

Columbia County
Assessor's Certified Ratio Study
For January 1, 2013



Oregon

John A. Kitzhaber, MD, Governor

Department of Revenue
Property Tax Division
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July 8, 2013

Sue Martin, Assessor
Columbia County
230 Strand Street
St. Helens, OR 97051

Columbia County 2013 Assessor's Certified Ratio Study Acceptance and Recommendations

The Department's CMART team has completed its required review of your "2013 Assessor Certified Ratio Study" report and accepts its findings.

In accordance with ORS 309.200 the county assessor has produced and timely filed a ratio study report that documents achievement of the 100% real market value (RMV) standard for the forthcoming assessment roll as required by ORS 308.232. Any significant changes made to the reported RMV adjustment program must be documented and forwarded to a mass appraisal team member listed below.

Your appraisal / valuation plan is yet to be received and is due on or before November 1, 2013.

In accordance with ORS 309.203(1) the Department recommends you continue to maintain accurate property records and values which are extremely important to the maintenance of the county's property tax program.

Our mass appraisal team is available to assist with your real market value mass appraisal programs. If you have questions, please contact any of the CMART team members:

Gene Rhoades (503) 945-8252
Don Kirby (541) 276-7811
Karen Anderson (503) 945-8355
Frank Lassen (541) 647-0074

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Sincerely,

Bram Ekstrand, Manager
Program Assistance
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cc: County Governing Body

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Certification & Analysis of Valuation Methods and Procedures

State of Oregon)
) SS.
County of Columbia)

I, Sue Martin, Assessor of Columbia County, State of Oregon, do hereby certify that I have prepared a ratio study for the current tax year according to ORS 309.200 and guidelines developed by the Department of Revenue, and that the attached is a complete and accurate copy of the original now on file in my office.

I further certify that the ratios and adjustments identified in this study will achieve 100% of real market value for real property and manufactured structures for the current year.

This report is given to the Department of Revenue and will be given to the Clerk of the Board of Property Tax Appeals to provide current knowledge of the adjustment program used by my office.

Sue Martin - **Assessor**

Date

Michael C. Simpson - Sales Data Analyst
Report Preparer/Contact Person

(503) 397 - 2240
Phone

INTRODUCTION - The Purpose and Description of the Ratio Study

THE PURPOSE OF THE RATIO STUDY

1. To measure the level of appraised value (RMV) relative to market value as of the Assessment Date. For 2013 this is the relationship between the Set-Up Real Market Values for all re-calculated and re-appraised areas, For those not yet re-calculated or re-appraised it is the relationship to the prior years Real Market Values and current Real Market Values.
2. To identify the adjustment factors that will achieve 100% of Real Market Value.
3. To document the analysis and decision process.
4. To provide a tool for managing Appraisal and Adjustment programs.

APPRAISAL AREAS / NEIGHBORHOODS / PROPERTY CLASSES

The county is divided into six appraisal areas (Maintenance Areas) as shown on the County Map page. Properties within these Areas are grouped together for market analysis and adjustment using "study area" codes and/or "property class" codes. Listings of these codes are included in this report. Maintenance Area 7 consists of Personal Property Manufactured Structures, regardless of location, throughout the County.

THE RATIO STUDY FORMAT

The format is intended to directly reflect the adjustment program and includes the following two primary sections, as well as other supportive and descriptive sections.

SUMMARY OF ADJUSTMENTS AND AFTER RATIOS SECTION

These summarize the adjustments by Appraisal Area (MA), Study Area (SA) and Neighborhood (NH). Adjustments are made in general categories by Real Market Value Class (RMV Class):

RESIDENTIAL URBAN, RMV CLASS 1XX/ RURAL TRACT, RMV CLASS 4XX /8*XX - This includes residential land, single family "site built" dwellings, "real property manufactured structures", condominiums and 2-4 unit multi-family properties within city limits, and rural property, from small rural residential parcels to large farm and forest parcels.

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COMMERCIAL, RMV Class 2XX/ INDUSTRIAL, RMV Class 3XX - This includes commercial, industrial and multi-family properties appraised by the County in urban or rural locations.

OTHERS - This is for properties which do not fit well into any of the other categories, or are better reported as a separate group.

STUDIES SECTION

These are the individual studies which make up the essential elements of the Ratio Study. They include the individual ratio studies and the supporting sales listings and statistics. See the following section for a detailed description of the Studies.

STUDIES SECTION DESCRIPTION

MARKET GROUPING

The assessment system provides for adjusting values by market groupings using stratification and combination. Stratification means **splitting** a large group of properties into separate groups based on market differences. Conversely, combination means **combining** properties from separate groups with similar market characteristics. "Study Area" (SA) and "Property Class" (Prp Cls) groupings are the most common market groupings used in this report. They may define the market by location, type of property or have a special purpose use.

STUDY PAGES

Each study is two or more pages in length and identify the Real Market Class(es), and Study Area(s) (SA), show the calculation of the adjustment and explain how the factors used in the calculation were selected. Each study includes a sales listing with related statistics. The following are the main elements of the first page of the studies:

Market Identification - Describes the population for which the individual Study is done, usually by the Real Market Class (RMV CLASS or Classes), Maintenance Area(s) (MA), Study Area(s) (SA), and general narrative description. Most locally assessed properties are identified and a trend conclusion is done whether or not a sales listing can be generated or a conclusion of "No Trend" is determined.

Adjustment Calculation Summary - This section identifies :

A:

- 1) The size of the sales sample;
- 2) The total size of the population in the study, both in terms of absolute numbers and by percentage;

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- 3) Identifies the values of the population by Land RMV (Real Market Value), On Site Development (OSD) RMV, Residential Improvement RMV and Farm Improvement (ancillary buildings) RMV, as documented in the Assessors File. These values are shown as dollar amounts and as a percentage of the total RMV for each population by category, both before adjustment and after.

B:

- 1) Selected Ratio From Sales is the ratio selected from the Mean, Median, Weighted Mean (WtdMean) or Geometric Mean (GeoMean) determined to provide the "best fit" for the study. Ratio conclusions are based on the following principles:

1A: No one sale should have a large influence on the ratio indications.

- Avoid a MEAN distorted by an extreme ratio.
- Avoid a WEIGHTED MEAN influenced by high valued properties.
- Avoid a MEDIAN when gaps exist in the middle of the frequency distribution.

1B: Split ratios (ratios above and below 100) are the result of being at or near market.

- A single trend will result in half the properties being over market and half being under market.
- A single trend cannot reduce the distribution of ratios within the group.

1C. Making the required adjustment.

- If an adjustment is clearly needed, it is applied.
- The adjustment with the greatest support is applied.

1D. Reliability is variable.

- Reliability is dependent on the size of the sample and the variability within the sample, therefore the ratio indicators (Mean, Median, etc.) lie within a range of reliable conclusions.
- Confidence Interval calculations are useful as a way to measure reliability.

The Selected Ratio may be adjusted by the results of the "Time Study", and this adjusted Ratio is entered. If so, the adjustment is identified in the Explanation section of the analysis.

- 2) Before Ratio is a measure of the Real Market Value (RMV) assessment at an established point in time for the tax year before any adjustments are applied.
- 3) Overall Adjustment Factor: The adjustment needed to bring the prior years RMV or the current re-calculated RMV assessment roll value to the statutory required 100% RMV for the assessment date, January 1, of the current assessment year. It is calculated by dividing 1 by the "Before Ratio". For improved properties the Overall Adjustment Factor is separated into the following elements:

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- 3A: Land Adjustment Factor** - The adjustment factor by which the Land portion of a property is adjusted. It is usually the Land Adjustment factor used in the analysis of Unimproved Land in the same Maintenance Area and Study Area, but may be from the analysis of the Improved classes if an insufficient sample is available.
- 3B: OSD Adjustment Factor** - The adjustment factor that brings the site improvement element of the property to 100% of Real Market Value. Due to a computer conversion process beginning in 2007 and continuing into 2013, this value may not be available as a separate component but is included in the Land Adjustment.
- 3C: Residential Improvement Factor** - The adjustment factor needed to bring the residential and associated improvements to 100% of RMV as part of the Overall Adjustment.
- 3D: Farm Improvement Adjustment** - The adjustment factor applied as part of the Overall adjustment that brings Outbuilding and other ancillary structures to 100% RMV.
- 4) Explanation** - A written explanation for which of the indicators of Central Tendencies were selected for the ratio determination in the analysis. If other factors contribute to the conclusion they may be mentioned here.
- 5) Performance History** -
- 5A: (COD) Coefficient of Dispersion** - The COD history, if available, from 2009 through 2013. A COD higher than the maximum for the property class and type is an indication that the Property Class and Maintenance Area may have a valuation problem.
- 5B: (PRD) Price Related Differential** - The PRD history if available from 2009 through 2013. A PRD above 1.00 suggests that high-value properties are undervalued and low-value properties are overvalued. On the other hand, a PRD less than 1.00 suggests that high-value properties are overvalued, and that low-valued properties are undervalued. PRD within a range of .98 and 1.03 are generally insignificant.
- 6) Adjusted Overall Ratio** - an estimate of the level of appraised value (RMV) relative to market value as of the Assessment Date before Trending (adjusting RMV).

Performance Measures -
STUDY LISTINGS

For most individual studies there are sales listings. Each sale in the listing is identified by Maintenance Area, Study Area, Neighborhood and Property Class, then additional details are provided which more fully describe the individual sale properties. Finally, a ratio is calculated for each sale, then statistics are calculated for the entire group and displayed. The major components are as follows:

(AP AR) MAINTENANCE APPRAISAL AREA - One of the seven appraisal areas.

(SA) STUDY AREA - Market identification code.

(NH) NEIGHBORHOOD - Not used at this time, designation will be "000".

(PRP CLS) REAL MARKET PROPERTY CLASS - A three digit number identifying the type of property.

(BLD CLS) BUILDING CLASS - The type of main structure included in the sale.

(RJ CD) SALE CONDITION CODE -

24 Sales price varies from RMV in excess of expected parameters, but no sales review requested.

28 The appraised values reflect the results of processing a Sales Review Request.

30 Unconfirmed sale from current sales year (verified by recorded instrument only)

31 The sale is from a prior sales year (verified by recorded instrument only)

32 Confirmed sale from a prior sales year (confirmed by seller, buyer or agent)

33 Confirmed sale from current sales year (confirmed by seller, buyer or agent)

MAP NO. - The Assessor's Map and Tax Lot Number. (**NOTE:** More than one tax lot may be involved.)

BOOK - The calendar year in which the document that transferred title to the property was recorded.

PAGE - The recording number identifying the document that transferred title to the property.

ACRES - The land size expressed as an acreage amount, if recorded in the Assessors file.

RMV LAND - The prior year appraised/trended land value.

RMV IMP - The prior year appraised/trended improvements value

TOTAL VALUE - The sum of the RMV LAND and the RMV IMP. This is usually the Real Market Value (RMV) from the Assessor's records. In some cases it is the value which would have been in the records if the property had not been changed (remodeled, subdivided, etc.) since the date of sale.

SALES PRICE - The sale price of the property as of the date of sale.

SALE DATE - The month and year the property sold.

SALE NO - Within each listing the sales are arrayed in ascending order by ratio and

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each is identified with a number.

RATIO - A comparison of the Total Appraised Value to the Sale Price expressed as a percentage without the decimal point (Total Value/Sale Price = Ratio). This indicates the level of appraised value (RMV) relative to the market value of the property.

EXPLANATION OF STATISTICS

Descriptive statistics are found on the second page of each Ratio Study Grouping. These are split into statistics of Central Tendency and of Distribution. As with all statistical analysis, the accuracy of the conclusions depend on adequate size samples which accurately represent the population. Judgments about grouping properties to get reasonably accurate results are based primarily on creating adequate minimum sample sizes or on Study Areas determined to have moved similarly in the market.

STATISTICS OF CENTRAL TENDENCY

The center, middle or typical element in a group. These are assumed to generally reflect the level of appraised value (RMV) relative to market value, but they must be analyzed in some detail and context to produce reasonably accurate trend conclusions. These statistics are found in numeric form on the second page of each individual Study in the upper right hand corner, and are listed with the Statistics of Distribution. These statistics are also presented in graph form near the center of the second page.

MEDIAN - The ratio value with the same number of ratios above as below. Listings which display sizable gaps near their center may have an unreliable Median.

MEAN, or ARITHMETIC MEAN - Traditionally called the Average. The sum of the ratios divided by the number of ratios. The Mean is distorted by extremely high or low ratios.

WEIGHTED MEAN - The sum of the Total Values divided by the sum of Sales Prices. Sales with relatively high values or prices will have the most effect on this measure.

GEOMETRIC MEAN - the Nth root of the product of the ratios, where N is the number of ratios in the array.

STATISTICS OF DISTRIBUTION

Statistics that describe how values are distributed within the group, or "how far ratios are from a central tendency". Distribution characteristics tend to indicate the accuracy of appraised values and the consistency of the marketplace. Ratio studies in Columbia County are usually (by necessity) done with relatively limited numbers of sales, so care must be taken not to "read too much" into the distribution statistics from these studies. Drawing conclusions about distribution from relatively small samples may be unreliable.

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FREQUENCY DISTRIBUTION - A listing used to visually display the distribution of sales by ratio range. This list appears on the second page in the upper left hand corner of each individual Study, and is displayed in graph and numeric form.

(AD) AVERAGE DEVIATION - The Average of the differences between each ratio and the Median for the entire group.

(COD) COEFFICIENT OF DISPERSION - The Average Deviation converted to a percentage.

(SD) STANDARD DEVIATION - A measure of deviation from the Arithmetic Mean for a *normally distributed population*. For this statistic to be useful the population and the sales sample must meet relatively strict statistical standards, therefore it is considered less useful for "typical" appraisal standards analysis than the COD above.

(COV) COEFFICIENT OF VARIANCE - The Standard Deviation converted to a percentage.

(PRD) PRICE RELATED DIFFERENTIAL - The Arithmetic Mean divided by the Weighted Mean, and is a measure of "vertical" equity. A PRD of greater than 1.00 indicates higher priced properties are under appraised relative to moderate or low priced properties, and a PRD of less than 1.00 indicates lower priced properties are under appraised relative to moderate or higher priced properties. If the PRD is between .98 and 1.03, the degree of bias or vertical equity is not considered significant.

95% CONFIDENCE - A calculation of uniformity used to determine the reliability that the array is representative of the population. This number is expressed as a percentage. The lower the percentage, the greater the reliability. Conversely the higher the percentage the lower the reliability.

The current "working" statistical standards are:

- | | |
|---------------------------------|-------------|
| 1. RMV | 100% |
| 2. COD standards: | |
| Vacant land (class 100,400) | 20 |
| Real & Personal Manuf. Homes | 25 |
| Urban Residential (class 101) | |
| Homogeneous | 10 |
| Non-homogeneous | 15 |
| Rural Improved (class 401) | 20 |
| Apartments (class 701) | 12 |
| Commercial Improved (class 201) | |
| Larger/Urban | 15 |
| Smaller/Rural | 20 |
| No standard set for Industrial | |
| 3. PRD standard: | .98 to 1.03 |

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SPECIALLY PROCESSED VALUES

Not all assessed values are adjusted in the manner described in this report. Specially Assessed (Farm or Forest Deferral) values, certain Personal Property values and many Industrial property values are recalculated or specially processed annually. The Ratio Study does not report on these values. However it does indicate how the Real Market Value of farm and forest deferred properties will be adjusted.

STATUS OF THE ASSESSOR'S ADJUSTMENT PROGRAM

The Columbia County Assessor's office will continue to review market information until the actual changes are made to the roll. It is possible that additional data and further analysis will lead to conclusions different than those contained in this report. The Assessor must make whatever adjustments are indicated by reliable market data to produce the most accurate appraisals possible. Any future modifications to the adjustment factors in this report will be reported to the Department of Revenue, and will be documented in the Modifications section of this study.

Property Class	RMV Class	Class Description	Count CURRENT Year	Count PRIOR Year	CHANGE FROM PRIOR YEAR
001	020	MISCELLANEOUS, LOGGING PERSONAL PROPERTY	0	0	0
003	030	MISCELLANEOUS, CENTRALLY ASSESSED	125	124	1
010	010	UNBUILDABLE(SIZE, DEQ DENIAL, ETC) ZONED RESIDENTIAL	160	162	-2
014	101	IMPROVED RESIDENTIAL, HISTORIC	2	2	0
015	101	OPEN SPACE RESIDENTIAL	0	0	0
019	019	PERSONAL PROPERTY MS	1301	1311	-10
020	020	UNBUILDABLE(SIZE, DEQ DENIAL, ETC) ZONED COMMERCIAL	21	21	0
024	201	IMPROVED COMMERCIAL, HISTORIC ZONED COMMERCIAL	5	5	0
025	201	OPEN SPACE, GOLF COURSE LAND ZONING NOT SIGNIFICANT	5	4	1
028	201	ENTERPRISE ZONE, IMPROVED COMMERCIAL ZONED COMMERCIAL	0	0	0
030	030	UNBUILDABLE(SIZE, DEQ DENIAL, ETC) ZONED INDUSTRIAL	7	7	0
031	301	INDUSTRIAL, UTILITY PROPERTY	0	0	0
032	030	INDUSTRIAL, MINERALS	120	120	0
033	303	IMPROVED INDUSTRIAL, STATE RESPONSIBILITY	0	0	0
037	301	ENTERPRISE ZONE IMPROVED COUNTY IPR PROCESSED	0	0	0
038	303	ENTERPRISE ZONE, IMPROVED STATE IPR PROCESSED	5	5	0
039	301	ENTERPRISE ZONE IMPROVED INDUSTRIAL	0	0	0
040	040	UNBUILDABLE(SIZE, DEQ DENIAL, ETC) ZONING NOT SIGNIFICANT	179	190	-11
041	401	IMPROVED ONLY TRACT, ZN NOT SIGNIFICANT	0	0	0
044	401	IMPROVED TRACT, HISTORIC ZONING NOT SIGNIFICANT	0	0	0
045	401	OPEN SPACE TRACT LAND ZONING NOT SIGNIFICANT	0	0	0
050	500	UNBUILDABLE(SIZE, DEQ DENIAL, ETC) ZONING NOT SIGNIFICANT	0	0	0
051	501	IMPROVED ONLY FARM, ZONING NOT SIGNIFICANT	0	0	0
054	501	IMPROVED FARM, HISTORIC ZONING NOT SIGNIFICANT	0	0	0
055	501	OPEN SPACE FARM LAND ZONING NOT SIGNIFICANT	0	0	0
060	600	UNBUILDABLE(SIZE, DEQ DENIAL, ETC) ZONING NOT SIGNIFICANT	0	0	0
061	601	IMPROVED ONLY FOREST, ZONING NOT SIGNIFICANT	0	0	0
070	700	UNBUILDABLE(SIZE, DEQ DENIAL, ETC) ZONED MULTI-FAMILY	0	0	0
071	701	IMPROVED ONLY, ZONED MULTI-FAMILY	0	0	0
100	100	VACANT LAND, ZONED RESIDENTIAL	1030	1058	-28
101	101	RESIDENTIAL IMPROVED, ZONED RESIDENTIAL	8950	8933	17
102	102	CONDOMINIUM	48	48	0
109	109	M S IMPROVED, ZONED RESIDENTIAL	422	422	0
110	100	VACANT, H&B RESD 4 OR LESS UNITS ZONING NOT SIGNIFICANT	0	0	0
111	111	RESIDENTIAL, FLOATING PROPERTY	288	288	0
120	100	VACANT, H & B USE RESIDENTIAL ZONED COMMERCIAL	0	0	0
121	101	SINGLE FMLY RESIDENCE IMPROVED ZONED COMMERCIAL	0	0	0
129	109	SINGLE FMLY RESIDENCE MS IMPROVD ZONED COMMERCIAL	0	0	0
130	100	VACANT, H&B USE RESIDENTIAL ZONED INDUSTRIAL	0	0	0
131	101	SINGLE FMLY RESIDENCE IMPROVED ZONED INDUSTRIAL	0	0	0
190	190	VACANT LAND, POTENTIAL DEVELOPABLE ZONED RESIDENTIAL	0	0	0
191	191	IMPROVED, POTENTIAL DEVELOPABLE ZONED RESIDENTIAL	0	0	0
199	199	M S IMPROVED, POTENTIAL DEVELOPABLE ZONED RESIDENTIAL	0	0	0
200	200	VACANT LAND ZONED COMMERCIAL	117	117	0
201	201	COMMERCIAL IMPROVED, ZONED COMMERCIAL	760	761	-1
206	201	COMMERCIAL, MARINA/MOORAGE	26	26	0
207	207	ALL M S PARKS, REGARDLESS OF ZONE	41	38	3
208	201	COMMERCIAL, RETIRE/CARE FACILITY	4	4	0
209	209	M S IMPROVED, ZONED COMMERCIAL	0	0	0
221	221	IMPROVED COMMERCIAL, FLOATING PROPERTY	13	13	0
291	291	COMMRL IMPROVD, POTENTIAL DEVELOP ZONED COMMERCIAL	0	0	0
299	299	M S IMPROVED, POTENTIAL DEVELOPABLE ZONED COMMERCIAL	0	0	0
300	300	VACANT LAND, ZONED INDUSTRIAL	74	75	-1
301	301	INDUSTRIAL IMPROVED, ZONED INDUSTRIAL	168	168	0
303	303	INDUSTRIAL, STATE RESPONSIBLE IPR PROCESSED	38	38	0
308	308	INDUSTRIAL, M&E STATE AND COUNTY RESPONSIBLE IPR PROCESSED	55	55	0
309	309	M S IMPROVED, ZONED INDUSTRIAL	0	0	0
330	300	INDUSTRIAL, AGGREGATE MINE	25	25	0
331	301	INDUSTRIAL, AGGREGATE MINE WITH IMPROVMENTS	19	20	-1
333	333	INDUSTRIAL IMPROVED, STATE RESP	0	0	0
338	308	INDUSTRIAL, AGGREGATE MACHINERY AND EQUIPMENT	3	3	0
391	391	INDSTRL IMPROVD, POTENTIAL DEVELOPABLE ZONED INDUSTRIAL	0	0	0

Property Class	RMV Class	Class Description	Count	Count	CHANGE FROM PRIOR YEAR
399	399	M S IMPROVED, POTENTIAL DEVELOPABLE ZONED INDUSTRIAL	0	0	0
400	400	VACANT H&B USE TRACT LAND, ZONING NOT SIGNIFICANT	707	714	-7
401	401	IMPROVED H&B USE TRACT, ZONING NOT SIGNIFICANT	4697	4683	14
409	409	M S H&B USE TRACT, ZONING NOT SIGNIFICANT	1242	1245	-3
440	400	VACANT H&B USE TRACT LAND, FARM DEF ZONED NON-EFU	0	0	0
441	401	IMPRVD H&B USE TRACT, FARM DEF, ZONED NON-EFU	0	0	0
449	409	M S H&B USE TRACT, FARM DEF, ZONED NON-EFU	0	0	0
450	400	VACANT H&B USE TRACT, FARM DEF, ZONED EFU	0	0	0
451	401	IMPROVED H&B USE TRACT, FARM DEF, ZONED EFU	0	0	0
459	409	M S H&B USE TRACT, FARM DEF, ZONED EFU	0	0	0
470	400	VACANT H&B USE TRACT, PERM FARM DISQ, ZONED EFU	0	0	0
471	401	IMPRVD H&B USE TRACT, PERM FARM DISQ, ZONED EFU	0	0	0
479	409	M S H&B USE TRACT, PERM FARM DISQ, ZONED EFU	0	0	0
480	400	VACANT H&B TRACT, MLTPL SPEC ASMT, ZONING NOT SIGNIFICANT	0	0	0
481	401	IMPRVD H&B TRACT, MLTPL SPEC ASMT, ZONING NOT SIGNIFICANT	0	0	0
489	409	M S H&B USE TRACT, MLTPL SPEC ASMT, ZONING NOT SIGNIFICANT	0	0	0
490	490	VACANT TRACT, POTENTIAL DEVELOP, ZONING NOT SIGNIFICANT	0	0	0
491	491	IMPROVED TRACT, POTENTIAL DEVELOP, ZONING NOT SIGNIFICANT	0	0	0
499	499	M S, POTENTIAL DEVELOPABLE, ZONING NOT SIGNIFICANT	0	0	0
500	500	VACANT H&B USE FARM, NOT RECV FARM DEF, ZONING NOT SIGNIFICANT	0	0	0
501	501	IMPRVD H&B USE FARM, NOT RECV FARM DEF, ZONING NOT SIGNIFICANT	0	0	0
509	509	M S H&B USE FARM, NOT RCVNG FARM DEF, ZONING NOT SIGNIFICANT	0	0	0
540	400	VACANT H&B USE FARM, RECEIVING FARM DEF, ZONED NON-EFU	150	151	-1
541	401	IMPROVED H&B USE FARM, RCVG FARM DEF, ZONED NON-EFU	399	393	6
549	409	M S H&B USE FARM, RECEIVING FARM DEF, ZONED NON-EFU	68	69	-1
550	400	VACANT H&B USE FARM, RCVNG FARM DEF, ZONED EFU	137	137	0
551	401	IMPROVED H&B USE FARM, RCVG FARM DEF, ZONED EFU	338	338	0
559	409	M S H&B USE FARM LAND, RCVNG FARM DEF, ZONED EFU	28	27	1
580	400	AGRICULTURE, MOSTLY FARM RURAL MULT SPEC ASMTS	22	23	-1
581	401	AGRICULTURE, W/IMPS-MOSTLY FARM RURAL, MULT SPEC ASMTS	83	80	3
589	409	M S H&B USE FARM, MLTPL SP ASMT FARM USE PREDOMINANT, ZN NOT SIGN	12	13	-1
600	600	VACANT H&B USE FOREST, NOT DESIGNATED, ZONING NOT SIGNIFICANT	570	627	-57
601	601	IMPRVD H&B FOREST LAND, NOT DESIGNATED, ZONING NOT SIGNIFICANT	0	0	0
609	609	M S H&B FOREST LAND, NOT DESIGNATED, ZONING NOT SIGNIFICANT	0	0	0
640	400	VACANT H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	2051	1998	53
641	401	IMPRVD H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	1927	1919	8
649	409	M S H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	595	597	-2
660	600	VACANT, REFORESTATION	0	0	0
680	400	FOREST LAND, LAND ONLY-MOSTLY FOREST RURAL, MULT SPEC ASMTS	58	51	7
681	401	FOREST LAND, WITHIMPS-MOSTLY FOREST RURAL, MULT SPEC ASMTS	165	169	-4
689	409	M S H&B USE FL, MLTPL SP ASMT, FL PREDOMINANT, ZN NOT SIGNIFICANT	17	17	0
700	700	VACANT LAND, ZONED MULTI-FAMILY	0	0	0
701	701	IMPROVED 5 OR MORE UNITS, ZONED MULTI-FAMILY AND MS PARK IMPROVED	50	51	-1
707	701	ALL M S PARKS, REGARDLESS OF ZONE	0	0	0
712	701	MULTIPLE HOUSING,	0	0	0
781	701	MULTIPLE HOUSING, LOW INCOME SPECIAL ASMT	6	6	0
790	790	VACANT LAND, POTENTIAL DEVELOP, ZONED MULTI-FAMILY	0	0	0
791	791	IMPRVD 5 OR MORE, POTENTIAL DEVELOP, ZONED MULTI-FAMILY	0	0	0
799	799	M S, POTENTIAL DEVELOPABLE, ZONED MULTI-FAMILY	0	0	0
800	800	RECREATION, LAND ONLY	154	155	-1
801	801	RECREATION, WITH IMPROVMENTS	4	4	0
890	890	RECREATION, HILLCREST/COL ACRES POTENTIAL DEVELOPMENT	302	304	-2
910	200	CHURCH - VACANT	19	19	0
911	201	CHURCH - IMPROVED	100	100	0
920	200	SCHOOL - VACANT	23	23	0
921	201	SCHOOL - IMPROVED	51	51	0
930	200	CEMETERY - VACANT	26	26	0
931	201	CEMETERY - IMPROVED	5	5	0
940	200	CITY - VACANT	356	356	0
941	201	CITY - IMPROVED	107	104	3
942	201	CITY - LEASED	0	0	0
950	200	COUNTY - VACANT	147	138	9

Property Class	RMV Class	Class Description	Count	Count	CHANGE FROM PRIOR YEAR
951	201	COUNTY - IMPROVED	43	40	3
952	201	COUNTY - LEASED	0	0	0
960	200	STATE OWNED - VACANT	160	159	1
961	201	STATE OWNED - IMPROVED	10	10	0
962	201	STATE - LEASED	1	1	0
964	401	EXEMPT, STATE GAME IN-LIEU OF	22	22	0
970	200	FEDERALLY OWNED - VACANT	46	46	0
971	201	FEDERALLY OWNED - IMPROVED	8	10	-2
976	201	FEDERALLY OWNED - NATIVE AMERICAN HOLDINGS	0	0	0
980	200	BENEVOLENT, FRATERNAL OWNERSHIP - VACANT	8	8	0
981	201	BENEVOLENT, FRATERNAL OWNERSHIP - IMPROVED	65	65	0
982	201	BENEVOLENT, FRATERNAL - LEASED	1	1	0
990	200	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	85	86	-1
991	201	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	94	94	0
994	201	EXEMPT, PORT: EXEMPT IN LIEU-OF PER ORS 307.120	5	5	0
995	201	EXEMPT, GOVERNMENT HOUSING AUTHORITIES	8	7	1
996	701	FARM LABOR CAMPS, DAY CARE CENTERS	1	1	0
			TOTAL CURRENT YEAR	TOTAL PRIOR YEAR	TOTAL CHANGE
			29184	29191	-7

2013 RATIO STUDY

TIME ADJUSTMENT

STUDY

TIME ADJUSTMENT STUDIES

The analysis and conclusions for an adjustment based on changes in the market (time adjustment) have been determined based on sales within Columbia County. These sales were separated into 1) properties located within the city limits of St. Helens, Scappoose, Columbia City, Rainier, Vernonia and Clatskanie for the 100, 101, 102 and 109 Real Market Value (RMV) Classes, WITH THE EXCEPTION OF MA 3 SA 03, properties located in the Flood Plain within the City of Vernonia. This Study Area was removed from this analysis as the properties in this Study Area have been found to be influenced so significantly by their location in the Flood Plain that they are considered to be in a separate market completely; and 2) the properties located outside of these City limits for the 400, 401 and 409 RMV Classes.

The conclusions found on this page are supported by the following pages. The sales used were from January 1, 2012 through December 31, 2012.

URBAN RESIDENTIAL PROPERTY

Property Classes: 100, 101 and related classes

All Areas: The analysis of sales indicate that an adjustment of 98% is needed.

RURAL RESIDENTIAL PROPERTY

Property Classes: 400, 401 and related classes

All Areas: The analysis of sales indicate that an adjustment of 93% is needed.

COMMERCIAL AND INDUSTRIAL PROPERTY

Property Classes: 200, 201 - commercial and related classes

300, 301 - industrial and related classes

All Areas: There are too few sales to provide a reliable indication, therefore no adjustment is supported.

NOTE: The adjustment of .98 in the Residential Property Sections (Property Classes 100, 101, 102 and 109) and .93 in the Rural Property Sections (Property Classes 400, 401 and 409) is applied in the Ratio Study to the Selected Ratio from the Indicators of Central Tendency in the following manner:

- 1 The Indicator of Central Tendency considered the most appropriate is selected,
- 2: This Selected Ratio is adjusted by .98 (Prop Classes 1XX) or .93 (Prop Classes 4XX)
- 3: The product of this calculation is entered on the line titled " Selected Ratio From Sales" found on the first page of each Residential section of the report.

An analysis was made to determine if this adjustment would modify in any way the Statistical

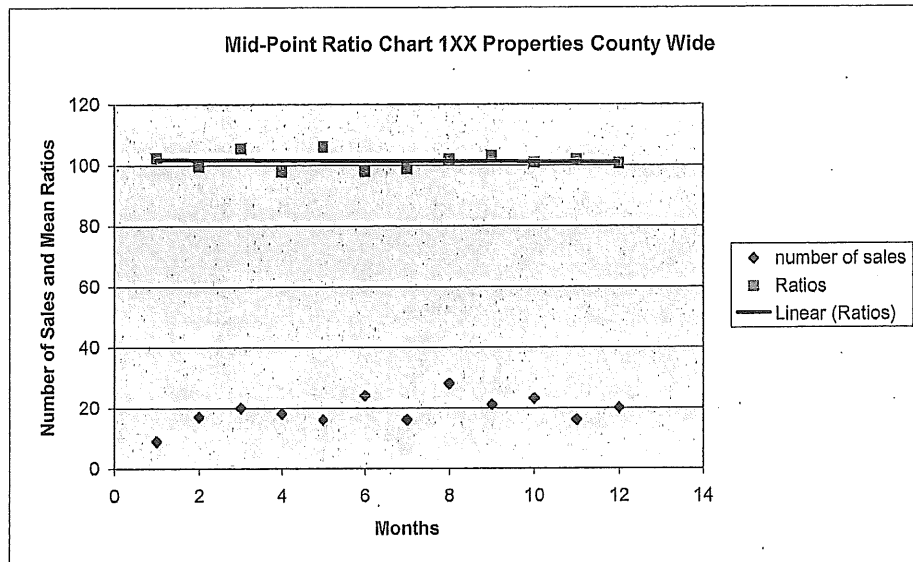
Calculations (COD, COV, PRD etc) made by the software program. It was found that these Statistical Calculations were affected little if any.

Historical Time Adjustment studies conclusions.

These are the factors used to adjust "MID MONTHS" when prior years' sales are used.

<u>Time Period</u>	<u>101'S</u>	<u>401'S</u>
7-94 thru 12-94	0.0050/mo	0.0050/mo
1994 overall %	10.5%	9.0%
1-95 thru 6-95	0.0050/mo	0.0050/mo
7-95 thru 12-95	0.0067/mo	0.0050/mo
1995 overall %	7.0%	6.0%
1-96 thru 6-96	0.0067/mo	0.0050/mo
7-96 thru 12-96	None	None
1996 overall %	4.0%	3.0%
1997-2005	None	None
2006	96.5%	94.2%
2007	None	None
2008	None	None
2009	92%	None
2010	99%	99%
2011	90%	89%
2012	103%	98%
2013	98%	93%

By Quarter			# Sales	Cum Sales for Quarter	Ratio for Month		# Sales	Cum Sales for month	Median	GeoMean
Median 1	A Mean 1	G Mean 1	46	46	Mean	102	9	9	104	102
104	103	102			1	Jan				
Median 2	A Mean 2	G Mean 2	58	104	2	Feb	100	17	26	101
99	100	99			3	Mar	105	20	46	105
Median 3	A Mean 3	G Mean 3	65	169	4	Apr	98	18	64	97
99	102	100			5	May	106	16	80	108
Median 4	A Mean 4	G Mean 4	59	228	6	Jun	98	24	104	97
98	101	100			7	Jul	99	16	120	97
					8	Aug	102	28	148	101
					9	Sep	103	21	169	99
					10	Oct	101	23	192	95
					11	Nov	102	16	208	101
					12	Dec	101	20	228	98
Total Sales			228		Total Sales		228			



Conclusion: The Mid Point of the Sales is found to be in July (7th Month),
 with a corresponding Mean Ratio of 99.
 The End of Year Ratio is 101
 $(99 - 101) / 101 = -.019$ or -2%.
 $100 - 2 = 98$, The Time Adjustment for 2012

#	Ratio Year	MA	SA	NH	RMV Class	Rej Code	Map #	Book	Page	Adj Sale Price	Sales Date	Ratio	Acct No	Total Land Size
1	2013	01	00	000	101	30	4N1W05-AB-01200	2012	1431	128500	01/05/2012	111	11532	0.17
2	2013	01	00	000	101	30	4N1W05-DB-02121	2012	279	179900	01/06/2012	104	12477	0.12
3	2013	01	01	000	101	33	5N1W28-BA-01908	2012	304	180000	01/13/2012	113	14511	0.20
4	2013	01	00	000	101	30	4N1W05-CD-04400	2012	360	237000	01/18/2012	90	12636	0.27
5	2013	02	83	000	101	30	3N2W13-BD-07600	2012	517	180000	01/24/2012	90	4802	0.23
6	2013	01	00	000	101	30	4N1W07-AB-03158	2012	1319	160000	01/24/2012	99	13022	0.15
7	2013	01	00	000	101	30	4N1W04-DD-06800	2012	674	92000	01/26/2012	105	11320	0.13
8	2013	01	00	000	101	30	5N1W33-DB-00707	2012	1042	130000	01/26/2012	87	13390	0.17
9	2013	01	00	000	101	30	4N1W05-CB-00122	2012	1224	202900	01/26/2012	122	12088	0.13
10	2013	01	00	000	101	30	5N1W34-CB-06801	2012	746	164000	02/03/2012	112	13836	0.23
11	2013	02	84	000	101	30	3N2W13-AC-00900	2012	1443	165000	02/03/2012	95	4421	0.14
12	2013	02	82	000	101	33	3N2W13-AA-04900	2012	939	160000	02/10/2012	121	4393	0.17
13	2013	01	00	000	101	33	4N1W04-DD-00700	2012	942	118900	02/10/2012	84	11240	0.13
14	2013	02	75	000	101	33	3N2W12-AD-06520	2012	991	257000	02/13/2012	104	28514	0.17
15	2013	01	21	000	101	30	5N1W21-DC-00112	2012	1027	162000	02/14/2012	105	14258	0.23
16	2013	01	00	000	101	33	5N1W33-DA-00401	2012	1044	138000	02/15/2012	74	13353	0.16
17	2013	01	00	000	101	33	4N1W05-AB-04216	2012	1086	182000	02/16/2012	105	11578	0.18
18	2013	01	00	000	101	33	4N1W05-CB-00128	2012	1207	200000	02/21/2012	104	12093	0.16
19	2013	02	00	000	101	30	3N2W13-BA-04900	2012	1255	170000	02/23/2012	99	4655	0.59
20	2013	01	00	000	101	33	4N1W05-AD-01000	2012	1253	144400	02/24/2012	110	11686	0.40
21	2013	05	00	000	101	30	7N4W09-CB-00800	2012	1292	152000	02/27/2012	99	26239	0.41
22	2013	01	00	000	101	30	4N1W05-AD-02700	2012	1309	180000	02/27/2012	101	11703	0.69
23	2013	01	00	000	101	30	4N1W06-DA-06700	2012	1312	226292	02/27/2012	84	12778	0.48
24	2013	01	00	000	101	30	5N1W33-AD-02100	2012	1314	220000	02/28/2012	94	13320	0.32
25	2013	01	00	000	101	30	4N1W05-CD-01207	2012	1384	115000	02/28/2012	96	12342	0.12
26	2013	01	00	000	101	33	5N1W34-CC-08400	2012	1358	110000	02/29/2012	107	13932	0.13
27	2013	01	21	000	101	33	5N1W21-CB-05000	2012	1477	179900	03/01/2012	90	14160	0.27
28	2013	01	00	000	101	30	4N1W06-DC-01200	2012	1618	183000	03/02/2012	111	12813	0.13
29	2013	01	00	000	101	33	4N1W05-AB-04217	2012	1532	178000	03/06/2012	106	11579	0.18
30	2013	02	00	000	101	33	3N2W12-DB-04600	2012	1798	99900	03/13/2012	103	4097	0.12
31	2013	03	00	000	101	28	4N4W04-AC-02200	2012	1815	165000	03/14/2012	109	22630	0.69
32	2013	01	00	000	101	30	4N1W04-CA-02900	2012	1847	145000	03/14/2012	102	10573	0.21
33	2013	01	00	000	101	30	4N1W04-DC-04300	2012	1894	85000	03/16/2012	86	11186	0.13
34	2013	01	00	000	101	33	4N1W07-AB-03108	2012	1943	169900	03/16/2012	105	12972	0.14
35	2013	03	00	000	101	30	4N4W04-DA-01500	2012	2236	90000	03/16/2012	112	23099	0.13
36	2013	05	00	000	101	33	7N4W08-BD-03000	2012	1923	140000	03/19/2012	99	25762	0.27
37	2013	01	00	000	101	33	4N1W06-DA-03201	2012	2230	172733	03/20/2012	136	12744	0.18
38	2013	01	00	000	101	33	4N1W05-DB-02120	2012	2367	154900	03/21/2012	107	12476	0.12
39	2013	04	47	000	101	30	7N2W16-BB-02000	2012	2041	102000	03/21/2012	123	22047	0.06
40	2013	04	00	000	101	30	7N2W17-DB-03100	2012	2051	140000	03/22/2012	134	18619	0.28
41	2013	02	73	000	101	30	3N2W01-CC-00107	2012	2071	250000	03/22/2012	77	2941	0.19
42	2013	01	00	000	101	33	4N1W04-AA-04701	2012	2218	109000	03/22/2012	102	9928	0.13
43	2013	01	01	000	101	33	5N1W28-CA-01200	2012	2226	215000	03/27/2012	111	14564	0.23
44	2013	04	00	000	101	33	7N2W16-DC-00703	2012	2196	130000	03/29/2012	87	18268	0.13
45	2013	02	84	000	101	33	3N2W13-AC-03310	2012	2313	155000	03/29/2012	105	4454	0.18
46	2013	02	82	000	101	30	3N2W13-AD-03000	2012	3477	185499	03/29/2012	104	4503	0.15
47	2013	02	80	000	101	30	3N2W12-BC-00233	2012	2365	285000	04/02/2012	104	3599	0.18
48	2013	05	00	000	101	33	7N4W08-CA-06400	2012	2422	214000	04/03/2012	96	25846	0.66
49	2013	01	43	000	101	33	4N1W05-BD-01104	2012	2532	102000	04/05/2012	121	11900	0.08
50	2013	02	74	000	101	33	3N2W12-DC-00129	2012	2681	194900	04/05/2012	96	4231	0.14
51	2013	02	00	000	101	30	3N2W12-CA-07800	2012	3143	136900	04/05/2012	100	3768	0.15
52	2013	01	01	000	101	30	5N1W28-DD-04500	2012	2586	177800	04/10/2012	109	14793	0.15
53	2013	02	75	000	101	30	3N2W12-AD-06518	2012	2770	228800	04/11/2012	95	28512	0.16
54	2013	01	00	000	101	33	4N1W05-AB-02400	2012	2738	139900	04/12/2012	97	11544	0.20
55	2013	02	79	000	101	33	3N2W11-DA-02613	2012	2676	305000	04/13/2012	95	3234	0.18
56	2013	02	00	000	101	33	3N2W12-DA-04127	2012	2750	170000	04/17/2012	97	4036	0.29
57	2013	01	00	000	101	30	4N1W03-CA-00600	2012	2768	149900	04/17/2012	87	9754	0.19
58	2013	01	00	000	101	30	4N1W05-AB-01002	2012	3699	148000	04/18/2012	103	11487	0.13
59	2013	01	00	000	101	33	5N1W32-DD-00201	2012	2852	235000	04/19/2012	114	13293	0.16
60	2013	02	82	000	101	33	3N1W18-BC-01400	2012	2874	210000	04/20/2012	89	2909	0.17
61	2013	01	00	000	101	30	4N1W06-DC-02100	2012	2919	223000	04/24/2012	84	12822	0.14
62	2013	01	00	000	101	30	4N1W04-DB-11100	2012	2937	113360	04/24/2012	79	11071	0.13
63	2013	02	00	000	100	33	3N1W07-CB-01910	2012	2927	60000	04/25/2012	84	434767	0.19
64	2013	02	00	000	101	33	3N2W11-DB-00400	2012	3061	179900	04/25/2012	111	3173	0.24
65	2013	01	00	000	101	28	4N1W04-BD-00500	2012	3166	96000	05/01/2012	110	10418	0.40
66	2013	01	00	000	101	33	4N1W03-CB-05902	2012	3430	95000	05/07/2012	113	9869	0.13
67	2013	02	00	000	101	28	3N2W12-DB-01100	2012	3306	136700	05/08/2012	87	4060	0.13
68	2013	02	00	000	101	30	3N1W07-CC-01428	2012	3485	251000	05/09/2012	82	429893	0.14

