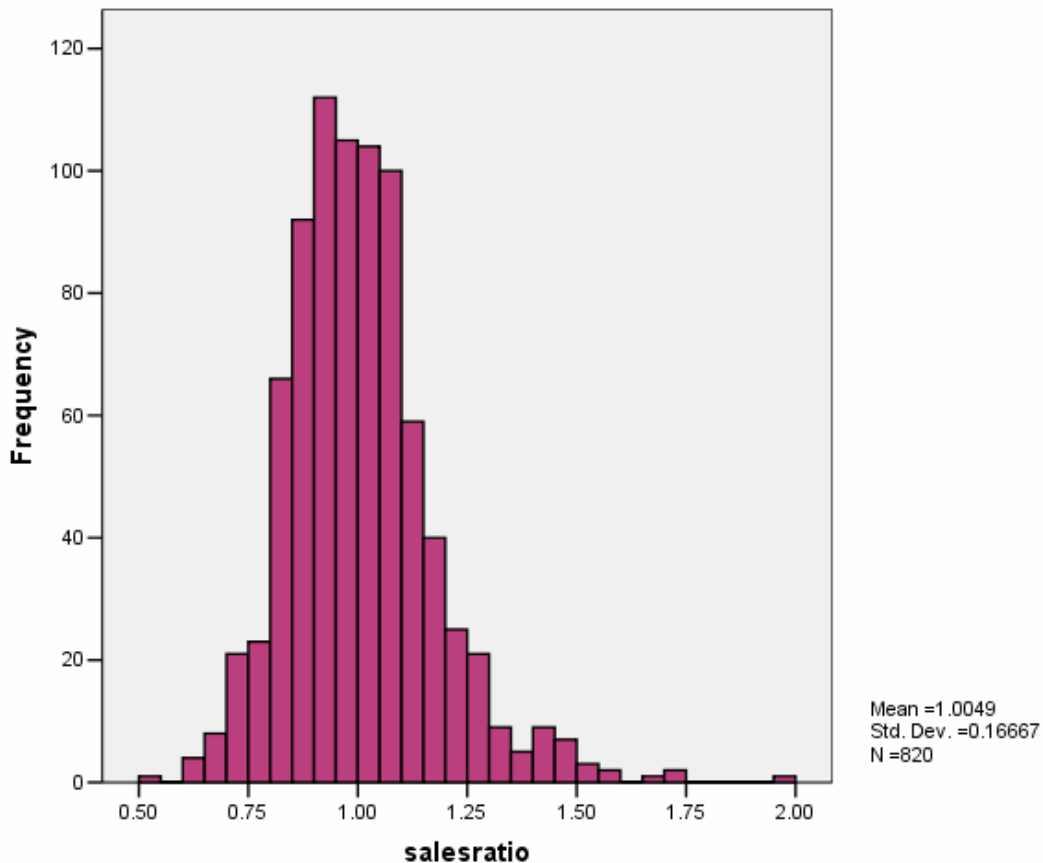
Residential Sale Price by Sales Ratio
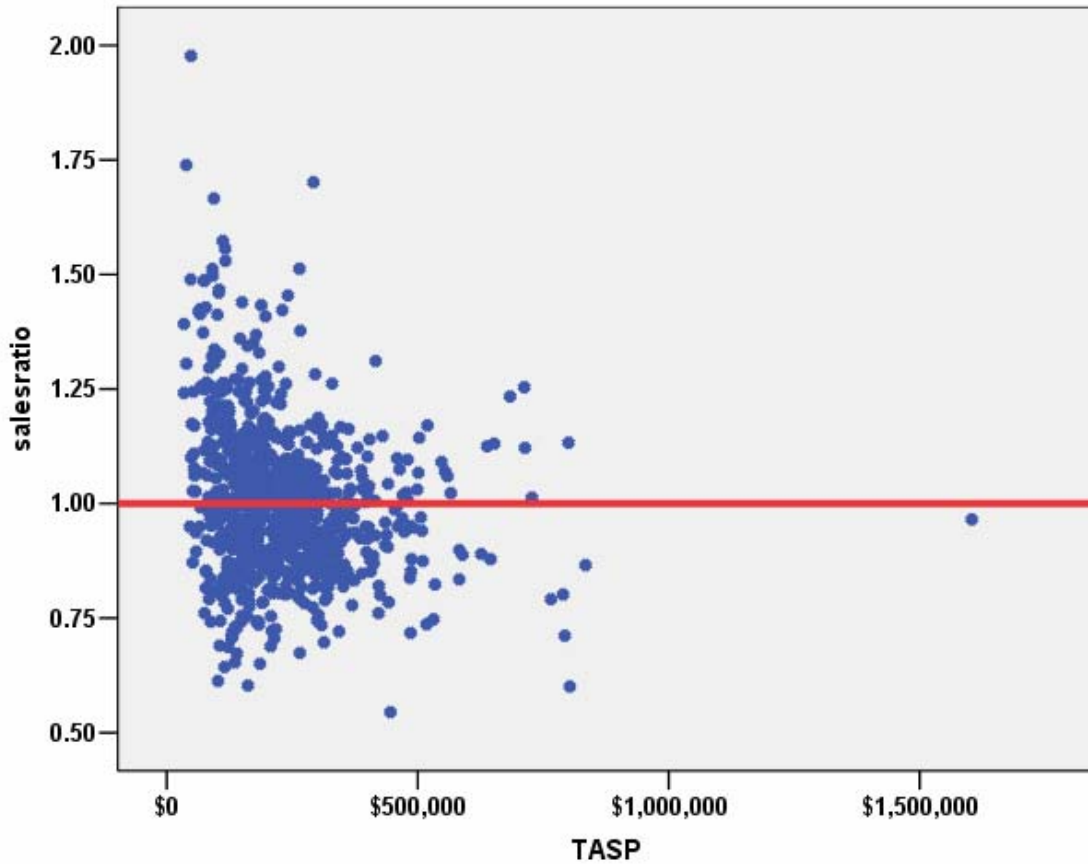
The above graphs indicate that the distribution of the sale ratios was within state mandated limits. No sales were trimmed.

