

2017 EL PASO COUNTY PROPERTY ASSESSMENT STUDY







September 15, 2017

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

RE: Final Report for the 2017 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2017 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 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 subdivision and discounting procedures. Valuation methodology for vacant land, improved properties and commercial residential 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.

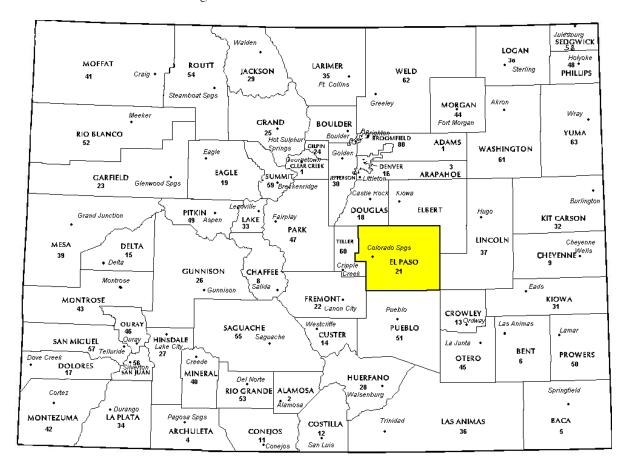
Wildrose Audit has completed the Property Assessment Study for 2017 and is pleased to report its findings for El Paso County in the following report.



REGIONAL/HISTORICAL SKETCH OF EL PASO COUNTY

Regional Information

El Paso 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

El Paso County had an estimated population of approximately 688,284 people with 323.6 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a 10.6 percent change from April 1, 2010 to July 1, 2016.

In July 1858, gold was discovered along the South Platte River in Arapahoe County, Kansas Territory. This discovery precipitated the Pike's Peak Gold Rush. Many residents of the mining region felt disconnected from the remote territorial governments of Kansas and Nebraska, so they voted to form their own Territory of Jefferson on Oct 24, 1859. The following month, the Jefferson Territorial Legislature organized 12 counties for the new territory including El Paso County. El Paso County was named for the Spanish language name for Ute Pass north of Pikes Peak. Colorado City served as the county seat of El Paso County.

The Jefferson Territory never received federal sanction, but on Feb. 2, 1861, U.S. President James Buchanan signed an act organizing the Territory of Colorado. El Paso County was

one of the original 17 counties created by the Colorado legislature on November 1, 1861. Part of its western territory was broken off to create Teller County in 1899. Originally based in Old Colorado City (now part of Colorado Springs, not today's Colorado City between Pueblo and Walsenburg), El Paso County's county seat was moved to Colorado Springs in 1873.

Colorado Springs was founded in August 1871 by General William Palmer, with the intention of creating a high quality resort community, and was soon nicknamed "Little London" because of the many English tourists who came. Nearby Pikes Peak and the Garden of the Gods made the city's location a natural choice. Colorado Springs covers 194.7 square miles, making it the most extensive municipality in Colorado. Colorado Springs was selected as the No. 1 Best Big City in "Best Places to Live" by Money magazine in 2006 and placed number one in Outside's 2009 list of America's Best Cities. The United States Air Force Academy is located in Colorado Springs. (Wikipedia.org)



RATIO ANALYSIS

Methodology

All significant classes of property were analyzed. Sales were collected for each property class over the eighteen month period from January 1, 2015 through June 20, 2016. Property classes with less than thirty sales had the sales period extended in six month increments up to an additional forty-two months. If this extended sales period did not produce the minimum thirty qualified sales, the Audit performed supplemental appraisals to reach the minimum.

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. 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 El Paso County are:

El Paso County Ratio Grid									
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis				
Commercial/Industrial	303	0.965	1.019	16.1	Compliant				
Condominium	N/A	N/A	N/A	N/A	N/A				
Single Family	30,430	0.976	1.007	5.7	Compliant				
Vacant Land	1,155	0.990	1.067	13.5	Compliant				

0		Price Related	Coefficient of
Group	Median	Differential	Dispersion
1	.976	1.005	.040
2 3	.983	1.019	.085
	.980	1.021	.104
4	.976	.997	.053
5	.980	1.019	.082
6	.990	1.022	.090
7	.981	1.008	.077
8	.986	1.022	.066
9	.989	1.004	.065
10	.980	1.016	.067
11	.990	1.003	.065
12	.976	1.003	.030
13	.984	1.004	.060
14	.965	1.001	.052
15	.993	1.004	.069
16	.980	1.002	.060
17	.980	1.015	.075
18	.983	1.011	.072
19	.980	1.016	.089
20	.976	1.003	.026
Overall	.976	1.007	.057

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

El Paso 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.

We test the hypothesis that the assessor has valued unsold properties consistent with what is observed with the sold properties based on several units of comparison and tests. units of comparison include the actual value per square foot and the change in value from the previous base year period to the current base year. The first test compares the actual value per square foot between sold and unsold properties by class. The median and mean value per square foot is compared and tested for any significant difference. This is tested using non-parametric methods, such as the Mann-Whitney test for differences in the distributions or medians between sold and unsold groups. It is also examined graphically and from an appraisal perspective. Data can be stratified based on location and subclass. The second test compares the difference in the median change in value from the previous base year to the current base year between sold and unsold properties by class. The same combination of non-parametric and appraisal testing is used as with the first test. A third test employing a valuation model testing a sold/unsold binary variable while controlling for property attributes such as location, size, age and other attributes. determines if the sold/unsold variable is statistically and empirically significant. three tests indicate a significant difference between sold and unsold properties for a given class, the Auditor may meet with the county to determine if sale chasing is actually occurring,

or if there are other explanations for the observed difference.

