

COLUMBIA COUNTY ASSESSOR



Certified Ratio Study

January 1, 2016

COLUMBIA County 2016 Ratio Study

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Oregon

Kate Brown, Governor

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August 11, 2016

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

Columbia County 2016 Assessor's Certified Ratio Study Acceptance and Recommendations

The Department's Mass Appraisal Review team has completed its required review of your *2016 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, 2016.

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 via email at MassAppraisal.Team@oregon.gov or:

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Sincerely,

Roxanne Gillespie, MAI, Manager
Program Assistance
Property Tax Division

Tel: (503) 347-7536
Fax: (503) 945-8737
cc: County Governing Body

COLUMBIA County 2016 Ratio Study

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 the guidelines developed by the Department of Revenue,. Additionally, 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

Joelle Leach, Data Analyst

Preparer/Contact Person

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Phone

COLUMBIA County 2016 Ratio Study

INTRODUCTION

The purpose and description of the Ratio Study is to measure the level of appraised value in relation to the market value as of the assessment date of January 1st. For 2016, this is the relationship between the set-up real market values for all re-calculated and re-appraised areas. For those areas which are not yet re-calculated or re-appraised, it is the relationship to the prior years real market values and current real market values.

Further, the Ratio Study's purpose is to document the analysis and to identify adjustment factors which will achieve 100% of Real Market Value (RMV). As an additional benefit, this study is a valuable tool for managing appraisal and adjustment programs.

Appraisal Areas, Study Areas and Property Classes:

Columbia County is divided into six (6) appraisal areas as illustrated on the County map included in this report. These appraisal areas are referred to as "Maintenance Areas" (MA). Properties within these areas are grouped together for market analysis and adjustment by using study area codes and/or property class codes. (Refer to the Table of Contents for the location of these listings).

Also referenced on the area list is Maintenance Area 7. This area is not noted on the County map but is designated for personal property manufactured structures located within the County.

The Ratio Study format:

The format of the Ratio Study is intended to reflect the adjustment program. Most notably are the "Summary of Ratio Indications" and the "Market Area Conclusions and Adjustments" portions of this study. The remaining sections lend additional support and provide further explanation of the adjustment program.

Summary of Ratio Indications:

This summarizes the adjustments by Maintenance Area (MA), Study Area (SA) and Neighborhood (NH). Adjustments are made in general categories by RMV class:

1. Residential Urban (RMV class 1XX); Rural Tract (RMV class 4XX or 8XX) - This includes residential land, single family site built dwellings, real property manufactured structures, condominium's, 2-4 unit multi-family properties within the city limits and rural properties which include small rural residential parcels to large farm and forest parcels.
2. Commercial (RMV class 2XX) and Industrial (RMV class 3XX) - This includes commercial, industrial and multi-family properties appraised by the County in urban or rural locations.
3. Others: this is for properties which do not fit well into any of the categories or they may be better reported as a separate group.

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Sales Trimming

When performing an analysis of the sales for a dataset, there may be ratios which are either very high or very low in the array. These are commonly referred to as “outliers”. These outlying ratios require further investigation to identify whether the sale is deemed “useable” for analysis. Also, there may be other extreme circumstances surrounding the sale which would result in a skewed ratio.

If the sale is deemed not beneficial to the analysis, then the sale should be “trimmed” from the array. The two standard methods of trimming sales are the “Trimmed Mean” and the “Interquartile Range”. Removing outliers is not a mandatory practice but is appropriate when drawing a conclusion about the sales data. If the decision is made to trim outliers, then this task must be performed before the process of analyzing the sales data.

Time Study

The purpose for performing a time study is to measure the movement of value over a period of time. In this case, sales data is analyzed and an adjustment (shown as a per cent) is developed to bring the sales price to the January 1st assessment date.

Two separate time studies have been performed: one for the RMV Class 1XX properties and another for the RMV Class 4XX properties. For this Ratio Study, the Mid-Point ratio analysis was deemed as the best technique to adjust for change over time. This is an adjustment to the central tendency and the resulting factor is used to adjust the RMV’s to the assessment date.

Studies: Market Area Conclusions and Adjustments

Following, are the essential elements which make up the Ratio Study. They include the individual ratio study for an area, as well as the supporting sales listings and statistics.

FÈ Market grouping: The assessment system provides for adjusting values by market group 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 and Property/RMV Class groupings are the most common market groupings used in this report. They may define the market by location, type of property or by those that have a special use.

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Ø Study: each study is two or more pages in length and identifies the Real Market Value Class, the Study Area, shows the calculation of the adjustment and also explains how the factors used in the calculation were selected. Furthermore, each study includes a sales listing with related statistics. Following are the main elements included in the study:

Ø Market Identification. This describes the population for which the individual study is done. Typically this is by the RMV class, MA and SA followed by a general description. Most locally assessed properties are identified and a trend conclusion is completed whether or not a sales listing can be generated or a conclusion of "No Trend" is determined.

Ø "Adjustment Calculation Summary" - This section identifies the following:

FD The size of the sales sample used.

GD The total size of the population in the study, both in terms of absolute numbers and by a per cent.

HD Identifies the values of the population by land RMV, on site development RMV, residential improvement RMV and farm improvement (ancillary buildings) RMV as is documented in the Assessor 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.

ID The "Selected Ratio from Sales" is the resulting product of the selected Mean, Median, Weighted Mean or Geometric Mean ratio multiplied by the conclusion from the time adjustment study. Ratio conclusions are based on the following principles:

æD No single sale should have a large influence on the ratio indications. The objective is to avoid a Mean distorted by an extreme ratio, a Weighted Mean influenced by high valued properties and to avoid a Median when gaps exist in the middle of the frequency distribution.

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c) If an adjustment is clearly needed then it is applied. Similarly, the adjustment with the greatest support is applied.

d) Reliability fluctuates. It is dependent upon the size of the sample and the variability within the sample. Therefore, the central tendencies will lie within a range of reliable conclusions.

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C. Understanding the Adjustment Calculation process:

- 1) The "Selected Ratio" may be adjusted by the result of the time study. After it is adjusted it is then entered. If the time adjustment is used, the adjustment is identified in the explanation portion of the analysis.
- 2) The "Before Ratio" is a measure of RMV assessment at an established point in time for the tax year before any adjustments are applied.
- 3) The "Overall Adjustment Factor" is needed to bring the prior years RMV (or the current years re-calculated RMV) to the statutorily required 100% real market value as of the January 1st assessment date of the current year. It is calculated by dividing 1 by the Before Ratio. For improved properties, the overall adjustment factor is separated into the following:
 - a) Land Adjustment Factor: the adjustment by which the land portion of a property is adjusted. It usually is the land adjustment factor used in the analysis of unimproved land within the same maintenance area and study area. However, the adjustment may be from the analysis of the improved classes if an insufficient sample is available.
 - b) OSD Adjustment Factor: the adjustment factor which brings the site improvement portion of the property to 100% of RMV. This value is available as a separate component for improved properties but at this time remains a flat 100 adjustment.
 - c) Residential Improvement Factor: the adjustment factor needed to bring the residential and associated improvements to 100% of RMV as part of the overall adjustment.
 - d) Farm Improvement Adjustment: the adjustment factor applied as part of the overall adjustment that will bring outbuildings and other ancillary structures to 100% real market value.
 - e) After Ratio: this measures the valuation to be sure it meets 100% real market value requirements as outlined in statute. The After Ratio "tests" the County's ratio study program.
 - f) Adjustment: this is an estimate of the level of appraised value (RMV) relative to the market value as of the assessment date of January 1st. This is before adjusting the RMV (trending).

- D. Explanation: This is a written statement explaining which central tendency was selected to determine the ratio used in the analysis. If other factors contribute to the conclusion they may be mentioned here as well.

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E. Performance History - a historical display of performance (valuation).

- 1) Coefficient of Dispersion (COD): The history of COD, if available, is shown at the bottom of the report. A COD higher than the maximum for the property class and type is an indication that the property class and/or MA may have a valuation problem. The acceptable measurement of uniformity ranges are when the COD percentages are between 10 to 20.
- 2) Price Related Differential (PRD): The PRD history, if available. The measurements for vertical equity are:
 - a) A PRD above 1.00 suggests that high-valued properties are under-appraised and low-valued properties are over-appraised (regressive).
 - b) A PRD less than 1.00 suggests that high-value properties are over-appraised and low-valued properties are under-appraised (progressive).
 - c) A PRD that is within a range of .98 to 1.03 are ideal.

Performance Measures

To measure valuation, the following studies are performed:

1. For most studies, sales listings are used. Each sale in the listing is identified by MA, SA, Neighborhood and Property Class. Once identified, then additional details are provided which more fully describe the individual sale properties. Next, a ratio is calculated for each sale, then statistics are calculated for the entire group and displayed. The major components are as follows:
 - A. Maintenance Area (MA): one of the seven appraisal areas.
 - B. Study Area (SA): market identification code.
 - C. Neighborhood (NH): not used at this time, current designation is "000".
 - D. Real Market Property Class: a three digit number identifying the type of property.
 - E. Building Class: the type of main structure included in the sale.
 - F. Sales are identified by a code (reject code) illustrating whether a sale is confirmed or not confirmed. The sales codes are as follows:
 - 01 Change of use
 - 02 Deed does not show warranty of title
 - 03 Grantee/Grantor is a political subdivision (Gov't Agency)
 - 04 Grantee/Grantor is a bank, other financial institution or lender foreclosure
 - 05 Grantee/Grantor is a charitable, religious or other institution

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- 06 Grantee/Grantor are related or business associates
- 07 Conveyance of partial or divided interest
- 08 Grantee and Grantor are the same, convenience
- 09 Exchange of properties (trade)
- 10 Conveyance of property to avoid lien/foreclosure
- 11 Grantor is the sheriff, court officer, receiver, guardian, trustee
- 12 Contract payoff
- 13 Critical field on deed/document left blank
- 14 Prior year's RMV or sales price is missing
- 15 Date of sale is missing
- 16 Sale includes personal property not accurately extracted
- 17 Sale includes orchards, crops or other exempt property
- 18 Mortgage balance is not noted
- 19 Error in classification
- 20 Other errors or omissions
- 21 Property sold not same as assessed
- 22 Sale includes designated forest land and/or timber
- 23 Sale of properties that had RMV adjudicated in the past 5 years
- 24 Sale price varies greatly but no sales review
- 25 RMV needs updating due to new construction
- 26 Short sale
- 27 Sale price varies greatly from RMV; sales review requested
- 28 Not used
- 29 Bank owned/REO sold on open market
- 30 Unconfirmed but usable
- 31 Unconfirmed prior year sale adj. for time & used in current year ratio study
- 32 Confirmed prior year sale adj. for time & used in current year ratio study
- 33 Confirmed Sale

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- 34 Double sale in ratio year
- 35 Assessment clerk question
- 50 Special size change code for tracking only
- 80 Segregation
- 98 Rejection of sale by DOR although the Assessor wants it included in the ratio study
- 99 Acceptance of sale in ratio study by DOR even though the Assessor rejected it

Total Number of Sales County wide:

	Number of Arms Length transactions	Sales used in the Ratio Study	Number of Confirmed Sales	Per Cent Confirmed
MA 1	368	325	290	89%
MA 2	307	266	222	83%
MA 3	101	71	62	87%
MA 4	102	63	54	86%
MA 5	108	76	63	83%
MA 6	119	98	75	77%
MA 7 PPMS	37	37	17	46%
Com/Ind	31	17	10	59%
Apartment	1	1	1	100%
Watercraft	5	5	5	100%
TOTALS:	1179	959	799	83%

83% of useable sales used have been confirmed for the current study.

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- G. Map Number: the Assessor's map and tax lot number. (Note: more than one tax lot may be involved but not displayed)
 - H. Book: the calendar year in which the title transfer document was recorded.
 - I. Page: the recording number of the title transfer document.
 - J. Acres: the land size expressed as acreage.
 - K. RMV Land: the base set-up land value analyzed and calculated yearly.
 - L. RMV Imp: the base value using the current DOR Factor Book with the applied local cost modifier and depreciation conclusions derived from the yearly set up analysis.
 - M. Total Value: the sum of the "RMV Land" and the "RMV Imp".
 - N. Sales Price: the sale price of the property as of the date of the sale.
 - O. Sale Date: the month and year the property sold.
 - P. Sale Number: the sale listings are arrayed in an ascending order by ratio.
 - Q. Ratio: a comparison of the total appraised value to the sale price which is expressed as a percentage without a decimal point (Total RMV/Sales Price = Ratio).
- Ⓔ Explanation of the statistical data: As with all statistical analysis, the accuracy of each conclusion depends on sufficient sample sizes which properly represent the population. Judgments about grouping properties to get reasonably accurate results are primarily based on creating an adequate sample size or on Study Areas that move similarly in the market. Descriptive statistics are found on the second page of each Ratio Study and are split into two categories: Statistics of Central Tendency and Statistics of Distribution.
- A. Statistics of Central Tendency measure the center, middle or typical element in a dataset. These are assumed to generally reflect the level of appraised value (RMV) relative to the market value. However, the central tendency ratios must be analyzed in some detail to produce reasonably accurate trend conclusions. These statistics can be found on the second page of each study in numeric form and are also illustrated in graph form. The central tendency measurements are comprised of the following:
 - 1) Median: the middle ratio of an array. It is a positional ratio and if there are gaps near the center of an array the Median may be an unreliable measurement.

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- 2) Mean: traditionally referred to as the "average", the mean is the sum of all the ratios divided by the number of ratios. Because it uses all the ratios in an array, it is easily distorted by extreme low or high ratios.
 - 3) Weighted Mean: the sum of the total RMV divided by the sum of the total Sales Price. The sales with relatively high prices will have the most effect on this measure.
 - 4) Geometric Mean: the "Nth" root of the product of the ratios, where "N" is the number of ratios in the array.
- B. Statistics of Distribution: this performance measurement describes how values are distributed within the group. Basically, it illustrates how far ratios are from the central tendency. Care must be taken not to "read too much" into the distribution statistics but rather to use them as an indication of the accuracy or consistency of RMV within the marketplace. If the sample is relatively small, the conclusion of the distribution may be unreliable.
- 1) Frequency Distribution: a listing used to visually display the distribution of sale by ratio range. This list appears on the second page of each individual study and is displayed in graph and numeric form.
 - 2) Average Deviation (AD): the average of the differences between each ratio and the Median for the entire group.
 - 3) Coefficient of Dispersion (COD): the average deviation converted to a percentage.
 - 4) Standard Deviation (SD): a measure of deviation from the 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 standard analysis than the COD.
 - 5) Coefficient of Variance (COV): the standard deviation converted to a percentage.
 - 6) Price Related Differential (PRD): a measure of "vertical equity". It is calculated by dividing the mean by the weighted mean.
 - a) Regressive: a PRD of greater than 1.00 indicates that higher priced properties are under appraised relative to the moderate or low priced properties.

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- b) Progressive: a PRD of less than 1.00 indicates that lower priced properties are under appraised relative to the moderate or higher priced properties.
 - c) If the PRD is between .98 and 1.03, the degree of bias (vertical equity) is not considered significant.
- 7) 95% Confidence Interval: 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.

C. Currently, the "working" statistical standards are:

- | | |
|---|--------------------------|
| 1) Real Market Value | 100% |
| 2) COD standards: | |
| Vacant Land RMV 100, 400 | 20% |
| Real & Personal Manufactured Homes | 25% |
| Urban Residential RMV 101, 109 | |
| Homogeneous | 10% |
| Non-homogeneous | 15% |
| Rural Improved (property class 401, 409) | 20% |
| Apartments (property class 701) | 12% |
| Commercial Improved (property class 201): | |
| Larger/Urban | 15% |
| Smaller/Urban | 20% |
| Industrial | no standard has been set |
- 3) The PRD standard is from .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 values (Farm or Forest Deferred), certain personal property values and many industrial property values are recalculated or specially processed annually. The ratio study does not report these values. It does however, indicate how the RMV of farm and forest deferred properties will be adjusted.

Status of the Assessor's adjustment program

The Columbia County Assessor and staff 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 those adjustments which are indicated by reliable market data to produce the most accurate appraisals possible. Any future modification 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.

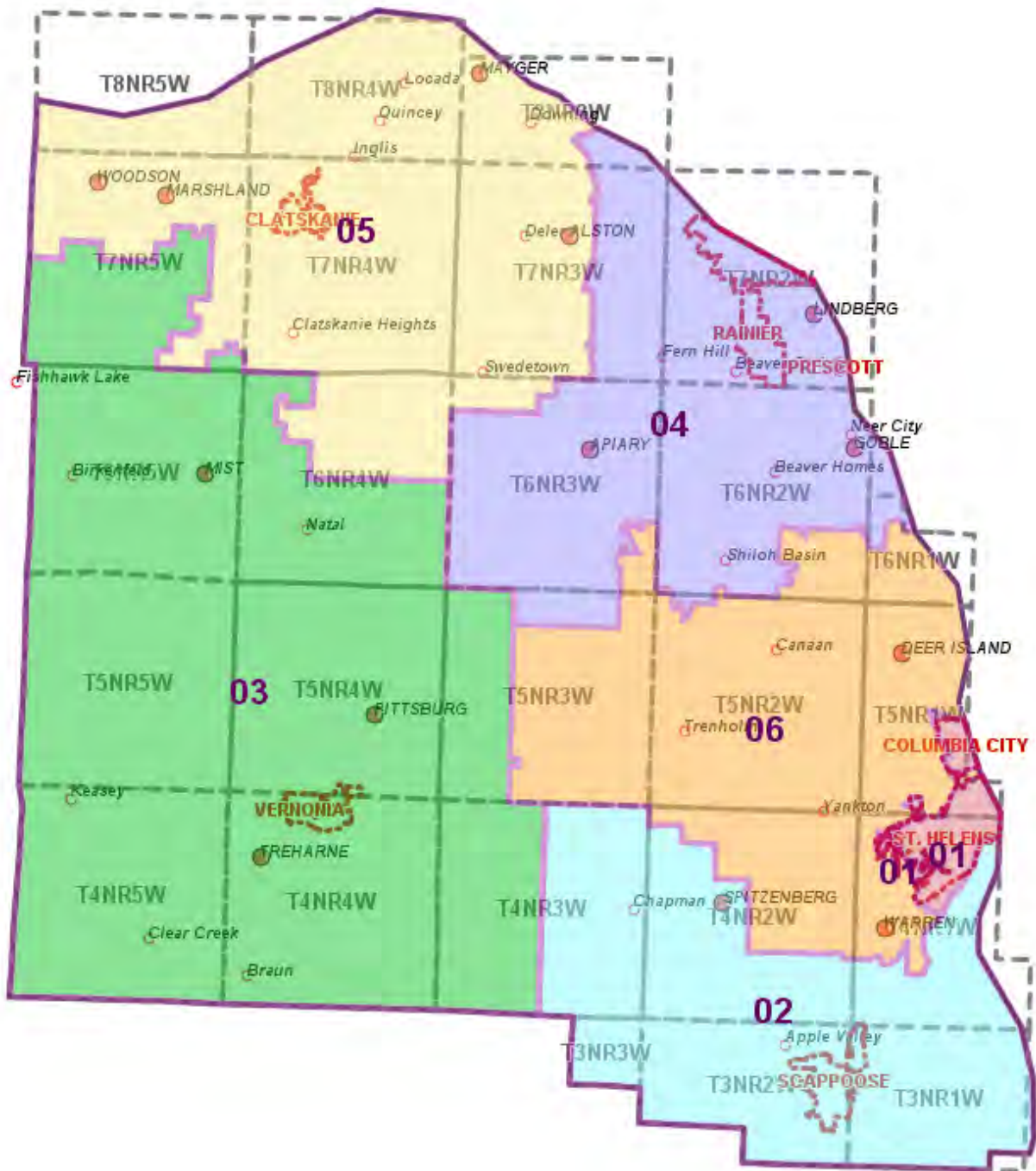
**MAINTENANCE AREA
DESCRIPTIONS
AND MAP**

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Maintenance Area 1:	City of St. Helens Columbia City
Maintenance Area 2:	City of Scappoose Surrounding Rural Areas
Maintenance Area 3:	City of Vernonia Surrounding Rural Areas
Maintenance Area 4:	City of Rainier Surrounding Rural Areas
Maintenance Area 5:	City of Clatskanie Surrounding Rural Areas
Maintenance Area 6:	Rural areas of St. Helens and Columbia City North Warren area Deer Island
<u>County Wide</u>	
Maintenance Area 7:	All Personal Property Manufactured Structures

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Maintenance Areas



**PROPERTY CLASS
&
RMV CLASS LIST
DESCRIPTION & COUNT**

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Class Descriptions and Count

Prop Class	RMV Class	Class Description	Count	Prior Year Count	Change from Prior Year
001	020	MISCELLANEOUS, LOGGING PERSONAL PROPERTY	0	0	0
003	003	MISCELLANEOUS, CENTRALLY ASSESSED	120	121	-1
008	008	INDUSTRIAL, M&E STATE IPR AND COUNTY RPR PROCESSED	47	48	-1
010	010	UNBUILDABLE(SIZE,DEQ DENIAL, ETC) ZONED RESIDENTIAL	122	142	-20
014	101	IMPROVED RESIDENTIAL, HISTORIC	2	2	0
015	101	OPEN SPACE RESIDENTIAL	0	0	0
019	019	PERSONAL PROPERTY MS	1211	1205	6
020	020	UNBUILDABLE(SIZE, DEQ DENIAL,ETC) ZONED COMMERCIAL	12	15	-3
024	201	IMPROVED COMMERCIAL, HISTORIC ZONED	5	5	0
025	201	OPEN SPACE, GOLF COURSE LAND ZONING NOT SIGNIFICANT	4	4	0
028	201	ENTERPRISE ZONE, IMPROVED COMMERCIAL ZONED COMMERCIAL	0	0	0
030	030	UNBUILDABLE(SIZE,DEQ DENIAL, ETC) ZONED INDUSTRIAL	5	5	0
031	301	INDUSTRIAL, UTILITY PROPERTY	0	0	0
032	030	INDUSTRIAL, MINERALS	119	117	2
033	303	IMPROVED INDUSTRIAL, STATE RESPONSIBILITY	0	0	0
037	308	ENTERPRIZE ZONE IMPROVED COUNTY RPR PROCESSED	0	0	0
038	303	ENTERPRISE ZONE, IMPROVED STATE IPR PROCESSED	5	4	1
039	301	ENTERPRIZE ZONE IMPROVED INDUSTRIAL	0	0	0
040	040	UNBUILDABLE(SIZE, DEQ DENIAL,ETC) ZONING NOT SIGNIFICANT	124	130	-6
041	401	IMPROVED ONLY TRACT, ZONING 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	795	888	-93
101	101	RESIDENTIAL IMPROVED, ZONED RESIDENTIAL	9159	9080	79
102	102	CONDOMINIUM	51	47	4
109	109	M S IMPROVED, ZONED RESIDENTIAL	435	434	1
110	100	VACANT,H&B RESD 4 OR LESS UNITS ZONING NOT SIGNIFICANT	0	0	0
111	111	RESIDENTIAL, FLOATING PROPERTY	280	281	-1
120	100	VACANT, H & B USE RESIDENTIAL ZONED COMMERCIAL	0	0	0
121	101	SINGLE FAMILY RESIDENCE IMPROVED ZONED COMMERCIAL	0	0	0
129	109	SINGLE FAMILY RESIDENCE MS IMPROVED ZONED COMMERCIAL	0	0	0
130	100	VACANT, H&B USE RESIDENTIAL ZONED INDUSTRIAL	0	0	0
131	101	SINGLE FAMILY 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	152	124	28
201	201	COMMERCIAL IMPROVED, ZONED COMMERCIAL	782	747	35
206	201	COMMERCIAL, MARINA/MOORAGE	62	60	2
207	207	ALL M S PARKS, REGARDLESS OF ZONE	45	41	4

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Class Descriptions and Count

Prop Class	RMV Class	Class Description	Count	Prior Year Count	Change from Prior Year
208	201	COMMERCIAL, RETIRE/CARE FACILITY	8	8	0
209	209	M S IMPROVED, ZONED COMMERCIAL	0	0	0
221	221	IMPROVED COMMERCIAL, FLOATING PROPERTY	3	3	0
290	290	VACANT, POTENTIAL DEVELOPABLE ZONED COMMERCIAL	0	0	0
291	291	COMMERCIAL IMPROVED,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	32	72	-40
301	301	INDUSTRIAL IMPROVED, ZONED INDUSTRIAL	54	133	-79
303	303	INDUSTRIAL B&S STATE IPR PROCESSED	37	37	0
308	308	INDUSTRIAL B&S COUNTY RPR PROCESSED	18	17	1
309	309	M S IMPROVED, ZONED INDUSTRIAL	0	0	0
330	400	INDUSTRIAL, AGGREGATE MINE	19	23	-4
331	401	INDUSTRIAL, AGGREGATE MINE WITH IMPROVEMENTS	1	14	-13
333	303	INDUSTRIAL IMPROVED, STATE RESP	3	0	3
338	308	INDUSTRIAL, AGGREGATE MACHINERY AND EQUIPMENT	1	3	-2
390	390	VACANT LAND, POTENTIAL DEVELOPABLE ZONED INDUSTRIAL	0	0	0
391	391	INDSTRL IMPRVD, POTENTIAL DEVELOPABLE ZONED INDUSTRIAL	0	0	0
399	399	M S IMPROVED, POTENTIAL DEVELOPABLE ZONED INDUSTRIAL	0	0	0
400	400	VACANT H&B USE TRACT LAND, ZONING NOT SIGNIFICANT	677	691	-14
401	401	IMPROVED H&B USE TRACT, ZONING NOT SIGNIFICANT	4748	4716	32
409	409	M S H&B USE TRACT, ZONING NOT SIGNIFICANT	1263	1255	8
440	400	VACANT H&B USE TRACT LAND, FARM DEF ZONED NON-EFU	0	0	0
441	401	IMPROVED H&B USE TRACT, FARM DEF, ZONED NON-EFU	1	1	0
449	409	M S H&B USE TRACT, FARM DEF, ZONED NON-EFU	1	0	1
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	IMPROVED 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,MULTIPLE SPEC ASSMT, ZONING NOT SIGNIFICANT	0	0	0
481	401	IMPROVED H&B TRACT, MULTIPLE SPEC ASSMT, ZONING NOT SIGNIFICANT	0	0	0
489	409	M S H&B USE TRACT,MULTIPLE SPEC ASSMT, 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	IMPROVED H&B USE FARM, NOT RECV FARM DEF, ZONING NOT SIGNIFICANT	0	0	0
509	509	M S H&B USE FARM, NOT RECEIVING FARM DEF, ZONING NOT SIGNIFICANT	0	0	0
540	400	VACANT H&B USE FARM, RECEIVING FARM DEF, ZONED NON-EFU	146	147	-1
541	401	IMPROVED H&B USE FARM, RECEIVING FARM DEF, ZONED NON-EFU	406	415	-9
549	409	M S H&B USE FARM, RECEIVNG FARM DEF, ZONED NON-EFU	58	70	-12
550	400	VACANT H&B USE FARM, RECEIVING FARM DEF, ZONED EFU	136	137	-1
551	401	IMPROVED H&B USE FARM, RECEIVING FARM DEF, ZONED EFU	331	335	-4
559	409	M S H&B USE FARM LAND, RECEIVING FARM DEF, ZONED EFU	30	30	0
580	400	AGRICULTURE, MOSTLY FARM RURAL MULT SPEC ASSMTS	18	19	-1
581	401	AGRICULTURE, W/IMPS-MOSTLY FARM RURAL, MULT SPEC ASSMTS	87	87	0
589	409	M S H&B USE FARM, MULTIPLE SP ASSMT FARM USE PREDOMINANT, ZN NOT SIGN	11	12	-1

COLUMBIA County 2016 Ratio Study

Class Descriptions and Count

Prop Class	RMV Class	Class Description	Count	Prior Year Count	Change from Prior Year
600	600	VACANT H&B USE FOREST, NOT DESIGNATED, ZONING NOT SIGNIFICANT	560	561	-1
601	601	IMPROVED H&B FOREST LAND,NOT DESIGNATED, ZONING NOT SIGNIFICANT	1	0	1
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	2021	2030	-9
641	401	IMPRVD H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	2035	1993	42
649	409	M S H&B USE TRACT FOREST/WLO,DESIGNATED, ZONING NOT SIGNIFICANT	612	618	-6
660	600	VACANT, REFORESTATION	0	0	0
680	400	FOREST LAND, LAND ONLY-MOSTLY FOREST RURAL, MULT SPEC ASMTS	57	59	-2
681	401	FOREST LAND, WITH IMPS-MOSTLY FOREST RURAL, MULT SPEC ASMTS	161	171	-10
689	409	M S H&B USE FL,MULTIPLE SP ASMT, FL PREDOMINANT,ZN NOT SIGNIFICANT	18	17	1
700	700	VACANT LAND, ZONED MULTI-FAMILY	0	0	0
701	701	IMPROVED 5 OR MORE UNITS, ZONED MULTI-FAMILY AND MS PARK IMPROVED	73	96	-23
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	IMPROVED 5 OR MORE,POTENTIAL DEVELP, ZONED MULTI-FAMILY	0	0	0
799	799	M S, POTENTIAL DEVELOPABLE, ZONED MULTI-FAMILY	0	0	0
800	800	RECREATION, LAND ONLY	148	148	0
801	801	RECREATION, WITH IMPROVMENTS	4	4	0
890	890	RECREATION, HILLCREST/COL ACRES POTENTIAL DEVELOPMENT	264	303	-39
910	200	CHURCH - VACANT	19	19	0
911	201	CHURCH - IMPROVED	101	101	0
920	200	SCHOOL - VACANT	22	23	-1
921	201	SCHOOL - IMPROVED	37	47	-10
930	200	CEMETERY - VACANT	26	26	0
931	201	CEMETERY - IMPROVED	6	6	0
940	200	CITY - VACANT	365	359	6
941	201	CITY - IMPROVED	104	105	-1
942	201	CITY - LEASED	0	0	0
950	200	COUNTY - VACANT	207	169	38
951	201	COUNTY - IMPROVED	54	51	3
952	201	COUNTY - LEASED	0	0	0
960	200	STATE OWNED - VACANT	166	165	1
961	201	STATE OWNED - IMPROVED	11	11	0
962	201	STATE - LEASED	4	1	3
964	401	EXEMPT, STATE GAME IN-LIEU OF	23	23	0
970	200	FEDERALLY OWNED - VACANT	45	46	-1
971	201	FEDERALLY OWNED - IMPROVED	9	8	1
976	201	FEDERALLY OWNED - NATIVE AMERICAN HOLDINGS	0	0	0
980	200	BENEVOLENT, FRATERNAL OWNERSHIP - VACANT	13	13	0
981	201	BENEVOLENT, FRATERNAL OWNERSHIP - IMPROVED	68	66	2
982	201	BENEVOLENT, FRATERNAL - LEASED	3	3	0
990	200	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	86	86	0
991	201	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	86	88	-2
994	201	EXEMPT, PORT: EXEMPT IN LIEU-OF PER ORS 307.120	2	8	-6
995	201	EXEMPT, GOVERMENT HOUSING AUTHORITIES	9	8	1
996	701	FARM LABOR CAMPS, DAY CARE CENTERS	1	1	0

**TIME
ADJUSTMENT
STUDY**

COLUMBIA County 2016 Ratio Study

Property sales within Columbia County from January 1, 2015 through December 31, 2015 were analyzed to determine an adjustment for change over time (time adjustment). These sales were separated into two groups:

1. RMV class 100, 101, 102 and 109. These are properties located within the city limits of each maintenance area.
2. RMV class 400, 401, and 409. These properties are located outside the city limits within each maintenance area.

Conclusions:

The analysis for Urban Residential Property (RMV Class 1XX) indicates an adjustment of 99% is needed for those properties located in the city limits.

For Rural Residential Property in all maintenance areas (RMV Class 4XX), the time study analysis supports a 101% adjustment.

Commercial and Industrial property (RMV Class 200, 201, 300 and 301) had too few property sales to provide a reliable indication of change over time. Therefore, no time adjustment is supported for these properties.

Watercraft/Floating Property (RMV 111) has been re-appraised for this ratio year. Therefore, no time adjustment is warranted.

The conclusions found on this page for this time adjustment study are supported by the subsequent pages.

How the conclusion from the time adjustment is applied in the Ratio Study:

1. The indicator of central tendency considered most appropriate is selected.
2. Once the central tendency is selected, it is then adjusted by the conclusion from the time study.
3. The product of this calculation is then entered on the "Selected Ratio From Sales" line found on the first page of each ratio study.

COLUMBIA County 2016 Ratio Study

Historical Time Adjustment Conclusions

Following are the factors used to adjust “mid months” when prior year sales are used.

<u>Year</u>	<u>RMV 1XX</u>	<u>RMV 4XX</u>
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%
2014	97%	106%
2015	104%	97%
2016	99%	101%

COLUMBIA County 2016 Ratio Study

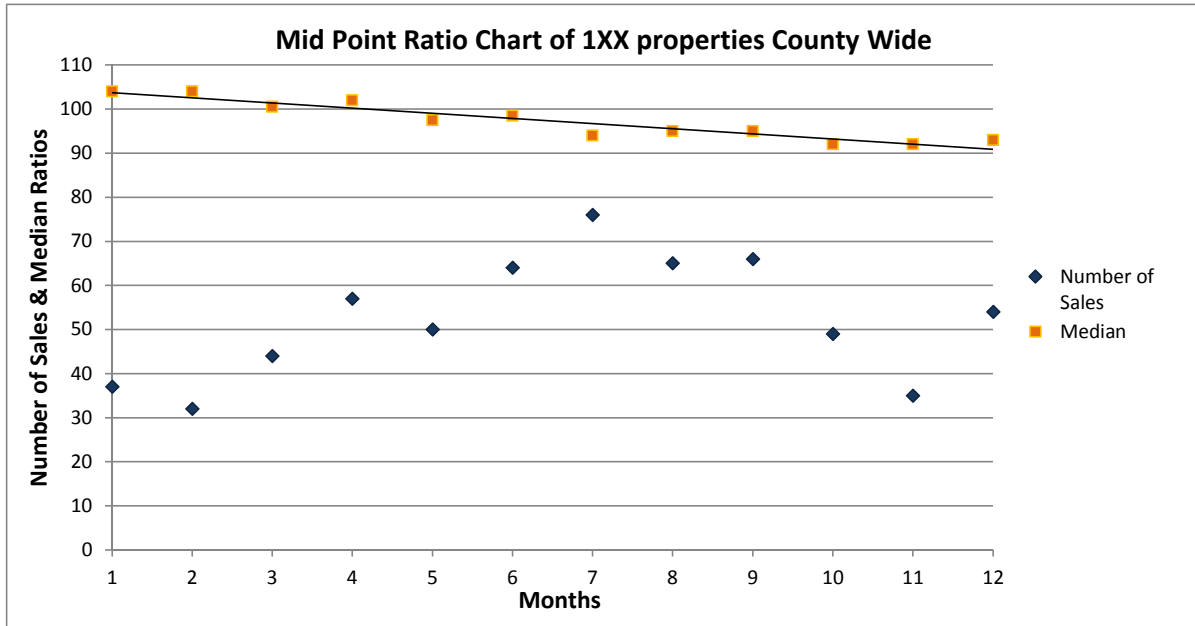
Time Study for RMV 1XX

	Month	Count	Cummlative Count	Mean	Median	Weighted Mean	Selected
	1 Jan	37	37	106	104		
	2 Feb	32	69	105	104		
	3 Mar	44	113	102	101		
	4 Apr	57	170	103	102		
	5 May	50	220	99	98		
	6 Jun	64	284	98	99		
Mid-point	7 Jul	76	360	97	94	94	94
	8 Aug	65	425	97	95		
	9 sep	66	491	96	95		
	10 Oct	49	540	93	92		
	11 Nov	35	575	91	92		
	12 Dec	54	629	93	93	93	93

Total Sales: 629 Total July RMV: 14,266,210 Total Dec RMV: 11,310,910
 Middle Sale: 315 Total July SP: 15,173,950 Total Dec SP: 12,169,397

Trend Factor: -0.01

Mid-point time adj: 0.99



2016 RMV Class 1XX City Time Adjustment

**Conclusion: The mid-point of the sales is found to be July (the 7th month),
 with a corresponding mid-point Median central tendency of .94**

The end of year central tendency is .93

(.93 - .94)/.95 = -0.01 or -1%

1.00 - 0.01 = .99, the Mid-point Time Adjustment Factor

COLUMBIA County 2016 Ratio Study

Time Study for RMV 1XX

#	Ratio			RMV				Prop			Stat		Rej		Acct	Total	Sale		Before # of		Count
	Year	MA	SA	NH	Class	Class	Class	Code	Acct No	Map #	Book	Page	Size	RMV			Price	Sales Date	Ratio	Mo.	
581	2016	1	0	0	101	101	141	33	11447	4N1W05-AA-07100	2015	10572	0.22	173760	195000	12/22/2015	89	12	38		
586	2016	1	0	0	101	101	143	33	11836	4N1W05-BC-01000	2015	10591	0.16	230550	245000	12/22/2015	94	12	39		
600	2016	4	0	0	101	101	141	33	18230	7N2W16-DB-11001	2015	10682	0.16	177560	175000	12/23/2015	101	12	40		
584	2016	2	0	0	101	101	143	33	433118	3N2W12-DC-02516	2015	10585	0.06	220280	215800	12/24/2015	102	12	41		
591	2016	1	0	0	101	101	131	33	11040	4N1W04-DB-07700	2015	10678	0.13	121730	180000	12/24/2015	68	12	42		
598	2016	2	0	0	101	101	143	33	4540	3N2W13-AD-07600	2015	10610	0.14	263350	298500	12/24/2015	88	12	43		
626		4	0	0	101	101	142	33	18171	7N2W16-DA-05200	2015	10628	0.2	201590	227900	12/24/2015	88	12	44		
629		4	0	0	101	101	141	33	432955	7N2W17-AC-02801	2015	10680	0.24	228700	205000	12/24/2015	112	12	45		
590	2016	1	0	0	101	101	131	33	13390	5N1W33-DB-00707	2015	10687	0.17	144020	165200	12/28/2015	87	12	46		
593	2016	1	0	0	101	101	143	33	13770	5N1W34-CB-01520	2015	10713	0.22	229850	319500	12/28/2015	72	12	47		
592	2016	1	0	0	101	101	143	33	12025	4N1W05-CA-00507	2015	10703	0.17	216240	270000	12/29/2015	80	12	48		
599	2016	2	79	0	101	101	151	33	3209	3N2W11-DA-02402	2015	10774	0.3	331720	350000	12/29/2015	95	12	49		
627		1	0	0	101	101	123	30	13824	5N1W34-CB-05700	2015	10673	0.13	98860	160000	12/29/2015	62	12	50		
594	2016	1	0	0	101	101	131	33	13787	5N1W34-CB-02200	2015	10724	0.13	131450	180600	12/30/2015	73	12	51		
595	2016	2	0	0	101	101	143	33	4815	3N2W13-BD-09000	2015	10756	0.16	228190	249900	12/30/2015	91	12	52		
596	2016	1	0	0	101	101	135	33	433550	4N1W04-CA-09501	2015	10766	0.11	121470	165700	12/30/2015	73	12	53		
597	2016	1	0	0	102	102	134	33	10506	4N1W04-BD-91300	2015	10768		120940	120000	12/31/2015	101	12	54		

Total Sales: 629

COLUMBIA County 2016 Ratio Study

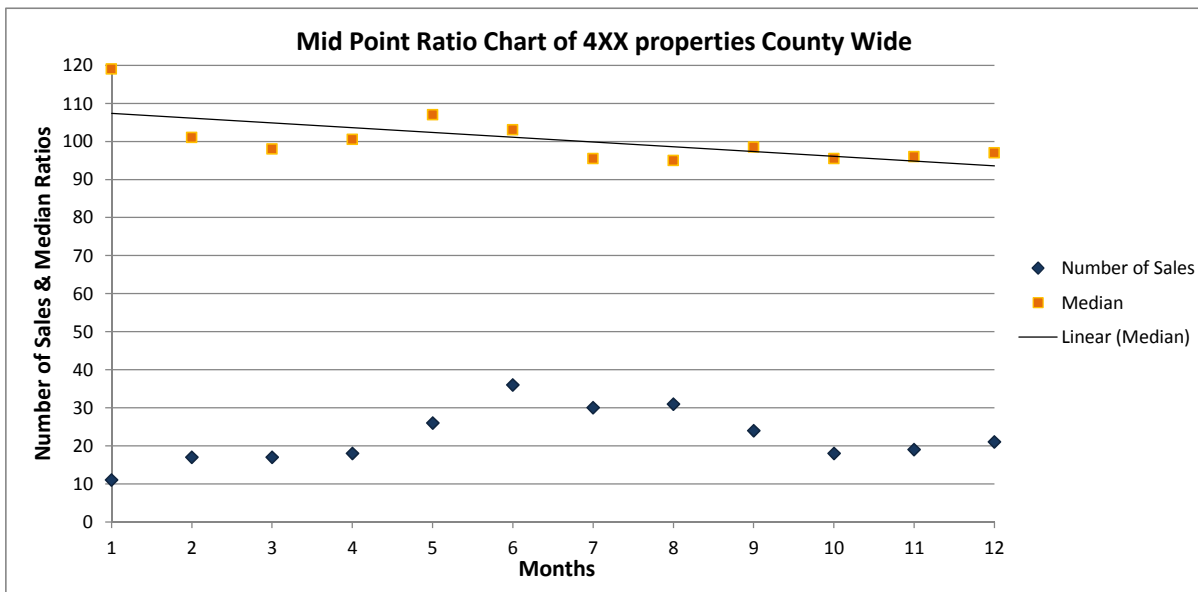
Time Study for RMV 4XX

	Month	Count	Cummlative Count	Mean	Median	Weighted Mean	Selected
	1 Jan	11	11	117	119		
	2 Feb	17	28	108	101		
	3 Mar	17	45	106	98		
	4 Apr	18	63	100	101		
	5 May	26	89	111	107		
	6 Jun	36	125	109	103		
Mid-point	7 Jul	30	155	99	96	100	96
	8 Aug	31	186	101	95		
	9 sep	24	210	102	99		
	10 Oct	18	228	100	96		
	11 Nov	19	247	103	96		
	12 Dec	21	268	98	97	98	97

Total Sales: 268 Total July RMV: 8,640,400 Total Dec RMV: 6,204,820
 Middle Sale: 134 Total July SP: 8,657,844 Total Dec SP: 6,313,199

Trend Factor: 0.01

Mid-point time adj: 1.01



2016 RMV Class 4XX Rural Time Adjustment

**Conclusion: The mid-point of the sales is found to be July (the 7th month),
 with a corresponding mid-point Median central tendency of .96**

The end of year central tendency is .97

$(.97 - .96) / .96 = 0.01$ or 1%

$1.00 + 0.01 = 1.01$, the Mid-point Time Adjustment Factor

COLUMBIA County 2016 Ratio Study

Time Study for RMV 4XX

#	Ratio		RMV			Prop	Stat	Rej	Acct No	Map #	Book	Page	Acct Size	Total RMV	Adj Sale		Sales Date	Before Ratio	# of Mo.	Count per Mo.
	Year	MA	SA	NH	Class	Class	Class	Code							Price	Price				
229	2016	2	21	0	401	401	135	33	8059	4N2W25-D0-00400	2015	10416	1.75	247100	330000	12/15/2015	75	12	13	
231	2016	4	42	0	409	409	452	33	21212	6N2W15-00-01100	2015	10482	3.43	189900	180000	12/17/2015	106	12	14	
233	2016	6	61	0	401	401	131	33	17429	4N2W13-A0-02100	2015	10562	0.50	247280	255000	12/21/2015	97	12	15	
232	2016	2	21	0	401	641	163	33	5613	3N2W10-00-00805	2015	10529	5.11	580050	520000	12/21/2015	112	12	16	
234	2016	3	31	0	409	409	452	33	24257	4N5W01-00-00301	2015	10570	4.05	156110	169999	12/22/2015	92	12	17	
235	2016	2	21	0	401	641	164	33	8272	4N2W34-A0-01302	2015	10589	7.14	714190	670000	12/23/2015	107	12	18	
268		6	61	0	401	401	153	30	436223	4N1W08-CB-00505	2015	10701	1.00	482510	330000	12/28/2015	146	12	19	
236	2016	6	61	0	400	400		33	17461	5N1W31-CC-00500	2015	10771	2.00	136000	115000	12/29/2015	118	12	20	
237	2016	2	22	0	409	649	462	33	7753	4N2W18-00-00600	2016	167	10.64	404440	368000	12/30/2015	110	12	21	

Total Sales: 268

GROUPING ANALYSIS and STUDY AREA LIST

COLUMBIA County 2016 Ratio Study

Maintenance areas as well as some study areas and/or property classes have moved within the market in such a similar manner that they may have been combined in the individual Ratio Study. Also, 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.