Residential Market Trend Analysis

We next analyzed the residential dataset using the 18-month sale period for any residual market trending, with the following results:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.022	.012		84.169	.000
	SalePeriod	-.002	.001	-.055	-1.569	.117

a. Dependent Variable: salesratio

Residential Sale Price Market Trend
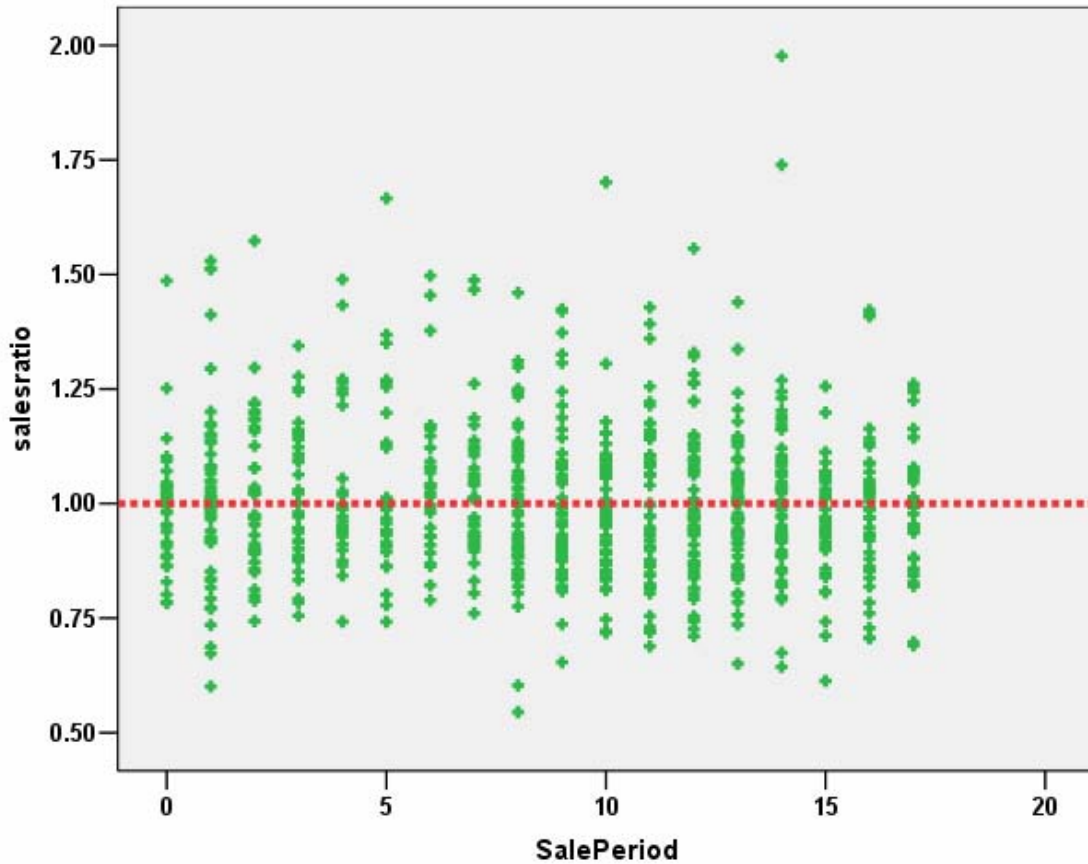
With no significant statistical trend evident in the sales ratio data, the above analysis indicated that the assessor has adequately addressed market trending in the valuation of residential properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square foot for 2009 between each group, as follows:

Group	No.	Median	Mean
Unsold	10,196	$132	$136
Sold	820	$141	$144

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

IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

We were provided a separate commercial/industrial data file containing sales between July 2003 and June 2008. This sale file included 63 qualified sales for this period. When faced with less than 30 sales during the standard 18-month sale period, smaller counties are allowed to go back beyond the 18 month sale period. These counties will typically go back to accumulate a sufficient number of qualified sales, and are allowed to go back 5 years from June 30, 2008. While the typical practice is for a county to go back only as far as necessary to accumulate these sales, Teller County used the entire 60 months allowed, even though they collected far more than the 30 minimum sales. According to the county, this was necessary because of its unique diversity in commercial property subclasses, exacerbated by the presence of the casino properties in Cripple Creek. We reviewed this valuation practice and concluded that it was acceptable and made sense from an appraisal perspective.