If the unsold properties have a higher median value per square foot than the sold properties, or if the median change in value is greater for the unsold properties than the sold properties, the analysis is stopped and the county is concluded to be in compliance with sold and unsold guidelines. All sold and unsold properties in a given class are first tested, although properties with extreme unit values or percent changes can be trimmed to stabilize the analysis. The median is the primary comparison metric, although the mean can also be used as a comparison metric if the distribution supports that type of measure of central tendency.

The first test (unit value method) is applied to both residential and commercial/industrial sold and unsold properties. The second test is applied to sold and unsold vacant land properties. The second test (change in value method) is also applied to residential or commercial sold and unsold properties if the first test results in a significant difference observed and/or tested between sold and unsold properties. The third test (valuation modeling) is used in instances where the results from the first two tests indicate a significant difference between sold and unsold properties. It can also be used when the number of sold and unsold properties is so large that the nonparametric testing is indicating a false rejection of the hypothesis that there is no difference between the sold and unsold property values.

These tests were supported by both tabular and graphics presentations, along with written documentation explaining the methodology used.



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

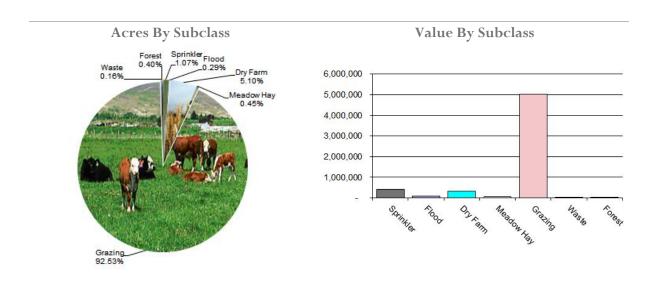
Conclusions

After applying the above described methodologies, it is concluded that El Paso 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 yields, any locally developed 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:



	El Paso County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre T	County Assessed Cotal Value	WRA Total Value	Ratio	
4107	Sprinkler	6,035	70.97	428,292	438,562	0.98	
4117	Flood	1,608	65.37	105,139	106,845	0.98	
4127	Dry Farm	28,660	11.69	334,936	343,453	0.98	
4137	Meadow Hay	2,506	29.85	74,798	74,798	1.00	
4147	Grazing	519,624	9.65	5,013,735	5,013,735	1.00	
4177	Forest	2,224	13.40	29,805	29,805	1.00	
4167	Waste	897	2.22	1,993	1,993	1.00	
Total/Avg		561,554	10.66	5,988,697	6,009,190	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

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

Recommendations



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

El Paso County has used the following methods to discover land under a residential improvement on a farm or ranch that is determined to be not integral under 39-1-102, C.R.S.:

- Questionnaires
- Field Inspections
- Phone Interviews
- Personal Knowledge of Occupants at Assessment Date

Aerial Photography/Pictometry

El Paso County has used the following methods to discover the land area under a residential improvement that is determined to be not integral under 39-1-102, C.R.S.:

Aerial Photography/Pictometry

El Paso 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 2017 for El Paso County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 63 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.

For residential, commercial, and vacant land sales with considerations over \$500, the contractor has examined and reported the ratio of qualified sales to total sales by class and performed the following analyses of unqualified sales:

The contractor has examined the manner in which sales have been classified as qualified or unqualified, including a listing of each step in the sales verification process, any adjustment procedures, and the county official responsible for making the final decision on qualification.

When less than 50 percent of sales are qualified in any of the three property classes (residential, commercial, and vacant land), the contractor analyzed the reasons for disqualifying sales in any subclass that constitutes at least 20 percent of the class, either by number



of properties or by value, from the prior year. The contractor reviewed with the assessor any analysis that sales data indicating inadequate, fail to reflect typical properties, or have been disqualified for insufficient cause. In addition, the contractor has reviewed disqualified sales by assigned code. If there appears to be any inconsistency in the coding, the contractor has conducted further analysis determine if the sales included in that code have been assigned appropriately.

If 50 percent or more of the sales are qualified, the contractor has reviewed a statistically significant sample of unqualified sales, excluding sales that were disqualified for obvious reasons.

El Paso County did not qualify for indepth subclass analysis.

Conclusions

El Paso County appears to be doing a good job of verifying their sales.

Recommendations



ECONOMIC AREA REVIEW AND EVALUATION

Methodology

El Paso County has submitted a written narrative describing the economic areas that make up the county's market areas. El Paso 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 El Paso 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 2017 in El Paso 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

El Paso 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.

El Paso 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

El Paso 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

El Paso 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.

El Paso 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
- MLS Listing and/or Sold Books
- 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
- CO Secretary of State
- Business Filing
- Volunteer Filing

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.

El Paso County submitted their personal property written audit plan and was current for the 2017 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Accounts with greater than 10% change



- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts Best Information Available
- Accounts close to the \$7,400 actual value exemption status
- Lowest or highest quartile of value per square foot
- Accounts protested with substantial disagreement

El Paso 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

El Paso 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

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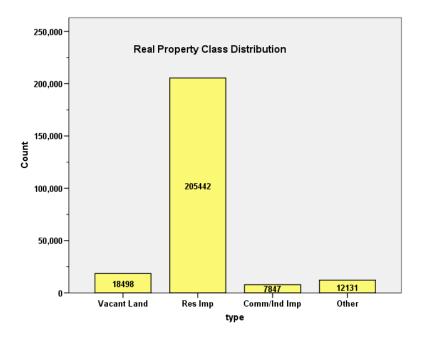
APPENDICES



STATISTICAL COMPLIANCE REPORT FOR EL PASO COUNTY 2017

I. OVERVIEW

El Paso County is an urban county located along Colorado's Front Range. The county has a total of 243,918 real property parcels, according to data submitted by the county assessor's office in 2017. 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 and 1112) accounted for 75.5% of all vacant land parcels.