Study areas and/or property classes were analyzed separately if:

1. The data indicated that an individual study area and/or property class had sufficient data to arrive at a reliable conclusion and
2. The sales within those areas indicated that it would not be reasonable to combine them with another area and/or class.

If a study area and/or property classes were combined, then they have been identified in the individual ratio study.

AREA 1 - City of St. Helens and City of Columbia City

00 Undefined (SH)	43 Townhouse, Row House, Common Wall (SH)	74 Comm. use in Indust. area & outside the commercial corridor
01 Undefined (CC)	44 Townhouse, Row House, Common Wall (CC)	
15 River Front (SH & CC)	60 Island, Columbia River	78 Large Industrial
21 McBride Meadows, Sophie Park	71 Comm. - Hwy with light	90 Industrial-County Resp.
30 Duplex, Triplex, Fourplex (SH)	72 Comm. - Hwy without light	95 Floating Home & Combinations
31 Duplex, Triplex, Fourplex (CC)	73 Comm. use in Indust. area & within the commercial corridor	97 Boathouses & Misc. Improvements

The following study areas have been created for 2016:

71 Comm. - Hwy with light (SH & CC)	73 Comm. use in Indust. area & within commercial corridor
72 Comm. - Hwy without light (SH & CC)	74 Comm. use in Indust. area & outside commercial corridor

AREA 2 - Scappoose

00 Undefined	41 Sauvie Island (SA 21 values)	74 Comm. use in Indust. area & outside the commercial corridor
06 Forest Value Zone	45 Sauvie Island Dike Land	
21 Rural Value Zone 1 (100%)	60 Island, Columbia River	79 Keys Landing, Keys Crest
22 Rural Value Zone 2 (70-80%)	62 Freeman Road	80 Columbia River View Estates
23 Rural Value Zone 3 (50-60%)	63 Columbia Acres	90 Industrial-County Resp.
25 Scappoose Dike Land	64 Hillcrest	95 Floating Home & Combinations
28 Duplex, Triplex, Fourplex (city)	71 Comm. - Hwy with light	97 Boathouses & Misc. Improvements
29 Duplex, Triplex, Fourplex (rural)	72 Comm. - Hwy without light	
33 Townhouse, Row House, Common Wall	73 Comm. use in Indust. area & within the commercial corridor	

The following study areas have been created for 2016:

71 Comm. - Hwy with light	73 Comm. use in Indust. area & within commercial corridor
72 Comm. - Hwy without light	74 Comm. use in Indust. area & outside commercial corridor

COLUMBIA County 2016 Ratio Study

AREA 3 - Vernonia

00 Undefined	36 Fishhawk Lake estates	73 Comm. use in Indust. area & within the commercial corridor
03 Flood Zone Properties	37 Berndt's Creek	74 Comm. use in Indust. area & outside the commercial corridor
06 Forest Value Zone	38 Roseview Heights	90 Industrial-County Resp.
31 Rural Value Zone 1 (100%)	39 Heather Park	
32 Rural Value Zone 2 (95%)	40 Duplex, Triplex, Fourplex (city)	
33 Rural Value Zone 3 (90%)	71 Comm. - Hwy with light	
34 Value Zone 4 (85%)	72 Comm. - Hwy without light	

The following study areas have been created for 2016:

71 Comm. - Hwy with light	73 Comm. use in Indust. area & within commercial corridor	
72 Comm. - Hwy without light	74 Comm. use in Indust. area & outside commercial corridor	

AREA 4 - Rainier

00 Undefined	45 Dike Land	74 Comm. use in Indust. area & outside the commercial corridor
06 Forest Value Zone	46 Riverview Drive, Maple Drive	90 Industrial-County Resp.
40 Duplex, Triplex, Fourplex (city)	47 Rainier Riverfront Estates	95 Floating Home & Combinations
41 Rural Value Zone 1 (100%)	60 Island, Columbia River	97 Boathouses & Misc. Improvements
42 Rural Value Zone 2 (90-95%)	71 Comm. - Hwy with light	
43 Rural Value Zone 3 (80-85%)	72 Comm. - Hwy without light	
44 Prescott	73 Comm. use in Indust. area & within the commercial corridor	

The following study areas have been created for 2016:

40 Duplex, Triplex, Fourplex (city)	73 Comm. use in Indust. area & within commercial corridor	
71 Comm. - Hwy with light	74 Comm. use in Indust. area & outside commercial corridor	
72 Comm. - Hwy without light		

AREA 5 - Clatskanie

00 Undefined	60 Island, Columbia River	74 Comm. use in Indust. area & outside the commercial corridor
06 Forest Value Zone	71 Comm. - Hwy with light	90 Industrial-County Resp.
40 Duplex, Triplex, Fourplex (city)	72 Comm. - Hwy without light	95 Floating Home & Combinations
51 Rural Value Zone 1 (100%)	73 Comm. use in Indust. area & within the commercial corridor	97 Boathouses & Misc. Improvements
55 Dike Land		

The following study areas have been created for 2016:

40 Duplex, Triplex, Fourplex (city)	73 Comm. use in Indust. area & within commercial corridor	
71 Comm. - Hwy with light	74 Comm. use in Indust. area & outside commercial corridor	
72 Comm. - Hwy without light		

COLUMBIA County 2016 Ratio Study

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

00 Undefined	63 Rural Value Zone 3 (60-80%)	74 Comm. use in Indust. area & outside the commercial corridor
06 Forest Value Zone	64 Rural Value Zone 4 (30-60%)	90 Industrial-County Resp.
32 Duplex, Triplex, Fourplex	65 Dike Land	95 Floating Home & Combinations
56 Deer Island Heights	71 Comm. - Hwy with light	97 Boathouses & Misc. Improvements
60 Island, Columbia River	72 Comm. - Hwy without light	
61 Rural Value Zone 1 (100%)	73 Comm. use in Indust. area & within the commercial corridor	
62 Rural Value Zone 2 (80-100%)		

The following study areas have been created for 2016:

71 Comm. - Hwy with light	73 Comm. use in Indust. area & within commercial corridor
72 Comm. - Hwy without light	74 Comm. use in Indust. area & outside commercial corridor

The following study areas have been removed for 2016 and forward:

04 (Commercial property North of Columbia City)

AREA 7 - Personal Property Manufactured Structures, County wide

01 PP MS in MA 1	27 PP MS Crestwood Village (St. Helens)	31 PP MS Crown Park (Scappoose)
02 PP MS in MA 2	28 PP MS Columbia City Estates (Col City)	35 PP MS Riverside Meadows (Vernonia)
03 PP MS in MA 3	30 PP MS Springlake Park (Scappoose)	
04 PP MS in MA 4		
05 PP MS in MA 5		
06 PP MS in MA 6		

The following study area has been created for 2016:

SA 35 PP MS in Riverside Meadows (Vernonia)

SUPPLEMENTAL NOTES

COLUMBIA County 2016 Ratio Study

Re-appraisal

Industrial property:

At the time of this report, a re-appraisal of industrial unimproved and improved property is in process. The sales used in this Ratio Study have been re-appraised.

Columbia City (Maintenance Area 01, Study Area 01):

The City of Columbia City has undergone a thorough set-up and re-appraisal for the 2016 ratio year.

River Front property:

A complete re-appraisal of river front property located in MA 01 SA 15 (St. Helens and Columbia City) has been completed for the 2016 ratio year.

Watercraft property:

All Floating Homes, Boathouses and Combination type properties county wide are currently being re-appraised. (The sales used in the the Watercraft analysis have been reappraised).

New Study Areas

Study area 35 (Riverside Meadows, Vernonia) was created in MA 07 to reflect the personal property manufactured homes located in the FEMA flood way.

Study Area 40 (duplex, tri-plex, fourplex) was added to MA 04 (Rainier) and MA 05 (Clatskanie).

Four new study areas were created for commercial and industrial properties located county wide. They are as follows:

- Study Area 71 Commercial - Highway with light
- Study Area 72 Commercial - Highway without light
- Study Area 73 Commercial use in an Industrial area and within the commercial corridor.
- Study Area 74 Commercial use in an Industrial area and outside the commercial corridor.

COLUMBIA County 2016 Ratio Study

Changed Study Areas

In the City of Scappoose SA 28 unimproved land for Duplex/Triplex/Fourplex has been moved to SA 00.

For the Meersburg Subdivision (SA 85) located in Scappoose, the following changes have occurred:

Unimproved property: there are four accounts of unimproved land located in the Meersburg Subdivision which have been moved to SA 00. Even though the properties are zoned commercial, the highest and best use would be as residential. At this time, it would be difficult to determine if they would be developed as a single family dwelling, common wall townhouse or as a duplex/triplex/fourplex.

Improved property: these accounts have been moved to SA 33 (common wall homes).

The commercial properties previously located in MA 06 SA 04 (land lying North of Columbia City) have been moved to one of the following study areas: SA 71, SA 72, SA 73 and SA 74. During re-appraisal of Commercial property it was found that SA 04 was not a good reflection of the commercial market.

SUMMARY of RATIO INDICATIONS

COLUMBIA County 2016 Ratio Study

Summary of Ratio Indications

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2016	003	01	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	003	01	01	000	000	100	100	100	100			<input type="checkbox"/>
2016	003	02	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	003	03	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	003	04	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	003	04	41	000	000	100	100	100	100			<input type="checkbox"/>
2016	003	05	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	003	06	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	01	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	01	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	02	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	02	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	03	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	03	09	000		100	100	100	100			<input type="checkbox"/>
2016	008	03	90	000		100	100	100	100			<input type="checkbox"/>
2016	008	04	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	04	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	05	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	06	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	008	06	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	010	01	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	010	01	01	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	010	01	15	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	010	02	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	010	03	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	010	03	03	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	010	04	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	010	05	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	019	07	01	000	000	100	100	94	94			<input checked="" type="checkbox"/>
2016	019	07	02	000	000	100	100	94	94			<input checked="" type="checkbox"/>
2016	019	07	03	000	000	100	100	59	59			<input checked="" type="checkbox"/>
2016	019	07	04	000	000	100	100	59	59			<input checked="" type="checkbox"/>
2016	019	07	05	000	000	100	100	59	59			<input checked="" type="checkbox"/>
2016	019	07	06	000	000	100	100	94	94			<input checked="" type="checkbox"/>
2016	019	07	27	000	000	100	100	94	94			<input checked="" type="checkbox"/>
2016	019	07	28	000	000	100	100	94	94			<input checked="" type="checkbox"/>
2016	019	07	30	000	000	100	100	108	108			<input checked="" type="checkbox"/>
2016	019	07	31	000	000	100	100	94	94			<input checked="" type="checkbox"/>
2016	019	07	35	000	000	100	100	59	59			<input checked="" type="checkbox"/>
2016	020	01	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	020	02	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	020	03	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	020	04	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	020	05	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	030	01	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>

COLUMBIA County 2016 Ratio Study

Summary of Ratio Indications

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2016	030	03	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	030	04	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	030	05	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	030	06	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	032	03	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	032	03	31	000	000	100	100	100	100			<input type="checkbox"/>
2016	040	02	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	02	21	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	03	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	03	03	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	04	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	04	41	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	04	42	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	04	44	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	05	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	06	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	06	61	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	040	06	62	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	100	01	00	000	000	111	100	100	111	30.99	.82	<input checked="" type="checkbox"/>
2016	100	01	01	000	000	108	100	100	108			<input type="checkbox"/>
2016	100	01	15	000	000	111	100	100	111			<input type="checkbox"/>
2016	100	02	00	000	000	101	100	100	101			<input checked="" type="checkbox"/>
2016	100	02	79	000	000	92	100	100	92			<input checked="" type="checkbox"/>
2016	100	02	80	000	000	103	100	100	103			<input checked="" type="checkbox"/>
2016	100	03	00	000	000	88	100	100	88	8.91	1.01	<input checked="" type="checkbox"/>
2016	100	03	03	000	000	106	100	100	106			<input checked="" type="checkbox"/>
2016	100	03	38	000	000	88	100	100	88			<input checked="" type="checkbox"/>
2016	100	04	00	000	000	103	100	100	103	.00	1.00	<input checked="" type="checkbox"/>
2016	100	04	46	000	000	103	100	100	103			<input checked="" type="checkbox"/>
2016	100	04	47	000	000	103	100	100	103	7.50	.98	<input checked="" type="checkbox"/>
2016	100	05	00	000	000	96	100	100	96	.00	1.00	<input checked="" type="checkbox"/>
2016	101	01	00	000	000	111	100	114	111	11.23	1.01	<input checked="" type="checkbox"/>
2016	101	01	01	000	000	108	100	110	108	10.04	1.01	<input type="checkbox"/>
2016	101	01	15	000	000	111	100	112	111			<input type="checkbox"/>
2016	101	01	21	000	000	108	100	110	108	8.40	1.01	<input type="checkbox"/>
2016	101	01	30	000	000	111	100	113	110	14.68	1.01	<input checked="" type="checkbox"/>
2016	101	01	31	000	000	108	100	111	108			<input type="checkbox"/>
2016	101	01	43	000	000	111	100	113	110	14.68	1.01	<input checked="" type="checkbox"/>
2016	101	02	00	000	000	101	100	101	101	7.90	1.01	<input checked="" type="checkbox"/>
2016	101	02	28	000	000	101	100	79	89	11.23	1.02	<input checked="" type="checkbox"/>
2016	101	02	33	000	000	101	100	79	89	11.23	1.02	<input checked="" type="checkbox"/>
2016	101	02	79	000	000	92	100	91	92	7.16	1.00	<input checked="" type="checkbox"/>
2016	101	02	80	000	000	103	100	103	103	4.08	1.00	<input checked="" type="checkbox"/>
2016	101	03	00	000	000	88	100	108	101	10.32	1.01	<input checked="" type="checkbox"/>
2016	101	03	03	000	000	106	100	109	106	8.87	.99	<input checked="" type="checkbox"/>

COLUMBIA County 2016 Ratio Study

Summary of Ratio Indications

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2016	101	03	39	000	000	88	100	102	98	2.24	1.00	<input checked="" type="checkbox"/>
2016	101	03	40	000	000	88	100	108	101	.00	1.00	<input checked="" type="checkbox"/>
2016	101	04	00	000	000	103	100	103	103	15.48	1.05	<input checked="" type="checkbox"/>
2016	101	04	40	000	000	103	100	104	103	.00	1.00	<input checked="" type="checkbox"/>
2016	101	04	46	000	000	103	100	103	103			<input checked="" type="checkbox"/>
2016	101	04	47	000	000	103	100	103	103	1.61	1.00	<input checked="" type="checkbox"/>
2016	101	05	00	000	000	96	100	95	96	9.39	1.01	<input checked="" type="checkbox"/>
2016	101	05	40	000	000	96	100	95	96	3.30	1.00	<input checked="" type="checkbox"/>
2016	102	01	00	000	000	100	100	96	96	2.88	.99	<input checked="" type="checkbox"/>
2016	102	02	00	000	000	100	100	101	101			<input checked="" type="checkbox"/>
2016	102	02	21	000	000	100	100	108	108			<input checked="" type="checkbox"/>
2016	102	04	00	000	000	100	100	103	103			<input checked="" type="checkbox"/>
2016	109	01	00	000	000	111	100	73	90	14.29	1.01	<input checked="" type="checkbox"/>
2016	109	01	01	000	000	108	100	111	108			<input type="checkbox"/>
2016	109	01	15	000	000	111	100	77	90			<input type="checkbox"/>
2016	109	02	00	000	000	101	100	101	101			<input checked="" type="checkbox"/>
2016	109	03	00	000	000	88	100	87	90	2.46	1.00	<input checked="" type="checkbox"/>
2016	109	03	03	000	000	106	100	102	103	15.38	.99	<input checked="" type="checkbox"/>
2016	109	03	38	000	000	88	100	88	90	8.33	1.01	<input checked="" type="checkbox"/>
2016	109	04	00	000	000	103	100	72	85	8.05	.99	<input checked="" type="checkbox"/>
2016	109	05	00	000	000	96	100	95	96	.00	1.00	<input checked="" type="checkbox"/>
2016	111	01	95	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	01	97	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	02	95	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	02	97	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	04	95	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	04	97	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	05	55	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	05	95	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	05	97	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	06	95	000	000	100	100	100	100			<input type="checkbox"/>
2016	111	06	97	000	000	100	100	100	100			<input type="checkbox"/>
2016	200	01	00	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	01	01	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	01	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	200	01	72	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	01	73	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	02	00	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	02	71	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	02	72	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	02	73	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	03	00	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	03	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	200	03	72	000	000	100	100	100	100			<input type="checkbox"/>
2016	200	03	73	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>

COLUMBIA County 2016 Ratio Study

Summary of Ratio Indications

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2016	200	04	00	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	04	71	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	04	72	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	04	73	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	05	00	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	05	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	200	05	72	000	000	100	100	100	100			<input type="checkbox"/>
2016	200	05	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	200	06	00	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	06	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	200	06	72	000	000	100	100	100	100	118.47	1.58	<input checked="" type="checkbox"/>
2016	200	06	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	201	01	00	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	01	01	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	01	71	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	01	72	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	01	73	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	02	00	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	02	71	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	02	72	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	02	73	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	03	00	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	03	03	000	000	100	100	100	100			<input type="checkbox"/>
2016	201	03	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	201	03	72	000	000	100	100	100	100			<input type="checkbox"/>
2016	201	03	73	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	04	00	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	04	71	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	04	72	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	04	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	201	05	00	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	05	71	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	05	72	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	05	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	201	06	00	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	06	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	201	06	72	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	201	06	73	000	000	100	100	100	100	25.63	.93	<input checked="" type="checkbox"/>
2016	207	01	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	207	01	01	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	207	02	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	207	03	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	207	04	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	207	05	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	207	06	00	000	000	100	100	100	100			<input checked="" type="checkbox"/>

COLUMBIA County 2016 Ratio Study

Summary of Ratio Indications

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2016	207	06	56	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	209	01	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	01	72	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	01	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	02	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	02	72	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	02	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	03	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	03	72	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	03	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	04	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	04	72	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	04	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	05	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	05	72	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	05	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	06	71	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	06	72	000	000	100	100	100	100			<input type="checkbox"/>
2016	209	06	73	000	000	100	100	100	100			<input type="checkbox"/>
2016	221	02	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	221	06	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	300	01	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	300	01	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	300	01	78	000	000	100	100	100	100			<input type="checkbox"/>
2016	300	02	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	300	02	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	300	03	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	300	03	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	300	04	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	300	04	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	300	05	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	300	05	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	300	06	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	300	06	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	301	01	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	301	01	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	301	01	78	000	000	100	100	100	100			<input type="checkbox"/>
2016	301	01	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	301	02	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	301	02	74	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	301	02	90	000	0	100	100	100	100			<input type="checkbox"/>
2016	301	03	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	301	03	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	301	04	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	301	04	74	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>

COLUMBIA County 2016 Ratio Study

Summary of Ratio Indications

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2016	301	05	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	301	05	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	301	05	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	301	06	00	000	000	100	100	100	100	.00	1.00	<input type="checkbox"/>
2016	301	06	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	301	06	78	000	000	100	100	100	100			<input type="checkbox"/>
2016	301	06	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	303	01	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	303	01	78	000	000	100	100	100	100			<input type="checkbox"/>
2016	303	02	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	303	03	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	303	04	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	303	05	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	303	06	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	303	06	78	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	01	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	01	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	01	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	02	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	02	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	02	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	03	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	03	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	04	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	04	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	04	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	05	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	05	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	05	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	06	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	06	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	308	06	90	000	000	100	100	100	100			<input type="checkbox"/>
2016	309	01	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	309	02	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	309	03	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	309	04	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	309	05	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	309	06	74	000	000	100	100	100	100			<input type="checkbox"/>
2016	333	02	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	333	06	78	000	000	100	100	100	100			<input type="checkbox"/>
2016	400	01	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	400	02	21	000	000	108	100	100	108	.00	1.00	<input checked="" type="checkbox"/>
2016	400	02	22	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	400	02	23	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	400	02	25	000	000	108	100	100	108			<input checked="" type="checkbox"/>

COLUMBIA County 2016 Ratio Study

Summary of Ratio Indications

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2016	400	02	41	000	000	100	100	100	100			<input type="checkbox"/>
2016	400	02	45	000	000	108	100	100	108			<input checked="" type="checkbox"/>
2016	400	02	60	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	400	02	62	000	000	108	100	100	108	.00	1.00	<input checked="" type="checkbox"/>
2016	400	02	63	000	000	108	100	100	108	.00	1.00	<input checked="" type="checkbox"/>
2016	400	02	64	000	000	108	100	100	108	.00	1.00	<input checked="" type="checkbox"/>
2016	400	03	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	400	03	31	000	000	115	100	100	115	8.93	1.02	<input checked="" type="checkbox"/>
2016	400	03	36	000	000	115	100	100	115			<input checked="" type="checkbox"/>
2016	400	03	37	000	000	115	100	100	115	.00	1.00	<input checked="" type="checkbox"/>
2016	400	04	41	000	000	93	100	100	93	11.76	1.00	<input checked="" type="checkbox"/>
2016	400	04	42	000	000	93	100	100	93	11.76	1.00	<input checked="" type="checkbox"/>
2016	400	04	44	000	000	93	100	100	93	.00	1.00	<input checked="" type="checkbox"/>
2016	400	04	45	000	000	93	100	100	93			<input checked="" type="checkbox"/>
2016	400	05	00	000	000	100	100	100	100			<input type="checkbox"/>
2016	400	05	51	000	000	103	100	100	103	12.31	1.06	<input checked="" type="checkbox"/>
2016	400	05	55	000	000	103	100	100	103			<input checked="" type="checkbox"/>
2016	400	05	60	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	400	06	56	000	000	92	100	100	92	24.84	1.02	<input checked="" type="checkbox"/>
2016	400	06	61	000	000	92	100	100	92	24.84	1.02	<input checked="" type="checkbox"/>
2016	400	06	62	000	000	92	100	100	92	24.84	1.02	<input checked="" type="checkbox"/>
2016	400	06	63	000	000	92	100	100	92	24.84	1.02	<input checked="" type="checkbox"/>
2016	400	06	64	000	000	92	100	100	92	24.84	1.02	<input checked="" type="checkbox"/>
2016	400	06	65	000	000	92	100	100	92	.00	1.00	<input checked="" type="checkbox"/>
2016	401	02	21	000	000	108	100	110	108	13.44	1.02	<input checked="" type="checkbox"/>
2016	401	02	22	000	000	100	100	100	100	5.64	1.00	<input checked="" type="checkbox"/>
2016	401	02	23	000	000	100	100	100	100	5.64	1.00	<input checked="" type="checkbox"/>
2016	401	02	25	000	000	108	100	105	108	.00	1.00	<input checked="" type="checkbox"/>
2016	401	02	41	000	000	108	100	110	108	13.44	1.02	<input checked="" type="checkbox"/>
2016	401	02	45	000	000	108	100	105	108	.00	1.00	<input checked="" type="checkbox"/>
2016	401	02	62	000	000	108	100	110	108	13.44	1.02	<input checked="" type="checkbox"/>
2016	401	02	63	000	000	108	100	110	108	13.44	1.02	<input checked="" type="checkbox"/>
2016	401	02	64	000	000	108	100	110	108	13.44	1.02	<input checked="" type="checkbox"/>
2016	401	03	31	000	000	115	100	120	115	7.16	1.00	<input checked="" type="checkbox"/>
2016	401	03	36	000	000	115	100	120	115	37.86	1.13	<input checked="" type="checkbox"/>
2016	401	03	37	000	000	115	100	120	115			<input checked="" type="checkbox"/>
2016	401	03	40	000	000	115	100	120	115			<input checked="" type="checkbox"/>
2016	401	04	41	000	000	93	100	91	93	13.27	.98	<input checked="" type="checkbox"/>
2016	401	04	42	000	000	93	100	91	93	13.27	.98	<input checked="" type="checkbox"/>
2016	401	04	44	000	000	93	100	91	93			<input checked="" type="checkbox"/>
2016	401	04	45	000	000	93	100	90	93	22.48	1.01	<input checked="" type="checkbox"/>
2016	401	05	51	000	000	103	100	104	103	13.04	1.00	<input checked="" type="checkbox"/>
2016	401	05	55	000	000	103	100	104	103	11.21	.98	<input checked="" type="checkbox"/>
2016	401	06	61	000	000	92	100	90	92	17.03	1.03	<input checked="" type="checkbox"/>
2016	401	06	62	000	000	92	100	90	92	17.03	1.03	<input checked="" type="checkbox"/>

COLUMBIA County 2016 Ratio Study

Summary of Ratio Indications

YEAR	RMV CLASS	MA	SA	NH	STAT CLASS	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2016	401	06	63	000	000	92	100	90	92	17.03	1.03	<input checked="" type="checkbox"/>
2016	401	06	64	000	000	92	100	90	92	17.03	1.03	<input checked="" type="checkbox"/>
2016	401	06	65	000	000	92	100	90	92			<input checked="" type="checkbox"/>
2016	409	02	21	000	000	108	100	113	108	5.56	1.00	<input checked="" type="checkbox"/>
2016	409	02	22	000	000	100	100	94	98	5.94	.99	<input checked="" type="checkbox"/>
2016	409	02	23	000	000	100	100	94	98	5.94	.99	<input checked="" type="checkbox"/>
2016	409	02	25	000	000	108	100	117	108			<input checked="" type="checkbox"/>
2016	409	02	41	000	000	108	100	113	108	5.56	1.00	<input checked="" type="checkbox"/>
2016	409	02	45	000	000	108	100	117	108			<input checked="" type="checkbox"/>
2016	409	02	62	000	000	108	100	113	108	5.56	1.00	<input checked="" type="checkbox"/>
2016	409	02	64	000	000	108	100	113	108	5.56	1.00	<input checked="" type="checkbox"/>
2016	409	03	31	000	000	115	100	52	87	14.21	.98	<input checked="" type="checkbox"/>
2016	409	03	37	000	000	115	100	64	87			<input checked="" type="checkbox"/>
2016	409	04	41	000	000	93	100	89	93	3.58	1.00	<input checked="" type="checkbox"/>
2016	409	04	42	000	000	93	100	89	93	3.58	1.00	<input checked="" type="checkbox"/>
2016	409	04	44	000	000	93	100	90	93			<input checked="" type="checkbox"/>
2016	409	04	45	000	000	93	100	88	93			<input checked="" type="checkbox"/>
2016	409	05	51	000	000	103	100	104	103	10.24	1.01	<input checked="" type="checkbox"/>
2016	409	05	55	000	000	103	100	104	103	.00	1.00	<input checked="" type="checkbox"/>
2016	409	06	56	000	000	92	100	88	92	14.52	1.04	<input checked="" type="checkbox"/>
2016	409	06	61	000	000	92	100	88	92	14.52	1.04	<input checked="" type="checkbox"/>
2016	409	06	62	000	000	92	100	88	92	14.52	1.04	<input checked="" type="checkbox"/>
2016	409	06	63	000	000	92	100	88	92	14.52	1.04	<input checked="" type="checkbox"/>
2016	409	06	64	000	000	92	100	88	92	14.52	1.04	<input checked="" type="checkbox"/>
2016	409	06	65	000	000	92	100	91	92			<input checked="" type="checkbox"/>
2016	600	02	06	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	600	03	06	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	600	04	06	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	600	05	06	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	600	06	06	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	701	01	00	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>
2016	701	02	00	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>
2016	701	03	00	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>
2016	701	04	00	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>
2016	701	05	00	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>
2016	701	06	00	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>
2016	800	02	63	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>
2016	800	02	64	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>
2016	800	04	60	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	800	05	60	000	000	100	100	100	100			<input checked="" type="checkbox"/>
2016	801	03	31	000	000	100	100	100	100			<input type="checkbox"/>
2016	890	02	63	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>
2016	890	02	64	000	000	100	100	100	100	.00	1.00	<input checked="" type="checkbox"/>

MAINTENANCE AREA 1

RESIDENTIAL ST. HELENS & COLUMBIA CITY

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
100	01	00	000		2	St Helens							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	2			
Population - Number of Accounts	209			
Sales as a percentage of the Population	0.96 %			
Prior Year Population Values				
Land RMV	12,866,020	100.00 %	14,281,282	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	90			
RMV Adjustment	100			
Before Ratio	90			
Overall Adjustment Factor	111			
Land Adjustment Factor	111			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	90	2016	Adjustment	111

Explanation

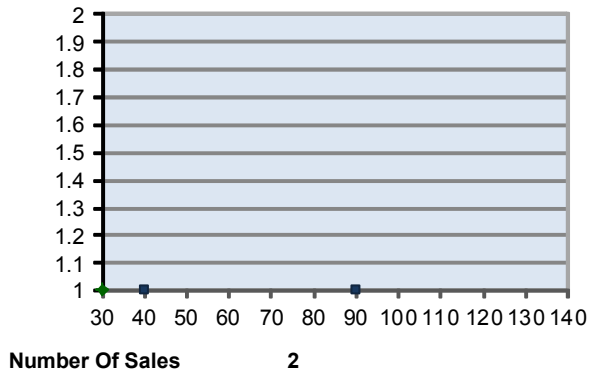
Unimproved land, City of St. Helens.
 Having only two sales available out of a population of 209 accounts, it was decided to apply the Selected Ratio of 90 from the MA 01 RMV 101 SA 00 study resulting in a Land Adjustment Factor of 111.

Performance History

	2016	2015	2014	2013	2012
COD	30.99	17.93	0.00	-	-
PRD	0.82	1.11	1.00	-	-

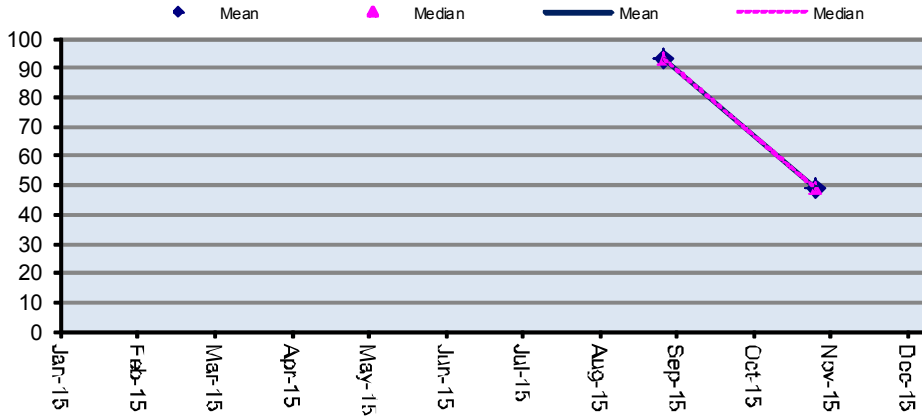
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	71	Wtd Mean	87
40	1	AD	22.00	GeoMean	68
50	0	COD	30.99	PRD	0.82
60	0	Mean	71	95% Confidence	43.12
70	0	SD	31.11		
80	0	COV	43.82		
90	1				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Sep-15	93	93	1
Nov-15	49	49	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	100		33	5N1W33-DC-07900	2015	9670	0.06	17,310	0	17,310	35,000	Nov-15	1	49
01	00	000	100		33	4N1W05-BD-01011	2015	8374	0.12	59,150	153,980	213,130	229,500	Sep-15	2	93

COLUMBIA County 2016 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	239	St Helens							

Adjustment Calculation Summary

Sample - Number of Sales	239	RECALCULATED		
Population - Number of Accounts	3,816			
Sales as a percentage of the Population	6.26 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	169,472,520	26.81 %	188,114,497	26.76 %
OSD RMV	88,849,500	14.05 %	88,849,500	12.64 %
Residential Improvement RMV	371,135,510	58.70 %	423,094,481	60.20 %
Farm Improvement RMV	2,782,960	0.44 %	2,782,960	0.40 %
SelectedRatioFromSales	90			
RMV Adjustment	100			
Before Ratio	90			
Overall Adjustment Factor	111			
Land Adjustment Factor	111			
OSD Adjustment Factor	100			
Residential Adjustment Factor	114			
Farm Improvement Factor	114			
After Ratio	100			
Selected Ratio	90	2016	Adjustment	111

Explanation

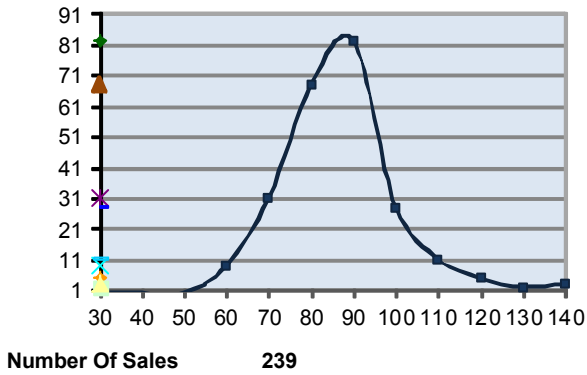
Improved property, City of St. Helens
 Selected the Median of 91 which is supported by the Mean (92) and Weighted Mean (91). The time adjustment of 99 was applied returning a Selected Ratio Adjustment of 90.