The following indicates the subclass breakdown for this county in terms of commercial sales:

PredUse * block Crosstabulation

Count

		block								Total
		Jan 07 to Jun 08	Jly 06 to Dec 06	Jan 06 to Jun 06	Jly 05 to Dec 05	Jan 05 to Jun 05	Jly 04 to Dec 04	Jan 04 to Jun 04	Jly 03 to Dec 03	
PredUse	1212	2	1	0	0	0	0	0	0	3
	1220	1	1	0	0	1	0	0	0	3
	2212	8	2	0	0	0	3	1	2	16
	2215	2	1	1	0	1	0	0	1	6
	2220	4	2	2	1	2	0	1	0	12
	2227	0	0	0	1	0	0	0	0	1
	2230	5	1	2	0	2	2	3	1	16
	2235	0	0	0	0	0	0	0	2	2
	2240	0	0	0	1	0	0	0	0	1
	2245	0	0	0	0	0	2	0	0	2
	3212	0	1	0	0	0	0	0	0	1
Total		22	9	5	3	6	7	5	6	63

As noted, with this number of distinct commercial subclasses in a relatively smaller market, the assessor's decision to use the full 60 month period was concluded to be justified, in our opinion. The following compliance analysis will use this period to determine if Teller County is in compliance for commercial/industrial properties.

The commercial/industrial sales ratio analysis results were as follows:

Median	**0.974**
Price Related Differential	**1.114**
Coefficient of Dispersion	**.175**

The above tables indicate that the Teller County commercial/industrial sale ratios were in compliance with the SBOE standards. The following histogram and scatter plot describe the sales ratio distribution further:

Mean =0.9533
Std. Dev. =0.21536
N =63
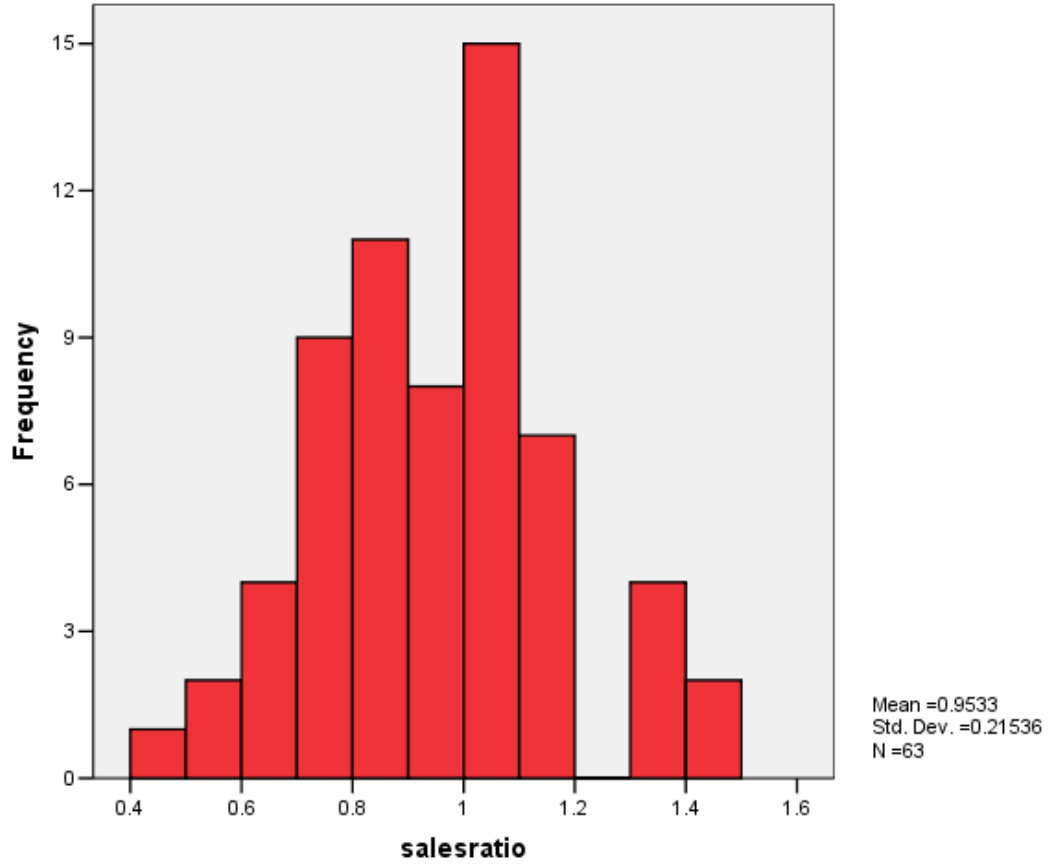
Commercial Sale Price by Sales Ratio
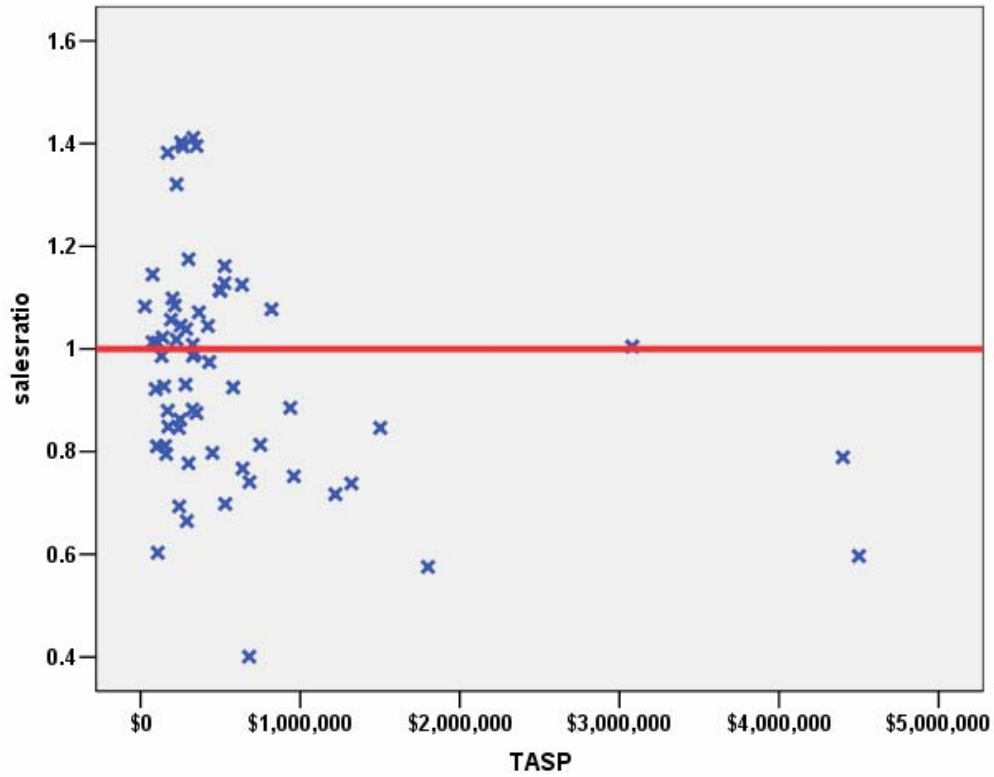
Commercial Market Trend Analysis