	Ratio Year	MA	SA	NH	RMV Class	Rej Code	Map #	Book	Page	Adj Sale Price	Sales Date	Ratio	Acct No	Total Land Size
69	2013	01	00	000	101	30	4N1W05-CC-01000	2012	3399	130000	05/10/2012	87	12227	0.24
70	2013	05	00	000	101	30	7N4W08-AD-01400	2012	3426	145000	05/12/2012	110	25658	0.26
71	2013	01	00	000	101	30	4N1W06-DD-02000	2012	3523	124000	05/14/2012	118	12892	0.18
72	2013	01	21	000	101	30	5N1W21-CA-00100	2012	3475	164900	05/15/2012	106	14048	0.30
73	2013	01	00	000	101	33	4N1W05-DC-03500	2012	3527	163000	05/15/2012	103	12580	0.24
74	2013	04	00	000	101	30	7N2W16-CB-02900	2012	3525	83000	05/16/2012	118	18038	0.45
75	2013	01	43	000	101	33	4N1W05-CB-06801	2012	3693	103000	05/16/2012	114	12185	0.09
76	2013	01	00	000	101	33	4N1W05-AA-08400	2012	4224	74900	05/23/2012	131	11460	0.17
77	2013	01	00	000	101	30	4N1W04-BC-07500	2012	3854	168000	05/29/2012	112	10375	0.16
78	2013	02	88	000	101	33	3N1W07-CC-02000	2012	3853	207000	05/30/2012	101	2870	0.19
79	2013	05	00	000	101	30	7N4W08-BD-02600	2012	4043	100000	05/30/2012	99	25759	0.27
80	2013	01	00	000	101	30	4N1W04-DB-09600	2012	4957	83000	05/31/2012	105	11061	0.13
81	2013	05	00	000	101	30	7N4W08-CB-04200	2012	3960	137000	06/01/2012	83	25898	0.18
82	2013	02	00	000	101	33	3N2W02-DD-01000	2012	3962	258000	06/01/2012	86	3036	0.26
83	2013	02	72	000	101	30	3N2W13-BD-00500	2012	4012	165000	06/01/2012	97	4729	0.14
84	2013	01	00	000	101	33	4N1W07-AB-03162	2012	4045	169000	06/04/2012	91	13026	0.12
85	2013	01	01	000	101	33	5N1W28-CA-02900	2012	4061	174500	06/06/2012	117	14581	0.23
86	2013	01	00	000	101	30	4N1W06-DC-06700	2012	4107	239900	06/07/2012	109	12868	0.31
87	2013	02	00	000	101	30	3N2W12-DB-10700	2012	4133	144560	06/07/2012	81	4165	0.23
88	2013	03	00	000	101	33	4N4W05-DA-03404	2012	4198	128000	06/12/2012	109	23408	0.13
89	2013	01	00	000	101	28	4N1W05-CB-05300	2012	4200	210000	06/13/2012	88	12163	0.20
90	2013	01	01	000	101	33	5N1W28-DD-02100	2012	4246	349900	06/13/2012	102	14771	0.12
91	2013	01	30	000	101	33	4N1W04-CB-11400	2012	5592	119000	06/13/2012	98	10626	0.11
92	2013	01	00	000	101	30	4N1W05-AA-07900	2012	4243	136500	06/14/2012	101	11455	0.17
93	2013	01	00	000	101	30	4N1W05-BD-04300	2012	4344	156700	06/15/2012	96	11952	0.12
94	2013	01	01	000	101	33	5N1W28-DA-01300	2012	4363	247500	06/15/2012	111	14607	0.23
95	2013	02	82	000	101	33	3N2W13-AD-00900	2012	4417	190000	06/15/2012	90	4484	0.15
96	2013	01	00	000	101	30	4N1W05-CB-00147	2012	4433	196000	06/15/2012	95	12111	0.14
97	2013	04	00	000	101	30	7N2W17-AC-02801	2012	4436	162500	06/18/2012	119	432955	0.24
98	2013	05	00	000	101	33	7N4W08-CD-08900	2012	4434	122000	06/19/2012	90	26021	0.17
99	2013	01	00	000	101	30	4N1W05-BC-03000	2012	4438	148500	06/20/2012	107	11855	0.16
100	2013	01	30	000	101	33	5N1W33-DC-05901	2012	4402	240000	06/20/2012	98	13484	0.22
101	2013	02	00	000	101	33	3N2W02-DD-01001	2012	4519	210000	06/25/2012	93	3037	0.21
102	2013	01	00	000	101	30	4N1W05-AD-03300	2012	4817	199900	06/25/2012	90	11709	0.55
103	2013	01	00	000	101	30	4N1W05-BD-05200	2012	4832	152000	06/25/2012	94	11960	0.12
104	2013	01	00	000	101	33	4N1W05-AB-04218	2012	4828	169750	06/28/2012	106	11580	0.25
105	2013	01	00	000	101	33	4N1W05-AB-05100	2012	5190	264700	07/06/2012	96	15790	0.31
106	2013	01	00	000	101	28	4N1W08-BC-04600	2012	5322	183000	07/09/2012	101	13197	0.17
107	2013	04	00	000	101	30	7N2W17-CO-01900	2012	5406	145800	07/13/2012	89	21033	0.68
108	2013	02	70	000	101	33	3N2W11-AA-01019	2012	5488	237000	07/13/2012	84	3118	0.46
109	2013	01	00	000	101	33	4N1W07-AB-03152	2012	5551	144000	07/17/2012	105	13016	0.12
110	2013	01	00	000	101	33	4N1W05-AC-06600	2012	5686	195000	07/19/2012	85	11499	0.16
111	2013	01	01	000	101	33	5N1W28-DD-01100	2012	5625	257000	07/23/2012	95	14763	0.16
112	2013	01	01	000	101	30	5N1W28-DD-01000	2012	5725	355350	07/23/2012	94	14762	0.23
113	2013	01	00	000	101	28	4N1W04-AD-03409	2012	5900	93120	07/24/2012	126	10189	0.13
114	2013	01	00	000	101	28	4N1W04-AC-07600	2012	5757	80000	07/25/2012	123	10118	0.39
115	2013	01	01	000	101	33	5N1W28-DA-04601	2012	5787	360000	07/26/2012	93	14645	0.25
116	2013	01	00	000	101	33	4N1W04-DB-13800	2012	5884	162000	07/26/2012	105	11102	0.40
117	2013	01	00	000	101	30	4N1W05-CA-01500	2012	5934	167000	07/26/2012	98	12040	0.28
118	2013	01	01	000	101	33	5N1W28-DA-05700	2012	5778	240000	07/27/2012	79	14660	0.28
119	2013	01	00	000	101	30	4N1W05-AD-06600	2012	5887	96000	07/27/2012	109	11743	0.18
120	2013	01	00	000	101	33	4N1W05-CC-01113	2012	5843	160000	07/31/2012	99	12244	0.22
121	2013	01	00	000	101	30	4N1W05-BD-02600	2012	5991	153000	08/01/2012	107	11937	0.25
122	2013	05	00	000	101	30	7N4W17-BB-01000	2012	6034	143000	08/02/2012	110	26333	0.21
123	2013	04	00	000	101	30	7N2W16-CC-00700	2012	6136	135900	08/04/2012	121	18075	0.44
124	2013	01	00	000	101	33	4N1W05-CA-00101	2012	6141	175000	08/06/2012	108	11989	0.13
125	2013	01	00	000	101	33	5N1W33-DC-13500	2012	6165	109000	08/07/2012	98	10039	0.21
126	2013	01	43	000	101	33	4N1W05-BD-01105	2012	6235	109000	08/07/2012	101	11901	0.08
127	2013	02	00	000	101	30	3N2W13-BA-04704	2012	7252	172900	08/07/2012	101	4654	0.15
128	2013	01	00	000	101	30	4N1W06-DC-03100	2012	6324	197600	08/08/2012	87	12832	0.19
129	2013	02	00	000	101	33	3N2W12-CC-00303	2012	6168	135000	08/09/2012	97	3840	0.12
130	2013	01	01	000	101	30	5N1W28-CA-00700	2012	6315	295000	08/10/2012	113	14559	0.55
131	2013	02	00	000	101	33	3N2W13-CD-02800	2012	6318	190000	08/10/2012	98	433512	0.14
132	2013	01	00	000	101	33	4N1W08-BB-05800	2012	6326	203400	08/15/2012	96	13145	0.20
133	2013	01	00	000	101	33	4N1W06-DD-03200	2012	6372	225000	08/15/2012	92	12904	0.16
134	2013	02	88	000	101	33	3N1W07-CC-02900	2012	6459	185000	08/17/2012	105	2879	0.17
135	2013	02	00	000	101	30	3N2W12-AD-05000	2012	6493	152600	08/17/2012	83	3448	0.16

	Ratio Year	MA	SA	NH	RMV Class	Rej Code	Map #	Book	Page	Adj Sale Price	Sales Date	Ratio	Acct No	Total Land Size
136	2013	02	79	000	101	30	3N2W11-DA-02612	2012	6501	292000	08/19/2012	105	3233	0.31
137	2013	01	21	000	101	30	5N1W21-CA-04600	2012	6499	150000	08/21/2012	109	14090	0.23
138	2013	01	01	000	101	30	5N1W28-DB-04900	2012	6524	290000	08/21/2012	85	14740	0.23
139	2013	01	00	000	101	30	4N1W05-AB-01032	2012	6534	155000	08/21/2012	101	11517	0.13
140	2013	01	21	000	101	33	5N1W21-CA-01300	2012	6526	174000	08/22/2012	98	14060	0.25
141	2013	01	01	000	101	33	5N1W28-CA-00900	2012	6632	290150	08/23/2012	102	14561	0.48
142	2013	04	00	000	109	30	7N2W21-A0-01601	2012	6726	135000	08/24/2012	128	21079	0.27
143	2013	01	00	000	101	33	4N1W05-AB-04213	2012	6617	187000	08/27/2012	113	11575	0.18
144	2013	02	00	000	101	30	3N2W12-DD-08600	2012	6699	199900	08/27/2012	86	4006	0.30
145	2013	01	01	000	101	33	5N1W28-DB-00300	2012	6754	130000	08/28/2012	128	14679	0.23
146	2013	01	00	000	101	30	4N1W06-DC-05700	2012	6872	225000	08/30/2012	85	12858	0.12
147	2013	01	15	000	101	30	5N1W34-BC-00100	2012	6932	355000	08/30/2012	82	13711	1.31
148	2013	01	00	000	101	30	4N1W04-BC-07000	2012	6967	150000	08/30/2012	115	10370	0.16
149	2013	01	00	000	101	30	4N1W04-CA-10800	2012	6925	89000	09/04/2012	95	10653	0.12
150	2013	01	00	000	101	30	4N1W04-DB-11800	2012	7048	96600	09/07/2012	99	11079	0.13
151	2013	01	00	000	101	33	4N1W05-DC-04000	2012	7110	220000	09/10/2012	105	12585	0.25
152	2013	01	43	000	101	30	4N1W05-CD-01000	2012	7096	66500	09/11/2012	158	12318	0.07
153	2013	01	00	000	101	30	4N1W04-CA-05600	2012	7105	65900	09/13/2012	120	10598	0.13
154	2013	01	00	000	101	30	4N1W05-DC-00100	2012	7127	167500	09/13/2012	102	12534	0.22
155	2013	01	01	000	100	33	5N1W28-AC-03600	2012	7145	60000	09/13/2012	79	14416	0.16
156	2013	01	00	000	101	30	4N1W05-AD-01200	2012	7333	165900	09/13/2012	102	11688	0.40
157	2013	01	43	000	101	30	4N1W05-BD-01122	2012	7288	103600	09/14/2012	110	11918	0.09
158	2013	02	00	000	101	33	3N2W12-BB-00600	2012	7286	162500	09/18/2012	88	3515	0.24
159	2013	01	01	000	101	30	5N1W28-BA-01400	2012	7284	132000	09/19/2012	103	14498	0.29
160	2013	01	43	000	101	30	4N1W05-BD-01103	2012	7331	115000	09/19/2012	108	11899	0.13
161	2013	01	00	000	101	30	5N1W33-DD-03800	2012	8177	97000	09/22/2012	96	13585	0.13
162	2013	01	00	000	101	30	5N1W34-CC-05900	2012	7443	89000	09/24/2012	116	13908	0.13
163	2013	02	75	000	101	30	3N2W12-AD-06519	2012	7702	336500	09/24/2012	87	28513	0.23
164	2013	02	71	000	101	33	3N2W12-AD-02423	2012	7468	196000	09/25/2012	78	3422	0.18
165	2013	01	00	000	101	30	4N1W06-DC-06600	2012	7470	174000	09/25/2012	90	12867	0.14
166	2013	01	00	000	101	30	4N1W05-CA-02100	2012	7504	170000	09/25/2012	85	12046	0.18
167	2013	03	38	000	109	28	4N4W05-AA-00308	2012	7704	97500	09/25/2012	153	23128	0.42
168	2013	01	00	000	101	33	4N1W03-BC-07900	2012	7509	115000	09/26/2012	93	9673	0.31
169	2013	02	84	000	101	30	3N2W13-AD-08700	2012	7570	167000	09/26/2012	97	4551	0.15
170	2013	01	43	000	101	30	4N1W08-BA-03300	2012	7633	107000	10/01/2012	121	13111	0.08
171	2013	01	00	000	101	33	4N1W06-DD-09200	2012	7757	163000	10/02/2012	88	12962	0.11
172	2013	01	00	000	101	30	5N1W34-CC-05300	2012	7714	165000	10/03/2012	76	13902	0.13
173	2013	01	00	000	101	30	4N1W05-CA-03800	2012	7717	154400	10/03/2012	103	12062	0.13
174	2013	03	00	000	101	33	4N4W05-AD-00700	2012	7823	78000	10/03/2012	123	23227	0.11
175	2013	02	70	000	101	30	3N2W02-DD-00620	2012	7870	184500	10/09/2012	87	3011	0.20
176	2013	01	00	000	101	30	4N1W04-BC-08600	2012	8034	150000	10/10/2012	111	10386	0.16
177	2013	02	84	000	101	30	3N2W13-AC-03328	2012	7969	165000	10/11/2012	99	4472	0.14
178	2013	01	00	000	101	28	4N1W05-DA-04900	2012	8284	133660	10/11/2012	95	12429	0.19
179	2013	01	00	000	101	33	4N1W05-CB-01600	2012	7940	183000	10/12/2012	95	12131	0.32
180	2013	02	83	000	101	30	3N2W13-BC-01800	2012	8032	180000	10/15/2012	89	4717	0.16
181	2013	01	00	000	101	30	4N1W05-DB-06201	2012	8102	149000	10/17/2012	94	429789	0.22
182	2013	01	43	000	101	30	4N1W08-BA-02400	2012	8098	109000	10/17/2012	117	13102	0.07
183	2013	04	00	000	101	30	7N2W17-DA-01400	2012	8096	169325	10/18/2012	84	18567	1.13
184	2013	02	70	000	101	30	3N2W11-AA-01800	2012	8104	198250	10/18/2012	87	3143	0.18
185	2013	02	00	000	101	33	3N2W12-DB-08600	2012	8175	99900	10/19/2012	111	4140	0.16
186	2013	01	00	000	101	30	4N1W06-DD-02700	2012	8306	185000	10/24/2012	83	12899	0.12
187	2013	01	00	000	101	33	4N1W04-DA-12200	2012	8347	137900	10/24/2012	95	11245	0.15
188	2013	01	00	000	101	30	4N1W04-AD-10800	2012	8475	69000	10/26/2012	117	10978	0.13
189	2013	03	00	000	101	28	4N4W05-AD-01700	2012	8426	50000	10/29/2012	165	23240	0.11
190	2013	01	00	000	101	28	4N1W08-AB-00500	2012	8471	129500	10/29/2012	109	13058	0.27
191	2013	02	00	000	101	30	3N2W12-BB-01600	2012	8498	269900	10/31/2012	92	3531	0.38
192	2013	01	00	000	101	30	4N1W04-BA-00800	2012	8530	139000	10/31/2012	76	10266	0.13
193	2013	01	00	000	101	30	4N1W05-CB-03600	2012	8641	128500	11/01/2012	115	12146	0.15
194	2013	03	00	000	101	30	4N4W05-AD-01800	2012	8695	170000	11/02/2012	101	23241	0.17
195	2013	02	00	000	101	30	3N2W12-BB-02700	2012	8593	169000	11/06/2012	87	3542	0.28
196	2013	02	79	000	101	33	3N2W11-DA-02405	2012	8693	246000	11/07/2012	107	3212	0.26
197	2013	01	00	000	101	30	5N1W34-CB-01500	2012	9627	153500	11/07/2012	108	13750	0.36
198	2013	01	00	000	101	30	4N1W03-CB-04700	2012	8795	147500	11/10/2012	77	9848	0.13
199	2013	02	00	000	101	30	3N2W12-AC-00133	2012	8868	132400	11/12/2012	98	3333	0.11
200	2013	01	00	000	101	30	4N1W04-DC-03200	2012	8774	92000	11/13/2012	115	11174	0.13
201	2013	01	00	000	101	30	4N1W03-CA-01200	2012	8928	136000	11/13/2012	93	9784	0.15
202	2013	01	00	000	101	30	4N1W05-CB-00113	2012	9631	170909	11/19/2012	144	12081	0.13
203	2013	02	75	000	101	30	3N2W12-AA-00900	2012	8945	240200	11/20/2012	95	28480	0.14

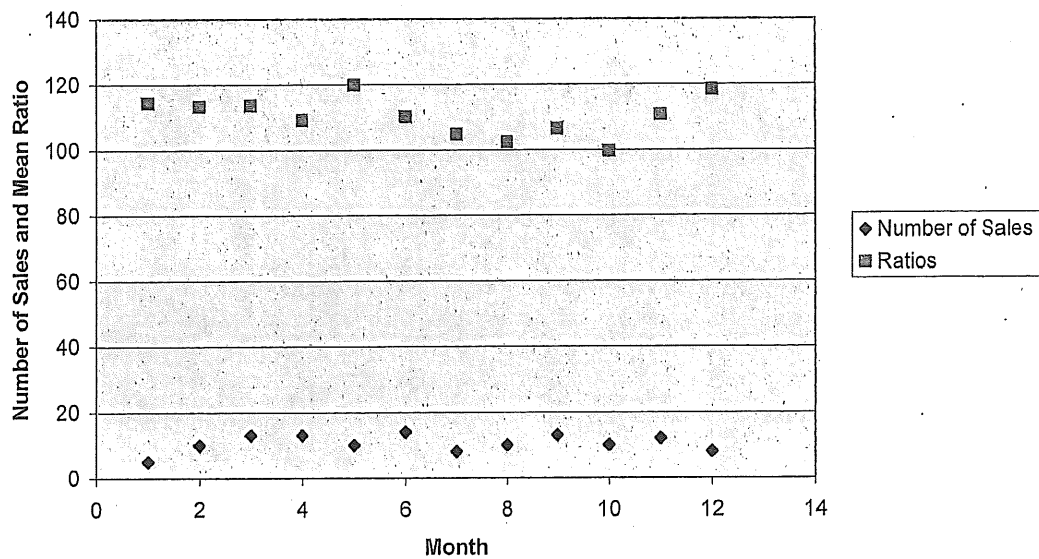
BY QUARTER

Median 1	A Mean 1	G Mean 1	
117	114	112	28
Median 2	A Mean 2	G Mean 2	
113	112	111	37
Median 3	A Mean 3	G Mean 3	
102	105	104	31
Median 4	A Mean 4	G Mean 4	
104	109	108	30
Total Sales			126

BY MONTH

		Ratio for Month Mean	# Sales	Cumulativ eSales for month	Median	GeoMean
1	Jan	114	5	5	117	114
2	Feb	113	10	15	110	112
3	Mar	114	13	28	117	112
4	Apr	109	13	41	103	108
5	May	120	10	51	120	118
6	Jun	110	14	65	108	109
7	Jul	105	8	73	103	104
8	Aug	102	10	83	100	101
9	Sep	106	13	96	107	106
10	Oct	100	10	106	97	99
11	Nov	111	12	118	106	109
12	Dec	118	8	126	118	117
Total Sales			126			

Mid-Point Ratio Chart for 4XX Properties County Wide



Conclusion: The Mid-Point of the Sales is found to be in June (6th Month) with a corresponding Mean Ratio of 110. The End of Year Ratio is 118.

$$(110 - 118) / 118 = -067 \text{ or } -7\%$$

$$(-7) + 100 = 93, \text{ The Time Adjustment for 2012}$$

Ratio Year	MA	SA	NH	RMV Class	Rej Code	Map #	Acct No	Book	Page	Adj Sale Price	Sales Date	Ratio	Total Land Size
2013	06	61	000	400	28	4N2W12-00-02206	17383	2012	173	161000	01/11/2012	117	16.65
2013	06	61	000	401	30	4N1W07-C0-01200	16893	2012	1728	230000	01/19/2012	117	3.57
2013	03	31	000	401	30	5N5W34-00-00102	24793	2012	563	415000	01/25/2012	115	11.43
2013	03	31	000	401	30	5N4W27-00-00700	24500	2012	478	240000	01/26/2012	118	4.98
2013	05	51	000	401	33	8N4W34-A0-00400	28319	2012	583	238000	01/27/2012	105	2.58
2013	06	61	000	401	30	4N1W06-A0-00407	16550	2012	676	285000	02/01/2012	117	1.00
2013	04	44	000	409	33	7N2W35-AD-02801	18659	2012	899	150000	02/09/2012	103	0.76
2013	06	64	000	401	33	5N2W28-00-00300	16320	2012	932	283325	02/10/2012	100	7.90
2013	06	61	000	401	33	4N1W06-DD-01200	16701	2012	1008	135000	02/14/2012	154	0.50
2013	06	62	000	409	33	5N2W25-00-00903	16215	2012	1047	168000	02/15/2012	135	2.00
2013	06	62	000	401	33	5N2W25-D0-01300	17501	2012	1205	299700	02/15/2012	95	4.88
2013	05	51	000	401	33	7N4W21-00-01301	26584	2012	1208	184000	02/21/2012	121	4.29
2013	04	41	000	409	30	7N3W35-C0-00500	18961	2012	1605	140000	02/23/2012	119	18.29
2013	02	21	000	401	28	4N2W26-00-01900	8134	2012	1266	328300	02/24/2012	94	2.50
2013	03	31	000	409	30	6N4W28-00-01104	25002	2012	1456	250000	02/29/2012	96	4.45
2013	06	61	000	401	33	4N1W19-B0-01304	8727	2012	1725	343000	03/07/2012	100	2.01
2013	04	41	000	409	30	7N3W25-00-00702	18893	2012	1722	157000	03/07/2012	117	3.96
2013	05	51	000	401	33	7N4W22-00-00220	26624	2012	1636	270000	03/08/2012	89	5.13
2013	02	22	000	409	30	4N2W16-00-01703	7579	2012	1740	131500	03/08/2012	116	1.49
2013	06	61	000	401	30	4N1W06-DA-05800	14954	2012	1751	220000	03/08/2012	143	1.68
2013	06	62	000	400	33	5N2W24-B0-00201	434974	2012	1785	125000	03/12/2012	105	9.80
2013	06	61	000	401	30	4N1W06-D0-00613	16692	2012	1788	175900	03/12/2012	136	0.54
2013	03	31	000	401	30	5N4W23-D0-01200	24477	2012	1935	282000	03/19/2012	86	8.44
2013	05	51	000	400	30	8N3W19-C0-00600	27923	2012	1967	50000	03/20/2012	86	7.29
2013	05	51	000	401	30	7N3W31-00-00900	26517	2012	2049	265000	03/21/2012	128	17.74
2013	06	64	000	401	33	5N2W09-00-00801	15918	2012	2082	242000	03/21/2012	122	6.03
2013	05	51	000	409	33	7N5W10-AA-03501	27503	2012	2195	81000	03/26/2012	131	0.38
2013	06	61	000	401	33	4N2W24-D0-00106	9216	2012	2228	332000	03/27/2012	118	2.01
2013	05	51	000	401	28	7N4W26-00-01000	26697	2012	2480	190800	04/05/2012	97	19.84
2013	03	31	000	401	30	5N4W33-00-01200	24622	2012	2544	290000	04/09/2012	99	27.23
2013	05	51	000	401	30	7N3W16-C0-01300	20821	2012	2564	345000	04/10/2012	132	4.82
2013	06	61	000	401	30	4N2W12-00-01606	17349	2012	2712	418000	04/12/2012	91	2.09
2013	06	61	000	401	33	4N1W17-B0-06300	17134	2012	2789	173900	04/12/2012	126	0.70
2013	05	51	000	409	28	7N3W09-A0-02100	20613	2012	2870	193000	04/16/2012	125	2.00
2013	06	61	000	409	28	4N1W08-CC-00902	17072	2012	2692	237000	04/17/2012	114	1.67
2013	04	42	000	401	33	6N2W13-B0-00800	21141	2012	3697	118900	04/17/2012	119	1.21
2013	02	21	000	401	28	3N2W02-00-02304	5502	2012	2774	700000	04/18/2012	97	4.87
2013	05	51	000	401	33	8N3W33-00-01703	20979	2012	3019	333500	04/23/2012	102	19.96
2013	06	61	000	401	33	4N2W23-DB-01600	9054	2012	3057	410000	04/26/2012	96	2.26
2013	06	61	000	401	33	4N2W12-AD-00701	15385	2012	3069	229900	04/27/2012	118	2.00
2013	06	61	000	401	33	4N1W19-CA-00300	8805	2012	3071	188000	04/27/2012	103	0.34
2013	06	61	000	409	30	4N1W18-A0-00300	17193	2012	3164	245000	05/02/2012	98	1.59
2013	02	21	000	401	30	3N2W01-A0-00203	5381	2012	3434	225000	05/02/2012	124	5.43
2013	04	42	000	400	33	6N2W07-00-00302	19188	2012	3443	53000	05/10/2012	118	10.00
2013	05	51	000	401	30	7N4W15-DB-01400	27142	2012	3417	230000	05/11/2012	86	1.67
2013	05	51	000	401	30	7N4W16-BA-00500	27190	2012	3483	88000	05/15/2012	122	0.23
2013	06	64	000	401	30	6N3W25-00-01300	17666	2012	3706	135114	05/16/2012	135	4.07
2013	03	36	000	400	30	6N5W06-BD-02100	25304	2012	3735	9400	05/23/2012	166	0.24
2013	05	55	000	401	30	8N4W27-00-01400	28223	2012	3811	156750	05/29/2012	122	16.96
2013	06	61	000	401	30	4N1W07-DA-01200	16954	2012	4039	332000	05/29/2012	118	1.00
2013	03	31	000	401	30	4N4W04-AC-00100	23911	2012	3821	275500	05/30/2012	109	2.37
2013	02	21	000	401	33	4N2W34-AD-00900	8284	2012	3909	241000	06/01/2012	122	14.23

Ratio Year	MA	SA	NH	RMV Class	Rej Code	Map #	Acct No	Book	Page	Adj Sale Price	Sales Date	Ratio	Total Land Size
2013	03	31	000	401	30	4N4W04-AB-01700	23909	2012	4837	220000	06/04/2012	120	5.66
2013	06	62	000	401	28	4N2W10-00-01000	15312	2012	4202	277000	06/05/2012	113	5.11
2013	06	61	000	401	30	4N1W06-C0-02000	16650	2012	4233	270000	06/12/2012	136	1.93
2013	03	31	000	401	30	4N4W19-00-01301	24179	2012	4221	349000	06/12/2012	86	17.44
2013	06	63	000	409	30	5N2W11-00-01800	16023	2012	4260	155000	06/13/2012	97	1.04
2013	03	31	000	401	30	5N4W23-D0-00200	24467	2012	4248	230500	06/13/2012	106	5.75
2013	06	61	000	401	28	4N1W05-BA-01600	14884	2012	4398	259000	06/18/2012	108	0.53
2013	03	31	000	401	28	6N4W29-00-01901	25030	2012	4431	226000	06/20/2012	90	1.13
2013	05	51	000	401	30	7N4W22-00-00200	26607	2012	4451	310000	06/21/2012	78	7.86
2013	06	61	000	401	30	4N2W13-A0-02100	17429	2012	4497	160000	06/22/2012	142	0.50
2013	03	31	000	401	33	5N4W32-00-00300	24573	2012	4493	500000	06/22/2012	104	23.06
2013	05	51	000	401	30	8N4W26-C0-01600	28183	2012	4792	120000	06/25/2012	131	4.61
2013	04	42	000	401	30	6N2W03-00-01402	19065	2012	4819	189000	06/26/2012	108	13.78
2013	06	61	000	401	30	4N2W13-A0-02301	8914	2012	5148	245000	07/02/2012	119	5.00
2013	05	51	000	401	33	7N4W04-C0-00500	26848	2012	5212	290000	07/02/2012	131	9.28
2013	06	61	000	401	30	4N1W19-B0-01308	8731	2012	5372	329900	07/02/2012	99	2.00
2013	05	51	000	401	30	7N4W14-00-01100	27118	2012	5493	285500	07/16/2012	88	9.47
2013	02	22	000	401	33	4N2W16-00-01100	7565	2012	5622	270000	07/18/2012	84	6.95
2013	06	61	000	401	30	4N1W19-AA-00500	8645	2012	5703	189900	07/19/2012	107	1.11
2013	04	42	000	401	30	6N2W21-A0-01101	21414	2012	5759	319500	07/25/2012	94	6.59
2013	04	42	000	401	30	6N2W03-00-01001	19057	2012	5981	177000	07/30/2012	116	3.13
2013	05	51	000	409	30	7N3W04-D0-01200	20473	2012	6010	168500	08/01/2012	89	6.11
2013	05	51	000	401	30	7N4W27-00-00502	31231	2012	6463	144500	08/02/2012	102	6.35
2013	06	61	000	401	30	4N1W06-DB-00300	14957	2012	6113	157000	08/06/2012	135	0.50
2013	05	51	000	401	30	7N4W15-DB-02300	27147	2012	6278	257900	08/13/2012	95	3.16
2013	06	63	000	401	30	6N2W26-00-01301	16430	2012	6311	395000	08/13/2012	101	5.90
2013	05	55	000	401	30	8N4W32-00-01300	27593	2012	6280	155000	08/13/2012	75	20.49
2013	06	61	000	401	30	4N2W23-DB-01500	9053	2012	6528	350000	08/21/2012	90	2.19
2013	05	51	000	401	33	8N3W33-00-00200	20962	2012	6677	270000	08/24/2012	124	3.69
2013	06	61	000	401	30	4N2W01-00-00901	17279	2012	6757	375000	08/29/2012	98	5.64
2013	06	63	000	400	33	5N1W07-B0-00200	15510	2012	6842	85000	08/31/2012	114	9.82
2013	02	22	000	401	28	4N2W17-D0-00201	7731	2012	7979	64900	09/04/2012	119	5.25
2013	02	63	000	401	33	3N2W24-BD-08700	7366	2012	7077	225000	09/10/2012	106	0.36
2013	04	41	000	401	33	7N2W23-CA-00100	19861	2012	7095	281000	09/11/2012	114	0.97
2013	06	61	000	401	33	4N1W19-CA-01200	8814	2012	7079	241999	09/11/2012	116	1.15
2013	06	61	000	401	33	4N1W18-A0-00100	17191	2012	7051	217000	09/11/2012	120	5.00
2013	06	61	000	401	28	5N1W32-C0-00400	15774	2012	7281	175000	09/18/2012	126	3.05
2013	05	51	000	401	33	7N4W09-BA-00900	27036	2012	7320	178000	09/19/2012	99	0.36
2013	04	41	000	401	30	7N2W18-D0-00900	19567	2012	7257	189900	09/19/2012	101	2.12
2013	05	51	000	401	30	7N3W04-A0-00201	20402	2012	7274	290000	09/20/2012	107	5.98
2013	05	51	000	401	33	7N4W15-DB-01700	27145	2012	7452	229900	09/21/2012	101	2.22
2013	05	51	000	401	30	7N3W16-C0-00500	20813	2012	7445	275000	09/24/2012	85	5.02
2013	06	62	000	401	30	4N2W10-00-00800	15310	2012	7511	230000	09/24/2012	109	2.68
2013	04	41	000	400	33	7N3W14-B0-00202	20331	2012	9589	65000	09/26/2012	81	5.01
2013	05	51	000	401	30	7N4W22-00-00606	26639	2012	7876	225000	10/03/2012	82	1.95
2013	05	51	000	409	33	7N4W27-00-00700	26713	2012	7826	135000	10/04/2012	96	1.42
2013	05	51	000	401	33	7N3W16-C0-00600	20814	2012	7873	293150	10/05/2012	86	4.82
2013	05	51	000	401	30	7N3W30-A0-01200	26483	2012	7773	295000	10/05/2012	111	4.80
2013	06	64	000	401	30	5N2W27-A0-01900	16300	2012	7865	189000	10/05/2012	132	3.74
2013	02	21	000	401	30	3N2W02-00-03801	5525	2012	7919	210000	10/08/2012	112	1.80
2013	05	51	000	401	30	7N4W17-BB-02100	27243	2012	7841	138000	10/09/2012	90	0.37
2013	06	61	000	401	30	4N2W23-DB-00900	9047	2012	8030	342400	10/15/2012	89	2.00
2013	05	51	000	401	30	7N3W21-C0-00800	21700	2012	8224	180000	10/22/2012	98	12.85
2013	03	31	000	401	30	4N4W05-DD-00900	23936	2012	8332	70000	10/25/2012	99	0.96
2013	06	63	000	401	30	5N2W12-A0-00300	16087	2012	9760	206500	11/01/2012	143	2.50

Ratio Year	MA	SA	NH	RMV Class	Rej Code	Map #	Acct No	Book	Page	Adj Sale Price	Sales Date	Ratio	Total Land Size
2013	03	31	000	401	30	6N5W30-00-00702	25514	2012	8770	321000	11/09/2012	124	37.60
2013	03	31	000	401	28	6N5W14-00-00300	25375	2012	8871	245000	11/12/2012	131	4.70
2013	02	21	000	401	30	4N2W26-00-00900	8108	2012	8863	392000	11/13/2012	96	4.70
2013	06	63	000	401	33	5N2W11-00-00300	15997	2012	8879	181000	11/13/2012	144	10.00
2013	06	61	000	401	33	4N2W24-BA-00304	9154	2012	8873	265000	11/14/2012	107	3.18
2013	06	63	000	401	30	5N2W11-00-00900	16006	2012	8841	299500	11/14/2012	93	5.09
2013	03	31	000	401	33	5N4W33-00-00700	24613	2012	9974	465000	11/14/2012	95	44.60
2013	04	42	000	409	30	6N2W03-00-01800	19077	2012	9101	196750	11/16/2012	109	6.36
2013	05	51	000	401	30	7N3W19-00-00902	26459	2012	8997	230587	11/20/2012	104	2.54
2013	06	63	000	401	30	5N2W10-A0-00301	432888	2012	9162	310400	11/26/2012	86	5.01
2013	06	61	000	401	30	4N1W06-A0-00406	16549	2012	9256	567500	11/30/2012	97	0.94
2013	06	61	000	400	33	5N2W36-C0-00206	432440	2012	9348	95000	12/04/2012	108	2.02
2013	03	31	000	409	30	6N5W14-00-00500	25378	2012	9487	166000	12/05/2012	148	15.58
2013	06	61	000	401	33	4N1W18-D0-00300	15178	2013	31	294000	12/05/2012	132	1.51
2013	06	61	000	401	33	4N1W18-A0-02900	17227	2012	9629	160000	12/11/2012	127	1.00
2013	05	51	000	401	30	7N4W04-B0-00800	27818	2012	9769	299000	12/17/2012	96	0.60
2013	06	61	000	401	30	5N1W28-D0-01900	15663	2013	52	185900	12/19/2012	131	1.95
2013	06	61	000	401	33	4N1W17-B0-08702	17161	2012	9905	269000	12/20/2012	104	0.96
2013	02	21	000	401	30	3N2W24-AC-02100	31358	2012	9818	244000	12/20/2012	101	2.00

2013 RATIO STUDY

GROUPING ANALYSIS

GROUPING ANALYSIS

Throughout the Maintenance Areas, some Study Areas and/or Property Classes were found to have moved in such a similar manner in the market that they were combined in the individual Ratio Studies. Other Study Areas and/or Property Classes may have been combined to improve the sale samples in order to arrive at a more reliable conclusion. If the data indicated that an individual Study Areas and/or Property Classes had sufficient data to arrive at a reliable conclusion and that the sales in those Study Areas and/or Property Classes indicated that it would not be reasonable to combine them with another Study Areas and/or Property Classes, they were analyzed separately. If Study Areas and/or Property Classes are combined, they are identified in the individual Ratio Study.

2013 RATIO STUDY

SUPPLEMENTAL NOTES

SUPPLEMENTAL NOTES TO THE 2013 RATIO STUDY SUMMARY SECTION

Summary of Ratio Indications :

The Summary of Ratio Indications lists a number of RMV Property Classes that have no active accounts, but are displayed in the summary. This is due to an internal linking of property classes within the software program. The RMV Property Classes MA and SA displayed with no Active Accounts are:

RMV CLASS	MA	SA	NH	RMV CLASS	MA	SA	NH
010	01	43	000	101	01	07	000
010	01	44	000	101	01	08	000
				101	01	09	000
ALL 019 RMV Class EXCEPT those located in MA 7 All Study Areas				101	01	10	000
				101	01	11	000
				101	01	12	000
020	01	43	000	101	01	13	000
020	03	03	000	101	01	14	000
				101	01	18	000
030	01	43	000	101	01	19	000
030	01	44	000	101	01	23	000
030	03	03	000	101	01	24	000
				101	01	25	000
100	01	04	000	101	01	26	000
100	01	12	000	101	01	29	000
100	01	14	000	101	01	32	000
100	01	23	000	101	01	33	000
100	01	25	000	101	01	34	000
100	01	32	000	101	01	35	000
100	01	37	000	101	01	36	000
100	01	42	000	101	01	37	000
100	01	43	000	101	01	38	000
100	01	44	000	101	01	40	000
100	02	21	000	101	01	41	000
100	02	33	000	101	01	42	000
100	06	00	000	101	06	00	000
101	01	03	000				
101	01	04	000				
101	01	05	000				
101	01	06	000				

RMV CLASS	MA	SA	NH	RMV CLASS	MA	SA	NH
102	01	39	000	111	02	25	000
102	01	43	000	111	04	00	000
				111	04	41	000
109	01	14	000	111	04	42	000
109	01	28	000	111	05	51	000
109	01	33	000	111	05	55	000
109	01	43	000	111	05	60	000
109	01	44	000	111	06	00	000
109	01	71	000				
109	01	72	000	200	01	03	000
109	01	78	000	200	01	14	000
109	02	12	000	200	01	29	000
109	02	15	000	200	01	43	000
109	02	21	000	200	01	44	000
109	02	22	000	200	01	60	000
109	02	23	000	200	01	74	000
109	02	25	000	200	01	78	000
109	02	29	000				
109	02	45	000				
109	02	62	000				
109	03	31	000	201	01	03	000
109	03	34	000	201	01	04	000
109	03	37	000	201	01	05	000
109	04	41	000	201	01	14	000
109	04	42	000	201	01	32	000
109	04	43	000	201	01	43	000
109	04	45	000	201	01	44	000
109	04	47	000	201	01	99	000
109	05	55	000	201	03	03	000
109	05	58	000				
109	06	00	000				
109	06	56	000				
109	06	61	000	207	01	43	000
109	06	62	000	207	01	44	000
109	06	63	000	207	03	03	000
109	06	64	000				
109	06	65	000	221	01	43	000
				221	02	25	000
				300	01	43	000
111	01	00	000	300	01	44	000
111	01	01	000	300	03	03	000
111	01	14	000				
111	01	44	000				
111	01	73	000				

RMV CLASS	MA	SA	NH	RMV CLASS	MA	SA	NH
301	01	43	000	409	03	34	000
301	03	03	000	409	03	43	000
301	03	90	000				
303	06	00	000	700	02	00	000
				701	01	43	000
333	01	00	000	960	01	71	000
333	01	01	000	960	04	00	000
333	01	43	000	960	05	00	000
333	01	44	000	960	05	55	000
333	01	78	000	960	05	60	000
333	02	00	000				
333	03	03	000				
333	05	00	000				
333	05	55	000				
400	03	03	000				
400	04	60	000				
400	06	52	000				
400	06	54	000				
401	03	32	000				
401	03	34	000				
401	04	43	000				
401	07	05	000				

SUPPLEMENTAL NOTES TO THE 2011 RATIO STUDY

Manufactured Home Parks: These properties, countywide will be appraised based on income. This portion of the study will be done at a later time. This delay is due to allocation of resources and the need to complete the re-calculation of Maintenance Area 6, Rural St. Helens and Rural Columbia City, which includes the Deer Island and the majority of the unincorporated Warren area.

Re-Appraisal of Maintenance Area 6 :Rural St. Helens and Rural Columbia City, which includes the Deer Island and the majority of the unincorporated Warren area.

At the time of this report, a re-appraisal of the residential properties in Maintenance Area 6 is in process. The sales used in the Ratio Study have been re-appraised.

2013 RATIO STUDY

STUDY AREAS

LIST

Study Areas/SUB-SA# BY AREA

Sub-SA's are used for sales analysis purposes only.