Performance History

	2016	2015	2014	2013	2012
COD	11.23	11.33	12.31	10.19	10.99
PRD	1.01	1.00	1.00	1.01	1.02

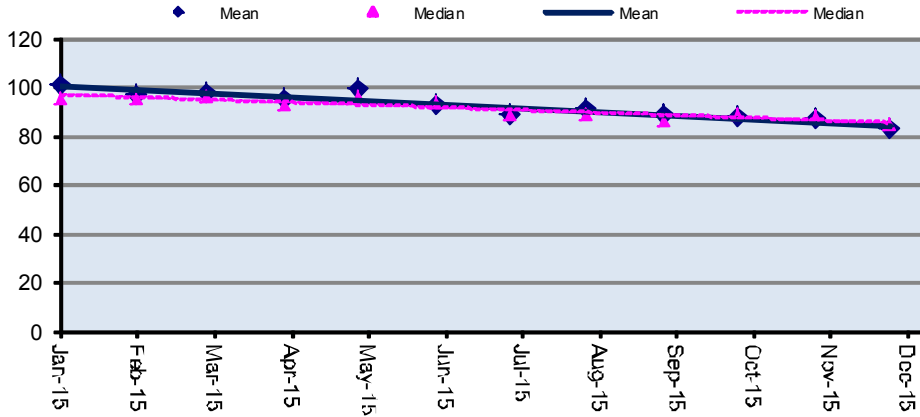
COLUMBIA County 2016 Ratio Study

Frequency



Median	91	Wtd Mean	91
AD	10.22	GeoMean	91
COD	11.23	PRD	1.01
Mean	92	95% Confidence	1.81
SD	14.25		
COV	15.49		

Central Tendencies



Month	Mean	Median	Sales
Jan-15	101	95	12
Feb-15	97	95	13
Mar-15	98	96	18
Apr-15	95	93	18
May-15	99	96	22
Jun-15	93	94	21
Jul-15	89	89	28
Aug-15	91	89	22
Sep-15	89	86	21
Oct-15	88	89	22
Nov-15	87	88	18
Dec-15	83	85	24

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	146	33	4N1W03-BC-06600	2015	8812	0.13	62,300	93,850	156,150	257,500	Oct-15	1	61
01	00	000	101	131	33	4N1W04-CA-13800	2015	9189	0.09	51,660	56,190	107,850	165,000	Oct-15	2	65
01	00	000	101	153	33	4N1W03-BA-07804	2015	5809	0.05	49,990	177,010	227,000	345,000	Jul-15	3	66
01	00	000	101	131	33	4N1W04-CA-16200	2015	8684	0.10	56,040	49,300	105,340	159,000	Oct-15	4	66
01	00	000	101	144	33	5N1W34-CC-02800	2015	6416	0.15	67,130	185,470	252,600	375,400	Jul-15	5	67
01	00	000	101	131	33	4N1W04-CB-12800	2015	7290	0.10	56,000	55,210	111,210	166,500	Aug-15	6	67
01	00	000	101	131	33	4N1W05-DA-07200	2015	10290	0.11	58,440	52,600	111,040	162,565	Dec-15	7	68
01	00	000	101	131	33	4N1W04-DB-07700	2015	10678	0.13	62,830	58,900	121,730	180,000	Dec-15	8	68
01	00	000	101	131	33	5N1W33-DA-04000	2015	8235	0.13	62,830	65,600	128,430	185,000	Sep-15	9	69
01	00	000	101	135	33	4N1W04-BA-01502	2015	9532	0.13	62,830	78,230	141,060	202,500	Nov-15	10	70
01	00	000	101	131	33	4N1W05-CD-03000	2015	10429	0.16	68,280	81,340	149,620	214,900	Dec-15	11	70
01	00	000	101	131	33	5N1W33-DC-14000	2015	1561	0.13	62,830	57,230	120,060	170,000	Mar-15	12	71
01	00	000	101	154	33	5N1W34-CC-03600	2015	8782	0.13	86,130	191,130	277,260	389,000	Oct-15	13	71
01	00	000	101	131	33	5N1W34-CB-03901	2015	9078	0.13	62,830	70,840	133,670	187,000	Oct-15	14	71
01	00	000	101	131	33	4N1W03-BC-09000	2015	5570	0.13	62,830	52,020	114,850	160,000	Jul-15	15	72
01	00	000	101	131	33	5N1W33-DC-07100	2015	6985	0.11	58,620	59,340	117,960	164,900	Aug-15	16	72
01	00	000	101	131	33	4N1W04-DA-10200	2015	10427	0.13	62,830	55,920	118,750	164,697	Dec-15	17	72
01	00	000	101	143	33	5N1W34-CB-01520	2015	10713	0.22	73,080	156,770	229,850	319,500	Dec-15	18	72
01	00	000	101	131	33	4N1W05-DA-11200	2015	4686	0.09	53,040	53,490	106,530	145,000	Jun-15	19	73

COLUMBIA County 2016 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	131	33	5N1W33-DB-00702	2015	9277	0.11	56,850	78,910	135,760	185,000	Nov-15	20	73
01	00	000	101	131	33	4N1W04-AD-03405	2015	10418	0.13	62,830	78,820	141,650	192,900	Dec-15	21	73
01	00	000	101	131	33	5N1W34-CB-02200	2015	10724	0.13	62,830	68,620	131,450	180,600	Dec-15	22	73
01	00	000	101	135	33	4N1W04-CA-09501	2015	10766	0.11	58,620	62,850	121,470	165,700	Dec-15	23	73
01	00	000	101	141	33	4N1W05-DC-07300	2015	2532	0.20	72,330	113,040	185,370	250,000	Apr-15	24	74
01	00	000	101	131	33	4N1W03-BB-13100	2015	9118	0.11	58,620	71,300	129,920	175,900	Oct-15	25	74
01	00	000	101	131	33	5N1W34-CB-01508	2015	4194	0.18	71,140	69,150	140,290	187,000	May-15	26	75
01	00	000	101	132	33	5N1W33-DC-13900	2015	6019	0.13	62,830	87,280	150,110	200,000	Jul-15	27	75
01	00	000	101	123	33	5N1W33-DD-11600	2015	8349	0.13	62,830	57,130	119,960	158,000	Sep-15	28	76
01	00	000	101	133	33	4N1W03-BC-07401	2015	8112	0.27	75,090	81,250	156,340	206,000	Sep-15	29	76
01	00	000	101	131	33	4N1W03-CB-03700	2015	8899	0.15	66,780	48,620	115,400	152,600	Oct-15	30	76
01	00	000	101	131	33	4N1W05-AD-12500	2015	7075	0.11	57,350	56,640	113,990	148,500	Aug-15	31	77
01	00	000	101	131	33	4N1W03-BC-00403	2015	8403	0.13	61,250	72,660	133,910	175,000	Sep-15	32	77
01	00	000	101	131	33	4N1W04-CA-07500	2015	9657	0.13	61,780	58,000	119,780	154,600	Nov-15	33	77
01	00	000	101	121	33	4N1W04-DC-00100	2015	9726	0.13	62,830	41,590	104,420	135,000	Nov-15	34	77
01	00	000	101	131	33	5N1W33-DC-02400	2015	4953	0.11	58,620	57,870	116,490	150,000	Jun-15	35	78
01	00	000	101	133	33	4N1W04-BD-00104	2015	8176	0.13	62,830	77,060	139,890	180,500	Sep-15	36	78
01	00	000	101	141	33	5N1W33-DA-00402	2015	1319	0.09	48,780	91,510	140,290	177,000	Feb-15	37	79
01	00	000	101	136	33	4N1W03-BD-05200	2015	6609	0.11	56,460	81,600	138,060	175,000	Jul-15	38	79
01	00	000	101	141	33	4N1W04-CD-01500	2015	9796	0.35	53,740	91,090	144,830	184,080	Nov-15	39	79
01	00	000	101	131	33	4N1W05-DD-00500	2015	9496	0.17	68,970	61,060	130,030	165,000	Nov-15	40	79
01	00	000	101	132	30	4N1W03-CB-01600	2015	3415	0.14	65,270	55,590	120,860	151,000	May-15	41	80
01	00	000	101	131	33	4N1W04-AA-01002	2015	5963	0.12	59,990	113,530	173,520	216,000	Jul-15	42	80
01	00	000	101	135	33	4N1W04-BD-05700	2015	7106	0.11	58,620	81,690	140,310	174,900	Aug-15	43	80
01	00	000	101	133	33	4N1W05-AD-12100	2015	7606	0.12	60,200	57,780	117,980	147,100	Sep-15	44	80
01	00	000	101	131	33	4N1W04-DC-02400	2015	8323	0.13	62,830	88,050	150,880	189,400	Sep-15	45	80
01	00	000	101	143	33	4N1W05-CA-00507	2015	10703	0.17	69,460	146,780	216,240	270,000	Dec-15	46	80
01	00	000	101	141	33	4N1W05-AC-01400	2015	8928	0.20	72,270	86,210	158,480	194,500	Oct-15	47	81
01	00	000	101	134	33	4N1W05-AC-05200	2015	10566	0.39	84,420	127,350	211,770	259,900	Dec-15	48	81
01	00	000	101	131	33	5N1W33-DC-04000	2015	192	0.11	58,620	58,670	117,290	143,800	Jan-15	49	82
01	00	000	101	141	33	4N1W05-CB-04600	2015	1983	0.16	68,310	116,400	184,710	224,000	Mar-15	50	82
01	00	000	101	121	33	4N1W04-BD-00400	2015	3502	0.27	69,980	54,830	124,810	152,900	May-15	51	82
01	00	000	101	143	33	4N1W05-CA-04000	2015	5283	0.15	67,100	156,200	223,300	273,000	Jun-15	52	82
01	00	000	101	141	33	4N1W05-CC-01104	2015	6158	0.18	70,390	98,060	168,450	205,000	Jul-15	53	82
01	00	000	101	133	33	4N1W05-CD-00903	2015	6411	0.16	67,890	97,920	165,810	201,000	Jul-15	54	82
01	00	000	101	143	33	4N1W06-DC-02200	2015	6258	0.14	63,920	116,810	180,730	220,000	Jul-15	55	82
01	00	000	101	143	33	4N1W06-DD-05000	2015	7541	0.12	60,770	120,660	181,430	220,000	Aug-15	56	82
01	00	000	101	143	33	4N1W06-DC-04500	2015	7882	0.12	60,770	155,720	216,490	263,000	Sep-15	57	82
01	00	000	101	141	33	4N1W06-DA-02700	2015	9368	0.26	74,690	101,710	176,400	216,000	Nov-15	58	82
01	00	000	101	131	33	4N1W04-AD-03101	2015	10425	0.12	59,510	121,800	181,310	220,335	Dec-15	59	82
01	00	000	101	133	33	4N1W03-BB-01900	2015	2579	0.15	66,780	72,690	139,470	169,000	Apr-15	60	83
01	00	000	101	143	33	4N1W05-DB-02109	2015	6133	0.12	58,730	157,770	216,500	259,900	Jun-15	61	83
01	00	000	101	131	30	4N1W04-DD-05000	2015	86	0.13	62,830	57,980	120,810	144,500	Jan-15	62	84
01	00	000	101	131	33	4N1W05-DA-05700	2015	9728	0.22	73,150	52,860	126,010	149,900	Nov-15	63	84
01	00	000	101	143	33	4N1W06-DC-07500	2015	10564	0.16	67,240	125,320	192,560	229,900	Dec-15	64	84
01	00	000	101	142	33	4N1W06-DA-05100	2015	1397	0.23	73,570	136,970	210,540	249,000	Feb-15	65	85

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01	00	000	101	131	30	5N1W34-CC-09600	2015	7244	0.27	75,090	58,540	133,630	157,000	Aug-15	66	85
01	00	000	101	135	33	4N1W05-AD-06400	2015	6611	0.15	66,720	69,330	136,050	160,000	Aug-15	67	85
01	00	000	101	121	33	5N1W33-DD-06300	2015	7428	0.13	61,190	39,120	100,310	117,500	Aug-15	68	85
01	00	000	101	141	30	4N1W03-BD-06801	2015	7569	0.13	61,510	93,700	155,210	182,000	Sep-15	69	85
01	00	000	101	141	33	4N1W05-DB-06300	2015	7884	0.19	71,540	85,410	156,950	185,000	Sep-15	70	85
01	00	000	101	143	33	4N1W06-DC-01100	2015	8521	0.13	62,750	122,200	184,950	218,000	Oct-15	71	85
01	00	000	101	143	33	4N1W05-BD-01012	2015	10578	0.12	59,000	149,850	208,850	246,500	Dec-15	72	85
01	00	000	101	143	33	4N1W05-CA-00507	2015	1258	0.17	69,460	146,780	216,240	250,000	Feb-15	73	86
01	00	000	101	131	33	4N1W05-AD-11900	2015	2988	0.13	61,410	50,190	111,600	130,000	Apr-15	74	86
01	00	000	101	131	33	4N1W04-DA-01000	2015	3990	0.26	100,660	97,630	198,290	229,900	May-15	75	86
01	00	000	101	141	33	4N1W05-AB-02600	2015	5572	0.18	70,650	97,710	168,360	195,000	Jul-15	76	86
01	00	000	101	143	33	4N1W06-DC-02400	2015	5800	0.31	77,320	173,290	250,610	291,000	Jul-15	77	86
01	00	000	101	131	33	4N1W04-CB-03400	2015	7613	0.27	75,460	85,530	160,990	187,031	Sep-15	78	86
01	00	000	101	143	33	4N1W04-DA-06000	2015	8325	0.13	58,950	103,440	162,390	189,900	Sep-15	79	86
01	00	000	101	141	33	4N1W05-CC-01820	2015	9137	0.16	67,970	99,110	167,080	194,000	Oct-15	80	86
01	00	000	101	143	33	4N1W05-BC-04700	2015	9836	0.12	60,220	129,960	190,180	219,900	Nov-15	81	86
01	00	000	101	143	33	4N1W08-BB-05900	2015	2651	0.18	69,810	129,540	199,350	228,500	Apr-15	82	87
01	00	000	101	133	33	4N1W05-AD-08400	2015	4951	0.26	74,750	80,810	155,560	178,000	Jun-15	83	87
01	00	000	101	143	33	4N1W05-CC-00705	2015	6442	0.16	68,150	142,180	210,330	243,000	Jun-15	84	87
01	00	000	101	131	33	4N1W05-DA-07700	2015	6059	0.11	58,440	59,360	117,800	136,000	Jul-15	85	87
01	00	000	101	143	33	4N1W05-DB-02101	2015	6129	0.12	60,660	158,190	218,850	253,000	Jul-15	86	87
01	00	000	101	141	33	4N1W05-AC-04402	2015	7294	0.32	77,980	139,130	217,110	250,000	Aug-15	87	87
01	00	000	101	141	33	4N1W06-AD-01100	2015	7414	0.19	71,720	125,850	197,570	228,000	Aug-15	88	87
01	00	000	101	143	33	5N1W32-DC-02603	2015	7579	0.16	76,880	154,620	231,500	266,100	Sep-15	89	87
01	00	000	101	131	33	5N1W33-DB-00707	2015	10687	0.17	68,890	75,130	144,020	165,200	Dec-15	90	87
01	00	000	101	132	30	4N1W04-AD-07700	2015	340	0.13	62,300	69,310	131,610	149,000	Jan-15	91	88
01	00	000	101	143	33	4N1W08-BB-05700	2015	455	0.16	68,250	121,660	189,910	216,000	Jan-15	92	88
01	00	000	101	143	33	4N1W06-DC-06500	2015	2558	0.12	59,720	114,190	173,910	198,000	Apr-15	93	88
01	00	000	101	143	33	4N1W07-AB-03129	2015	6478	0.11	58,640	164,750	223,390	254,000	Jul-15	94	88
01	00	000	101	143	33	4N1W04-BC-07700	2015	9023	0.17	69,380	122,250	191,630	219,000	Oct-15	95	88
01	00	000	101	141	33	4N1W05-BD-01010	2015	10279	0.13	61,340	136,610	197,950	225,500	Dec-15	96	88
01	00	000	101	141	33	4N1W05-DD-02001	2015	1316	0.18	70,200	125,600	195,800	220,000	Feb-15	97	89
01	00	000	101	121	33	5N1W33-CD-02400	2015	1920	0.17	68,980	41,110	110,090	123,700	Mar-15	98	89
01	00	000	101	141	33	4N1W05-BD-01018	2015	3555	0.12	58,880	131,510	190,390	213,900	Apr-15	99	89
01	00	000	101	143	33	4N1W05-BC-05200	2015	3911	0.13	61,580	158,480	220,060	247,000	May-15	100	89
01	00	000	101	143	33	4N1W05-CB-04200	2015	5562	0.14	65,460	156,250	221,710	248,900	Jul-15	101	89
01	00	000	101	143	33	4N1W06-DD-07700	2015	6202	0.16	67,790	123,480	191,270	215,000	Jul-15	102	89
01	00	000	101	143	33	4N1W05-AB-01037	2015	7217	0.16	67,920	143,220	211,140	237,900	Aug-15	103	89
01	00	000	101	141	33	4N1W05-BA-03911	2015	7486	0.15	66,550	137,160	203,710	229,050	Aug-15	104	89
01	00	000	101	144	33	4N1W03-BB-15400	2015	8450	0.12	59,490	149,900	209,390	235,500	Oct-15	105	89
01	00	000	101	143	33	4N1W05-BD-01015	2015	10237	0.14	65,020	152,610	217,630	245,500	Dec-15	106	89
01	00	000	101	131	33	4N1W04-DC-05400	2015	10277	0.13	62,830	82,900	145,730	164,000	Dec-15	107	89
01	00	000	101	141	33	4N1W05-AA-07100	2015	10572	0.22	72,890	100,870	173,760	195,000	Dec-15	108	89
01	00	000	101	141	33	5N1W34-CB-01602	2015	6437	0.16	67,890	108,580	176,470	196,000	Jul-15	109	90
01	00	000	101	143	33	4N1W05-AB-01041	2015	8735	0.13	63,020	145,520	208,540	232,000	Oct-15	110	90
01	00	000	101	141	33	4N1W07-AB-03175	2015	8736	0.16	68,250	127,370	195,620	218,000	Oct-15	111	90

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01	00	000	101	143	33	4N1W08-BB-05100	2015	9606	0.19	71,080	143,890	214,970	239,900	Nov-15	112	90
01	00	000	101	141	33	4N1W05-DC-08302	2015	10002	0.19	71,750	114,970	186,720	208,500	Nov-15	113	90
01	00	000	101	131	33	4N1W04-DC-03900	2015	1793	0.13	62,830	99,570	162,400	179,000	Mar-15	114	91
01	00	000	101	141	33	4N1W05-AC-02718	2015	2382	0.16	67,360	114,950	182,310	200,000	Apr-15	115	91
01	00	000	101	143	33	4N1W05-CB-00147	2015	3453	0.14	63,800	170,600	234,400	259,000	May-15	116	91
01	00	000	101	143	33	4N1W05-BC-00400	2015	4265	0.16	68,200	123,510	191,710	210,000	Jun-15	117	91
01	00	000	101	143	33	4N1W06-DD-04600	2015	5278	0.13	61,320	190,550	251,870	278,300	Jun-15	118	91
01	00	000	101	131	33	4N1W04-DA-06801	2015	5568	0.11	56,630	39,280	95,910	104,900	Jul-15	119	91
01	00	000	101	143	33	4N1W07-AB-03124	2015	8512	0.13	63,020	190,570	253,590	277,500	Sep-15	120	91
01	00	000	101	141	33	5N1W32-DB-01800	2015	9865	0.17	77,320	184,470	261,790	287,958	Nov-15	121	91
01	00	000	101	141	33	4N1W05-DC-07100	2015	1796	0.20	72,330	112,030	184,360	199,800	Mar-15	122	92
01	00	000	101	141	33	4N1W05-AC-02000	2015	2260	0.18	70,210	119,380	189,590	205,000	Mar-15	123	92
01	00	000	101	143	33	4N1W05-BD-01019	2015	2856	0.12	59,420	164,500	223,920	243,000	Apr-15	124	92
01	00	000	101	141	33	4N1W05-BC-00200	2015	3252	0.17	68,490	113,970	182,460	198,900	Apr-15	125	92
01	00	000	101	123	33	5N1W33-DC-05300	2015	4088	0.26	74,480	48,840	123,320	133,600	May-15	126	92
01	00	000	101	134	33	5N1W33-DC-03700	2015	4384	0.10	55,300	85,180	140,480	153,000	May-15	127	92
01	00	000	101	141	33	4N1W04-BD-01702	2015	5935	0.13	60,960	96,130	157,090	170,000	Jul-15	128	92
01	00	000	101	151	33	4N1W04-CA-15800	2015	6223	0.39	84,730	146,300	231,030	252,000	Jul-15	129	92
01	00	000	101	143	33	4N1W05-AA-09400	2015	6378	0.22	73,120	164,440	237,560	257,250	Jul-15	130	92
01	00	000	101	143	33	4N1W08-BB-07300	2015	7774	0.16	68,170	124,760	192,930	210,000	Sep-15	131	92
01	00	000	101	143	33	4N1W06-DD-09000	2015	10350	0.11	58,110	143,950	202,060	219,000	Dec-15	132	92
01	00	000	101	141	33	4N1W05-CC-00711	2015	450	0.17	69,380	130,550	199,930	216,000	Jan-15	133	93
01	00	000	101	146	33	4N1W04-AA-04900	2015	813	0.13	62,830	123,890	186,720	201,000	Feb-15	134	93
01	00	000	101	141	33	4N1W05-DC-04400	2015	1613	0.24	73,980	167,310	241,290	259,900	Mar-15	135	93
01	00	000	101	141	33	4N1W05-AB-03600	2015	3164	0.26	74,740	109,840	184,580	198,000	Apr-15	136	93
01	00	000	101		33	5N1W32-DC-00111	2015	4312	0.17	77,500	164,170	241,670	260,000	May-15	137	93
01	00	000	101	143	30	4N1W07-AB-03145	2015	5483	0.13	61,440	142,050	203,490	219,900	Jun-15	138	93
01	00	000	101	141	33	4N1W07-AB-03144	2015	6958	0.12	60,870	125,140	186,010	200,500	Aug-15	139	93
01	00	000	101	145	33	4N1W05-BA-03913	2015	7181	0.13	62,180	171,430	233,610	250,000	Aug-15	140	93
01	00	000	101	141	33	5N1W32-DC-00109	2015	7477	0.16	76,740	170,220	246,960	265,900	Aug-15	141	93
01	00	000	101	143	33	4N1W05-BD-03100	2015	8333	0.19	70,820	140,590	211,410	228,000	Sep-15	142	93
01	00	000	101	143	33	4N1W05-BA-03901	2015	8778	0.21	72,630	162,160	234,790	252,000	Oct-15	143	93
01	00	000	101	141	33	4N1W05-DC-08600	2015	9953	0.40	85,510	143,280	228,790	245,000	Nov-15	144	93
01	00	000	101	143	30	4N1W06-DD-06100	2015	170	0.12	59,820	120,080	179,900	191,000	Jan-15	145	94
01	00	000	101	143	33	4N1W05-BD-01020	2015	1165	0.12	58,860	159,850	218,710	232,000	Feb-15	146	94
01	00	000	101	143	33	4N1W07-AB-03149	2015	2192	0.11	58,660	142,810	201,470	215,000	Mar-15	147	94
01	00	000	101	143	33	5N1W21-CB-03100	2015	2791	0.23	73,510	199,580	273,090	289,900	Apr-15	148	94
01	00	000	101	141	33	4N1W05-BD-01000	2015	4647	0.13	61,730	157,290	219,020	232,400	Jun-15	149	94
01	00	000	101	143	33	4N1W05-BD-01003	2015	5336	0.16	67,410	166,460	233,870	247,500	Jun-15	150	94
01	00	000	101	143	33	4N1W04-BC-06300	2015	4696	0.17	68,620	156,970	225,590	240,000	Jun-15	151	94
01	00	000	101	143	33	4N1W06-DC-00100	2015	8366	0.15	66,720	117,830	184,550	196,000	Aug-15	152	94
01	00	000	101	146	33	4N1W04-AC-09100	2015	10060	0.26	74,890	145,210	220,100	235,000	Dec-15	153	94
01	00	000	101	143	33	4N1W05-BC-01000	2015	10591	0.16	68,440	162,110	230,550	245,000	Dec-15	154	94
01	00	000	101	143	33	4N1W05-BC-01400	2015	10465	0.16	67,930	198,360	266,290	282,500	Dec-15	155	94
01	00	000	101	143	30	4N1W05-CA-00118	2015	137	0.13	61,890	160,210	222,100	235,000	Jan-15	156	95
01	00	000	101	141	33	4N1W05-AA-00808	2015	1389	0.28	75,690	151,480	227,170	240,000	Feb-15	157	95

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01	00	000	101	132	30	4N1W04-BD-00110	2015	1720	0.19	71,120	70,820	141,940	150,000	Mar-15	158	95
01	00	000	101	143	30	4N1W07-AB-03125	2015	3733	0.16	67,240	191,130	258,370	272,000	May-15	159	95
01	00	000	101	143	33	4N1W05-CB-00109	2015	3544	0.15	67,080	185,390	252,470	265,000	May-15	160	95
01	00	000	101	143	33	4N1W05-BC-04500	2015	4466	0.12	59,820	139,240	199,060	210,000	Jun-15	161	95
01	00	000	101	143	30	5N1W34-CB-01607	2015	7525	0.16	67,890	121,640	189,530	199,950	Aug-15	162	95
01	00	000	101	143	33	4N1W05-CB-00107	2015	10447	0.15	66,360	203,680	270,040	283,500	Dec-15	163	95
01	00	000	101	143	33	4N1W07-AB-03131	2015	1053	0.11	58,640	137,680	196,320	203,500	Feb-15	164	96
01	00	000	101	135	33	4N1W05-DA-05800	2015	1779	0.28	75,900	57,600	133,500	139,000	Mar-15	165	96
01	00	000	101	143	33	5N1W32-DC-00102	2015	1946	0.17	77,320	169,180	246,500	257,500	Mar-15	166	96
01	00	000	101	132	33	4N1W05-DA-08700	2015	2728	0.13	62,990	78,900	141,890	147,600	Apr-15	167	96
01	00	000	101		33	5N1W32-DC-00112	2015	4313	0.17	78,410	179,770	258,180	270,000	May-15	168	96
01	00	000	101	141	33	4N1W05-CA-02400	2015	5037	0.23	66,180	111,700	177,880	185,500	Jun-15	169	96
01	00	000	101	143	33	4N1W05-CB-00138	2015	5580	0.13	63,030	187,090	250,120	261,500	Jun-15	170	96
01	00	000	101	143	33	4N1W08-BC-04800	2015	5459	0.19	71,500	153,730	225,230	234,000	Jul-15	171	96
01	00	000	101	143	33	4N1W05-AB-04205	2015	8072	0.17	68,600	185,610	254,210	265,000	Sep-15	172	96
01	00	000	101	131	30	4N1W05-AC-05300	2015	8616	0.25	74,080	50,390	124,470	129,250	Oct-15	173	96
01	00	000	101	142	33	4N1W05-AB-01500	2015	9331	0.22	73,100	137,770	210,870	220,500	Nov-15	174	96
01	00	000	101	142	33	5N1W32-DC-00115	2015	9411	0.17	77,330	162,380	239,710	249,900	Nov-15	175	96
01	00	000	101	124	33	4N1W05-DA-06700	2015	9482	0.14	63,880	64,070	127,950	132,900	Nov-15	176	96
01	00	000	101	145	33	4N1W05-BA-03918	2015	10288	0.14	63,760	175,780	239,540	249,500	Dec-15	177	96
01	00	000	101	143	33	4N1W07-AB-03181	2015	1791	0.12	60,540	150,920	211,460	219,000	Mar-15	178	97
01	00	000	101	141	33	4N1W07-AB-03138	2015	2858	0.11	58,640	125,360	184,000	189,900	Apr-15	179	97
01	00	000	101	143	33	4N1W05-BD-01002	2015	4963	0.13	61,780	176,410	238,190	245,000	Jun-15	180	97
01	00	000	101	143	33	4N1W07-AB-03127	2015	3250	0.14	64,750	198,240	262,990	269,000	Apr-15	181	98
01	00	000	101	143	33	4N1W06-DA-04500	2015	3773	0.34	97,790	157,440	255,230	260,000	May-15	182	98
01	00	000	101	141	33	4N1W05-DA-03002	2015	6382	0.16	67,930	120,540	188,470	193,000	Jul-15	183	98
01	00	000	101	143	33	4N1W07-AB-03178	2015	2096	0.12	60,740	195,010	255,750	259,000	Mar-15	184	99
01	00	000	101	141	33	4N1W07-AB-03133	2015	2645	0.11	58,640	124,490	183,130	185,900	Apr-15	185	99
01	00	000	101	143	30	4N1W05-BD-01006	2015	3497	0.12	58,880	169,470	228,350	231,500	May-15	186	99
01	00	000	101	143	33	4N1W07-AB-03108	2015	3708	0.14	65,360	167,100	232,460	235,000	May-15	187	99
01	00	000	101	143	33	4N1W05-BC-06400	2015	6422	0.54	94,390	156,210	250,600	252,000	Jul-15	188	99
01	00	000	101	153	33	4N1W06-DC-07000	2015	7740	0.25	74,470	231,330	305,800	308,000	Sep-15	189	99
01	00	000	101		33	5N1W32-DC-00118	2015	8612	0.22	83,140	184,650	267,790	271,098	Oct-15	190	99
01	00	000	101	143	33	4N1W08-BA-03500	2015	9712	0.20	85,650	154,490	240,140	239,777	Nov-15	191	100
01	00	000	101	143	33	5N1W32-DC-00119	2015	9830	0.18	79,220	186,070	265,290	264,900	Nov-15	192	100
01	00	000	101	131	33	4N1W04-AD-06700	2015	671	0.26	100,660	69,350	170,010	168,500	Jan-15	193	101
01	00	000	101	143	33	4N1W08-BB-04700	2015	847	0.18	70,090	147,600	217,690	215,000	Feb-15	194	101
01	00	000	101	143	33	4N1W07-AB-03126	2015	3315	0.16	67,960	199,030	266,990	264,000	May-15	195	101
01	00	000	101	142	33	4N1W05-CC-01001	2015	3942	0.31	77,250	170,540	247,790	245,000	May-15	196	101
01	00	000	101	143	33	4N1W05-BC-08900	2015	5187	0.20	72,270	134,180	206,450	204,900	Jun-15	197	101
01	00	000	101	143	33	4N1W05-AC-06200	2015	5589	0.16	68,200	157,470	225,670	224,000	Jul-15	198	101
01	00	000	101	143	33	5N1W32-DB-01700	2015	1311	0.17	77,320	202,010	279,330	273,000	Feb-15	199	102
01	00	000	101	141	33	4N1W07-AB-03135	2015	1813	0.11	58,640	124,500	183,140	180,000	Mar-15	200	102
01	00	000	101		33	5N1W32-DC-00120	2015	6841	0.19	80,720	184,650	265,370	259,900	Aug-15	201	102
01	00	000	101	141	33	5N1W32-DC-00108	2015	1891	0.23	83,330	188,110	271,440	263,500	Mar-15	202	103
01	00	000	101	143	33	5N1W32-DB-01000	2015	4386	0.21	82,500	185,320	267,820	259,000	Jun-15	203	103

COLUMBIA County 2016 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-CC-01101	2015	6717	0.19	71,590	101,940	173,530	169,000	Aug-15	204	103
01	00	000	101	141	30	4N1W05-CC-01818	2015	579	0.16	67,970	110,100	178,070	171,000	Jan-15	205	104
01	00	000	101	142	33	4N1W05-AB-01300	2015	6663	0.17	69,270	108,050	177,320	170,000	Jul-15	206	104
01	00	000	101	132	33	4N1W04-DA-05200	2015	8792	0.19	70,820	79,610	150,430	145,000	Oct-15	207	104
01	00	000	101	143	33	4N1W08-BB-05800	2015	4852	0.20	72,140	186,030	258,170	245,000	Jun-15	208	105
01	00	000	101	151	33	4N1W05-CB-00137	2015	7484	0.20	72,140	252,680	324,820	308,000	Aug-15	209	105
01	00	000	101	153	33	4N1W05-BC-03400	2015	4278	0.12	60,910	212,360	273,270	259,000	Jun-15	210	106
01	00	000	101	143	33	4N1W06-DC-07600	2015	1221	0.14	65,160	119,100	184,260	171,900	Feb-15	211	107
01	00	000	101	143	33	4N1W05-AB-01043	2015	1728	0.13	63,020	145,540	208,560	195,000	Feb-15	212	107
01	00	000	101	141	33	4N1W04-DB-13800	2015	1756	0.40	85,150	106,870	192,020	179,900	Mar-15	213	107
01	00	000	101	131	33	4N1W05-DA-02000	2015	4197	0.20	72,230	142,710	214,940	200,000	May-15	214	107
01	00	000	101	144	33	5N1W33-AD-04500	2015	8069	0.39	96,480	225,830	322,310	297,500	Sep-15	215	108
01	00	000	101	153	33	4N1W05-AA-11000	2015	8817	0.19	81,280	244,350	325,630	302,745	Oct-15	216	108
01	00	000	101	153	30	4N1W05-CC-01802	2015	1988	0.86	110,940	203,630	314,570	289,000	Mar-15	217	109
01	00	000	101	141	33	4N1W05-AA-04200	2015	6441	0.21	72,830	85,350	158,180	145,000	Jul-15	218	109
01	00	000	101	131	33	4N1W04-CB-12600	2015	8909	0.09	52,500	47,810	100,310	90,825	Oct-15	219	110
01	00	000	101	132	33	4N1W04-DB-10000	2015	673	0.13	62,830	83,260	146,090	130,000	Jan-15	220	112
01	00	000	101	144	33	4N1W06-AD-01700	2015	4319	0.18	70,450	202,620	273,070	243,900	Jun-15	221	112
01	00	000	101	132	33	5N1W34-CB-08000	2015	7829	0.15	67,130	55,310	122,440	109,000	Sep-15	222	112
01	00	000	101	122	33	4N1W04-BD-00800	2015	9344	0.24	99,270	49,870	149,140	131,500	Oct-15	223	113
01	00	000	101	122	33	5N1W34-CB-06600	2015	3255	0.13	62,830	32,630	95,460	83,000	Apr-15	224	115
01	00	000	101	143	33	4N1W05-AC-06300	2015	4128	0.16	68,200	144,510	212,710	185,500	May-15	225	115
01	00	000	101	141	33	4N1W05-DC-07800	2015	6987	0.16	67,750	88,680	156,430	135,000	Aug-15	226	116
01	00	000	101	153	33	4N1W05-CB-00125	2015	6579	0.13	61,710	256,200	317,910	272,000	May-15	227	117
01	00	000	101	153	33	4N1W05-CB-00141	2015	2657	0.14	64,910	245,650	310,560	262,000	Apr-15	228	119
01	00	000	101	143	33	5N1W32-DB-01400	2015	8786	0.37	118,480	210,040	328,520	277,064	Oct-15	229	119
01	00	000	101	123	33	5N1W34-CC-15000	2015	7715	0.13	62,830	48,350	111,180	92,000	Sep-15	230	121
01	00	000	101	143	33	4N1W04-CA-07400	2015	32	0.11	58,620	141,800	200,420	164,900	Jan-15	231	122
01	00	000	101	131	30	5N1W33-DA-01800	2015	2309	0.13	63,330	72,170	135,500	110,000	Apr-15	232	123
01	00	000	101	141	33	4N1W04-BB-01600	2015	1220	0.24	73,880	89,350	163,230	130,000	Feb-15	233	126
01	00	000	101	131	33	4N1W04-DB-07700	2015	5724	0.13	62,830	58,900	121,730	95,000	Jul-15	234	128
01	00	000	101	132	33	5N1W33-DC-06300	2015	6632	0.11	58,620	58,960	117,580	90,000	Aug-15	235	131
01	00	000	101	125	30	4N1W04-CB-11300	2015	3751	0.14	63,350	67,460	130,810	95,000	May-15	236	138
01	00	000	101	132	33	4N1W04-AD-03000	2015	3938	0.27	69,980	79,480	149,460	102,000	May-15	237	147
01	00	000	101	131	30	4N1W04-DC-06300	2015	338	0.13	62,830	48,350	111,180	75,000	Jan-15	238	148
01	00	000	101	125	33	4N1W04-CB-11300	2015	2045	0.14	63,350	67,460	130,810	87,807	Mar-15	239	149

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
102	01	00	000		7	St Helens							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	7			
Population - Number of Accounts	27			
Sales as a percentage of the Population	25.93 %			
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	4,250,560	100.00 %	4,080,538	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	104			
RMV Adjustment	100			
Before Ratio	104			
Overall Adjustment Factor	96			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	96			
Farm Improvement Factor	96			
After Ratio	100			
Selected Ratio	104	2016	Adjustment	96

Explanation

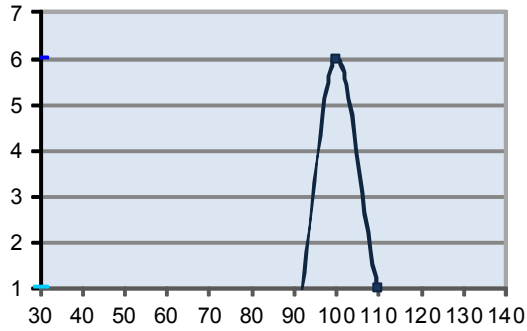
Improved property - Condominium, City of St. Helens
 Selected the Mean of 105 which is supported by the Median (104) and the Weighted Mean (106). Next, the time adjustment of 99 was applied which then returned the Selected Ratio of 104.

Performance History

	2016	2015	2014	2013	2012
COD	2.88	-	-	10.19	10.99
PRD	0.99	-	-	1.01	1.02

COLUMBIA County 2016 Ratio Study

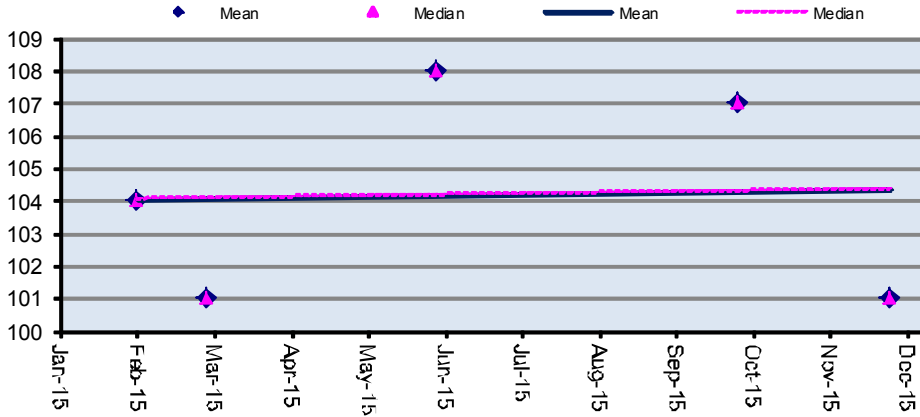
Frequency



30	0	Median	104	Wtd Mean	106
40	0	AD	3.00	GeoMean	105
50	0	COD	2.88	PRD	0.99
60	0	Mean	105	95% Confidence	3.01
70	0	SD	4.06		
80	0	COV	3.87		
90	0				
100	6				
110	1				
120	0				
130	0				
140	0				

Number Of Sales 7

Central Tendencies



Month	Mean	Median	Sales
Feb-15	104	104	1
Mar-15	101	101	1
Jun-15	108	108	2
Oct-15	107	107	2
Dec-15	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
01	00	000	102	151	30	4N1W03-BA-90204	2015	1879	0	0	194,140	194,140	192,000	Mar-15	1	101
01	00	000	102	134	33	4N1W04-BD-91300	2015	10768	0	0	120,940	120,940	120,000	Dec-15	2	101
01	00	000	102	134	33	4N1W04-BD-90900	2015	1164	0	0	120,940	120,940	116,000	Feb-15	3	104
01	00	000	102	151	30	4N1W03-BA-90103	2015	5358	0	0	192,120	192,120	185,000	Jun-15	4	104
01	00	000	102	134	33	4N1W04-BD-90500	2015	9192	0	0	120,940	120,940	115,000	Oct-15	5	105
01	00	000	102	152	33	5N1W34-CD-90001	2015	9143	0	0	260,500	260,500	240,000	Oct-15	6	109
01	00	000	102	151	30	4N1W03-BA-90102	2015	5890	0	0	192,120	192,120	171,000	Jun-15	7	112

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	01	00	000		2	St Helens							

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	89			
Sales as a percentage of the Population	2.25 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	4,104,730	33.12 %	4,556,250	40.78 %
OSD RMV	2,097,500	16.92 %	2,097,500	18.77 %
Residential Improvement RMV	5,992,440	48.35 %	4,374,481	39.15 %
Farm Improvement RMV	198,310	1.60 %	144,766	1.30 %
SelectedRatioFromSales	111			
RMV Adjustment	100			
Before Ratio	111			
Overall Adjustment Factor	90			
Land Adjustment Factor	111			
OSD Adjustment Factor	100			
Residential Adjustment Factor	73			
Farm Improvement Factor	73			
After Ratio	100			
Selected Ratio	111	2016	Adjustment	90

Explanation

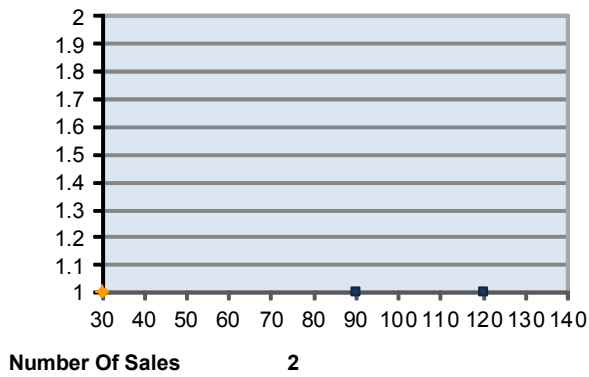
Improved property - Manufactured Structure, City of St. Helens
 Selected the Median of 112 which is supported by both the Mean and Weighted Mean. The time adjustment 99 was then applied resulting in a Selected Ratio of 111.