The 63 commercial/industrial sales were next analyzed by subclass for any residual market trending, examining the sale ratios across the 60-month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.931	.051		18.098	.000
	SalePeriod	.001	.002	.066	.513	.610

a. Dependent Variable: salesratio

Commercial Market Trend Analysis
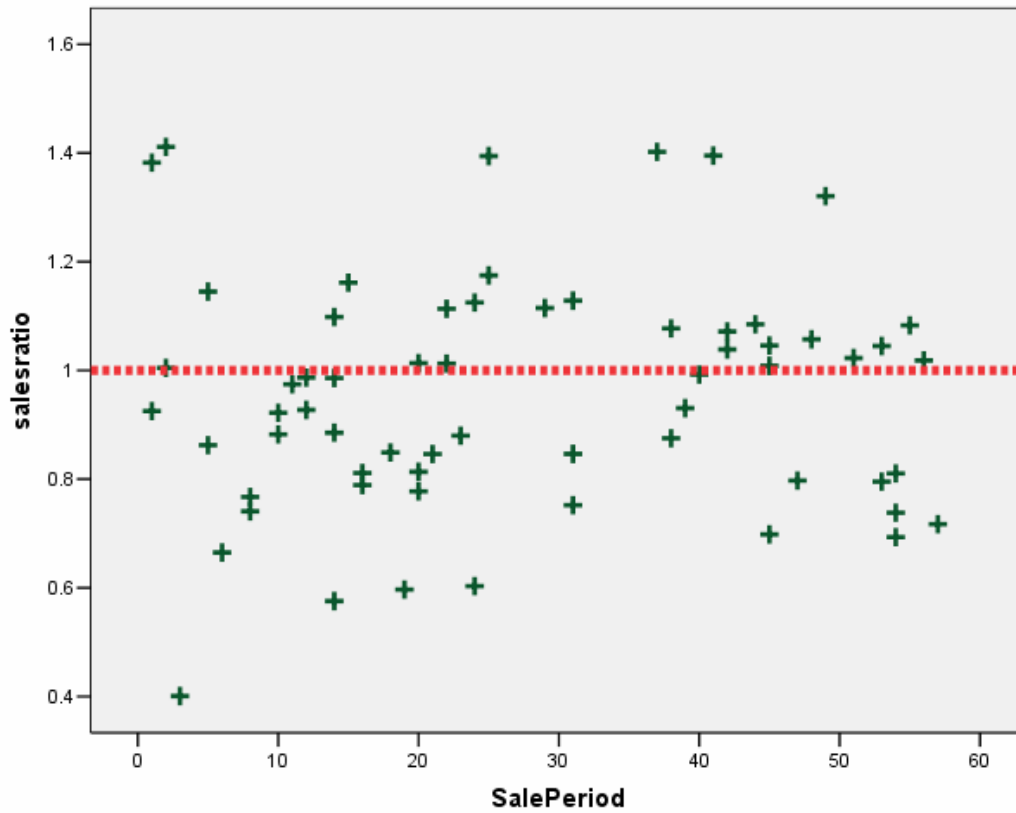
The market trend results indicated no significant residual sales ratio trend in the commercial/industrial data. We therefore concluded that the assessor adequately considered market trending in their valuation of commercial and industrial properties.