AREA 1 - St. Helens (sh) and Columbia City (cc)

00 Undefined (sh)	30 Duplex, Triplex, Fourplex (sh)	44 TwnHouse, Row House and 73 Downtown Commercial (sh)
01 Undefined (cc)	31 Duplex, Triplex, Fourplex (cc)	Common Wall Houses (cc)
15 River Front (sh & cc)	43 TwnHouse, Row House and	60 Island (Columbia River)
21 McBride Meadows, Sophie	Common Wall Houses (sh)	71 Hiway Commercial (sh)
Park (cc)		72 Uptown Commercial (sh)
		74 Spot Commercial (sh/cc)
		78 "Large" Industrials
		95 Floating Homes & Combos
		97 Boathouses & Misc. imps

AREA 2 - Scappoose and rural vicinity (South Warren-Chapman-Dutch Canyon)

00 Undefined	35 UGB - Scapp. City Values	71 Westview, Johnson Estates
06 Forest Value Zone	41 Sauvie Island (NH 21 values)	72 Kingsbrook, Green Meadows
11 Comm - Havlik Rd area (city)	45 Sauvie Island Dike Land	73 Wheeler Street
12 Comm - SW central Hwy (city)	56 Stonebrook/1, Mazour Acres/2	74 Steinfeld Acres
13 Comm - NW Hwy (city)	57 Healey Rd.	75 Harmony Park
14 Comm - East of Hwy (city)	60 Island (Columbia River)	76 Cascade Meadow
15 Spot Comm (city/county)	61 Scott Acres	79 Keys Landing/1, Keys Crest/2
21 Value Zone 1 (100%)	62 Freeman Road	80 Columbia River View Estates
22 Value Zone 2 (70-85%)	63 Columbia Acres	82 Seven Oaks/1, pt of Rolling
23 Value Zone 3 (50-60%)	64 Hillcrest	Hills/2, Charlie's Acre/3,
25 Scappoose Dike Land	70 Westcliff, Bella Vjsta,	Springlake Mdws/4
28 City Duplex, Triplex, 4plex	Scappoose Heights,	
29 Rural Duplex, Triplex, 4plex	Scappoose Hts #2 (Mtn View)	
		83 Meadowbrook Estates
		Norfolk, Snyder Court/
		84 Havlik Estates, Havlik Est's 2
		85 Meersburg PC
		87 Heron Mdws, Sunset Est,
		Kingfisher Glen
		88 Elm Crossing, The Willows
		95 Floating Homes & Combos
		97 Boathouses & Misc. imps

AREA 3 - Vernonia and rural vicinity (Keasey-Pittsburg-Natal-Mist-Birkenfeld-Fishhawk)

00 Undefined	06 Forest Value Zone	36 Fishhawk Lake Estates	39 Heather Park
03 Properties Located in Flood	31 Value Zone 1	37 Berndt's Creek Subd	40 City Duplex, Triplex, 4plex
Impacted Area within City	35 UGB - Vernonia City Values	38 Roseview Heights	

AREA 4 - Rainier and rural vicinity (Shiloh Basin-Goble-Prescott-Lindberg-APIary-Fern Hill)

00 Undefined	41 Value Zone 1	45 Dike Land	60 Island (Columbia River)
06 Forest Value Zone	42 Value Zone 2	46 Riverview Drive & Maple Drive	95 Floating Homes & Combos
35 UGB - Rainier City Values	44 Prescott	47 Rainier Riverfront Estates	97 Boathouses & Misc. imps

AREA 5 - Clatskanie and rural vicinity (Swedetown-Alston-Delena-Mayger-Marshland-Woodson)

00 Undefined	51 Rural Value Zone	95 Floating Homes & Combos
06 Forest Value Zone	55 Dike Land	97 Boathouses & Misc. imps
35 UGB - Clatskanie City Values	60 Island (Columbia River)	

AREA 6 - Rural St. Helens and Columbia City (Warren-Yankton-Trenholm-Deer Island-Canaan)

00 Undefined	61 Value Zone 1	64 Value Zone 4	78 "Large" Industrials
06 Forest Value Zone	62 Value Zone 2	65 Dike Land	95 Floating Homes & Combos
60 Island (Columbia River)	63 Value Zone 3	71 Hiway Comm. - S. St. Helens	97 Boathouses & Misc. imps

NOTE: SA's 32 (Duplex, Triplex, 4-Plex), 50 (Heritage Lane), 51 (Cascade View Estates), 52 (Miloris Subdivision), 53 (Viewcrest Subdivision), and 55 (Woods Heights) were combined into the the SA (61, 62, 63 or 64) surrounding the property.

NOTE : SA 54 (Railroad Avenue Area) properties were determined, due to size and location and market influences, to be best valued as MA 1 SA 00 Residential base with an Undesirable Locaton adjustment applied.

AREA 7 - Personal Property Manufactured Homes

01 PP MS Within MA 1	05 PP MS Within MA 5
Except those in Crestwood Village (SA 27) and Columbia City Estates (SA 28)	06 PP MS Within MA 6
02 PP MS Within MA 2	Except those in Deer Island Heights (SA 56)
Except those in Springlake Park (SA 30) and Crown Park (SA 31)	
03 PP MS within MA 3	
04 PP MS Within MA 4	

2013 RATIO STUDY

SUMMARY OF RATIO INDICATIONS

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	010	01	00	000	000	100	100	100	100			☐
2013	010	01	01	000	000	100	100	100	100			☐
2013	010	01	43	000	000	100	100	100	100			☐
2013	010	01	44	000	000	100	100	100	100			☐
2013	010	02	00	000	000	100	100	100	100			☐
2013	010	02	74	000	000	100	100	100	100			☐
2013	010	03	00	000	000	100	100	100	100			☐
2013	010	03	03	000	000	100	100	100	100			☐
2013	010	04	00	000	000	100	100	100	100			☐
2013	010	05	00	000	000	100	100	100	100			☐
2013	019	01	00	000	000	100	100	100	100			☐
2013	019	01	01	000	000	100	100	100	100			☐
2013	019	01	27	000	000	100	100	100	100			☐
2013	019	01	28	000	000	100	100	100	100			☐
2013	019	01	30	000	000	100	100	100	100			☐
2013	019	01	43	000	000	100	100	100	100			☐
2013	019	01	44	000	000	100	100	100	100			☐
2013	019	01	90	000	000	100	100	100	100			☐
2013	019	02	00	000	000	100	100	100	100			☐
2013	019	02	21	000	000	100	100	100	100			☐
2013	019	02	22	000	000	100	100	100	100			☐
2013	019	02	23	000	000	100	100	100	100			☐
2013	019	02	30	000	000	100	100	100	100			☐
2013	019	02	31	000	000	100	100	100	100			☐
2013	019	02	76	000	000	100	100	100	100			☐
2013	019	03	00	000	000	100	100	100	100			☐
2013	019	03	03	000	000	100	100	100	100			☐
2013	019	03	31	000	000	100	100	100	100			☐
2013	019	03	37	000	000	100	100	100	100			☐
2013	019	03	38	000	000	100	100	100	100			☐
2013	019	04	00	000	000	100	100	100	100			☐
2013	019	04	41	000	000	100	100	100	100			☐
2013	019	04	42	000	000	100	100	100	100			☐
2013	019	04	43	000	000	100	100	100	100			☐
2013	019	05	00	000	000	100	100	100	100			☐
2013	019	05	51	000	000	100	100	100	100			☐
2013	019	05	55	000	000	100	100	100	100			☐
2013	019	06	00	000	000	100	100	100	100			☐
2013	019	06	56	000	000	100	100	100	100			☐
2013	019	06	61	000	000	100	100	100	100			☐
2013	019	06	62	000	000	100	100	100	100			☐
2013	019	06	63	000	000	100	100	100	100			☐
2013	019	06	64	000	000	100	100	100	100			☐
2013	019	06	65	000	000	100	100	100	100			☐
2013	019	07	01	000	000	100	100	101	101			☒

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	019	07	02	000	000	100	100	101	101			☒
2013	019	07	03	000	000	100	100	101	101			☒
2013	019	07	04	000	000	100	100	101	101			☒
2013	019	07	05	000	000	100	100	101	101			☒
2013	019	07	06	000	000	100	100	101	101			☒
2013	019	07	27	000	000	100	100	101	101			☒
2013	019	07	28	000	000	100	100	101	101			☒
2013	019	07	30	000	000	100	100	106	106			☒
2013	019	07	31	000	000	100	100	101	101			☒
2013	019	07	56	000	000	100	100	100	100			☐
2013	020	01	00	000	000	100	100	100	100			☐
2013	020	01	43	000	000	100	100	100	100			☐
2013	020	01	73	000	000	100	100	100	100			☐
2013	020	02	00	000	000	100	100	100	100			☐
2013	020	02	11	000	000	100	100	100	100			☐
2013	020	03	00	000	000	100	100	100	100			☐
2013	020	03	03	000	000	100	100	100	100			☐
2013	020	04	00	000	000	100	100	100	100			☐
2013	020	05	00	000	000	100	100	100	100			☐
2013	030	01	00	000	000	100	100	100	100			☐
2013	030	01	01	000	000	100	100	100	100			☐
2013	030	01	43	000	000	100	100	100	100			☐
2013	030	01	44	000	000	100	100	100	100			☐
2013	030	02	00	000	000	100	100	100	100			☐
2013	030	03	00	000	000	100	100	100	100			☐
2013	030	03	03	000	000	100	100	100	100			☐
2013	030	04	00	000	000	100	100	100	100			☐
2013	030	04	41	000	000	100	100	100	100			☐
2013	030	05	00	000	000	100	100	100	100			☐
2013	030	06	00	000	000	100	100	100	100			☐
2013	040	02	00	000	000	100	100	100	100			☐
2013	040	02	21	000	000	100	100	100	100			☐
2013	040	02	22	000	000	100	100	100	100			☐
2013	040	03	00	000	000	100	100	100	100			☐
2013	040	03	03	000	000	100	100	100	100			☐
2013	040	04	00	000	000	100	100	100	100			☐
2013	040	04	41	000	000	100	100	100	100			☐
2013	040	04	42	000	000	100	100	100	100			☐
2013	040	04	44	000	000	100	100	100	100			☐
2013	040	05	00	000	000	100	100	100	100			☐
2013	040	06	00	000	000	100	100	100	100			☐
2013	040	06	62	000	000	100	100	100	100			☐
2013	100	01	00	000	000	101	100	100	101			☒
2013	100	01	01	000	000	99	100	100	99	.00	1.00	☒
2013	100	01	04	000	000	100	100	100	100			☐

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	100	01	12	000	000	100	100	100	100			☐
2013	100	01	14	000	000	100	100	100	100			☐
2013	100	01	15	000	000	110	100	100	110			☒
2013	100	01	23	000	000	100	100	100	100			☐
2013	100	01	25	000	000	100	100	100	100			☐
2013	100	01	32	000	000	100	100	100	100			☐
2013	100	01	37	000	000	100	100	100	100			☐
2013	100	01	42	000	000	100	100	100	100			☐
2013	100	01	43	000	000	100	100	100	100			☐
2013	100	01	44	000	000	100	100	100	100			☐
2013	100	02	00	000	000	108	100	100	108	.00	1.00	☐
2013	100	02	21	000	000	100	100	100	100			☐
2013	100	02	28	000	000	108	100	100	108	.00	1.00	☐
2013	100	02	33	000	000	100	100	100	100			☐
2013	100	02	70	000	000	119	100	100	119	.00	1.00	☐
2013	100	02	72	000	000	108	100	100	108	.00	1.00	☐
2013	100	02	79	000	000	100	100	100	100			☐
2013	100	02	80	000	000	100	100	100	100			☐
2013	100	02	82	000	000	108	100	100	108	.00	1.00	☐
2013	100	03	00	000	000	83	100	100	83			☒
2013	100	03	03	000	000	44	100	100	44			☒
2013	100	03	38	000	000	83	100	100	83			☒
2013	100	04	00	000	000	93	100	100	93			☒
2013	100	04	46	000	000	93	100	100	93			☒
2013	100	04	47	000	000	93	100	100	93			☒
2013	100	05	00	000	000	104	100	100	104			☒
2013	100	06	00	000	000	100	100	100	100			☐
2013	101	01	00	000	000	101	101	101	101	10.19	1.01	☒
2013	101	01	01	000	000	99	99	99	99	8.39	1.01	☒
2013	101	01	03	000	000	100	100	100	100			☐
2013	101	01	04	000	000	100	100	100	100			☐
2013	101	01	05	000	000	100	100	100	100			☐
2013	101	01	06	000	000	100	100	100	100			☐
2013	101	01	07	000	000	100	100	100	100			☐
2013	101	01	08	000	000	100	100	100	100			☐
2013	101	01	09	000	000	100	100	100	100			☐
2013	101	01	10	000	000	100	100	100	100			☐
2013	101	01	11	000	000	100	100	100	100			☐
2013	101	01	12	000	000	100	100	100	100			☐
2013	101	01	13	000	000	100	100	100	100			☐
2013	101	01	14	000	000	100	100	100	100			☐
2013	101	01	15	000	000	110	110	110	110	22.36	1.02	☒
2013	101	01	18	000	000	100	100	100	100			☐
2013	101	01	19	000	000	100	100	100	100			☐
2013	101	01	21	000	000	99	99	99	99	8.39	1.01	☒

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	101	01	23	000	000	100	100	100	100			☐
2013	101	01	24	000	000	100	100	100	100			☐
2013	101	01	25	000	000	100	100	100	100			☐
2013	101	01	26	000	000	100	100	100	100			☐
2013	101	01	29	000	000	100	100	100	100			☐
2013	101	01	30	000	000	101	101	101	101	10.19	1.01	☒
2013	101	01	31	000	000	99	99	99	99	8.39	1.01	☒
2013	101	01	32	000	000	100	100	100	100			☐
2013	101	01	33	000	000	100	100	100	100			☐
2013	101	01	34	000	000	100	100	100	100			☐
2013	101	01	35	000	000	100	100	100	100			☐
2013	101	01	36	000	000	100	100	100	100			☐
2013	101	01	37	000	000	100	100	100	100			☐
2013	101	01	38	000	000	100	100	100	100			☐
2013	101	01	40	000	000	100	100	100	100			☐
2013	101	01	41	000	000	100	100	100	100			☐
2013	101	01	42	000	000	100	100	100	100			☐
2013	101	01	43	000	000	91	91	91	91	10.72	1.03	☒
2013	101	01	44	000	000	91	91	91	91	10.72	1.03	☒
2013	101	02	00	000	000	108	100	108	108	7.54	1.01	☐
2013	101	02	28	000	000	108	100	108	108	7.54	1.01	☐
2013	101	02	33	000	000	108	100	108	108	7.54	1.01	☐
2013	101	02	70	000	000	119	100	119	119	6.69	1.00	☐
2013	101	02	71	000	000	119	100	119	119	6.69	1.00	☐
2013	101	02	72	000	000	108	100	108	108	7.54	1.01	☐
2013	101	02	73	000	000	119	100	119	119	6.69	1.00	☐
2013	101	02	74	000	000	102	100	102	102	3.46	1.00	☐
2013	101	02	75	000	000	108	100	108	108	7.54	1.01	☐
2013	101	02	76	000	000	108	100	108	108	7.54	1.01	☐
2013	101	02	79	000	000	100	100	100	100	4.04	1.01	☐
2013	101	02	80	000	000	100	100	100	100	4.04	1.01	☐
2013	101	02	82	000	000	108	100	108	108	7.54	1.01	☐
2013	101	02	83	000	000	111	100	111	111	6.39	1.01	☐
2013	101	02	84	000	000	102	100	102	102	3.46	1.00	☐
2013	101	02	87	000	000	108	100	108	108	7.54	1.01	☐
2013	101	02	88	000	000	102	100	102	102	3.46	1.00	☐
2013	101	03	00	000	000	83	83	83	83	17.73	1.06	☒
2013	101	03	03	000	000	44	44	44	44	31.21	1.32	☒
2013	101	03	39	000	000	83	83	83	83	17.73	1.06	☒
2013	101	03	40	000	000	83	83	83	83	17.73	1.06	☒
2013	101	04	00	000	000	93	93	93	93	14.01	1.01	☒
2013	101	04	46	000	000	93	93	93	93	14.01	1.01	☒
2013	101	04	47	000	000	93	93	93	93	14.01	1.01	☒
2013	101	05	00	000	000	104	104	104	104	6.57	1.00	☒
2013	101	06	00	000	000	100	100	100	100			☐

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	102	01	00	000	000	101	101	101	101	10.19	1.01	☒
2013	102	01	39	000	000	100	100	100	100			☐
2013	102	01	43	000	000	100	100	100	100			☐
2013	102	02	00	000	000	108	100	108	108	7.54	1.01	☐
2013	102	02	21	000	000	101	101	101	101	10.38	1.03	☐
2013	102	04	00	000	000	93	93	93	93	14.01	1.01	☒
2013	109	01	00	000	000	101	101	101	101	10.19	1.01	☒
2013	109	01	01	000	000	99	99	99	99	8.39	1.01	☒
2013	109	01	14	000	000	100	100	100	100			☐
2013	109	01	15	000	000	110	110	110	110	22.36	1.02	☒
2013	109	01	28	000	000	100	100	100	100			☐
2013	109	01	33	000	000	100	100	100	100			☐
2013	109	01	43	000	000	100	100	100	100			☐
2013	109	01	44	000	000	100	100	100	100			☐
2013	109	01	71	000	000	100	100	100	100			☐
2013	109	01	72	000	000	100	100	100	100			☐
2013	109	01	78	000	000	100	100	100	100			☐
2013	109	02	00	000	000	108	100	108	108	7.54	1.01	☐
2013	109	02	12	000	000	100	100	100	100			☐
2013	109	02	15	000	000	100	100	100	100			☐
2013	109	02	21	000	000	100	100	100	100			☐
2013	109	02	22	000	000	100	100	100	100			☐
2013	109	02	23	000	000	100	100	100	100			☐
2013	109	02	25	000	000	100	100	100	100			☐
2013	109	02	29	000	000	100	100	100	100			☐
2013	109	02	45	000	000	100	100	100	100			☐
2013	109	02	62	000	000	100	100	100	100			☐
2013	109	03	00	000	000	83	83	83	83	17.73	1.06	☒
2013	109	03	03	000	000	44	44	44	44	31.21	1.32	☒
2013	109	03	31	000	000	100	100	100	100			☐
2013	109	03	34	000	000	100	100	100	100			☐
2013	109	03	37	000	000	100	100	100	100			☐
2013	109	03	38	000	000	83	83	83	83	17.73	1.06	☒
2013	109	04	00	000	000	93	93	93	93	14.01	1.01	☒
2013	109	04	41	000	000	100	100	100	100			☐
2013	109	04	42	000	000	100	100	100	100			☐
2013	109	04	43	000	000	100	100	100	100			☐
2013	109	04	45	000	000	100	100	100	100			☐
2013	109	04	47	000	000	100	100	100	100			☐
2013	109	05	00	000	000	104	104	104	104	6.57	1.00	☒
2013	109	05	55	000	000	100	100	100	100			☐
2013	109	05	58	000	000	100	100	100	100			☐
2013	109	06	00	000	000	100	100	100	100			☐
2013	109	06	56	000	000	100	100	100	100			☐
2013	109	06	61	000	000	100	100	100	100			☐

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	109	06	62	000	000	100	100	100	100			☐
2013	109	06	63	000	000	100	100	100	100			☐
2013	109	06	64	000	000	100	100	100	100			☐
2013	109	06	65	000	000	100	100	100	100			☐
2013	111	01	00	000	000	100	100	100	100			☐
2013	111	01	01	000	000	100	100	100	100			☐
2013	111	01	14	000	000	100	100	100	100			☐
2013	111	01	44	000	000	100	100	100	100			☐
2013	111	01	73	000	000	100	100	100	100			☐
2013	111	01	95	000	000	100	100	100	100			☐
2013	111	01	97	000	000	100	100	100	100			☐
2013	111	02	25	000	000	100	100	100	100			☐
2013	111	02	95	000	000	100	100	100	100			☐
2013	111	02	97	000	000	100	100	100	100			☐
2013	111	04	00	000	000	100	100	100	100			☐
2013	111	04	41	000	000	100	100	100	100			☐
2013	111	04	42	000	000	100	100	100	100			☐
2013	111	04	95	000	000	100	100	100	100			☐
2013	111	04	97	000	000	100	100	100	100			☐
2013	111	05	51	000	000	100	100	100	100			☐
2013	111	05	55	000	000	100	100	100	100			☐
2013	111	05	60	000	000	100	100	100	100			☐
2013	111	05	95	000	000	100	100	100	100			☐
2013	111	05	97	000	000	100	100	100	100			☐
2013	111	06	00	000	000	100	100	100	100			☐
2013	111	06	95	000	000	100	100	100	100			☐
2013	111	06	97	000	000	100	100	100	100			☐
2013	200	01	00	000	000	91	100	100	91	.00	1.00	☐
2013	200	01	01	000	000	91	100	100	91	.00	1.00	☐
2013	200	01	03	000	000	100	100	100	100			☐
2013	200	01	14	000	000	100	100	100	100			☐
2013	200	01	29	000	000	100	100	100	100			☐
2013	200	01	43	000	000	100	100	100	100			☐
2013	200	01	44	000	000	100	100	100	100			☐
2013	200	01	60	000	000	100	100	100	100			☐
2013	200	01	71	000	000	91	100	100	91	.00	1.00	☐
2013	200	01	72	000	000	91	100	100	91	.00	1.00	☐
2013	200	01	73	000	000	91	100	100	91	.00	1.00	☐
2013	200	01	74	000	000	100	100	100	100			☐
2013	200	01	78	000	000	100	100	100	100			☐
2013	200	02	00	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	11	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	12	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	14	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	15	000	000	91	100	100	91	.00	1.00	☐

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	200	02	21	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	22	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	25	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	41	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	45	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	60	000	000	100	100	100	100			☐
2013	200	02	72	000	000	91	100	100	91	.00	1.00	☐
2013	200	02	88	000	000	91	100	100	91	.00	1.00	☐
2013	200	03	00	000	000	91	100	100	91	.00	1.00	☐
2013	200	03	03	000	000	91	100	100	91	.00	1.00	☐
2013	200	03	31	000	000	91	100	100	91	.00	1.00	☐
2013	200	04	00	000	000	91	100	100	91	.00	1.00	☐
2013	200	04	41	000	000	91	100	100	91	.00	1.00	☐
2013	200	04	42	000	000	91	100	100	91	.00	1.00	☐
2013	200	04	44	000	000	91	100	100	91	.00	1.00	☐
2013	200	04	45	000	000	91	100	100	91	.00	1.00	☐
2013	200	04	60	000	000	100	100	100	100			☐
2013	200	05	00	000	000	91	100	100	91	.00	1.00	☐
2013	200	05	51	000	000	91	100	100	91	.00	1.00	☐
2013	200	05	55	000	000	91	100	100	91	.00	1.00	☐
2013	200	05	60	000	000	100	100	100	100			☐
2013	200	06	00	000	000	91	100	100	91	.00	1.00	☐
2013	200	06	61	000	000	91	100	100	91	.00	1.00	☐
2013	200	06	62	000	000	91	100	100	91	.00	1.00	☐
2013	200	06	63	000	000	91	100	100	91	.00	1.00	☐
2013	200	06	64	000	000	91	100	100	91	.00	1.00	☐
2013	200	06	65	000	000	91	100	100	91	.00	1.00	☐
2013	200	06	71	000	000	91	100	100	91	.00	1.00	☐
2013	201	01	00	000	000	91	91	91	91	10.91	.99	☐
2013	201	01	01	000	000	91	91	91	91	10.91	.99	☐
2013	201	01	03	000	000	100	100	100	100			☐
2013	201	01	04	000	000	100	100	100	100			☐
2013	201	01	05	000	000	100	100	100	100			☐
2013	201	01	14	000	000	100	100	100	100			☐
2013	201	01	15	000	000	91	91	91	91	10.91	.99	☐
2013	201	01	32	000	000	100	100	100	100			☐
2013	201	01	43	000	000	100	100	100	100			☐
2013	201	01	44	000	000	100	100	100	100			☐
2013	201	01	71	000	000	91	91	91	91	10.91	.99	☐
2013	201	01	72	000	000	91	91	91	91	10.91	.99	☐
2013	201	01	73	000	000	91	91	91	91	10.91	.99	☐
2013	201	01	74	000	000	91	91	91	91	10.91	.99	☐
2013	201	01	99	000	000	100	100	100	100			☐
2013	201	02	00	000	000	91	91	91	91	10.91	.99	☐
2013	201	02	11	000	000	91	91	91	91	10.91	.99	☐

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	201	02	12	000	000	91	91	91	91	10.91	.99	☐
2013	201	02	13	000	000	91	91	91	91	10.91	.99	☐
2013	201	02	14	000	000	91	91	91	91	10.91	.99	☐
2013	201	02	15	000	000	91	91	91	91	10.91	.99	☐
2013	201	02	21	000	000	91	91	91	91	10.91	.99	☐
2013	201	02	22	000	000	91	91	91	91	10.91	.99	☐
2013	201	02	25	000	000	91	91	91	91	10.91	.99	☐
2013	201	02	72	000	000	91	91	91	91	10.91	.99	☐
2013	201	03	00	000	000	91	91	91	91	10.91	.99	☐
2013	201	03	03	000	000	100	100	100	100			☐
2013	201	03	31	000	000	91	91	91	91	10.91	.99	☐
2013	201	04	00	000	000	91	91	91	91	10.91	.99	☐
2013	201	04	41	000	000	91	91	91	91	10.91	.99	☐
2013	201	04	42	000	000	91	91	91	91	10.91	.99	☐
2013	201	04	44	000	000	91	91	91	91	10.91	.99	☐
2013	201	05	00	000	000	91	91	91	91	10.91	.99	☐
2013	201	05	51	000	000	91	91	91	91	10.91	.99	☐
2013	201	06	00	000	000	91	91	91	91	10.91	.99	☐
2013	201	06	61	000	000	91	91	91	91	10.91	.99	☐
2013	201	06	63	000	000	91	91	91	91	10.91	.99	☐
2013	201	06	64	000	000	91	91	91	91	10.91	.99	☐
2013	201	06	71	000	000	91	91	91	91	10.91	.99	☐
2013	207	01	00	000	000	100	100	100	100			☐
2013	207	01	01	000	000	100	100	100	100			☐
2013	207	01	43	000	000	100	100	100	100			☐
2013	207	01	44	000	000	100	100	100	100			☐
2013	207	02	00	000	000	100	100	100	100			☐
2013	207	03	00	000	000	100	100	100	100			☐
2013	207	03	03	000	000	100	100	100	100			☐
2013	207	04	00	000	000	100	100	100	100			☐
2013	207	05	00	000	000	100	100	100	100			☐
2013	207	06	00	000	000	100	100	100	100			☐
2013	207	06	56	000	000	100	100	100	100			☐
2013	221	01	00	000	000	100	100	100	100			☐
2013	221	01	43	000	000	100	100	100	100			☐
2013	221	02	00	000	000	100	100	100	100			☐
2013	221	02	25	000	000	100	100	100	100			☐
2013	221	04	00	000	000	100	100	100	100			☐
2013	221	05	00	000	000	100	100	100	100			☐
2013	221	06	00	000	000	100	100	100	100			☐
2013	300	01	00	000	000	100	100	100	100	.00	1.00	☐
2013	300	01	01	000	000	100	100	100	100	.00	1.00	☐
2013	300	01	43	000	000	100	100	100	100			☐
2013	300	01	44	000	000	100	100	100	100			☐
2013	300	01	78	000	000	100	100	100	100	.00	1.00	☐

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	300	02	00	000	000	100	100	100	100	.00	1.00	☐
2013	300	03	00	000	000	100	100	100	100	.00	1.00	☐
2013	300	03	03	000	000	100	100	100	100			☐
2013	300	04	00	000	000	100	100	100	100	.00	1.00	☐
2013	300	04	41	000	000	100	100	100	100	.00	1.00	☐
2013	300	05	00	000	000	100	100	100	100	.00	1.00	☐
2013	300	06	00	000	000	100	100	100	100	.00	1.00	☐
2013	300	06	78	000	000	100	100	100	100	.00	1.00	☐
2013	301	01	00	000	000	100	100	100	100			☐
2013	301	01	43	000	000	100	100	100	100			☐
2013	301	01	78	000	000	100	100	100	100			☐
2013	301	01	90	000	000	100	100	100	100			☐
2013	301	02	00	000	000	100	100	100	100			☐
2013	301	02	90	000	000	100	100	100	100			☐
2013	301	03	00	000	000	100	100	100	100			☐
2013	301	03	03	000	000	100	100	100	100			☐
2013	301	03	90	000	000	100	100	100	100			☐
2013	301	04	00	000	000	100	100	100	100			☐
2013	301	04	41	000	000	100	100	100	100			☐
2013	301	04	90	000	000	100	100	100	100			☐
2013	301	05	00	000	000	100	100	100	100			☐
2013	301	05	90	000	000	100	100	100	100			☐
2013	301	06	00	000	000	100	100	100	100			☐
2013	301	06	61	000	000	100	100	100	100			☐
2013	301	06	78	000	000	100	100	100	100			☐
2013	301	06	90	000	000	100	100	100	100			☐
2013	303	01	00	000	000	100	100	100	100			☐
2013	303	01	78	000	000	100	100	100	100			☐
2013	303	02	00	000	000	100	100	100	100			☐
2013	303	03	00	000	000	100	100	100	100			☐
2013	303	04	00	000	000	100	100	100	100			☐
2013	303	05	00	000	000	100	100	100	100			☐
2013	303	06	00	000	000	100	100	100	100			☐
2013	303	06	78	000	000	100	100	100	100			☐
2013	308	01	00	000	000	100	100	100	100			☐
2013	308	02	00	000	000	100	100	100	100			☐
2013	308	03	00	000	000	100	100	100	100			☐
2013	308	04	00	000	000	100	100	100	100			☐
2013	308	05	00	000	000	100	100	100	100			☐
2013	308	06	00	000	000	100	100	100	100			☐
2013	333	01	00	000	000	100	100	100	100			☐
2013	333	01	01	000	000	100	100	100	100			☐
2013	333	01	43	000	000	100	100	100	100			☐
2013	333	01	44	000	000	100	100	100	100			☐
2013	333	01	78	000	000	100	100	100	100			☐

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	333	02	00	000	000	100	100	100	100			☐
2013	333	02	22	000	000	100	100	100	100			☐
2013	333	03	03	000	000	100	100	100	100			☐
2013	333	05	00	000	000	100	100	100	100			☐
2013	333	05	55	000	000	100	100	100	100			☐
2013	333	06	78	000	000	100	100	100	100			☐
2013	400	02	21	000	000	101	100	100	101			☐
2013	400	02	22	000	000	101	100	100	101			☐
2013	400	02	23	000	000	101	100	100	101			☐
2013	400	02	25	000	000	101	100	100	101			☐
2013	400	02	41	000	000	101	100	100	101			☐
2013	400	02	45	000	000	101	100	100	101			☐
2013	400	02	56	000	000	101	100	100	101			☐
2013	400	02	62	000	000	101	100	100	101			☐
2013	400	02	63	000	000	101	100	100	101			☐
2013	400	02	64	000	000	101	100	100	101			☐
2013	400	03	00	000	000	100	100	100	100			☒
2013	400	03	03	000	000	100	100	100	100			☐
2013	400	03	31	000	000	100	100	100	100			☒
2013	400	03	36	000	000	100	100	100	100	.00	1.00	☒
2013	400	03	37	000	000	100	100	100	100			☒
2013	400	04	41	000	000	98	98	100	98	18.50	1.02	☒
2013	400	04	42	000	000	98	98	100	98	18.50	1.02	☒
2013	400	04	44	000	000	98	98	100	98	18.50	1.02	☒
2013	400	04	45	000	000	98	98	100	98	18.50	1.02	☒
2013	400	04	60	000	000	100	100	100	100			☐
2013	400	05	51	000	000	104	104	100	104	.00	1.00	☒
2013	400	05	55	000	000	104	104	100	104	.00	1.00	☒
2013	400	05	60	000	000	100	100	100	100			☐
2013	400	06	52	000	000	100	100	100	100			☐
2013	400	06	54	000	000	100	100	100	100			☐
2013	400	06	56	000	000	93	93	100	93	4.05	1.00	☒
2013	400	06	60	000	000	100	100	100	100			☐
2013	400	06	61	000	000	93	93	100	93	4.05	1.00	☒
2013	400	06	62	000	000	93	93	100	93	4.05	1.00	☒
2013	400	06	63	000	000	93	93	100	93	4.05	1.00	☒
2013	400	06	64	000	000	93	93	100	93	4.05	1.00	☒
2013	400	06	65	000	000	93	93	100	93	4.05	1.00	☒
2013	401	02	21	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	22	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	23	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	25	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	29	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	41	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	45	000	000	101	101	101	101	10.38	1.03	☐

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	401	02	56	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	57	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	61	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	62	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	63	000	000	101	101	101	101	10.38	1.03	☐
2013	401	02	64	000	000	101	101	101	101	10.38	1.03	☐
2013	401	03	31	000	000	100	100	100	100	13.10	1.01	☒
2013	401	03	32	000	000	100	100	100	100			☐
2013	401	03	34	000	000	100	100	100	100			☐
2013	401	03	36	000	000	100	100	100	100	.00	1.00	☒
2013	401	03	37	000	000	100	100	100	100			☒
2013	401	03	40	000	000	100	100	100	100	13.10	1.01	☒
2013	401	04	41	000	000	98	98	98	98	6.25	1.02	☒
2013	401	04	42	000	000	98	98	98	98	6.25	1.02	☒
2013	401	04	43	000	000	100	100	100	100			☐
2013	401	04	44	000	000	98	98	98	98	6.25	1.02	☒
2013	401	04	45	000	000	98	98	98	98	6.25	1.02	☒
2013	401	05	51	000	000	104	104	104	104	14.40	1.01	☒
2013	401	05	55	000	000	104	104	104	104	14.40	1.01	☒
2013	401	06	61	000	000	93	93	93	93	12.72	1.04	☒
2013	401	06	62	000	000	93	93	93	93	12.72	1.04	☒
2013	401	06	63	000	000	93	93	93	93	12.72	1.04	☒
2013	401	06	64	000	000	93	93	93	93	12.72	1.04	☒
2013	401	06	65	000	000	93	93	93	93	12.72	1.04	☒
2013	401	07	05	000	000	100	100	100	100			☐
2013	409	02	21	000	000	101	101	101	101	10.38	1.03	☐
2013	409	02	22	000	000	101	101	101	101	10.38	1.03	☐
2013	409	02	23	000	000	101	101	101	101	10.38	1.03	☐
2013	409	02	25	000	000	101	101	101	101	10.38	1.03	☐
2013	409	02	41	000	000	101	101	101	101	10.38	1.03	☐
2013	409	02	45	000	000	101	101	101	101	10.38	1.03	☐
2013	409	02	62	000	000	101	101	101	101	10.38	1.03	☐
2013	409	02	64	000	000	101	101	101	101	10.38	1.03	☐
2013	409	03	31	000	000	100	100	100	100	13.10	1.01	☒
2013	409	03	34	000	000	100	100	100	100			☐
2013	409	03	37	000	000	100	100	100	100			☒
2013	409	04	41	000	000	98	98	98	98	6.25	1.02	☒
2013	409	04	42	000	000	98	98	98	98	6.25	1.02	☒
2013	409	04	43	000	000	100	100	100	100			☐
2013	409	04	44	000	000	98	98	98	98	6.25	1.02	☒
2013	409	04	45	000	000	98	98	98	98	6.25	1.02	☒
2013	409	05	51	000	000	104	104	104	104	14.40	1.01	☒
2013	409	05	55	000	000	104	104	104	104	14.40	1.01	☒
2013	409	06	56	000	000	93	93	93	93	12.72	1.04	☒
2013	409	06	61	000	000	93	93	93	93	12.72	1.04	☒

Summary of Ratio Indications

2013 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2013	409	06	62	000	000	93	93	93	93	12.72	1.04	☒
2013	409	06	63	000	000	93	93	93	93	12.72	1.04	☒
2013	409	06	64	000	000	93	93	93	93	12.72	1.04	☒
2013	409	06	65	000	000	93	93	93	93	12.72	1.04	☒
2013	600	02	06	000	000	100	100	100	100			☒
2013	600	03	06	000	000	100	100	100	100			☒
2013	600	04	06	000	000	100	100	100	100			☒
2013	600	05	06	000	000	100	100	100	100			☒
2013	600	06	06	000	000	100	100	100	100			☒
2013	700	02	00	000	000	100	100	100	100			☐
2013	701	01	00	000	000	100	100	100	100			☐
2013	701	01	43	000	000	100	100	100	100			☐
2013	701	02	00	000	000	100	100	100	100			☐
2013	701	04	00	000	000	100	100	100	100			☐
2013	701	05	00	000	000	100	100	100	100			☐
2013	701	06	00	000	000	100	100	100	100			☐
2013	800	02	63	000	000	100	100	100	100			☐
2013	800	02	64	000	000	100	100	100	100			☐
2013	800	04	60	000	000	100	100	100	100			☐
2013	800	05	60	000	000	100	100	100	100			☐
2013	801	03	31	000	000	100	100	100	100			☐
2013	890	02	63	000	000	100	100	100	100			☐
2013	890	02	64	000	000	100	100	100	100			☐
2013	960	01	71	000	000	100	100	100	100			☐
2013	960	04	00	000	000	100	100	100	100			☐
2013	960	05	00	000	000	100	100	100	100			☐
2013	960	05	55	000	000	100	100	100	100			☐
2013	960	05	60	000	000	100	100	100	100			☐

2013 RATIO STUDY

MAINTENANCE AREA 1

RESIDENTIAL

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	01	00	000		0	St Helens							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	337			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	14,206,980	100.00 %	14,349,050	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	101			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	99	2013	Adjustment	101

Explanation

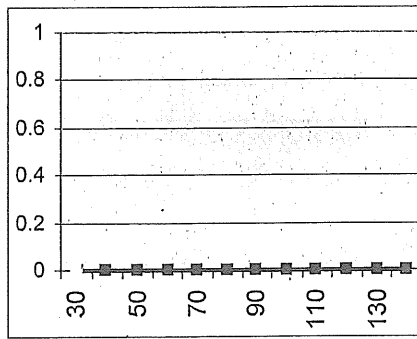
There were no usable sales of Unimproved Properties in MA 1 SA 00 during the Study Period, Therefore the conclusion from the Improved Property (RMV CLASS 101) from for this MA and SA's (Time Adjusted Ratio of 99, Calculated Adjustment of 101) is applied.

Performance History

	2013	2012	2011	2010	2009
COD		-	0.00	1.33	17.36
PRD		-	1.00	1.01	1.11

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales

0

30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

SD

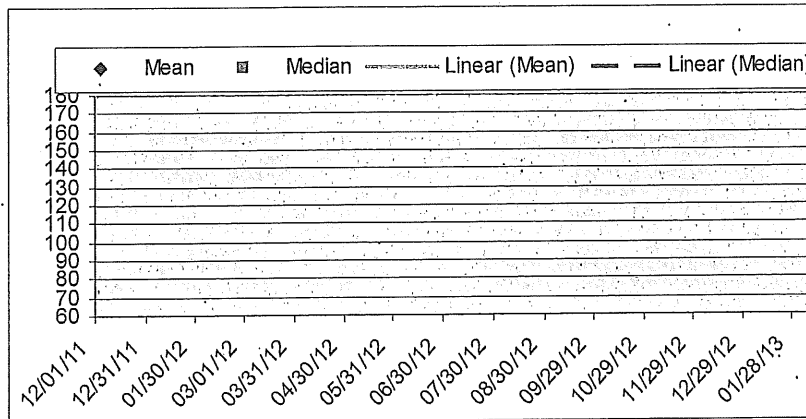
95%

COV

Confidence

Central Tendencies

Month Mean Median Sales



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
101	01	00	000	1995	115	St Helens	109	01	00	000		0	St Helens
102	01	00	000		0	St Helens	101	01	30	000	1995	2	St Helens

Adjustment Calculation Summary

	117	RECALCULATED		
Sample - Number of Sales	117			
Population - Number of Accounts	4,052			
Sales as a percentage of the Population	2.89 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	117,265,580	20.76 %	118,438,236	20.76 %
OSD RMV	78,725,750	13.94 %	79,513,008	13.94 %
Residential Improvement RMV	366,220,490	64.84 %	369,882,695	64.84 %
Farm Improvement RMV	2,582,370	0.46 %	2,608,194	0.46 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	101			
OSD Adjustment Factor	101			
Residential Adjustment Factor	101			
Farm Improvement Factor	101			
After Ratio	100			
Selected Ratio	99	2013	Adjustment	101

Explanation

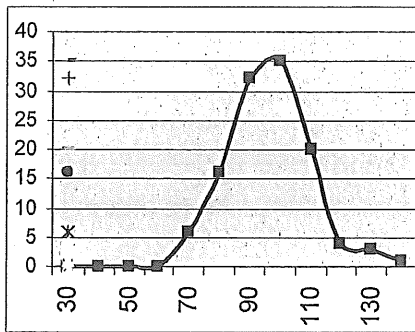
All Indicators of Central Tendency returned similar results with the Median and Mean indicating 101 and the Weighted Mean and GeoMean indicating 100. The Central Tendency from the Median and Mean of 101 has been selected. This selected Ratio is adjusted by the results of the Time Adjustment Study for a resulting Ratio of 99, and a calculated adjustment of 101. This adjustment has been applied to all components of the Improved Properties in this grouping of Study Areas.