Performance History

	2016	2015	2014	2013	2012
COD	14.29	11.33	12.31	10.19	10.99
PRD	1.01	1.00	1.00	1.01	1.02

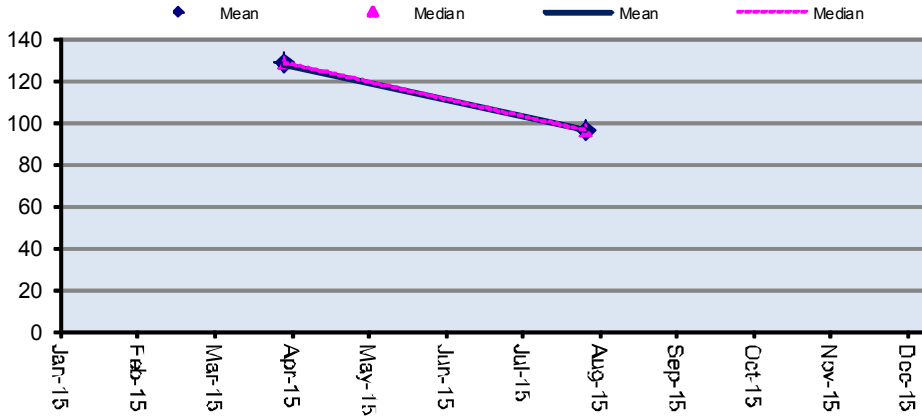
COLUMBIA County 2016 Ratio Study

Frequency



Median	112	Wtd Mean	111
AD	16.00	GeoMean	111
COD	14.29	PRD	1.01
Mean	112	95% Confidence	31.36
SD	22.63		
COV	20.20		

Central Tendencies



Month	Mean	Median	Sales
Apr-15	128	128	1
Aug-15	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
01	00	000	109	452	33	5N1W33-DD-09302	2015	6919	0.13	62,830	56,930	119,760	125,000	Aug-15	1	96
01	00	000	109	462	33	4N1W05-CC-02501	2015	3167	0.17	68,520	71,930	140,450	110,000	Apr-15	2	128

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	17			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	1,960,650	100.00 %	2,176,322	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	90			
RMV Adjustment	100			
Before Ratio	90			
Overall Adjustment Factor	111			
Land Adjustment Factor	111			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	90	2016	Adjustment	111

Explanation

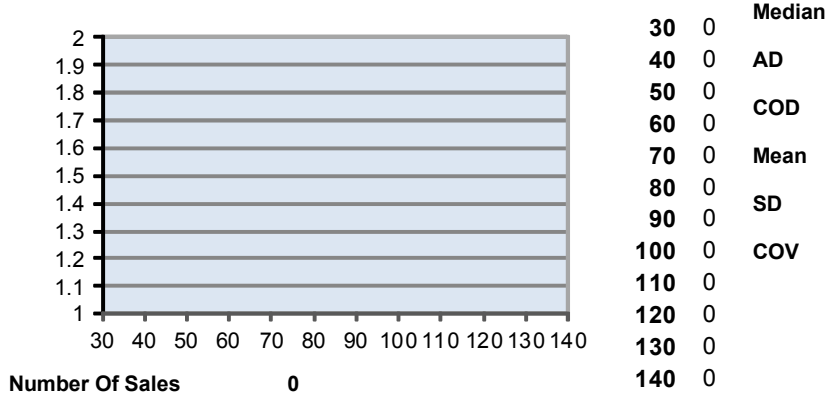
Unimproved land – River Front, City of St. Helens and City of Columbia City
 There are no unimproved land sales available for this analysis. Therefore, the Selected Ratio of 90 from the MA 1 SA 00 RMV 100 study for the City of St. Helens was used.

Performance History

	2016	2015	2014	2013	2012
COD		0.00	11.50	-	-
PRD		1.00	1.01	-	-

COLUMBIA County 2016 Ratio Study

Frequency



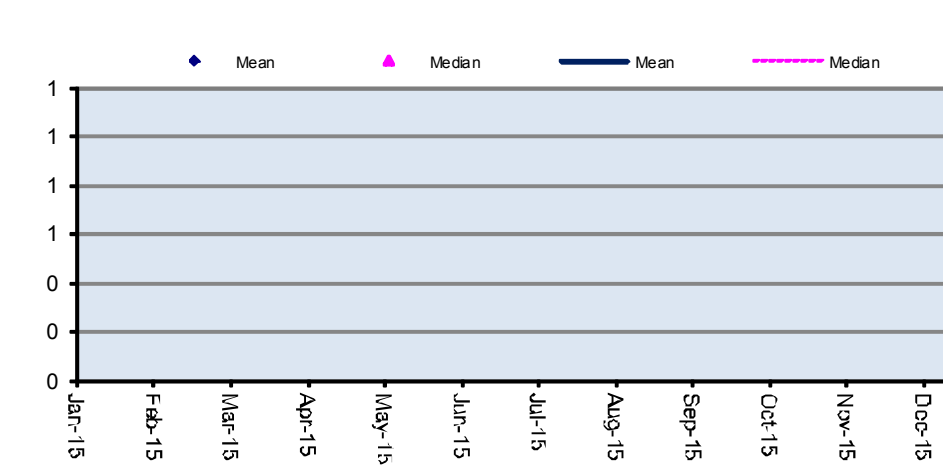
Wtd Mean

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 2016 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
101	01	15	000	1995	0	St Helens							

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	42			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	8,445,670	41.99 %	9,374,694	41.98 %
OSD RMV	931,000	4.63 %	931,000	4.17 %
Residential Improvement RMV	10,722,270	53.30 %	12,008,942	53.77 %
Farm Improvement RMV	16,500	0.08 %	18,480	0.08 %
SelectedRatioFromSales	90			
RMV Adjustment	100			
Before Ratio	90			
Overall Adjustment Factor	111			
Land Adjustment Factor	111			
OSD Adjustment Factor	100			
Residential Adjustment Factor	112			
Farm Improvement Factor	112			
After Ratio	100			
Selected Ratio	90	2016	Adjustment	111

Explanation

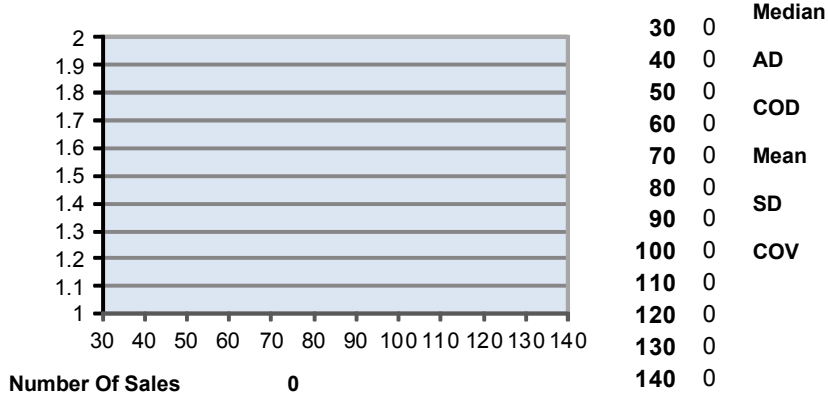
RMV 101, SA 15
 Improved land – River Front, City of St. Helens and City of Columbia City
 There are no improved sales available for this analysis. Therefore, the Selected Ratio of 90 from the MA 1 SA 00 RMV 101 improved land study for the City of St. Helens was used.

Performance History

	2016	2015	2014	2013	2012
COD		0.68	11.50	22.36	27.31
PRD		1.00	1.01	1.02	1.04

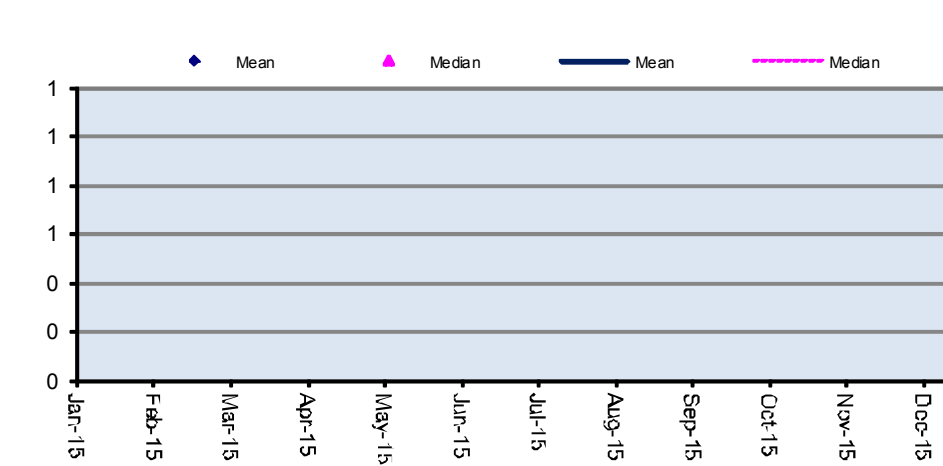
COLUMBIA County 2016 Ratio Study

Frequency



- 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 NO	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 NO	RATIO NO

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	2			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	432,500	67.59 %	480,075	73.77 %
OSD RMV	48,000	7.50 %	48,000	7.38 %
Residential Improvement RMV	159,370	24.91 %	122,715	18.86 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	111			
RMV Adjustment	100			
Before Ratio	111			
Overall Adjustment Factor	90			
Land Adjustment Factor	111			
OSD Adjustment Factor	100			
Residential Adjustment Factor	77			
Farm Improvement Factor	77			
After Ratio	100			
Selected Ratio	111	2016	Adjustment	90

Explanation

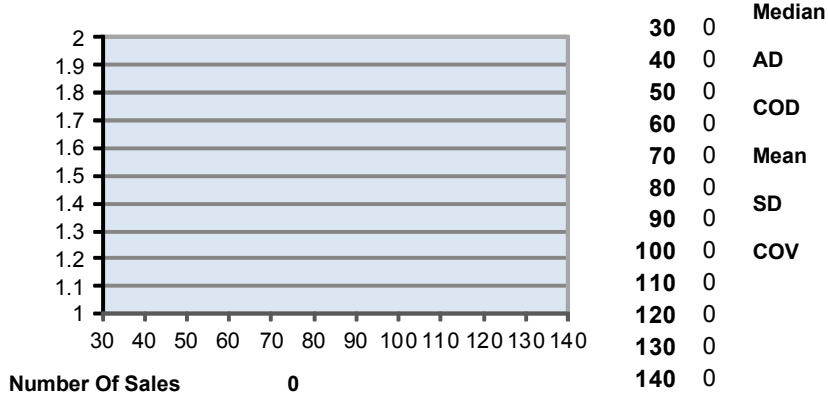
Improved land (Manufactured Structure) – River Front, City of St. Helens and City of Columbia City
 There are no improved sales available for this analysis. Therefore, the Selected Ratio of 111 from the MA 1 SA 00 RMV 109 improved land (manufactured structure) study for the City of St. Helens was used.

Performance History

	2016	2015	2014	2013	2012
COD		0.68	11.50	22.36	27.31
PRD		1.00	1.01	1.02	1.04

COLUMBIA County 2016 Ratio Study

Frequency



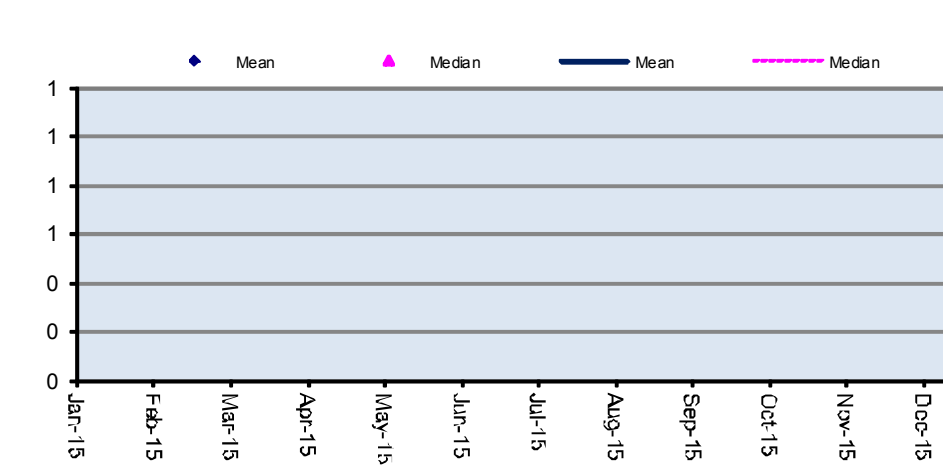
Wtd Mean

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 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
101	01	30	000	1995	8	St Helens	101	01	43	000	1995	7	St Helens

Adjustment Calculation Summary

Sample - Number of Sales	15	RECALCULATED		
Population - Number of Accounts	303			
Sales as a percentage of the Population	4.95 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	11,412,610	23.78 %	12,667,997	24.02 %
OSD RMV	9,809,500	20.44 %	9,809,500	18.60 %
Residential Improvement RMV	26,759,790	55.75 %	30,238,563	57.34 %
Farm Improvement RMV	20,150	0.04 %	22,770	0.04 %
SelectedRatioFromSales	91			
RMV Adjustment	100			
Before Ratio	91			
Overall Adjustment Factor	110			
Land Adjustment Factor	111			
OSD Adjustment Factor	100			
Residential Adjustment Factor	113			
Farm Improvement Factor	113			
After Ratio	100			
Selected Ratio	91	2016	Adjustment	110

Explanation

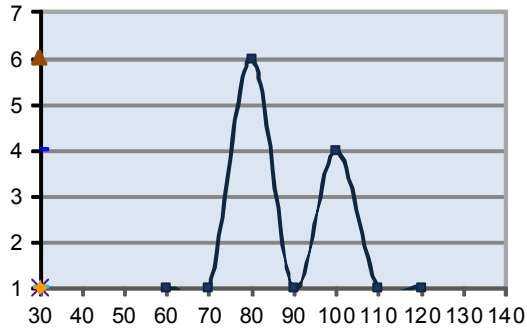
Improved land - Duplex/Triplex/Fourplex and Town house/Row house, City of St. Helens
 Selected the Weighted Mean of 92 applying the time adjustment of 99. Thus, the resulting Selected Ratio Adjustment is 91.

Performance History

	2016	2015	2014	2013	2012
COD	14.68	7.80	-	-	-
PRD	1.01	0.98	-	-	-

COLUMBIA County 2016 Ratio Study

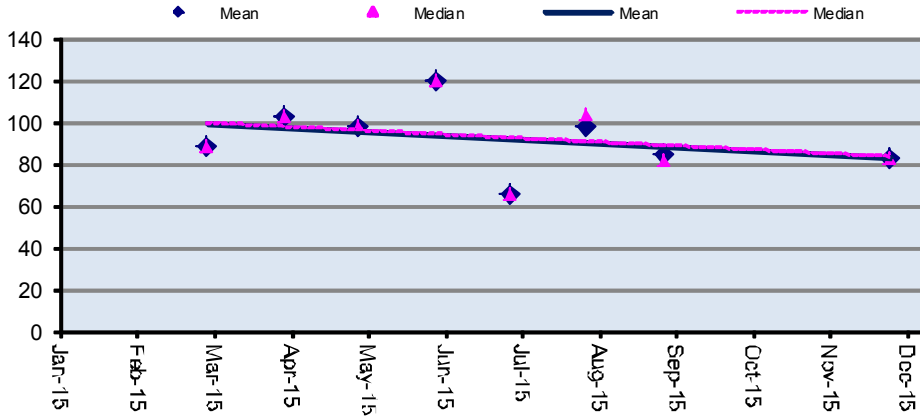
Frequency



30	0	Median	89	Wtd Mean	92
40	0	AD	13.07	GeoMean	92
50	0	COD	14.68	PRD	1.01
60	1	Mean	93	95% Confidence	7.97
70	1	SD	15.74		
80	6	COV	16.93		
90	1				
100	4				
110	1				
120	1				
130	0				
140	0				

Number Of Sales **15**

Central Tendencies



Month	Mean	Median	Sales
Mar-15	88	88	1
Apr-15	103	103	1
May-15	98	98	2
Jun-15	120	120	1
Jul-15	65	65	1
Aug-15	98	104	5
Sep-15	84	82	3
Dec-15	83	83	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	30	000	101	232	33	4N1W04-CA-06000	2015	5619	0.17	78,770	42,210	120,980	185,000	Jul-15	1	65
01	30	000	101	232	33	4N1W03-BB-00800	2015	6626	0.13	72,330	36,670	109,000	150,000	Aug-15	2	73
01	30	000	101	232	30	4N1W03-BB-13000	2015	7608	0.13	72,330	121,120	193,450	240,000	Sep-15	3	81
01	30	000	101	242	33	5N1W33-DB-00704	2015	7822	0.19	80,850	121,650	202,500	247,000	Sep-15	4	82
01	43	000	101	133	32	4N1W05-BD-01106	2015	10736	0.08	54,380	98,620	153,000	185,000	Dec-15	5	83
01	30	000	101	242	33	4N1W05-CD-01015	2015	1775	0.11	68,130	164,720	232,850	265,000	Mar-15	6	88
01	30	000	101	242	33	4N1W05-CD-01011	2015	4228	0.12	69,860	167,650	237,510	266,000	May-15	7	89
01	43	000	101	133	33	4N1W05-CD-01000	2015	8294	0.07	49,880	79,590	129,470	145,000	Sep-15	8	89
01	30	000	101	232	33	4N1W04-DA-13300	2015	6572	0.13	72,330	62,130	134,460	150,000	Aug-15	9	90
01	43	000	101	143	33	4N1W05-CB-06701	2015	2739	0.09	54,410	89,100	143,510	138,950	Apr-15	10	103
01	43	000	101	143	33	4N1W05-CB-06701	2015	7177	0.09	54,410	89,100	143,510	138,500	Aug-15	11	104
01	30	000	101	242	30	5N1W34-CB-01609	2015	4060	0.32	87,820	167,600	255,420	239,000	May-15	12	107
01	43	000	101	143	33	4N1W05-BD-01115	2015	7421	0.08	54,370	101,740	156,110	145,000	Aug-15	13	108
01	43	000	101	143	33	4N1W08-BA-01614	2015	6715	0.09	55,010	138,160	193,170	168,000	Aug-15	14	115
01	43	000	101	143	33	4N1W08-BA-01620	2015	6420	0.04	40,970	131,650	172,620	144,000	Jun-15	15	120

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
100	01	01	000		0	Columbia City							

Adjustment Calculation Summary

Sample - Number of Sales				0
Population - Number of Accounts				38
Sales as a percentage of the Population			0.00 %	
Prior Year Population Values				
Land RMV	3,755,380	100.00 %	4,055,810	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	2016	Adjustment 108

Explanation

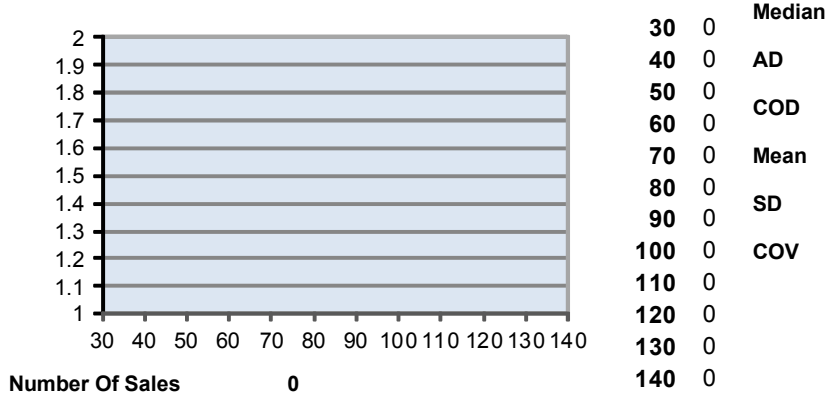
Unimproved land, City of Columbia City.
 Since there are no sales available of vacant land in the City of Columbia city, it was decided to use the Selected Ratio of 93 from the MA 01 SA 01 RMV 101 study.

Performance History

	2016	2015	2014	2013	2012
COD		-	-	0.00	0.00
PRD		-	-	1.00	1.00

COLUMBIA County 2016 Ratio Study

Frequency



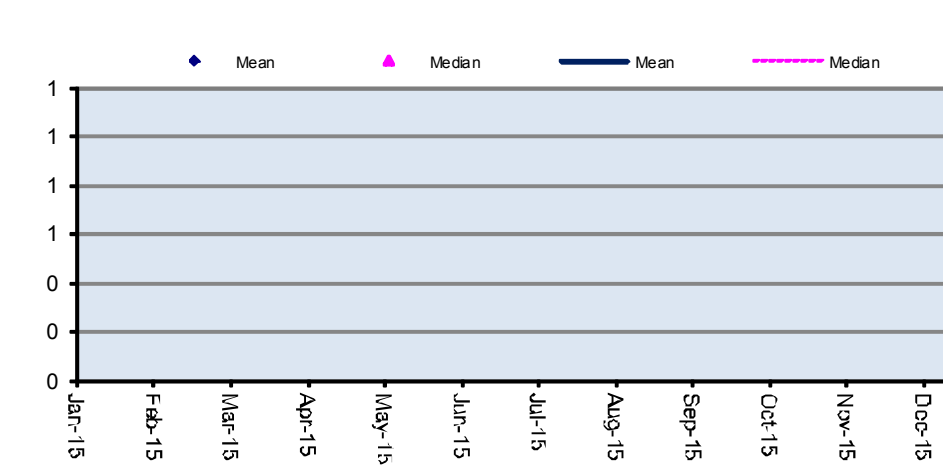
Wtd Mean

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 2016 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
101	01	01	000	1995	30	Columbia City							

Adjustment Calculation Summary

Sample - Number of Sales	30			
Population - Number of Accounts	514			
Sales as a percentage of the Population	5.84 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	33,086,160	28.85 %	35,733,053	28.81 %
OSD RMV	14,557,500	12.69 %	14,557,500	11.74 %
Residential Improvement RMV	66,698,450	58.15 %	73,368,295	59.14 %
Farm Improvement RMV	355,270	0.31 %	390,797	0.32 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	108			
OSD Adjustment Factor	100			
Residential Adjustment Factor	110			
Farm Improvement Factor	110			
After Ratio	100			
Selected Ratio	93	2016	Adjustment	108

Explanation

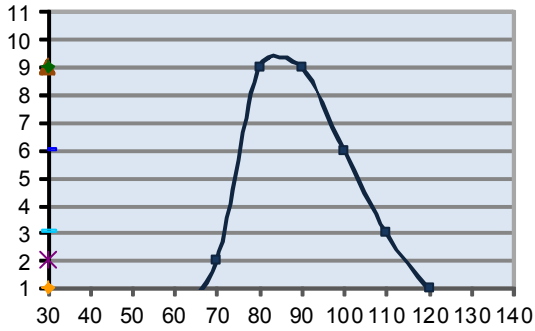
Improved land, City of Columbia City.
 Selected the Median of 94. The time adjustment of 99 was then applied, returning a Selected Ratio of 93.

Performance History

	2016	2015	2014	2013	2012
COD	10.04	12.13	12.30	8.39	9.28
PRD	1.01	1.00	1.01	1.01	1.01

COLUMBIA County 2016 Ratio Study

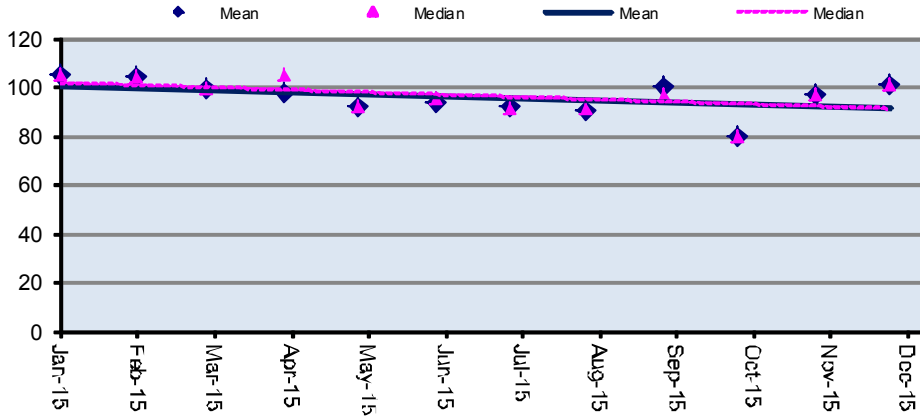
Frequency



30	0	Median	94	Wtd Mean	94
40	0	AD	9.43	GeoMean	94
50	0	COD	10.04	PRD	1.01
60	0	Mean	95	95% Confidence	4.19
70	2	SD	11.70		
80	9	COV	12.32		
90	9				
100	6				
110	3				
120	1				
130	0				
140	0				

Number Of Sales **30**

Central Tendencies



Month	Mean	Median	Sales
Jan-15	105	105	1
Feb-15	104	104	1
Mar-15	99	99	2
Apr-15	98	105	4
May-15	92	92	2
Jun-15	94	95	2
Jul-15	92	91	4
Aug-15	90	91	4
Sep-15	100	97	6
Oct-15	80	80	2
Nov-15	97	97	1
Dec-15	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
01	01	000	101	142	33	5N1W28-AD-05000	2015	9105	0.23	103,640	130,990	234,630	305,000	Oct-15	1	77
01	01	000	101	135	33	5N1W28-AA-01300	2015	4317	0.13	75,830	69,750	145,580	184,900	Jun-15	2	79
01	01	000	101	153	33	5N1W28-DD-02201	2015	5733	0.19	97,010	160,970	257,980	315,000	Jul-15	3	82
01	01	000	101	143	33	5N1W21-CB-01300	2015	5892	0.23	82,460	114,910	197,370	240,000	Jul-15	4	82
01	01	000	101	131	33	5N1W28-BA-01700	2015	8507	0.23	82,460	59,520	141,980	171,000	Oct-15	5	83
01	01	000	101	142	33	5N1W28-CA-02900	2015	7475	0.23	114,460	123,770	238,230	280,000	Aug-15	6	85
01	01	000	101	142	33	5N1W28-DB-04000	2015	8369	0.23	82,420	130,140	212,560	249,000	Sep-15	7	85
01	01	000	101	133	33	5N1W28-BA-01400	2015	2339	0.29	85,500	64,400	149,900	174,000	Apr-15	8	86
01	01	000	101	123	33	5N1W28-AD-00300	2015	3257	0.11	75,120	72,240	147,360	169,000	Apr-15	9	87
01	01	000	101	142	33	5N1W28-AD-03000	2015	4117	0.17	98,900	144,090	242,990	279,900	May-15	10	87
01	01	000	101	151	33	5N1W28-BD-00610	2015	8182	0.32	79,520	179,060	258,580	289,435	Sep-15	11	89
01	01	000	101	151	30	5N1W28-BA-01914	2015	6782	0.20	91,340	121,630	212,970	237,000	Aug-15	12	90
01	01	000	101	142	33	5N1W28-AB-02502	2015	5622	0.25	83,670	135,720	219,390	242,000	Jul-15	13	91
01	01	000	101	153	33	5N1W21-CD-00201	2015	7138	0.11	75,120	181,500	256,620	280,500	Aug-15	14	91
01	01	000	101	142	33	5N1W28-DB-00102	2015	7186	0.23	82,460	108,190	190,650	205,000	Aug-15	15	93
01	01	000	101	153	33	5N1W28-AA-00703	2015	2182	0.13	94,590	195,810	290,400	310,000	Mar-15	16	94
01	01	000	101	142	33	5N1W28-DB-03302	2015	4391	0.31	86,660	141,250	227,910	237,000	May-15	17	96
01	01	000	101	152	33	5N1W28-BD-00601	2015	7708	0.23	103,780	219,750	323,530	334,800	Sep-15	18	97
01	01	000	101	142	33	5N1W28-AC-01900	2015	8336	0.23	103,640	137,600	241,240	249,000	Sep-15	19	97

COLUMBIA County 2016 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	131	33	5N1W28-AA-01100	2015	9924	0.25	94,500	82,660	177,160	183,500	Nov-15	20	97
01	01	000	101	151	33	5N1W28-BD-00618	2015	10459	0.23	82,460	178,010	260,470	259,000	Dec-15	21	101
01	01	000	101	131	33	5N1W28-AB-03400	2015	1211	0.23	82,480	58,680	141,160	136,000	Feb-15	22	104
01	01	000	101	143	33	5N1W28-AD-04301	2015	2129	0.23	82,460	161,630	244,090	235,000	Mar-15	23	104
01	01	000	101	143	33	5N1W28-BA-01905	2015	7872	0.20	81,030	138,420	219,450	210,000	Sep-15	24	104
01	01	000	101	142	33	5N1W28-AA-01000	2015	677	0.11	102,490	113,680	216,170	205,000	Jan-15	25	105
01	01	000	101	143	33	5N1W21-CD-01800	2015	2643	0.11	75,120	145,860	220,980	210,000	Apr-15	26	105
01	01	000	101	121	33	5N1W28-AB-01200	2015	4732	0.11	84,240	25,500	109,740	100,000	Jun-15	27	110
01	01	000	101	142	33	5N1W28-DB-03402	2015	2869	0.23	93,060	175,610	268,670	238,000	Apr-15	28	113
01	01	000	101	132	33	5N1W28-AC-03300	2015	6476	0.29	97,300	96,950	194,250	169,000	Jul-15	29	115
01	01	000	101	152	33	5N1W28-AC-02101	2015	7961	0.46	108,180	150,610	258,790	205,000	Sep-15	30	126

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales				0
Population - Number of Accounts				8
Sales as a percentage of the Population			0.00 %	
Prior Year Population Values				
Land RMV	481,110	37.40 %	519,599	37.44 %
OSD RMV	236,000	18.34 %	236,000	17.01 %
Residential Improvement RMV	560,120	43.54 %	621,733	44.80 %
Farm Improvement RMV	9,320	0.72 %	10,345	0.75 %
SelectedRatioFromSales				93
RMV Adjustment				100
Before Ratio				93
Overall Adjustment Factor				108
Land Adjustment Factor				108
OSD Adjustment Factor				100
Residential Adjustment Factor				111
Farm Improvement Factor				111
After Ratio				100
Selected Ratio	93	2016	Adjustment	108

Explanation

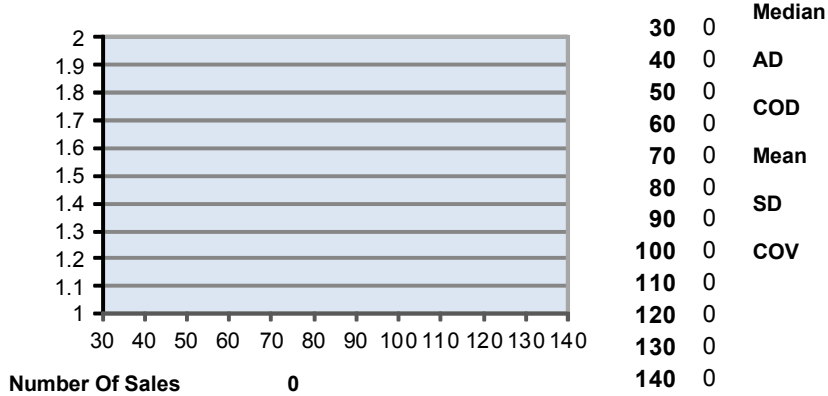
Improved land - Manufactured Structure, City of Columbia City.
 Due to having no manufactured sales available for this analysis, the Selected Ratio of 93 from the MA 01 SA 01 RMV 101 study was applied here.

Performance History

	2016	2015	2014	2013	2012
COD		12.13	12.30	8.39	9.28
PRD		1.00	1.01	1.01	1.01

COLUMBIA County 2016 Ratio Study

Frequency



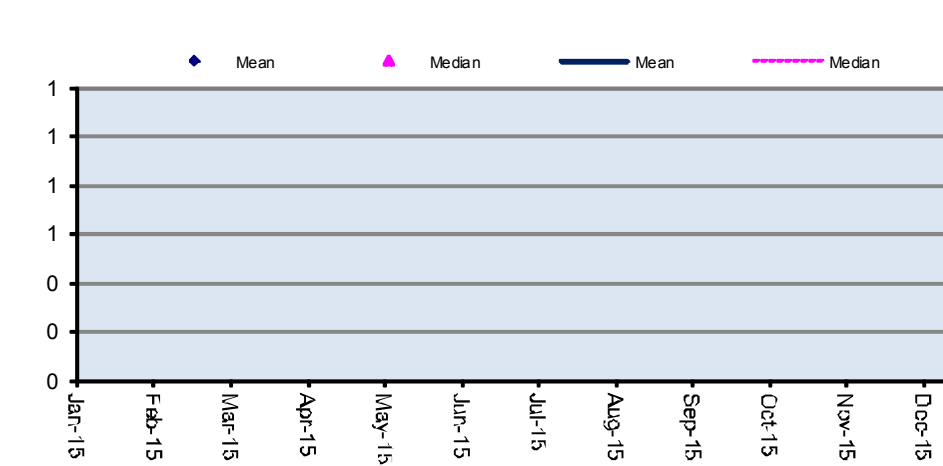
Wtd Mean

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 2016 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
101	01	21	000	1995	17	Columbia City							

Adjustment Calculation Summary

Sample - Number of Sales				17
Population - Number of Accounts				217
Sales as a percentage of the Population			7.83 %	
Prior Year Population Values				
Land RMV	11,864,460	25.06 %	12,813,617	25.02 %
OSD RMV	6,313,000	13.34 %	6,313,000	12.33 %
Residential Improvement RMV	28,928,110	61.11 %	31,820,921	62.15 %
Farm Improvement RMV	232,580	0.49 %	255,838	0.50 %
SelectedRatioFromSales				93
RMV Adjustment				100
Before Ratio				93
Overall Adjustment Factor				108
Land Adjustment Factor				108
OSD Adjustment Factor				100
Residential Adjustment Factor				110
Farm Improvement Factor				110
After Ratio				100
Selected Ratio	93	2016	Adjustment	108

Explanation

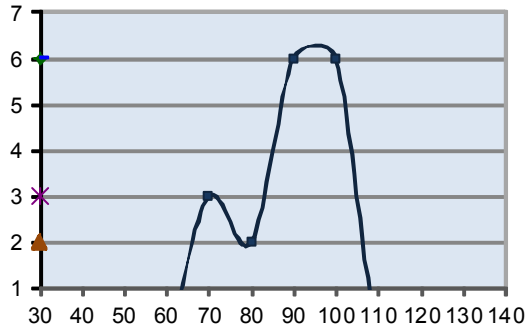
Improved land – McBride Meadows/Sophie Park, City of Columbia City.
 Selected the Mean of 94 which is supported by the Weighted Mean (93). The conclusion of 99 from the time adjustment study for RMV 1XX was applied thus resulting in a Selected Ratio of 93.

Performance History

	2016	2015	2014	2013	2012
COD	8.40	6.43	10.58	8.39	9.28
PRD	1.01	1.00	1.02	1.01	1.01

COLUMBIA County 2016 Ratio Study

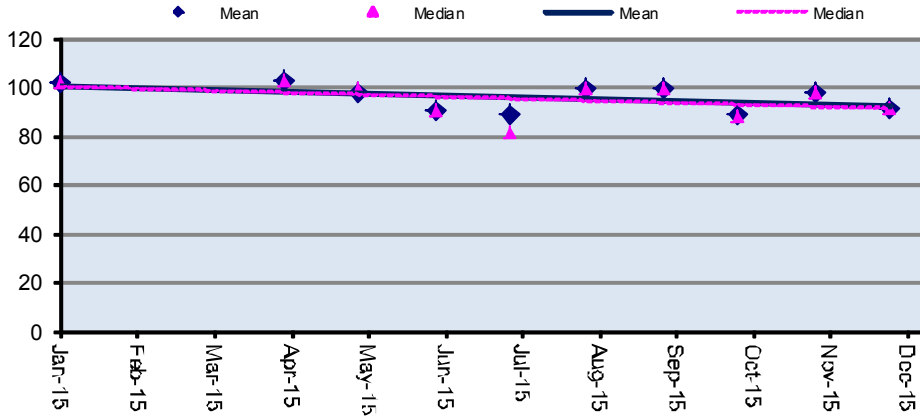
Frequency



30	0	Median	98	Wtd Mean	93
40	0	AD	8.24	GeoMean	93
50	0	COD	8.40	PRD	1.01
60	0	Mean	94	95% Confidence	4.65
70	3	SD	9.78		
80	2	COV	10.40		
90	6				
100	6				
110	0				
120	0				
130	0				
140	0				

Number Of Sales 17

Central Tendencies



Month	Mean	Median	Sales
Jan-15	102	102	1
Apr-15	103	103	1
May-15	98	99	2
Jun-15	90	90	2
Jul-15	89	81	3
Aug-15	99	99	1
Sep-15	99	99	1
Oct-15	89	88	3
Nov-15	98	98	1
Dec-15	91	91	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
01	21	000	101	141	33	5N1W21-BD-00300	2015	10247	0.26	84,200	121,000	205,200	267,000	Dec-15	1	77
01	21	000	101	141	33	5N1W21-CB-02400	2015	6649	0.27	84,650	99,500	184,150	235,000	Jul-15	2	78
01	21	000	101	152	33	5N1W21-CD-02300	2015	5365	0.23	82,460	142,920	225,380	283,900	Jun-15	3	79
01	21	000	101	141	30	5N1W21-BC-02700	2015	8988	0.43	93,700	149,660	243,360	292,000	Oct-15	4	83
01	21	000	101	131	33	5N1W21-CD-04200	2015	6541	0.24	83,220	65,480	148,700	176,000	Jul-15	5	84
01	21	000	101	143	33	5N1W21-CA-01700	2015	8951	0.25	94,110	128,420	222,530	241,000	Oct-15	6	92
01	21	000	101	142	33	5N1W21-CD-03300	2015	9141	0.71	117,260	205,080	322,340	346,000	Oct-15	7	93
01	21	000	101	143	33	5N1W28-AB-04500	2015	3412	0.23	82,510	136,730	219,240	225,000	May-15	8	97
01	21	000	101	143	33	5N1W21-CB-03600	2015	9867	0.25	83,730	121,900	205,630	210,000	Nov-15	9	98
01	21	000	101	141	33	5N1W21-BC-01800	2015	6728	0.23	82,460	149,660	232,120	235,000	Aug-15	10	99
01	21	000	101	142	33	5N1W21-CD-06000	2015	7877	0.23	82,460	131,580	214,040	217,000	Sep-15	11	99
01	21	000	101	143	33	5N1W21-CD-04900	2015	3735	0.23	82,610	124,840	207,450	207,000	May-15	12	100
01	21	000	101	143	33	5N1W21-CD-04800	2015	5280	0.27	84,460	136,490	220,950	222,000	Jun-15	13	100
01	21	000	101	141	33	5N1W21-BC-02500	2015	448	0.24	82,800	158,360	241,160	237,500	Jan-15	14	102
01	21	000	101	141	30	5N1W21-CB-04500	2015	2860	0.27	85,250	104,610	189,860	184,000	Apr-15	15	103
01	21	000	101	141	33	5N1W21-BC-02300	2015	6388	0.23	82,490	156,470	238,960	227,000	Jul-15	16	105
01	21	000	101	143	33	5N1W21-DC-00115	2015	10379	0.24	82,940	188,420	271,360	258,000	Dec-15	17	105

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
101	01	31	000	1995	0	Columbia City	101	01	44	000	1995	0	Columbia City

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	9			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	570,000	28.15 %	615,600	28.14 %
OSD RMV	391,500	19.33 %	391,500	17.90 %
Residential Improvement RMV	1,050,620	51.88 %	1,166,188	53.31 %
Farm Improvement RMV	12,890	0.64 %	14,308	0.65 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	108			
OSD Adjustment Factor	100			
Residential Adjustment Factor	111			
Farm Improvement Factor	111			
After Ratio	100			
Selected Ratio	93	2016	Adjustment	108

Explanation

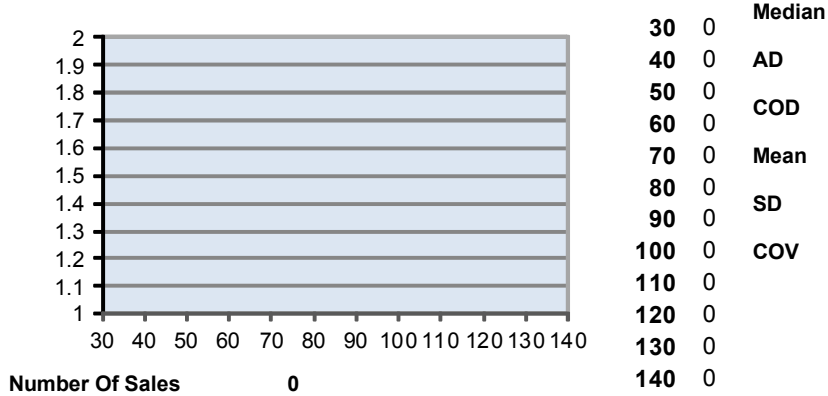
Duplex/Triplex/Fourplex and Town house/Row house, City of Columbia City
 There were no sales available, therefore the Selected Ratio of 93 from the MA 01 SA 01 RMV 101 study was applied here.