Sold/Unsold Analysis

We compared the median actual value per square foot between sold and unsold commercial properties to determine if the assessor was valuing each group consistently, as follows:

Subclass	Group	No.	Median	Mean
Total	Unsold	301	$100	$113
	Sold	56	$110	$120

Based on the above results, we concluded that the Teller County assessor was valuing sold and unsold commercial properties consistently.

V. VACANT LAND SALE RESULTS

We were provided a separate vacant land sale file with sales between January 2007 and June 2008. This file contained sales over the specified 18-month sale period and included 332 vacant land sales that were qualified; we trimmed a total of 20 sales due to their extreme ratios. Please note that this barely put the sales ratio in compliance in terms of the COD statistic, and was at the 5% trimming limit specified by the IAAO.

The sales ratio analysis resulted in the following ratio statistics:

Median	0.988
Price Related Differential	1.091
Coefficient of Dispersion	.208

The above tables indicate that the Teller County vacant land sale ratios were in compliance with the SBOE standards. The following histogram and scatter plot describe the sales ratio distribution further:

Mean =1.0033
Std. Dev. =0.27017
N =312
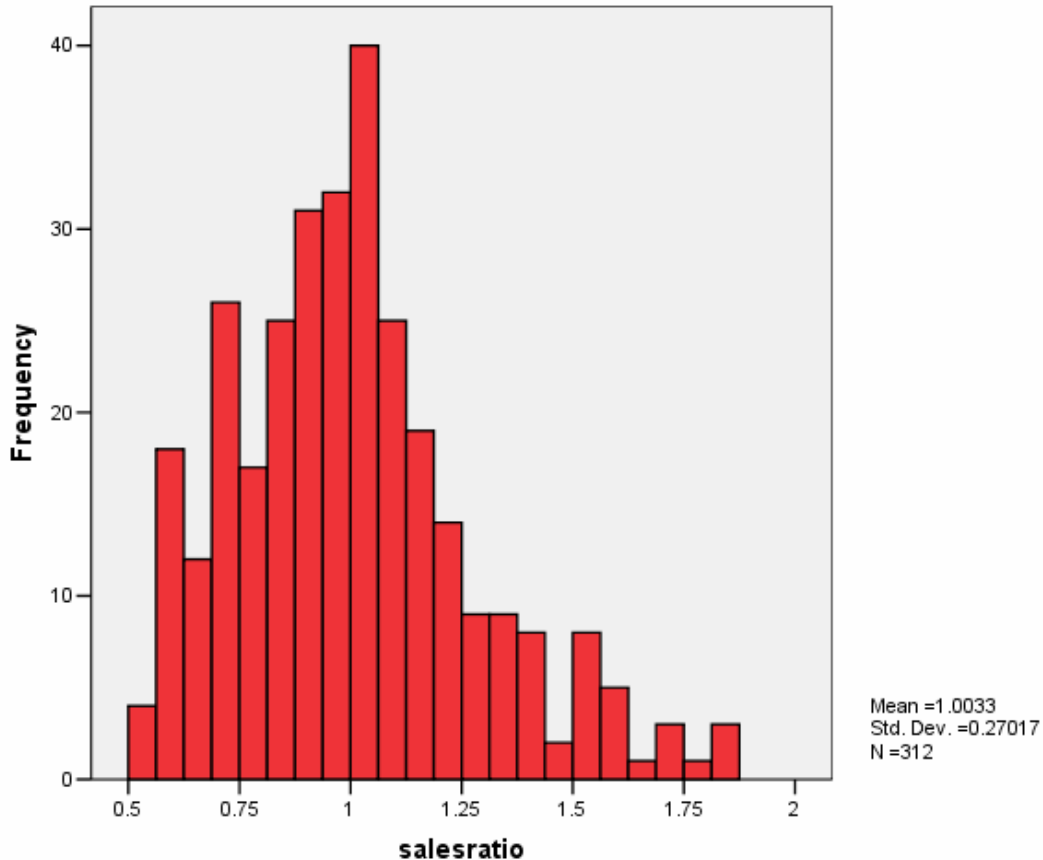
Vacant Land Sale Price by Sales Ratio
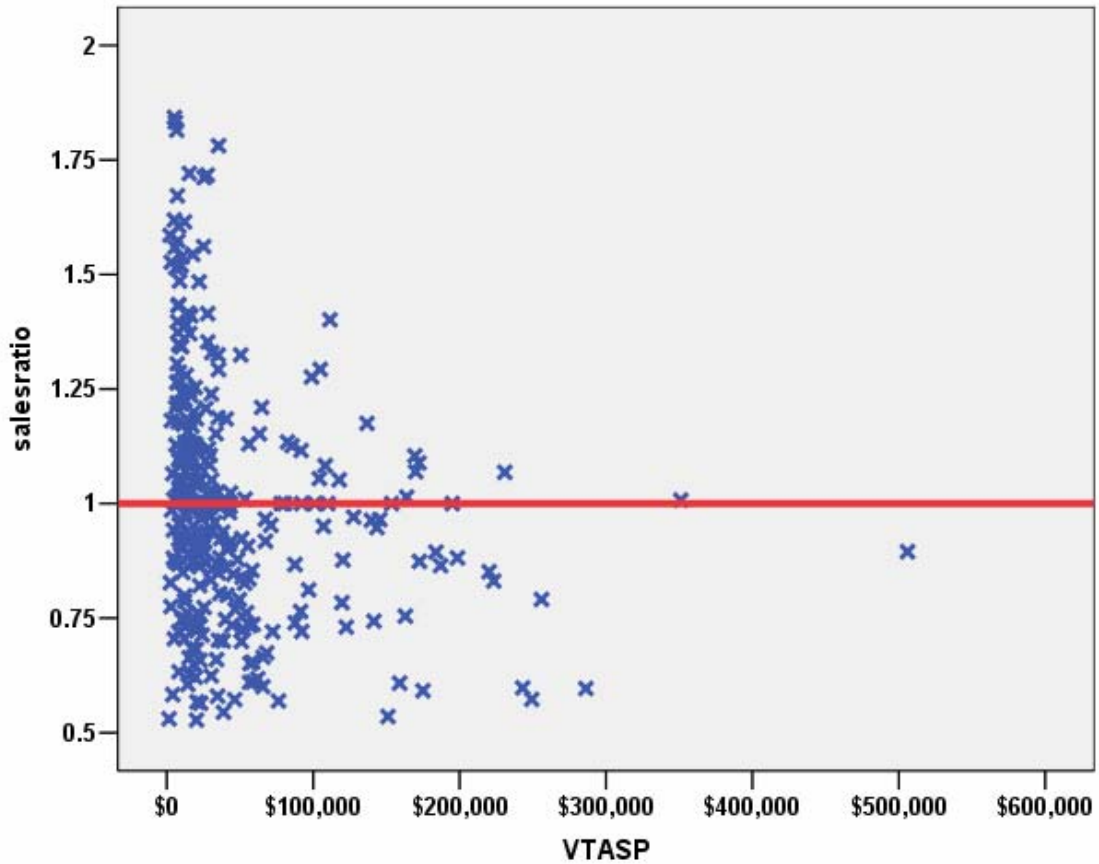
Vacant Land Market Trend Analysis