Performance History

	2013	2012	2011	2010	2009
COD	10.19	10.99	11.97	12.04	9.26
PRD	1.01	1.02	1.00	1.01	1.00

COLUMBIA County 2013 Ratio Study

Frequency

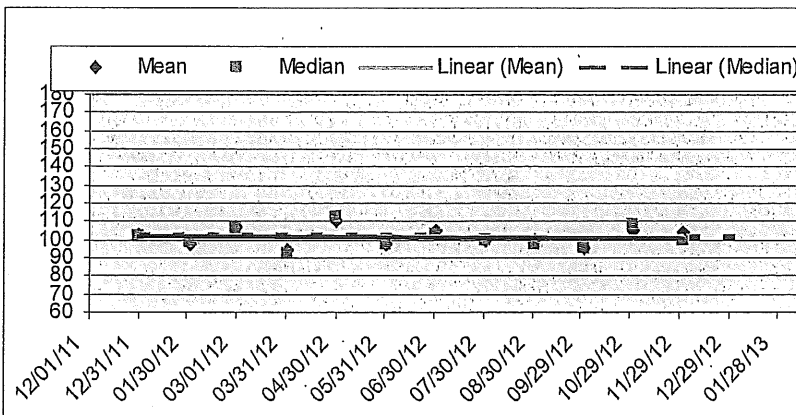


Number Of Sales 117

30	0
40	0
50	0
60	0
70	6
80	16
90	32
100	35
110	20
120	4
130	3
140	1

Median	101	Wtd Mean	100
AD	10.29	GeoMean	100
COD	10.19	PRD	1.01
Mean	101	95% Confidence	2.39
SD	13.18		
COV	13.05		

Central Tendencies



Month	Mean	Median	Sales
Jan-12	103	102	7
Feb-12	97	99	11
Mar-12	107	106	8
Apr-12	94	92	6
May-12	110	112	8
Jun-12	98	98	12
Jul-12	105	103	10
Aug-12	100	100	10
Sep-12	100	98	11
Oct-12	95	95	12
Nov-12	105	108	9
Dec-12	104	100	13

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	00	000	101	131	33	5N1W33-DA-00401	2012	1044	0.16	46,760	55,750	102,510	138,000	Feb-12	1	74
01	00	000	101	144	30	5N1W34-CC-05300	2012	7714	0.13	44,530	80,610	125,140	165,000	Oct-12	2	76
01	00	000	101	131	30	4N1W04-BA-00800	2012	8530	0.13	44,530	61,370	105,900	139,000	Oct-12	3	76
01	00	000	101	135	30	4N1W04-BA-01502	2012	9969	0.13	40,720	64,360	105,080	138,000	Dec-12	4	76
01	00	000	101	133	30	4N1W03-CB-04700	2012	8795	0.13	36,910	77,150	114,060	147,500	Nov-12	5	77
01	00	000	101	122	30	4N1W04-DB-11100	2012	2937	0.13	44,530	45,020	89,550	113,360	Apr-12	6	79
01	00	000	101	143	30	4N1W06-DD-02700	2012	8306	0.12	42,810	110,530	153,340	185,000	Oct-12	7	83
01	00	000	101	131	30	4N1W05-AC-04407	2012	9228	0.17	47,090	76,890	123,980	149,900	Nov-12	8	83
01	00	000	101	131	33	4N1W04-DD-00700	2012	942	0.13	44,530	54,770	99,300	118,900	Feb-12	9	84
01	00	000	101	141	30	4N1W06-DA-06700	2012	1312	0.48	63,860	127,130	190,990	226,292	Feb-12	10	84
01	00	000	101	143	30	4N1W06-DC-02100	2012	2919	0.14	44,990	143,370	188,360	223,000	Apr-12	11	84
01	00	000	101	135	30	4N1W04-BC-01700	2012	9625	0.11	38,950	66,070	105,020	125,000	Dec-12	12	84
01	00	000	101	143	33	4N1W05-AC-06600	2012	5686	0.16	46,660	119,030	165,690	195,000	Jul-12	13	85
01	00	000	101	143	30	4N1W06-DC-05700	2012	6872	0.12	43,550	147,100	190,650	225,000	Aug-12	14	85
01	00	000	101	141	30	4N1W05-CA-02100	2012	7504	0.18	47,410	97,330	144,740	170,000	Sep-12	15	85
01	00	000	101	121	30	4N1W04-DC-04300	2012	1894	0.13	44,530	28,660	73,190	85,000	Mar-12	16	86
01	00	000	101	131	30	5N1W33-DB-00707	2012	1042	0.17	47,080	66,310	113,390	130,000	Jan-12	17	87
01	00	000	101	132	30	4N1W03-CA-00600	2012	2768	0.19	64,700	65,540	130,240	149,900	Apr-12	18	87
01	00	000	101	131	30	4N1W05-CC-01000	2012	3399	0.24	51,740	61,610	113,350	130,000	May-12	19	87

COLUMBIA County 2013 Ratio Study

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO	RATIO
01	00	000	101	143	30	4N1W06-DC-03100 2012	6324		0.19	48,320	123,110	171,430	197,600	Aug-12	20	87
01	00	000	101	143	28	4N1W05-CB-05300 2012	4200		0.20	48,700	136,040	184,740	210,000	Jun-12	21	88
01	00	000	101	143	33	4N1W06-DD-09200 2012	7757		0.11	42,630	100,040	142,670	163,000	Oct-12	22	88
01	00	000	101	141	30	4N1W05-CD-04400 2012	360		0.27	52,980	160,720	213,700	237,000	Jan-12	23	90
01	00	000	101	141	30	4N1W05-AD-03300 2012	4817		0.55	65,660	114,660	180,320	199,900	Jun-12	24	90
01	00	000	101	143	30	4N1W06-DC-06600 2012	7470		0.14	44,740	112,520	157,260	174,000	Sep-12	25	90
01	00	000	101	143	33	4N1W07-AB-03162 2012	4045		0.12	42,930	111,250	154,180	169,000	Jun-12	26	91
01	00	000	101	143	33	4N1W06-DD-03200 2012	6372		0.16	46,580	160,980	207,560	225,000	Aug-12	27	92
01	00	000	101	141	30	4N1W05-BA-03909 2012	9801		0.18	47,880	126,850	174,730	190,000	Dec-12	28	92
01	00	000	101	136	33	4N1W03-BC-07900 2012	7509		0.31	37,120	70,280	107,400	115,000	Sep-12	29	93
01	00	000	101	145	30	4N1W03-CA-01200 2012	8928		0.15	46,280	79,660	125,940	136,000	Nov-12	30	93
01	00	000	101	144	30	5N1W33-AD-02100 2012	1314		0.32	55,660	150,270	205,930	220,000	Feb-12	31	94
01	00	000	101	141	30	4N1W05-BD-05200 2012	4832		0.12	43,140	99,680	142,820	152,000	Jun-12	32	94
01	00	000	101	131	30	4N1W05-DB-06201 2012	8102		0.22	49,970	89,540	139,510	149,000	Oct-12	33	94
01	00	000	101	143	30	4N1W05-CB-00147 2012	4433		0.14	44,890	141,620	186,510	196,000	Jun-12	34	95
01	00	000	101	131	30	4N1W04-CA-10800 2012	6925		0.12	43,120	41,310	84,430	89,000	Sep-12	35	95
01	00	000	101	141	33	4N1W05-CB-01600 2012	7940		0.32	55,610	118,000	173,610	183,000	Oct-12	36	95
01	00	000	101	133	28	4N1W05-DA-04900 2012	8284		0.19	48,280	78,510	126,790	133,660	Oct-12	37	95
01	00	000	101	141	33	4N1W04-DA-12200 2012	8347		0.15	42,500	88,870	131,370	137,900	Oct-12	38	95
01	00	000	101	131	30	4N1W05-CD-01207 2012	1384		0.12	42,990	67,510	110,500	115,000	Feb-12	39	96
01	00	000	101	143	30	4N1W05-BD-04300 2012	4344		0.12	43,550	106,720	150,270	156,700	Jun-12	40	96
01	00	000	101	142	33	4N1W05-AB-05100 2012	5190		0.31	55,050	198,930	253,980	264,700	Jul-12	41	96
01	00	000	101	143	33	4N1W08-BB-05800 2012	6326		0.20	48,600	147,580	196,180	203,400	Aug-12	42	96
01	00	000	101	133	30	5N1W33-DD-03800 2012	8177		0.13	44,530	48,650	93,180	97,000	Sep-12	43	96
01	00	000	101	141	33	4N1W05-AB-02400 2012	2738		0.20	48,950	87,180	136,130	139,900	Apr-12	44	97
01	00	000	101	143	30	4N1W05-DB-06204 2012	9569		0.16	46,670	140,930	187,600	192,500	Dec-12	45	97
01	00	000	101	141	33	5N1W32-DD-00209 2012	9744		0.17	55,760	115,640	171,400	177,000	Dec-12	46	97
01	30	000	101	232	33	5N1W33-DC-05901 2012	4402		0.22	97,520	136,740	234,260	240,000	Jun-12	47	98
01	30	000	101	232	33	4N1W04-CB-11400 2012	5592		0.11	44,950	71,130	116,080	119,000	Jun-12	48	98
01	00	000	101	141	30	4N1W05-CA-01500 2012	5934		0.28	53,360	110,250	163,610	167,000	Jul-12	49	98
01	00	000	101	134	33	5N1W33-DC-13500 2012	6165		0.21	49,660	57,530	107,190	109,000	Aug-12	50	98
01	00	000	101	141	30	4N1W07-AB-03158 2012	1319		0.15	45,730	112,140	157,870	160,000	Jan-12	51	99
01	00	000	101	141	33	4N1W05-CC-01113 2012	5843		0.22	50,270	107,400	157,670	160,000	Jul-12	52	99
01	00	000	101	131	30	4N1W04-DB-11800 2012	7048		0.13	44,530	50,880	95,410	96,600	Sep-12	53	99
01	00	000	101	143	30	4N1W05-CB-07400 2012	9556		0.12	43,590	133,290	176,880	179,000	Dec-12	54	99
01	00	000	101	143	33	4N1W05-CC-00710 2012	9083		0.17	47,140	127,930	175,070	174,900	Nov-12	55	100
01	00	000	101	141	30	4N1W08-BA-03200 2012	9995		0.13	43,870	91,100	134,970	134,900	Dec-12	56	100
01	00	000	101	141	30	4N1W05-AD-02700 2012	1309		0.69	72,080	110,320	182,400	180,000	Feb-12	57	101
01	00	000	101	141	30	4N1W05-AA-07900 2012	4243		0.17	46,950	90,960	137,910	136,500	Jun-12	58	101
01	00	000	101	143	28	4N1W08-BC-04600 2012	5322		0.17	47,030	137,660	184,690	183,000	Jul-12	59	101
01	00	000	101	143	30	4N1W05-AB-01032 2012	6534		0.13	44,620	112,060	156,680	155,000	Aug-12	60	101
01	00	000	101	141	30	4N1W04-CA-02900 2012	1847		0.21	46,000	101,580	147,580	145,000	Mar-12	61	102
01	00	000	101	131	33	4N1W04-AA-04701 2012	2218		0.13	44,530	66,900	111,430	109,000	Mar-12	62	102
01	00	000	101	141	30	4N1W05-DC-00100 2012	7127		0.22	50,570	120,630	171,200	167,500	Sep-12	63	102
01	00	000	101	141	30	4N1W05-AD-01200 2012	7333		0.40	59,420	110,080	169,500	165,900	Sep-12	64	102
01	00	000	101	143	30	4N1W05-AB-01002 2012	3699		0.13	44,610	107,620	152,230	148,000	Apr-12	65	103

COLUMBIA County 2013 Ratio Study

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	00	000	101	141	33	4N1W05-DC-03500	2012	3527	0.24	51,860	115,390	167,250	163,000	May-12	66	103
01	00	000	101	143	30	4N1W05-CA-03800	2012	7717	0.13	44,180	115,450	159,630	154,400	Oct-12	67	103
01	00	000	101	143	30	4N1W05-DB-02121	2012	279	0.12	43,470	142,780	186,250	179,900	Jan-12	68	104
01	00	000	101	143	33	4N1W05-CB-00128	2012	1207	0.16	46,680	160,350	207,030	200,000	Feb-12	69	104
01	00	000	101	131	30	4N1W04-DD-06800	2012	674	0.13	44,440	52,500	96,940	92,000	Jan-12	70	105
01	00	000	101	142	33	4N1W05-AB-04216	2012	1086	0.18	47,410	143,520	190,930	182,000	Feb-12	71	105
01	00	000	101	143	33	4N1W07-AB-03108	2012	1943	0.14	45,600	132,240	177,840	169,900	Mar-12	72	105
01	00	000	101	131	30	4N1W04-DB-09600	2012	4957	0.13	44,530	42,420	86,950	83,000	May-12	73	105
01	00	000	101	143	33	4N1W07-AB-03152	2012	5551	0.12	42,790	107,840	150,630	144,000	Jul-12	74	105
01	00	000	101	141	33	4N1W04-DB-13800	2012	5884	0.40	59,400	110,300	169,700	162,000	Jul-12	75	105
01	00	000	101	151	33	4N1W05-DC-04000	2012	7110	0.25	52,320	178,900	231,220	220,000	Sep-12	76	105
01	00	000	101	142	33	4N1W05-AB-04217	2012	1532	0.18	47,420	141,300	188,720	178,000	Mar-12	77	106
01	00	000	101	143	33	4N1W05-AB-04218	2012	4828	0.25	49,340	130,700	180,040	169,750	Jun-12	78	106
01	00	000	101	134	33	5N1W34-CC-08400	2012	1358	0.13	50,530	67,370	117,900	110,000	Feb-12	79	107
01	00	000	101	143	33	4N1W05-DB-02120	2012	2367	0.12	43,230	121,890	165,120	154,900	Mar-12	80	107
01	00	000	101	141	30	4N1W05-BC-03000	2012	4438	0.16	46,700	112,170	158,870	148,500	Jun-12	81	107
01	00	000	101	141	30	4N1W05-BD-02600	2012	5991	0.25	52,190	111,730	163,920	153,000	Aug-12	82	107
01	00	000	101	143	33	4N1W05-CA-00101	2012	6141	0.13	43,870	145,010	188,880	175,000	Aug-12	83	108
01	00	000	101	143	30	4N1W06-DC-03800	2012	9019	0.15	45,690	133,440	179,130	166,200	Nov-12	84	108
01	00	000	101	141	33	5N1W34-CB-01500	2012	9627	0.36	57,580	108,420	166,000	153,500	Nov-12	85	108
01	00	000	101	151	30	4N1W06-DC-06700	2012	4107	0.31	55,080	205,670	260,750	239,900	Jun-12	86	109
01	00	000	101	121	30	4N1W05-AD-06600	2012	5887	0.18	47,820	56,800	104,620	96,000	Jul-12	87	109
01	00	000	101	141	28	4N1W08-AB-00500	2012	8471	0.27	53,540	88,140	141,680	129,500	Oct-12	88	109
01	00	000	101	146	33	4N1W04-AC-01500	2012	9815	0.13	44,530	102,530	147,060	135,000	Dec-12	89	109
01	00	000	101	141	33	4N1W05-AD-01000	2012	1253	0.40	59,620	98,630	158,250	144,400	Feb-12	90	110
01	00	000	101	132	28	4N1W04-BD-00500	2012	3166	0.40	55,410	50,230	105,640	96,000	May-12	91	110
01	00	000	101	141	30	4N1W05-AB-01200	2012	1431	0.17	47,240	95,410	142,650	128,500	Jan-12	92	111
01	00	000	101	143	30	4N1W06-DC-01200	2012	1618	0.13	44,520	158,420	202,940	183,000	Mar-12	93	111
01	00	000	101	143	30	4N1W04-BC-08600	2012	8034	0.16	46,760	119,400	166,160	150,000	Oct-12	94	111
01	00	000	101	144	30	5N1W34-CB-06801	2012	746	0.23	51,240	132,610	183,850	164,000	Feb-12	95	112
01	00	000	101	143	30	4N1W04-BC-07500	2012	3854	0.16	46,760	141,700	188,460	168,000	May-12	96	112
01	00	000	101	131	33	4N1W03-CB-05902	2012	3430	0.13	40,720	66,630	107,350	95,000	May-12	97	113
01	00	000	101	142	33	4N1W05-AB-04213	2012	6617	0.18	47,460	164,560	212,020	187,000	Aug-12	98	113
01	00	000	101	153	33	5N1W32-DD-00201	2012	2852	0.16	55,330	211,720	267,050	235,000	Apr-12	99	114
01	00	000	101	141	30	4N1W04-CD-01400	2012	9904	0.17	47,650	75,820	123,470	107,900	Dec-12	100	114
01	00	000	101	143	30	4N1W04-BC-07000	2012	6967	0.16	46,660	125,480	172,140	150,000	Aug-12	101	115
01	00	000	101	141	30	4N1W05-CB-03600	2012	8641	0.15	45,930	102,220	148,150	128,500	Nov-12	102	115
01	00	000	101	131	30	4N1W04-DC-03200	2012	8774	0.13	43,970	61,760	105,730	92,000	Nov-12	103	115
01	00	000	101	132	30	5N1W34-CC-05900	2012	7443	0.13	44,530	58,670	103,200	89,000	Sep-12	104	116
01	00	000	101	121	30	4N1W04-AD-10800	2012	8475	0.13	44,530	36,170	80,700	69,000	Oct-12	105	117
01	00	000	101	141	30	4N1W06-DD-02000	2012	3523	0.18	47,700	98,520	146,220	124,000	May-12	106	118
01	00	000	101	152	33	4N1W05-AC-02716	2012	9288	0.26	52,670	224,190	276,860	235,000	Dec-12	107	118
01	00	000	101	153	30	4N1W06-DC-07000	2012	9606	0.25	52,220	203,460	255,680	216,000	Dec-12	108	118
01	00	000	101	141	33	5N1W33-DA-00400	2013	56	0.13	43,550	78,630	122,180	103,500	Dec-12	109	118
01	00	000	101	131	30	4N1W04-CA-05600	2012	7105	0.13	44,250	34,570	78,820	65,900	Sep-12	110	120
01	00	000	101	153	30	4N1W05-CB-00122	2012	1224	0.13	44,260	202,750	247,010	202,900	Jan-12	111	122

COLUMBIA County 2013 Ratio Study

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	00	000	101	132	28	4N1W04-AC-07600	2012	5757	0.39	47,370	50,810	98,180	80,000	Jul-12	112	123
01	00	000	101	132	28	4N1W04-AD-03409	2012	5900	0.13	44,530	72,800	117,330	93,120	Jul-12	113	126
01	00	000	101	131	33	4N1W05-AA-08400	2012	4224	0.17	47,350	51,040	98,390	74,900	May-12	114	131
01	00	000	101	136	30	4N1W04-AA-08100	2012	10030	0.06	29,230	79,790	109,020	81,640	Dec-12	115	134
01	00	000	101	151	33	4N1W06-DA-03201	2012	2230	0.18	47,640	186,980	234,620	172,733	Mar-12	116	136
01	00	000	101	153	30	4N1W05-CB-00113	2012	9631	0.13	44,200	202,190	246,390	170,909	Nov-12	117	144

COLUMBIA County 2013 Ratio Study

RMV	Class	MA	SA	NH	Year	App # of Sales	Location
101	01	43	000	1995	9		St Helens

RMV	Class	MA	SA	NH	Year	App # of Sales	Location
101	01	44	000	1995	0		Columbia City

Adjustment Calculation Summary

Sample - Number of Sales	9	RECALCULATED			
Population - Number of Accounts	97				
Sales as a percentage of the Population	9.28 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn	
Prior Year Population Values					
Land RMV	1,158,780	9.81 %	1,054,490	9.81 %	
OSD RMV	1,939,500	16.42 %	1,764,945	16.42 %	
Residential Improvement RMV	8,710,320	73.76 %	7,926,391	73.76 %	
Farm Improvement RMV	0	0.00 %	0	0.00 %	
SelectedRatioFromSales	110				
RMV Adjustment	100				
Before Ratio	110				
Overall Adjustment Factor	91				
Land Adjustment Factor	91				
OSD Adjustment Factor	91				
Residential Adjustment Factor	91				
Farm Improvement Factor	91				
After Ratio	100				
Selected Ratio	110	2013	Adjustment	91	

Explanation

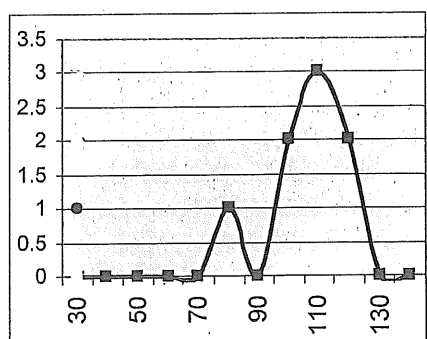
Indicators of Central Tendency returned similar results with the Median at 114, the Mean 115, the Weighted Mean 112 and the GeoMean indicating 114. The Central Tendency from the Weighted Mean at 112 has been selected based on the parameters outlined on Page 5. This Selected Ratio is adjusted by the results of the Time Adjustment Study for a resulting Ratio of 110, and a calculated adjustment of 91. This adjustment has been applied to all components of the Improved Properties in this Study Area.

Performance History

	2013	2012	2011	2010	2009
COD	10.72	-	8.89	-	-
PRD	1.03	-	1.00	-	-

COLUMBIA County 2013 Ratio Study

Frequency

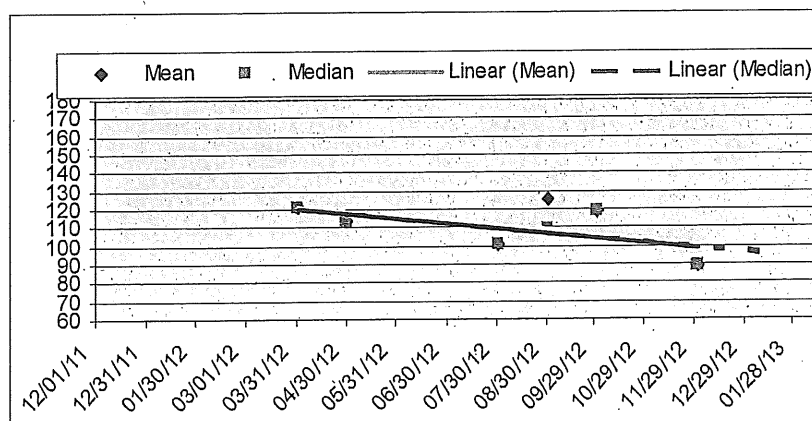


Number Of Sales

9

Median	114	Wtd Mean	112
AD	12.22	GeoMean	114
COD	10.72	PRD	1.03
Mean	115	95% Confidence	12.38
SD	18.95		
COV	16.48		

Central Tendencies



Month	Mean	Median	Sales
Apr-12	121	121	1
May-12	114	114	1
Aug-12	101	101	1
Sep-12	125	109	3
Oct-12	119	119	2
Dec-12	89	89	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	43	000	101	143	30	4N1W08-BA-01623	2012	9655	0.09	32,660	113,430	146,090	165,000	Dec-12	1	89
01	43	000	101	133	33	4N1W05-BD-01105	2012	6235	0.08	31,660	78,440	110,100	109,000	Aug-12	2	101
01	43	000	101	143	30	4N1W05-BD-01103	2012	7331	0.13	33,870	90,710	124,580	115,000	Sep-12	3	108
01	43	000	101	133	30	4N1W05-BD-01122	2012	7288	0.09	32,690	81,290	113,980	103,600	Sep-12	4	110
01	43	000	101	143	33	4N1W05-CB-06801	2012	3693	0.09	32,270	85,510	117,780	103,000	May-12	5	114
01	43	000	101	143	30	4N1W08-BA-02400	2012	8098	0.07	29,460	98,560	128,020	109,000	Oct-12	6	117
01	43	000	101	143	33	4N1W05-BD-01104	2012	2532	0.08	31,660	91,290	122,950	102,000	Apr-12	7	121
01	43	000	101	143	30	4N1W08-BA-03300	2012	7633	0.08	30,480	98,500	128,980	107,000	Oct-12	8	121
01	43	000	101	133	30	4N1W05-CD-01000	2012	7096	0.07	29,570	75,650	105,220	66,500	Sep-12	9	158

COLUMBIA County 2013 Ratio Study

RMV	App	# of				
Class	MA	SA	NH	Year	Sales	Location
100	01	01	000		1	Columbia City

RMV	App	# of				
Class	MA	SA	NH	Year	Sales	Location

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED			
Population - Number of Accounts	43				
Sales as a percentage of the Population	2.33 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn	
Prior Year Population Values					
Land RMV	2,933,640	100.00 %	2,904,304	100.00 %	
OSD RMV	0	0.00 %	0	0.00 %	
Residential Improvement RMV	0	0.00 %	0	0.00 %	
Farm Improvement RMV	0	0.00 %	0	0.00 %	
SelectedRatioFromSales	101				
RMV Adjustment	100				
Before Ratio	101				
Overall Adjustment Factor	99				
Land Adjustment Factor	99				
OSD Adjustment Factor	100				
Residential Adjustment Factor	100				
Farm Improvement Factor	100				
After Ratio	100				
Selected Ratio	101	2013	Adjustment	99	

Explanation

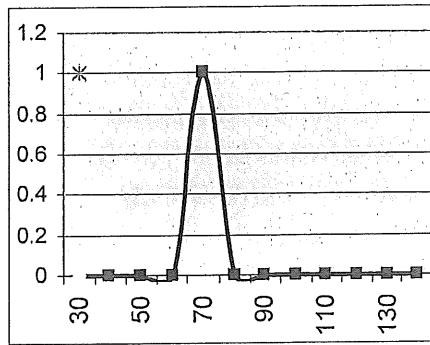
There was only one usable sale of Unimproved Residential Property in this Study Area during the Sales Period. A search of sales of Unimproved Properties since 1-1-2010 was made, with only one additional sale found. The Data obtained does not provide adequate information to base a reliable conclusion. Therefore, the conclusion from the Improved Property Study in this Study Area has been applied to the Unimproved Properties in Columbia City (Adjusted Ratio of 101, and a Calculated Adjustment of 99).

Performance History

	2013	2012	2011	2010	2009
COD	0.00	0.00	-	-	7.67
PRD	1.00	1.00	-	-	1.01

COLUMBIA County 2013 Ratio Study

Frequency

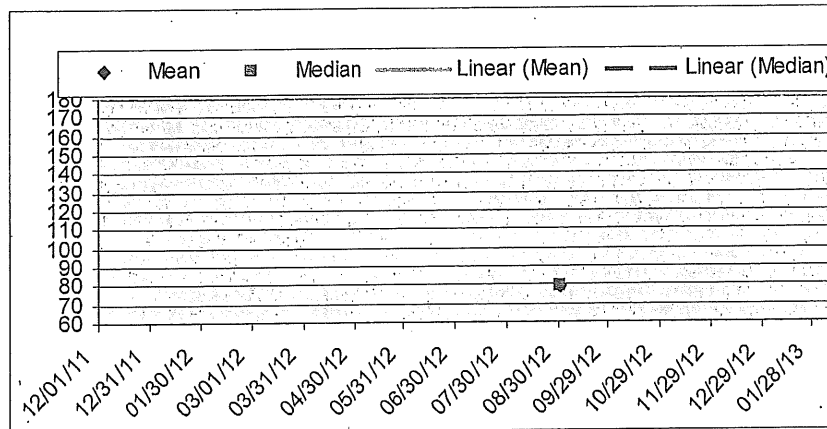


30	0
40	0
50	0
60	0
70	1
80	0
90	0
100	0
110	0
120	0
130	0
140	0

Median	79	Wtd Mean	79
AD	0.00	GeoMean	79
COD	0.00	PRD	1.00
Mean	79	95% Confidence	1.96
SD	1.00		
COV	1.27		

Number Of Sales 1

Central Tendencies



Month	Mean	Median	Sales
Sep-12	79	79	1

AP AR	SA NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	01	000	100	33	5N1W28-AC-03600	2012	7145	0.16	47,670	0	47,670	60,000	Sep-12	1	79

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	01	000	1995	16	Columbia City
109	01	01	000		0	Columbia City

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	21	000	1995	5	Columbia City
101	01	31	000	1995	0	Columbia City

Adjustment Calculation Summary

Sample - Number of Sales	21	RECALCULATED		
Population - Number of Accounts	722			
Sales as a percentage of the Population	2.91 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	28,844,870	21.07 %	28,556,421	21.07 %
OSD RMV	19,592,000	14.31 %	19,396,080	14.31 %
Residential Improvement RMV	88,024,610	64.30 %	87,144,364	64.30 %
Farm Improvement RMV	433,120	0.32 %	428,789	0.32 %
SelectedRatioFromSales	101			
RMV Adjustment	100			
Before Ratio	101			
Overall Adjustment Factor	99			
Land Adjustment Factor	99			
OSD Adjustment Factor	99			
Residential Adjustment Factor	99			
Farm Improvement Factor	99			
After Ratio	100			
Selected Ratio	101	2013	Adjustment	99

Explanation

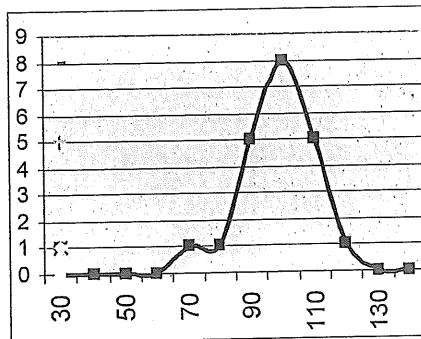
Indicators of Central Tendency returned similar results with the Median indicating a high of 105 and Weighted Mean the low of 102. The Mean and the GeoMean with identical indications of 103 has been selected. This Ratio has been adjusted by the results of the Time Adjustment Study for a resulting Ratio of 101, and a calculated adjustment of 99. This adjustment has been applied to all components of the Improved Properties in this grouping of Study Areas.

Performance History

	2013	2012	2011	2010	2009
COD	8.39	9.28	-	7.56	8.61
PRD	1.01	1.01	-	0.99	1.02

COLUMBIA County 2013 Ratio Study

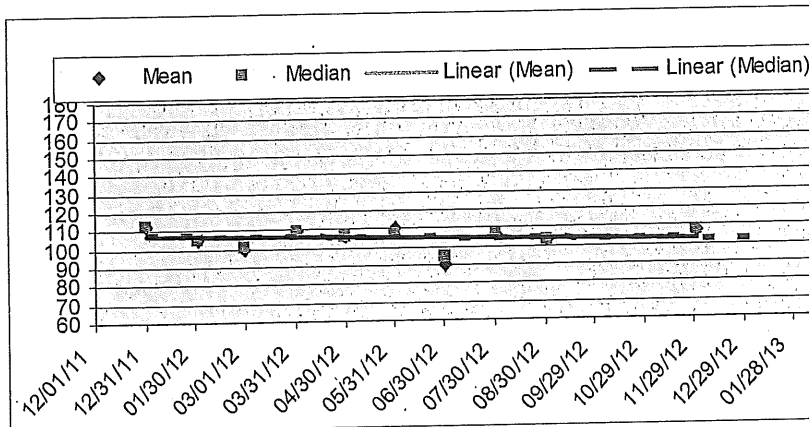
Frequency



Number Of Sales 21

Median	105	Wtd Mean	102
AD	8.81	GeoMean	103
COD	8.39	PRD	1.01
Mean	103	95% Confidence	4.87
SD	11.38		
COV	11.05		

Central Tendencies



Month	Mean	Median	Sales
Jan-12	113	113	1
Feb-12	105	105	1
Mar-12	100	101	2
Apr-12	109	109	1
May-12	106	106	1
Jun-12	110	107	3
Jul-12	90	94	4
Aug-12	106	106	6
Sep-12	103	103	1
Dec-12	107	107	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	01	000	101	141	33	5N1W28-DA-05700	2012	5778	0.28	83,280	105,550	188,830	240,000	Jul-12	1	79
01	01	000	101	142	30	5N1W28-DB-04900	2012	6524	0.23	66,650	180,060	246,710	290,000	Aug-12	2	85
01	21	000	101	141	33	5N1W21-CB-05000	2012	1477	0.27	61,560	100,000	161,560	179,900	Mar-12	3	90
01	01	000	101	152	33	5N1W28-DA-04601	2012	5787	0.25	93,840	241,110	334,950	360,000	Jul-12	4	93
01	01	000	101	153	30	5N1W28-DD-01000	2012	5725	0.23	78,130	254,690	332,820	355,350	Jul-12	5	94
01	01	000	101	153	33	5N1W28-DD-01100	2012	5625	0.16	71,790	172,740	244,530	257,000	Jul-12	6	95
01	21	000	101	141	33	5N1W21-CA-01300	2012	6526	0.25	59,970	110,910	170,880	174,000	Aug-12	7	98
01	01	000	101	154	33	5N1W28-DD-02100	2012	4246	0.12	70,940	286,220	357,160	349,900	Jun-12	8	102
01	01	000	101	152	33	5N1W28-CA-00900	2012	6632	0.48	78,190	217,630	295,820	290,150	Aug-12	9	102
01	01	000	101	133	30	5N1W28-BA-01400	2012	7284	0.29	69,750	66,220	135,970	132,000	Sep-12	10	103
01	21	000	101	141	30	5N1W21-DC-00112	2012	1027	0.23	59,020	111,260	170,280	162,000	Feb-12	11	105
01	21	000	101	143	30	5N1W21-CA-00100	2012	3475	0.30	62,420	112,900	175,320	164,900	May-12	12	106
01	01	000	101	136	30	5N1W28-DA-02700	2012	9598	0.11	62,090	117,430	179,520	168,000	Dec-12	13	107
01	01	000	101	143	30	5N1W28-DD-04500	2012	2586	0.15	63,820	129,680	193,500	177,800	Apr-12	14	109
01	21	000	101	142	30	5N1W21-CA-04600	2012	6499	0.23	59,250	104,710	163,960	150,000	Aug-12	15	109
01	01	000	101	142	33	5N1W28-CA-01200	2012	2226	0.23	87,650	151,800	239,450	215,000	Mar-12	16	111
01	01	000	101	153	33	5N1W28-DA-01300	2012	4363	0.23	78,260	196,070	274,330	247,500	Jun-12	17	111
01	01	000	101	143	33	5N1W28-BA-01908	2012	304	0.20	63,980	139,950	203,930	180,000	Jan-12	18	113
01	01	000	101	154	30	5N1W28-CA-00700	2012	6315	0.55	100,070	231,900	331,970	295,000	Aug-12	19	113

COLUMBIA County 2013 Ratio Study

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	01	000	101	142	33	5N1W28-CA-02900	2012	4061	0.23	73,590	130,250	203,840	174,500	Jun-12	20	117
01	01	000	101	134	33	5N1W28-DB-00300	2012	6754	0.23	70,290	95,470	165,760	130,000	Aug-12	21	128

COLUMBIA County 2013 Ratio Study

RMV	App	# of				
Class	MA	SA	NH	Year	Sales	Location
100	01	15	000		0	St Helens

RMV	App	# of				
Class	MA	SA	NH	Year	Sales	Location

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED			
Population - Number of Accounts	18				
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn	
Prior Year Population Values					
Land RMV	2,069,460	100.00 %	2,276,406	100.00 %	
OSD RMV	0	0.00 %	0	0.00 %	
Residential Improvement RMV	0	0.00 %	0	0.00 %	
Farm Improvement RMV	0	0.00 %	0	0.00 %	
SelectedRatioFromSales	91				
RMV Adjustment	100				
Before Ratio	91				
Overall Adjustment Factor	110				
Land Adjustment Factor	110				
OSD Adjustment Factor	100				
Residential Adjustment Factor	100				
Farm Improvement Factor	100				
After Ratio	100				
Selected Ratio	91	2013	Adjustment	110	

Explanation

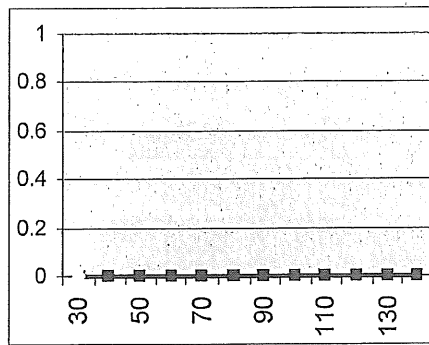
There were no usable sales of Unimproved Residential Property in this Study Area during the Sales Period. The data obtained does not provide adequate information to base a reliable conclusion. Therefore, the conclusion from the Improved Property Study in this Study Area has been applied to the Unimproved Properties MA 1 SA 15 (Adjusted Ratio of 91, and a Calculated Adjustment of 110).

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	0.00	17.36
PRD	-	-	-	1.00	1.11

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales 0

30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

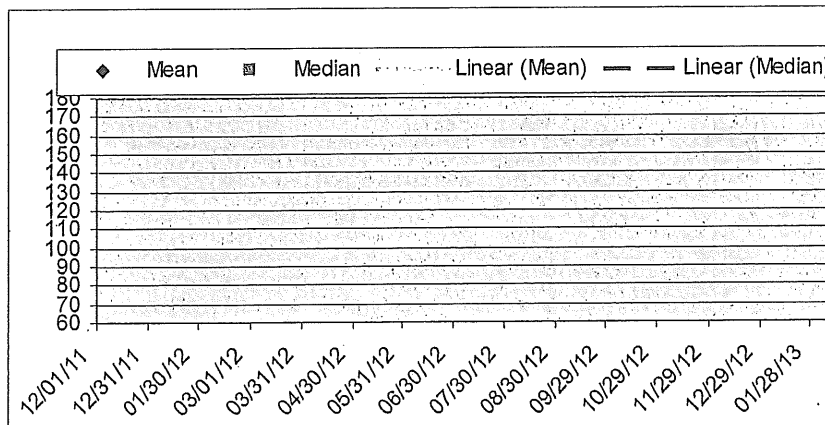
95%
Confidence

SD

COV

Central Tendencies

Month Mean Median Sales



AP	SA	NH	PRP	BLD	RJ	MAP NO.	BOOK	PAGE	ACRES	RMV	RMV	TOTAL	SALES	SALE	SALE
AR			CLS	CLS	CD					LAND	IMP	VALUE	PRICE	DATE	RATIO
AP	SA	NH	PR	BLD	RJ	ACCOUNT NO	BOOK	PAGE	AC	RMV	RMV	TOTAL	SALES	SALE	SALE
AR			P	CLS	CD					LAND	IMP	VALUE	PRICE	DATE	RATIO
			CLS												

COLUMBIA County 2013 Ratio Study

RMV	Class	MA	SA	NH	Year	App # of Sales	Location
101	01	15	000	1995	3		St Helens

RMV	Class	MA	SA	NH	Year	App # of Sales	Location
109	01	15	000		0		St Helens

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED		
Population - Number of Accounts	51			
Sales as a percentage of the Population	1.96 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	11,191,110	45.37 %	12,310,221	45.37 %
OSD RMV	904,320	3.67 %	994,752	3.67 %
Residential Improvement RMV	12,546,260	50.87 %	13,800,886	50.87 %
Farm Improvement RMV	23,130	0.09 %	25,443	0.09 %
SelectedRatioFromSales	91			
RMV Adjustment	100			
Before Ratio	91			
Overall Adjustment Factor	110			
Land Adjustment Factor	110			
OSD Adjustment Factor	110			
Residential Adjustment Factor	110			
Farm Improvement Factor	110			
After Ratio	100			
Selected Ratio	91	2013	Adjustment	110

Explanation

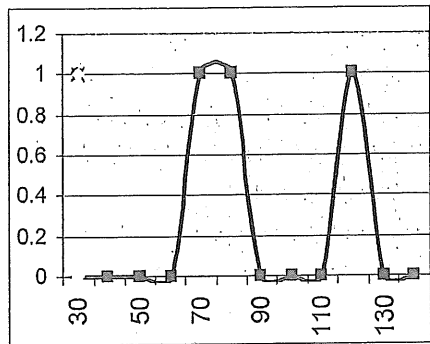
There was only one usable sale of improved properties within this Study Area during the Sales Period January 1, 2012 and December 31, 2012. As this provided insufficient data to arrive at a reasonable conclusion, two sales from the 2012 Ratio Study were included in this year's Ratio Study. The three sales returned Ratio Indications of Median at 82, the Mean at 93, and the Weighted Mean and the GeoMean identical at 91. Adjusting the selected Ratio Indication provided by the Mean of 93 by the results of the Time Study, a Ratio of 91 is determined, with a Calculated Adjustment of 110. Properties in this Study Area are limited in number, with the unique characteristic of Columbia River Frontage and services provided by the Cities of St. Helens and Columbia City. This unique combination of amenities creates a market of mostly higher valued properties.

Performance History

	2013	2012	2011	2010	2009
COD	22.36	27.31	-	0.00	9.26
PRD	1.02	1.04	-	1.00	1.00

COLUMBIA County 2013 Ratio Study

Frequency



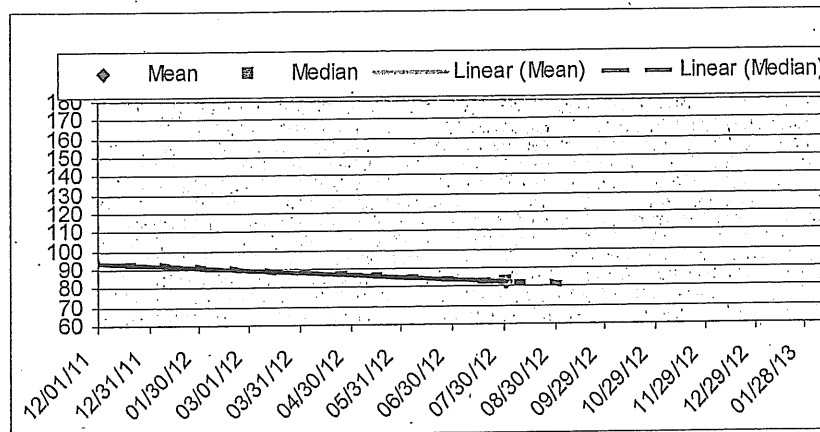
30	0
40	0
50	0
60	0
70	1
80	1
90	0
100	0
110	0
120	1
130	0
140	0

Median	82	Wtd Mean	91
AD	18.33	GeoMean	91
COD	22.36	PRD	1.02
Mean	93	95% Confidence	27.00
SD	23.86		
COV	25.66		

Number Of Sales

1

Central Tendencies



Month	Mean	Median	Sales
Sep-11	98	98	2
Aug-12	82	82	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	15	000	101	153	32	5N1W34-CB-00400	2011	6934	1.11	236,450	183,800	420,250	550,000	Sep-11	1	76
01	15	000	101	141	30	5N1W34-BC-00100	2012	6932	1.31	170,580	119,810	290,390	355,000	Aug-12	2	82
01	15	000	101	152	32	5N1W34-BC-00600	2011	6797	1.00	247,760	230,440	478,200	399,900	Sep-11	3	120

2013 RATIO STUDY

MAINTENANCE AREA 2

RESIDENTIAL

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	02	00	000		1	Scappoose	100	02	72	000		0	Scappoose
100	02	28	000		0	Scappoose	100	02	82	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	1			
Population - Number of Accounts	140			
Sales as a percentage of the Population	0.71 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	11,306,070	100.00 %	12,210,556	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	108			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	93	2013	Adjustment	108

Explanation

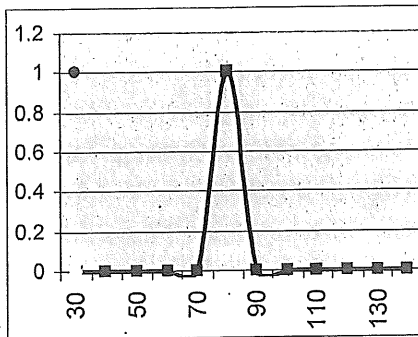
There was a single usable sale of Unimproved Property in this grouping of Study Areas. As a single sale does not provide adequate information for a reliable Ratio conclusion, the results of the Improved Properties for these Study Areas (Adjusted Ratio of 93, and a Calculated Overall Adjustment of 108) is considered to be reliable and reasonable.

Performance History

	2013	2012	2011	2010	2009
COD	0.00	-	-	-	15.09
PRD	1.00	-	-	-	1.04

COLUMBIA County 2013 Ratio Study

Frequency

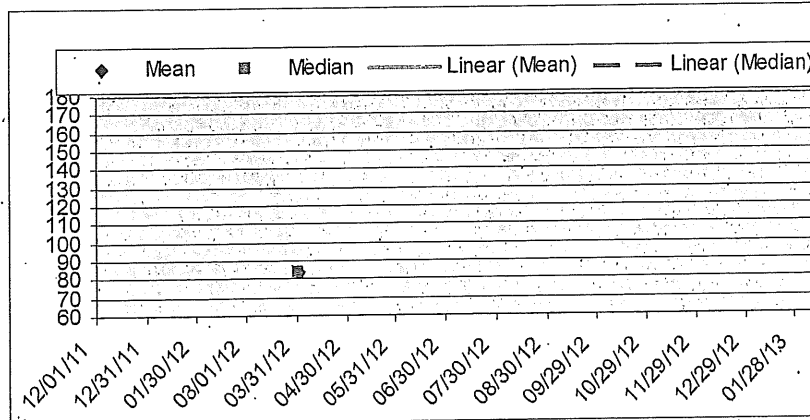


30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	0
120	0
130	0
140	0

Median	84	Wtd Mean	84
AD	0.00	GeoMean	84
COD	0.00	PRD	1.00
Mean	84	95% Confidence	1.96
SD	1.00		
COV	1.19		

Number Of Sales 1

Central Tendencies



Month	Mean	Median	Sales
Apr-12	84	84	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	00	000	100		33	3N1W07-CB-01910	2012	2927	0.19	50,230	0	50,230	60,000	Apr-12	1	84

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	00	000		24	Scappoose	101	02	72	000		2	Scappoose
102	02	00	000		0	Scappoose	101	02	75	000		4	Scappoose
109	02	00	000		0	Scappoose	101	02	76	000		0	Scappoose
101	02	28	000		0	Scappoose	101	02	82	000		5	Scappoose
101	02	33	000		0	Scappoose	101	02	87	000		1	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	36			
Population - Number of Accounts	1,711			
Sales as a percentage of the Population	2.10 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	109,016,420	37.56 %	117,737,734	37.56 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	179,889,580	61.97 %	194,280,746	61.97 %
Farm Improvement RMV	1,378,010	0.47 %	1,488,251	0.47 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	108			
OSD Adjustment Factor	100			
Residential Adjustment Factor	108			
Farm Improvement Factor	108			
After Ratio	100			
Selected Ratio	93	2013	Adjustment	108

Explanation

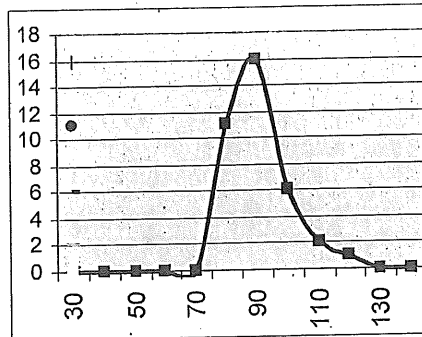
This Grouping of Residential Properties in the City of Scappoose has returned very closely grouped Indicators of Central Tendency with the Median and Weighted Mean indicating 94 and the Mean and GeoMean 95. The Mean Ratio of 95 has been selected. Applying the Time Adjustment provides an Adjusted Ratio of 93, and a Calculated Overall Adjustment of 108. This Calculated Adjustment is applied to all components in this grouping of Improved Properties.