Performance History

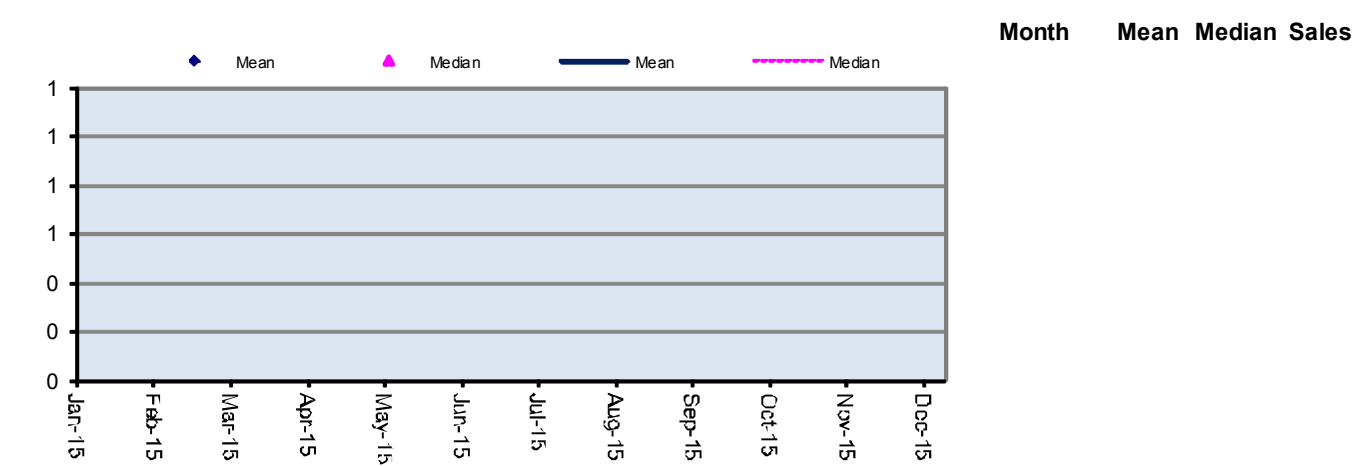
	2016	2015	2014	2013	2012
COD		0.00	12.30	8.39	9.28
PRD		1.00	1.01	1.01	1.01

COLUMBIA County 2016 Ratio Study

Frequency



Central Tendencies



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	PR P CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO

MAINTENANCE AREA 2

RESIDENTIAL SCAPPOOSE

COLUMBIA County 2016 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		0	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	82			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	10,841,970	100.00 %	10,950,390	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	2016	Adjustment	101

Explanation

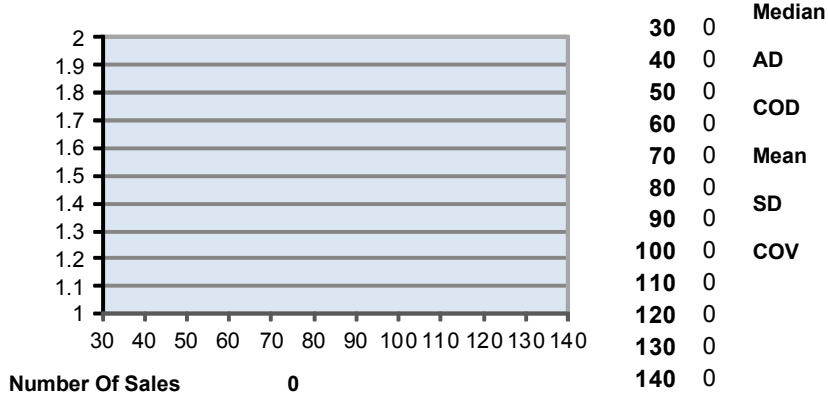
Unimproved land, City of Scappoose.
 No sales of unimproved land were available. Therefore, the Selected Ratio of 99 from the MA 02 RMV 101, SA 00 analysis was applied here.

Performance History

	2016	2015	2014	2013	2012
COD		5.56	20.28	0.00	0.00
PRD		1.01	1.03	1.00	1.00

COLUMBIA County 2016 Ratio Study

Frequency



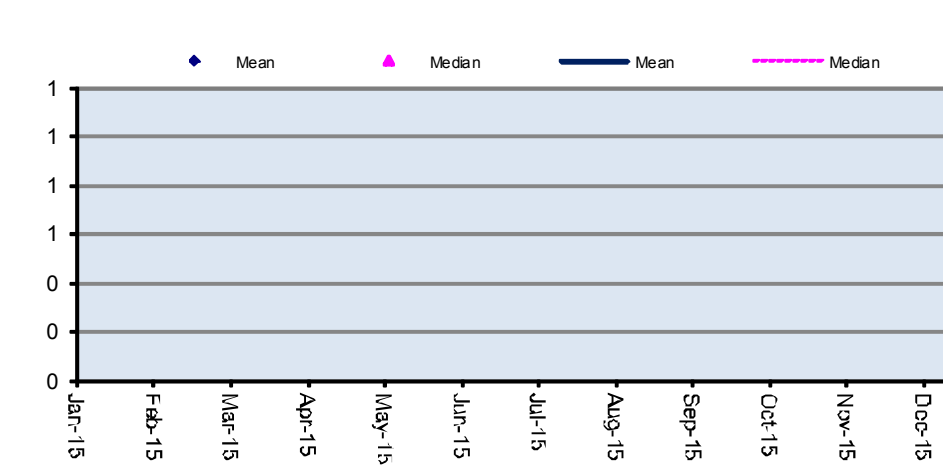
Wtd Mean

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	PRP 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 2016 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		164	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	164	RECALCULATED		
Population - Number of Accounts	2,012			
Sales as a percentage of the Population	8.15 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	180,073,618	37.69 %	181,874,354	37.73 %
OSD RMV	49,904,000	10.45 %	49,904,000	10.35 %
Residential Improvement RMV	245,494,660	51.38 %	247,949,607	51.44 %
Farm Improvement RMV	2,287,970	0.48 %	2,310,850	0.48 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	101			
OSD Adjustment Factor	100			
Residential Adjustment Factor	101			
Farm Improvement Factor	101			
After Ratio	100			
Selected Ratio	99	2016	Adjustment	101

Explanation

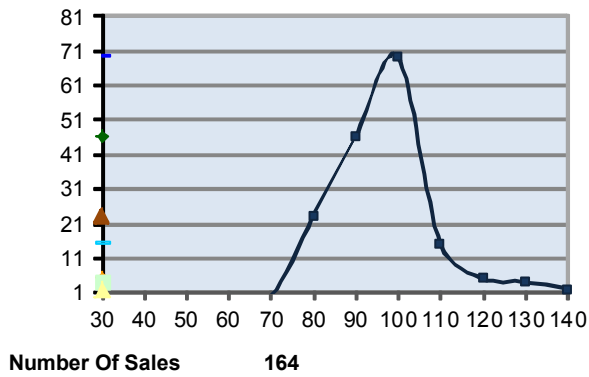
Improved property, City of Scappoose
 Selected the Median of 101 which is supported by both the Mean (102) and the Weighted Mean (101). The time adjustment of 99 was applied returning a Selected Ratio Adjustment of 99.

Performance History

	2016	2015	2014	2013	2012
COD	7.90	8.66	10.06	7.54	9.18
PRD	1.01	1.01	1.00	1.01	1.02

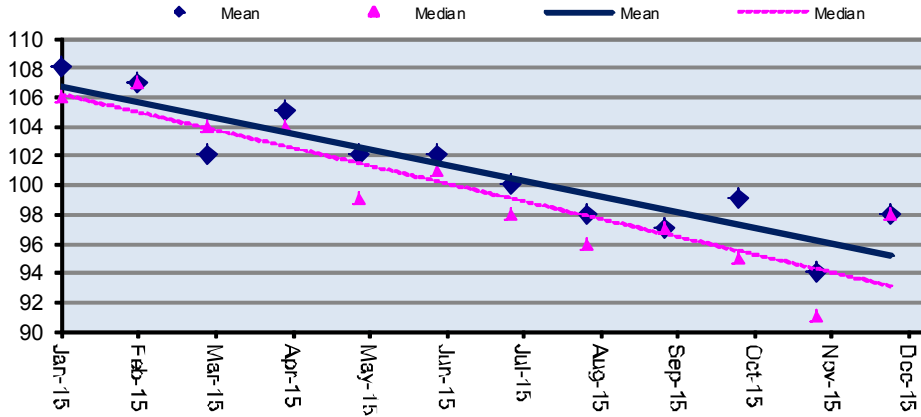
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	101	Wtd Mean	101
40	0	AD	7.98	GeoMean	101
50	0	COD	7.90	PRD	1.01
60	0	Mean	102	95% Confidence	1.74
70	0	SD	11.37		
80	23	COV	11.15		
90	46				
100	69				
110	15				
120	5				
130	4				
140	2				

Central Tendencies



Month	Mean	Median	Sales
Jan-15	108	106	17
Feb-15	107	107	11
Mar-15	102	104	16
Apr-15	105	104	26
May-15	102	99	13
Jun-15	102	101	20
Jul-15	100	98	14
Aug-15	98	96	13
Sep-15	97	97	11
Oct-15	99	95	9
Nov-15	94	91	7
Dec-15	98	98	7

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	135	33	3N2W12-DD-06600	2015	9021	0.17	105,870	86,330	192,200	240,900	Oct-15	1	80
02	00	000	101	141	33	3N1W18-BC-01900	2015	8068	0.15	102,880	97,670	200,550	242,500	Sep-15	2	83
02	00	000	101	141	33	3N2W12-BB-00704	2015	5577	0.17	106,500	142,200	248,700	295,000	Jul-15	3	84
02	00	000	101	143	33	3N2W12-DB-05000	2015	7246	0.20	111,560	122,380	233,940	277,000	Aug-15	4	84
02	00	000	101	141	33	3N2W12-DC-01000	2015	9879	0.19	108,390	95,930	204,320	243,900	Nov-15	5	84
02	00	000	101	143	33	3N2W01-CC-00107	2015	2190	0.19	108,660	173,330	281,990	329,900	Mar-15	6	85
02	00	000	101	141	33	3N2W13-AA-06900	2015	2341	0.15	102,810	112,580	215,390	252,900	Apr-15	7	85
02	00	000	101	144	33	3N2W02-DD-00615	2015	4192	0.17	114,300	125,050	239,350	279,000	May-15	8	86
02	00	000	101	143	33	3N1W07-CA-00125	2015	6697	0.20	109,710	134,000	243,710	282,000	Aug-15	9	86
02	00	000	101	131	33	3N2W12-DB-10000	2015	2610	0.19	108,280	74,270	182,550	209,000	Apr-15	10	87
02	00	000	101	131	33	3N2W12-CB-02900	2015	3552	0.12	100,240	60,560	160,800	185,000	May-15	11	87
02	00	000	101	141	33	3N2W13-AD-04516	2015	8397	0.14	101,740	132,730	234,470	268,000	Oct-15	12	87
02	00	000	101	145	33	3N1W18-BC-00900	2015	2264	0.15	103,630	146,890	250,520	286,000	Mar-15	13	88
02	00	000	101	143	30	3N2W12-DC-00138	2015	5342	0.14	101,880	199,270	301,150	342,400	Jun-15	14	88
02	00	000	101	141	33	3N2W11-DA-01603	2015	5808	0.38	138,620	116,830	255,450	289,500	Jul-15	15	88
02	00	000	101	143	33	3N2W13-AD-07600	2015	10610	0.14	101,840	161,510	263,350	298,500	Dec-15	16	88
02	00	000	101	141	33	3N2W13-AC-01300	2015	4955	0.14	101,980	122,070	224,050	253,000	Jun-15	17	89
02	00	000	101	143	33	3N2W13-CA-00500	2015	6264	0.16	104,610	118,680	223,290	250,000	Jul-15	18	89
02	00	000	101	132	33	3N2W12-AC-03701	2015	6836	0.11	99,250	78,680	177,930	199,000	Aug-15	19	89

COLUMBIA County 2016 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	00	000	101	141	33	3N1W07-CB-03300	2015	7409	0.14	102,220	119,900	222,120	250,000	Aug-15	20	89
02	00	000	101	143	33	3N1W07-CA-00158	2015	7888	0.17	106,260	120,390	226,650	255,000	Sep-15	21	89
02	00	000	101	142	33	3N2W13-AD-08900	2015	8243	0.14	101,850	120,900	222,750	250,000	Sep-15	22	89
02	00	000	101	143	33	3N1W07-CC-04900	2015	9300	0.14	101,740	179,030	280,770	315,000	Nov-15	23	89
02	00	000	101	144	33	3N2W11-AA-01010	2015	9758	0.17	114,300	200,170	314,470	350,000	Nov-15	24	90
02	00	000	101	142	33	3N2W11-AA-00133	2015	3029	0.20	110,710	139,760	250,470	275,000	Apr-15	25	91
02	00	000	101	141	33	3N2W12-DD-04100	2015	3322	0.18	107,760	113,370	221,130	242,400	Apr-15	26	91
02	00	000	101	131	33	3N2W01-CC-02700	2015	3548	0.14	101,940	85,510	187,450	207,000	May-15	27	91
02	00	000	101	143	33	3N1W07-CC-05500	2015	6481	0.18	107,430	211,590	319,020	349,500	Jul-15	28	91
02	00	000	101	143	33	3N2W13-BD-09000	2015	10756	0.16	104,610	123,580	228,190	249,900	Dec-15	29	91
02	00	000	101	142	33	3N2W13-BA-00619	2015	320	0.19	108,750	142,710	251,460	272,000	Jan-15	30	92
02	00	000	101	143	33	3N1W07-CC-02100	2015	9294	0.17	106,270	160,810	267,080	289,900	Nov-15	31	92
02	00	000	101	143	30	3N2W13-CD-08900	2015	5177	0.15	102,840	184,210	287,050	307,995	Jun-15	32	93
02	00	000	101	131	33	3N2W12-DB-01100	2015	4781	0.13	100,980	62,630	163,610	175,000	Jun-15	33	93
02	00	000	101	141	33	3N1W07-CA-00101	2015	6753	0.19	108,380	115,830	224,210	242,000	Jul-15	34	93
02	00	000	101	153	33	3N2W13-AD-07800	2015	8712	0.16	104,830	211,370	316,200	338,500	Oct-15	35	93
02	00	000	101	151	33	3N2W02-DD-00636	2015	2367	0.17	106,230	226,490	332,720	355,000	Apr-15	36	94
02	00	000	101	143	33	3N2W12-AD-06505	2015	7395	0.16	105,090	220,760	325,850	345,000	Aug-15	37	94
02	00	000	101	141	33	3N2W13-AA-00800	2015	6543	0.25	122,200	82,460	204,660	215,700	Jul-15	38	95
02	00	000	101	141	33	3N2W12-AB-00202	2015	6983	0.14	102,030	102,670	204,700	216,000	Aug-15	39	95
02	00	000	101	143	33	3N1W07-CA-02200	2015	8714	0.23	118,480	151,460	269,940	283,000	Oct-15	40	95
02	00	000	101	143	33	3N1W07-CC-01417	2015	9139	0.14	101,770	189,410	291,180	306,000	Oct-15	41	95
02	00	000	101	131	30	3N2W12-CC-00304	2015	9714	0.10	95,200	61,410	156,610	164,900	Nov-15	42	95
02	00	000	101	141	33	3N2W11-AA-00109	2015	9598	0.19	116,450	107,580	224,030	237,000	Nov-15	43	95
02	00	000	101	143	33	3N2W13-AC-03311	2015	2290	0.15	102,640	114,280	216,920	226,000	Mar-15	44	96
02	00	000	101	131	33	3N2W12-DA-00702	2015	5894	0.24	120,400	91,240	211,640	221,000	Jun-15	45	96
02	00	000	101	141	30	3N2W13-AD-03200	2015	5560	0.15	102,980	105,080	208,060	216,000	Jul-15	46	96
02	00	000	101	143	33	3N2W13-AD-09900	2015	6545	0.14	101,980	125,810	227,790	238,000	Aug-15	47	96
02	00	000	101	143	33	3N1W07-CC-04500	2015	10558	0.14	101,740	201,080	302,820	315,000	Dec-15	48	96
02	00	000	101	141	33	3N2W12-CD-02001	2015	2380	0.18	107,340	77,110	184,450	190,000	Mar-15	49	97
02	00	000	101	143	33	3N1W07-CC-01404	2015	5431	0.14	101,740	211,220	312,960	323,000	Apr-15	50	97
02	00	000	101	141	33	3N2W13-AD-04510	2015	4158	0.14	102,210	139,000	241,210	247,500	May-15	51	97
02	00	000	101	143	33	3N2W12-AD-06543	2015	7370	0.14	101,740	207,080	308,820	319,900	Aug-15	52	97
02	00	000	101	141	33	3N2W12-DA-04121	2015	7951	0.20	109,480	105,260	214,740	221,000	Sep-15	53	97
02	00	000	101	143	33	3N2W12-AD-06537	2015	8410	0.14	101,980	227,910	329,890	339,000	Sep-15	54	97
02	00	000	101	143	33	3N2W13-CD-01300	2015	8309	0.17	105,450	148,690	254,140	262,600	Sep-15	55	97
02	00	000	101	143	33	3N2W13-AC-03322	2015	815	0.15	103,780	123,410	227,190	232,500	Jan-15	56	98
02	00	000	101	143	33	3N2W13-BD-08800	2015	1628	0.16	104,610	128,900	233,510	239,000	Mar-15	57	98
02	00	000	101	141	33	3N2W13-BD-00100	2015	3158	0.14	102,440	103,110	205,550	210,000	Apr-15	58	98
02	00	000	101	143	30	3N2W13-CD-09000	2015	4112	0.20	110,220	185,790	296,010	302,000	May-15	59	98
02	00	000	101	141	33	3N2W12-CA-01700	2015	4090	0.24	121,160	121,160	242,320	246,600	May-15	60	98
02	00	000	101	143	33	3N1W07-CA-00135	2015	7078	0.20	110,120	163,540	273,660	280,000	Jun-15	61	98
02	00	000	101	141	33	3N2W13-AC-03318	2015	6954	0.24	121,730	118,870	240,600	244,400	Aug-15	62	98
02	00	000	101	135	33	3N2W12-CB-03500	2015	3947	0.13	101,360	68,840	170,200	172,000	May-15	63	99
02	00	000	101	143	33	3N2W12-AD-06544	2015	4861	0.14	101,740	225,480	327,220	329,900	Jun-15	64	99
02	00	000	101	141	33	3N2W12-AC-00200	2015	5104	0.17	106,280	80,520	186,800	189,000	Jun-15	65	99

COLUMBIA County 2016 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	00	000	101	143	33	3N1W07-CC-04600	2015	5832	0.14	101,740	193,020	294,760	298,000	Jul-15	66	99
02	00	000	101	131	33	3N2W12-AC-00126	2015	5797	0.22	116,380	56,560	172,940	175,100	Jul-15	67	99
02	00	000	101	141	33	3N2W13-BA-04104	2015	6730	0.19	108,930	143,970	252,900	255,063	Aug-15	68	99
02	00	000	101	143	33	3N2W12-AA-00600	2015	10420	0.15	103,040	235,250	338,290	340,000	Dec-15	69	99
02	00	000	101	141	30	3N2W13-AD-02700	2015	315	0.15	103,070	103,750	206,820	207,000	Jan-15	70	100
02	00	000	101	143	30	3N1W07-CA-00136	2015	10334	0.19	109,460	125,060	234,520	235,000	Mar-15	71	100
02	00	000	101	141	33	3N2W13-CD-08500	2015	4108	0.15	102,750	166,420	269,170	268,830	Apr-15	72	100
02	00	000	101	143	33	3N2W13-CD-07200	2015	4114	0.14	101,890	188,750	290,640	289,895	May-15	73	100
02	00	000	101	141	33	3N2W13-CD-08200	2015	4643	0.15	102,780	183,150	285,930	285,305	Jun-15	74	100
02	00	000	101	141	33	3N2W13-CD-08300	2015	4690	0.15	103,720	184,420	288,140	287,970	Jun-15	75	100
02	00	000	101	143	33	3N2W13-CA-00300	2015	6483	0.16	104,610	119,500	224,110	223,900	Jul-15	76	100
02	00	000	101	131	30	3N2W01-CC-02400	2015	7772	0.15	103,000	66,390	169,390	169,000	Sep-15	77	100
02	00	000	101	143	30	3N2W13-AD-02000	2015	234	0.21	114,340	147,720	262,060	259,500	Jan-15	78	101
02	00	000	101	141	33	3N2W12-DC-00143	2015	1189	0.14	102,260	139,230	241,490	240,000	Feb-15	79	101
02	00	000	101	143	33	3N2W12-AD-06540	2015	1604	0.14	101,740	187,800	289,540	287,500	Mar-15	80	101
02	00	000	101	141	33	3N1W07-CA-00155	2015	3771	0.19	108,460	144,780	253,240	250,000	May-15	81	101
02	00	000	101	141	33	3N2W12-AC-00129	2015	5238	0.22	116,380	74,760	191,140	190,000	Jun-15	82	101
02	00	000	101	141	33	3N1W07-CB-01909	2015	5958	0.18	107,590	143,980	251,570	250,000	Jul-15	83	101
02	00	000	101	142	33	3N2W11-DD-00600	2015	6390	0.72	162,680	196,520	359,200	356,000	Jul-15	84	101
02	00	000	101	143	33	3N2W13-BA-05400	2015	8362	0.17	105,700	159,640	265,340	262,500	Sep-15	85	101
02	00	000	101	135	33	3N2W12-DB-07800	2015	8509	0.15	103,240	74,360	177,600	175,000	Sep-15	86	101
02	00	000	101	143	30	3N1W07-CA-00134	2015	113	0.18	106,970	112,960	219,930	215,000	Jan-15	87	102
02	00	000	101	152	30	3N2W11-AA-01016	2015	245	0.17	126,410	282,810	409,220	399,500	Jan-15	88	102
02	00	000	101	141	33	3N2W13-AA-03501	2015	1559	0.27	125,690	127,850	253,540	249,000	Feb-15	89	102
02	00	000	101	142	33	3N2W11-DA-01400	2015	2263	0.55	150,730	180,740	331,470	325,000	Mar-15	90	102
02	00	000	101	143	33	3N2W13-CD-07500	2015	2890	0.14	101,960	185,070	287,030	282,565	Apr-15	91	102
02	00	000	101	141	33	3N2W13-CD-07600	2015	2893	0.14	101,740	166,760	268,500	263,105	Apr-15	92	102
02	00	000	101	143	33	3N2W13-CD-08600	2015	3538	0.15	102,730	184,520	287,250	282,555	Apr-15	93	102
02	00	000	101	143	33	3N2W13-CD-07800	2015	3599	0.14	101,740	184,030	285,770	279,145	Apr-15	94	102
02	00	000	101	143	33	3N2W11-AA-01024	2015	7015	0.26	134,430	165,200	299,630	293,000	Aug-15	95	102
02	00	000	101	143	33	3N2W12-DC-02528	2015	9081	0.06	66,320	150,670	216,990	213,000	Oct-15	96	102
02	00	000	101	141	33	3N2W12-AB-00201	2015	10230	0.19	108,150	104,050	212,200	209,000	Dec-15	97	102
02	00	000	101	143	33	3N2W12-DC-02516	2015	10585	0.06	67,760	152,520	220,280	215,800	Dec-15	98	102
02	00	000	101	142	33	3N2W12-BB-01000	2015	1360	0.29	128,310	129,800	258,110	250,000	Feb-15	99	103
02	00	000	101	143	33	3N1W07-CA-00500	2015	3455	0.19	108,500	175,330	283,830	275,000	Apr-15	100	103
02	00	000	101	142	33	3N2W11-AA-00101	2015	4810	0.19	108,750	119,190	227,940	222,000	Jun-15	101	103
02	00	000	101	141	33	3N2W12-DD-00710	2015	5221	0.22	114,880	105,630	220,510	214,000	Jun-15	102	103
02	00	000	101	141	33	3N1W07-CA-01500	2015	8405	0.29	127,740	172,820	300,560	292,000	Sep-15	103	103
02	00	000	101	141	30	3N2W13-BD-03700	2015	8709	0.25	123,860	93,830	217,690	212,000	Oct-15	104	103
02	00	000	101	143	30	3N2W12-AD-06520	2015	141	0.17	105,850	285,910	391,760	375,000	Jan-15	105	104
02	00	000	101	143	30	3N2W12-DC-00126	2015	376	0.14	101,740	146,030	247,770	238,000	Jan-15	106	104
02	00	000	101	143	33	3N2W12-AD-06541	2015	1239	0.14	101,740	180,360	282,100	270,000	Feb-15	107	104
02	00	000	101	141	33	3N2W13-CD-06900	2015	2162	0.16	104,950	181,460	286,410	276,175	Mar-15	108	104
02	00	000	101	143	30	3N2W13-CD-08700	2015	3408	0.15	102,730	189,640	292,370	282,130	Apr-15	109	104
02	00	000	101	143	33	3N1W07-CC-01416	2015	4346	0.14	101,780	214,830	316,610	305,000	Jun-15	110	104
02	00	000	101	141	33	3N2W12-CC-00303	2015	4658	0.12	99,620	71,500	171,120	165,000	Jun-15	111	104

COLUMBIA County 2016 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	00	000	101	143	33	3N2W12-AD-02415	2015	6624	0.14	102,360	126,450	228,810	220,800	Aug-15	112	104
02	00	000	101	143	33	3N2W13-CD-06500	2015	2061	0.14	102,020	183,770	285,790	271,990	Mar-15	113	105
02	00	000	101	143	33	3N2W13-CD-08400	2015	4110	0.15	102,730	186,600	289,330	276,745	Apr-15	114	105
02	00	000	101	143	33	3N2W12-DC-00136	2015	8237	0.14	102,200	171,610	273,810	261,000	Sep-15	115	105
02	00	000	101	143	33	3N2W12-DC-02514	2015	10544	0.06	67,760	149,270	217,030	206,500	Dec-15	116	105
02	00	000	101	143	30	3N2W11-AA-01029	2015	294	0.44	143,820	135,120	278,940	264,000	Jan-15	117	106
02	00	000	101	131	33	3N2W12-DD-09500	2015	474	0.18	109,000	72,610	181,610	171,000	Jan-15	118	106
02	00	000	101	143	33	3N2W13-CD-05800	2015	1557	0.19	108,870	187,080	295,950	279,130	Feb-15	119	106
02	00	000	101	143	33	3N2W13-CD-05300	2015	1940	0.14	101,980	187,240	289,220	272,895	Mar-15	120	106
02	00	000	101	143	33	3N2W13-CD-06600	2015	2252	0.14	102,240	191,390	293,630	277,030	Mar-15	121	106
02	00	000	101	143	33	3N2W13-CD-08000	2015	3860	0.14	101,740	188,240	289,980	272,995	Apr-15	122	106
02	00	000	101	143	33	3N2W12-DC-00101	2015	3886	0.14	102,270	158,200	260,470	246,262	May-15	123	106
02	00	000	101	141	33	3N2W12-DA-02601	2015	8733	0.17	105,920	86,580	192,500	181,197	Oct-15	124	106
02	00	000	101	143	33	3N2W13-CD-05000	2015	1282	0.14	101,850	191,870	293,720	273,895	Feb-15	125	107
02	00	000	101	143	33	3N2W13-CD-06200	2015	2255	0.14	101,770	187,080	288,850	269,865	Mar-15	126	107
02	00	000	101	143	30	3N2W13-CD-07700	2015	3730	0.14	101,740	177,800	279,540	261,745	Apr-15	127	107
02	00	000	101	143	33	3N2W13-CD-08800	2015	4946	0.15	102,750	179,390	282,140	262,995	Jun-15	128	107
02	00	000	101	143	33	3N2W13-CD-04900	2015	363	0.15	102,720	192,350	295,070	273,895	Jan-15	129	108
02	00	000	101	141	33	3N2W13-CD-06100	2015	1938	0.14	101,770	162,450	264,220	244,615	Feb-15	130	108
02	00	000	101	143	33	3N2W13-CD-06700	2015	2099	0.15	102,570	186,980	289,550	267,740	Feb-15	131	108
02	00	000	101	143	33	3N2W13-CA-03600	2015	2114	0.14	102,410	187,970	290,380	268,615	Mar-15	132	108
02	00	000	101	143	33	3N2W13-CD-06400	2015	3248	0.14	102,140	185,990	288,130	267,345	Apr-15	133	108
02	00	000	101	143	33	3N2W13-CD-00300	2015	4130	0.14	102,450	155,140	257,590	238,000	May-15	134	108
02	00	000	101	143	33	3N2W13-CD-08100	2015	4369	0.14	101,740	174,930	276,670	255,995	Jun-15	135	108
02	00	000	101	143	33	3N2W13-CD-06000	2015	2117	0.14	101,870	185,300	287,170	263,995	Mar-15	136	109
02	00	000	101	143	30	3N2W13-CD-07900	2015	3880	0.14	101,740	186,640	288,380	265,430	Apr-15	137	109
02	00	000	101	143	33	3N2W13-CD-06300	2015	3220	0.14	102,310	175,630	277,940	254,190	Apr-15	138	109
02	00	000	101	141	33	3N2W13-CD-07000	2015	2165	0.17	106,410	179,940	286,350	260,470	Feb-15	139	110
02	00	000	101	143	30	3N2W13-CD-07400	2015	2865	0.14	102,020	186,950	288,970	263,745	Apr-15	140	110
02	00	000	101	143	33	3N1W18-BB-01400	2015	4393	0.14	101,740	194,770	296,510	270,000	Jun-15	141	110
02	00	000	101	142	33	3N2W11-AA-01015	2015	9542	0.17	126,410	228,300	354,710	323,000	Nov-15	142	110
02	00	000	101	152	33	3N2W11-DB-00600	2015	1393	0.23	119,630	229,630	349,260	315,000	Feb-15	143	111
02	00	000	101	143	33	3N2W13-CD-07100	2015	3155	0.14	101,750	187,260	289,010	260,995	Apr-15	144	111
02	00	000	101	143	33	3N2W13-CD-05200	2015	649	0.14	102,130	194,450	296,580	264,615	Jan-15	145	112
02	00	000	101	143	33	3N2W13-CD-05700	2015	1376	0.19	109,270	187,460	296,730	264,320	Jan-15	146	112
02	00	000	101	143	33	3N2W13-CD-06800	2015	2167	0.14	102,230	175,440	277,670	246,995	Mar-15	147	112
02	00	000	101	141	33	3N2W12-AD-02401	2015	3737	0.15	103,080	130,490	233,570	209,000	May-15	148	112
02	00	000	101	143	33	3N1W07-CC-05100	2015	4358	0.14	101,740	204,950	306,690	274,900	Jun-15	149	112
02	00	000	101	141	33	3N2W12-AC-00106	2015	2564	0.20	111,630	90,040	201,670	179,000	Apr-15	150	113
02	00	000	101	143	33	3N2W12-DC-00133	2015	481	0.14	101,740	165,400	267,140	234,900	Jan-15	151	114
02	00	000	101	143	33	3N2W13-CD-05100	2015	647	0.14	101,850	185,980	287,830	251,400	Jan-15	152	114
02	00	000	101	136	30	3N2W12-CD-00900	2015	1400	0.24	122,070	60,380	182,450	154,000	Feb-15	153	118
02	00	000	101	143	30	3N2W13-BA-05500	2015	3628	0.14	101,770	135,360	237,130	188,380	Apr-15	154	126
02	00	000	101	141	33	3N2W12-AB-00119	2015	2741	0.14	102,030	99,860	201,890	160,000	Apr-15	155	126
02	00	000	101	131	33	3N2W12-DB-10600	2015	5349	0.23	118,480	61,410	179,890	143,000	Jun-15	156	126
02	00	000	101	121	33	3N2W12-CA-00803	2015	8775	0.14	101,740	30,180	131,920	105,000	Oct-15	157	126

COLUMBIA County 2016 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	00	000	101	141	30	3N2W12-DD-04100	2015	236	0.18	107,760	113,370	221,130	171,000	Jan-15	158	129
02	00	000	101	143	30	3N1W07-CA-00501	2015	5457	0.26	123,770	135,250	259,020	200,000	Jul-15	159	130
02	00	000	101	131	33	3N2W12-DB-06400	2015	5960	0.11	98,370	50,400	148,770	114,000	Jul-15	160	130
02	00	000	101	143	33	3N2W13-BA-04706	2015	322	0.14	101,790	153,500	255,290	195,000	Jan-15	161	131
02	00	000	101	131	33	3N2W12-AD-03200	2015	7304	0.18	107,860	64,280	172,140	125,000	Aug-15	162	138
02	00	000	101	141	33	3N1W07-CB-01902	2015	2990	0.18	81,160	0	81,160	55,000	Apr-15	163	148
02	00	000	101	141	33	3N1W07-CB-01903	2015	3573	0.18	81,580	0	81,580	55,000	May-15	164	148

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	02	00	000		0	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	68			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	9,153,018	63.37 %	9,244,548	63.43 %
OSD RMV	1,351,500	9.36 %	1,351,500	9.27 %
Residential Improvement RMV	3,566,450	24.69 %	3,602,115	24.71 %
Farm Improvement RMV	372,960	2.58 %	376,690	2.58 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	101			
OSD Adjustment Factor	100			
Residential Adjustment Factor	101			
Farm Improvement Factor	101			
After Ratio	100			
Selected Ratio	99	2016	Adjustment	101

Explanation

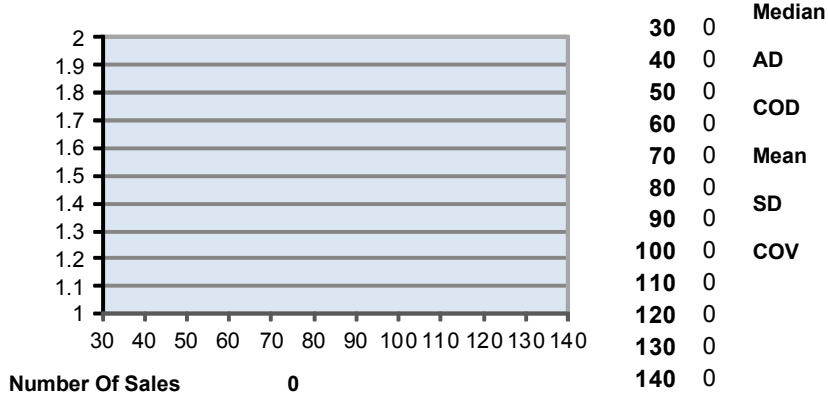
Improved property - Manufactured Structure, City of Scappoose
 There were no sales available for this analysis, therefore the Selected Ratio of 99 from the MA 02 SA 00 RMV 101 study was applied here.

Performance History

	2016	2015	2014	2013	2012
COD		8.66	10.06	7.54	9.18
PRD		1.01	1.00	1.01	1.02

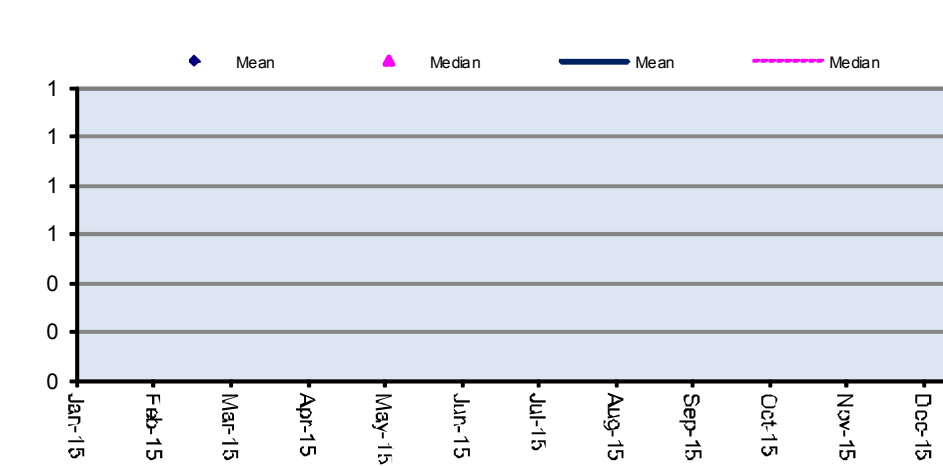
COLUMBIA County 2016 Ratio Study

Frequency



- 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	PRP 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 2016 Ratio Study

RMV				App	# of				RMV				App	# of					
Class	MA	SA	NH	Year	Sales	Location				Class	MA	SA	NH	Year	Sales	Location			
101	02	28	000		3	Scappoose				101	02	33	000		10	Scappoose			

Adjustment Calculation Summary

Sample - Number of Sales	13	RECALCULATED		
Population - Number of Accounts	156			
Sales as a percentage of the Population	8.33 %	Pre-Trend	Post Trend	Post Trend
Prior Year Population Values		Brkdwn	Values	Brkdwn
Land RMV	10,944,980	32.76 %	11,054,430	37.11 %
OSD RMV	4,709,500	14.10 %	4,709,500	15.81 %
Residential Improvement RMV	17,694,090	52.97 %	13,978,331	46.93 %
Farm Improvement RMV	56,100	0.17 %	44,319	0.15 %
SelectedRatioFromSales	112			
RMV Adjustment	100			
Before Ratio	112			
Overall Adjustment Factor	89			
Land Adjustment Factor	101			
OSD Adjustment Factor	100			
Residential Adjustment Factor	79			
Farm Improvement Factor	79			
After Ratio	100			
Selected Ratio	112	2016	Adjustment	89

Explanation

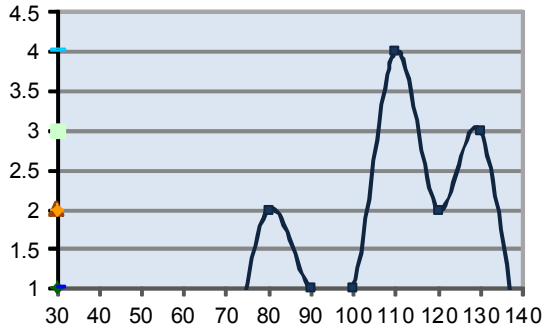
Duplex/Triplex/Fourplex and Town house/Row house/Common wall, City of Scappoose
 Selected the Median of 113 which is bracketed by the Weighted Mean (112) and the Mean (114). The selected central tendency was then adjusted by the conclusion from the time study (99) resulting in a Selected Ratio of 112.