The assessor did not apply any market trend adjustments to the vacant land dataset. The 312 vacant land sales were analyzed, examining the sale ratios across the 18-month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.976	.032		30.409	.000
	VSalePeriod	.003	.003	.054	.952	.342

a. Dependent Variable: salesratio

Vacant Land Sales Market Trend Analysis
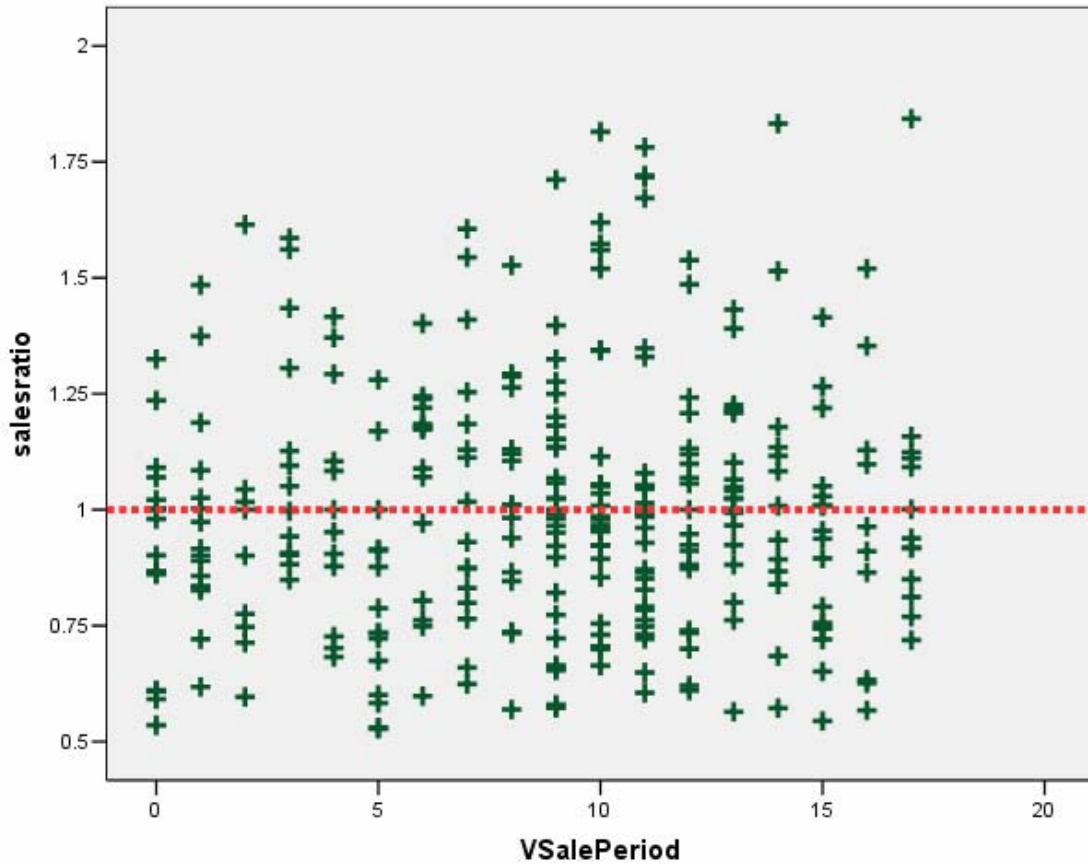
The market trend results indicated no statistically significant trend. We concur that no market trend adjustments were warranted for properties in this class for Teller County.