Performance History

	2013	2012	2011	2010	2009
COD	7.54	-	-	-	7.80
PRD	1.01	-	-	-	1.01

COLUMBIA County 2013 Ratio Study

Frequency



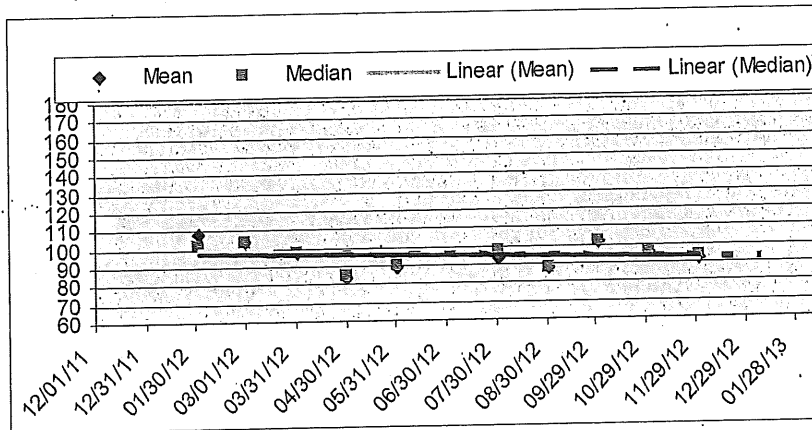
Number Of Sales

36

30	0
40	0
50	0
60	0
70	0
80	11
90	16
100	6
110	2
120	1
130	0
140	0

Median	94	Wtd Mean	94
AD	7.08	GeoMean	95
COD	7.54	PRD	1.01
Mean	95	95% Confidence	2.97
SD	9.10		
COV	9.58		

Central Tendencies



Month	Mean	Median	Sales
Feb-12	108	102	3
Mar-12	104	104	2
Apr-12	98	97	5
May-12	84	85	2
Jun-12	89	90	5
Aug-12	93	97	5
Sep-12	88	88	2
Oct-12	102	102	2
Nov-12	95	95	5
Dec-12	92	93	5

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	00	000	101	143	33	3N2W11-AA-00208	2012	9972	0.26	59,160	131,090	190,250	238,400	Dec-12	1	80
02	00	000	101	123	30	3N2W12-DB-10700	2012	4133	0.23	60,370	57,440	117,810	144,560	Jun-12	2	81
02	00	000	101	143	30	3N1W07-CC-01428	2012	3485	0.14	57,230	147,420	204,650	251,000	May-12	3	82
02	00	000	101	141	30	3N2W12-AD-05000	2012	6493	0.16	55,900	70,820	126,720	152,600	Aug-12	4	83
02	00	000	101	134	33	3N2W02-DD-01000	2012	3962	0.26	59,740	162,860	222,600	258,000	Jun-12	5	86
02	00	000	101	141	30	3N2W12-DD-08600	2012	6699	0.30	61,210	111,210	172,420	199,900	Aug-12	6	86
02	00	000	101	131	28	3N2W12-DB-01100	2012	3306	0.13	54,220	65,370	119,590	136,700	May-12	7	87
02	75	000	101	153	30	3N2W12-AD-06519	2012	7702	0.23	60,350	231,960	292,310	336,500	Sep-12	8	87
02	00	000	101	141	30	3N2W12-BB-02700	2012	8593	0.28	60,440	85,890	146,330	169,000	Nov-12	9	87
02	00	000	101	141	33	3N2W12-BB-00600	2012	7286	0.24	59,220	84,500	143,720	162,500	Sep-12	10	88
02	82	000	101	143	33	3N1W18-BC-01400	2012	2874	0.17	64,780	122,070	186,850	210,000	Apr-12	11	89
02	82	000	101	141	33	3N2W13-AD-00900	2012	4417	0.15	63,360	108,520	171,880	190,000	Jun-12	12	90
02	72	000	101	141	33	3N2W13-BD-03200	2012	9214	0.14	49,100	105,400	154,500	169,000	Nov-12	13	91
02	00	000	101	142	30	3N2W12-BB-01600	2012	8498	0.38	63,430	185,780	249,210	269,900	Oct-12	14	92
02	87	000	101	143	33	3N1W07-CA-00500	2012	9774	0.19	66,000	145,800	211,800	230,000	Dec-12	15	92
02	00	000	101	141	33	3N2W02-DD-01001	2012	4519	0.21	58,210	136,890	195,100	210,000	Jun-12	16	93
J2	00	000	101	143	30	3N2W12-DC-02516	2012	10035	0.06	42,440	116,330	158,770	171,000	Dec-12	17	93
02	00	000	101	143	30	3N2W12-DA-06100	2012	9782	0.20	58,060	118,030	176,090	188,000	Dec-12	18	94
02	75	000	101	153	30	3N2W12-AD-06518	2012	2770	0.16	57,410	160,630	218,040	228,800	Apr-12	19	95

COLUMBIA County 2013 Ratio Study

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	75	000	101	153	30	3N2W12-AA-00900 2012	8945		0.14	56,580	172,410	228,990	240,200	Nov-12	20	95
02	00	000	101	141	33	3N2W12-DA-04127 2012	2750		0.29	61,890	102,590	164,480	170,000	Apr-12	21	97
02	72	000	101	143	30	3N2W13-BD-00500 2012	4012		0.14	49,230	110,330	159,560	165,000	Jun-12	22	97
02	00	000	101	141	33	3N2W12-CC-00303 2012	6168		0.12	56,060	74,750	130,810	135,000	Aug-12	23	97
02	00	000	101	143	33	3N2W13-CD-02800 2012	6318		0.14	57,420	129,580	187,000	190,000	Aug-12	24	98
02	00	000	101	131	30	3N2W12-AC-00133 2012	8868		0.11	55,750	74,520	130,270	132,400	Nov-12	25	98
02	00	000	101	143	30	3N2W13-BA-04900 2012	1255		0.59	70,170	98,660	168,830	170,000	Feb-12	26	99
02	82	000	101	141	30	3N2W13-AA-06500 2012	9485		0.15	63,360	103,280	166,640	169,000	Dec-12	27	99
02	00	000	101	131	30	3N2W12-CA-07800 2012	3143		0.15	55,680	80,670	136,350	136,900	Apr-12	28	100
02	00	000	101	143	30	3N2W13-BA-04704 2012	7252		0.15	48,550	125,660	174,210	172,900	Aug-12	29	101
02	00	000	101	131	33	3N2W12-DB-04600 2012	1798		0.12	53,830	49,150	102,980	99,900	Mar-12	30	103
02	75	000	101	153	33	3N2W12-AD-06520 2012	991		0.17	58,110	210,370	268,480	257,000	Feb-12	31	104
02	82	000	101	143	30	3N2W13-AD-03000 2012	3477		0.15	63,500	128,970	192,470	185,499	Mar-12	32	104
02	00	000	101	133	30	3N2W12-CB-02200 2013	292		0.52	72,820	102,270	175,090	164,900	Nov-12	33	106
02	00	000	101	141	33	3N2W11-DB-00400 2012	3061		0.24	61,760	137,210	198,970	179,900	Apr-12	34	111
02	00	000	101	131	33	3N2W12-DB-08600 2012	8175		0.16	56,060	54,600	110,660	99,900	Oct-12	35	111
02	82	000	101	141	33	3N2W13-AA-04900 2012	939		0.17	67,640	126,410	194,050	160,000	Feb-12	36	121

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
100	02	70	000		1	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	1			
Population - Number of Accounts	11			
Sales as a percentage of the Population	9.09 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	587,270	100.00 %	698,851	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	84			
RMV Adjustment	100			
Before Ratio	84			
Overall Adjustment Factor	119			
Land Adjustment Factor	119			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	84	2013	Adjustment	119

Explanation

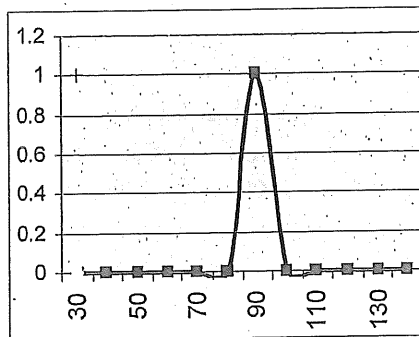
There were no usable sales of Unimproved Properties in this Study Area during the current Sales Period of January 1, 2012 through December 31, 2012. Sales of Unimproved Properties in this Study Area for the prior Sales Year and Sales occurring since January 1, 2013 were also researched. One Sale in each of these additional sales periods were found. The sale from the 2011 Sales period has been included in the current analysis and indicates a Ratio (Time Adjusted) of 94 with a Calculated Overall adjustment of 106 would be warranted. The sale occurring after the current sales year based on the current Roll Value indicates a Ratio of 91 with a Calculated Overall Adjustment of 110. The Improved Property Analysis for this year's Ratio Study has returned a Time Adjusted Ratio of 84 and a Calculated Overall Adjustment of 119. It is therefore concluded that since a single sale should not be considered adequate to derive a Ratio conclusion, that the sale occurring after the sales period, while an indication of an increase in values is merely supporting data, and the significant sample size of Improved property Sales that the conclusion from the Improved Properties in this Study Area (Time Adjusted Ratio of 84, Calculated Overall Adjustment of 119) would be the most relevant data, and is applied to the Unimproved Properties in this Study Area.

Performance History

	2013	2012	2011	2010	2009
COD	0.00	0.00	1.82	4.17	15.09
PRD	1.00	1.00	1.00	0.96	1.04

COLUMBIA County 2013 Ratio Study

Frequency



30 0
40 0
50 0
60 0
70 0
80 0
90 1
100 0
110 0
120 0
130 0
140 0

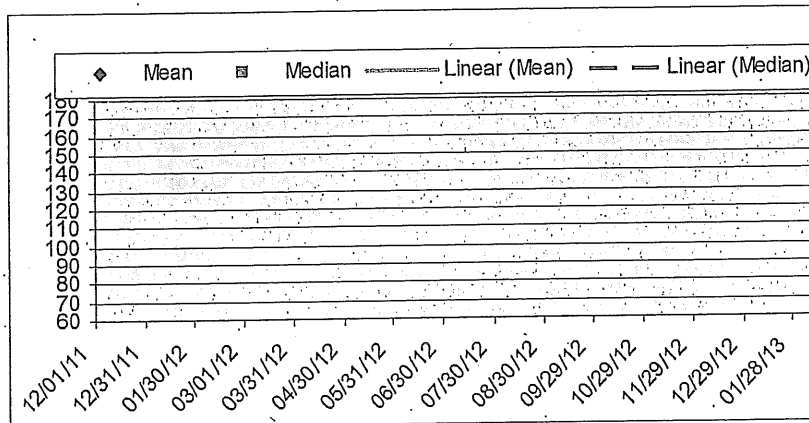
Median	96	Wtd Mean	96
AD	0.00	GeoMean	96
COD	0.00	PRD	1.00
Mean	96	95% Confidence	1.96
SD	1.00		
COV	1.04		

Number Of Sales

1

Central Tendencies

Month	Mean	Median	Sales
Jul-11	96	96	1



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	70	000	100		31	3N2W11-AA-00118	2011	5109	0.32	65,100	0	65,100	68,000	Jul-11	1	96

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	70	000		5	Scappoose	101	02	73	000		1	Scappoose
101	02	71	000		2	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	8			
Population - Number of Accounts	174			
Sales as a percentage of the Population	4.60 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	10,413,570	34.72 %	12,392,148	34.72 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	19,551,890	65.20 %	23,266,749	65.20 %
Farm Improvement RMV	24,060	0.08 %	28,631	0.08 %
SelectedRatioFromSales	84			
RMV Adjustment	100			
Before Ratio	84			
Overall Adjustment Factor	119			
Land Adjustment Factor	119			
OSD Adjustment Factor	100			
Residential Adjustment Factor	119			
Farm Improvement Factor	119			
After Ratio	100			
Selected Ratio	84	2013	Adjustment	119

Explanation

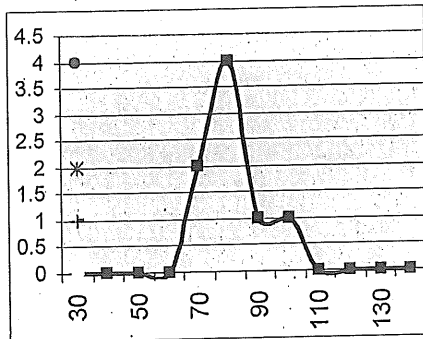
An additional year of sales (Sales Period 1-1-11 through 1-31-11) were added to this grouping of properties in order to more accurately measure the current Market Conditions for the Improved Properties in this grouping of Study Areas. Without the inclusion of the three additional sales, the Central Tendencies indicated a (Time Adjusted) Ratio of 83 and overall Calculated Adjustment of 120 is warranted. Inclusion of the three additional sales alters this conclusion slightly to a Time Adjusted Ratio of 84 and a calculated overall adjustment of 119.

Performance History

	2013	2012	2011	2010	2009
COD	6.69	4.20	10.91	-	7.80
PRD	1.00	1.00	1.00	-	1.01

COLUMBIA County 2013 Ratio Study

Frequency

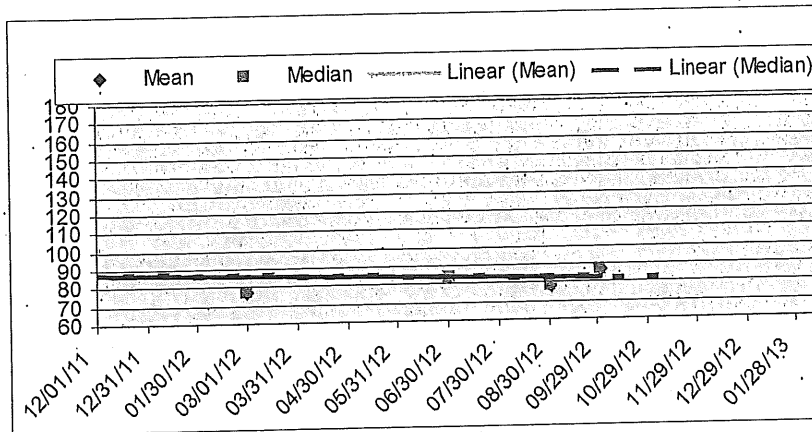


Number Of Sales

8

Median	86	Wtd Mean	86
AD	5.75	GeoMean	86
COD	6.69	PRD	1.00
Mean	86	95% Confidence	5.44
SD	7.86		
COV	9.13		

Central Tendencies



Month	Mean	Median	Sales
Feb-11	84	84	1
Jul-11	100	100	1
Sep-11	95	95	1
Mar-12	77	77	1
Jul-12	84	84	1
Sep-12	78	78	1
Oct-12	87	87	2

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	73	000	101	153	30	3N2W01-CC-00107	2012	2071	0.19	56,010	135,310	191,320	250,000	Mar-12	1	77
02	71	000	101	143	33	3N2W12-AD-02423	2012	7468	0.18	51,410	102,160	153,570	196,000	Sep-12	2	78
02	70	000	101	141	32	3N2W11-AA-00109	2011	1399	0.19	54,480	82,400	136,880	162,500	Feb-11	3	84
02	70	000	101	144	33	3N2W11-AA-01019	2012	5488	0.46	72,530	127,390	199,920	237,000	Jul-12	4	84
02	70	000	101	142	30	3N2W02-DD-00620	2012	7870	0.20	58,010	103,270	161,280	184,500	Oct-12	5	87
02	70	000	101	142	30	3N2W11-AA-01800	2012	8104	0.18	62,680	109,680	172,360	198,250	Oct-12	6	87
02	71	000	101	141	31	3N2W12-AD-02408	2011	7946	0.15	49,830	93,110	142,940	150,000	Sep-11	7	95
02	70	000	101	143	32	3N2W02-DD-00625	2011	5891	0.18	57,220	112,480	169,700	170,000	Jul-11	8	100

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
101	02	74	000		1	Scappoose	101	02	88	000		2	Scappoose
101	02	84	000		4	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	7			
Population - Number of Accounts	147			
Sales as a percentage of the Population	4.76 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	8,646,570	33.13 %	8,819,501	33.13 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	17,452,910	66.87 %	17,801,968	66.87 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	98			
RMV Adjustment	100			
Before Ratio	98			
Overall Adjustment Factor	102			
Land Adjustment Factor	102			
OSD Adjustment Factor	100			
Residential Adjustment Factor	102			
Farm Improvement Factor				
After Ratio	100			
Selected Ratio	98	2013	Adjustment	102

Explanation

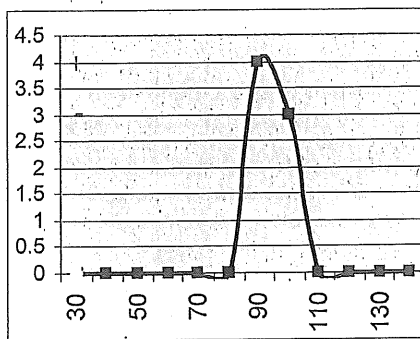
The Indicators of Central Tendency for this grouping of Study Areas are similar with the Median at 99, and the Mean, Weighted Mean and GeoMean identical with Ratios of 100. Adjusting the selected Ratio of 100 by the Time Adjustment conclusion of 98 returns an Adjusted Ratio of 98 and a Calculated Overall Adjustment of 102.

Performance History

	2013	2012	2011	2010	2009
COD	3.46	-	10.91	-	7.80
PRD	1.00	-	1.00	-	1.01

COLUMBIA County 2013 Ratio Study

Frequency

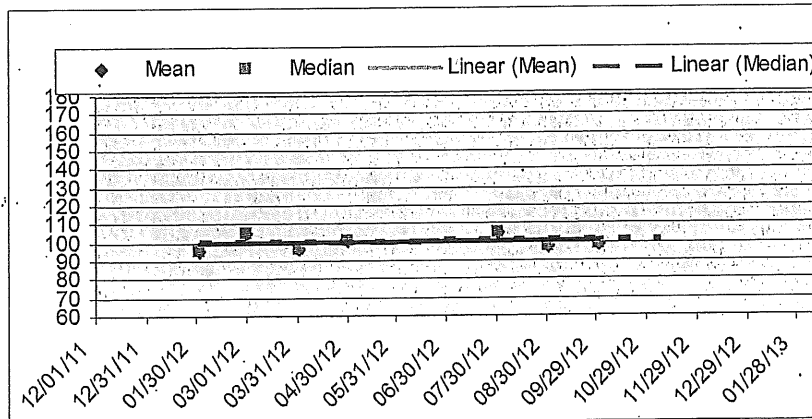


Number Of Sales

7

Median	99	Wtd Mean	100
AD	3.43	GeoMean	100
COD	3.46	PRD	1.00
Mean	100	95% Confidence	3.05
SD	4.12		
COV	4.12		

Central Tendencies



Month	Mean	Median	Sales
Feb-12	95	95	1
Mar-12	105	105	1
Apr-12	96	96	1
May-12	101	101	1
Aug-12	105	105	1
Sep-12	97	97	1
Oct-12	99	99	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	84	000	101	141	30	3N2W13-AC-00900	2012	1443	0.14	54,030	102,840	156,870	165,000	Feb-12	1	95
02	74	000	101	143	33	3N2W12-DC-00129	2012	2681	0.14	62,940	124,780	187,720	194,900	Apr-12	2	96
02	84	000	101	141	30	3N2W13-AD-08700	2012	7570	0.15	54,520	107,110	161,630	167,000	Sep-12	3	97
02	84	000	101	143	30	3N2W13-AC-03328	2012	7969	0.14	54,030	108,760	162,790	165,000	Oct-12	4	99
02	88	000	101	141	33	3N1W07-CC-02000	2012	3853	0.19	66,480	143,140	209,620	207,000	May-12	5	101
02	84	000	101	143	33	3N2W13-AC-03310	2012	2313	0.18	54,390	108,760	163,150	155,000	Mar-12	6	105
02	88	000	101	141	33	3N1W07-CC-02900	2012	6459	0.17	65,560	128,080	193,640	185,000	Aug-12	7	105

COLUMBIA County 2013 Ratio Study

RMV	App	# of			
Class	MA SA NH	Year	Sales	Location	
100	02 79 000		0	Scappoose	

RMV	App	# of			
Class	MA SA NH	Year	Sales	Location	
100	02 80 000		0	Scappoose	

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	1			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdw	Post Trend Values	Post Trend Brkdw
Prior Year Population Values				
Land RMV	67,990	100.00 %	67,990	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

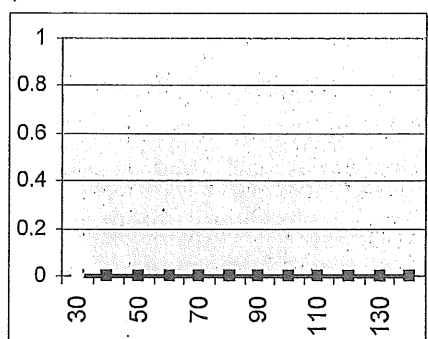
There were no usable sales in this grouping of Unimproved Properties for the study period. Therefore the conclusion from the Improved properties in this grouping, 100 adjusted Ratio and a calculated adjustment of 100, is applied

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	15.09
PRD	-	-	-	-	1.04

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales

0

30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

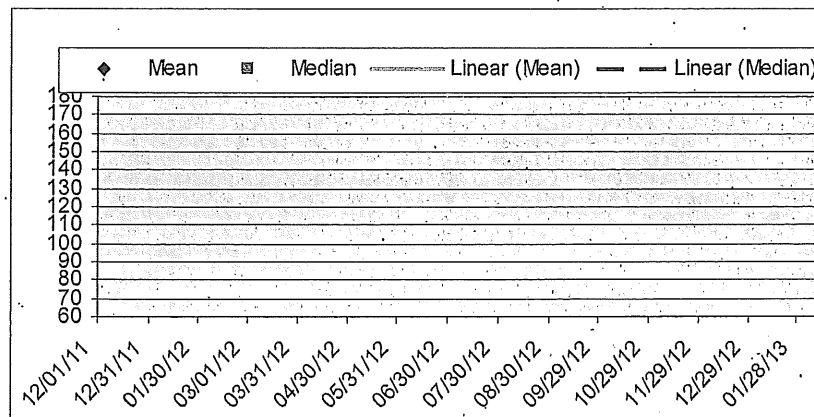
PRD

95%

Confidence

Central Tendencies

Month Mean Median Sales



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	79	000		4	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	80	000		1	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	5			
Population - Number of Accounts	73			
Sales as a percentage of the Population	6.85 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	5,142,640	21.71 %	5,142,640	21.71 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	18,542,300	78.29 %	18,542,300	78.29 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

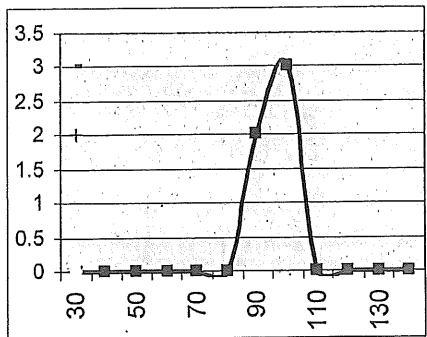
The indicators of Central Tendency ranged from a low of 101, the Weighted Mean, to a high of 104 as indicated by the Median. The Mean and GeoMean had identical Ratios of 102, and this Ratio has been selected. This Ratio is adjusted by the conclusion from the Time Adjustment study and the adjusted Ratio is 100, with the overall calculated adjustment of 100. This adjustment is applied to all components of the Improved Properties in this grouping of Study Areas.

Performance History

	2013	2012	2011	2010	2009
COD	4.04	10.63	4.85	6.25	7.80
PRD	1.01	1.01	1.00	1.00	1.01

COLUMBIA County 2013 Ratio Study

Frequency



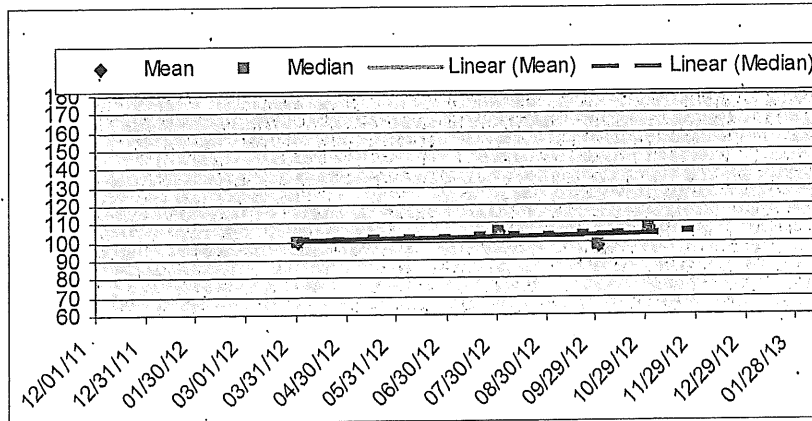
Number Of Sales

5

30	0
40	0
50	0
60	0
70	0
80	0
90	2
100	3
110	0
120	0
130	0
140	0

Median	104	Wtd Mean	101
AD	4.20	GeoMean	102
COD	4.04	PRD	1.01
Mean	102	95% Confidence	4.45
SD	5.07		
COV	4.97		

Central Tendencies



Month	Mean	Median	Sales
Apr-12	100	100	2
Aug-12	105	105	1
Oct-12	98	98	1
Nov-12	107	107	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	79	000	101	153	33	3N2W11-DA-02613	2012	2676	0.18	56,590	234,050	290,640	305,000	Apr-12	1	95
02	79	000	101	161	30	3N2W11-DD-00323	2012	8100	0.17	56,220	329,330	385,550	395,000	Oct-12	2	98
02	80	000	101	154	30	3N2W12-BC-00233	2012	2365	0.18	71,650	226,090	297,740	285,000	Apr-12	3	104
02	79	000	101	152	30	3N2W11-DA-02612	2012	6501	0.31	55,710	250,680	306,390	292,000	Aug-12	4	105
02	79	000	101	153	33	3N2W11-DA-02405	2012	8693	0.26	58,340	205,500	263,840	246,000	Nov-12	5	107

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	83	000		4	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	4			
Population - Number of Accounts	77			
Sales as a percentage of the Population	5.19 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	3,853,920	29.94 %	4,277,851	29.94 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	9,020,120	70.06 %	10,012,333	70.06 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	90			
RMV Adjustment	100			
Before Ratio	90			
Overall Adjustment Factor	111			
Land Adjustment Factor	111			
OSD Adjustment Factor	100			
Residential Adjustment Factor	111			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	90	2013	Adjustment	111

Explanation

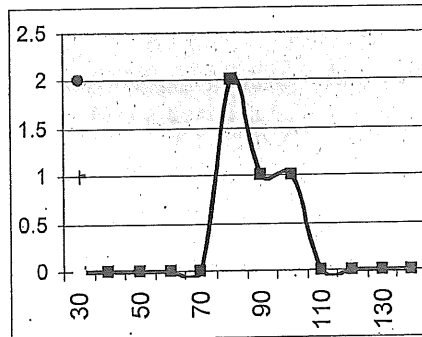
There were two usable sales of Improved Properties in this Study Area during the 2013 Ratio Year, with all indicators of Central Tendency returning Ratios of 90. During the analysis process, an additional years sales (from the 2012 Ratio Study) were added and this analysis demonstrated a slight change in the Ratio Indications returning a Median of 90, a Mean of 93. The Weighted Mean and GeoMean had identical Ratios of 92. It has been determined that the analysis using the additional years sales would be more reliable, with the Ratio of 92 having the most support. Adjusting this selected Ratio by the Time Adjustment, a Ratio of 90 with the resulting Calculated Overall Adjustment of 111 is considered reasonable and is applied to this Study Area.

Performance History

	2013	2012	2011	2010	2009
COD	6.39	6.21	10.91	9.36	7.80
PRD	1.01	1.01	1.00	1.02	1.01

COLUMBIA County 2013 Ratio Study

Frequency



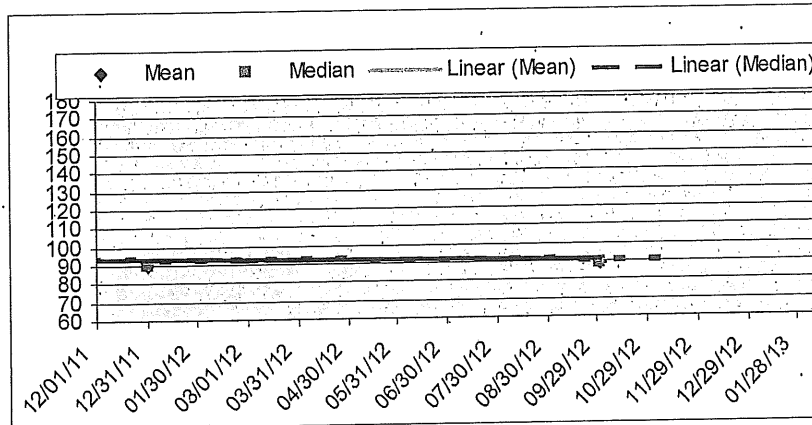
Number Of Sales

4

30	0
40	0
50	0
60	0
70	0
80	2
90	1
100	1
110	0
120	0
130	0
140	0

Median	90	Wtd Mean	92
AD	5.75	GeoMean	92
COD	6.39	PRD	1.01
Mean	93	95% Confidence	7.40
SD	7.55		
COV	8.12		

Central Tendencies



Month	Mean	Median	Sales
Jul-11	88	88	1
Nov-11	104	104	1
Jan-12	90	90	1
Oct-12	89	89	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	83	000	101	143	32	3N2W13-BD-08200	2011	5571	0.16	49,640	99,060	148,700	169,900	Jul-11	1	88
02	83	000	101	143	30	3N2W13-BC-01800	2012	8032	0.16	49,640	110,200	159,840	180,000	Oct-12	2	89
02	83	000	101	143	30	3N2W13-BD-07600	2012	517	0.23	52,000	110,500	162,500	180,000	Jan-12	3	90
02	83	000	101	143	31	3N2W13-BD-03605	2012	418	0.14	49,880	123,680	173,560	167,000	Nov-11	4	104

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	21	000		0	Scappoose	400	02	45	000		0	Sauvies Island
400	02	22	000		0	Scappoose	400	02	56	000		0	Scappoose
400	02	23	000		0	Scappoose	400	02	62	000		0	Scappoose
400	02	25	000		0	Scappoose	400	02	63	000		0	Scappoose
400	02	41	000		0	Sauvies Island	400	02	64	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	418			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	74,497,890	100.00 %	75,242,869	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	101			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	99	2013	Adjustment	101
Explanation				

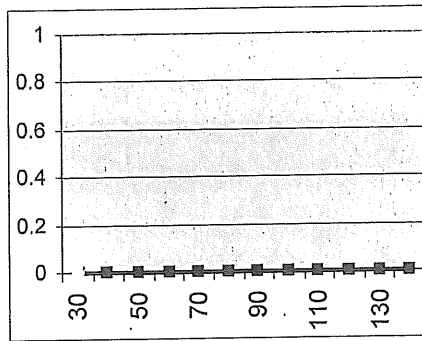
There were no usable sales of RMV Property Class 400 during the study period. Therefore, the conclusion from the RMV Property Class 401 and 409 analysis (99 Adjusted Ratio, an Overall Calculated Adjustment of 101) is applied here.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	0.00
PRD	-	-	-	-	1.00

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales

0

30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	0
120	0
130	0
140	0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

SD

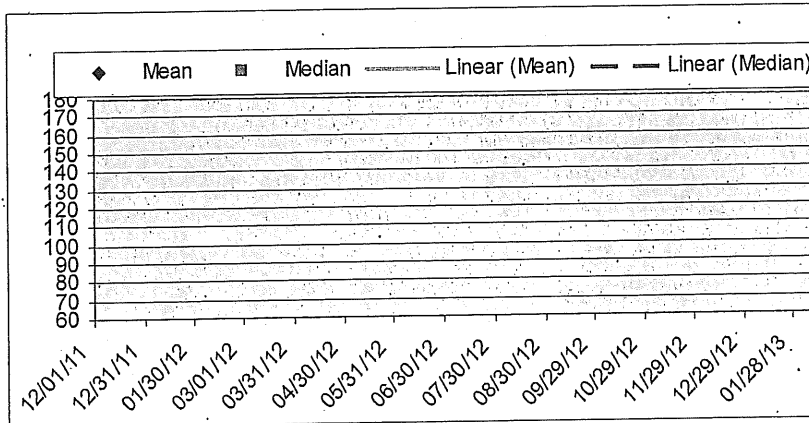
95%

COV

Confidence

Central Tendencies

Month Mean Median Sales



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	00	000		0	Scappoose	409	02	41	000		0	Sauvies Island
401	02	21	000		7	Scappoose	401	02	45	000		0	Sauvies Island
409	02	21	000		0	Scappoose	409	02	45	000		0	Sauvies Island
102	02	21	000		0	Scappoose	401	02	56	000		0	Scappoose
401	02	22	000		2	Scappoose	401	02	57	000		0	Scappoose
409	02	22	000		1	Scappoose	401	02	61	000		0	Scappoose
401	02	23	000		0	Scappoose	401	02	62	000		0	Scappoose
409	02	23	000		0	Scappoose	409	02	62	000		0	Scappoose
401	02	25	000		0	Scappoose	401	02	63	000		1	Scappoose
409	02	25	000		0	Scappoose	401	02	64	000		0	Scappoose
401	02	29	000		0	Scappoose	409	02	64	000		0	Scappoose
401	02	41	000		0	Sauvies Island							

Adjustment Calculation Summary

Sample - Number of Sales	11			
Population - Number of Accounts	1,948			
Sales as a percentage of the Population	0.56 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	242,324,780	48.31 %	244,748,028	48.31 %
OSD RMV	954,140	0.19 %	963,681	0.19 %
Residential Improvement RMV	236,738,950	47.19 %	239,106,340	47.19 %
Farm Improvement RMV	21,605,930	4.31 %	21,821,989	4.31 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	101			
OSD Adjustment Factor	101			
Residential Adjustment Factor	101			
Farm Improvement Factor	101			
After Ratio	100			
Selected Ratio	99	2013	Adjustment	101

Explanation

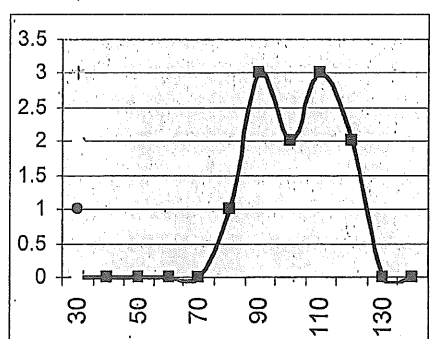
All of the Improved Properties in the rural Scappoose Area are combined in this grouping. The Ratios returned by the Median, Mean and GeoMean were identical at 106, and the Weighted Mean had a Ratio Indication of 103. The Ratio of 106 has been selected and after adjustment by the conclusion from the Time Study indicates a Ratio of 99, and from this adjusted Ratio an Overall Adjustment of 101 is indicated. This Adjustment is applied to all components of the Improved Properties in this grouping.

Performance History

	2013	2012	2011	2010	2009
COD	10.38	10.71	-	-	13.14
PRD	1.03	1.02	-	-	1.00

COLUMBIA County 2013 Ratio Study

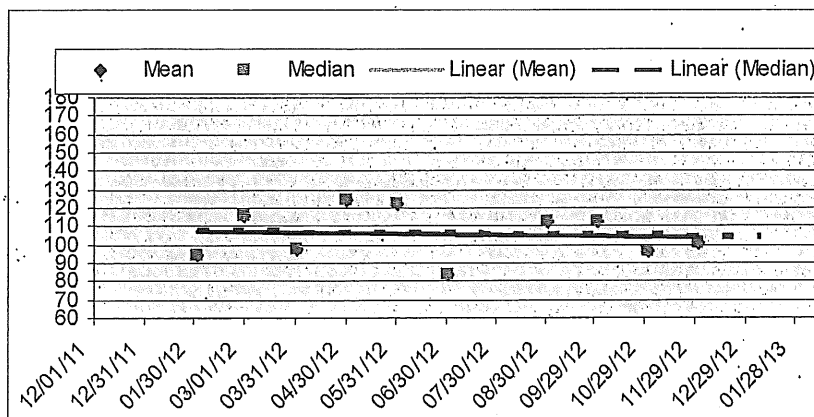
Frequency



Number Of Sales 11

Median	106	Wtd Mean	103
AD	11.00	GeoMean	106
COD	10.38	PRD	1.03
Mean	106	95% Confidence	7.75
SD	13.11		
COV	12.37		

Central Tendencies



Month	Mean	Median	Sales
Feb-12	94	94	1
Mar-12	116	116	1
Apr-12	97	97	1
May-12	124	124	1
Jun-12	122	122	1
Jul-12	84	84	1
Sep-12	112	113	2
Oct-12	112	112	1
Nov-12	96	96	1
Dec-12	101	101	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	22	000	401	142	33	4N2W16-00-01100	2012	5622	6.95	106,760	121,000	227,760	270,000	Jul-12	1	84
02	21	000	401	152	28	4N2W26-00-01900	2012	1266	2.50	117,590	190,070	307,660	328,300	Feb-12	2	94
02	21	000	401	151	30	4N2W26-00-00900	2012	8863	4.70	144,340	232,920	377,260	392,000	Nov-12	3	96
02	21	000	401	164	28	3N2W02-00-02304	2012	2774	4.87	173,710	505,540	679,250	700,000	Apr-12	4	97
02	21	000	401	141	30	3N2W24-AC-02100	2012	9818	2.00	115,720	131,510	247,230	244,000	Dec-12	5	101
02	63	000	401	141	33	3N2W24-BD-08700	2012	7077	0.36	73,400	164,940	238,340	225,000	Sep-12	6	106
02	21	000	401	143	30	3N2W02-00-03801	2012	7919	1.80	107,010	127,790	234,800	210,000	Oct-12	7	112
02	22	000	409	452	30	4N2W16-00-01703	2012	1740	1.49	76,490	76,170	152,660	131,500	Mar-12	8	116
02	22	000	401		28	4N2W17-D0-00201	2012	7979	5.25	77,480	0	77,480	64,900	Sep-12	9	119
02	21	000	401	133	33	4N2W34-AD-00900	2012	3909	14.23	184,090	110,110	294,200	241,000	Jun-12	10	122
02	21	000	401	131	30	3N2W01-A0-00203	2012	3434	5.43	148,470	130,260	278,730	225,000	May-12	11	124

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
800	02	63	000		0	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
800	02	64	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	149			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	216,700	100.00 %	216,700	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

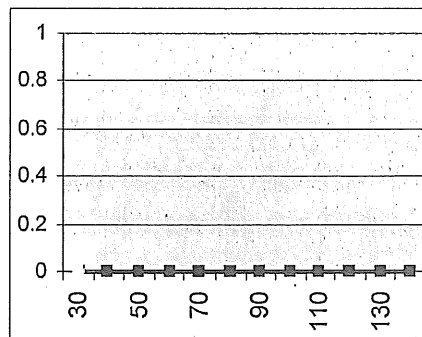
There were no usable sales of properties with 800 Real Market Class in these Study Areas during the Sales Year. These properties are generally too small for development on their own, and are valued at minimal value. Development is only possible on these properties when combined or irrevocably bound, at which time the Property Class designation is changed to 4XX. It is recommended that no adjustment be made to these properties at this time.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales

0

30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	0
120	0
130	0
140	0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

95%

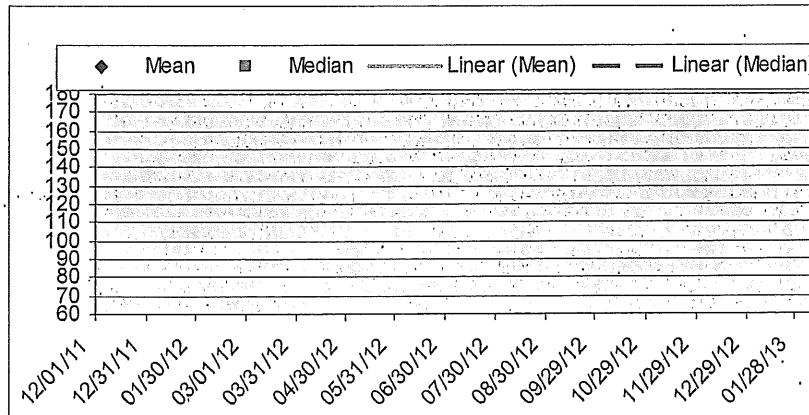
SD

Confidence

COV

Central Tendencies

Month Mean Median Sales



AP	SA	NH	PRP	BLD	RJ	MAP NO.	BOOK	PAGE	ACRES	RMV	RMV	TOTAL	SALES	SALE	SALE
AR			CLS	CLS	CD					LAND	IMP	VALUE	PRICE	DATE	RATIO
AP	SA	NH	PR	BLD	RJ	ACCOUNT NO	BOOK	PAGE	AC	RMV	RMV	TOTAL	SALES	SALE	SALE
AR			P	CLS	CD					LAND	IMP	VALUE	PRICE	DATE	RATIO
			CLS												NO

2013 RATIO STUDY

MAINTENANCE AREA 3

RESIDENTIAL

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location
100	03	00	000		0	Vernonia

RMV Class	MA	SA	NH	Year	App # of Sales	Location
100	03	38	000		0	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED			
Population - Number of Accounts	169				
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdown	Post Trend Values	Post Trend Brkdown	
Prior Year Population Values					
Land RMV	7,805,610	100.00 %	6,478,656	100.00 %	
OSD RMV	0	0.00 %	0	0.00 %	
Residential Improvement RMV	0	0.00 %	0	0.00 %	
Farm Improvement RMV	0	0.00 %	0	0.00 %	
SelectedRatioFromSales	121				
RMV Adjustment	100				
Before Ratio	121				
Overall Adjustment Factor	83				
Land Adjustment Factor	83				
OSD Adjustment Factor	100				
Residential Adjustment Factor	100				
Farm Improvement Factor	100				
After Ratio	100				
Selected Ratio	121	2013	Adjustment	83	

Explanation

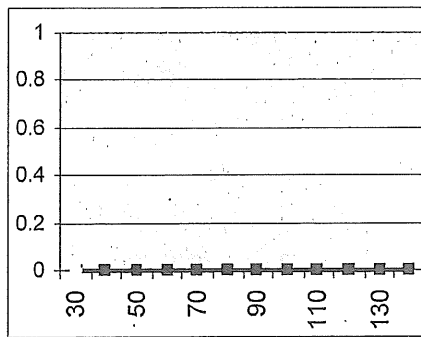
There were no usable sales of RMV Property Class 100 during the study period within this grouping of Study Areas. Therefore, the conclusion from the RMV Property Class 101 and 109 analysis (121 Adjusted Ratio, an Overall Calculated Adjustment of 83) is applied here.