For residential improved properties, single family properties accounted for 93.7% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 3.2% of all such properties in this county.



II. DATA FILES

The following sales analyses were based on the requirements of the 2017 Colorado Property Assessment Study. Information was provided by the El Paso Assessor's Office in May 2017. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 30,430 qualified residential sales over the 24 month period ending on June 30, 2016. The sales ratio analysis was analyzed as follows:

Case Processing Summary

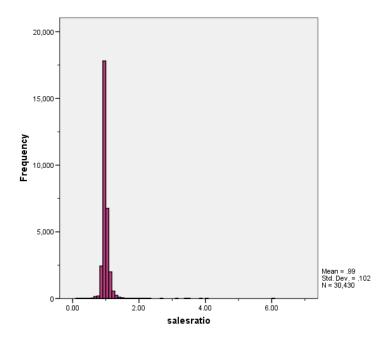
		Count	Percent
ECONAREA	1	4803	15.8%
	2	1011	3.3%
	2 3	539	1.8%
	4	2200	7.2%
	5	1511	5.0%
	6	644	2.1%
	7	1145	3.8%
	8	899	3.0%
	9	709	2.3%
	10	771	2.5%
	11	1550	5.1%
	12	3883	12.8%
	13	1921	6.3%
	14	3047	10.0%
	15	1997	6.6%
	16	361	1.2%
	17	784	2.6%
	18	723	2.4%
	19	152	0.5%
	20	1780	5.8%
Overall		30430	100.0%
Excluded		0	
Total		30430	



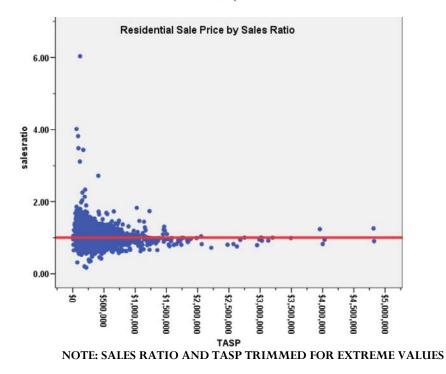
Ratio Statistics for CURRTOT / TASP

		Price Related	Coefficient of
Group	Median	Differential	Dispersion
1	.976	1.005	.040
2	.983	1.019	.085
3	.980	1.021	.104
4	.976	.997	.053
5	.980	1.019	.082
6	.990	1.022	.090
7	.981	1.008	.077
8	.986	1.022	.066
9	.989	1.004	.065
10	.980	1.016	.067
11	.990	1.003	.065
12	.976	1.003	.030
13	.984	1.004	.060
14	.965	1.001	.052
15	.993	1.004	.069
16	.980	1.002	.060
17	.980	1.015	.075
18	.983	1.011	.072
19	.980	1.016	.089
20	.976	1.003	.026
Overall	.976	1.007	.057

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 and broken down by economic area. 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 using the 24-month sale period for any residual market trending and broken down by economic area, as follows:

Coefficients^a

ECONAREA	Model			zed Coefficients	Standardized Coefficients		Cia
LCONAREA	iviodei	(0 (1)	В	Std. Error	Beta	005.000	Sig.
1	1	(Constant)	.983	.002		625.888	.000
		SalePeriod	.000	.000	.023	1.616	.106
2	1	(Constant)	1.009	.007		137.360	.000
		SalePeriod	001	.001	039	-1.236	.217
3	1	(Constant)	.992	.013		75.867	.000
		SalePeriod	.002	.001	.099	2.312	.021
4	1	(Constant)	.970	.003		314.576	.000
		SalePeriod	.002	.000	.130	6.164	.000
5	1	(Constant)	1.003	.007		146.661	.000
		SalePeriod	9.565E-6	.001	.000	.018	.986
6	1	(Constant)	1.030	.012		88.424	.000
		SalePeriod	.000	.001	008	207	.836
7	1	(Constant)	1.005	.008		122.990	.000
		SalePeriod	.000	.001	.016	.543	.587
8	1	(Constant)	.999	.007		151.857	.000
		SalePeriod	6.794E-5	.001	.005	.136	.892
9	1	(Constant)	1.009	.006		157.014	.000
		SalePeriod	.000	.000	023	617	.537



10	1	(Constant)	.976	.006		156.824	.000
		SalePeriod	.001	.000	.097	2.699	.007
11	1	(Constant)	1.003	.004		223.971	.000
		SalePeriod	.001	.000	.061	2.424	.015
12	1	(Constant)	.976	.002		631.856	.000
		SalePeriod	.001	.000	.111	6.946	.000
13	1	(Constant)	.986	.004		264.410	.000
		SalePeriod	.001	.000	.094	4.114	.000
14	1	(Constant)	.962	.002		444.738	.000
		SalePeriod	.000	.000	.050	2.776	.006
15	1	(Constant)	.996	.004		249.686	.000
		SalePeriod	.001	.000	.074	3.309	.001
16	1	(Constant)	.981	.010		100.208	.000
		SalePeriod	.001	.001	.049	.936	.350
17	1	(Constant)	.998	.015		67.464	.000
		SalePeriod	.001	.001	.023	.634	.526
18	1	(Constant)	.998	.011		89.701	.000
		SalePeriod	9.939E-5	.001	.004	.118	.906
19	1	(Constant)	1.019	.025		39.971	.000
		SalePeriod	001	.002	059	720	.473
20	1	(Constant)	.988	.003		321.068	.000
		SalePeriod	.001	.000	.050	2.092	.037

a. Dependent Variable: salesratio

There was no residual market trending present in the sale ratio data for most of the economic areas; those with statistically relevant trends were not significant in terms of magnitude. 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 2017 between each group. The data was analyzed as follows:

Report

VALSF			
sold	N	Median	Mean
UNSOLD	174,762	\$144	\$150
SOLD	30,424	\$149	\$157

We also examined this comparison by economic area, as follows:



Report

ECONAREA	sold	N	Median	Mean
1	UNSOLD	23,077	\$128	\$130
	SOLD	4,803	\$135	\$139
2	UNSOLD	8,109	\$175	\$187
	SOLD	1,011	\$177	\$184
3	UNSOLD	4,066	\$136	\$139
	SOLD	538	\$145	\$151
4	UNSOLD	14,078	\$118	\$118
	SOLD	2,198	\$125	\$126
5	UNSOLD	11,790	\$166	\$169
	SOLD	1,509	\$173	\$178
6	UNSOLD	4,945	\$191	\$190
	SOLD	644	\$202	\$205
7	UNSOLD	9,882	\$148	\$145
	SOLD	1,145	\$155	\$154
8	UNSOLD	5,830	\$162	\$171
	SOLD	899	\$165	\$176
9	UNSOLD	5,175	\$155	\$164
	SOLD	709	\$154	\$159
10	UNSOLD	4,814	\$143	\$147
	SOLD	771	\$125	\$ 136
11	UNSOLD	11,036	\$140	\$143
	SOLD	1,550	\$143	\$146
12	UNSOLD	16,465	\$136	\$138
	SOLD	3,883	\$144	\$147
13	UNSOLD	12,253	\$147	\$152
	SOLD	1,921	\$150	\$156
14	UNSOLD	13,105	\$151	\$162
	SOLD	3,047	\$155	\$168
15	UNSOLD	8,754	\$172	\$182
	SOLD	1,997	\$186	\$198
16	UNSOLD	2,633	\$164	\$172
	SOLD	361	\$185	\$187
17	UNSOLD	6,684	\$172	\$177
	SOLD	784	\$183	\$190
18	UNSOLD	5,699	\$102	\$111
	SOLD	722	\$111	\$121
19	UNSOLD	1,145	\$78	\$94
	SOLD	152	\$92	\$106
20	UNSOLD	5,222	\$138	\$140
	SOLD	1,780	\$148	\$157



Although the overall comparison indicated consistency in the valuation of sold and unsold properties by economic area, we also examined the percent change in actual value for taxable years 2016 and 2017 for sold and unsold residential properties, both overall and by economic area:

Report

DIFF			
sold	N	Median	Mean
UNSOLD	174,964	1.13	1.28
SOLD	30,430	1.14	1.24



Report

DIFF				
ECONAREA	sold	N	Median	Mean
1	UNSOLD	23,111	1.12	1.19
	SOLD	4,803	1.15	1.26
2	UNSOLD	8,107	1.08	1.10
	SOLD	1,011	1.09	1.12
3	UNSOLD	4,128	1.20	1.19
	SOLD	539	1.22	1.27
4	UNSOLD	14,136	1.11	1.16
	SOLD	2,200	1.17	1.23
5	UNSOLD	11,820	1.13	1.19
	SOLD	1,511	1.13	1.20
6	UNSOLD	4,946	1.17	1.17
	SOLD	644	1.17	1.22
7	UNSOLD	9,882	1.17	1.18
	SOLD	1,145	1.18	1.22
8	UNSOLD	5,830	1.14	1.16
	SOLD	899	1.14	1.19
9	UNSOLD	5,174	1.13	1.13
	SOLD	709	1.13	1.15
10	UNSOLD	4,813	1.13	1.12
	SOLD	771	1.13	1.15
11	UNSOLD	11,040	1.18	1.19
	SOLD	1,550	1.18	1.20
12	UNSOLD	16,464	1.11	1.20
	SOLD	3,883	1.14	1.25
13	UNSOLD	12,251	1.15	1.14
	SOLD	1,921	1.14	1.15
14	UNSOLD	13,104	1.10	1.44
	SOLD	3,047	1.09	1.34
15	UNSOLD	8,746	1.12	1.37
	SOLD	1,997	1.12	1.27
16	UNSOLD	2,628	1.15	1.34
	SOLD	361	1.16	1.24
17	UNSOLD	6,681	1.13	2.64
	SOLD	784	1.15	1.23
18	UNSOLD	5,741	1.14	1.53
	SOLD	723	1.19	1.26
19	UNSOLD	1,154	1.15	1.25
	SOLD	152	1.22	1.31
20	UNSOLD	5,208	1.11	1.52
	SOLD	1,780	1.12	1.33

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

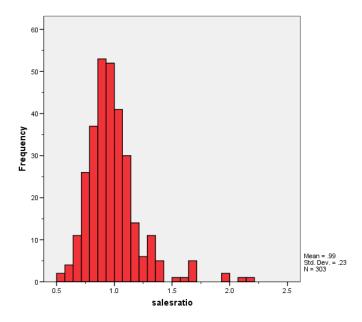


IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

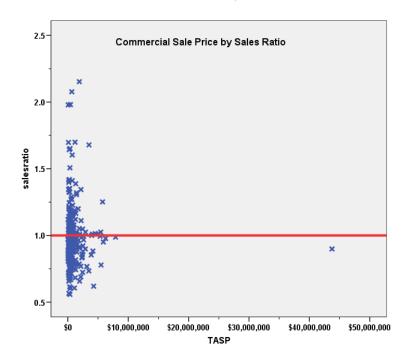
There were 303 qualified commercial/industrial sales over the 24 month period ending June 30, 2016. The sale ratios were analyzed as follows:

Median	0.965
Price Related Differential	1.019
Coefficient of Dispersion	16.1

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







Commercial/Industrial Market Trend Analysis

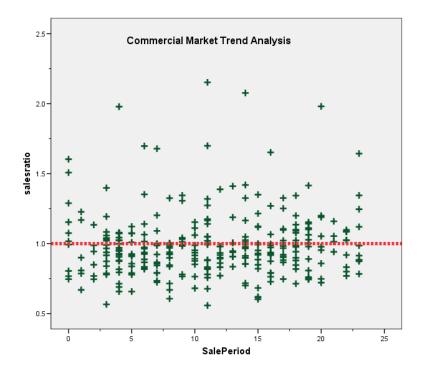
The 303 commercial/industrial sales were analyzed, examining the sale ratios across the 24 month sale period with the following results:

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	.964	.027		35.789	.000
	SalePeriod	.002	.002	.061	1.061	.289

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 2017 actual value per square foot between sold and unsold commercial/industrial properties to determine if sold and unsold properties were valued consistently, as follows:

Report

VALSF			
sold	Ν	Median	Mean
UNSOLD	7,556	\$ 76	\$108
SOLD	303	\$83	\$103



Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is the same across categories of sold.	Independent- Samples Mann- Whitney U Test	.007	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .00.

Report

VALSF				
ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD	1,208	\$92	\$120
	SOLD	47	\$97	\$114
2220.00	UNSOLD	818	\$83	\$95
	SOLD	64	\$81	\$93
2230.00	UNSOLD	1,570	\$114	\$151
	SOLD	53	\$117	\$148
2235.00	UNSOLD	1,729	\$ 58	\$93
	SOLD	54	\$71	\$74
2245.00	UNSOLD	790	\$81	\$92
	SOLD	37	\$81	\$104

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

V. VACANT LAND SALE RESULTS

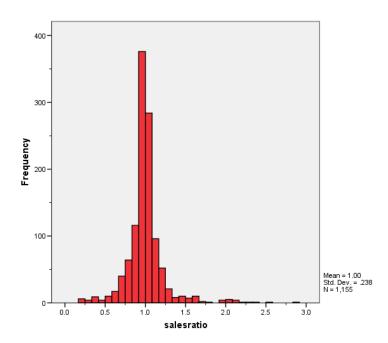
There were 1,164 qualified vacant land sales over the 24 month period ending June 30, 2016. We trimmed 9 sales due to their extreme sales ratios. The sales ratio analysis was analyzed as follows:



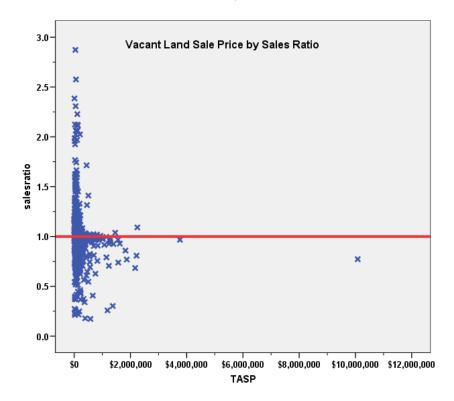
Ratio Statistics for currInd / Vtasp

Median	0.990
Price Related Differential	1.067
Coefficient of Dispersion	13.5

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 was no price related differential issues. No sales were trimmed.

Vacant Land Market Trend Analysis

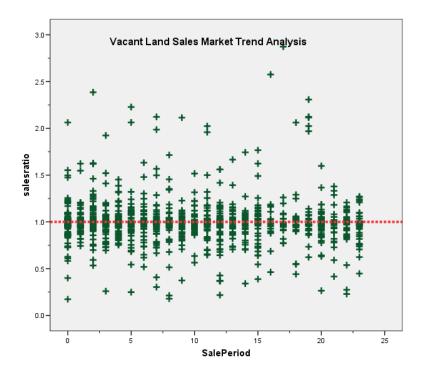
We next analyzed the vacant land dataset using the 24-month sale period, with the following results:

Coefficientsa

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.009	.012		86.534	.000
	SalePeriod	001	.001	029	977	.329

a. Dependent Variable: salesratio





There was no significant trend. We therefore 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 and mean change in actual value for taxable years 2016 and 2017 for each group. The following results present the comparison results for sold and unsold properties:

Report						
DIFF						
sold	N	Median	Mean			
UNSOLD	13,843	1.05	1.08			
SOLD	1,083	1.08	1.15			

Given the difference in the overall comparison analysis, we next examined sold and unsold properties by subdivision with at least three sales. This breakdown indicated that sold and unsold properties were valued consistently. Due to the number of these subdivisions with at least three sales, we developed the following table with subdivision with at least 12 sales, which indicates the same overall value consistency between sold and unsold properties:



Report

DIFF

SUBDIVNO	sold	N	Median	Mean
0	UNSOLD	2,166	1.05	1.05
	SOLD	120	1.05	1.13
871	UNSOLD	58	1.80	1.78
	SOLD	14	1.48	1.43
12407	UNSOLD	4	1.67	1.67
	SOLD	15	1.74	1.62
13431	UNSOLD	33	.91	.92
	SOLD	13	.91	.95
13588	UNSOLD	14	1.77	1.65
	SOLD	17	1.37	1.33
13639	UNSOLD	4	1.00	1.00
	SOLD	15	1.01	1.01
13666	UNSOLD	7	1.22	1.19
	SOLD	33	1.22	1.22
13670	UNSOLD	7	1.02	1.01
	SOLD	18	1.02	1.02

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

VI. AGRICULTURAL IMPROVEMENTS ANALYSIS

Based on the parameters of the state audit analysis, this county was exempt from this analysis for 2017.

VII. CONCLUSIONS

Based on this 2017 audit statistical analysis, residential, commercial and vacant land properties were found to be in compliance with state guidelines.