Performance History

	2016	2015	2014	2013	2012
COD	11.23	2.06	-	7.54	-
PRD	1.02	1.00	-	1.01	-

COLUMBIA County 2016 Ratio Study

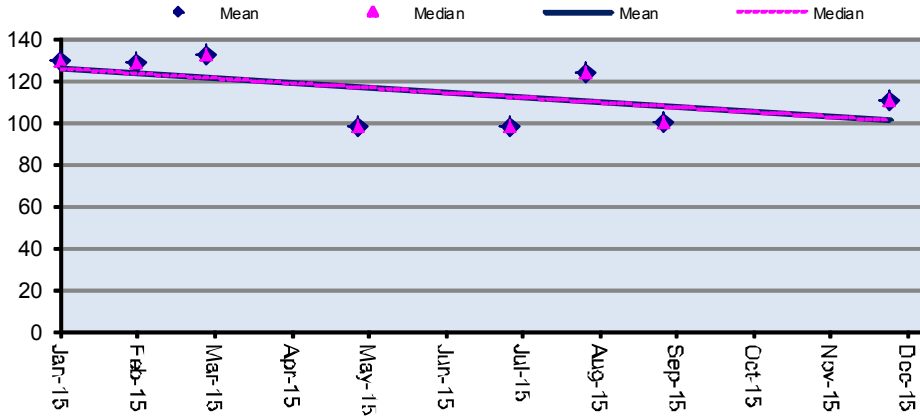
Frequency



30	0	Median	113	Wtd Mean	112
40	0	AD	12.69	GeoMean	113
50	0	COD	11.23	PRD	1.02
60	0	Mean	114	95% Confidence	8.91
70	0	SD	16.39		
80	2	COV	14.38		
90	1				
100	1				
110	4				
120	2				
130	3				
140	0				

Number Of Sales **13**

Central Tendencies



Month	Mean	Median	Sales
Jan-15	129	129	2
Feb-15	128	128	1
Mar-15	132	132	1
May-15	98	98	1
Jul-15	98	98	2
Aug-15	124	124	2
Sep-15	100	100	2
Dec-15	110	110	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	33	000	101	143	33	3N2W12-DC-00154	2015	6198	0.06	64,880	101,900	166,780	197,500	Jul-15	1	84
02	28	000	101	232	33	3N2W12-AC-02100	2015	7769	0.11	109,250	83,320	192,570	220,000	Sep-15	2	88
02	28	000	101	234	33	3N2W12-DA-02400	2015	3888	0.28	159,010	104,670	263,680	270,000	May-15	3	98
02	33	000	101	143	33	3N2W12-DC-00152	2015	10064	0.06	64,880	148,480	213,360	199,900	Dec-15	4	107
02	33	000	101	143	33	3N2W13-AA-04406	2015	5882	0.08	79,520	132,970	212,490	190,000	Jul-15	5	112
02	33	000	101	143	33	3N2W12-AD-03117	2015	7929	0.08	82,980	140,960	223,940	199,900	Sep-15	6	112
02	33	000	101	143	33	3N1W07-CC-01009	2015	10444	0.11	98,830	148,460	247,290	219,000	Dec-15	7	113
02	28	000	101	143	33	3N2W13-BA-02201	2015	6839	0.13	100,610	99,360	199,970	173,000	Aug-15	8	116
02	33	000	101	143	30	3N2W12-AD-03125	2015	324	0.08	81,040	140,990	222,030	180,500	Jan-15	9	123
02	33	000	101	143	33	3N2W12-AD-03113	2015	1439	0.09	90,180	147,120	237,300	186,100	Feb-15	10	128
02	33	000	101	143	30	3N2W12-AD-03122	2015	6699	0.09	89,230	140,390	229,620	175,000	Aug-15	11	131
02	33	000	101	143	33	3N2W13-AA-04415	2015	2133	0.11	98,200	135,600	233,800	176,900	Mar-15	12	132
02	33	000	101	143	30	3N2W12-AD-03124	2015	369	0.09	89,280	140,810	230,090	170,000	Jan-15	13	135

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	9			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	803,810	100.00 %	739,505	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	109			
RMV Adjustment	100			
Before Ratio	109			
Overall Adjustment Factor	92			
Land Adjustment Factor	92			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	109	2016	Adjustment	92

Explanation

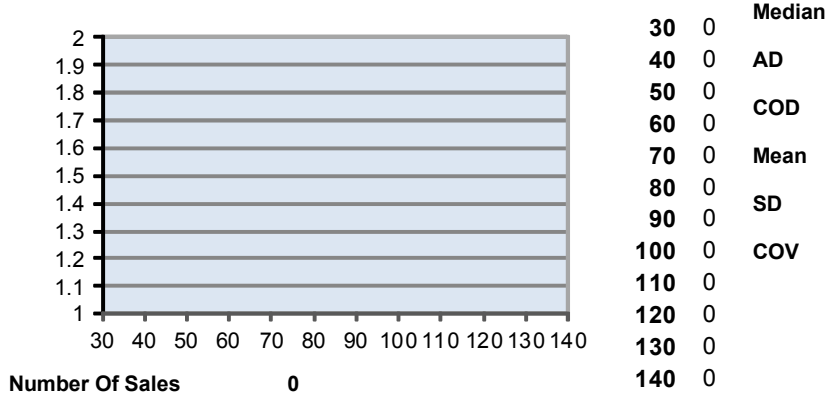
Unimproved land – Keys Landing, Keys Crest, City of Scappoose
 Having no sales available for this population of 9 accounts, it was decided to use the Selected Ratio of 109 from the MA 02 SA 79 RMV 101 analysis.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study

Frequency



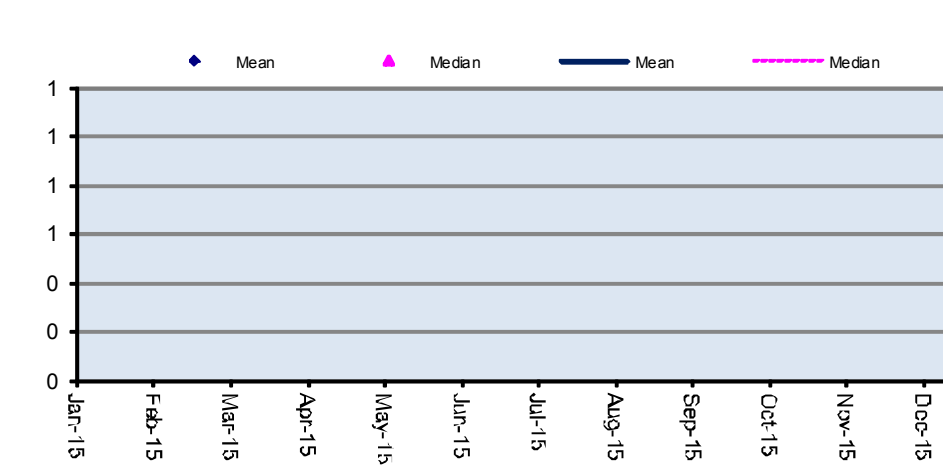
Wtd Mean

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 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	79	000		6	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	6	RECALCULATED		
Population - Number of Accounts	47			
Sales as a percentage of the Population	12.77 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	4,679,610	23.32 %	4,305,241	23.38 %
OSD RMV	1,198,500	5.97 %	1,198,500	6.51 %
Residential Improvement RMV	14,189,960	70.71 %	12,912,864	70.12 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	109			
RMV Adjustment	100			
Before Ratio	109			
Overall Adjustment Factor	92			
Land Adjustment Factor	92			
OSD Adjustment Factor	100			
Residential Adjustment Factor	91			
Farm Improvement Factor	91			
After Ratio	100			
Selected Ratio	109	2016	Adjustment	92

Explanation

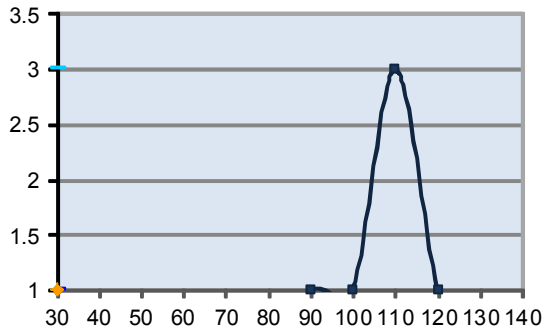
Improved land – Keys Landing, Keys Crest, City of Scappoose
 Selected the Mean of 110 which is supported by the Weighted Mean (110). After applying the time study adjustment of 99, the Selected Ratio is 109.

Performance History

	2016	2015	2014	2013	2012
COD	7.16	5.29	10.14	4.04	10.63
PRD	1.00	1.00	0.99	1.01	1.01

COLUMBIA County 2016 Ratio Study

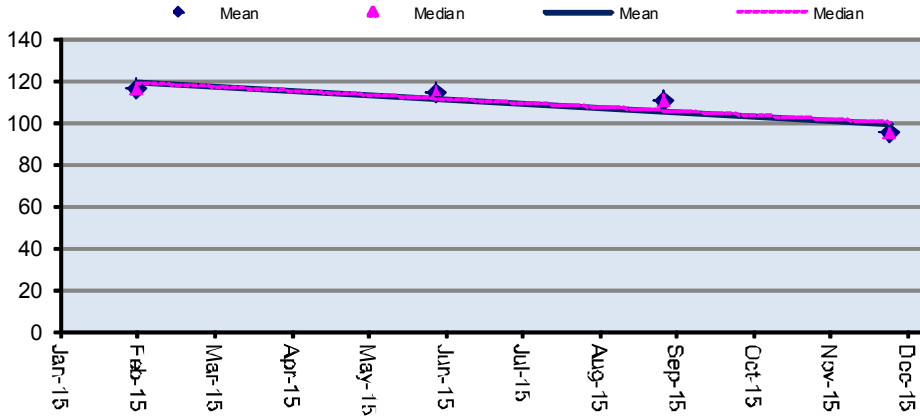
Frequency



30	0	Median	114	Wtd Mean	110
40	0	AD	8.17	GeoMean	109
50	0	COD	7.16	PRD	1.00
60	0	Mean	110	95% Confidence	8.01
70	0	SD	10.01		
80	0	COV	9.10		
90	1				
100	1				
110	3				
120	1				
130	0				
140	0				

Number Of Sales **6**

Central Tendencies



Month	Mean	Median	Sales
Feb-15	116	116	1
Jun-15	114	114	2
Sep-15	110	110	2
Dec-15	95	95	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	151	33	3N2W11-DA-02402	2015	10774	0.30	129,560	202,160	331,720	350,000	Dec-15	1	95
02	79	000	101	151	33	3N2W11-DA-02403	2015	8034	0.68	159,640	164,310	323,950	325,000	Sep-15	2	100
02	79	000	101	161	33	3N2W11-DD-00312	2015	4679	0.20	111,140	333,850	444,990	397,400	Jun-15	3	112
02	79	000	101	161	33	3N2W11-DD-00311	2015	1095	0.26	124,000	344,420	468,420	405,000	Feb-15	4	116
02	79	000	101	161	33	3N2W11-DD-00310	2015	5216	0.19	108,790	372,610	481,400	414,000	Jun-15	5	116
02	79	000	101	154	33	3N2W11-DA-02607	2015	7800	0.45	144,520	256,420	400,940	335,000	Sep-15	6	120

COLUMBIA County 2016 Ratio Study

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

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 Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	81,900	100.00 %	84,357	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	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

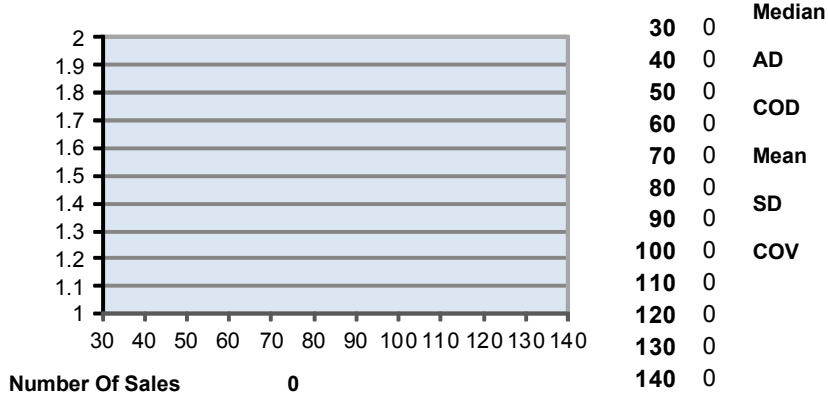
Unimproved land – Columbia River View Estates, City of Scappoose
 Having no sales available, it was decided to use the Selected Ratio of 97 from the MA 02 SA 80 RMV 101 analysis.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study

Frequency



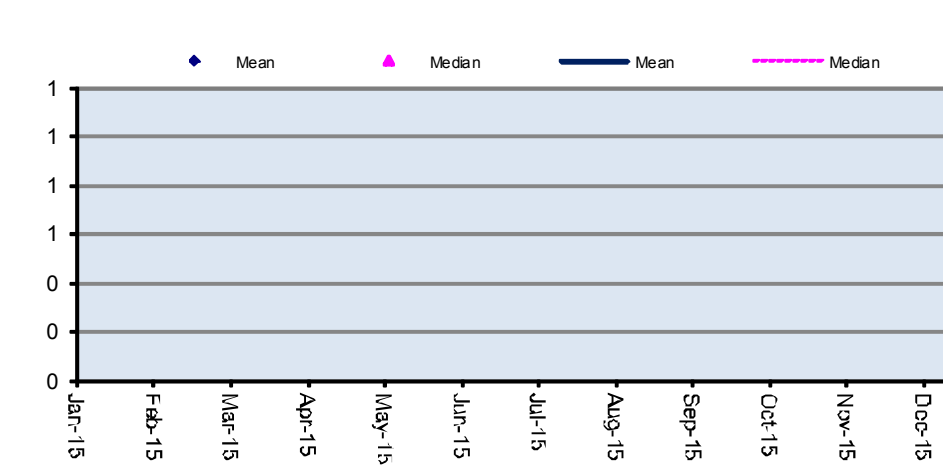
Wtd Mean

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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	80	000		4	Scappoose							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	4			
Population - Number of Accounts	44			
Sales as a percentage of the Population	9.09 %			
Prior Year Population Values				
Land RMV	4,190,120	24.54 %	4,315,824	24.58 %
OSD RMV	1,122,000	6.57 %	1,122,000	6.39 %
Residential Improvement RMV	11,765,210	68.89 %	12,118,166	69.03 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	103			
Farm Improvement Factor	103			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

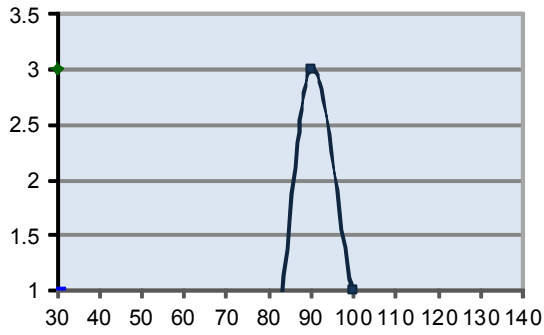
Improved land – Columbia River View Estates, City of Scappoose
This analysis reveals that the Mean, Median and Weighted Mean have resulted in the same conclusion of 98. Therefore the time adjustment of 99 was applied thus arriving at the selected ratio of 97.

Performance History

	2016	2015	2014	2013	2012
COD	4.08	8.08	1.22	4.04	10.63
PRD	1.00	1.01	1.00	1.01	1.01

COLUMBIA County 2016 Ratio Study

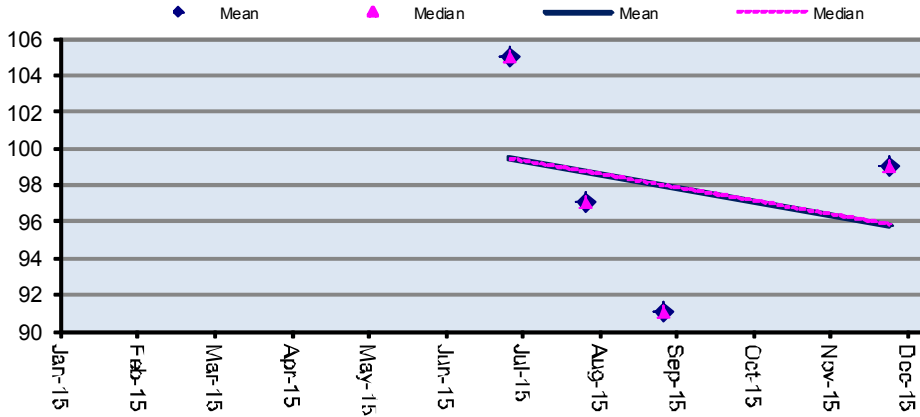
Frequency



30	0	Median	98	Wtd Mean	98
40	0	AD	4.00	GeoMean	98
50	0	COD	4.08	PRD	1.00
60	0	Mean	98	95% Confidence	5.66
70	0	SD	5.77		
80	0	COV	5.89		
90	3				
100	1				
110	0				
120	0				
130	0				
140	0				

Number Of Sales 4

Central Tendencies



Month	Mean	Median	Sales
Jul-15	105	105	1
Aug-15	97	97	1
Sep-15	91	91	1
Dec-15	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	80	000	101	152	33	3N2W12-BC-00226	2015	8123	0.18	115,840	285,650	401,490	440,000	Sep-15	1	91
02	80	000	101	153	33	3N2W12-BC-00217	2015	7025	0.17	126,830	297,960	424,790	438,900	Aug-15	2	97
02	80	000	101	154	33	3N2W12-BC-00224	2015	10587	0.17	106,520	322,650	429,170	433,000	Dec-15	3	99
02	80	000	101	154	33	3N2W12-BC-00230	2015	5886	0.17	134,820	311,150	445,970	424,000	Jul-15	4	105

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
102	02	00	000		0	Scappoose							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	8			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	1,566,470	100.00 %	1,582,135	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	101			
Farm Improvement Factor	101			
After Ratio	100			
Selected Ratio	99	2016	Adjustment	101

Explanation

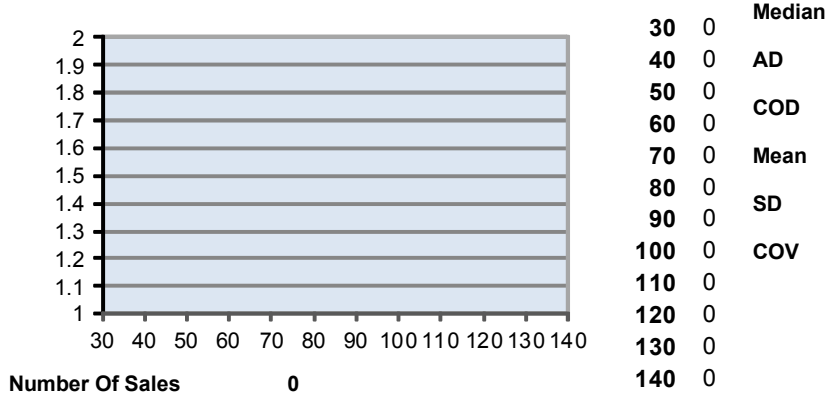
Improved land – Condominium, City of Scappoose
 This grouping has a population of 8 and no sales were available for this study. Therefore the conclusion from the MA 02 SA 00 RMV 101 study with a Selected Ratio of 99 was applied here.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	7.54	9.18
PRD	-	-	-	1.01	1.02

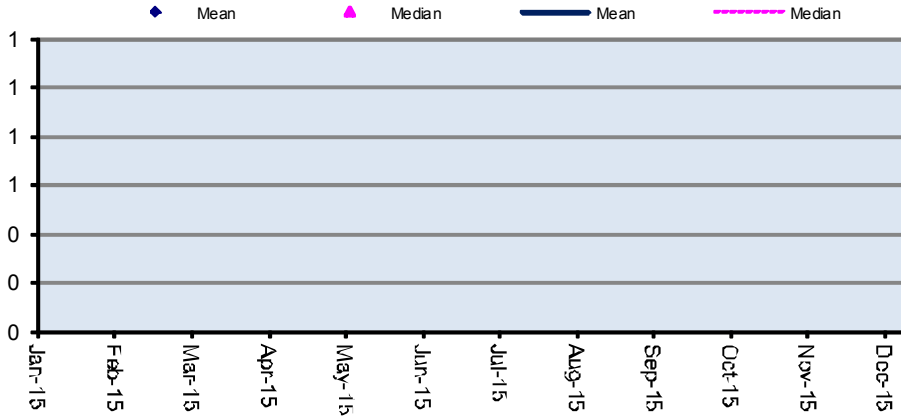
COLUMBIA County 2016 Ratio Study

Frequency



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 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
102	02	21	000		0	Scappoose							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	4			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	649,540	100.00 %	701,503	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	108			
Farm Improvement Factor	108			
After Ratio	100			
Selected Ratio	93	2016	Adjustment	108

Explanation

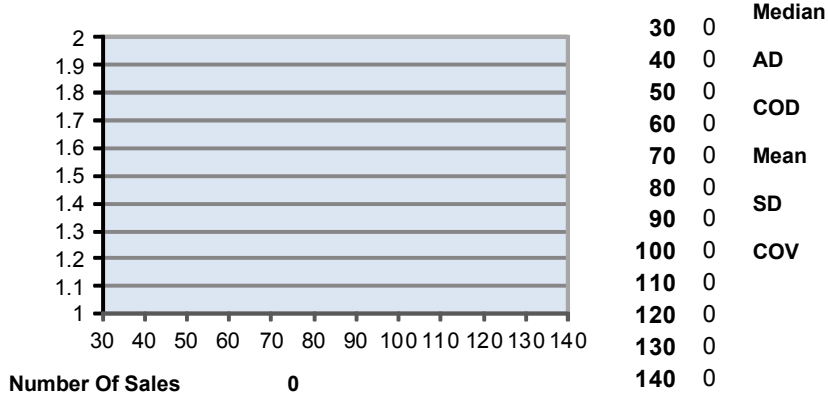
Improved land – Condominium, Rural Value Zone 1, Rural Scappoose
 These Condominium properties are located in Rural Scappoose (SA 21, Value Zone 1), There are no sales available for this study. Therefore the conclusion from the MA 02 SA 21, SA 41, SA 62, SA 63 & SA 64 RMV 401 study with a Selected Ratio of 93 was applied here.

Performance History

	2016	2015	2014	2013	2012
COD		-	2.00	10.38	10.71
PRD		-	1.00	1.03	1.02

COLUMBIA County 2016 Ratio Study

Frequency



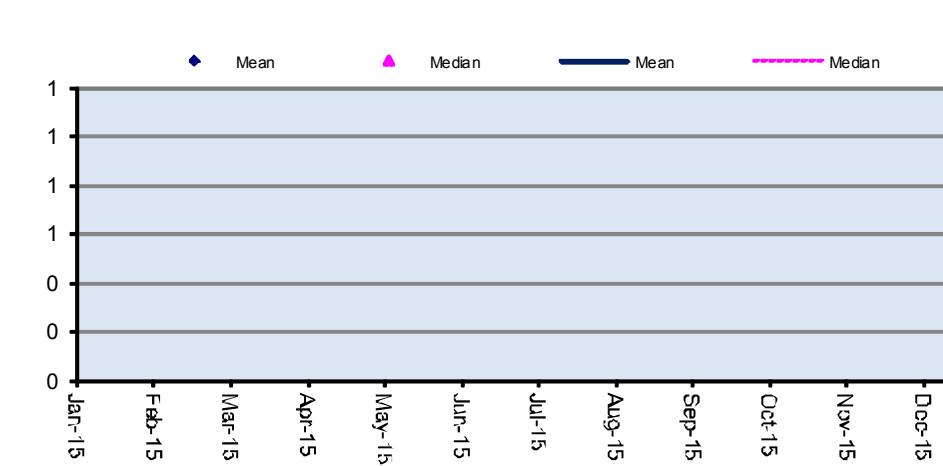
Wtd Mean

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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2016 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		1	Scappoose	400	02	63	000		0	Scappoose
400	02	62	000		0	Scappoose	400	02	64	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED		
Population - Number of Accounts	231			
Sales as a percentage of the Population	0.43 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	35,598,360	100.00 %	38,446,229	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	2016	Adjustment	108

Explanation

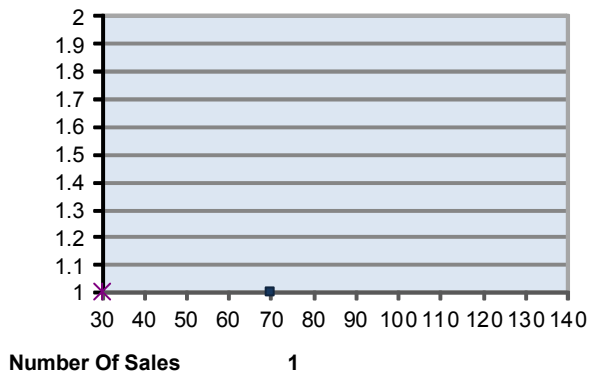
Unimproved land – Value Zone 1 (21), Sauvies Island (41, no active accounts), Freeman Road (62), Columbia Acres (63) & Hillcrest (64) in Rural Scappoose.
 With having only one sale available for this analysis, it was decided to use the Selected Ratio of 93 from the MA 02 SA 21, SA 41, SA 62, SA 63 & SA 64 RMV 401 study.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	0.00	8.96	-	-
PRD	1.00	1.00	1.02	-	-

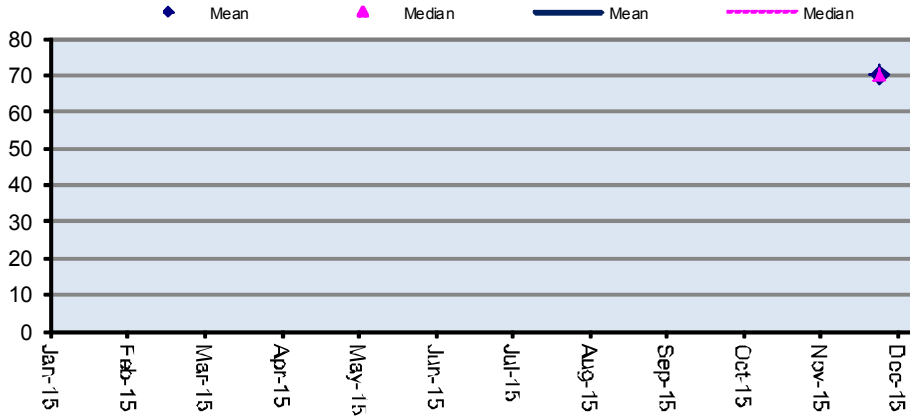
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	70	Wtd Mean	70
40	0	AD	0.00	GeoMean	70
50	0	COD	0.00	PRD	1.00
60	0	Mean	70	95% Confidence	1.96
70	1	SD	1.00		
80	0	COV	1.43		
90	0				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Dec-15	70	70	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	21	000	400		33	3N2W01-A0-00500	2015	10285	6.42	125,400	0	125,400	180,000	Dec-15	1	70

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	21	000		40	Scappoose	401	02	63	000		2	Scappoose
401	02	41	000		1	Sauvies Island	401	02	64	000		1	Scappoose
401	02	62	000		0	Scappoose							

Adjustment Calculation Summary

Sample - Number of Sales	44	RECALCULATED		
Population - Number of Accounts	1,214			
Sales as a percentage of the Population	3.62 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	139,640,695	35.93 %	150,811,951	35.95 %
OSD RMV	51,449,840	13.24 %	51,449,840	12.26 %
Residential Improvement RMV	174,781,720	44.97 %	192,259,892	45.83 %
Farm Improvement RMV	22,748,060	5.85 %	25,022,866	5.96 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	108			
OSD Adjustment Factor	100			
Residential Adjustment Factor	110			
Farm Improvement Factor	110			
After Ratio	100			
Selected Ratio	93	2016	Adjustment	108

Explanation

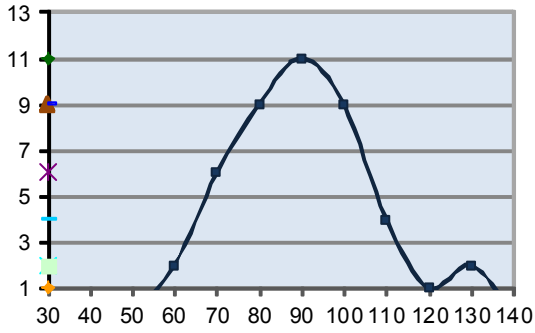
Improved land – Value Zone 1 (21), Sauvies Island (41), Freeman Road (62), Columbia Acres (63) & Hillcrest (64) in Rural Scappoose.
 Selected the Median of 92 from this sales array and applied the time adjustment of 101 from the Rural Time Study. The result is the Selected Ratio of 93.

Performance History

	2016	2015	2014	2013	2012
COD	13.44	12.19	10.38	10.38	10.71
PRD	1.02	1.02	1.01	1.03	1.02

COLUMBIA County 2016 Ratio Study

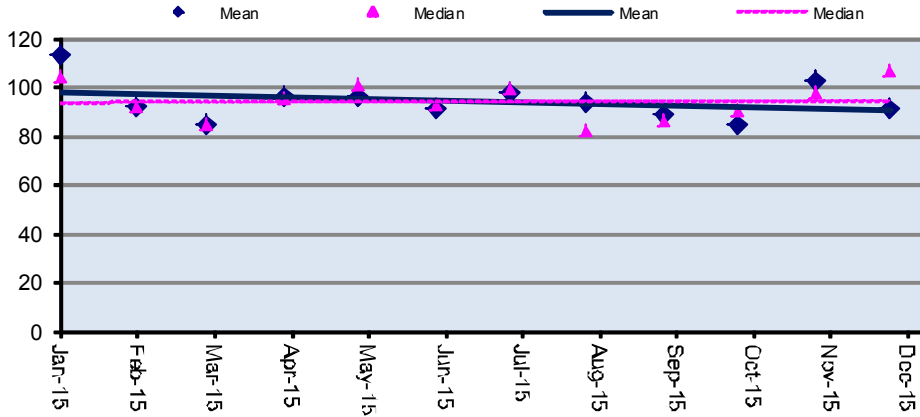
Frequency



30	0	Median	92	Wtd Mean	92
40	0	AD	12.36	GeoMean	93
50	0	COD	13.44	PRD	1.02
60	2	Mean	94	95% Confidence	4.63
70	6	SD	15.65		
80	9	COV	16.65		
90	11				
100	9				
110	4				
120	1				
130	2				
140	0				

Number Of Sales **44**

Central Tendencies



Month	Mean	Median	Sales
Jan-15	113	104	3
Feb-15	92	92	2
Mar-15	85	85	1
Apr-15	96	95	5
May-15	96	101	5
Jun-15	91	93	6
Jul-15	98	99	2
Aug-15	94	82	5
Sep-15	89	86	3
Oct-15	85	90	5
Nov-15	103	98	3
Dec-15	91	107	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
02	41	000	401	153	33	3N1W11-00-00102	2015	4132	16.20	506,210	381,140	887,350	1,350,000	May-15	1	66
02	21	000	401	141	33	3N1W18-BC-02800	2015	10058	4.33	168,390	244,950	413,340	600,000	Dec-15	2	69
02	21	000	401	135	33	4N2W35-CB-01000	2015	8856	0.85	132,500	113,010	245,510	335,000	Oct-15	3	73
02	21	000	401	300	30	3N2W02-00-03100	2015	4851	10.20	167,710	12,750	180,460	245,000	Jun-15	4	74
02	21	000	401	153	33	4N2W26-DD-00500	2015	7459	5.02	170,060	319,520	489,580	649,950	Aug-15	5	75
02	21	000	401	135	33	4N2W25-D0-00400	2015	10416	1.75	156,560	90,540	247,100	330,000	Dec-15	6	75
02	21	000	401	141	33	4N2W26-A0-01300	2015	7830	5.03	179,880	142,930	322,810	415,000	Aug-15	7	78
02	21	000	401	141	33	4N2W35-BC-00600	2015	3383	0.59	126,500	156,840	283,340	360,100	Apr-15	8	79
02	21	000	401	145	33	3N2W02-00-03801	2015	9083	1.80	158,150	115,020	273,170	340,000	Oct-15	9	80
02	63	000	401	143	33	3N2W24-BD-01000	2015	1395	0.52	126,500	152,030	278,530	340,000	Feb-15	10	82
02	21	000	401	153	33	4N2W25-D0-01611	2015	7360	2.00	164,500	267,780	432,280	525,000	Aug-15	11	82
02	21	000	401	154	33	3N2W02-D0-02100	2015	4126	5.96	170,870	302,420	473,290	562,000	May-15	12	84
02	21	000	401	133	33	3N1W07-CB-00700	2015	2131	1.04	134,030	111,500	245,530	290,000	Mar-15	13	85
02	21	000	401	133	33	4N2W34-B0-01400	2015	8382	0.45	126,500	103,250	229,750	270,000	Sep-15	14	85
02	21	000	401	141	33	4N2W25-B0-00400	2015	5168	2.00	164,500	157,340	321,840	375,000	Jun-15	15	86
02	21	000	401	141	33	4N2W36-00-00601	2015	7712	5.40	158,190	216,630	374,820	435,000	Sep-15	16	86
02	63	000	401	153	33	3N2W24-BD-08000	2015	4736	0.48	126,500	190,660	317,160	357,000	Jun-15	17	89
02	21	000	401	146	33	3N2W13-C0-02400	2015	8986	1.09	124,130	173,770	297,900	330,000	Oct-15	18	90
02	21	000	401	151	33	3N2W14-CB-01100	2015	3404	1.03	133,710	359,410	493,120	540,000	Apr-15	19	91

COLUMBIA County 2016 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	21	000	401	142	33	3N2W01-CC-01401	2015	8789	1.96	163,230	289,880	453,110	499,900	Oct-15	20	91
02	21	000	401	142	33	4N2W27-00-00604	2015	9166	5.13	166,230	198,010	364,240	399,900	Oct-15	21	91
02	21	000	401	132	33	3N2W01-CC-01000	2015	9918	1.00	132,500	81,190	213,690	233,600	Nov-15	22	91
02	21	000	401	152	33	4N2W26-A0-01601	2015	6057	2.00	164,500	366,600	531,100	579,900	Jul-15	23	92
02	21	000	401	153	33	4N2W25-D0-01602	2015	3449	2.00	164,500	334,900	499,400	528,000	Apr-15	24	95
02	21	000	401	145	33	3N2W11-AD-00102	2015	117	5.10	170,120	248,330	418,450	435,000	Jan-15	25	96
02	21	000	401	141	33	3N1W07-CB-04200	2015	4378	0.60	126,500	127,450	253,950	265,000	Jun-15	26	96
02	21	000	401	142	30	4N2W27-DC-00200	2015	8188	1.57	150,850	176,150	327,000	340,000	Sep-15	27	96
02	21	000	401	164	33	3N2W11-AC-00300	2015	5697	5.00	192,890	588,010	780,900	787,500	Jun-15	28	99
02	21	000	401	153	33	3N2W11-AD-00104	2015	1353	5.03	133,600	291,700	425,300	420,000	Feb-15	29	101
02	21	000	401	141	33	4N2W26-A0-00700	2015	3090	3.66	147,860	93,860	241,720	240,000	Apr-15	30	101
02	21	000	401	131	33	3N2W12-DA-04301	2015	3988	0.41	126,490	105,750	232,240	230,000	May-15	31	101
02	21	000	401	126	30	3N2W24-C0-03900	2015	4280	0.63	129,500	60,530	190,030	188,000	May-15	32	101
02	21	000	401	152	33	4N2W25-B0-01905	2015	7925	2.00	174,320	214,000	388,320	379,900	Aug-15	33	102
02	21	000	401	143	33	3N1W07-CB-00400	2015	5223	0.30	126,500	99,530	226,030	218,153	Jun-15	34	104
02	21	000	401	164	33	3N2W23-BC-00100	2015	9536	5.01	170,040	376,130	546,170	525,000	Nov-15	35	104
02	21	000	401	142	30	4N2W25-B0-00100	2015	5880	2.00	164,500	175,370	339,870	325,000	Jul-15	36	105
02	21	000	401	164	33	4N2W34-A0-01302	2015	10589	7.14	166,380	547,810	714,190	670,000	Dec-15	37	107
02	21	000	401	131	33	4N2W27-DC-01000	2015	475	1.57	150,850	89,560	240,410	215,000	Jan-15	38	112
02	21	000	401	163	33	3N2W10-00-00805	2015	10529	5.11	170,130	409,920	580,050	520,000	Dec-15	39	112
02	21	000	401	141	33	3N1W07-CB-02000	2015	9364	0.98	132,500	195,250	327,750	290,000	Nov-15	40	113
02	21	000	401	131	30	4N2W25-C0-01300	2015	2853	3.08	168,650	65,230	233,880	202,900	Apr-15	41	115
02	21	000	401	141	33	3N2W13-BB-05400	2015	3913	0.30	126,500	83,470	209,970	162,900	May-15	42	129
02	64	000	401	163	33	3N2W22-AA-06800	2015	624	2.04	191,480	753,830	945,310	725,000	Jan-15	43	130
02	21	000	401	141	33	4N2W36-C0-01200	2015	7196	1.09	145,420	194,860	340,280	260,000	Aug-15	44	131

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	21	000		2	Scappoose	409	02	62	000		0	Scappoose
409	02	41	000		0	Sauvies Island	409	02	64	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	203			
Sales as a percentage of the Population	0.99 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	22,258,280	46.68 %	24,038,942	46.63 %
OSD RMV	9,329,130	19.57 %	9,329,130	18.10 %
Residential Improvement RMV	12,329,440	25.86 %	13,932,267	27.03 %
Farm Improvement RMV	3,762,500	7.89 %	4,251,625	8.25 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	108			
OSD Adjustment Factor	100			
Residential Adjustment Factor	113			
Farm Improvement Factor	113			
After Ratio	100			
Selected Ratio	93	2016	Adjustment	108

Explanation

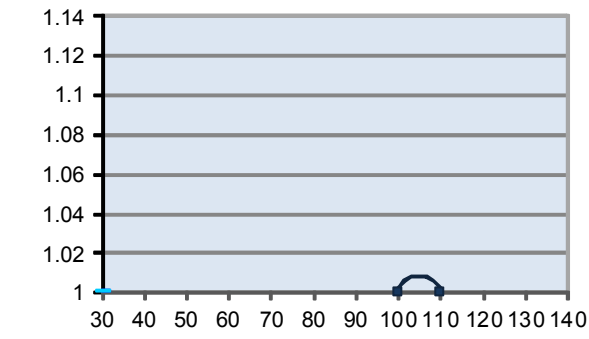
Improved land - Manufactured Structure - Value Zone 1 (21), Sauvies Island (41), Freeman Road (62), Columbia Acres (63, no active accounts) & Hillcrest (64) in Rural Scappoose.
 With having only two sales available, it was decided to use the Selected Ratio of 93 from the MA 02 SA 21, SA 41, SA 62, SA 63 & SA 64 RMV 401 study.