Performance History

	2013	2012	2011	2010	2009
COD		0.00	4.58	-	6.91
PRD		1.00	1.01	-	1.01

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales 0

30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

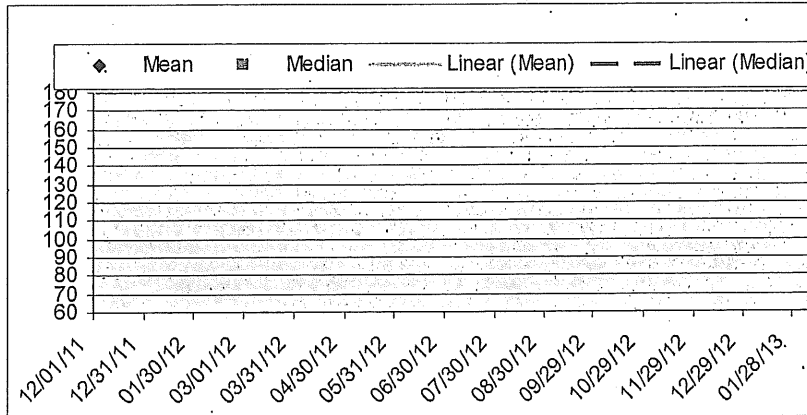
95%
Confidence

SD

COV

Central Tendencies

Month Mean Median Sales



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	03	00	000		6	Vernonia	101	03	39	000		0	Vernonia
109	03	00	000		0	Vernonia	101	03	40	000		0	Vernonia
109	03	38	000		1	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	7	RECALCULATED		
Population - Number of Accounts	655			
Sales as a percentage of the Population	1.07 %	Pre-Trend Brkdown	Post Trend Values	Post Trend Brkdown
Prior Year Population Values				
Land RMV	23,450,760	28.19 %	19,464,131	28.19 %
OSD RMV	16,221,000	19.50 %	13,463,430	19.50 %
Residential Improvement RMV	42,256,150	50.80 %	35,072,605	50.80 %
Farm Improvement RMV	1,255,970	1.51 %	1,042,455	1.51 %
SelectedRatioFromSales	121			
RMV Adjustment	100			
Before Ratio	121			
Overall Adjustment Factor	83			
Land Adjustment Factor	83			
OSD Adjustment Factor	83			
Residential Adjustment Factor	83			
Farm Improvement Factor	83			
After Ratio	100			
Selected Ratio	121	2013	Adjustment	83

Explanation

As in recent past years, Property Values within the City of Vernonia have continued to reflect the after effects of the of the flooding which occurred in 2007. This somewhat modified during the current sales year by increased participation in the market of investors and home buyers.

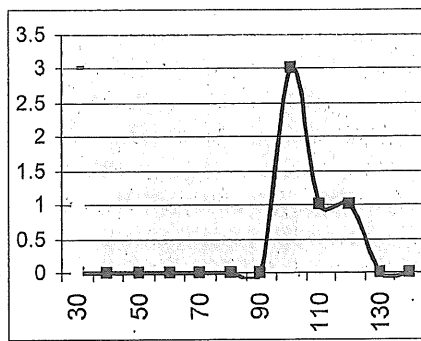
The GeoMean with a Ratio Indication of 123 has been selected. Adjusting this Ratio by the conclusion of the Time Trend results in and adjusted Ratio of 121, and a calculated adjustment of 83.

Performance History

	2013	2012	2011	2010	2009
COD	17.73	15.51	14.69	16.21	11.58
PRD	1.06	1.04	1.01	1.04	1.00

COLUMBIA County 2013 Ratio Study

Frequency



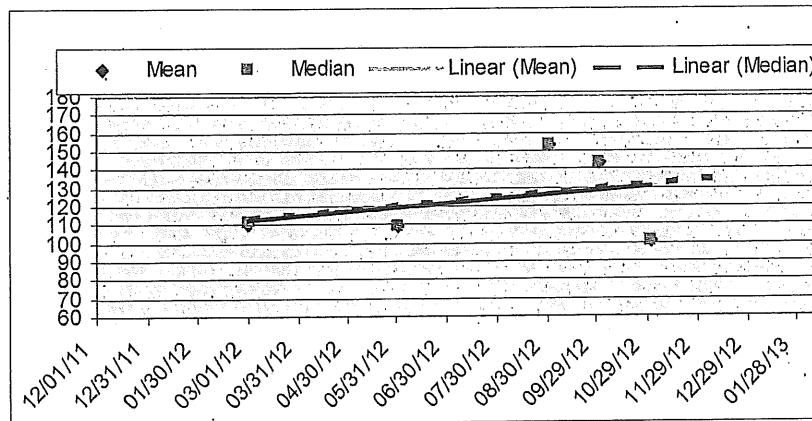
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	3
110	1
120	1
130	0
140	0

Median	112	Wtd Mean	118
AD	19.86	GeoMean	123
COD	17.73	PRD	1.06
Mean	125		
SD	24.65	95% Confidence	18.26
COV	19.72		

Number Of Sales

7

Central Tendencies



Month	Mean	Median	Sales
Mar-12	110	111	2
Jun-12	109	109	1
Sep-12	153	153	1
Oct-12	144	144	2
Nov-12	101	101	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
03	00	000	101	141	30	4N4W05-AD-01800	2012	8695	0.17	56,550	115,410	171,960	170,000	Nov-12	1	101
03	00	000	101	134	28	4N4W04-AC-02200	2012	1815	0.69	67,010	112,450	179,460	165,000	Mar-12	2	109
03	00	000	101	141	33	4N4W05-DA-03404	2012	4198	0.13	52,590	87,520	140,110	128,000	Jun-12	3	109
03	00	000	101	131	30	4N4W04-DA-01500	2012	2236	0.13	53,860	47,280	101,140	90,000	Mar-12	4	112
03	00	000	101	121	33	4N4W05-AD-00700	2012	7823	0.11	52,400	43,320	95,720	78,000	Oct-12	5	123
03	38	000	109	462	28	4N4W05-AA-00308	2012	7704	0.42	72,630	76,580	149,210	97,500	Sep-12	6	153
03	00	000	101	121	28	4N4W05-AD-01700	2012	8426	0.11	52,420	30,220	82,640	50,000	Oct-12	7	165

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	03	03	000		0	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	83			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	2,332,710	100.00 %	1,026,392	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	228			
RMV Adjustment	100			
Before Ratio	228			
Overall Adjustment Factor	44			
Land Adjustment Factor	44			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	228	2013	Adjustment	44

Explanation

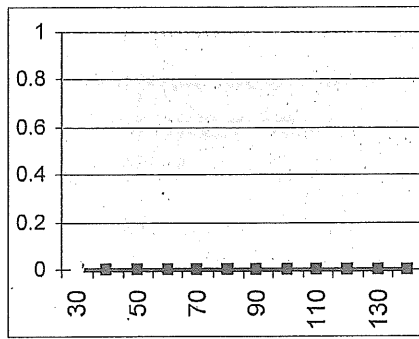
There were no usable sales of Unimproved Properties in this Study Area during the Study Period, therefore the conclusion from the Improved Properties (Ratio Indication of 228 and a calculated Overall Adjustment of 44) is considered the best data available and is applied here.

Performance History

	2013	2012	2011	2010	2009
COD		0.00	-	-	-
PRD		1.00	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales

0

30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

95%

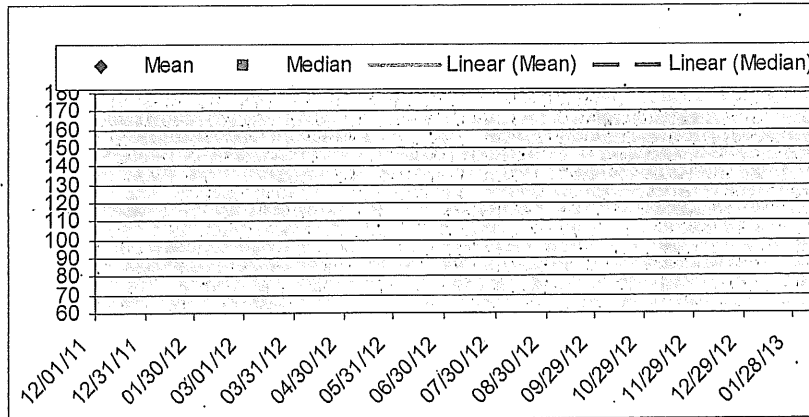
SD

Confidence

COV

Central Tendencies

Month Mean Median Sales



AP AR	SA AR	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA AR	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2013 Ratio Study

RMV	App	# of				RMV	App	# of				Location
Class	MA	SA	NH	Year	Sales	Class	MA	SA	NH	Year	Sales	Location
101	03	03	000		5	109	03	03	000		3	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	8	RECALCULATED			
Population - Number of Accounts	295				
Sales as a percentage of the Population	2.71 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn	
Prior Year Population Values					
Land RMV	9,171,850	24.89 %	4,035,614	24.89 %	
OSD RMV	6,423,370	17.43 %	2,826,283	17.43 %	
Residential Improvement RMV	20,496,780	55.63 %	9,018,583	55.63 %	
Farm Improvement RMV	754,280	2.05 %	331,883	2.05 %	
Selected Ratio From Sales	228				
RMV Adjustment	100				
Before Ratio	228				
Overall Adjustment Factor	44				
Land Adjustment Factor	44				
OSD Adjustment Factor	44				
Residential Adjustment Factor	44				
Farm Improvement Factor	44				
After Ratio	100				
Selected Ratio	228	2013	Adjustment	44	

Explanation

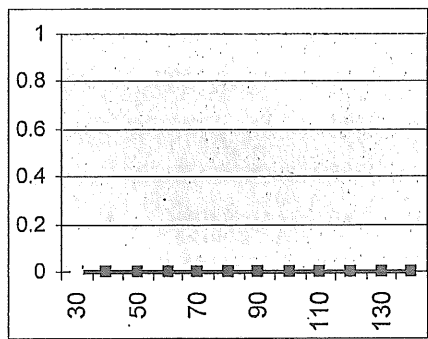
This Study Area consists of properties within the Flood Zone of the City of Vernonia. Properties in this Study Area were severely impacted by the floods occurring in the 1996 and in 2007. The Market Values of these properties are influenced by several factors including the stigma associated with the flooding, restrictions implemented by the local building codes for properties within the Flood Zone and Flood Insurance costs. Because of these factors property values in this Study Area have dramatically been reduced, with a wide variation in sales prices. It is therefore expected that the Indicators of Central Tendency would be as varied as demonstrated, with the Median at 282, the Mean 301, the Wtd Mean indicating 228 and the GeoMean at 282. As sales prices in this Study Area continue to demonstrate instability, it is recommended that any adjustment be approached in a conservative manner and that this Study Area continue to be monitored separate from the general residential properties in the City of Vernonia. Based on the data it is recommended that the Wtd Mean with a Ratio Indication of 228 be selected and a calculated adjustment of 44 be applied in this Study Area. The conclusion from the Time Study was deemed to be not appropriate for application in this Study Area based on this Study Areas unique market, and is not applied.

Performance History

	2013	2012	2011	2010	2009
COD	31.21	15.51	-	-	-
PRD	1.32	1.04	-	-	-

COLUMBIA County 2013 Ratio Study

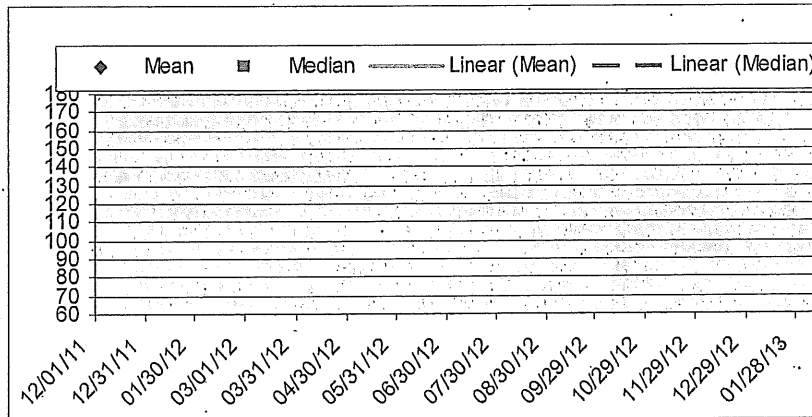
Frequency



Number Of Sales 8

Median	282	Wtd Mean	228
AD	88.00	GeoMean	282
COD	31.21	PRD	1.32
Mean	301		
SD	110.01	95% Confidence	76.23
COV	36.55		

Central Tendencies



Month	Mean	Median	Sales
Feb-12	205	205	2
Apr-12	413	413	1
Sep-12	461	461	1
Oct-12	230	230	2
Nov-12	380	380	1
Dec-12	282	282	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
03	03	000	101	132	30	5N4W34-CC-00700	2012	1896	1.41	71,460	137,900	209,360	139,000	Feb-12	1	151
03	03	000	101	131	28	5N4W34-CC-00200	2012	8350	2.00	135,560	117,370	252,930	143,000	Oct-12	2	177
03	03	000	101	136	30	4N4W03-BB-04000	2012	1572	0.18	57,880	74,110	131,990	51,000	Feb-12	3	259
03	03	000	101	135	30	4N4W04-BD-06400	2012	9683	0.11	52,420	57,440	109,860	39,000	Dec-12	4	282
03	03	000	109	452	28	4N4W04-BD-12300	2012	8234	0.11	52,420	60,590	113,010	40,000	Oct-12	5	283
03	03	000	109	462	28	4N4W04-BD-12200	2012	8849	0.11	52,420	57,860	110,280	29,000	Nov-12	6	380
03	03	000	109	462	30	4N4W04-BC-01002	2012	2691	0.11	53,170	58,420	111,590	27,000	Apr-12	7	413
03	03	000	101	131	28	4N4W04-CB-03200	2012	7428	0.14	55,070	4,060	59,130	12,833	Sep-12	8	461

COLUMBIA County 2013 Ratio Study

RMV	App	# of			
Class	MA	SA	NH	Year	Sales
400	03	31	000		0

Location
Vernonia

RMV	App	# of			
Class	MA	SA	NH	Year	Sales
400	03	00	000		0

Location
Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED			
Population - Number of Accounts	586				
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn	
Prior Year Population Values					
Land RMV	100,373,580	100.00 %	100,373,580	100.00 %	
OSD RMV	0	0.00 %	0	0.00 %	
Residential Improvement RMV	0	0.00 %	0	0.00 %	
Farm Improvement RMV	0	0.00 %	0	0.00 %	
SelectedRatioFromSales	100				
RMV Adjustment	100				
Before Ratio	100				
Overall Adjustment Factor	100				
Land Adjustment Factor	100				
OSD Adjustment Factor	100				
Residential Adjustment Factor	100				
Farm Improvement Factor	100				
After Ratio	100				
Selected Ratio	100	2013	Adjustment	100	

Explanation

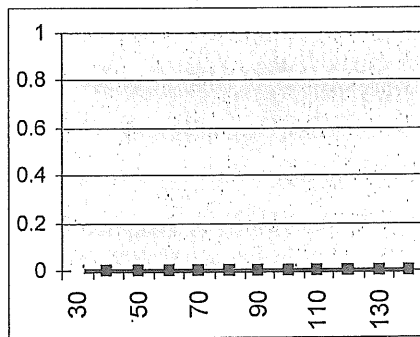
There were no usable sales found during the Study Period for unimproved properties in this Study Area, therefore the conclusion from the Improved Property analysis for this Study Area (100 Ratio, 100 Overall Adjustment) is applied.

Performance History

	2013	2012	2011	2010	2009
COD		52.50	0.00	0.00	0.00
PRD		1.43	1.00	1.00	1.00

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales

0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

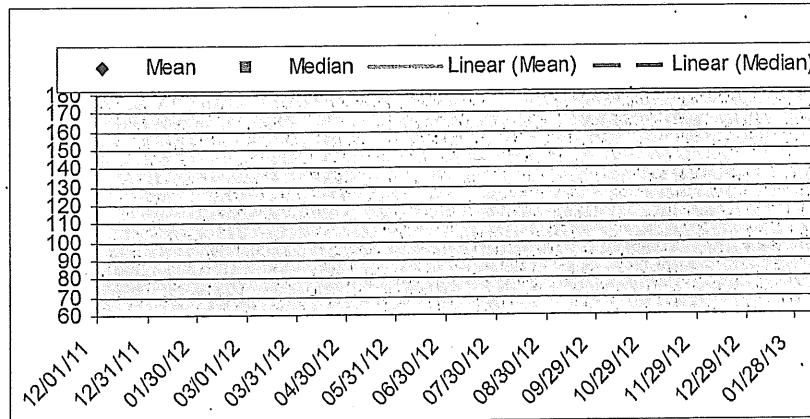
SD

95%
Confidence

COV

Central Tendencies

Month Mean Median Sales



AP	SA	NH	PRP	BLD	RJ	MAP NO.	BOOK	PAGE	ACRES	RMV	RMV	TOTAL	SALES	SALE	SALE	RATIO
AR			CLS	CLS	CD					LAND	IMP	VALUE	PRICE	DATE		NO
AP	SA	NH	PR	BLD	RJ	ACCOUNT NO	BOOK	PAGE	AC	RMV	RMV	TOTAL	SALES	SALE	SALE	RATIO
AR			P	CLS	CD					LAND	IMP	VALUE	PRICE	DATE		NO
			CLS													

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	03	31	000		14	Vernonia
409	03	31	000		2	Vernonia

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	03	40	000		0	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	16	RECALCULATED		
Population - Number of Accounts	875			
Sales as a percentage of the Population	1.83 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	64,273,450	35.58 %	64,273,450	35.58 %
OSD RMV	33,126,420	18.34 %	33,126,420	18.34 %
Residential Improvement RMV	67,679,670	37.46 %	67,679,670	37.46 %
Farm Improvement RMV	15,589,490	8.63 %	15,589,490	8.63 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

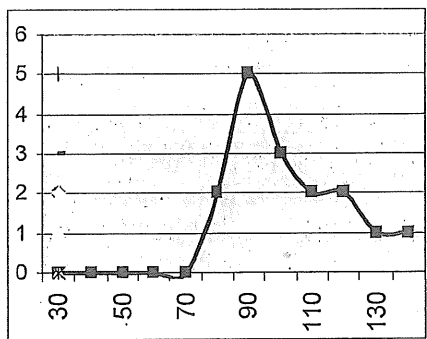
The Indicators of Central Tendency for this grouping of properties return Ratios ranging from a low of the Median (105) to the high of the Mean (108), with the WtdMean and GeoMean between with identical Ratio Indications of 107. It is recommended that the Ratio Indication provided by the WtdMean and the GeoMean be selected. Adjusting this Ratio by the conclusion from the Time Study (93) results in a Ratio of 100, with the Calculated Overall Adjustment also of 100.

Performance History

	2013	2012	2011	2010	2009
COD	13.10	17.53	10.19	12.77	17.31
PRD	1.01	1.06	1.00	0.99	0.98

COLUMBIA County 2013 Ratio Study

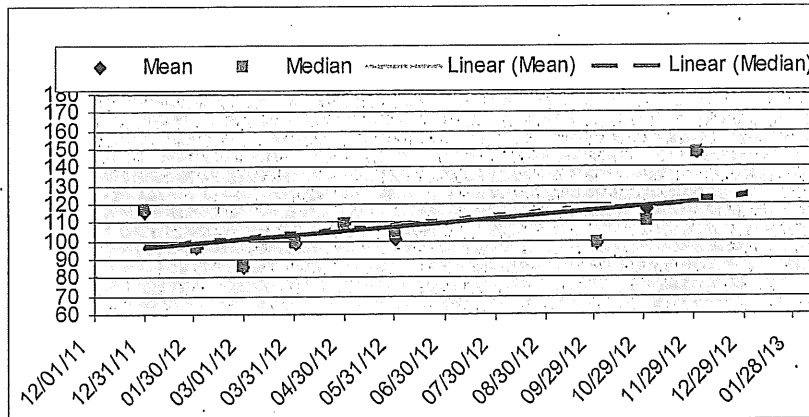
Frequency



Number Of Sales 16

Median	105	Wtd Mean	107
AD	13.75	GeoMean	107
COD	13.10	PRD	1.01
Mean	108	95% Confidence	8.45
SD	17.25		
COV	15.98		

Central Tendencies



Month	Mean	Median	Sales
Jan-12	116	117	2
Feb-12	96	96	1
Mar-12	86	86	1
Apr-12	99	99	1
May-12	109	109	1
Jun-12	101	104	5
Oct-12	99	99	1
Nov-12	117	110	3
Dec-12	148	148	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
03	31	000	401	143	30	5N4W23-D0-01200	2012	1935	8.44	116,720	126,930	243,650	282,000	Mar-12	1	86
03	31	000	401	143	30	4N4W19-00-01301	2012	4221	17.44	144,280	156,250	300,530	349,000	Jun-12	2	86
03	31	000	401	143	28	6N4W29-00-01901	2012	4431	1.13	89,180	115,220	204,400	226,000	Jun-12	3	90
03	31	000	401	142	33	5N4W33-00-00700	2012	9974	44.60	190,640	252,380	443,020	465,000	Nov-12	4	95
03	31	000	409	463	30	6N4W28-00-01104	2012	1456	4.45	120,060	121,060	241,120	250,000	Feb-12	5	96
03	31	000	401	134	30	5N4W33-00-01200	2012	2544	27.23	167,990	119,300	287,290	290,000	Apr-12	6	99
03	31	000	401	135	30	4N4W05-DD-00900	2012	8332	0.96	65,540	3,970	69,510	70,000	Oct-12	7	99
03	31	000	401	156	33	5N4W32-00-00300	2012	4493	23.06	166,660	353,570	520,230	500,000	Jun-12	8	104
03	31	000	401	143	30	5N4W23-D0-00200	2012	4248	5.75	116,910	126,570	243,480	230,500	Jun-12	9	106
03	31	000	401	152	30	4N4W04-AC-00100	2012	3821	2.37	89,940	209,920	299,860	275,500	May-12	10	109
03	31	000	401	156	30	5N5W34-00-00102	2012	563	11.43	145,960	331,220	477,180	415,000	Jan-12	11	115
03	31	000	401	143	30	5N4W27-00-00700	2012	478	4.98	114,580	168,910	283,490	240,000	Jan-12	12	118
03	31	000	401	131	30	4N4W04-AB-01700	2012	4837	5.66	116,640	147,960	264,600	220,000	Jun-12	13	120
03	31	000	401	300	30	6N5W30-00-00702	2012	8770	37.60	156,040	240,930	396,970	321,000	Nov-12	14	124
03	31	000	401	141	28	6N5W14-00-00300	2012	8871	4.70	133,610	187,470	321,080	245,000	Nov-12	15	131
03	31	000	409	472	30	6N5W14-00-00500	2012	9487	15.58	139,980	105,960	245,940	166,000	Dec-12	16	148

COLUMBIA County 2013 Ratio Study

RMV	Class	MA	SA	NH	App Year	# of Sales	Location
401	03	36	000			0	Vernonia

RMV	Class	MA	SA	NH	App Year	# of Sales	Location
400	03	36	000			1	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED		
Population - Number of Accounts	86			
Sales as a percentage of the Population	1.16 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	2,623,920	26.49 %	2,623,920	26.49 %
OSD RMV	1,870,000	18.88 %	1,870,000	18.88 %
Residential Improvement RMV	5,363,000	54.14 %	5,363,000	54.14 %
Farm Improvement RMV	48,220	0.49 %	48,220	0.49 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

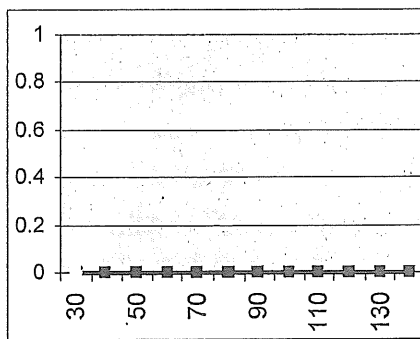
There was a single sale within this Study Area during the Sales Period. This was an unimproved property, and this single sale does not provide sufficient data for a reliable adjustment conclusion. The conclusion from the General Rural Vernonia (MA 3 SA 31) area is considered to be the most reliable data available, and is applied here.

Performance History

	2013	2012	2011	2010	2009
COD	0.00	12.50	-	22.78	-
PRD	1.00	0.98	-	1.01	-

COLUMBIA County 2013 Ratio Study

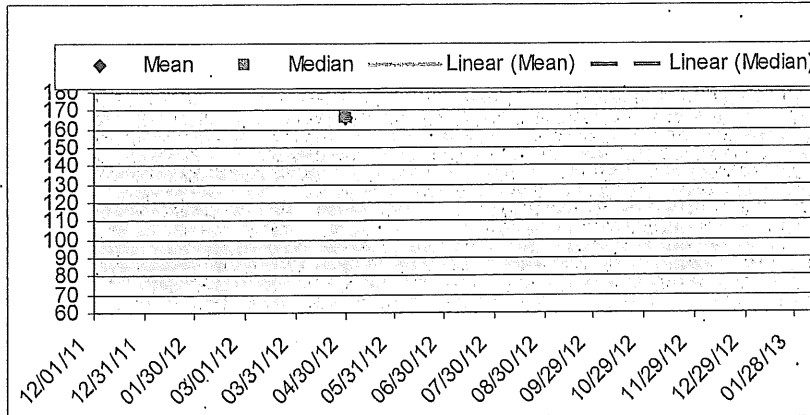
Frequency



Number Of Sales

1

Central Tendencies



Month	Mean	Median	Sales
May-12	166	166	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
03	36	000	400		30	6N5W06-BD-02100	2012	3735	0.24	15,560	0	15,560	9,400	May-12	1	166

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	03	37	000		0	Vernonia
409	03	37	000		0	Vernonia

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	03	37	000		0	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED			
Population - Number of Accounts	26				
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn	
Prior Year Population Values					
Land RMV	1,571,000	36.85 %	1,571,000	36.85 %	
OSD RMV	891,000	20.90 %	891,000	20.90 %	
Residential Improvement RMV	1,729,580	40.57 %	1,729,580	40.57 %	
Farm Improvement RMV	71,960	1.69 %	71,960	1.69 %	
SelectedRatioFromSales	100				
RMV Adjustment	100				
Before Ratio	100				
Overall Adjustment Factor	100				
Land Adjustment Factor	100				
OSD Adjustment Factor	100				
Residential Adjustment Factor	100				
Farm Improvement Factor	100				
After Ratio	100				
Selected Ratio	100	2013	Adjustment	100	
Explanation					

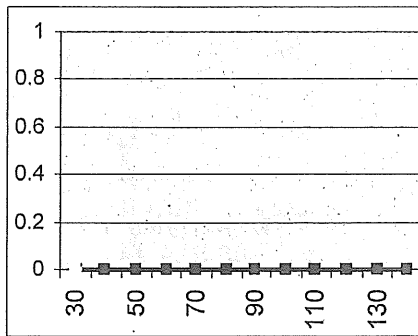
There no usable sales of unimproved or improved properties within this Study Area during the Sales Period. The conclusion from the General Rural Vernonia (MA 3 SA 31) area is considered to be the most reliable data available, and is applied here.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median
AD
COD
Mean
SD
COV

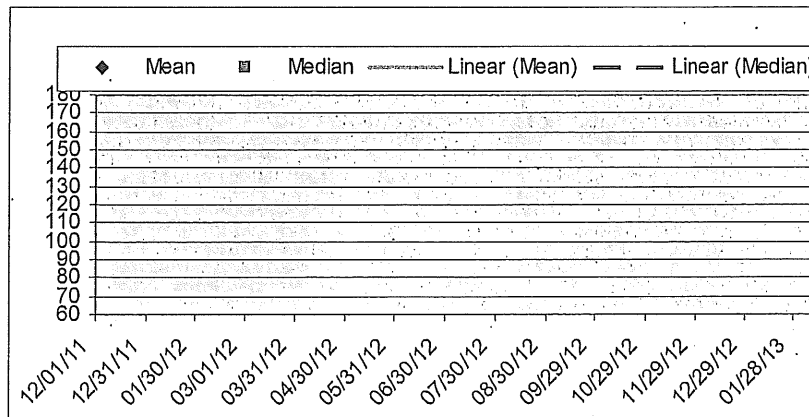
Wtd Mean
GeoMean
PRD
95% Confidence

Number Of Sales

0

Central Tendencies

Month Mean Median Sales



AP AR	SA NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
801	03	31	000		0	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	1			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	500	100.00 %	500	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100
Explanation				

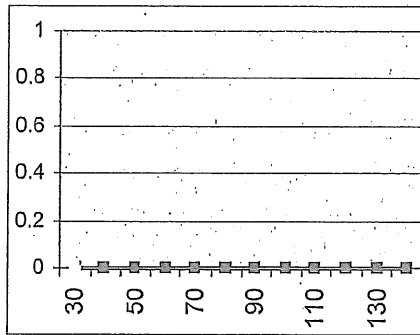
This account is the only RMV Class 801 account in the county. It is owned by Fishhawk Lake Recreation Club. It is a minimum value account and it is recommended that no adjustment be made for this year.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	12.77	17.31
PRD	-	-	-	0.99	0.98

COLUMBIA County 2013 Ratio Study

Frequency



30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

95%

SD

Confidence

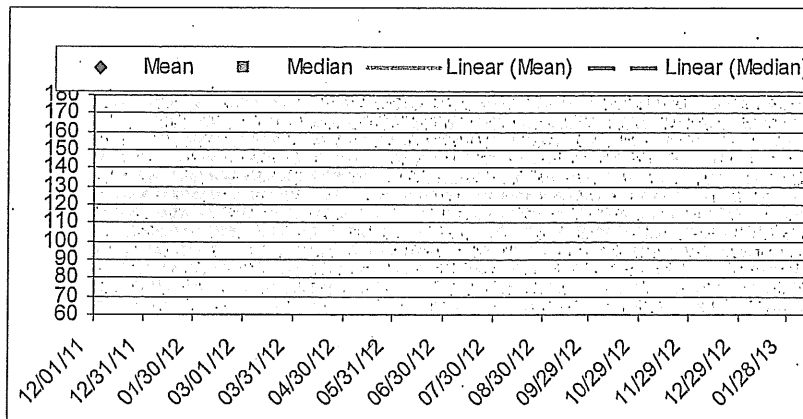
COV

Number Of Sales

0

Central Tendencies

Month Mean Median Sales



AP AR	SA NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

2013 RATIO STUDY

MAINTENANCE AREA 4

RESIDENTIAL

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	04	00	000		0	Rainier
100	04	46	000		0	Rainier

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	04	47	000		0	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	187			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	6,420,750	100.00 %	5,971,298	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	108			
RMV Adjustment	100			
Before Ratio	108			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	108	2013	Adjustment	93

Explanation

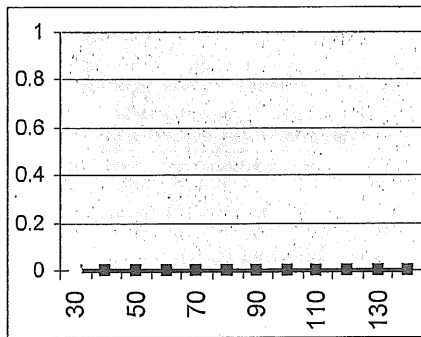
There were no usable sales found of unimproved properties in this grouping during the Sales Period. Therefore the conclusion from the improved Property Analysis is considered the best data available and is applied here.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	0.00	0.00
PRD	-	-	-	1.00	1.00

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales 0

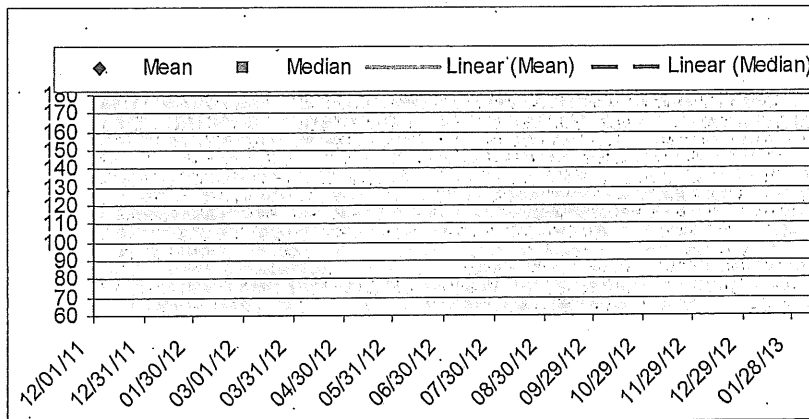
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	0
120	0
130	0
140	0

Median
AD
COD
Mean
SD
COV

Wtd Mean
GeoMean
PRD
95%
Confidence

Central Tendencies

Month Mean Median Sales



AP AR	SA NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
AP AR	SA NH	PRP CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	04	00	000		7	Rainier	102	04	00	000		0	Rainier
101	04	47	000		1	Rainier	109	04	00	000		1	Rainier
101	04	46	000		0	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	9	RECALCULATED		
Population - Number of Accounts	800			
Sales as a percentage of the Population	1.12 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	29,805,910	27.47 %	27,719,496	27.47 %
OSD RMV	10,612,500	9.78 %	9,869,625	9.78 %
Residential Improvement RMV	67,506,720	62.21 %	62,781,250	62.21 %
Farm Improvement RMV	588,720	0.54 %	547,510	0.54 %
SelectedRatioFromSales	108			
RMV Adjustment	100			
Before Ratio	108			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	93			
Residential Adjustment Factor	93			
Farm Improvement Factor	93			
After Ratio	100			
Selected Ratio	108	2013	Adjustment	93

Explanation

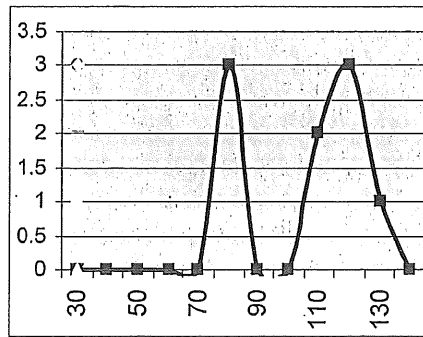
The Indicators of Central Tendency for this grouping of properties demonstrate the continuing volatility of the market. The Median Ratio Indication is 119, with the Mean, WtdMEan and GeoMean closely grouped at 111, 110 and 110 respectively. Selecting the Ratio Indication of 110 and adjusting this selection by the results of the Time Study returns an adjusted Ratio of 108 and a resulting overall adjustment of 93.

Performance History

	2013	2012	2011	2010	2009
COD	14.01	-	15.11	21.02	18.05
PRD	1.01	-	1.00	1.02	1.00

COLUMBIA County 2013 Ratio Study

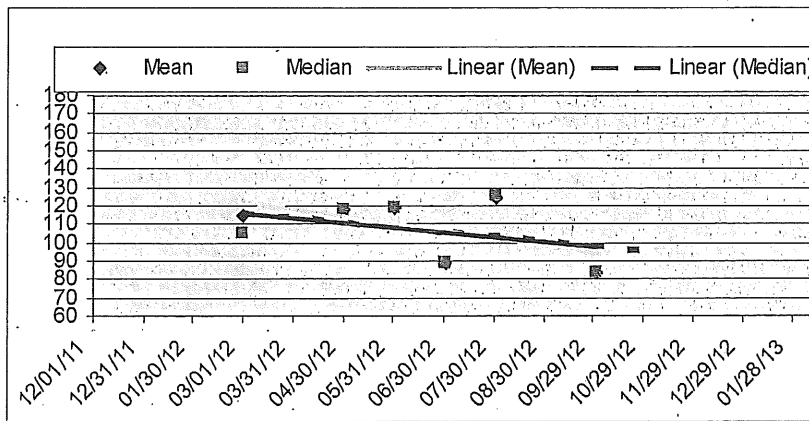
Frequency



Number Of Sales 9

Median	119	Wtd Mean	110
AD	16.67	GeoMean	110
COD	14.01	PRD	1.01
Mean	111	95% Confidence	12.58
SD	19.25		
COV	17.34		

Central Tendencies



Month	Mean	Median	Sales
Mar-12	115	105	3
May-12	118	118	1
Jun-12	119	119	1
Jul-12	89	89	1
Aug-12	124	125	2
Oct-12	84	84	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
04	00	000	101	132	30	7N2W17-DA-01400	2012	8096	1.13	40,510	102,550	143,060	169,325	Oct-12	1	84
04	00	000	101	131	33	7N2W16-DC-00703	2012	2196	0.13	37,140	76,010	113,150	130,000	Mar-12	2	87
04	00	000	101	134	30	7N2W17-CO-01900	2012	5406	0.68	51,290	78,580	129,870	145,800	Jul-12	3	89
04	00	000	101	131	30	7N2W16-CB-02900	2012	3525	0.45	45,800	52,120	97,920	83,000	May-12	4	118
04	00	000	101	141	30	7N2W17-AC-02801	2012	4436	0.24	46,440	134,300	180,740	152,500	Jun-12	5	119
04	00	000	101	142	30	7N2W16-CC-00700	2012	6136	0.44	45,320	119,250	164,570	135,900	Aug-12	6	121
04	47	000	101	143	30	7N2W16-BB-02000	2012	2041	0.06	22,550	102,750	125,300	102,000	Mar-12	7	123
04	00	000	109	473	30	7N2W21-AO-01601	2012	6726	0.27	40,200	132,500	172,700	135,000	Aug-12	8	128
04	00	000	101	142	30	7N2W17-DB-03100	2012	2051	0.28	40,640	147,110	187,750	140,000	Mar-12	9	134

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	04	41	000		1	Rainier
400	04	42	000		1	Rainier

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	04	44	000		0	Rainier
400	04	45	000		0	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	644			
Sales as a percentage of the Population	0.31 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	56,142,020	99.86 %	55,019,180	99.86 %
OSD RMV	64,510	0.11 %	63,220	0.11 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	15,490	0.03 %	15,180	0.03 %
SelectedRatioFromSales	102			
RMV Adjustment	100			
Before Ratio	102			
Overall Adjustment Factor	98			
Land Adjustment Factor	98			
OSD Adjustment Factor	98			
Residential Adjustment Factor	100			
Farm Improvement Factor	98			
After Ratio	100			
Selected Ratio	102	2013	Adjustment	98

Explanation

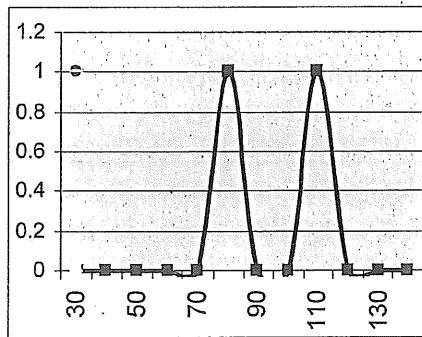
With only two usable sales available during the Sales Period of Unimproved Properties in this grouping, it was determined the conclusion from the Improved Properties (102 adjusted Ratio, 98 Overall Adjustment) would be more relevant, and is therefore applied here. There is one property in this grouping that has OSD value attributed to it due to a recently removed residence, and four properties with minor improvements that have been determined by the appraisers to be best classified as unimproved (Property Class 400).

Performance History

	2013	2012	2011	2010	2009
COD	18.50	-	-	14.85	0.00
PRD	1.02	-	-	0.93	1.00

COLUMBIA County 2013 Ratio Study

Frequency

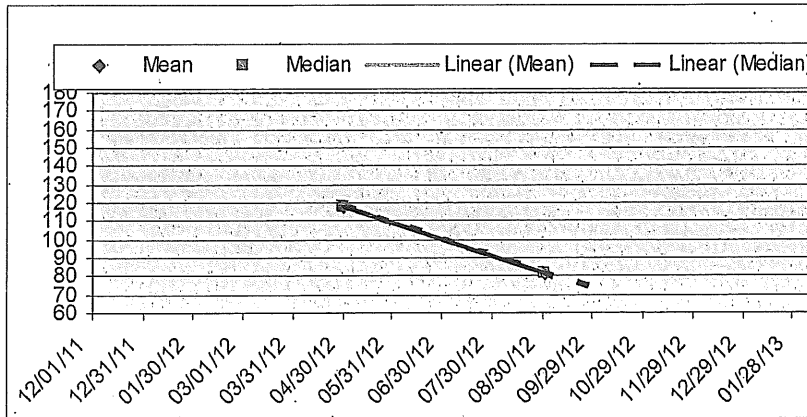


30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	1
120	0
130	0
140	0

Median	100	Wtd Mean	98
AD	18.50	GeoMean	98
COD	18.50	PRD	1.02
Mean	100	95% Confidence	36.27
SD	26.17		
COV	26.17		

Number Of Sales 2

Central Tendencies



Month	Mean	Median	Sales
May-12	118	118	1
Sep-12	81	81	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
04	41	000	400		33	7N3W14-B0-00202	2012	9589	5.01	52,820	0	52,820	65,000	Sep-12	1	81
04	42	000	400		33	6N2W07-00-00302	2012	3443	10.00	62,300	0	62,300	53,000	May-12	2	118

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	04	41	000		2	Rainier
401	04	42	000		4	Rainier
401	04	44	000		0	Rainier
401	04	45	000		0	Rainier

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	04	41	000		2	Rainier
409	04	42	000		1	Rainier
409	04	44	000		1	Rainier
409	04	45	000		0	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	10	RECALCULATED		
Population - Number of Accounts	1,703			
Sales as a percentage of the Population	0.59 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	90,731,220	29.36 %	88,916,596	29.36 %
OSD RMV	65,177,970	21.09 %	63,874,411	21.09 %
Residential Improvement RMV	128,791,930	41.68 %	126,216,091	41.68 %
Farm Improvement RMV	24,279,970	7.86 %	23,794,371	7.86 %
SelectedRatioFromSales	102			
RMV Adjustment	100			
Before Ratio	102			
Overall Adjustment Factor	98			
Land Adjustment Factor	98			
OSD Adjustment Factor	98			
Residential Adjustment Factor	98			
Farm Improvement Factor	98			
After Ratio	100			
Selected Ratio	102	2013	Adjustment	98

Explanation

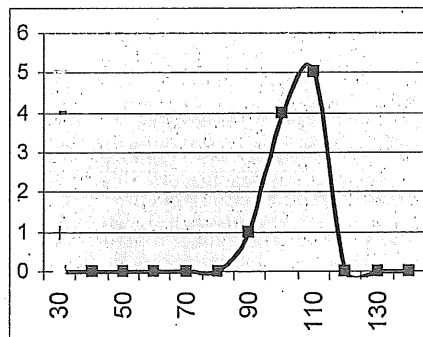
The Indicators of Central Tendency are closely grouped with Median (112) and the WtdMean (108) bracketing the Mean and the GeoMean of 110. The Ratio indication of the Mean has the most support and is selected. This Ratio Indication is adjusted by the conclusion of the Time Study (93) and an adjusted Ratio of 102 is calculated. The overall adjustment of 98 is applied to this grouping.