STATISTICAL ABSTRACT

Residential

Ratio Statistics for CURRTOT / TASP

			nfidence Interval or Mean		95% Cor	nfidence Interval fo	or Median		95% Confiden Weighte				Coefficient of Variation
ECON AREA	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	.985	.983	.987	.976	.976	.976	95.0%	.980	.978	.981	1.005	.040	6.2%
2	1.001	.993	1.009	.983	.979	.989	95.6%	.982	.962	1.003	1.019	.085	12.6%
3	1.017	1.003	1.032	.980	.980	.990	95.3%	.996	.983	1.009	1.021	.104	16.8%
4	.986	.983	.989	.976	.976	.976	95.3%	.989	.970	1.008	.997	.053	8.3%
5	1.003	.995	1.010	.980	.978	.982	95.5%	.984	.972	.996	1.019	.082	14.3%
6	1.028	1.015	1.041	.990	.988	.992	95.6%	1.007	.996	1.017	1.022	.090	16.0%
7	1.009	1.000	1.017	.981	.980	.987	95.6%	1.001	.988	1.013	1.008	.077	14.6%
8	1.000	.993	1.007	.986	.981	.990	95.5%	.978	.959	.998	1.022	.066	10.6%
9	1.006	.999	1.013	.989	.983	.992	95.8%	1.003	.994	1.011	1.004	.065	9.4%
10	.990	.983	.997	.980	.975	.984	95.6%	.975	.950	1.000	1.016	.067	9.9%
11	1.012	1.007	1.017	.990	.986	.990	95.5%	1.009	1.004	1.013	1.003	.065	9.6%
12	.985	.983	.987	.976	.976	.976	95.3%	.982	.980	.984	1.003	.030	5.5%
13	.999	.995	1.003	.984	.980	.988	95.0%	.996	.980	1.011	1.004	.060	8.7%
14	.967	.965	.969	.965	.963	.967	95.4%	.966	.963	.968	1.001	.052	6.9%
15	1.007	1.003	1.011	.993	.990	.996	95.1%	1.003	.998	1.007	1.004	.069	9.5%
16	.989	.978	.999	.980	.977	.990	95.5%	.987	.978	.996	1.002	.060	10.3%
17	1.006	.990	1.021	.980	.980	.984	95.1%	.990	.981	.999	1.015	.075	22.2%
18	.999	.987	1.010	.983	.980	.987	95.5%	.988	.979	.997	1.011	.072	16.0%
19	1.003	.978	1.028	.980	.972	.990	95.8%	.987	.968	1.006	1.016	.089	15.5%
20	.993	.989	.996	.976	.976	.976	95.1%	.990	.987	.992	1.003	.026	7.4%

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



Commercial Land

Ratio Statistics for CURRTOT / TASP

	95% Confiden Me			95% Cor	ifidence Interval fo	r Median		95% Confiden 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
.989	.963	1.015	.965	.929	.986	96.2%	.970	.932	1.007	1.019	.161	23.3%

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

	95% Confider Me	nce Interval for ean		95% Cor	nfidence Interval fo	or Median		95% Confiden Weighte	ice 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
1.00	.986	1.013	.990	.982	.995	95.5%	.937	.912	.961	1.067	.135	23.8%

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



Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	5	0.0%
	\$25K to \$50K	42	0.1%
	\$50K to \$100K	745	2.4%
	\$100K to \$150K	2452	8.1%
	\$150K to \$200K	5863	19.3%
	\$200K to \$300K	11746	38.6%
	\$300K to \$500K	7813	25.7%
	\$500K to \$750K	1411	4.6%
	\$750K to \$1,000K	200	0.7%
	Over \$1,000K	153	0.5%
Overall		30430	100.0%
Excluded	1	0	
Total		30430	

				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LT \$25K	.953	.993	.169	22.8%
\$25K to \$50K	1.059	1.006	.128	17.6%
\$50K to \$100K	.993	1.001	.124	24.6%
\$100K to \$150K	.994	1.001	.085	17.1%
\$150K to \$200K	.980	1.000	.058	10.2%
\$200K to \$300K	.976	1.000	.045	7.5%
\$300K to \$500K	.976	1.000	.052	8.6%
\$500K to \$750K	.980	1.000	.072	10.8%
\$750K to \$1,000K	.970	.999	.073	11.3%
Over \$1,000K	.960	.999	.103	16.8%
Overall	.976	1.007	.057	10.6%



Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	753.00	1	0.0%
	1212.00	28488	93.6%
	1212.60	1	0.0%
	1213.00	1	0.0%
	1213.50	13	0.0%
	1214.00	1	0.0%
	1215.00	172	0.6%
	1217.33	2	0.0%
	1217.50	2	0.0%
	1218.00	1	0.0%
	1220.00	197	0.6%
	1221.00	2	0.0%
	1223.33	1	0.0%
	1225.00	60	0.2%
	1226.75	1	0.0%
	1230.00	1451	4.8%
	1545.33	1	0.0%
	1715.00	1	0.0%
	1716.00	1	0.0%
	1721.00	1	0.0%
	1723.50	1	0.0%
	1813.80	1	0.0%
	1825.80	1	0.0%
	1889.00	1	0.0%
	1890.67	1	0.0%
	1980.75	1	0.0%
	2047.83	1	0.0%
	2234.33	2	0.0%
	2526.43	1	0.0%
	2573.67	1	0.0%
	2745.50	13	0.0%
	3256.67	5	0.0%
	3512.25	2	0.0%
	3767.83	1	0.0%
Overall		30430	100.0%
Excluded		0	
Total		30430	