Performance History

	2016	2015	2014	2013	2012
COD	5.56	12.19	13.45	10.38	10.71
PRD	1.00	1.02	1.02	1.03	1.02

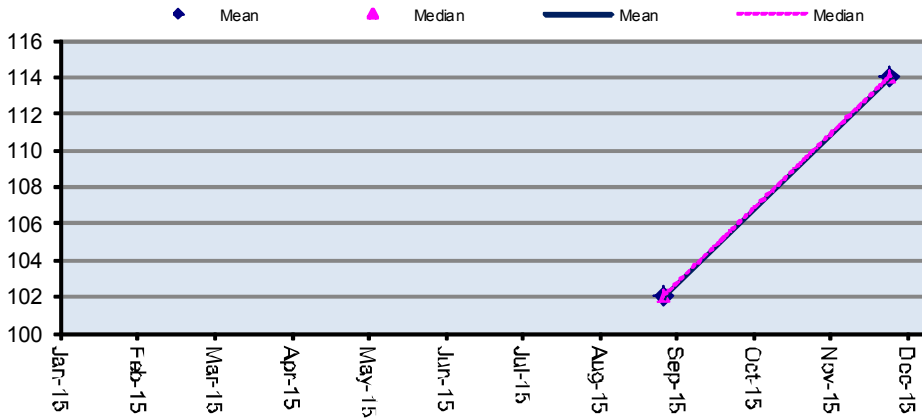
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	108	Wtd Mean	108
40	0	AD	6.00	GeoMean	108
50	0	COD	5.56	PRD	1.00
60	0	Mean	108	95% Confidence	11.76
70	0	SD	8.49		
80	0	COV	7.86		
90	0				
100	1				
110	1				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Sep-15	102	102	1
Dec-15	114	114	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	21	000	409	441	33	4N2W34-B0-03100	2015	7826	5.67	158,420	8,080	166,500	164,000	Sep-15	1	102
02	21	000	409	300	33	4N1W30-B0-02100	2015	10365	4.75	220,310	18,970	239,280	210,000	Dec-15	2	114

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	22	000		0	Scappoose	400	02	23	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	153			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	36,312,430	100.00 %	36,312,430	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	2016	Adjustment	100

Explanation

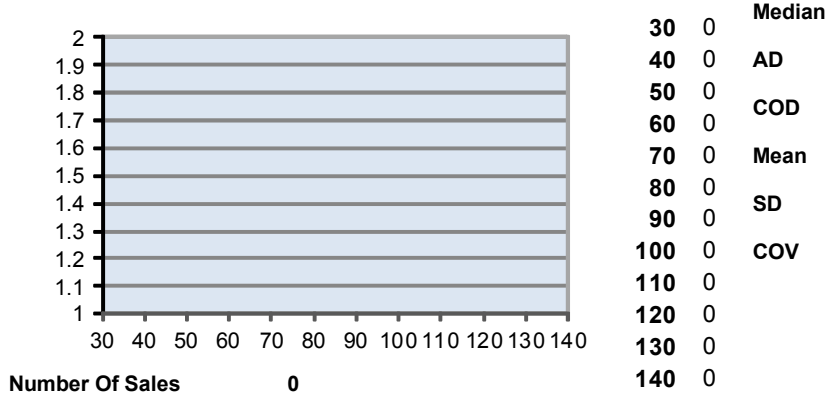
Unimproved land – Value Zone 2 (22) & Value Zone 3 (23) in Rural Scappoose.
 With having no sales available for this analysis, it was decided to use the Selected Ratio of 100 from the MA 02 SA 22 & 23 RMV 401 study.

Performance History

	2016	2015	2014	2013	2012
COD		0.00	8.96	-	-
PRD		1.00	1.02	-	-

COLUMBIA County 2016 Ratio Study

Frequency



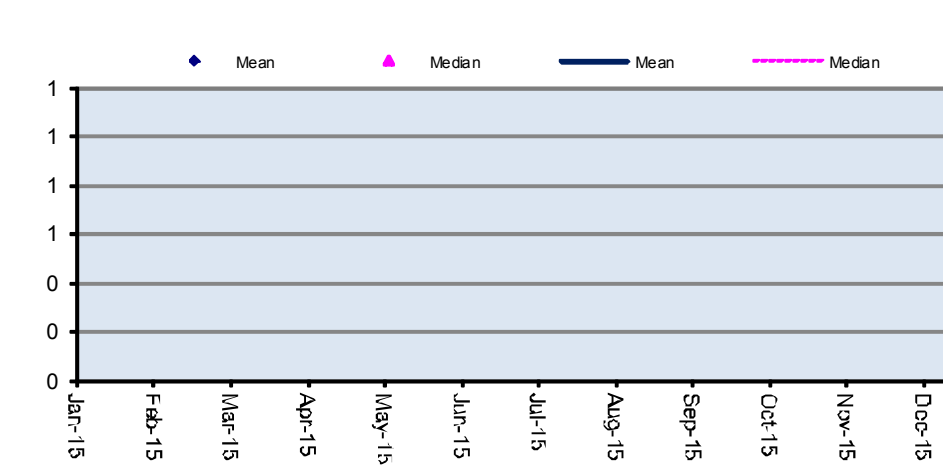
Wtd Mean

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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	22	000		8	Scappoose	401	02	23	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	8	RECALCULATED		
Population - Number of Accounts	326			
Sales as a percentage of the Population	2.45 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	38,658,970	40.59 %	38,658,970	40.59 %
OSD RMV	12,883,150	13.53 %	12,883,150	13.53 %
Residential Improvement RMV	38,727,290	40.66 %	38,727,290	40.66 %
Farm Improvement RMV	4,983,250	5.23 %	4,983,250	5.23 %
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	2016	Adjustment	100

Explanation

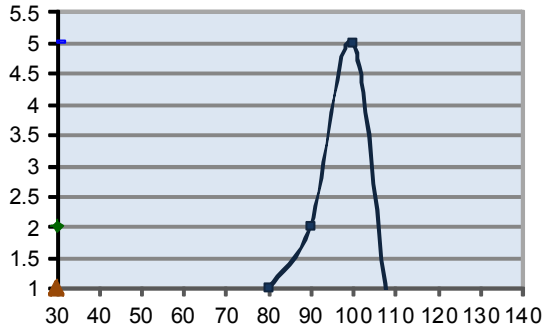
Improved land – Value Zone 2 (22) & Value Zone 3 (23) in Rural Scappoose.
 Selected the Mean of 99 and then adjusted it by the time study conclusion of 101 for a Selected Ratio of 100.

Performance History

	2016	2015	2014	2013	2012
COD	5.64	12.19	10.38	10.38	10.71
PRD	1.00	1.02	1.01	1.03	1.02

COLUMBIA County 2016 Ratio Study

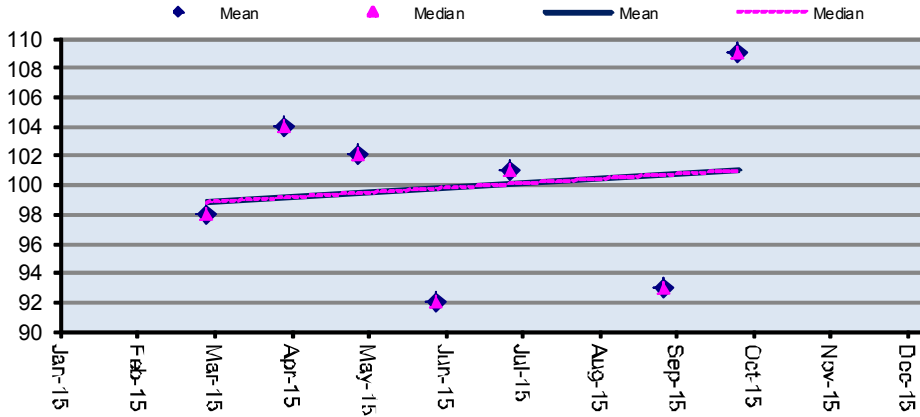
Frequency



30	0	Median	102	Wtd Mean	99
40	0	AD	5.75	GeoMean	99
50	0	COD	5.64	PRD	1.00
60	0	Mean	99	95% Confidence	5.38
70	0	SD	7.76		
80	1	COV	7.84		
90	2				
100	5				
110	0				
120	0				
130	0				
140	0				

Number Of Sales **8**

Central Tendencies



Month	Mean	Median	Sales
Mar-15	98	98	1
Apr-15	104	104	1
May-15	102	102	1
Jun-15	92	92	1
Jul-15	101	101	1
Sep-15	93	93	2
Oct-15	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
02	22	000	401	141	30	4N2W20-00-00103	2015	8172	4.19	157,380	137,580	294,960	349,900	Sep-15	1	84
02	22	000	401	153	33	4N2W17-C0-00800	2015	4625	2.47	166,470	206,500	372,970	405,000	Jun-15	2	92
02	22	000	401	156	33	4N2W19-00-00900	2015	2209	7.44	181,350	307,970	489,320	500,000	Mar-15	3	98
02	22	000	401	141	33	4N2W18-D0-02200	2015	6204	9.13	187,620	195,000	382,620	380,000	Jul-15	4	101
02	22	000	401	142	33	4N2W16-00-03300	2015	4140	1.48	128,100	151,900	280,000	274,500	May-15	5	102
02	22	000	401	141	33	4N3W13-D0-00800	2015	7710	9.54	192,030	182,490	374,520	368,100	Sep-15	6	102
02	22	000	401	143	33	4N2W16-00-03200	2015	2433	3.60	144,920	194,970	339,890	326,500	Apr-15	7	104
02	22	000	401	151	33	4N2W18-C0-01300	2015	8901	3.95	169,260	190,740	360,000	330,000	Oct-15	8	109

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
409	02	22	000		3	Scappoose	409	02	23	000		1	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	4	RECALCULATED		
Population - Number of Accounts	147			
Sales as a percentage of the Population	2.72 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	18,231,830	48.48 %	18,231,830	49.46 %
OSD RMV	6,880,280	18.29 %	6,880,280	18.67 %
Residential Improvement RMV	9,671,410	25.72 %	9,091,125	24.67 %
Farm Improvement RMV	2,824,400	7.51 %	2,654,936	7.20 %
SelectedRatioFromSales	102			
RMV Adjustment	100			
Before Ratio	102			
Overall Adjustment Factor	98			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	94			
Farm Improvement Factor	94			
After Ratio	100			
Selected Ratio	102	2016	Adjustment	98

Explanation

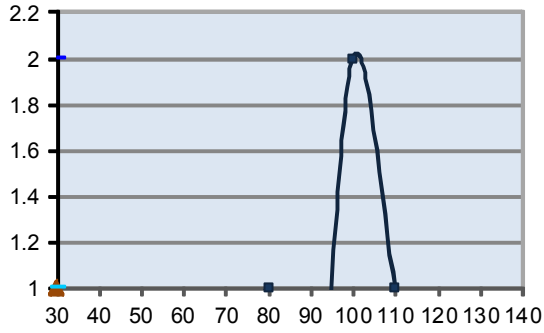
Improved land - Manufactured Structure - Value Zone 2 (22) & Value Zone 3 (23) in Rural Scappoose.
 Selected the Median of 101 and then adjusted it by the time study conclusion of 101 for a Selected Ratio of 102.

Performance History

	2016	2015	2014	2013	2012
COD	5.94	12.19	13.45	10.38	10.71
PRD	0.99	1.02	1.02	1.03	1.02

COLUMBIA County 2016 Ratio Study

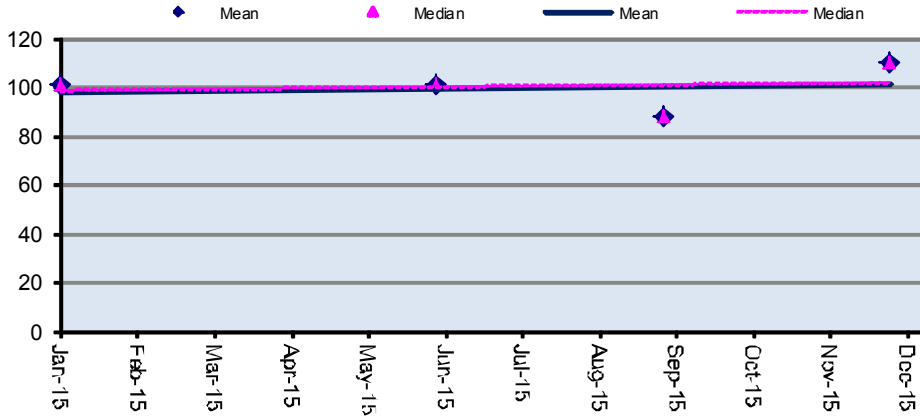
Frequency



30	0	Median	101	Wtd Mean	101
40	0	AD	6.00	GeoMean	100
50	0	COD	5.94	PRD	0.99
60	0	Mean	100	95% Confidence	8.87
70	0	SD	9.06		
80	1	COV	9.06		
90	0				
100	2				
110	1				
120	0				
130	0				
140	0				

Number Of Sales: 4

Central Tendencies



Month	Mean	Median	Sales
Jan-15	101	101	1
Jun-15	101	101	1
Sep-15	88	88	1
Dec-15	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
02	23	000	409	452	33	4N2W07-00-00204	2015	8029	1.53	149,590	83,700	233,290	265,300	Sep-15	1	88
02	22	000	409	442	33	4N3W13-D0-02101	2015	126	5.00	170,000	126,640	296,640	295,000	Jan-15	2	101
02	22	000	409	452	33	4N2W17-00-02601	2015	5352	4.17	169,470	119,190	288,660	285,000	Jun-15	3	101
02	22	000	409	462	33	4N2W18-00-00600	2016	167	10.64	222,140	182,300	404,440	368,000	Dec-15	4	110

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
400	02	25	000		0	Scappoose	400	02	45	000		0	Sauvies Island

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	65			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	22,156,670	100.00 %	23,929,204	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	2016	Adjustment	108

Explanation

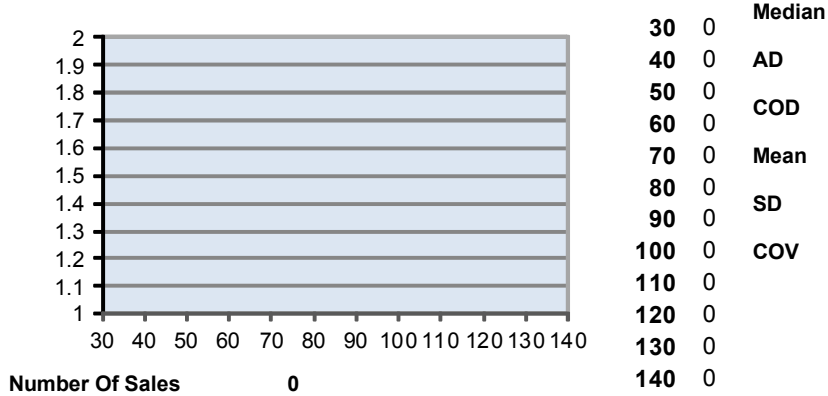
Unimproved land – Dike land in Scappoose (SA 25) & Sauvies Island (45)
 No sales information was available for this study. Therefore the Selected Ratio of 93 was applied from the MA 02 SA 21, SA 62, SA 63 & SA 64 RMV 400 analysis.

Performance History

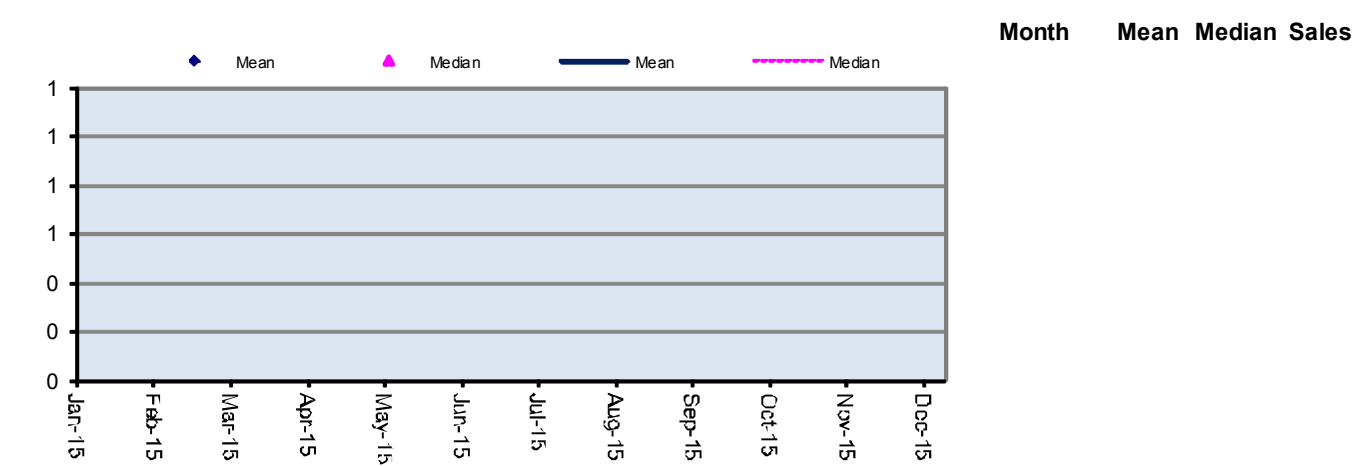
	2016	2015	2014	2013	2012
COD	-	-	8.96	-	-
PRD	-	-	1.02	-	-

COLUMBIA County 2016 Ratio Study

Frequency



Central Tendencies



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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
		CLS											

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
401	02	25	000		1	Scappoose	401	02	45	000		0	Sauvies Island

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED		
Population - Number of Accounts	54			
Sales as a percentage of the Population	1.85 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	35,356,590	72.95 %	38,185,117	73.64 %
OSD RMV	1,947,760	4.02 %	1,947,760	3.76 %
Residential Improvement RMV	6,309,490	13.02 %	6,624,965	12.78 %
Farm Improvement RMV	4,853,280	10.01 %	5,095,944	9.83 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	108			
OSD Adjustment Factor	100			
Residential Adjustment Factor	105			
Farm Improvement Factor	105			
After Ratio	100			
Selected Ratio	93	2016	Adjustment	108

Explanation

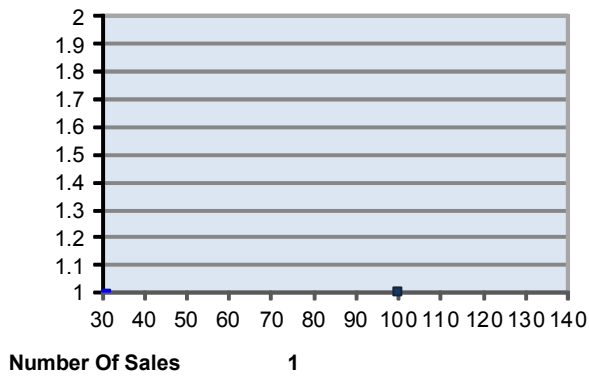
Improved land – Dike land in Scappoose (SA 25) & Sauvies Island (45)
 There was only one useable sale to analyze for this study. Therefore the Selected Ratio of 93 was applied from the MA 02 SA 21, SA 41, SA 62, SA 63 & SA 64 RMV 401 analysis.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	-	10.38	10.38	10.71
PRD	1.00	-	1.01	1.03	1.02

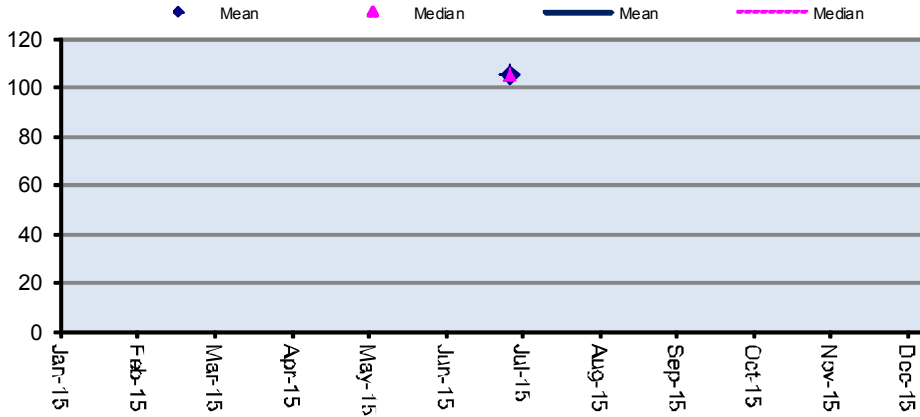
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	105	Wtd Mean	105
40	0	AD	0.00	GeoMean	105
50	0	COD	0.00	PRD	1.00
60	0	Mean	105	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	0.95		
90	0				
100	1				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Jul-15	105	105	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	25	000	401	153	33	3N1W08-00-01300	2015	5693	21.75	295,080	510,770	805,850	765,000	Jul-15	1	105

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	25	000		0	Scappoose	409	02	45	000		0	Sauvies Island

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	6			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	3,249,430	87.59 %	3,509,384	87.59 %
OSD RMV	242,500	6.54 %	242,500	6.05 %
Residential Improvement RMV	67,530	1.82 %	79,010	1.97 %
Farm Improvement RMV	150,370	4.05 %	175,933	4.39 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	108			
OSD Adjustment Factor	100			
Residential Adjustment Factor	117			
Farm Improvement Factor	117			
After Ratio	100			
Selected Ratio	93	2016	Adjustment	108

Explanation

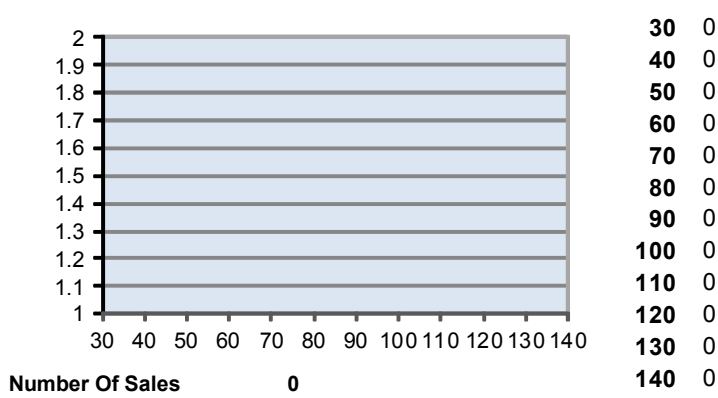
Improved land – Manufactured Structure – Dike land in Scappoose (SA 25) & Sauvies Island (45)
 Due to having no sales available for this study, it was decided to use the Selected Ratio of 93 from the MA 02 SA 21, SA 41, SA 62 & SA 64 RMV 409 analysis and to apply it here.

Performance History

	2016	2015	2014	2013	2012
COD		-	13.45	10.38	10.71
PRD		-	1.02	1.03	1.02

COLUMBIA County 2016 Ratio Study

Frequency



Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

95%

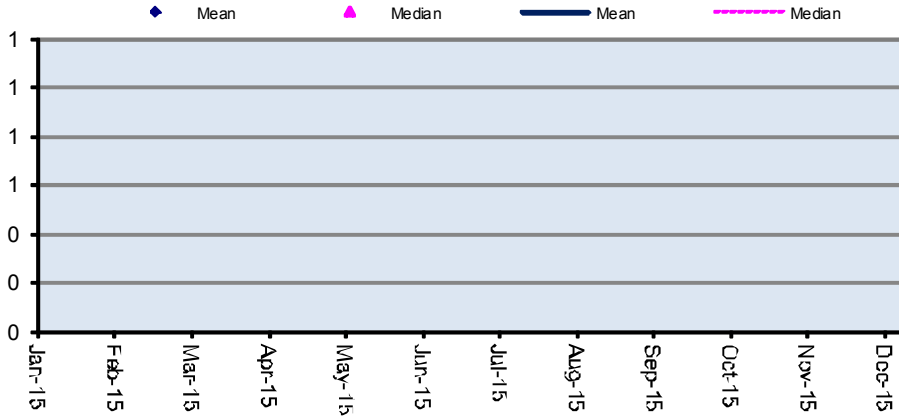
SD

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

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
800	02	63	000		0	Scappoose	890	02	63	000		1	Scappoose
800	02	64	000		0	Scappoose	890	02	64	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED		
Population - Number of Accounts	448			
Sales as a percentage of the Population	0.22 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	458,000	100.00 %	458,000	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	2016	Adjustment	100

Explanation

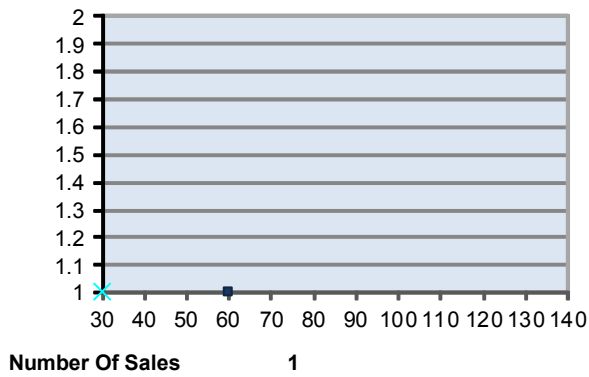
Unimproved land – Columbia Acres (63) & Hillcrest (64), Rural Scappoose
 These properties are very small vacant lots which can only be developed if they are combined or irrevocably bound. Generally they are of minimal value until such time that they can be combined or irrevocably bound and then the RMV class is changed to 4XX. Because of the unique nature of these groupings and having only one sale, it is recommended to make no adjustment at this time.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	-	-	-	-
PRD	1.00	-	-	-	-

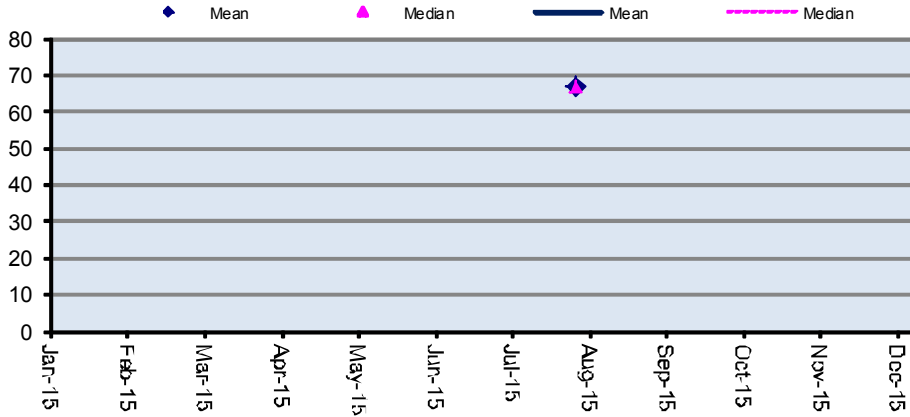
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	67	Wtd Mean	67
40	0	AD	0.00	GeoMean	67
50	0	COD	0.00	PRD	1.00
60	1	Mean	67	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	1.49		
90	0				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Aug-15	67	67	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	63	000	890		30	3N2W24-BC-02600	2015	6952	0.16	500	0	500	750	Aug-15	1	67

**MAINTENANCE
AREA 3**

**RESIDENTIAL
VERNONIA**

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	03	00	000		4	Vernonia							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	4			
Population - Number of Accounts	149			
Sales as a percentage of the Population	2.68 %			
Prior Year Population Values				
Land RMV	6,758,020	100.00 %	5,947,058	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	114			
RMV Adjustment	100			
Before Ratio	114			
Overall Adjustment Factor	88			
Land Adjustment Factor	88			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	114	2016	Adjustment	88

Explanation

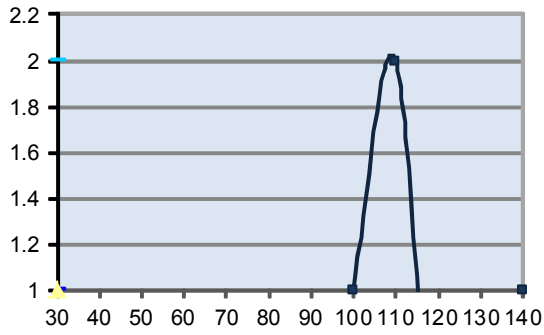
Unimproved land, City of Vernonia
 Selected the Median of 115 and adjusted it by the time study conclusion of 99. Therefore, the Selected Ratio is 114.

Performance History

	2016	2015	2014	2013	2012
COD	8.91	11.01	0.00	-	0.00
PRD	1.01	1.01	1.00	-	1.00

COLUMBIA County 2016 Ratio Study

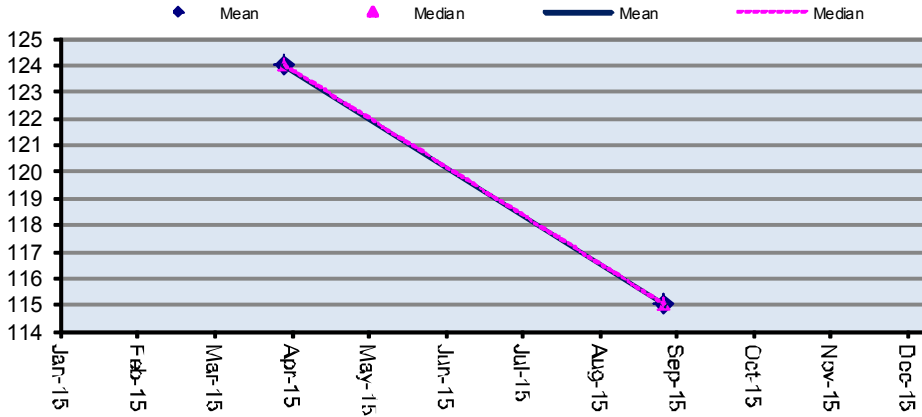
Frequency



30	0	Median	115	Wtd Mean	118
40	0	AD	10.25	GeoMean	119
50	0	COD	8.91	PRD	1.01
60	0	Mean	119	95% Confidence	14.08
70	0	SD	14.36		
80	0	COV	12.07		
90	0				
100	1				
110	2				
120	0				
130	0				
140	1				

Number Of Sales 4

Central Tendencies



Month	Mean	Median	Sales
Apr-15	124	124	2
Sep-15	115	115	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
03	00	000	100		30	5N4W34-CD-02000	2015	3282	0.19	35,430	0	35,430	33,000	Apr-15	1	107
03	00	000	100		30	4N4W05-AA-00400	2015	7871	0.38	71,170	0	71,170	62,500	Sep-15	2	114
03	00	000	100		33	5N4W34-CD-00700	2015	9035	0.23	39,480	0	39,480	34,000	Sep-15	3	116
03	00	000	100		33	4N4W04-BB-00112	2015	3261	0.26	42,630	0	42,630	30,500	Apr-15	4	140

COLUMBIA County 2016 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		22	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	22	RECALCULATED		
Population - Number of Accounts	500			
Sales as a percentage of the Population	4.40 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	19,978,100	28.70 %	17,580,728	25.04 %
OSD RMV	12,099,000	17.38 %	12,099,000	17.23 %
Residential Improvement RMV	36,484,920	52.41 %	39,403,714	56.12 %
Farm Improvement RMV	1,051,900	1.51 %	1,136,052	1.62 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	88			
OSD Adjustment Factor	100			
Residential Adjustment Factor	108			
Farm Improvement Factor	108			
After Ratio	100			
Selected Ratio	99	2016	Adjustment	101

Explanation

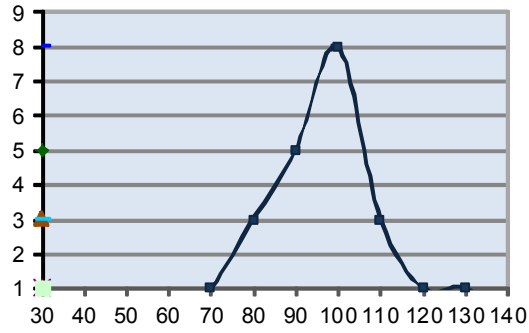
Improved land, City of Vernonia
 Selected the Median of 100 which is supported by the Mean (101) and Weighted Mean (100). After applying the time adjustment of 99, the Selected Ratio is 99.

Performance History

	2016	2015	2014	2013	2012
COD	10.32	15.86	9.67	17.73	15.51
PRD	1.01	1.03	1.01	1.06	1.04

COLUMBIA County 2016 Ratio Study

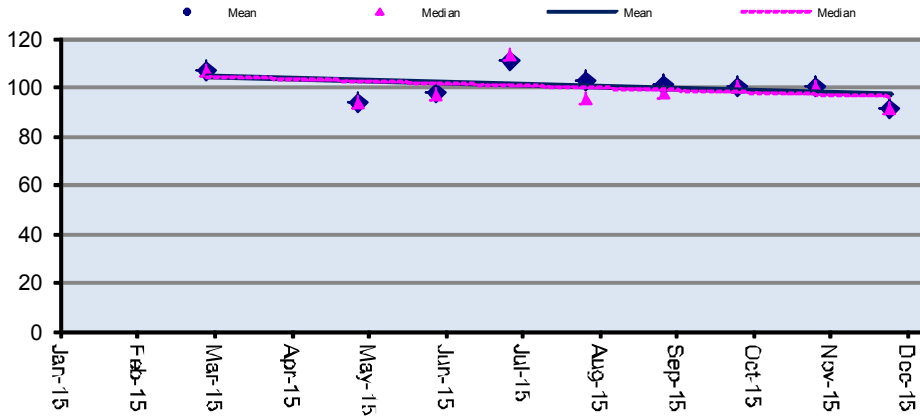
Frequency



30	0	Median	100	Wtd Mean	100
40	0	AD	10.32	GeoMean	100
50	0	COD	10.32	PRD	1.01
60	0	Mean	101	95% Confidence	5.44
70	1	SD	13.02		
80	3	COV	12.89		
90	5				
100	8				
110	3				
120	1				
130	1				
140	0				

Number Of Sales **22**

Central Tendencies



Month	Mean	Median	Sales
Mar-15	107	107	1
May-15	94	94	1
Jun-15	98	97	6
Jul-15	111	113	4
Aug-15	103	95	3
Sep-15	101	98	3
Oct-15	100	100	1
Nov-15	100	100	1
Dec-15	91	91	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
03	00	000	101	131	33	4N4W04-AD-05000	2015	10473	0.15	59,050	58,380	117,430	152,000	Dec-15	1	77
03	00	000	101	121	33	4N4W05-AC-04000	2015	5338	0.23	76,400	28,610	105,010	130,000	Jun-15	2	81
03	00	000	101	141	33	4N4W03-CA-00900	2015	6149	0.27	70,910	116,310	187,220	213,000	Jul-15	3	88
03	00	000	101	142	33	4N4W04-BA-00900	2015	8412	1.36	125,990	127,830	253,820	289,000	Sep-15	4	88
03	00	000	101	131	33	4N4W04-AD-01400	2015	4815	0.17	60,850	42,680	103,530	115,000	Jun-15	5	90
03	00	000	101	136	33	4N4W04-AD-03701	2015	5828	0.32	74,890	78,260	153,150	165,000	Jun-15	6	93
03	00	000	101	141	33	5N4W34-CD-01700	2015	3768	0.19	62,430	153,570	216,000	229,000	May-15	7	94
03	00	000	101	141	33	4N4W03-BC-09301	2015	6827	0.19	62,710	114,220	176,930	186,000	Aug-15	8	95
03	00	000	101	141	33	5N4W34-CD-02000	2015	7171	0.19	62,430	161,700	224,130	236,000	Aug-15	9	95
03	00	000	101	141	33	5N4W34-CD-01800	2015	4440	0.19	62,430	166,200	228,630	227,500	Jun-15	10	100
03	00	000	101	143	33	5N4W34-CD-00600	2015	8984	0.42	84,880	175,840	260,720	260,000	Oct-15	11	100
03	00	000	101	141	33	4N4W04-AD-02000	2015	10047	0.20	63,170	84,740	147,910	147,500	Nov-15	12	100
03	00	000	101	143	33	4N4W05-AC-04202	2015	10100	0.21	64,100	176,200	240,300	229,900	Dec-15	13	105
03	00	000	101	141	33	4N4W05-AC-03800	2015	1877	0.29	72,070	109,090	181,160	170,000	Mar-15	14	107
03	00	000	101	141	33	4N4W05-AA-00403	2015	7869	0.54	93,830	134,600	228,430	214,000	Sep-15	15	107
03	00	000	101	141	33	4N4W05-AC-00900	2015	5184	0.26	69,940	107,720	177,660	165,000	Jun-15	16	108
03	00	000	101	133	33	4N4W04-BD-00500	2015	8121	0.11	56,000	133,880	189,880	174,500	Sep-15	17	109
03	00	000	101	143	33	4N4W05-AA-00404	2015	6460	0.53	93,630	146,080	239,710	215,000	Jul-15	18	111
03	00	000	101	145	30	4N4W05-AD-00100	2015	6051	0.41	82,090	104,690	186,780	165,000	Jul-15	19	113

COLUMBIA County 2016 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
03	00	000	101	121	33	4N4W05-AD-01700	2015	5166	0.11	56,000	34,860	90,860	80,000	Jun-15	20	114
03	00	000	101	141	30	4N4W04-BA-03800	2015	7129	0.74	107,160	114,440	221,600	185,000	Aug-15	21	120
03	00	000	101	121	33	4N4W03-BC-10100	2015	6444	0.13	57,610	24,260	81,870	62,000	Jul-15	22	132

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	03	00	000		4	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	4	RECALCULATED		
Population - Number of Accounts	81			
Sales as a percentage of the Population	4.94 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	3,247,890	30.47 %	2,858,143	29.87 %
OSD RMV	2,025,000	19.00 %	2,025,000	21.16 %
Residential Improvement RMV	5,156,330	48.38 %	4,486,007	46.89 %
Farm Improvement RMV	228,560	2.14 %	198,847	2.08 %
SelectedRatioFromSales	111			
RMV Adjustment	100			
Before Ratio	111			
Overall Adjustment Factor	90			
Land Adjustment Factor	88			
OSD Adjustment Factor	100			
Residential Adjustment Factor	87			
Farm Improvement Factor	87			
After Ratio	100			
Selected Ratio	111	2016	Adjustment	90

Explanation

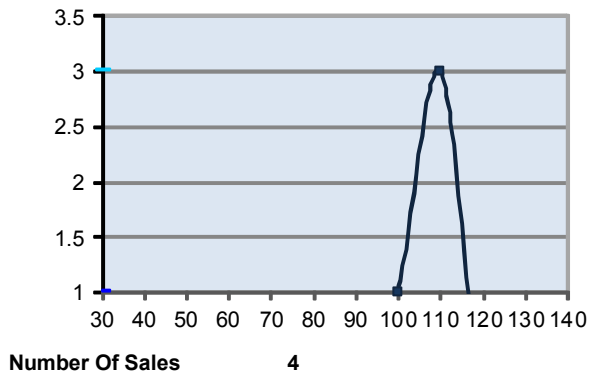
Improved Land – Manufactured Structure, City of Vernonia
 Selected 112 which is reflected by all the central tendencies. Then the time adjustment of 99 was applied, resulting in a Selected Ratio of 111.

