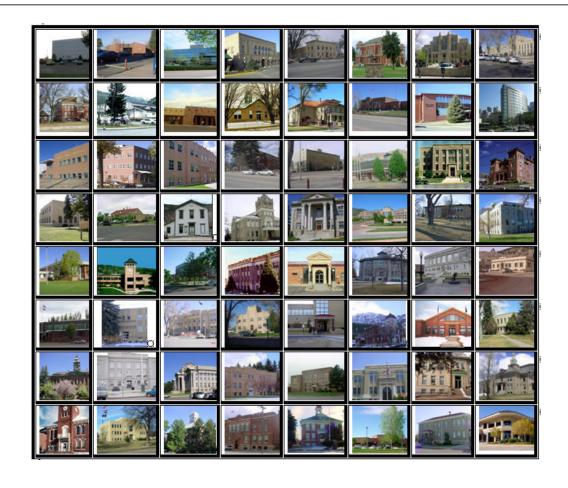


2014 PUEBLO COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2014

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

RE: Final Report for the 2014 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2014 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. Zulln

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 2014 and is pleased to report its findings for Pueblo County in the following report.



REGIONAL/HISTORICAL SKETCH OF PUEBLO COUNTY

Regional Information

Pueblo County is located in the Front Range region of Colorado. The Colorado Front Range is a colloquial geographic term for the populated areas of the State that are just east of the foothills of the Front Range. It includes Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld counties.





Historical Information

Pueblo County has a population of approximately 159,063 people with 66.58 people per square mile, according to the U.S. Census Bureau's 2010 census data. This represents a 12.43 percent change from the 2000 Census.

Pueblo County, one of the seventeen original territorial counties, was established in 1861 with an area of 2,405 square miles. The county was named for its county seat, Pueblo, Spanish for 'town' or 'village.' Originally called Independence, it had been a settlement for many years, occupied at times by Spaniards, trappers, Indian traders, and Mexicans.

Pueblo is a Home Rule Municipality and is the county seat and the most populous city of Pueblo County. It is situated at the confluence of the Arkansas River and Fountain Creek. The area is considered to be semi-arid with approximately 14 inches of precipitation annually; however with its location in the

"banana belt," Pueblo tends to get less snow than the other major cities in Colorado. Pueblo is one of the largest steel-producing cities in the United States. Because of this, Pueblo is referred to as the "Steel City." Many consider Pueblo to be the economic hub of south eastern Colorado. Due to this some people call Pueblo "Colorado's second city" even though Pueblo is the state's ninth most populous city. It is now home to a number of electronics and aviation companies. Historic Arkansas River Project (HARP) is a beautiful river walk that graces the historic Union Avenue district. It shows the history of the Pueblo Flood.

Pueblo is also the home to Colorado's largest single event, the Colorado State Fair and the largest parade, the state fair parade. Pueblo also hosts an annual Chili Festival and the Wild West Fest.

(www.Wikipedia.org, William Bright, Colorado Place Names, 3rd Edition, Johnson Books, 2004, p. 143)



RATIO ANALYSIS

Methodology

All significant classes of properties were analyzed. Sales were collected for each property class over the appropriate sale period, which was typically defined as the 18-month period between January 2011 and June 2012. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2012 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 Pueblo County are:

Pueblo County Ratio Grid							
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis		
Commercial/Industrial	54	0.951	0.993	20.6	Compliant		
Condominium	N/A	N/A	N/A	N/A	N/A		
Single Family	1,853	1.021	1.019	11.4	Compliant		
Vacant Land	138	1.000	1.150	18	Compliant		

Ratio Statistics for Current Total / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	
1	.986	1.020	.159	
10	1.010	1.009	.078	
11	1.041	1.009	.088	
12	1.026	1.018	.150	
13	1.002	1.014	.098	
2	1.019	1.021	.112	
3	1.030	1.025	.129	
4	1.007	1.018	.124	
5	1.010	1.024	.131	
6	1.030	1.013	.086	
7	1.034	1.011	.102	
8	1.022	1.027	.114	
9	1.010	1.021	.119	
Overall	1.021	1.019	.114	

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

SBOE, DPT, and Colorado State Statute valuation guidelines.