Performance History

	2013	2012	2011	2010	2009
COD	6.25	14.81	-	16.98	10.90
PRD	1.02	1.01	-	1.04	1.00

COLUMBIA County 2013 Ratio Study

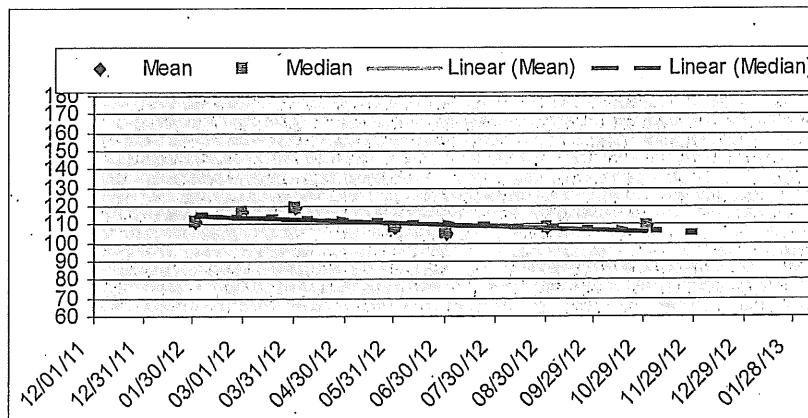
Frequency



Number Of Sales 10

Median	112	Wtd Mean	108
AD	7.00	GeoMean	110
COD	6.25	PRD	1.02
Mean	110	95% Confidence	5.28
SD	8.52		
COV	7.75		

Central Tendencies



Month	Mean	Median	Sales
Feb-12	111	111	2
Mar-12	117	117	1
Apr-12	119	119	1
Jun-12	108	108	1
Jul-12	105	105	2
Sep-12	108	108	2
Nov-12	109	109	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
04	42	000	401	155	30	6N2W21-A0-01101	2012	5759	6.59	102,660	196,300	298,960	319,500	Jul-12	1	94
04	41	000	401	141	30	7N2W18-D0-00900	2012	7257	2.12	84,780	106,240	191,020	189,900	Sep-12	2	101
04	44	000	409	452	33	7N2W35-AD-02801	2012	899	0.76	61,430	92,630	154,060	150,000	Feb-12	3	103
04	42	000	401	135	30	6N2W03-00-01402	2012	4819	13.78	118,220	86,780	205,000	189,000	Jun-12	4	108
04	42	000	409	462	30	6N2W03-00-01800	2012	9101	6.36	101,900	113,210	215,110	196,750	Nov-12	5	109
04	41	000	401	142	33	7N2W23-CA-00100	2012	7095	0.97	81,250	238,710	319,960	281,000	Sep-12	6	114
04	42	000	401	141	30	6N2W03-00-01001	2012	5981	3.13	89,690	116,290	205,980	177,000	Jul-12	7	116
04	41	000	409	452	30	7N3W25-00-00702	2012	1722	3.96	95,790	88,100	183,890	157,000	Mar-12	8	117
04	41	000	409	452	30	7N3W35-C0-00500	2012	1605	18.29	136,440	30,220	166,660	140,000	Feb-12	9	119
04	42	000	401	131	33	6N2W13-B0-00800	2012	3697	1.21	67,680	73,540	141,220	118,900	Apr-12	10	119

2013 RATIO STUDY

MAINTENANCE AREA 5

RESIDENTIAL

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location
100	05	00	000		0	Clatskanie

RMV Class	MA	SA	NH	Year	App # of Sales	Location
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Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	107			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	5,279,170	100.00 %	5,490,337	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	96			
RMV Adjustment	100			
Before Ratio	96			
Overall Adjustment Factor	104			
Land Adjustment Factor	104			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	96	2013	Adjustment	104

Explanation

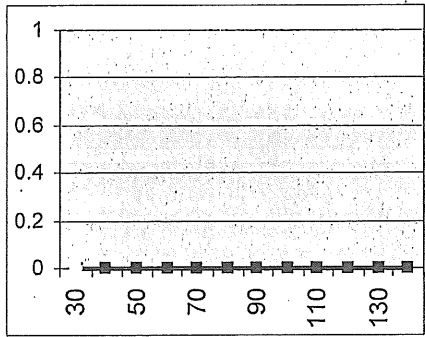
There were no sales of Unimproved residential properties in this Study Area during the Sales Period, therefore the conclusion from the Improved Properties for this area (96 adjusted Ratio, 104 overall adjustment) is applied.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	21.50
PRD	-	-	-	-	0.93

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales

0

30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median

AD

COD

Mean

SD

COV

Wtd Mean

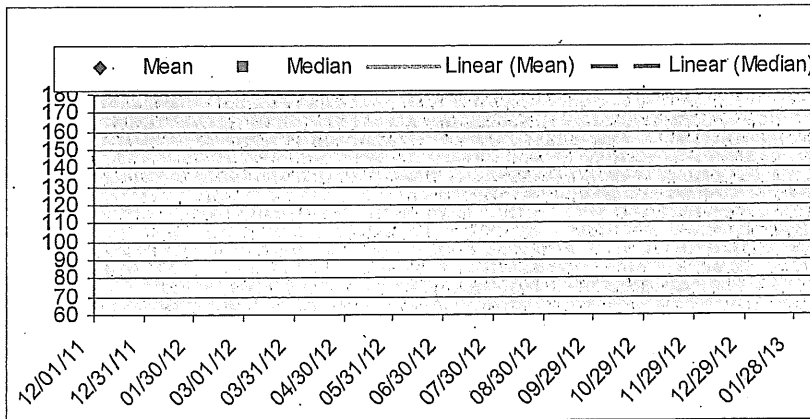
GeoMean

PRD

95%
Confidence

Central Tendencies

Month Mean Median Sales



AP	SA	NH	PRP	BLD	RJ	MAP NO.	BOOK	PAGE	ACRES	RMV	RMV	TOTAL	SALES	SALE	SALE	RATIO
AR			CLS	CLS	CD					LAND	IMP	VALUE	PRICE	DATE		NO
AP	SA	NH	PR	BLD	RJ	ACCOUNT NO	BOOK	PAGE	AC	RMV	RMV	TOTAL	SALES	SALE	SALE	RATIO
AR			P	CLS	CD					LAND	IMP	VALUE	PRICE	DATE		NO
			CLS													

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
101	05	00	000		8	Clatskanie	109	05	00	000		0	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	8	RECALCULATED		
Population - Number of Accounts	580			
Sales as a percentage of the Population	1.38 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	18,174,260	23.36 %	18,901,230	23.36 %
OSD RMV	8,415,620	10.82 %	8,752,245	10.82 %
Residential Improvement RMV	50,459,290	64.85 %	52,477,662	64.85 %
Farm Improvement RMV	762,120	0.98 %	792,605	0.98 %
SelectedRatioFromSales	96			
RMV Adjustment	100			
Before Ratio	96			
Overall Adjustment Factor	104			
Land Adjustment Factor	104			
OSD Adjustment Factor	104			
Residential Adjustment Factor	104			
Farm Improvement Factor	104			
After Ratio	100			
Selected Ratio	96	2013	Adjustment	104

Explanation

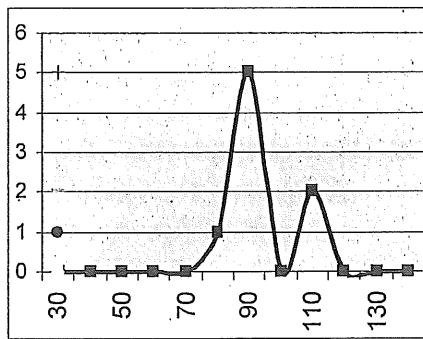
The Indicators of Central Tendency are closely grouped with the Median indicating 99, and the Mean, WtdMean and GeoMean identical at 98. The Ratio indication of 98 has the most support and is selected. This Ratio is adjusted by the conclusion from the Time Study and returns an adjusted Ratio of 98 with a calculated overall adjustment of 96.

Performance History

	2013	2012	2011	2010	2009
COD	6.57	11.72	11.08	11.36	11.12
PRD	1.00	1.02	1.03	1.00	1.00

COLUMBIA County 2013 Ratio Study

Frequency

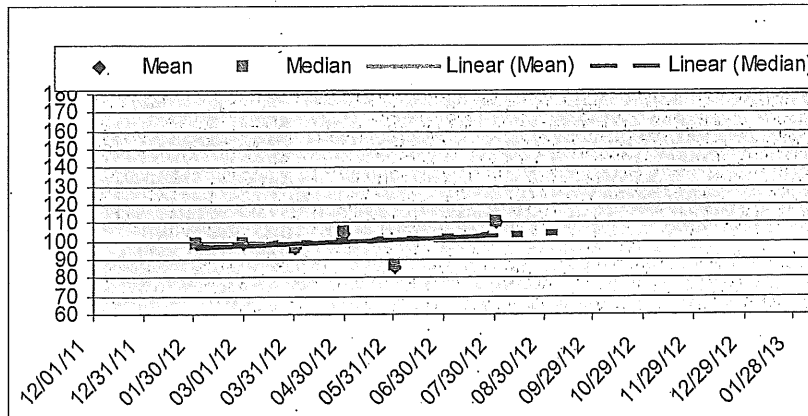


Number Of Sales

8

Median	99	Wtd Mean	98
AD	6.50	GeoMean	98
COD	6.57	PRD	1.00
Mean	98	95% Confidence	6.33
SD	9.13		
COV	9.32		

Central Tendencies



Month	Mean	Median	Sales
Feb-12	99	99	1
Mar-12	99	99	1
Apr-12	96	96	1
May-12	104	105	2
Jun-12	86	87	2
Aug-12	110	110	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
05	00	000	101	131	30	7N4W08-CB-04200	2012	3960	0.18	42,950	70,110	113,060	137,000	Jun-12	1	83
05	00	000	101	131	33	7N4W08-CD-08900	2012	4434	0.17	42,500	66,880	109,380	122,000	Jun-12	2	90
05	00	000	101	143	33	7N4W08-CA-06400	2012	2422	0.66	57,100	148,500	205,600	214,000	Apr-12	3	96
05	00	000	101	134	30	7N4W09-CB-00800	2012	1292	0.42	51,160	99,260	150,420	152,000	Feb-12	4	99
05	00	000	101	142	33	7N4W08-BD-03000	2012	1923	0.27	48,300	90,900	139,200	140,000	Mar-12	5	99
05	00	000	101	133	30	7N4W08-BD-02600	2012	4043	0.27	48,300	50,810	99,110	100,000	May-12	6	99
05	00	000	101	141	30	7N4W08-AD-01400	2012	3426	0.28	48,510	111,290	159,800	145,000	May-12	7	110
05	00	000	101	141	30	7N4W17-BB-01000	2012	6034	0.21	44,460	112,420	156,880	143,000	Aug-12	8	110

COLUMBIA County 2013 Ratio Study

RMV	App	# of				
Class	MA	SA	NH	Year	Sales	Location
400	05	51	000		1	Clatskanie

RMV	App	# of				
Class	MA	SA	NH	Year	Sales	Location
400	05	55	000		0	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED			
Population - Number of Accounts	803				
Sales as a percentage of the Population	0.12 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn	
Prior Year Population Values					
Land RMV	76,485,440	99.94 %	79,544,858	99.94 %	
OSD RMV	43,000	0.06 %	44,720	0.06 %	
Residential Improvement RMV	0	0.00 %	0	0.00 %	
Farm Improvement RMV	0	0.00 %	0	0.00 %	
SelectedRatioFromSales	96				
RMV Adjustment	100				
Before Ratio	96				
Overall Adjustment Factor	104				
Land Adjustment Factor	104				
OSD Adjustment Factor	104				
Residential Adjustment Factor	100				
Farm Improvement Factor	100				
After Ratio	100				
Selected Ratio	96	2013	Adjustment	104	

Explanation

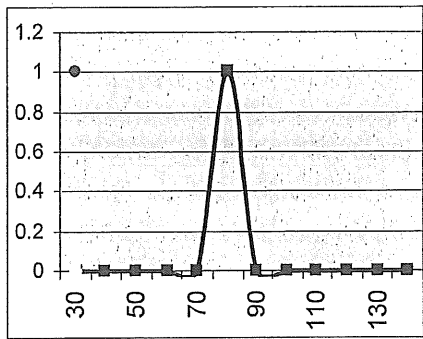
With only one sale of Unimproved residential properties in these Study Areas during the Sales Period, the conclusion from the Improved Properties for these areas (96 adjusted Ratio, 104 overall adjustment) is considered the best data and is therefore applied: There is one property in this area with an OSD adjustment due to a removed structure.

Performance History

	2013	2012	2011	2010	2009
COD	0.00	17.86	-	-	-
PRD	1.00	0.95	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	0
120	0
130	0
140	0

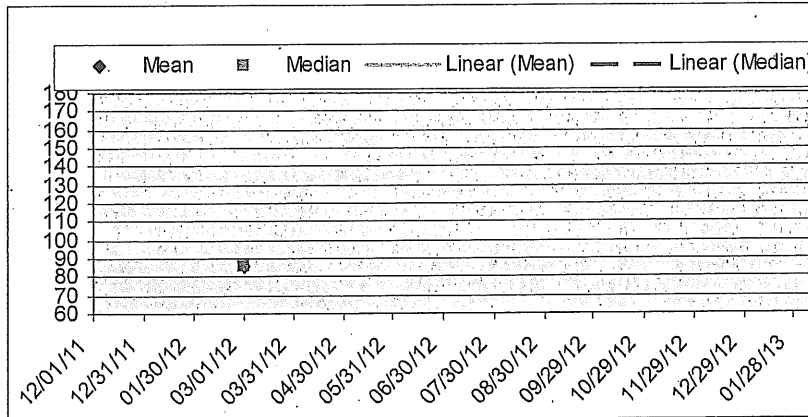
Median	86	Wtd Mean	86
AD	0.00	GeoMean	86
COD	0.00	PRD	1.00
Mean	86	95% Confidence	1.96
SD	1.00		
COV	1.16		

Number Of Sales

1

Central Tendencies

Month	Mean	Median	Sales
Mar-12	86	86	1



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
05	51	000	400		30	8N3W19-CO-00600	2012	1967	7.29	42,790	0	42,790	50,000	Mar-12	1	86

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	05	51	000		27	Clatskanie	401	05	55	000		2	Clatskanie
409	05	51	000		4	Clatskanie	409	05	55	000		0	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	33	RECALCULATED		
Population - Number of Accounts	2,031			
Sales as a percentage of the Population	1.62 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	84,212,820	24.48 %	87,581,333	24.48 %
OSD RMV	74,039,090	21.52 %	77,000,654	21.52 %
Residential Improvement RMV	152,908,520	44.45 %	159,024,861	44.45 %
Farm Improvement RMV	32,866,740	9.55 %	34,181,410	9.55 %
SelectedRatioFromSales	96			
RMV Adjustment	100			
Before Ratio	96			
Overall Adjustment Factor	104			
Land Adjustment Factor	104			
OSD Adjustment Factor	104			
Residential Adjustment Factor	104			
Farm Improvement Factor	104			
After Ratio	100			
Selected Ratio	96	2013	Adjustment	104

Explanation

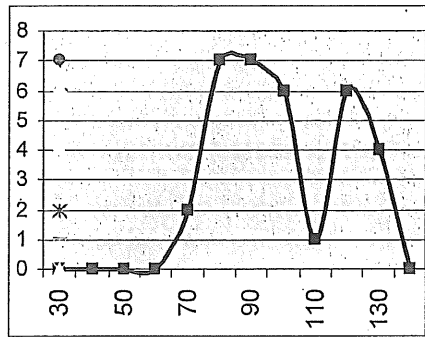
The Indicators of Central Tendency are closely grouped with the Median indicating 101, the Mean 104 and the WtdMean and GeoMean identical at 103. The Ratio indicated by the Wtd Mean and the GeoMean of 103 is selected. This Ratio is adjusted by the conclusion from the Time Study and returns an adjusted Ratio of 96 with a calculated overall adjustment of 104.

Performance History

	2013	2012	2011	2010	2009
COD	14.40	15.38	-	16.39	15.93
PRD	1.01	1.04	-	0.99	1.04

COLUMBIA County 2013 Ratio Study

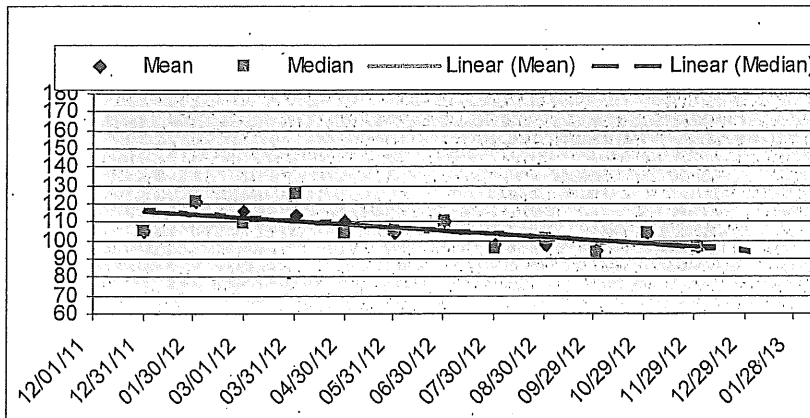
Frequency



Number Of Sales 33

Median	101	Wtd Mean	103
AD	14.55	GeoMean	103
COD	14.40	PRD	1.01
Mean	104	95% Confidence	5.92
SD	17.35		
COV	16.68		

Central Tendencies



Month	Mean	Median	Sales
Jan-12	105	105	1
Feb-12	121	121	1
Mar-12	116	109	3
Apr-12	114	125	4
May-12	110	104	3
Jun-12	104	105	2
Jul-12	110	110	2
Aug-12	97	95	5
Sep-12	98	101	4
Oct-12	94	93	6
Nov-12	104	104	1
Dec-12	96	96	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
05	55	000	401	135	30	8N4W32-00-01300	2012	6280	20.49	68,800	47,930	116,730	155,000	Aug-12	1	75
05	51	000	401	143	30	7N4W22-00-00200	2012	4451	7.86	87,210	154,720	241,930	310,000	Jun-12	2	78
05	51	000	401	142	30	7N4W22-00-00606	2012	7876	1.95	69,070	116,460	185,530	225,000	Oct-12	3	82
05	51	000	401	143	30	7N3W16-C0-00500	2012	7445	5.02	82,040	151,060	233,100	275,000	Sep-12	4	85
05	51	000	401	141	30	7N4W15-DB-01400	2012	3417	1.67	65,330	131,760	197,090	230,000	May-12	5	86
05	51	000	401	141	33	7N3W16-C0-00600	2012	7873	4.82	81,400	171,910	253,310	293,150	Oct-12	6	86
05	51	000	401	142	30	7N4W14-00-01100	2012	5493	9.47	90,450	160,470	250,920	285,500	Jul-12	7	88
05	51	000	401	151	33	7N4W22-00-00220	2012	1636	5.13	82,160	158,440	240,600	270,000	Mar-12	8	89
05	51	000	409	462	30	7N3W04-D0-01200	2012	6010	6.11	83,360	66,920	150,280	168,500	Aug-12	9	89
05	51	000	401	133	30	7N4W17-BB-02100	2012	7841	0.37	58,600	65,980	124,580	138,000	Oct-12	10	90
05	51	000	401	141	30	7N4W15-DB-02300	2012	6278	3.16	69,140	174,660	243,800	257,900	Aug-12	11	95
05	51	000	409	452	33	7N4W27-00-00700	2012	7826	1.42	61,990	67,670	129,660	135,000	Oct-12	12	96
05	51	000	401	143	30	7N4W04-B0-00800	2012	9769	0.64	59,710	227,560	287,270	299,000	Dec-12	13	96
05	51	000	401	133	28	7N4W26-00-01000	2012	2480	19.84	113,960	70,350	184,310	190,800	Apr-12	14	97
05	51	000	401	131	30	7N3W21-C0-00800	2012	8224	12.85	99,000	77,960	176,960	180,000	Oct-12	15	98
05	51	000	401	141	33	7N4W09-BA-00900	2012	7320	0.39	58,600	117,350	175,950	178,000	Sep-12	16	99
05	51	000	401	143	33	7N4W15-DB-01700	2012	7452	2.22	70,940	160,360	231,300	229,900	Sep-12	17	101
05	51	000	401	154	33	8N3W33-00-01703	2012	3019	19.96	114,140	226,870	341,010	333,500	Apr-12	18	102
05	51	000	401	134	30	7N4W27-00-00502	2012	6463	6.35	65,810	80,880	146,690	144,500	Aug-12	19	102

COLUMBIA County 2013 Ratio Study

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
05	51	000	401	143	30	7N3W19-00-00902	2012	8997	2.54	72,640	168,180	240,820	230,587	Nov-12	20	104
05	51	000	401	143	33	8N4W34-A0-00400	2012	583	2.58	72,860	176,640	249,500	238,000	Jan-12	21	105
05	51	000	401	142	30	7N3W04-A0-00201	2012	7274	5.98	83,100	226,970	310,070	290,000	Sep-12	22	107
05	51	000	401	144	30	7N3W30-A0-01200	2012	7773	4.80	81,330	246,130	327,460	295,000	Oct-12	23	111
05	51	000	401	143	33	7N4W21-00-01301	2012	1208	4.29	79,620	143,570	223,190	184,000	Feb-12	24	121
05	51	000	401	131	30	7N4W16-BA-00500	2012	3483	0.24	58,600	48,830	107,430	88,000	May-12	25	122
05	55	000	401	133	30	8N4W27-00-01400	2012	3811	16.96	98,210	92,660	190,870	156,750	May-12	26	122
05	51	000	401	142	33	8N3W33-00-00200	2012	6677	3.69	85,120	249,930	335,050	270,000	Aug-12	27	124
05	51	000	409	452	28	7N3W09-A0-02100	2012	2870	2.00	69,740	171,740	241,480	193,000	Apr-12	28	125
05	51	000	401	151	30	7N3W31-00-00900	2012	2049	17.74	110,700	229,320	340,020	265,000	Mar-12	29	128
05	51	000	409	452	33	7N5W10-AA-03501	2012	2195	0.38	58,600	47,660	106,260	81,000	Mar-12	30	131
05	51	000	401	131	30	8N4W26-C0-01600	2012	4792	4.61	80,700	76,890	157,590	120,000	Jun-12	31	131
05	51	000	401	152	33	7N4W04-C0-00500	2012	5212	9.29	92,440	286,920	379,360	290,000	Jul-12	32	131
05	51	000	401	154	30	7N3W16-C0-01300	2012	2564	4.82	81,400	375,200	456,600	345,000	Apr-12	33	132

2013 RATIO STUDY

MAINTENANCE AREA 6

RESIDENTIAL

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	06	56	000		0	Rural St Helens	400	06	63	000		1	Rural St Helens
400	06	61	000		2	Rural St Helens	400	06	64	000		0	Rural St Helens
400	06	62	000		1	Rural St Helens	400	06	65	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	4	RECALCULATED		
Population - Number of Accounts	737			
Sales as a percentage of the Population	0.54 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	205,380,550	99.98 %	191,003,912	99.98 %
OSD RMV	48,500	0.02 %	45,105	0.02 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	108			
RMV Adjustment	100			
Before Ratio	108			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	93			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	108	2013	Adjustment	93

Explanation

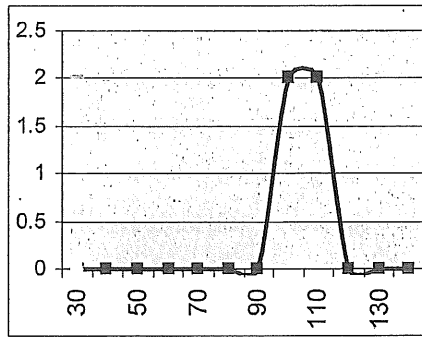
With only four sales of Unimproved residential properties in this Study Area during the Sales Period, it was concluded that the sample size was insufficient to make a reliable Ratio conclusion. Therefore the conclusion from the Improved Properties for this area (108 adjusted Ratio, 93 overall adjustment) is applied.

Performance History

	2013	2012	2011	2010	2009
COD	4.05	-	23.71	26.28	9.90
PRD	1.00	-	1.02	1.00	1.00

COLUMBIA County 2013 Ratio Study

Frequency

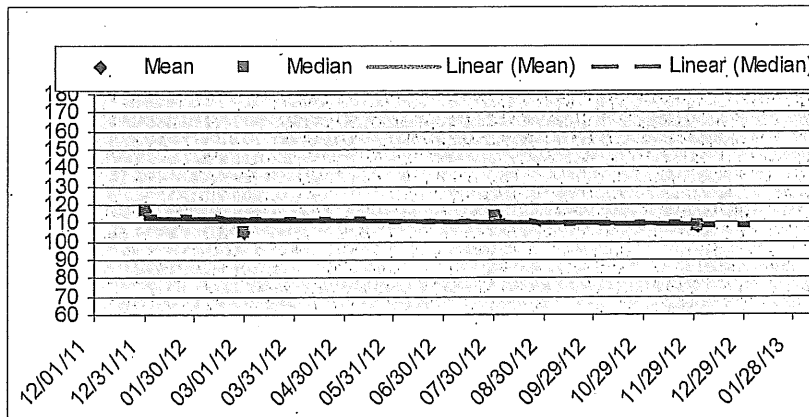


Number Of Sales

4

Median	111	Wtd Mean	111
AD	4.50	GeoMean	111
COD	4.05	PRD	1.00
Mean	111	95% Confidence	5.37
SD	5.48		
COV	4.93		

Central Tendencies



Month	Mean	Median	Sales
Jan-12	117	117	1
Mar-12	105	105	1
Aug-12	114	114	1
Dec-12	108	108	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
06	62	000	400		33	5N2W24-B0-00201	2012	1785	9.80	131,100	0	131,100	125,000	Mar-12	1	105
06	61	000	400		33	5N2W36-C0-00206	2012	9348	2.02	102,210	0	102,210	95,000	Dec-12	2	108
06	63	000	400		33	5N1W07-B0-00200	2012	6842	9.82	96,520	0	96,520	85,000	Aug-12	3	114
06	61	000	400		28	4N2W12-00-02206	2012	173	16.65	188,900	0	188,900	161,000	Jan-12	4	117

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	06	56	000		0	Rural St Helens	409	06	63	000		1	Rural St Helens
401	06	61	000		32	Rural St Helens	401	06	64	000		4	Rural St Helens
409	06	61	000		2	Rural St Helens	409	06	64	000		0	Rural St Helens
401	06	62	000		3	Rural St Helens	401	06	65	000		0	Rural St Helens
409	06	62	000		1	Rural St Helens	409	06	65	000		0	Rural St Helens
401	06	63	000		5	Rural St Helens							

Adjustment Calculation Summary

Sample - Number of Sales	48	RECALCULATED		
Population - Number of Accounts	2,927			
Sales as a percentage of the Population	1.64 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	311,657,430	43.01 %	289,841,410	43.01 %
OSD RMV	74,146,040	10.23 %	68,955,817	10.23 %
Residential Improvement RMV	306,941,780	42.36 %	285,455,855	42.36 %
Farm Improvement RMV	31,941,200	4.41 %	29,705,316	4.41 %
SelectedRatioFromSales	108			
RMV Adjustment	100			
Before Ratio	108			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	93			
Residential Adjustment Factor	93			
Farm Improvement Factor	93			
After Ratio	100			
Selected Ratio	108	2013	Adjustment	93

Explanation

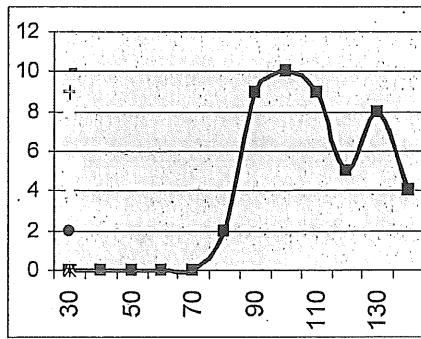
The Indicators of Central Tendency are closely grouped with the Median indicating 116, the Mean 116 and the WtdMean 112 and the GeoMean 114. The Ratio indicated by the Median and the Mean of 116 is selected. This Ratio is adjusted by the conclusion from the Time Study and returns an adjusted Ratio of 108 with a calculated overall adjustment of 93. This Maintenance Area is currently being Re-Appraised. All sales used in this analysis have been re-appraised with all values based on the current Set-Up.

Performance History

	2013	2012	2011	2010	2009
COD	12.72	-	11.76	16.61	10.61
PRD	1.04	-	0.98	0.99	1.02

COLUMBIA County 2013 Ratio Study

Frequency

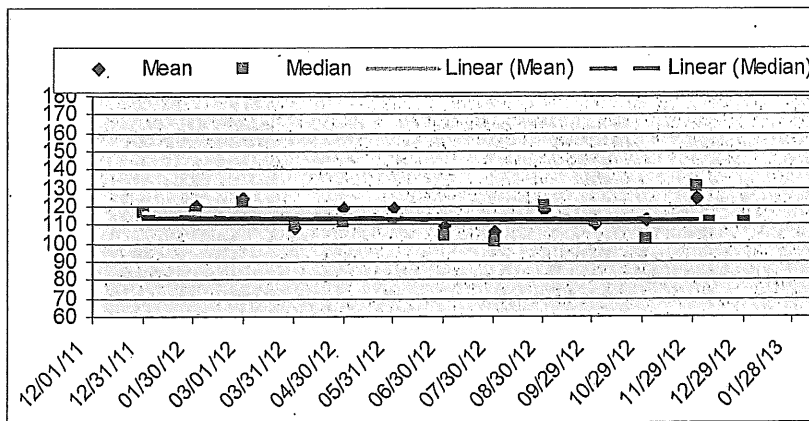


Number Of Sales 48

30	0
40	0
50	0
60	0
70	0
80	2
90	9
100	10
110	9
120	5
130	8
140	4

Median	116	Wtd Mean	112
AD	14.75	GeoMean	114
COD	12.72	PRD	1.04
Mean	116	95% Confidence	4.97
SD	17.56		
COV	15.14		

Central Tendencies



Month	Mean	Median	Sales
Jan-12	117	117	1
Feb-12	120	117	5
Mar-12	124	122	5
Apr-12	108	109	6
May-12	119	111	3
Jun-12	119	113	5
Jul-12	109	104	3
Aug-12	106	101	4
Sep-12	118	120	4
Oct-12	110	111	2
Nov-12	112	102	6
Dec-12	124	131	4

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
06	63	000	401	141	30	5N2W10-A0-00301	2012	9162	5.01	123,860	142,300	266,160	310,400	Nov-12	1	86
06	61	000	401	141	30	4N2W23-DB-00900	2012	8030	2.00	150,420	155,820	306,240	342,400	Oct-12	2	89
06	61	000	401	142	30	4N2W23-DB-01500	2012	6528	2.19	141,580	175,150	316,730	350,000	Aug-12	3	90
06	61	000	401	143	30	4N2W12-00-01606	2012	2712	2.09	151,210	228,680	379,890	418,000	Apr-12	4	91
06	63	000	401	143	30	5N2W11-00-00900	2012	8841	5.09	124,220	155,170	279,390	299,500	Nov-12	5	93
06	62	000	401	144	33	5N2W25-D0-01300	2012	1205	4.88	138,220	147,520	285,740	299,700	Feb-12	6	95
06	61	000	401	152	33	4N2W23-DB-01600	2012	3057	2.26	142,030	250,590	392,620	410,000	Apr-12	7	96
06	63	000	409	452	30	5N2W11-00-01800	2012	4260	1.04	80,750	70,190	150,940	155,000	Jun-12	8	97
06	61	000	401	154	30	4N1W06-A0-00406	2012	9256	0.94	121,300	431,860	553,160	567,500	Nov-12	9	97
06	61	000	401	141	30	4N2W01-00-00901	2012	6757	5.64	176,920	190,960	367,880	375,000	Aug-12	10	98
06	61	000	401	143	30	4N1W19-B0-01308	2012	5372	2.00	150,420	176,030	326,450	329,900	Jul-12	11	99
06	64	000	401	133	33	5N2W28-00-00300	2012	932	7.90	137,290	146,430	283,720	283,325	Feb-12	12	100
06	61	000	401	143	33	4N1W19-B0-01304	2012	1725	2.01	150,630	193,480	344,110	343,000	Mar-12	13	100
06	63	000	401	142	30	6N2W26-00-01301	2012	6311	5.90	132,860	266,720	399,580	395,000	Aug-12	14	101
06	61	000	401	131	33	4N1W19-CA-00300	2012	3071	0.34	109,650	84,710	194,360	188,000	Apr-12	15	103
06	61	000	409	452	30	4N1W18-A0-00300	2012	3164	1.59	129,530	123,710	253,240	245,000	May-12	16	103
06	61	000	401	141	33	4N1W17-B0-08702	2012	9905	0.96	121,300	159,600	280,900	269,000	Dec-12	17	104
06	61	000	401	141	33	4N2W24-BA-00304	2012	8873	3.18	159,070	123,990	283,060	265,000	Nov-12	18	107
06	61	000	401	142	28	4N1W05-BA-01600	2012	4398	0.53	117,220	162,440	279,660	259,000	Jun-12	19	108

COLUMBIA County 2013 Ratio Study

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
06	61	000	401	141	30	4N1W19-AA-00500	2012	5703	1.19	111,660	95,940	207,600	189,900	Jul-12	20	109
06	62	000	401	136	30	4N2W10-00-00800	2012	7511	2.68	135,230	116,130	251,360	230,000	Sep-12	21	109
06	62	000	401	141	28	4N2W10-00-01000	2012	4202	5.11	149,580	162,630	312,210	277,000	Jun-12	22	113
06	61	000	409	143	28	4N1W08-CC-00902	2012	2692	1.67	133,600	136,120	269,720	237,000	Apr-12	23	114
06	61	000	401	131	33	4N1W19-CA-01200	2012	7079	1.15	182,450	97,110	279,560	241,999	Sep-12	24	116
06	61	000	401	135	30	4N1W07-C0-01200	2012	1728	3.57	161,880	106,580	268,460	230,000	Jan-12	25	117
06	61	000	401	153	30	4N1W06-A0-00407	2012	676	1.00	121,300	211,700	333,000	285,000	Feb-12	26	117
06	61	000	401	141	33	4N2W24-D0-00106	2012	2228	2.01	150,630	241,170	391,800	332,000	Mar-12	27	118
06	61	000	401	141	33	4N2W12-AD-00701	2012	3069	2.00	150,420	121,660	272,080	229,900	Apr-12	28	118
06	61	000	401	153	30	4N1W07-DA-01200	2012	4039	1.00	121,300	270,930	392,230	332,000	May-12	29	118
06	61	000	401	141	30	4N2W13-A0-02301	2012	5148	5.00	172,250	120,170	292,420	245,000	Jul-12	30	119
06	61	000	401	141	33	4N1W18-A0-00100	2012	7051	5.00	159,880	99,820	259,700	217,000	Sep-12	31	120
06	64	000	401	143	33	5N2W09-00-00801	2012	2082	6.03	130,910	164,440	295,350	242,000	Mar-12	32	122
06	61	000	401	141	33	4N1W17-B0-06300	2012	2789	0.70	115,480	102,980	218,460	173,900	Apr-12	33	126
06	61	000	401	142	28	5N1W32-C0-00400	2012	7281	3.05	103,320	117,690	221,010	175,000	Sep-12	34	126
06	61	000	401	135	33	4N1W18-A0-02900	2012	9629	1.00	121,300	81,190	202,490	160,000	Dec-12	35	127
06	61	000	401	141	30	5N1W28-D0-01900	2013	52	1.95	150,390	92,270	242,660	185,900	Dec-12	36	131
06	64	000	401	146	30	5N2W27-A0-01900	2012	7865	3.74	111,270	138,160	249,430	189,000	Oct-12	37	132
06	61	000	401	152	33	4N1W18-D0-00300	2013	31	1.51	130,500	257,790	388,290	294,000	Dec-12	38	132
06	62	000	409	452	33	5N2W25-00-00903	2012	1047	1.98	130,350	96,290	226,640	168,000	Feb-12	39	135
06	64	000	401	121	30	6N3W25-00-01300	2012	3706	4.07	119,720	63,300	183,020	135,114	May-12	40	135
06	61	000	401	141	30	4N1W06-DB-00300	2012	6113	0.50	109,650	102,450	212,100	157,000	Aug-12	41	135
06	61	000	401	151	30	4N1W06-D0-00613	2012	1788	0.54	109,650	129,210	238,860	175,900	Mar-12	42	136
06	61	000	401	143	30	4N1W06-C0-02000	2012	4233	1.93	146,850	220,950	367,800	270,000	Jun-12	43	136
06	61	000	401	141	30	4N2W13-A0-02100	2012	4497	0.50	109,650	117,370	227,020	160,000	Jun-12	44	142
06	61	000	401	141	30	4N1W06-DA-05800	2012	1751	1.68	134,110	181,330	315,440	220,000	Mar-12	45	143
06	63	000	401	151	30	5N2W12-A0-00300	2012	9760	2.50	112,780	181,780	294,560	206,500	Nov-12	46	143
06	63	000	401	141	33	5N2W11-00-00300	2012	8879	10.00	145,900	115,150	261,050	181,000	Nov-12	47	144
06	61	000	401	141	33	4N1W06-DD-01200	2012	1008	0.50	109,650	98,730	208,380	135,000	Feb-12	48	154

2013 RATIO STUDY

ALL MAINTENANCE AREAS

RMV CLASSES

010

020

030

040

ODD LOTS

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
010	01	00	000		0	St Helens	010	03	00	000		0	Vernonia
010	01	01	000		0	Columbia City	010	03	03	000		0	Vernonia
010	02	00	000		0	Scappoose	010	04	00	000		0	Rainier
010	02	74	000		0	Scappoose	010	05	00	000		0	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	176			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	149,890	89.78 %	149,890	89.78 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	17,060	10.22 %	17,060	10.22 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

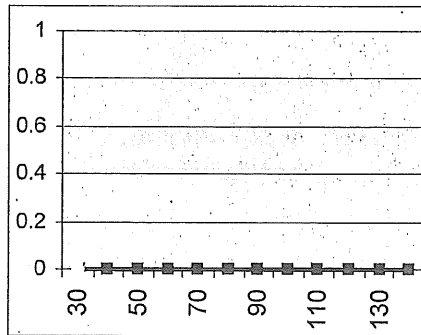
These properties are located within the Incorporated areas of Columbia County. These properties have been identified as having little value because of size or shape. Improvement values displayed are for paving and are considered to be of little importance. No adjustment is recommended for these properties.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	0
120	0
130	0
140	0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

SD

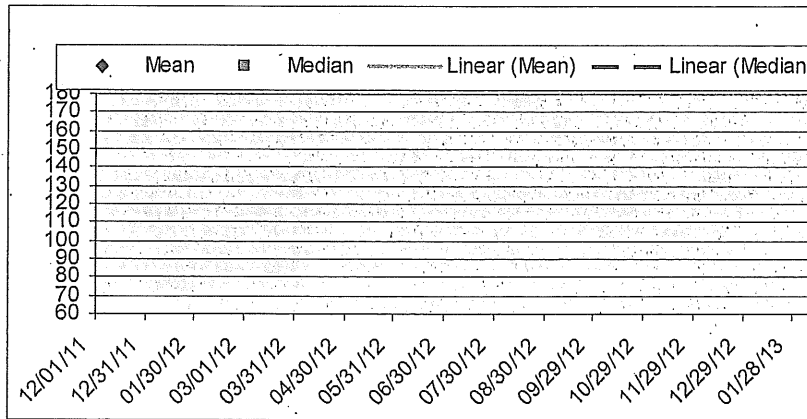
95%
Confidence

COV

Number Of Sales 0

Central Tendencies

Month Mean Median Sales



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
020	01	00	000		0	St Helens	020	03	00	000		0	Vernonia
020	01	73	000		0	St Helens	020	04	00	000		0	Rainier
020	02	00	000		0	Scappoose	020	05	00	000		0	Clatskanie
020	02	11	000		0	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	18			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	11,600	100.00 %	11,600	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

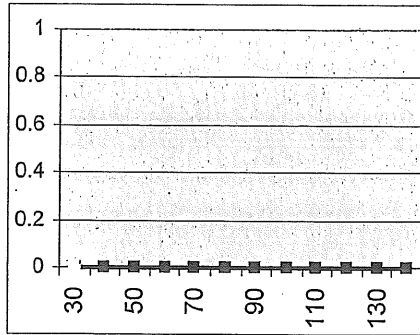
These properties are zoned commercial and have minimal value because of size, shape or other factors. They are held at minimum value and no adjustment is recommended.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

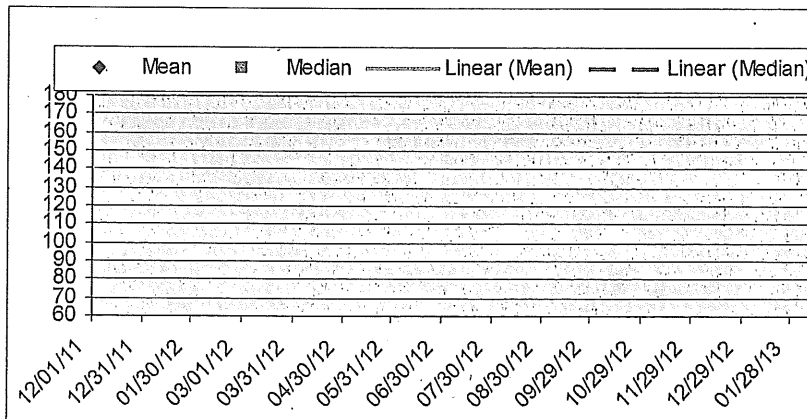
Median
AD
COD
Mean
SD
COV

Wtd Mean
GeoMean
PRD
95%
Confidence

Number Of Sales 0

Central Tendencies

Month Mean Median Sales



AP AR	SA AR	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA AR	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
030	01	00	000		0	St Helens
030	01	01	000		0	Columbia City
030	02	00	000		0	Scappoose
030	03	00	000		0	Vernonia

RMV Class	MA	SA	NH	App Year	# of Sales	Location
030	04	00	000		0	Rainier
030	04	41	000		0	Rainier
030	05	00	000		0	Clatskanie
030	06	00	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	136			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	926,480	98.67 %	926,480	98.67 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	11,970	1.27 %	11,970	1.27 %
Farm Improvement RMV	500	0.05 %	500	0.05 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

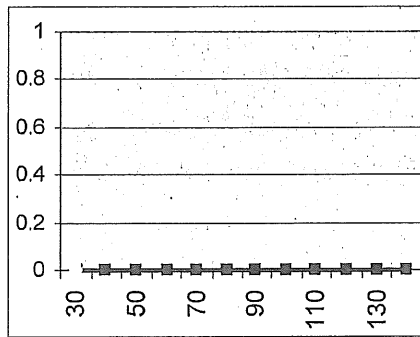
These properties are located countywide, are zoned Industrial and are of insufficient size for development. They may provide access to other sites. These properties are given minimal value and no adjustment is recommended. Also included in the population for this RMV Class are Centrally Assessed properties with an 003 Property Class designation. It was anticipated that these properties would have been removed from this RMV Class for this years Ratio Study, however because of time constraints this was not accomplished. The Minor Improvements indicated are of little or no consequence.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	0
120	0
130	0
140	0