				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
753.00	.914	1.000	.000	
1212.00	.976	1.005	.056	10.5%
1212.60	.990	1.000	.000	
1213.00	.980	1.000	.000	
1213.50	.980	1.006	.029	5.6%
1214.00	.970	1.000	.000	
1215.00	.990	1.016	.095	14.6%
1217.33	1.614	1.165	.228	32.2%
1217.50	1.602	.997	.054	7.7%
1218.00	.826	1.000	.000	
1220.00	.968	1.019	.096	13.4%
1221.00	.998	1.080	.133	18.8%
1223.33	1.004	1.000	.000	
1225.00	.963	1.007	.099	14.8%
1226.75	1.259	1.000	.000	
1230.00	.977	1.004	.058	9.4%
1545.33	1.093	1.000	.000	
1715.00	.867	1.000	.000	
1716.00	1.163	1.000	.000	
1721.00	1.624	1.000	.000	
1723.50	1.361	1.000	.000	
1813.80	.996	1.000	.000	
1825.80	1.658	1.000	.000	
1889.00	1.421	1.000	.000	
1890.67	1.080	1.000	.000	
1980.75	1.126	1.000	.000	
2047.83	1.735	1.000	.000	
2234.33	.998	.999	.011	1.6%
2526.43	.972	1.000	.000	
2573.67	1.829	1.000	.000	
2745.50	.991	1.046	.081	17.3%
3256.67	.971	1.058	.156	22.5%
3512.25	1.265	1.068	.207	29.2%
3767.83	1.048	1.000	.000	
Overall	.976	1.007	.057	10.6%



Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	740	2.4%
	75 to 100	385	1.3%
	50 to 75	3080	10.1%
	25 to 50	8721	28.7%
	5 to 25	12026	39.5%
	5 or Newer	5478	18.0%
Overall		30430	100.0%
Excluded		0	
Total		30430	

				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	.980	1.028	.105	19.8%
75 to 100	.981	1.012	.100	16.5%
50 to 75	.980	1.008	.076	12.8%
25 to 50	.976	1.010	.066	11.1%
5 to 25	.977	1.003	.048	7.8%
5 or Newer	.976	1.003	.040	11.0%
Overall	.976	1.007	.057	10.6%



Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	23	0.1%
	500 to 1,000 sf	3284	10.8%
	1,000 to 1,500 sf	9125	30.0%
	1,500 to 2,000 sf	8905	29.3%
	2,000 to 3,000 sf	7198	23.7%
	3,000 sf or Higher	1895	6.2%
Overall		30430	100.0%
Excluded		0	
Total		30430	

				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	.980	.999	.092	13.4%
500 to 1,000 sf	.976	1.008	.069	11.6%
1,000 to 1,500 sf	.976	1.006	.053	9.5%
1,500 to 2,000 sf	.976	1.004	.050	8.7%
2,000 to 3,000 sf	.976	1.005	.057	11.7%
3,000 sf or Higher	.986	1.025	.082	15.2%
Overall	.976	1.007	.057	10.6%



Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	.0	2	0.0%
	1.0	270	0.9%
	2.0	22195	72.9%
	3.0	7409	24.3%
	4.0	510	1.7%
	5.0	44	0.1%
Overall		30430	100.0%
Excluded		0	
Total		30430	

				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
.0	.985	1.001	.015	2.1%
1.0	.987	.995	.110	18.4%
2.0	.976	1.009	.053	9.9%
3.0	.980	1.004	.062	11.5%
4.0	.985	1.013	.082	12.4%
5.0	.966	1.072	.186	36.0%
Overall	.976	1.007	.057	10.6%



Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	1	0.3%
	\$25K to \$50K	2	0.7%
	\$50K to \$100K	14	4.6%
	\$100K to \$150K	12	4.0%
	\$150K to \$200K	23	7.6%
	\$200K to \$300K	43	14.2%
	\$300K to \$500K	66	21.8%
	\$500K to \$750K	51	16.8%
	\$750K to \$1,000K	18	5.9%
	Over \$1,000K	73	24.1%
Overall		303	100.0%
Excluded	1	0	
Total		303	

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	.890	1.000	.000	
\$25K to \$50K	1.045	.991	.070	9.9%
\$50K to \$100K	.898	.988	.232	43.0%
\$100K to \$150K	.953	.998	.186	24.1%
\$150K to \$200K	1.022	1.003	.140	19.0%
\$200K to \$300K	.970	1.008	.144	20.8%
\$300K to \$500K	.921	1.003	.172	26.1%
\$500K to \$750K	.990	.999	.160	23.9%
\$750K to \$1,000K	.983	1.002	.102	13.3%
Over \$1,000K	.964	1.021	.161	25.6%
Overall	.965	1.019	.161	23.9%



Subclass

Case Processing Summary

		•	,
		Count	Percent
ABSTRIMP	1549.00	1	0.3%
	1716.00	7	2.3%
	1720.00	1	0.3%
	1721.00	1	0.3%
	1725.00	1	0.3%
	1727.50	1	0.3%
	2032.00	1	0.3%
	2149.17	1	0.3%
	2180.79	1	0.3%
	2212.00	47	15.5%
	2215.00	3	1.0%
	2216.00	1	0.3%
	2220.00	64	21.1%
	2221.00	2	0.7%
	2223.50	2	0.7%
	2225.00	1	0.3%
	2227.50	3	1.0%
	2230.00	53	17.5%
	2235.00	54	17.8%
	2245.00	37	12.2%
	2250.00	1	0.3%
	2343.89	1	0.3%
	2348.44	1	0.3%
	2561.67	1	0.3%
	2717.50	1	0.3%
	3215.00	9	3.0%
	3230.00	2	0.7%
	3254.50	1	0.3%
	3593.00	1	0.3%
	9229.00	1	0.3%
	9259.00	1	0.3%
	9279.00	1	0.3%
Overall		303	100.0%
Excluded		0	
Total		303	