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

Pueblo 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 2012 and 2014 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 Results				
Property Class	Results			
Commercial/Industrial	Compliant			
Condominium	N/A			
Single Family	Compliant			
Vacant Land	Compliant			

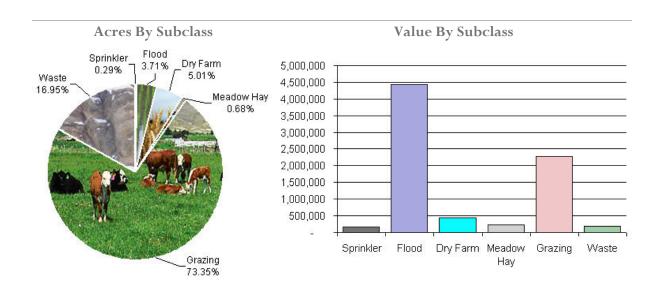
Conclusions

After applying the above described methodologies, it is concluded that Pueblo 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 lands. 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 locally developed yields, any 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:



	Pueblo County Agricultural Land Ratio Grid							
Abstract Code	Land Class	Number Of Acres	County Value Per Acre T	County Assessed Total Value	WRA Total Value	Ratio		
4107	Sprinkler	1,889	83.00	157,602	164,922	0.96		
4117	Flood	24,460	182.00	4,443,908	4,532,019	0.98		
4127	Dry Farm	33,024	13.00	437,693	440,115	0.99		
4137	Meadow Hay	4,507	51.00	231,696	231,696	1.00		
4147	Grazing	483,025	5.00	2,278,097	2,278,097	1.00		
4167	Waste	111,630	2.00	194,859	194,859	1.00		
Total/Avg		658,535	12.00	7,743,855	7,841,707	0.99		

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

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

Recommendations

None

Agricultural Land Under Improvements

Methodology

Data was collected and reviewed to determine if the guidelines found in the Assessor's Reference Library (ARL) Volume 3, pages 5.19 and 5.20 were being followed.

Conclusions

Pueblo County has substantially complied with the procedures provided by the Division of Property Taxation for the valuation of land under residential improvements that may or may not be integral to an agricultural operation.

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 2014 for Pueblo County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 60 sales listed as unqualified.

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

Conclusions

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

Recommendations



ECONOMIC AREA REVIEW AND EVALUATION

Methodology

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



VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2014 in Pueblo County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14) and by applying the recommended methodology in ARL Vol 3, Chap 4. Subdivision Discounting in the intervening year was accomplished by reducing the absorption period by one year.

In instances where the number of sales within an approved plat was less than the absorption

rate per year calculated for the plat, the absorption period was left unchanged.

Conclusions

Pueblo 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 Chapter 39-1-103 (17)(a)(II)C.R.S. Possessory Interest is defined by the Property Tax Administrator's Publication ARL Volume 3, Chapter 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 under lease, permit, concession, contract, or other agreement.

Pueblo 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

Pueblo 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

Pueblo 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.

Pueblo County is compliant with the guidelines set forth in ARL Volume 5 regarding discovery procedures, using the following methods to discover personal property accounts in the county:

- Public Record Documents
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth

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.

Pueblo County submitted their personal property written audit plan and was current for the 2014 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Accounts with obvious discrepancies
- New businesses filing for the first time
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Non-filing Accounts Best Information Available
- Accounts protested with substantial disagreement

Pueblo 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

Pueblo 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

Carl W. Ross, Agricultural/Natural Resource Analyst

J. Andrew Rodriguez, Field Analyst



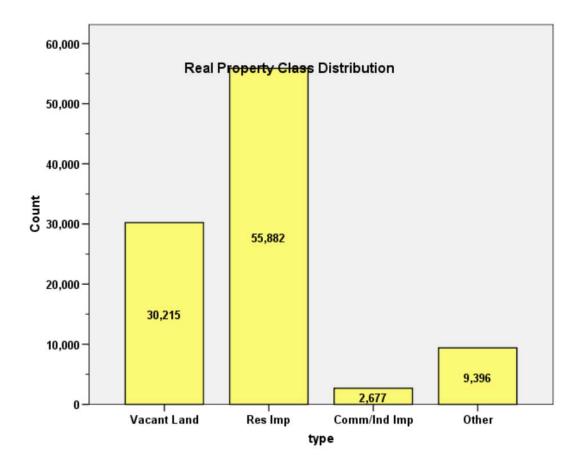
APPENDICES



STATISTICAL COMPLIANCE REPORT FOR PUEBLO COUNTY 2014

I. OVERVIEW

Pueblo County is located along the southern portion of Colorado's Front Range urban corridor. The county had a total of 98,170 real property parcels, according to data submitted by the county assessor's office in 2014. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100) accounted for 84.3% of all vacant land parcels.