Sold/Unsold Analysis

We compared the median change in actual value between 2008 and 2009 for vacant land properties to determine if sold and unsold properties were valued consistently, as follows:

SUBDIVNO	Group	N	Median	Mean
Total	**Unsold**	10,089	1.00	1.01
	Sold	301	1.03	1.03

The above results indicated that sold and unsold vacant land properties were valued consistently overall.

V. AGRICULTURAL IMPROVEMENTS ANALYSIS

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

The following indicates that agricultural residential improvements were valued in a manner similar to the single family residential improvements in this county:

Descriptives

	ABSTRIMP			Statistic	Std. Error
ImpValSF	1212.00	Mean		$113.69	$2.001
		95% Confidence Interval for Mean	Lower Bound	$109.77	
			Upper Bound	$117.62	
		5% Trimmed Mean		$109.16	
		Median		$108.05	
		Variance		41618.125	
		Std. Deviation		$204.005	
		Minimum		$0	
		Maximum		$16,397	
		Range		$16,397	
		Interquartile Range		$63	
		Skewness		68.548	.024
		Kurtosis		5058.428	.048
	4277.00	Mean		$102.41	$3.351
		95% Confidence Interval for Mean	Lower Bound	$95.79	
			Upper Bound	$109.02	
		5% Trimmed Mean		$99.83	
		Median		$98.71	
		Variance		2032.999	
		Std. Deviation		$45.089	
		Minimum		$6	
		Maximum		$272	
		Range		$266	
		Interquartile Range		$55	
		Skewness		.997	.181
		Kurtosis		1.728	.359

VI. CONCLUSIONS

Based on this statistical analysis, there were no significant compliance issues concluded for Teller County as of the date of this report. Please note that the commercial sale ratio dispersion as measured by the COD statistic was barely compliant over the 18-month sale period.

STATISTICAL ABSTRACT

Residential

Ratio Statistics for CURRTOT / TASP

Mean		1.005
95% Confidence Interval for Mean	Lower Bound	.993
	Upper Bound	1.016
Median		.991
95% Confidence Interval for Median	Lower Bound	.975
	Upper Bound	1.002
	Actual Coverage	95.4%
Weighted Mean		.985
95% Confidence Interval for Weighted Mean	Lower Bound	.974
	Upper Bound	.996
Price Related Differential		1.020
Coefficient of Dispersion		.125
Coefficient of Variation	Mean Centered	16.6%

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/Industrial

Ratio Statistics for CURRTOT / TASP

Mean		.953
95% Confidence Interval for Mean	Lower Bound	.899
	Upper Bound	1.008
Median		.974
95% Confidence Interval for Median	Lower Bound	.875
	Upper Bound	1.018
	Actual Coverage	95.7%
Weighted Mean		.856
95% Confidence Interval for Weighted Mean	Lower Bound	.771
	Upper Bound	.940
Price Related Differential		1.114
Coefficient of Dispersion		.175
Coefficient of Variation	Mean Centered	22.6%

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		1.000
95% Confidence Interval for Mean	Lower Bound	.970
	Upper Bound	1.031
Median		.985
95% Confidence Interval for Median	Lower Bound	.943
	Upper Bound	1.001
	Actual Coverage	95.3%
Weighted Mean		.911
95% Confidence Interval for Weighted Mean	Lower Bound	.876
	Upper Bound	.947
Price Related Differential		1.097
Coefficient of Dispersion		.210
Coefficient of Variation	Mean Centered	27.2%

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

Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$25K to $50K	9	1.1%
	$50K to $100K	71	8.7%
	$100K to $150K	143	17.4%
	$150K to $200K	168	20.5%
	$200K to $300K	247	30.1%
	$300K to $500K	151	18.4%
	$500K to $750K	24	2.9%
	$750K to $1,000K	6	.7%
	Over $1,000K	1	.1%
Overall		820	100.0%
Excluded		0	
Total		820	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$25K to $50K	1.305	1.002	.181	25.3%
$50K to $100K	1.105	.998	.147	18.4%
$100K to $150K	1.000	1.003	.153	19.6%
$150K to $200K	1.001	.998	.113	14.6%
$200K to $300K	.978	.999	.101	13.8%
$300K to $500K	.946	1.000	.095	12.3%
$500K to $750K	1.018	.993	.123	14.6%
$750K to $1,000K	.797	.999	.146	22.7%
Over $1,000K	.966	1.000	.000	.
Overall	.991	1.020	.125	16.9%

Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	25	3.0%
	75 to 100	10	1.2%
	50 to 75	25	3.0%
	25 to 50	228	27.8%
	5 to 25	417	50.9%
	5 or Newer	115	14.0%
Overall		820	100.0%
Excluded		0	
Total		820	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.896	1.083	.217	31.2%
75 to 100	.911	1.120	.296	46.9%
50 to 75	.989	1.012	.131	17.5%
25 to 50	.996	1.012	.136	17.7%
5 to 25	1.001	1.021	.117	15.5%
5 or Newer	.968	1.010	.091	12.4%
Overall	.991	1.020	.125	16.9%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	11	1.3%
	500 to 1,000 sf	113	13.8%
	1,000 to 1,500 sf	258	31.5%
	1,500 to 2,000 sf	247	30.1%
	2,000 to 3,000 sf	134	16.3%
	3,000 sf or Higher	57	7.0%
Overall		820	100.0%
Excluded		0	
Total		820	

Ratio Statistics for CURRTOT / TASP

				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	.896	1.059	.218	28.3%
500 to 1,000 sf	.976	1.035	.145	18.7%
1,000 to 1,500 sf	.996	1.021	.124	16.9%
1,500 to 2,000 sf	.993	1.020	.107	15.0%
2,000 to 3,000 sf	.968	1.022	.127	17.5%
3,000 sf or Higher	1.027	1.012	.143	18.7%
Overall	.991	1.020	.125	16.9%

Improvement Quality

Case Processing Summary

		Count	Percent
Qual	2.00	296	36.1%
	2.50	1	.1%
	3.00	31	3.8%
	3.33	1	.1%
	3.50	17	2.1%
	4.00	17	2.1%
	4.50	1	.1%
	5.00	210	25.6%
	5.50	8	1.0%
	6.00	195	23.8%
	7.00	9	1.1%
	9.00	28	3.4%
	10.00	6	.7%
Overall		820	100.0%
Excluded		0	
Total		820	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
2.00	.992	1.019	.099	13.5%
2.50	1.144	1.000	.000	.
3.00	1.027	1.001	.115	14.6%
3.33	.907	1.000	.000	.
3.50	.900	1.018	.123	20.9%
4.00	.993	.979	.111	17.6%
4.50	.806	1.000	.000	.
5.00	.995	1.037	.147	20.0%
5.50	1.048	1.059	.186	25.1%
6.00	.999	1.017	.121	15.8%
7.00	.898	.959	.170	23.0%
9.00	.835	1.052	.232	31.8%
10.00	.976	1.035	.126	16.6%
Overall	.991	1.020	.125	16.9%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$25K to $50K	1	1.6%
	$50K to $100K	3	4.8%
	$100K to $150K	6	9.5%
	$150K to $200K	7	11.1%
	$200K to $300K	14	22.2%
	$300K to $500K	13	20.6%
	$500K to $750K	9	14.3%
	$750K to $1,000K	3	4.8%
	Over $1,000K	7	11.1%
Overall		63	100.0%
Excluded		0	
Total		63	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$25K to $50K	1.083	1.000	.000	.
$50K to $100K	1.013	1.008	.073	11.2%
$100K to $150K	.957	.988	.119	18.4%
$150K to $200K	.880	.992	.176	27.2%
$200K to $300K	1.028	1.005	.185	23.5%
$300K to $500K	1.008	1.003	.125	18.5%
$500K to $750K	.813	1.017	.237	31.4%
$750K to $1,000K	.885	1.010	.122	18.7%
Over $1,000K	.738	1.000	.145	20.1%
Overall	.974	1.114	.175	22.2%

SubClass

Case Processing Summary

		Count	Percent
PredUse	1212	3	4.8%
	1220	3	4.8%
	2212	16	25.4%
	2215	6	9.5%
	2220	12	19.0%
	2227	1	1.6%
	2230	16	25.4%
	2235	2	3.2%
	2240	1	1.6%
	2245	2	3.2%
	3212	1	1.6%
Overall		63	100.0%
Excluded		0	
Total		63	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212	.927	1.123	.119	18.7%
1220	.862	.978	.214	44.3%
2212	.948	1.180	.232	29.4%
2215	.919	1.046	.134	15.8%
2220	.972	.984	.138	17.4%
2227	.846	1.000	.000	.
2230	.934	1.072	.195	25.1%
2235	1.051	1.025	.031	4.3%
2240	1.128	1.000	.000	.
2245	1.027	1.002	.018	2.6%
3212	.597	1.000	.000	.
Overall	.974	1.114	.175	22.2%

Vacant Land Median Ratio Stratification

Case Processing Summary

		Count	Percent
VPreduse	100	260	83.3%
	520	4	1.3%
	530	13	4.2%
	540	12	3.8%
	550	15	4.8%
	1112	1	.3%
	1113	7	2.2%
Overall		312	100.0%
Excluded		0	
Total		312	

Ratio Statistics for CURRLND / VTASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100	1.000	1.093	.206	27.2%
520	1.012	1.065	.145	24.7%
530	.878	1.024	.132	19.4%
540	.845	1.138	.322	49.1%
550	.963	1.078	.198	25.3%
1112	.943	1.000	.000	.
1113	.756	.976	.232	33.5%
Overall	.985	1.097	.210	27.6%