Median
AD
COD
Mean
SD
COV

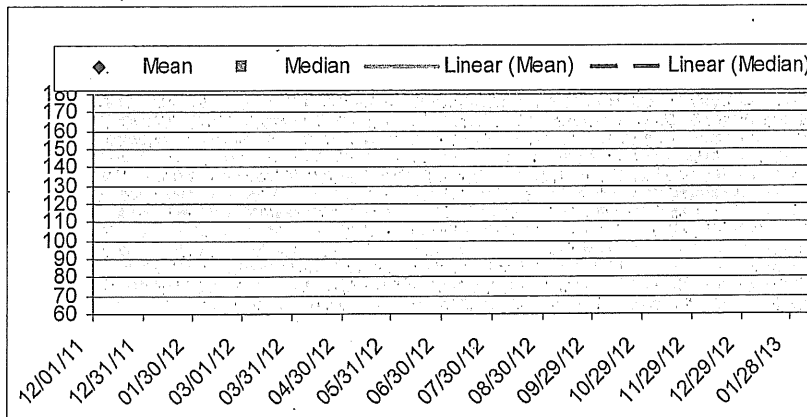
Wtd Mean
GeoMean
PRD
95% Confidence

Number Of Sales

0

Central Tendencies

Month Mean Median Sales



AP AR	SA NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
040	02	00	000		0	Scappoose	040	04	41	000		0	Rainier
040	02	21	000		0	Scappoose	040	04	42	000		0	Rainier
040	02	22	000		0	Scappoose	040	04	44	000		0	Rainier
040	03	00	000		0	Vernonia	040	05	00	000		0	Clatskanie
040	03	03	000		0	Vernonia	040	06	00	000		0	Rural St Helens
040	04	00	000		0	Rainier	040	06	62	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	186			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	171,920	100.00 %	171,920	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

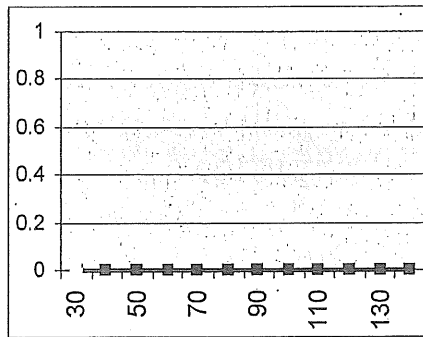
These properties are located in the Rural areas of Columbia County. They are given minimum valuation because of size, shape or other factors. No adjustment is recommended for these properties.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	0
120	0
130	0
140	0

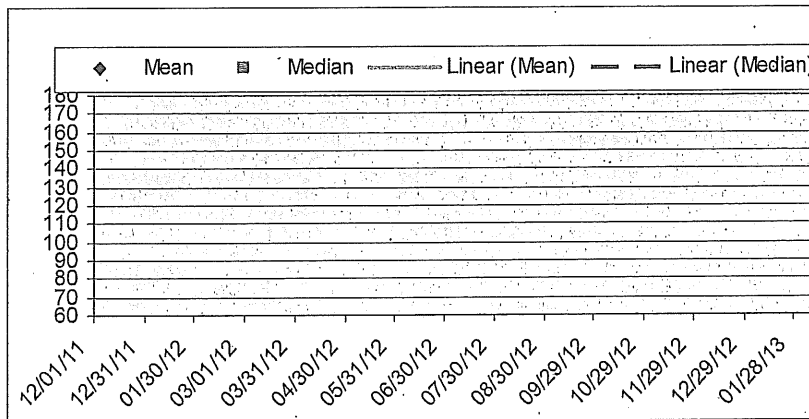
Median
AD
COD
Mean
SD
COV

Wtd Mean
GeoMean
PRD
95%
Confidence

Number Of Sales 0

Central Tendencies

Month Mean Median Sales



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

2013 RATIO STUDY

ALL MAINTENANCE AREAS

PERSONAL PROPERTY

RMV CLASS 111

FLOATING HOMES
BOAT HOSES
COMBINATIONS

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	01	95	000		0	St. Helens	111	04	97	000		0	Rainier
111	01	97	000		0	St. Helens	111	05	95	000		0	Clatskanie
111	02	95	000		0	Scappoose	111	05	97	000		0	Clatskanie
111	02	97	000		0	St Helens	111	06	95	000		0	Rural St Helens
111	04	95	000		0	Rainier	111	06	97	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	286			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	17,003,760	100.00 %	17,003,760	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

This analysis has been done in an Excel spreadsheet which follows this page. There were 6 usable sales of these properties for a population size of 2.10. Because of the sample size, the small adjustment indicated by the Indicators of Central tendency and the need for a full Re-Appraisal of all Floating Properties Countywide, it has been determined that NO ADJUSTMENT is warranted at this time. The need for a full Re-Appraisal of Floating Properties is recognized and is scheduled to be done as time and resources allow.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

FLOATING PROPERTY SALES (PERSONAL PROPERTY)

2013 RATIO STUDY

Sale #	Code/Account #	Tax ID #	Marine Board #	Property Class	SALE DATE	ADJUSTED SALE PRICE	MA SA	Cond Code	RMV	RATIO
1	1-09 3347	432216	FH-1975	111	10/29/2012	148000	2 95	30	102810	69
2	1-09 3456	434379	FH-2946	111	7/1/2012	172000	2 95	30	128220	75
3	1-09 3396	432186	FH-783	111	9/18/2012	174000	2 95	30	165580	95
4	1-09 3405	432110	BH-2499	111	9/8/2012	105000	2 95	30	106200	101
5	1-09 3427	432513	FH-1192	111	8/1/2012	168500	2 95	30	180170	107
6	1-09 3377	432195	C-1725	111	7/1/2012	154000	2 95	30	187800	122

Sum of \$921,500

Sum of Sales Prices

Sum of \$870,780 RMV

Population: 286 +/- 6
Sales: 6
Sample 2.10 Per Cent

Median 98
Mean 95
GeoMean 93
Weighted Mean 94

COD 16
SD 20
COV 21
AAD 15
PRD 1.00

2013 RATIO STUDY

MA 7

PERSONAL PROPERTY

**MANUFACTURED
STRUCTURES**

RMV CLASS 019

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	01	000		0	Maintenance Area 1	019	07	06	000		0	Maintenance Area 6
019	07	02	000		0	Maintenance Area 2	019	07	27	000		0	St. Helens
019	07	03	000		0	Maintenance Area 3	019	07	28	000		0	Columbia City
019	07	04	000		0	Maintenance Area 4	019	07	31	000		0	Scappoose
019	07	05	000		0	Maintenance Area 5							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	8			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	1,380	14.67 %	1,394	14.67 %
Farm Improvement RMV	8,030	85.33 %	8,110	85.33 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	101			
Farm Improvement Factor	101			
After Ratio	100			
Selected Ratio	99	2013	Adjustment	101

Explanation

This grouping of Personal Property Manufactured Structures (MS) encompasses all areas of Columbia County EXCEPT those located in Springlake Park (MA 7 SA 30). The analysis of sales has been done in an Excel Spreadsheet, with that information transferred to this page. The Excel spreadsheet follows this page. The Wtd Mean with a Ratio Indication of 99 has been selected, with a calculated overall adjustment of 101.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

MANUFACTURED HOMES (PERSONAL PROPERTY) COUNTYWIDE

Excepting MA 7 SA 30, Springlake Park

Sale #	MA	SA	Cond Code	ACCT #	SALE DATE	YEAR BUILT/ MANUFACTURER CLASS SIZE BD/BTH	ADJUSTED SALE PRICE	RMV	RATIO
1	7	02	33	435496	2/17/2012	2011 Goldenwest 451 774 SF 2Bdr/1Bth	\$31,000	\$37,500	121
2	7	02	30	574	5/1/2012	1972 Concord 451 980 SF 2Bdr/1Bth	\$9,900	\$6,930	70
3	7	04	30	1857	1/12/2012	1992 Goldstar 452 1404 SF 3Bdr/2Bth	\$11,000	\$16,090	146
4	7	04	30	1883	8/17/2012	1975 Lamplighter 441 924 sf 2 / 1	\$6,500	\$5,600	86
5	7	05	30	2539	1/15/2012	1999 Guerdon 452 1026 SF 3Bdr/2Bth	\$25,000	\$22,640	91
6	7	05	33	2475	2/7/2012	1973 Brookwood 452 1152 sf 3Bdr/2Bth	\$12,000	\$4,680	39
7	7	06	30	1542	10/18/2012	1970 Hillcrest 442 800 SF 2 / 1	\$5,000	\$4,490	90
8	7	27	30	1070	4/24/2012	1995 Grandville 442 1456 Sf 3Bdr/2Bth	\$28,000	\$27,570	98
9	7	27	30	1086	5/24/2012	1997 Redman 442 1539 SF 3Bdr/2Bth	\$32,500	\$38,240	118
10	7	27	30	1115	4/30/2012	1997 Guerdon 442 1296 SF 3Bdr/2Bth	\$32,000	\$26,430	83
11	7	27	33	1056	7/20/2012	1995 Skyline 442 1404 SF 3Bdr/2Bth	\$32,000	\$25,660	80
12	7	27	30	1124	6/20/2012	1998 Oakwood 442 1782 SF 3 / 2	\$34,500	\$38,060	110
13	7	27	33	1141	11/1/2012	1996 Ardmore 442 1080 SF 2 / 2	\$25,000	\$30,890	124
14	7	28	30	1271	2/10/2012	1995 Skyline 442 1460 SF 3Bdr/2Bth	\$30,000	\$25,150	84

MEAN	WTD MEAN
96	99
MEDIAN	COD
90	22
GEO MEAN	COV
92	28
PRD	AAD
0.97	20

Explanation: The Wtd Mean with a Ratio of 99 has been selected as the best fit for these properties. The calculated adjustment is 101.

COLUMBIA County 2013 Ratio Study

RMV	App	# of				
Class	MA	SA	NH	Year	Sales	Location
019	07	30	000		0	Scappoose

RMV	App	# of				
Class	MA	SA	NH	Year	Sales	Location

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED			
Population - Number of Accounts	1				
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdown	Post Trend Values	Post Trend Brkdown	
Prior Year Population Values					
Land RMV	0	0.00 %	0	0.00 %	
OSD RMV	0	0.00 %	0	0.00 %	
Residential Improvement RMV	47,520	100.00 %	50,371	100.00 %	
Farm Improvement RMV	0	0.00 %	0	0.00 %	
SelectedRatioFromSales	94				
RMV Adjustment	100				
Before Ratio	94				
Overall Adjustment Factor	106				
Land Adjustment Factor	100				
OSD Adjustment Factor	100				
Residential Adjustment Factor	106				
Farm Improvement Factor					
After Ratio	100				
Selected Ratio	94	2013	Adjustment	106	

Explanation

This analysis of sales of Personal Property Manufactured Structures (MS) in Springlake Par, MA 7 SA 30, has been done in an Excel Spreadsheet, and that information is transferred to this page. The Excell Spreadsheet follows this page. The Mean with a Ratio Conclusion of 94 has been selectedand an overall adjustment of 106 has been calculated.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

**MANUFACTURED HOMES
(PERSONAL PROPERTY)
SPRINGLAKE PARK**

Sale #	MA	SA	Cond Code	Account Number	SALE DATE	YEAR BUILT/ MANUFACTURER CLASS SIZE BD/BTH	ADJUSTED SALE PRICE	RMV	RATIO
1	7	30	30	30244	4/2/2016	2005 Redman 452 1485 SF 3Bdr/2Bth	\$112,000	\$82,740	74
2	7	30	33	30423	5/4/2012	1995 Redman 452 1680 SF 3Bdr/2Bth	\$43,900	\$43,230	98
3	7	30	30	210	7/25/2012	1997 Golden Eagle 452 1500 SF 3 / 2	\$50,000	\$53,640	107
4	7	30	33	136	8/15/2012	1995 Fleetwood 462 1526 sf 3 / 2	\$63,000	\$64,760	103
5	7	30	30	110	8/22/2012	1989 Liberty 452 1512 sf 3 / 2	\$19,000	\$23,200	122
6	7	30	33	155	8/23/2012	1995 Modular 452 1420 sf 2 / 2	\$55,000	\$59,170	108
7	7	30	30	122	9/18/2012	1990 Golden West 442 1620 SF 3 / 2	\$30,000	\$29,500	98
8	7	30	33	176	10/4/2012	1996 Goldenwest 452 1080 SF 3 / 2	\$25,500	\$22,540	88
9	7	30	33	174	11/30/2012	1996 Golden West 452 1512 sf 3 / 2	\$94,000	\$74,890	80
10	7	30	33	117	12/16/2012	1990 Fleetwood 442 1782 sf 3 / 2	\$50,000	\$32,090	64

MEAN	WTD MEAN
94	90
MEDIAN	COD
98	14
GEO MEAN	COV
93	19
PRD	AAD
1.05	13

Explanation: The Mean with a Ratio of 94 has been selected as the best fit for these properties. The calculated adjustment is 106.

2013 RATIO STUDY

ALL MAINTENANCE AREAS

STUDY AREA 60

ISLANDS

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	02	60	000		0	Scappoose	400	06	60	000		0	Rural St Helens
200	04	60	000		0	Rainier	800	04	60	000		0	Rainier
200	05	60	000		0	Clatskanie	800	05	60	000		0	Clatskanie
400	05	60	000		0	Clatskanie	400	04	60	000		0	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	29			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	1,581,790	100.00 %	1,581,790	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

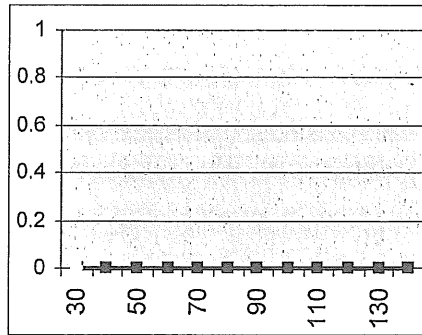
These properties are located on islands in the Columbia River, but do not include any properties located on Sauvie Island. There are historically few sales of these properties. Because of the lack of relevant data and the limited access to these properties, no adjustments are indicated.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median
AD
COD
Mean
SD
COV

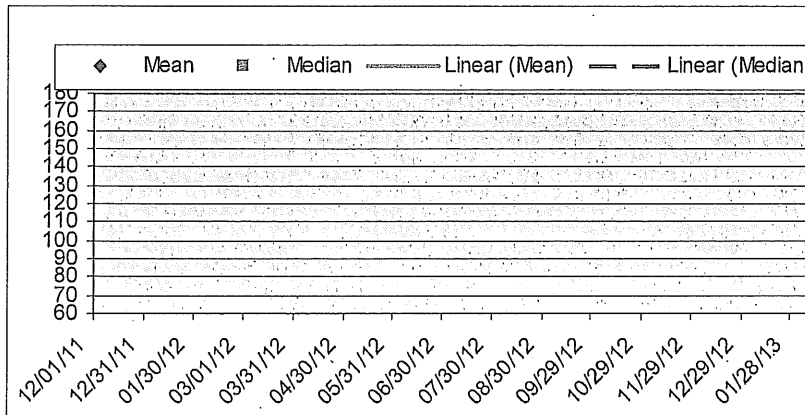
Wtd Mean
GeoMean
PRD
95%
Confidence

Number Of Sales

0

Central Tendencies

Month Mean Median Sales



AP	SA	NH	PRP	BLD	RJ	MAP NO.	BOOK	PAGE	ACRES	RMV	RMV	TOTAL	SALES	SALE	SALE	RATIO
AR			CLS	CLS	CD					LAND	IMP	VALUE	PRICE	DATE	NO	
AP	SA	NH	PR	BLD	RJ	ACCOUNT NO	BOOK	PAGE	AC	RMV	RMV	TOTAL	SALES	SALE	SALE	RATIO
AR			P	CLS	CD					LAND	IMP	VALUE	PRICE	DATE	NO	
			CLS													

2013 RATIO STUDY

ALL MAINTENANCE AREAS

RMV CLASS 600

STUDY AREA 06

HIGHEST AND BEST USE
FOREST LANDS

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
600	02	06	000		0	Scappoose
600	03	06	000		0	Vernonia
600	04	06	000		0	Rainier

RMV Class	MA	SA	NH	App Year	# of Sales	Location
600	05	06	000		0	Clatskanie
600	06	06	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	605			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	88,467,510	99.99 %	88,467,510	99.99 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	4,490	0.01 %	4,490	0.01 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

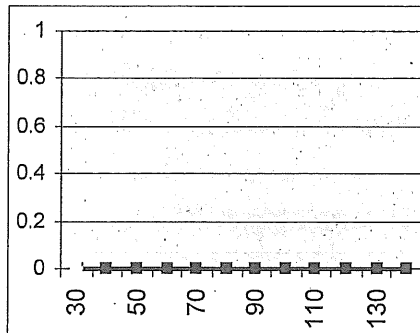
This grouping of properties are identified as Highest and Best Use timber lands and are located throughout the county. They are usually large tracts of land located away from primary roads, often with topography and access limitations. Real Market Values for these Properties are based on Designated Forest Land Values provided by the Department of Revenue annually, and these values are implemented by this office for each Roll Year. There is historically little sales activity associated with these properties. No adjustment is warranted for these properties.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



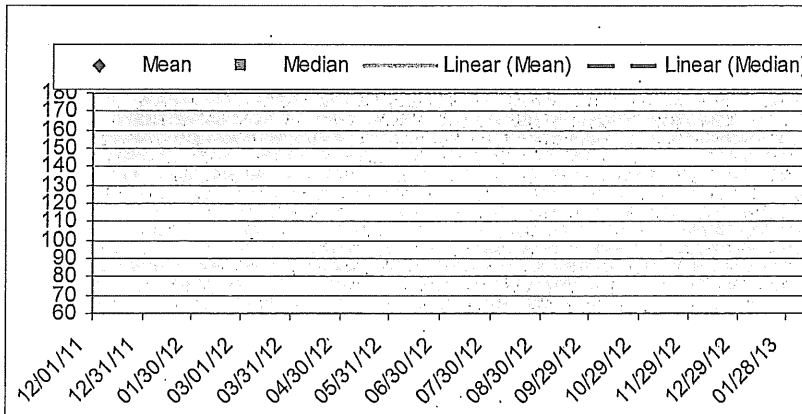
Number Of Sales 0

30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median
AD
COD
Mean
SD
COV

Wtd Mean
GeoMean
PRD
95%
Confidence

Central Tendencies



Month Mean Median Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

2013 RATIO STUDY

ALL MAINTENANCE AREAS

COMMERCIAL

AND

INDUSTRIAL

PROPERTIES

ALL 20X and 30X CLASSES

COLUMBIA County 2013 Ratio Study

Adjustment Calculation Summary

Sample - Number of Sales	1			
Population - Number of Accounts	572			
Sales as a percentage of the Population	0.17 %	Pre-Trend Brkdown	Post Trend Values	Post Trend Brkdown
Prior Year Population Values				
Land RMV	25,657,650	100.00 %	23,348,462	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	110			
RMV Adjustment	100			
Before Ratio	110			
Overall Adjustment Factor	91			
Land Adjustment Factor	91			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	110	2013	Adjustment	91

Explanation

There was a single usable sale within the county of Unimproved Commercial Property during the sales period. This data is considered insufficient to make a reliable conclusion, therefore the conclusion from the Improved Commercial Properties is deemed the most reliable and is applied here.

Performance History

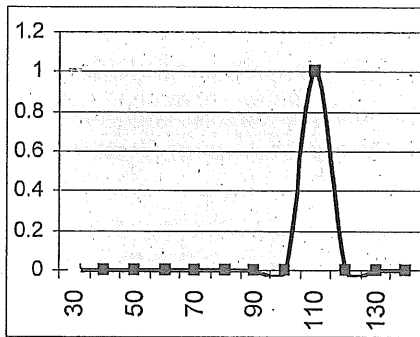
	2013	2012	2011	2010	2009
COD	0.00	14.56	-	-	0.00
PRD	1.00	1.00	-	-	1.00

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	01	00	000		0	St Helens	200	03	31	000		0	Vernonia
200	01	01	000		0	Columbia City	200	04	00	000		0	Rainier
200	01	71	000		0	St Helens	200	04	41	000		0	Rainier
200	01	72	000		0	St Helens	200	04	42	000		0	Rainier
200	01	73	000		0	St Helens	200	04	44	000		0	Rainier
200	02	00	000		0	Scappoose	200	04	45	000		0	Rainier
200	02	11	000		1	Scappoose	200	05	00	000		0	Clatskanie
200	02	12	000		0	Scappoose	200	05	51	000		0	Clatskanie
200	02	14	000		0	Scappoose	200	05	55	000		0	Clatskanie
200	02	15	000		0	Scappoose	200	06	00	000		0	Rural St Helens
200	02	21	000		0	Scappoose	200	06	61	000		0	Rural St Helens
200	02	22	000		0	Scappoose	200	06	62	000		0	Rural St Helens
200	02	25	000		0	Scappoose	200	06	63	000		0	Rural St Helens
200	02	45	000		0	Sauvies Island	200	06	64	000		0	Rural St Helens
200	02	72	000		0	Scappoose	200	06	65	000		0	Rural St Helens
200	02	88	000		0	Scappoose	200	06	71	000		0	Rural St Helens
200	03	00	000		0	Vernonia	200	02	41	000		0	Sauvies Island
200	03	03	000		0	Vernonia							

COLUMBIA County 2013 Ratio Study

Frequency

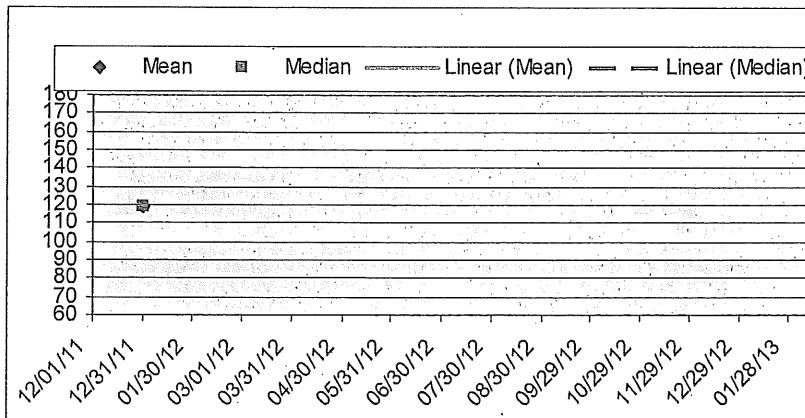


30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	1
120	0
130	0
140	0

Median	119	Wtd Mean	119
AD	0.00	GeoMean	119
COD	0.00	PRD	1.00
Mean	119	95% Confidence	1.96
SD	1.00		
COV	0.84		

Number Of Sales 1

Central Tendencies



Month	Mean	Median	Sales
Jan-12	119	119	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	11	000	200		33	3N2W13-DB-00203	2012	187	1.60	713,500	0	713,500	600,000	Jan-12	1	119

COLUMBIA County 2013 Ratio Study

Adjustment Calculation Summary

Sample - Number of Sales	6			
Population - Number of Accounts	1,094			
Sales as a percentage of the Population	0.55 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	149,452,580	42.60 %	136,001,848	42.60 %
OSD RMV	194,000	0.06 %	176,540	0.06 %
Residential Improvement RMV	198,445,120	56.57 %	180,585,059	56.57 %
Farm Improvement RMV	2,727,710	0.78 %	2,482,216	0.78 %
SelectedRatioFromSales	110			
RMV Adjustment	100			
Before Ratio	110			
Overall Adjustment Factor	91			
Land Adjustment Factor	91			
OSD Adjustment Factor	91			
Residential Adjustment Factor	91			
Farm Improvement Factor	91			
After Ratio	100			
Selected Ratio	110	2013	Adjustment	91

Explanation

The Indicators of Central Tendency for Improved Commercial Properties ranged from a low of the Median at 110 to a high of the WtdMean of 117 with the Mean and GeoMean near the top of the range at 116 and 115 respectively. Sales of Improved Commercial properties since 2008 have proved to be inconclusive until this year. As the Market Values of Residential Properties have demonstrated a decline and then the beginning of a slow recovery over this time period, the market trend for Commercial Properties has been inconclusive due the lack of reliable sales data. Although the sample is small all of the sales indicate that an adjustment is warranted. Based on the small sample size and the inference taken from the chart labeled "Central Tendencies," it has been determined that a conservative approach to an adjustment of these properties is appropriate, and the Median has been selected with a Ratio of 110, and an overall adjustment of 91, is recommended. A complete re-appraisal of all commercial properties countywide is scheduled following the conclusion of a re-appraisal of Residential Properties in Maintenance Area 2.

Performance History

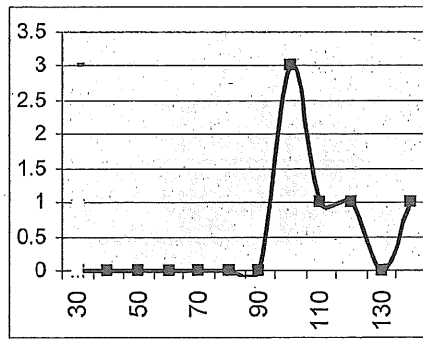
	2013	2012	2011	2010	2009
COD	10.91	18.02	-	-	27.56
PRD	0.99	1.09	-	-	1.17

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
201	03	00	000		1	Vernonia	201	01	71	000		0	St Helens
201	02	11	000		0	Scappoose	201	06	61	000		0	Rural St Helens
201	04	44	000		0	Rainier	201	02	72	000		0	Scappoose
201	06	00	000		0	Rural St Helens	201	02	22	000		0	Scappoose
201	02	25	000		0	Scappoose	201	02	21	000		0	Scappoose
201	06	63	000		0	Rural St Helens	201	01	74	000		0	St Helens/Col City
201	02	14	000		0	Scappoose	201	02	15	000		1	Scappoose
201	01	00	000		0	St Helens	201	01	72	000		1	St Helens
201	04	42	000		0	Rainier	201	06	64	000		0	Rural St Helens
201	02	00	000		0	Scappoose	201	04	00	000		2	Rainier
201	05	51	000		0	Clatskanie	201	05	00	000		0	Clatskanie
201	01	73	000		1	St Helens	201	01	01	000		0	Columbia City
201	01	15	000		0	St Helens	201	02	13	000		0	Scappoose
201	06	71	000		0	Rural St Helens	201	03	31	000		0	Vernonia
201	02	12	000		0	Scappoose	201	04	41	000		0	Rainier

COLUMBIA County 2013 Ratio Study

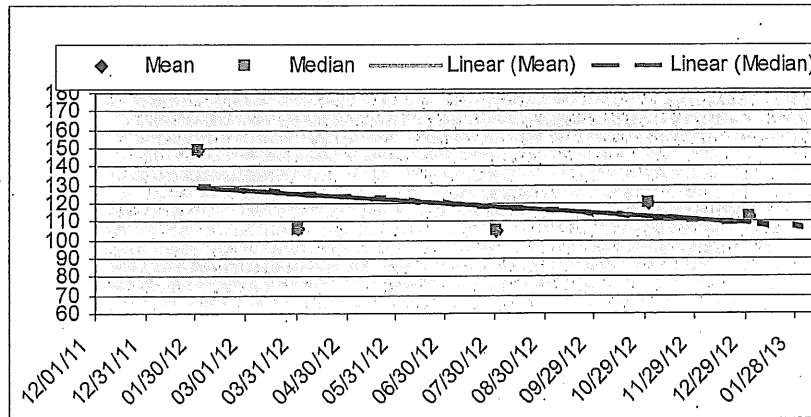
Frequency



Number Of Sales 6

Median	110	Wtd Mean	117
AD	12.00	GeoMean	115
COD	10.91	PRD	0.99
Mean	116	95% Confidence	13.69
SD	17.11		
COV	14.75		

Central Tendencies



Month	Mean	Median	Sales
Feb-12	149	149	1
Apr-12	106	106	1
Aug-12	105	105	2
Nov-12	120	120	1
Jan-13	113	113	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
03	00	000	201	552	33	5N4W23-CA-00200	2012	7149	0.38	80,540	125,330	205,870	200,000	Aug-12	1 103
04	00	000	201	520	30	7N2W16-DB-04000	2012	2433	0.40	66,700	103,660	170,360	160,000	Apr-12	2 106
01	72	000	201	500	33	4N1W04-AC-05701	2012	6503	0.39	171,710	31,500	203,210	190,000	Aug-12	3 107
01	73	000	201	500	30	4N1W03-BB-13800	2013	810	0.15	55,030	63,440	118,470	105,000	Jan-13	4 113
02	15	000	201	571	30	3N2W24-C0-00302	2012	9088	0.40	179,950	530	180,480	150,000	Nov-12	5 120
04	00	000	201	581	33	7N2W26-A0-01000	2012	1386	3.36	186,400	111,410	297,810	200,000	Feb-12	6 149

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
300	01	00	000		1	St Helens	300	04	00	000		0	Rainier
300	01	01	000		0	Columbia City	300	04	41	000		0	Rainier
300	01	78	000		0	St Helens	300	05	00	000		0	Clatskanie
300	02	00	000		0	Scappoose	300	06	00	000		0	Rural St Helens
300	03	00	000		0	Vernonia	300	06	78	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	1			
Population - Number of Accounts	129			
Sales as a percentage of the Population	0.78 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	41,884,230	100.00 %	41,884,230	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

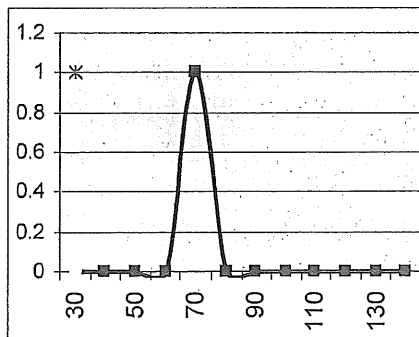
There was a single sale of Unimproved Industrial Land during the Study Period, and no sales of Improved Industrial Properties. It is therefore recommended that no adjustment be made for these properties this year. A Re-Appraisal of Commercial and Industrial Properties Countywide is scheduled after the re-appraisal of Maintenance Area 2 Residential Properties next year.

Performance History

	2013	2012	2011	2010	2009
COD	0.00	-	-	26.84	41.69
PRD	1.00	-	-	0.72	0.87

COLUMBIA County 2013 Ratio Study

Frequency



30	0
40	0
50	0
60	0
70	1
80	0
90	0
100	0
110	0
120	0
130	0
140	0

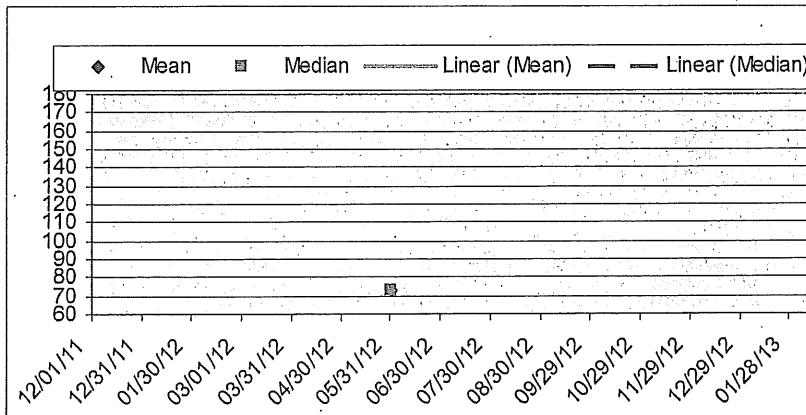
Median	73	Wtd Mean	73
AD	0.00	GeoMean	73
COD	0.00	PRD	1.00
Mean	73	95% Confidence	1.96
SD	1.00		
COV	1.37		

Number Of Sales

1

Central Tendencies

Month	Mean	Median	Sales
Jun-12	73	73	1



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	00	000	300		30	4N1W09-AB-01000	2012	4056	1.18	91,500	0	91,500	125,000	Jun-12	1	73

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
301	01	00	000		0	St Helens	301	04	90	000		0	Rainier
301	01	78	000		0	St Helens	301	05	00	000		0	Clatskanie
301	01	90	000		0	St Helens/Col City	301	05	90	000		0	Clatskanie
301	02	00	000		0	Scappoose	301	06	00	000		0	Rural St Helens
301	02	90	000		0	Scappoose	301	06	61	000		0	Rural St Helens
301	03	00	000		0	Vernonia	301	06	78	000		0	Rural St Helens
301	04	00	000		0	Rainier	301	06	90	000		0	Rural St Helens
301	04	41	000		0	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	198			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	65,112,930	58.46 %	65,112,930	58.46 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	45,999,210	41.30 %	45,999,210	41.30 %
Farm Improvement RMV	262,690	0.24 %	262,690	0.24 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

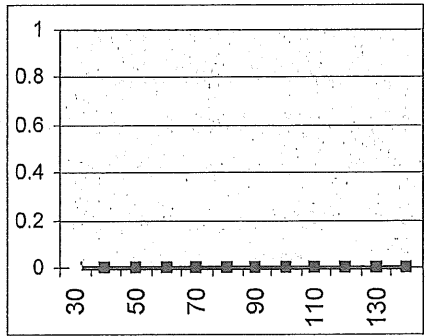
There were no usable sales available for analysis of Improved Industrial Properties during the Study period, and only one Unimproved sale of Industrial Zoned Land. It is therefore recommended that no adjustment be made for these properties this year. A Re-Appraisal of Commercial and Industrial Properties Countywide is scheduled after the re-appraisal of Maintenance Area 2 Residential Properties next year.

Performance History

	2013	2012	2011	2010	2009
COD		3.13	-	22.49	41.69
PRD		0.99	-	0.84	0.87

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales

0

30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	0
120	0
130	0
140	0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

95%

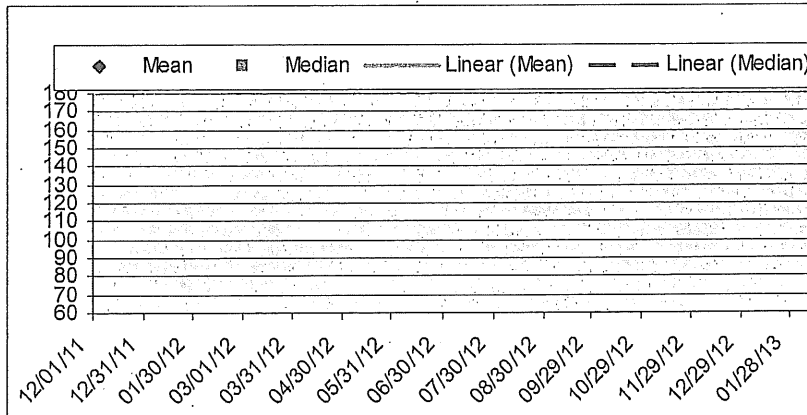
SD

Confidence

COV

Central Tendencies

Month Mean Median Sales



AP	SA	NH	PRP	BLD	RJ	MAP NO.	BOOK	PAGE	ACRES	RMV	RMV	TOTAL	SALES	SALE	SALE	RATIO
AR			CLS	CLS	CD					LAND	IMP	VALUE	PRICE	DATE	NO	
AP	SA	NH	PR	BLD	RJ	ACCOUNT NO	BOOK	PAGE	AC	RMV	RMV IMP	TOTAL	SALES	SALE	SALE	RATIO
AR			P	CLS	CD					LAND		VALUE	PRICE	DATE	NO	
			CLS													

2013 RATIO STUDY

ALL MAINTENANCE AREAS

MULTI-FAMILY

(5 PLUS UNITS)

PROPERTIES

701 PROPERTY CLASS

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
701	01	00	000		0	St Helens	701	05	00	000		0	Clatskanie
701	02	00	000		0	Scappoose	701	06	00	000		0	Rural St Helens
701	04	00	000		0	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	56			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	9,210,090	17.77 %	9,210,090	17.77 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	42,600,260	82.17 %	42,600,260	82.17 %
Farm Improvement RMV	31,060	0.06 %	31,060	0.06 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

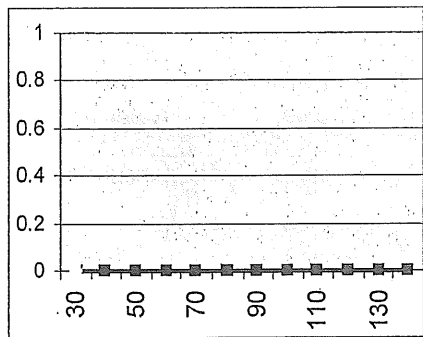
With no sales of RMV Class 701 Properties during the Study Period, it is recommended that no adjustment be made to these properties this year. .

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	0.00
PRD	-	-	-	-	1.00

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales

0

30 0
40 0
50 0
60 0
70 0
80 0
90 0
100 0
110 0
120 0
130 0
140 0

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

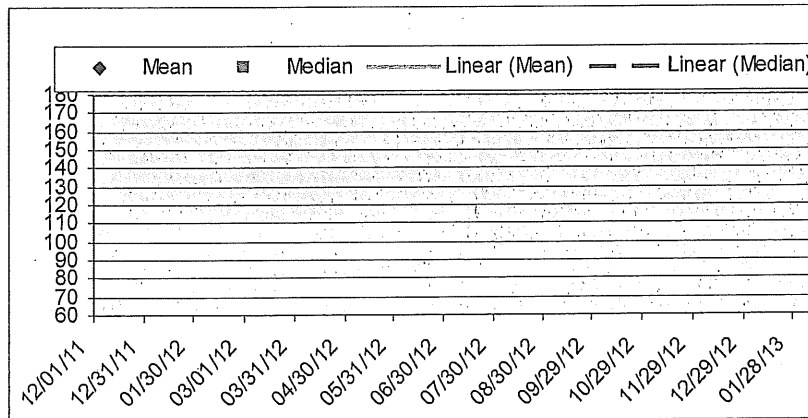
PRD

95%

Confidence

Central Tendencies

Month Mean Median Sales



AP	SA	NH	PRP	BLD	RJ	MAP NO.	BOOK	PAGE	ACRES	RMV	RMV	TOTAL	SALES	SALE	SALE	RATIO
AR			CLS	CLS	CD					LAND	IMP	VALUE	PRICE	DATE		NO
AP	SA	NH	PR	BLD	RJ	ACCOUNT NO	BOOK	PAGE	AC	RMV	RMV	TOTAL	SALES	SALE	SALE	RATIO
AR			P	CLS	CD					LAND	IMP	VALUE	PRICE	DATE		NO
			CLS													

2013 RATIO STUDY

ALL MAINTENANCE AREAS

PROPERTY CLASS 221

COMMERCIAL FLOATING

PROPERTY

COLUMBIA County 2013 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
221	01	00	000		0	St Helens	221	05	00	000		0	Clatskanie
221	02	00	000		0	Scappoose	221	06	00	000		0	Rural St Helens
221	04	00	000		0	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	13			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	5,191,060	100.00 %	5,191,060	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	100			
RMV Adjustment	100			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	100	2013	Adjustment	100

Explanation

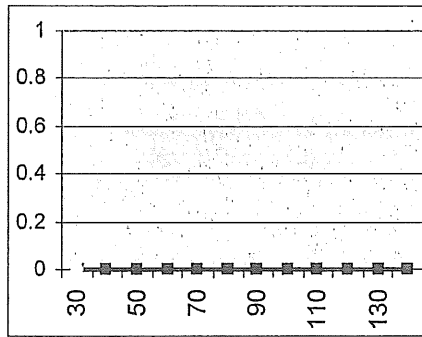
There were no usable sales of Commercial Floating Properties during the Study Period, and no adjustment is warranted.

Performance History

	2013	2012	2011	2010	2009
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2013 Ratio Study

Frequency



Number Of Sales 0

30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	0
120	0
130	0
140	0

Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

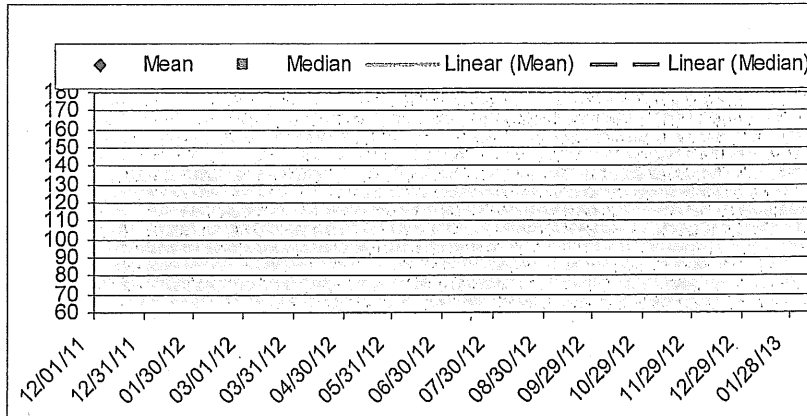
SD

95%
Confidence

COV

Central Tendencies

Month Mean Median Sales



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
AP AR	SA	NH	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

2013 RATIO STUDY

**COEFFICIENT of
DISPERSION**

and

**PRICE RELATED
DIFFERENTIAL**

AREAS OF CONCERN

ALL MAINTENANCE AREAS

Coefficient of Dispersion 2013

AREAS OF CONCERN

Coefficients of Dispersion by Maintenance Area, Study Area and Property Class from the Sales File with sales date January 1, 2012 through December 31, 2012. This is the sales study period used in the 2013 Ratio Report.

Maintenance Area	Study Area	Real Property Class	COD	Standard for PC	Prior Year COD
MA 1	15	101	22.36	15	27.31
MA 3	00	101	17.73	15	15.51
MA 3	03	101,109	31.21	15, 25	15.51
MA 3	39	101	17.73	15	15.51
MA 3	40	101	17.73	15	15.51

The Coefficient of Dispersion for the properties listed above have exceeded the Standards. Each of the areas listed have unique characteristics or market influences that need recognition.

The properties within the MA 1, SA 15 are Improved Properties sited along the Columbia River within the City Limits of St. Helens and Columbia City. There was a single sale during the Sales Period, and two additional sales from the prior year were added to the analysis. This increased the sample size. An improvement is noted from the prior years COD.

The properties in MA 3 SA's 00, 03, 39 and 40 continue to be heavily influenced by current Market conditions and the remaining stigma from the floods within the Vernonia City Limits.

**Price Related Differential
2013**

AREAS OF CONCERN

Price Related Differential by Maintenance Area, Study Area and Property Class from the Sales File with sales date January 1, 2012 through December 31, 2012. This is the sales study period used in the 2013 Ratio Report.

Maintenance Area	Study Area	Real Property Class	PRD	Under .98	OVER 1.03
MA 3	03	101	1.32		XX
MA 3	00, 39, 40	101, 109	1.06		XX
MA 3	38	109	1.06		XX
MA 6	61, 62, 63, 64, 65	401	1.04		XX
MA 6	56, 61, 62, 63, 64, 65,	401 and 409	1.06		XX
MA 7	All SA's EXCEPT 30	019	.97	XX	
MA 7	SA 30	19	1.05		XX

2013 RATIO STUDY

MAINTENANCE AREA

DESCRIPTIONS

AND

MAP

Maintenance Area Descriptions

Maintenance Area 1 - Cities of St. Helens and Columbia City

Maintenance Area 2 - City of Scappoose and Adjoining Rural Areas

Maintenance Area 3 - City of Vernonia and Adjoining Rural Areas

Maintenance Area 4 - City of Rainier and Adjoining Rural Areas

Maintenance Area 5 - City of Clatskanie and Adjoining Rural Areas

Maintenance Area 6 - Rural Areas Adjoining St. Helens and Columbia City,
Including the Warren and Deer Island Areas.

Maintenance Area 7 - All Personal Property Manufactured homes in Columbia
County Regardless of Location.

Maintenance Areas
Columbia County, OR