For residential improved properties, single family properties accounted for 93.8% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 2.7% of all such properties in this county.



II. DATA FILES

The following sales analyses were based on the requirements of the 2014 Colorado Property Assessment Study. Information was provided by the Pueblo Assessor's Office in May 2014. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 1,853 qualified residential sales for the 18 month period prior to June 30, 2014. The sales ratio analysis was analyzed as follows:

Case Processing Summary

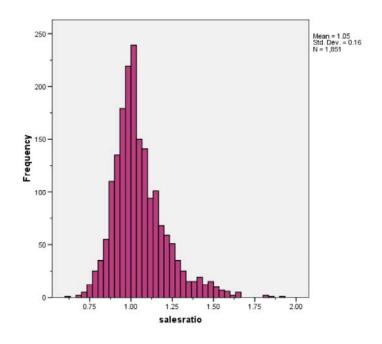
	Count	Percent
econarea 1	53	2.9%
10	80	4.3%
11	39	2.1%
12	53	2.9%
13	126	6.8%
2	156	8.4%
3	192	10.4%
4	53	2.9%
5	187	10.1%
6	149	8.0%
7	174	9.4%
8	413	22.3%
9	176	9.5%
Overall	1851	100.0%
Excluded	0	
Total	1851	

Ratio Statistics for Current Total / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.986	1.020	.159
10	1.010	1.009	.078
11	1.041	1.009	.088
12	1.026	1.018	.150
13	1.002	1.014	.098
2	1.019	1.021	.112
3	1.030	1.025	.129
4	1.007	1.018	.124
5	1.010	1.024	.131
6	1.030	1.013	.086
7	1.034	1.011	.102
8	1.022	1.027	.114
9	1.010	1.021	.119
Overall	1.021	1.019	.114



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:





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



Residential Market Trend Analysis

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

Coefficients^a

econarea	Model		Unstandardized Coefficients		Standardized Coefficients		
			В	Std. Error	Beta	t	Sig.
1	1	(Constant)	1.072	.053		20.101	.000
		SalePeriod	005	.006	129	929	.357
2	1	(Constant)	1.058	.025		42.487	.000
		SalePeriod	.000	.003	.005	.063	.950
3	1	(Constant)	1.088	.026		41.103	.000
		SalePeriod	003	.003	075	-1.040	.300
4	1	(Constant)	1.080	.039		27.844	.000
		SalePeriod	006	.004	204	-1.486	.143
5	1	(Constant)	1.045	.024		43.935	.000
		SalePeriod	001	.002	043	580	.563
-6	1	(Constant)	1.033	.019		53.394	.000
		SalePeriod	.002	.002	.075	.909	.365
7	1	(Constant)	1.066	.021		50.558	.000
		SalePeriod	001	.002	021	279	.781
-8	1	(Constant)	1.048	.015		71.912	.000
		SalePeriod	.002	.002	.046	.940	.348
9	1	(Constant)	1.067	.023		47.023	.000
		SalePeriod	003	.003	088	-1.167	.245
10	1	(Constant)	1.030	.026		39.140	.000
		SalePeriod	.001	.003	.026	.231	.818
11	1	(Constant)	1.031	.043		23.896	.000
		SalePeriod	.007	.005	.236	1.479	.148
12	1	(Constant)	1.129	.047		23.920	.000
		SalePeriod	007	.005	202	-1.475	.146
13	1	(Constant)	.999	.024		42.372	.000
		SalePeriod	.004	.002	.134	1.503	.135

a. Dependent Variable: salesratio

There was no significant residual market trending present in the sale ratio data for any of the economic areas. We therefore concluded 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 2014 between each group. The data was analyzed broken down by economic area, as follows:



Econarea	Group	N	Median SPSF	Mean SPSF
1	Unsold	44,61	\$48.81	\$51.83
	Sold	53	\$49.99	\$54.37
2	Unsold	3,840	\$91.62	\$96.44
	Sold	156	\$98.12	\$101.51
3	Unsold	4,857	\$80.692	\$84.65
	Sold	192	\$89.45	\$93.60
4	Unsold	3,349	\$51.33	\$53.58
	Sold	53	\$60.16	\$61.87
5	Unsold	5,537	\$70.39	\$73.40
	Sold	187	\$74.32	\$78.94
6	Unsold	4,006	\$105.0	\$101.95
	Sold	149	\$109.12	\$108.03
7	Unsold	5,228	\$101.94	\$101.84
	Sold	174	\$106.56	\$107.31
8	Unsold	7,660	\$106.28	\$103.33
	Sold	413	\$111.53	\$108.21
9	Unsold	7,643	\$93.44	\$94.40
	Sold	176	\$101.69	\$102.72
10	Unsold	992	\$100.14	\$102.49
	Sold	80	\$100.54	\$100.29
11	Unsold	1,026	\$53.42	\$59.95
	Sold	39	\$85.33	\$78.57
12	Unsold	2,305	\$47.44	\$51.56
	Sold	53	\$57.87	\$59.32
13	Unsold	1,903	\$103.98	\$103.85
	Sold	126	\$106.33	\$104.37
Total	Unsold	52,807	\$85.36	\$85.82
	Sold	1,851	\$98.27	\$97.05

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

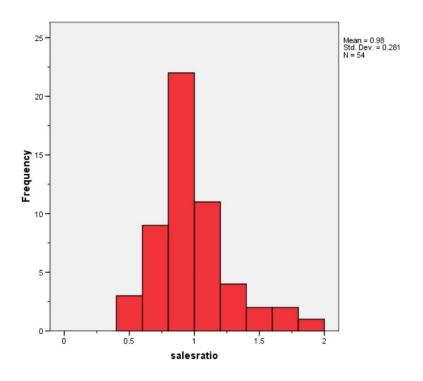
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

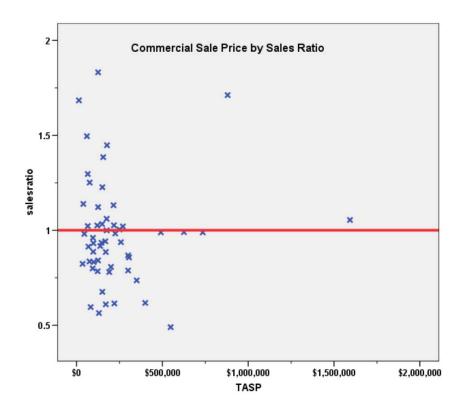
There were 55 qualified commercial/industrial sales for the 24 month period prior to June 30, 2014; one sale was trimmed for its extreme ratio value. The sales ratio analysis was analyzed as follows:

Median	0.951
Price Related Differential	0.993
Coefficient of Dispersion	.206



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







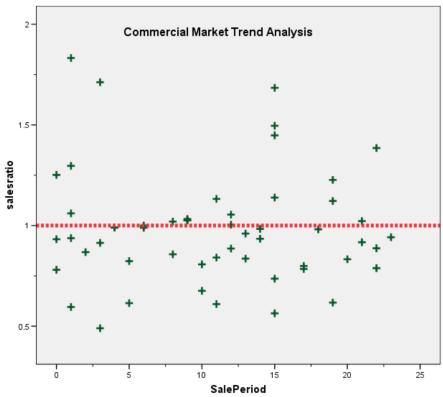
Commercial/Industrial Market Trend Analysis

The 54 commercial/industrial sales were analyzed, examining the sale ratios across the 24 month sale period with the following results:

Coefficients^a

Γ	Model	Unstandardized Coefficients		Standardized Coefficients		
L		В	Std. Error	Beta	t	Sig.
	(Constant)	1.000	.071		14.076	.000
	SalePeriod	002	.006	038	273	.786

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 change in value between 2012 and 2014 for sold and unsold commercial/industrial properties to determine if sold and unsold properties were valued consistently, as follows:



Econarea	Group	N	Median Chg Vl	Mean Chg Val
1	Unsold	2,599	1.0154	1.0485
	Sold	54	1.0400	1.0777

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

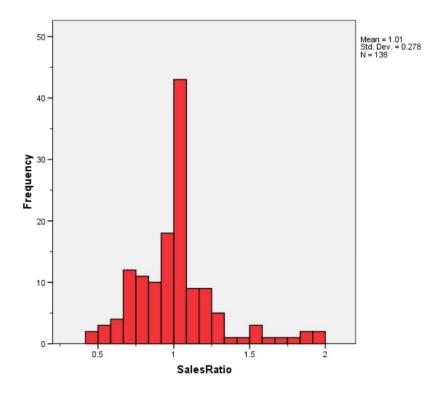
V. VACANT LAND SALE RESULTS

There were 138 qualified vacant land sales for the 18 month period prior to June 30, 2014. The sales ratio analysis was analyzed as follows:

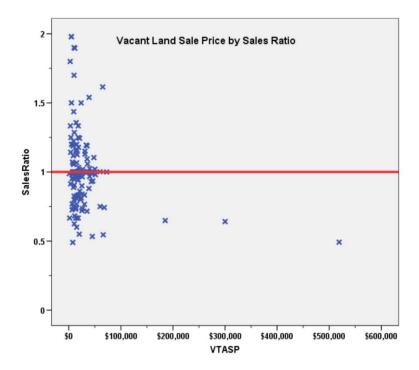
Ratio Statistics for currInd / Vtasp

Median	1.000				
Price Related Differential	1.150				
Coefficient of Dispersion	.180				

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, while the above scatter plot indicated that there were no price related differential issues. No sales were trimmed.

Vacant Land Market Trend Analysis

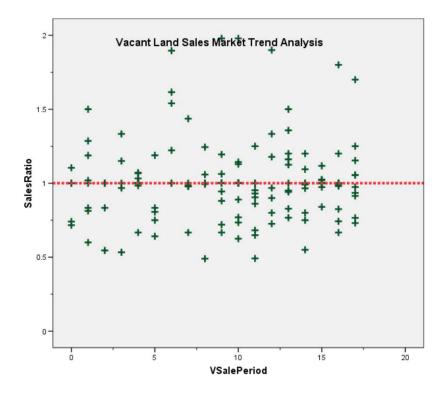
We next analyzed the vacant land dataset using the 18-month sale period and stratified by economic area, with the following results:

Coefficients^a

Mo	del	Unstandardize	d Coefficients	Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	.988	.050		19.764	.000
	VSalePeriod	.002	.005	.045	.524	.601

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 change in value for 2012 and 2014 between each group, as follows:

Econarea	Group	N	Median Chg Vl	Mean Chg Val
1	Unsold	30,040	1.0000	0.9283
	Sold	138	0.8863	0.9020

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

V. AGRICULTURAL IMPROVEMENTS ANALYSIS

The final verification concerned the assigned actual values for agricultural residential improvements. We compared the median improved value per square foot rate for this subclass and compared it to the median improved value per square foot for residential single family improvements in Pueblo County, as follows:



Descriptives

	ABSTR	IMP		Statistic	Std. Error
ImpValSF	1212	Mean		\$76.24	\$.119
		95% Confidence Interval for	Lower Bound	\$76.00	
		Mean	Upper Bound	\$76.47	
		5% Trimmed Mean		\$75.82	
		Median		\$75.73	
		Variance		734.679	
		Std. Deviation		\$27.105	
		Minimum		\$1	
		Maximum		\$371	
		Range		\$370	
		Interquartile Range		\$41	
		Skewness		.257	.011
		Kurtosis		.298	.021
	4277	Mean		\$73.84	\$1.841
		95% Confidence Interval for	Lower Bound	\$70.21	
		Mean	Upper Bound	\$77.46	
		5% Trimmed Mean		\$72.08	
		Median		\$67.68	D .
		Variance		1118.480	
		Std. Deviation		\$33.444	
		Minimum		\$9	
		Maximum		\$223	
		Range		\$214	
		Interquartile Range		\$45	
		Skewness		.978	.134
		Kurtosis		1.750	.268

The above results indicate that agricultural residential properties were valued similarly to single family residential properties.