				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
1549.00	1.981	1.000	.000	
1716.00	.789	1.099	.202	38.2%
1720.00	1.031	1.000	.000	
1721.00	1.699	1.000	.000	
1725.00	1.043	1.000	.000	
1727.50	.929	1.000	.000	
2032.00	1.010	1.000	.000	
2149.17	.988	1.000	.000	
2180.79	.977	1.000	.000	
2212.00	.912	1.046	.179	24.7%
2215.00	.969	1.028	.068	10.7%
2216.00	.986	1.000	.000	
2220.00	.987	1.012	.170	25.3%
2221.00	.898	1.006	.020	2.9%
2223.50	.823	.984	.019	2.7%
2225.00	.993	1.000	.000	
2227.50	.905	1.039	.103	19.6%
2230.00	.929	1.050	.173	23.4%
2235.00	.984	1.006	.100	13.5%
2245.00	.965	.983	.147	23.3%
2250.00	.669	1.000	.000	
2343.89	1.679	1.000	.000	
2348.44	1.013	1.000	.000	
2561.67	1.076	1.000	.000	
2717.50	1.077	1.000	.000	
3215.00	1.006	1.055	.225	43.3%
3230.00	.923	1.046	.068	9.6%
3254.50	.791	1.000	.000	
3593.00	.805	1.000	.000	
9229.00	.965	1.000	.000	
9259.00	1.319	1.000	.000	
9279.00	1.098	1.000	.000	
Overall	.965	1.019	.161	23.9%



Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	23	7.6%
	75 to 100	8	2.6%
	50 to 75	43	14.2%
	25 to 50	136	44.9%
	5 to 25	84	27.7%
	5 or Newer	9	3.0%
Overall		303	100.0%
Excluded		0	
Total		303	

				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
Over 100	.844	1.028	.228	36.8%
75 to 100	.905	.980	.086	10.6%
50 to 75	.937	1.063	.168	23.4%
25 to 50	.989	1.026	.162	24.4%
5 to 25	.959	.983	.137	21.3%
5 or Newer	.998	1.062	.142	18.4%
Overall	.965	1.019	.161	23.9%



Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	3	1.0%
	500 to 1,000 sf	8	2.6%
	1,000 to 1,500 sf	26	8.6%
	1,500 to 2,000 sf	24	7.9%
	2,000 to 3,000 sf	29	9.6%
	3,000 sf or Higher	213	70.3%
Overall		303	100.0%
Excluded		0	
Total		303	

				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LE 500 sf	.879	1.067	.072	14.4%
500 to 1,000 sf	.882	1.169	.296	51.0%
1,000 to 1,500 sf	.997	1.017	.135	20.2%
1,500 to 2,000 sf	.889	1.022	.170	26.7%
2,000 to 3,000 sf	.935	1.025	.144	19.0%
3,000 sf or Higher	.981	1.037	.157	23.5%
Overall	.965	1.019	.161	23.9%



Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	1.0	62	20.5%
	2.0	235	77.6%
	3.0	6	2.0%
Overall		303	100.0%
Excluded		0	
Total		303	

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1.0	.937	1.031	.169	26.6%
2.0	.967	1.002	.156	23.2%
3.0	.841	1.137	.305	50.2%
Overall	.965	1.019	.161	23.9%



Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	50	4.3%
	\$25K to \$50K	108	9.4%
	\$50K to \$100K	388	33.6%
	\$100K to \$150K	235	20.3%
	\$150K to \$200K	165	14.3%
	\$200K to \$300K	106	9.2%
	\$300K to \$500K	41	3.5%
	\$500K to \$750K	25	2.2%
	\$750K to \$1,000K	13	1.1%
	Over \$1,000K	24	2.1%
Overall		1155	100.0%
Excluded		0	
Total		1155	

				Coefficient of Variation
Group	Median	Price Related Differential	Coefficient of Dispersion	Median Centered
LT \$25K	1.055	1.012	.211	34.7%
\$25K to \$50K	1.031	.999	.230	35.2%
\$50K to \$100K	1.002	1.002	.127	22.0%
\$100K to \$150K	.987	1.004	.121	22.8%
\$150K to \$200K	.981	1.000	.082	13.7%
\$200K to \$300K	.973	.999	.101	18.8%
\$300K to \$500K	.946	.993	.152	26.5%
\$500K to \$750K	.965	1.001	.147	26.1%
\$750K to \$1,000K	.981	.998	.062	12.7%
Over \$1,000K	.926	1.010	.146	23.8%
Overall	.990	1.067	.135	24.0%



Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100.00	365	31.6%
	200.00	54	4.7%
	300.00	9	0.8%
	510.00	6	0.5%
	520.00	14	1.2%
	530.00	12	1.0%
	540.00	9	0.8%
	550.00	51	4.4%
	560.00	2	0.2%
	1112.00	567	49.1%
	1120.00	1	0.1%
	1126.00	2	0.2%
	1135.00	26	2.3%
	2112.00	12	1.0%
	2120.00	1	0.1%
	2130.00	18	1.6%
	2135.00	6	0.5%
Overall		1155	100.0%
Excluded		0	
Total		1155	



		Price Related	Coefficient of	Coefficient of Variation Median
Group	Median	Differential	Dispersion	Centered
100.00	.991	1.042	.151	27.3%
200.00	.960	1.029	.110	19.9%
300.00	.981	1.068	.138	20.9%
510.00	.981	1.051	.068	9.2%
520.00	.984	1.372	.267	44.8%
530.00	1.013	1.040	.054	9.6%
540.00	.844	1.006	.360	54.2%
550.00	.990	1.260	.217	33.4%
560.00	1.063	1.120	.185	26.2%
1112.00	.998	1.022	.110	19.8%
1120.00	1.007	1.000	.000	
1126.00	1.016	1.000	.119	16.9%
1135.00	.888	1.111	.308	40.1%
2112.00	.971	.991	.052	9.5%
2120.00	.983	1.000	.000	
2130.00	.967	1.051	.079	14.7%
2135.00	.983	1.141	.123	17.3%
Overall	.990	1.067	.135	24.0%