VI. CONCLUSIONS

Based on this 2014 audit statistical analysis for Pueblo County, residential, commercial industrial, vacant land and agricultural residential properties were found to be in compliance with state guidelines. The commercial median ratio was barely in compliance after rounding.



STATISTICAL ABSTRACT

Residential

Ratio Statistics for Current Total / TASP

$\overline{}$													
econarea		95% Confiden Me:			95% Con	fidence interval fo	or Median		95% Confider Weighte	nce Interval for ed Mean			Coefficient of Variation
	Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
1	1.030	.975	1.085	.986	.937	1.094	97.3%	1.009	.961	1.057	1.020	.159	19.4%
2	1.059	1.033	1.085	1.019	.999	1.036	95.5%	1.038	1.015	1.061	1.021	.112	15.5%
3	1.064	1.038	1.090	1.030	1.010	1.063	96.4%	1.038	1.013	1.064	1.025	.129	17.1%
4	1.031	.990	1.073	1.007	.942	1.089	97.3%	1.013	.972	1.054	1.018	.124	14.6%
5	1.033	1.009	1.058	1.010	.973	1.046	96.0%	1.009	.986	1.032	1.024	.131	16.4%
6	1.048	1.027	1.068	1.030	1.013	1.047	95.1%	1.035	1.018	1.052	1.013	.086	12.1%
7	1.061	1.039	1.083	1.034	1.015	1.056	96.0%	1.049	1.031	1.067	1.011	.102	13.8%
8	1.060	1.044	1.075	1.022	1.008	1.029	95.1%	1.031	1.015	1.048	1.027	.114	15.3%
9	1.045	1.020	1.070	1.010	.994	1.037	95.8%	1.024	1.001	1.046	1.021	.119	15.9%
10	1.036	1.010	1.062	1.010	.991	1.026	96.7%	1.027	1.002	1.051	1.009	.078	11.3%
11	1.085	1.038	1.132	1.041	1.025	1.093	97.6%	1.075	1.030	1.121	1.009	.088	13.3%
12	1.072	1.017	1.126	1.026	.978	1.135	97.3%	1.053	1.003	1.102	1.018	.150	18.4%
13	1.029	1.005	1.053	1.002	.987	1.030	96.0%	1.016	.995	1.036	1.014	.098	13.2%

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.

Commercial Land

Ratio Statistics for Current Total / TASP

	95% Confider Me	ice Interval for an		95% Con	fidence Interval fo	or Median		95% Confiden Weighte	ce Interval for d Mean			Coefficient of Variation
Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
.984	.907	1.061	.951	.886	1.004	96.0%	.991	.867	1.115	.993	.206	28.5%

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 Current Land / VTASP

		95% Confiden Me			95% Con	fidence interval fo	or Median		95% Confiden Weighte				Coefficient of Variation
	Mean	Lower Bound	Upper Bound	Median	Lower Bound	Upper Bound	Actual Coverage	Weighted Mean	Lower Bound	Upper Bound	Price Related Differential	Coefficient of Dispersion	Mean Centered
ı	1.011	.964	1.057	1.000	.988	1.000	95.0%	.879	.760	.998	1.150	.180	27.5%

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	LT \$25K	10	.5%
	\$25K to \$50K	101	5.5%
	\$50K to \$100K	490	26.5%
	\$100K to \$150K	626	33.8%
	\$150K to \$200K	371	20.0%
	\$200K to \$300K	207	11.2%
	\$300K to \$500K	38	2.1%
	\$500K to \$750K	6	.3%
	\$750K to \$1,000K	2	.1%
Overall		1851	100.0%
Excluded	1	0	
Total		1851	

Ratio Statistics for Current Total / TASP

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LT \$25K	1.274	1.002	.150	18.3%
\$25K to \$50K	1.148	1.002	.149	17.9%
\$50K to \$100K	1.048	1.000	.143	19.4%
\$100K to \$150K	1.025	1.001	.102	13.7%
\$150K to \$200K	1.012	1.000	.085	11.9%
\$200K to \$300K	.985	1.001	.077	10.1%
\$300K to \$500K	.973	.999	.092	12.7%
\$500K to \$750K	.990	1.004	.064	9.2%
\$750K to \$1,000K	.779	.999	.042	6.0%
Overall	1.021	1.019	.114	16.0%



Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1212	1810	97.8%
	1225	1	.1%
	1230	40	2.2%
Overall		1851	100.0%
Excluded		0	
Total		1851	

Ratio Statistics for Current Total / TASP

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1212	1.020	1.020	.115	16.0%
1225	.946	1.000	.000	.%
1230	1.041	1.008	.089	14.5%
Overall	1.021	1.019	.114	16.0%



Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	87	4.7%
	75 to 100	91	4.9%
	50 to 75	378	20.4%
	25 to 50	386	20.9%
	5 to 25	839	45.3%
	5 or Newer	70	3.8%
Overall		1851	100.0%
Excluded		0	
Total		1851	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	1.007	1.029	.136	18.0%
75 to 100	.970	1.014	.134	17.8%
50 to 75	1.017	1.018	.137	18.7%
25 to 50	1.034	1.023	.111	16.0%
5 to 25	1.019	1.020	.103	14.6%
5 or Newer	1.020	1.018	.082	10.5%
Overall	1.021	1.019	.114	16.0%



Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	2	.1%
	500 to 1,000 sf	354	19.1%
	1,000 to 1,500 sf	805	43.5%
	1,500 to 2,000 sf	471	25.4%
	2,000 to 3,000 sf	190	10.3%
	3,000 sf or Higher	29	1.6%
Overall		1851	100.0%
Excluded		0	
Total		1851	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	.937	1.010	.054	7.6%
500 to 1,000 sf	1.011	1.021	.132	18.4%
1,000 to 1,500 sf	1.026	1.016	.114	15.8%
1,500 to 2,000 sf	1.017	1.019	.108	15.3%
2,000 to 3,000 sf	1.017	1.019	.100	14.6%
3,000 sf or Higher	1.016	1.038	.094	12.6%
Overall	1.021	1.019	.114	16.0%



Improvement Quality

Case Processing Summary

	Count	Percent
QUALITY 0	1	.1%
1	129	7.0%
2	1613	87.1%
3	34	1.8%
4	4	.2%
9	70	3.8%
Overall	1851	100.0%
Excluded	0	
Total	1851	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	.987	1.000	.000	.%
1	.983	1.032	.164	22.3%
2	1.024	1.018	.109	15.2%
3	1.024	1.020	.084	11.9%
4	.863	1.099	.190	30.7%
9	1.010	1.036	.151	21.4%
Overall	1.021	1.019	.114	16.0%



Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	0	1	.1%
	1	129	7.0%
	2	1613	87.1%
	3	34	1.8%
	4	4	.2%
	9	70	3.8%
Overall		1851	100.0%
Excluded		0	
Total		1851	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
0	.987	1.000	.000	.%
1	.983	1.032	.164	22.3%
2	1.024	1.018	.109	15.2%
3	1.024	1.020	.084	11.9%
4	.863	1.099	.190	30.7%
9	1.010	1.036	.151	21.4%
Overall	1.021	1.019	.114	16.0%



Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	1	1.9%
	\$25K to \$50K	3	5.6%
	\$50K to \$100K	12	22.2%
	\$100K to \$150K	11	20.4%
	\$150K to \$200K	9	16.7%
	\$200K to \$300K	9	16.7%
	\$300K to \$500K	4	7.4%
	\$500K to \$750K	3	5.6%
	\$750K to \$1,000K	1	1.9%
	Over \$1,000K	1	1.9%
Overall		54	100.0%
Excluded	I	0	
Total		54	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LT \$25K	1.684	1.000	.000	.%
\$25K to \$50K	.981	.995	.107	16.1%
\$50K to \$100K	.923	1.026	.189	27.8%
\$100K to \$150K	.934	1.004	.239	36.8%
\$150K to \$200K	.942	1.008	.214	29.7%
\$200K to \$300K	.983	1.005	.110	16.7%
\$300K to \$500K	.797	.988	.155	20.0%
\$500K to \$750K	.989	.973	.169	35.7%
\$750K to \$1,000K	1.712	1.000	.000	.%
Over \$1,000K	1.054	1.000	.000	.%
Overall	.951	.993	.206	29.7%



Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1718	1	1.9%
	2212	10	18.5%
	2220	6	11.1%
	2225	1	1.9%
	2230	20	37.0%
	2235	3	5.6%
	2245	6	11.1%
	3212	5	9.3%
	3215	2	3.7%
Overall		54	100.0%
Excluded		0	
Total		54	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1718	.807	1.000	.000	.%
2212	.939	.946	.125	16.9%
2220	.951	1.007	.086	11.8%
2225	1.684	1.000	.000	.%
2230	.886	.902	.244	35.0%
2235	.780	1.082	.294	47.0%
2245	1.023	1.011	.036	7.4%
3212	.983	1.250	.254	36.1%
3215	1.482	1.067	.236	33.4%
Overall	.951	.993	.206	29.7%



Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	7	13.0%
	75 to 100	2	3.7%
	50 to 75	7	13.0%
	25 to 50	21	38.9%
	5 to 25	11	20.4%
	5 or Newer	6	11.1%
Overall		54	100.0%
Excluded		0	
Total		54	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	1.022	1.074	.186	29.7%
75 to 100	.724	1.060	.151	21.3%
50 to 75	.784	1.077	.306	56.8%
25 to 50	.932	.962	.148	18.9%
5 to 25	.983	.971	.250	36.4%
5 or Newer	1.023	1.032	.104	20.0%
Overall	.951	.993	.206	29.7%



Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	1	1.9%
	500 to 1,000 sf	1	1.9%
	1,000 to 1,500 sf	1	1.9%
	1,500 to 2,000 sf	1	1.9%
	2,000 to 3,000 sf	13	24.1%
	3,000 sf or Higher	37	68.5%
Overall		54	100.0%
Excluded		0	
Total		54	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	.807	1.000	.000	.%
500 to 1,000 sf	1.684	1.000	.000	.%
1,000 to 1,500 sf	1.139	1.000	.000	.%
1,500 to 2,000 sf	.823	1.000	.000	.%
2,000 to 3,000 sf	.857	1.026	.168	23.2%
3,000 sf or Higher	.983	.989	.202	29.7%
Overall	.951	.993	.206	29.7%



Improvement Quality

Case Processing Summary

	Count	Percent
QUALITY 1	12	22.2%
2	42	77.8%
Overall	54	100.0%
Excluded	0	
Total	54	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1	.930	1.111	.271	31.8%
2	.951	.979	.189	29.6%
Overall	.951	.993	.206	29.7%



Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	1	12	22.2%
	2	42	77.8%
Overall		54	100.0%
Excluded		0	
Total		54	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1	.930	1.111	.271	31.8%
2	.951	.979	.189	29.6%
Overall	.951	.993	.206	29.7%



Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	99	71.7%
	\$25K to \$50K	29	21.0%
	\$50K to \$100K	7	5.1%
	\$150K to \$200K	1	.7%
	\$200K to \$300K	1	.7%
	\$500K to \$750K	1	.7%
Overall		138	100.0%
Excluded	ı	0	
Total		138	

Group				Coefficient of Variation
	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LT \$25K	1.000	1.033	.189	29.4%
\$25K to \$50K	1.000	.999	.113	18.0%
\$50K to \$100K	.980	1.001	.230	34.9%
\$150K to \$200K	.649	1.000	.000	.%
\$200K to \$300K	.641	1.000	.000	.%
\$500K to \$750K	.492	1.000	.000	.%
Overall	1.000	1.150	.180	27.8%



Subclass

Case Processing Summary

		Count	Percent
abstrind	100	44	31.9%
	200	7	5.1%
	300	1	.7%
	560	1	.7%
	1112	82	59.4%
	1135	1	.7%
	2112	1	.7%
	2130	1	.7%
Overall		138	100.0%
Excluded		0	
Total		138	

Group					icient of iation
	Median	Price Related Differential	Coefficient of Dispersion		edian ntered
100	1.000	1.044	.166		27.7%
200	.984	.990	.241		34.1%
300	.993	1.000	.000	.%	
560	.806	1.000	.000	.%	
1112	1.000	1.056	.176		27.5%
1135	1.286	1.000	.000	.%	
2112	.641	1.000	.000	.%	
2130	.492	1.000	.000	.%	
Overall	1.000	1.150	.180		27.8%