Performance History

	2016	2015	2014	2013	2012
COD	2.46	15.86	9.67	17.73	15.51
PRD	1.00	1.03	1.01	1.06	1.04

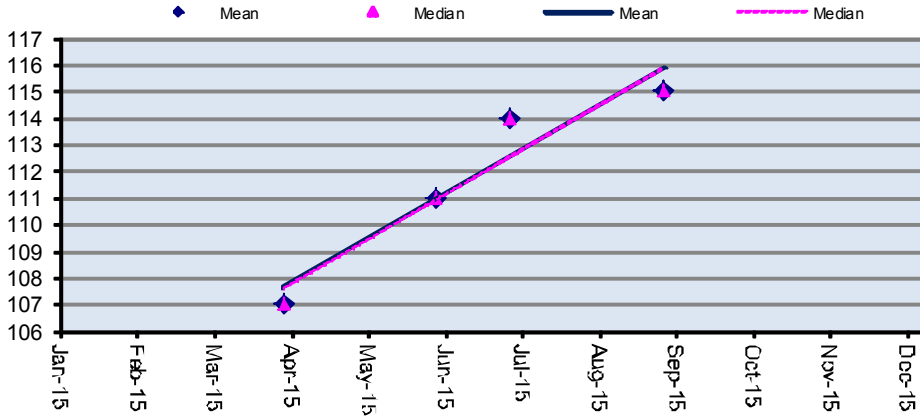
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	112	Wtd Mean	112
40	0	AD	2.75	GeoMean	112
50	0	COD	2.46	PRD	1.00
60	0	Mean	112	95% Confidence	3.53
70	0	SD	3.61		
80	0	COV	3.22		
90	0				
100	1				
110	3				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Apr-15	107	107	1
Jun-15	111	111	1
Jul-15	114	114	1
Sep-15	115	115	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	109	452	33	4N4W05-AD-06400	2015	2941	0.11	55,960	61,630	117,590	110,000	Apr-15	1	107
03	00	000	109	462	33	4N4W05-DA-07600	2015	4682	0.14	57,990	85,480	143,470	129,500	Jun-15	2	111
03	00	000	109	462	30	4N4W05-AD-14210	2015	5834	0.22	65,490	77,410	142,900	125,000	Jul-15	3	114
03	00	000	109	452	30	4N4W05-AD-14207	2015	9015	0.22	65,860	65,760	131,620	114,000	Sep-15	4	115

COLUMBIA County 2016 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

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	89			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	2,507,650	100.00 %	2,658,109	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	94			
RMV Adjustment	100			
Before Ratio	94			
Overall Adjustment Factor	106			
Land Adjustment Factor	106			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	94	2016	Adjustment	106

Explanation

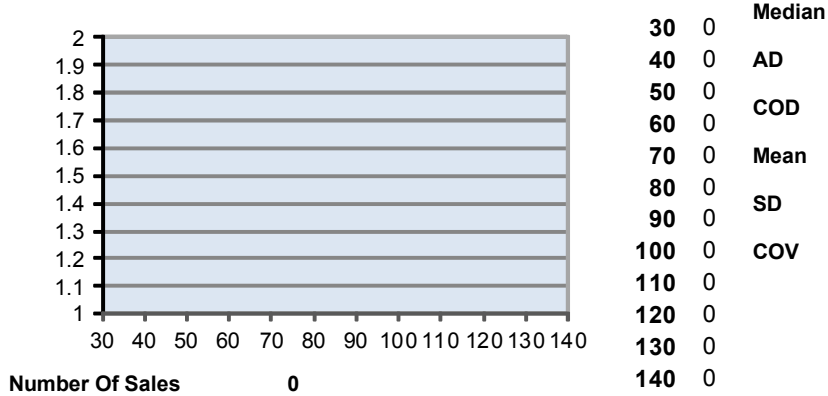
Unimproved land – located in the Floodway - City of Vernonia
 No unimproved land sales were available for this study. Therefore the Selected Ratio of 94 from the MA 03 SA 03 RMV 101 analysis was applied here.

Performance History

	2016	2015	2014	2013	2012
COD		-	12.81	-	0.00
PRD		-	1.06	-	1.00

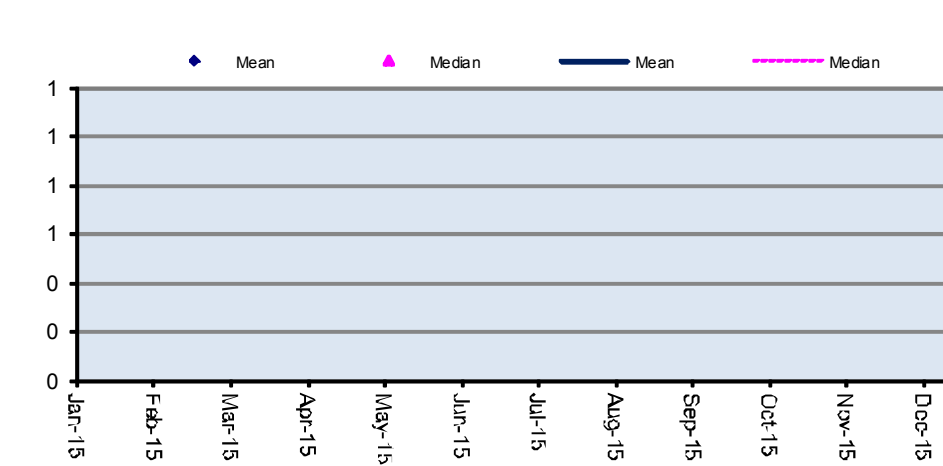
COLUMBIA County 2016 Ratio Study

Frequency



- 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	PRP 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 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	03	03	000		7	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	7	RECALCULATED		
Population - Number of Accounts	291			
Sales as a percentage of the Population	2.41 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	6,508,250	24.01 %	6,898,745	23.97 %
OSD RMV	6,384,560	23.55 %	6,384,560	22.19 %
Residential Improvement RMV	13,548,510	49.98 %	14,767,876	51.32 %
Farm Improvement RMV	666,750	2.46 %	726,758	2.53 %
SelectedRatioFromSales	94			
RMV Adjustment	100			
Before Ratio	94			
Overall Adjustment Factor	106			
Land Adjustment Factor	106			
OSD Adjustment Factor	100			
Residential Adjustment Factor	109			
Farm Improvement Factor	109			
After Ratio	100			
Selected Ratio	94	2016	Adjustment	106

Explanation

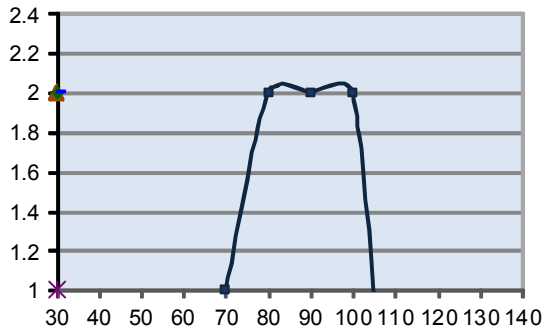
Improved land – located in the Floodway - City of Vernonia
 Selected the Median of 95 and applied the time adjustment of 99. Thus, the resulting Selected Ratio Adjustment is 94.

Performance History

	2016	2015	2014	2013	2012
COD	8.87	15.71	12.81	31.21	15.51
PRD	0.99	1.05	1.06	1.32	1.04

COLUMBIA County 2016 Ratio Study

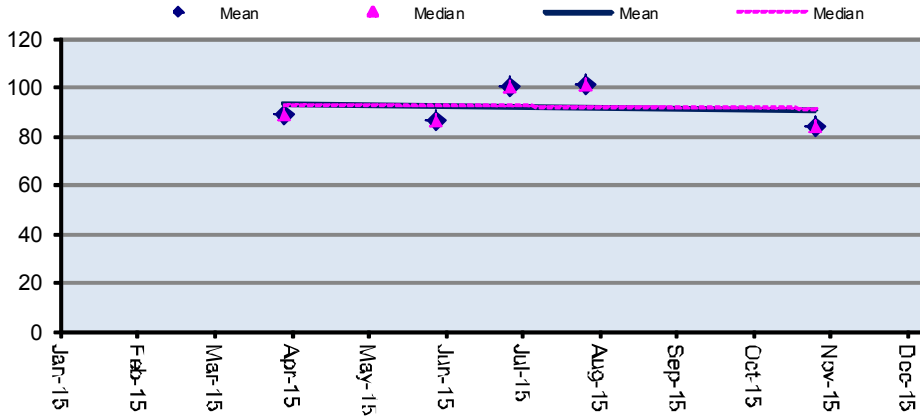
Frequency



30	0	Median	95	Wtd Mean	93
40	0	AD	8.43	GeoMean	92
50	0	COD	8.87	PRD	0.99
60	0	Mean	92	95% Confidence	7.89
70	1	SD	10.65		
80	2	COV	11.58		
90	2				
100	2				
110	0				
120	0				
130	0				
140	0				

Number Of Sales 7

Central Tendencies



Month	Mean	Median	Sales
Apr-15	89	89	1
Jun-15	86	86	2
Jul-15	100	100	2
Aug-15	101	101	1
Nov-15	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
03	03	000	101	141	33	4N4W03-BB-07400	2015	5363	0.22	49,550	58,550	108,100	145,403	Jun-15	1	74
03	03	000	101	131	33	4N4W04-BD-12000	2015	10098	0.11	41,750	32,000	73,750	87,500	Nov-15	2	84
03	03	000	101	131	33	4N4W04-BD-03600	2015	2827	0.25	51,780	38,880	90,660	102,000	Apr-15	3	89
03	03	000	101	131	33	4N4W04-CB-06000	2015	6469	0.13	42,890	36,200	79,090	83,000	Jul-15	4	95
03	03	000	101	131	33	4N4W03-BC-02500	2015	5606	0.31	56,430	59,050	115,480	119,000	Jun-15	5	97
03	03	000	101	143	33	4N4W03-BB-07600	2015	7272	0.22	49,540	68,360	117,900	116,500	Aug-15	6	101
03	03	000	101	144	33	4N4W04-BD-02500	2015	6185	0.11	41,750	151,780	193,530	185,000	Jul-15	7	105

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	3	RECALCULATED		
Population - Number of Accounts	51			
Sales as a percentage of the Population	5.88 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	1,612,510	29.03 %	1,709,261	29.95 %
OSD RMV	1,134,000	20.42 %	1,134,000	19.87 %
Residential Improvement RMV	2,530,060	45.55 %	2,580,661	45.22 %
Farm Improvement RMV	277,730	5.00 %	283,285	4.96 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	106			
OSD Adjustment Factor	100			
Residential Adjustment Factor	102			
Farm Improvement Factor	102			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

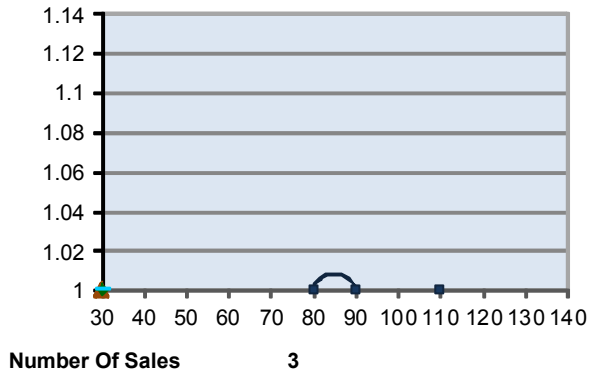
Improved land – located in the Floodway, Manufactured Structure - City of Vernonia
 Selected the Mean of 98 and applied the conclusion from the time study (99). The Selected Ratio is determined to be 97 .

Performance History

	2016	2015	2014	2013	2012
COD	15.38	15.71	12.81	31.21	15.51
PRD	0.99	1.05	1.06	1.32	1.04

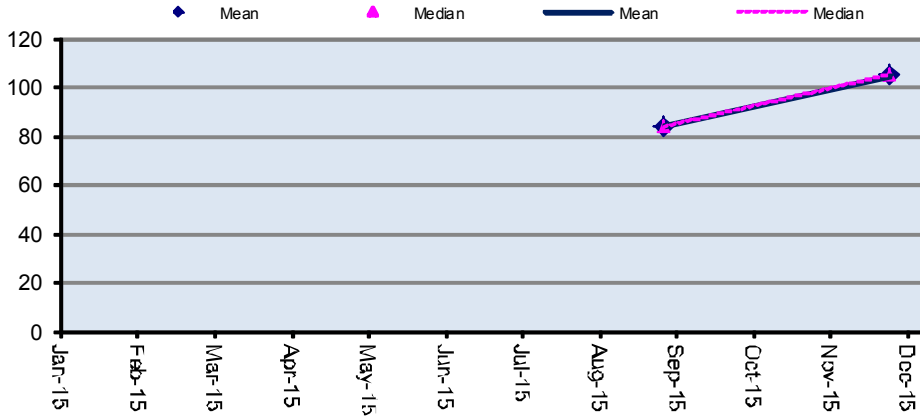
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	91	Wtd Mean	99
40	0	AD	14.00	GeoMean	97
50	0	COD	15.38	PRD	0.99
60	0	Mean	98	95% Confidence	20.96
70	0	SD	18.52		
80	1	COV	18.90		
90	1				
100	0				
110	1				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Sep-15	84	84	1
Dec-15	105	105	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
03	03	000	109	462	33	4N4W03-BD-02106	2015	8160	0.31	56,030	70,670	126,700	150,000	Sep-15	1	84
03	03	000	109	462	33	5N4W34-00-01000	2015	10267	1.54	77,530	95,340	172,870	189,900	Dec-15	2	91
03	03	000	109	463	33	4N4W04-BC-01007	2015	10363	0.79	98,210	128,130	226,340	190,000	Dec-15	3	119

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	2			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	105,230	100.00 %	92,602	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	114			
RMV Adjustment	100			
Before Ratio	114			
Overall Adjustment Factor	88			
Land Adjustment Factor	88			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	114	2016	Adjustment	88

Explanation

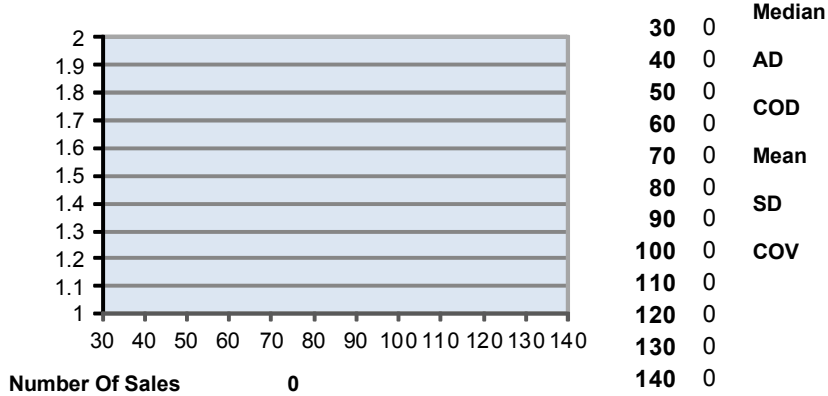
Unimproved land - Roseview Heights, City of Vernonia
 Due to having no bare land sales available, it was decided to use the Selected Ratio of 114 from the MA 03 SA 00 RMV 100 analysis.

Performance History

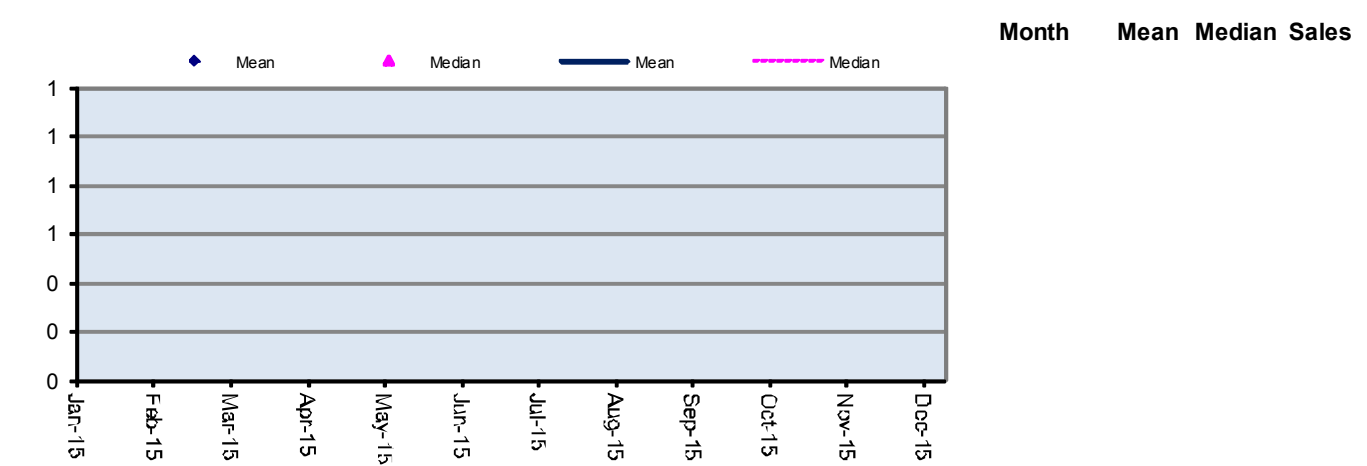
	2016	2015	2014	2013	2012
COD		-	-	-	0.00
PRD		-	-	-	1.00

COLUMBIA County 2016 Ratio Study

Frequency



Central Tendencies



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	PR P 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 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	03	38	000		2	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	21			
Sales as a percentage of the Population	9.52 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	1,251,340	35.94 %	1,101,179	35.16 %
OSD RMV	567,000	16.28 %	567,000	18.10 %
Residential Improvement RMV	1,661,390	47.72 %	1,462,023	46.68 %
Farm Improvement RMV	2,050	0.06 %	1,804	0.06 %
SelectedRatioFromSales	111			
RMV Adjustment	100			
Before Ratio	111			
Overall Adjustment Factor	90			
Land Adjustment Factor	88			
OSD Adjustment Factor	100			
Residential Adjustment Factor	88			
Farm Improvement Factor	88			
After Ratio	100			
Selected Ratio	111	2016	Adjustment	90

Explanation

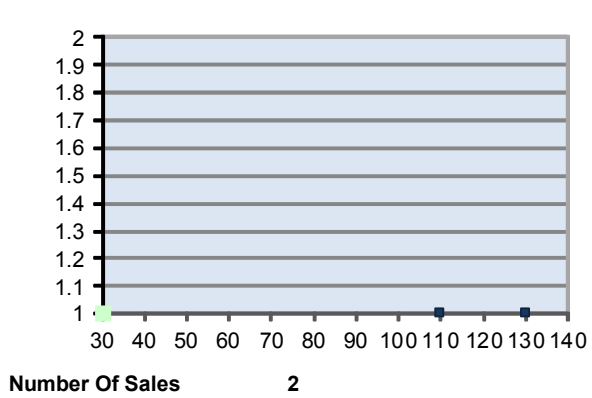
Improved land - Roseview Heights, City of Vernonia
 This area is a small subdivision located within the City of Vernonia and comprised of manufactured structures and various accessory items/buildings. The sales available are too few in number in order to conduct an analysis for the current year. Therefore, the Selected Ratio of 111 from the MA 03 SA 00 RMV 109 study was used.

Performance History

	2016	2015	2014	2013	2012
COD	8.33	0.00	9.32	17.73	15.51
PRD	1.01	1.00	1.02	1.06	1.04

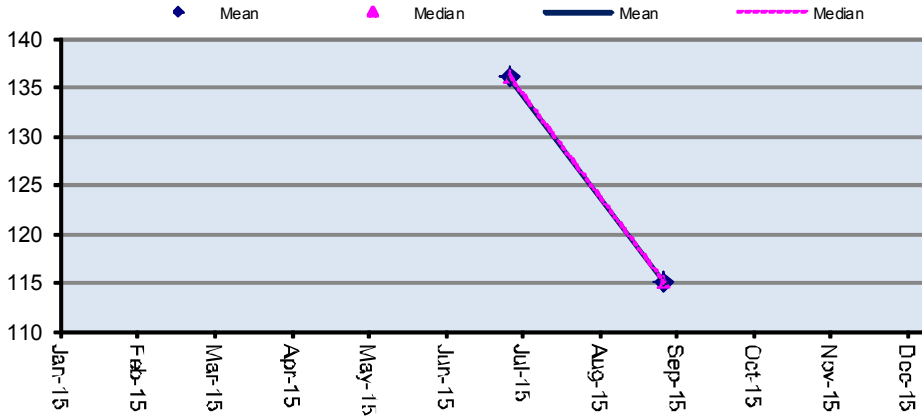
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	126	Wtd Mean	125
40	0	AD	10.50	GeoMean	125
50	0	COD	8.33	PRD	1.01
60	0	Mean	126	95% Confidence	20.60
70	0	SD	14.87		
80	0	COV	11.80		
90	0				
100	0				
110	1				
120	0				
130	1				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Jul-15	136	136	1
Sep-15	115	115	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	38	000	109	462	33	4N4W05-AA-00312	2015	7988	0.35	77,870	91,550	169,420	147,500	Sep-15	1	115
03	38	000	109	462	33	4N4W05-AA-00301	2015	5671	0.55	94,850	81,850	176,700	130,000	Jul-15	2	136

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	03	39	000		3	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	3	RECALCULATED		
Population - Number of Accounts	14			
Sales as a percentage of the Population	21.43 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	649,300	24.40 %	571,384	21.84 %
OSD RMV	378,000	14.20 %	378,000	14.45 %
Residential Improvement RMV	1,617,890	60.79 %	1,650,248	63.08 %
Farm Improvement RMV	16,320	0.61 %	16,646	0.64 %
SelectedRatioFromSales	102			
RMV Adjustment	100			
Before Ratio	102			
Overall Adjustment Factor	98			
Land Adjustment Factor	88			
OSD Adjustment Factor	100			
Residential Adjustment Factor	102			
Farm Improvement Factor	102			
After Ratio	100			
Selected Ratio	102	2016	Adjustment	98

Explanation

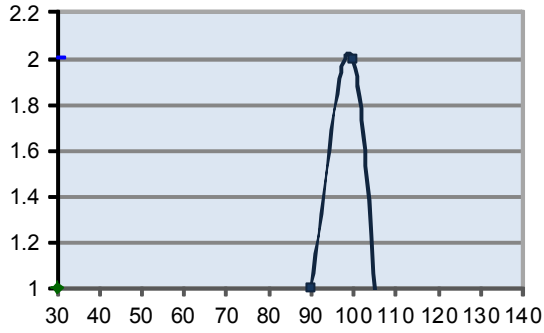
Improved land – Heather Park, City of Vernonia
 Selected the Mean of 103 which is supported by the Weighted Mean (103) and the Median (104). After applying the time adjustment of 99, the Selected Ratio is 102.

Performance History

	2016	2015	2014	2013	2012
COD	2.24	15.86	9.67	17.73	15.51
PRD	1.00	1.03	1.01	1.06	1.04

COLUMBIA County 2016 Ratio Study

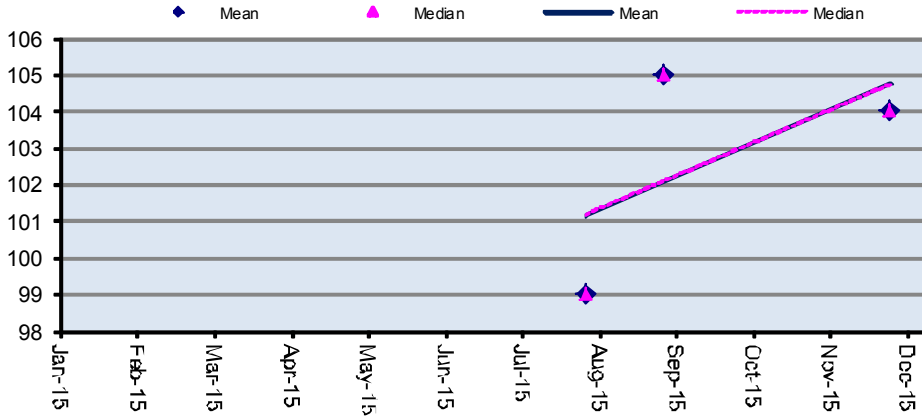
Frequency



30	0	Median	104	Wtd Mean	103
40	0	AD	2.33	GeoMean	103
50	0	COD	2.24	PRD	1.00
60	0	Mean	103	95% Confidence	3.67
70	0	SD	3.24		
80	0	COV	3.15		
90	1				
100	2				
110	0				
120	0				
130	0				
140	0				

Number Of Sales 3

Central Tendencies



Month	Mean	Median	Sales
Aug-15	99	99	1
Sep-15	105	105	1
Dec-15	104	104	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	39	000	101	141	33	4N4W03-BA-01010	2015	7173	0.21	64,280	128,300	192,580	195,000	Aug-15	1	99
03	39	000	101	142	33	4N4W03-BA-01015	2015	10575	0.43	85,530	211,630	297,160	286,500	Dec-15	2	104
03	39	000	101	142	33	4N4W03-BA-01011	2015	8222	0.32	74,890	98,030	172,920	164,000	Sep-15	3	105

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	03	40	000		1	Vernonia							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	1			
Population - Number of Accounts	9			
Sales as a percentage of the Population	11.11 %			
Prior Year Population Values				
Land RMV	292,860	23.32 %	257,717	20.29 %
OSD RMV	348,000	27.71 %	348,000	27.40 %
Residential Improvement RMV	612,290	48.75 %	661,273	52.07 %
Farm Improvement RMV	2,840	0.23 %	3,067	0.24 %
SelectedRatioFromSales	99			
RMV Adjustment	100			
Before Ratio	99			
Overall Adjustment Factor	101			
Land Adjustment Factor	88			
OSD Adjustment Factor	100			
Residential Adjustment Factor	108			
Farm Improvement Factor	108			
After Ratio	100			
Selected Ratio	99	2016	Adjustment	101

Explanation

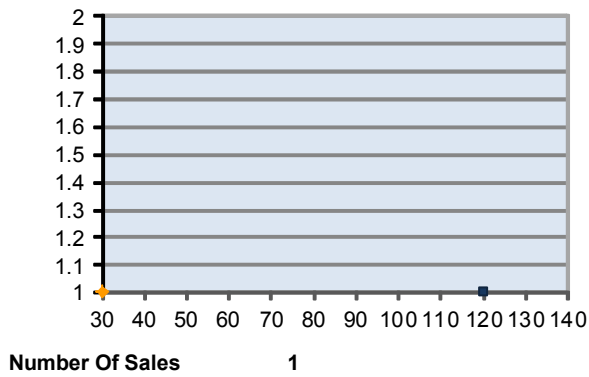
Improved land – Duplex/Triplex/Fourplex, City of Vernonia
 With having only one sale available for study, the MA 03 SA 00 RMV 101 Selected Ratio of 99 was applied.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	-	9.67	17.73	15.51
PRD	1.00	-	1.01	1.06	1.04

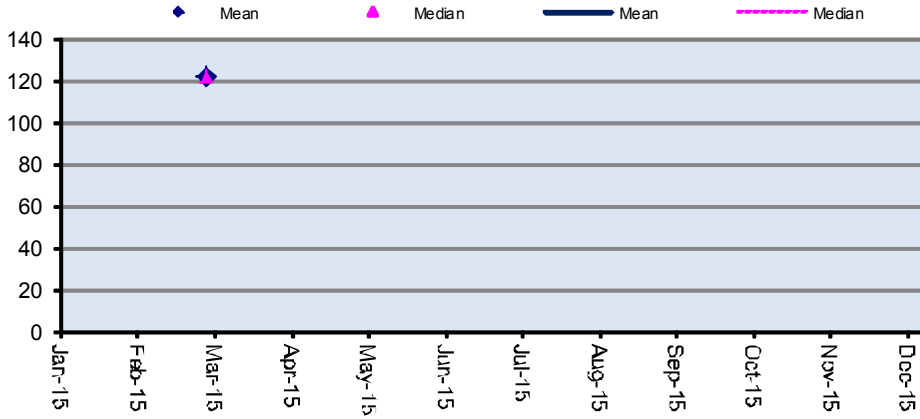
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	122	Wtd Mean	122
40	0	AD	0.00	GeoMean	122
50	0	COD	0.00	PRD	1.00
60	0	Mean	122	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	0.82		
90	0				
100	0				
110	0				
120	1				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Mar-15	122	122	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	40	000	101	234	33	4N4W05-AD-07100	2015	2648	0.11	91,380	66,150	157,530	129,000	Mar-15	1	122

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	03	31	000		2	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	579			
Sales as a percentage of the Population	0.35 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	122,543,500	99.96 %	140,925,025	99.96 %
OSD RMV	49,500	0.04 %	49,500	0.04 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	87			
RMV Adjustment	100			
Before Ratio	87			
Overall Adjustment Factor	115			
Land Adjustment Factor	115			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	87	2016	Adjustment	115

Explanation

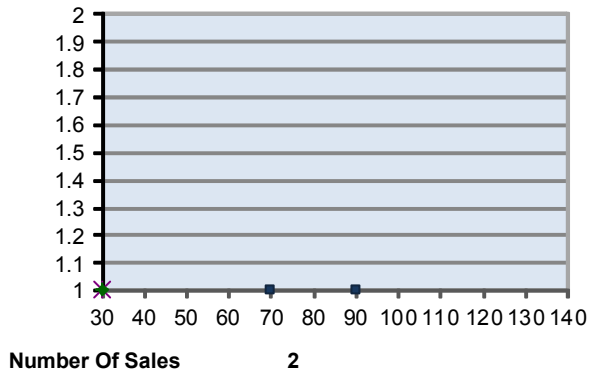
Unimproved land – Value Zone 1 (31) in Rural Vernonia.
 Having less than one per cent of sales available for this population of 579 accounts, it was decided to use the MA 03 SA 31 RMV 101 Selected Ratio of 87.

Performance History

	2016	2015	2014	2013	2012
COD	8.93	15.51	13.40	-	52.50
PRD	1.02	1.04	0.97	-	1.43

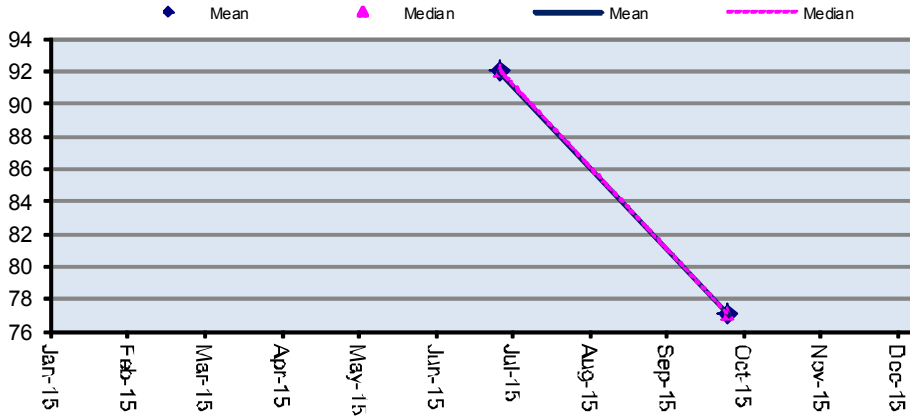
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	84	Wtd Mean	82
40	0	AD	7.50	GeoMean	84
50	0	COD	8.93	PRD	1.02
60	0	Mean	84	95% Confidence	14.73
70	1	SD	10.63		
80	0	COV	12.65		
90	1				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Jul-15	92	92	1
Oct-15	77	77	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	400		33	4N4W09-00-01001	2015	8791	24.09	120,260	0	120,260	157,000	Oct-15	1	77
03	31	000	400		33	4N4W08-00-00207	2015	6515	5.19	82,580	0	82,580	90,000	Jul-15	2	92

COLUMBIA County 2016 Ratio Study

RMV		App	# of				RMV		App	# of			
Class	MA	SA	NH	Year	Sales	Location	Class	MA	SA	NH	Year	Sales	Location
401	03	31	000		10	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	10	RECALCULATED		
Population - Number of Accounts	708			
Sales as a percentage of the Population	1.41 %	Pre-Trend	Post Trend	Post Trend
Prior Year Population Values		Brkdwn	Values	Brkdwn
Land RMV	61,604,760	37.59 %	70,845,474	37.58 %
OSD RMV	25,351,080	15.47 %	25,351,080	13.45 %
Residential Improvement RMV	63,624,440	38.82 %	76,349,328	40.50 %
Farm Improvement RMV	13,302,030	8.12 %	15,962,436	8.47 %
SelectedRatioFromSales	87			
RMV Adjustment	100			
Before Ratio	87			
Overall Adjustment Factor	115			
Land Adjustment Factor	115			
OSD Adjustment Factor	100			
Residential Adjustment Factor	120			
Farm Improvement Factor	120			
After Ratio	100			
Selected Ratio	87	2016	Adjustment	115

Explanation

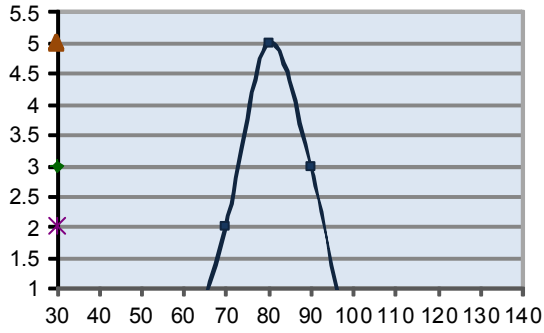
Improved land – Value Zone 1 (31) in Rural Vernonia.
 For this study, there are 10 sales available for this area. The mean of 86 was selected as it is supported by the Weighted Mean and the GeoMean. It was then adjusted by the time study conclusion of 101 resulting in a Selected Ratio of 87.

Performance History

	2016	2015	2014	2013	2012
COD	7.16	18.26	12.88	13.10	17.53
PRD	1.00	1.06	1.01	1.01	1.06

COLUMBIA County 2016 Ratio Study

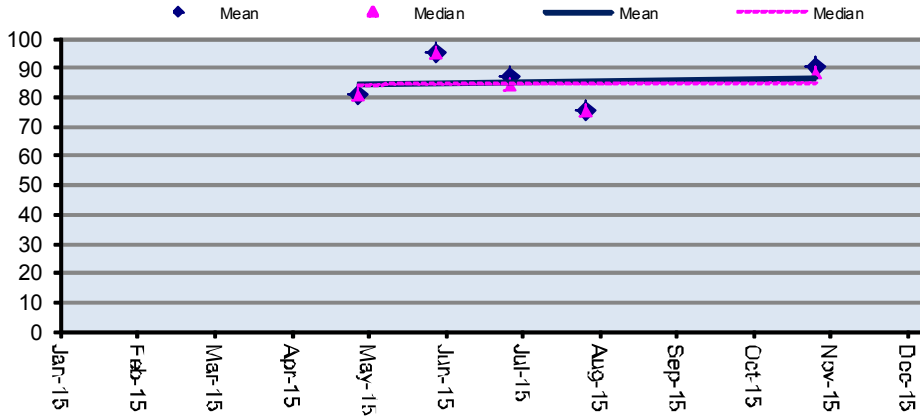
Frequency



30	0	Median	88	Wtd Mean	86
40	0	AD	6.30	GeoMean	86
50	0	COD	7.16	PRD	1.00
60	0	Mean	86	95% Confidence	4.88
70	2	SD	7.87		
80	5	COV	9.15		
90	3				
100	0				
110	0				
120	0				
130	0				
140	0				

Number Of Sales **10**

Central Tendencies



Month	Mean	Median	Sales
May-15	81	81	2
Jun-15	95	95	1
Jul-15	87	84	3
Aug-15	75	75	1
Nov-15	90	88	3

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	153	33	4N4W20-00-01001	2015	3725	20.24	151,820	205,680	357,500	487,600	May-15	1	73
03	31	000	401	145	33	5N5W27-00-00500	2015	7169	14.91	147,280	153,780	301,060	399,000	Aug-15	2	75
03	31	000	401	141	33	4N4W29-00-00802	2015	5847	15.20	147,660	210,230	357,890	450,000	Jul-15	3	80
03	31	000	401	141	33	5N4W36-00-00300	2015	6690	13.64	145,980	105,250	251,230	287,900	Jul-15	4	87
03	31	000	401	132	33	5N4W31-00-01000	2015	9851	4.23	123,560	179,220	302,780	349,000	Nov-15	5	87
03	31	000	401	143	33	4N4W09-00-01401	2015	3585	7.03	141,660	112,480	254,140	287,000	May-15	6	89
03	31	000	401	300	33	4N4W31-00-00502	2015	9677	11.06	145,040	236,850	381,890	430,000	Nov-15	7	89
03	31	000	401	151	33	4N4W08-00-00202	2015	6516	5.00	130,800	295,640	426,440	456,500	Jul-15	8	93
03	31	000	401	141	33	5N4W33-DC-01300	2015	4654	0.68	71,500	161,650	233,150	245,000	Jun-15	9	95
03	31	000	401	155	33	4N5W12-00-01000	2015	9557	7.92	109,930	344,590	454,520	480,000	Nov-15	10	95

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	03	31	000		5	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	5	RECALCULATED		
Population - Number of Accounts	185			
Sales as a percentage of the Population	2.70 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	15,100,870	39.51 %	17,366,001	52.09 %
OSD RMV	8,230,160	21.54 %	8,230,160	24.69 %
Residential Improvement RMV	11,399,190	29.83 %	5,927,579	17.78 %
Farm Improvement RMV	3,486,300	9.12 %	1,812,876	5.44 %
SelectedRatioFromSales	115			
RMV Adjustment	100			
Before Ratio	115			
Overall Adjustment Factor	87			
Land Adjustment Factor	115			
OSD Adjustment Factor	100			
Residential Adjustment Factor	52			
Farm Improvement Factor	52			
After Ratio	100			
Selected Ratio	115	2016	Adjustment	87

Explanation

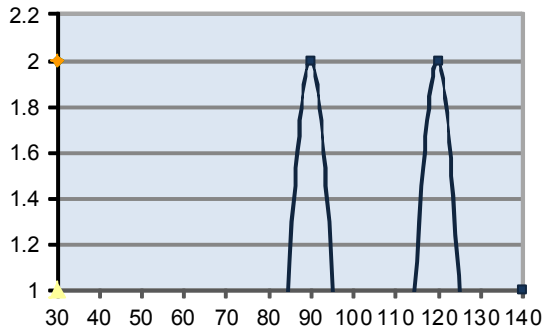
Improved land – Manufactured Structure in Rural Vernonia.
 For this analysis, the Mean of 114 was selected which is supported by the Weighted Mean (116) and the GeoMean (113). The Mean was then adjusted by 101 adjustment from the time study. Thus, the Selected Ratio is 115.

Performance History

	2016	2015	2014	2013	2012
COD	14.21	18.26	12.88	13.10	17.53
PRD	0.98	1.06	1.01	1.01	1.06

COLUMBIA County 2016 Ratio Study

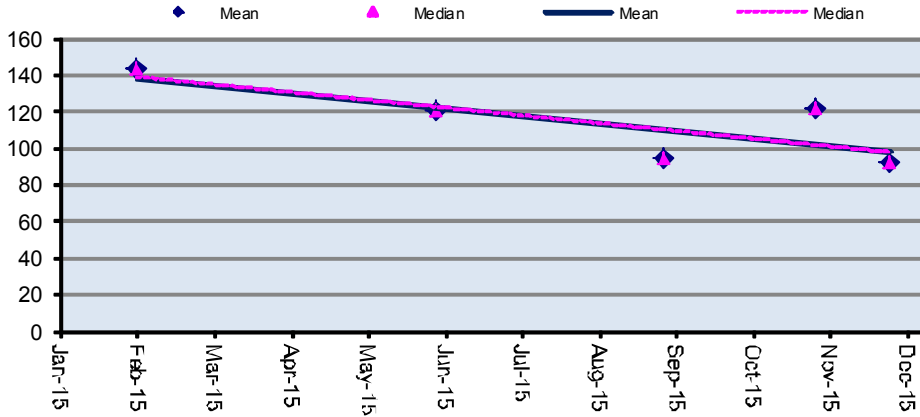
Frequency



30	0	Median	121	Wtd Mean	116
40	0	AD	17.20	GeoMean	113
50	0	COD	14.21	PRD	0.98
60	0	Mean	114	95% Confidence	18.79
70	0	SD	21.44		
80	0	COV	18.80		
90	2				
100	0				
110	0				
120	2				
130	0				
140	1				

Number Of Sales 5

Central Tendencies



Month	Mean	Median	Sales
Feb-15	143	143	1
Jun-15	121	121	1
Sep-15	94	94	1
Nov-15	122	122	1
Dec-15	92	92	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	409	452	33	4N5W01-00-00301	2015	10570	4.05	121,870	34,240	156,110	169,999	Dec-15	1	92
03	31	000	409	441	33	4N4W07-D0-00201	2015	8241	8.18	142,750	31,400	174,150	185,000	Sep-15	2	94
03	31	000	409	452	33	4N4W31-00-00403	2015	4818	21.61	159,210	155,890	315,100	260,000	Jun-15	3	121
03	31	000	409	452	33	6N4W18-00-00600	2015	9490	39.70	225,410	172,520	397,930	325,000	Nov-15	4	122
03	31	000	409	452	33	6N5W05-00-00600	2015	1269	2.60	92,220	164,290	256,510	179,500	Feb-15	5	143

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	03	36	000		0	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	27			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	618,930	100.00 %	711,770	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	87			
RMV Adjustment	100			
Before Ratio	87			
Overall Adjustment Factor	115			
Land Adjustment Factor	115			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	87	2016	Adjustment	115

Explanation

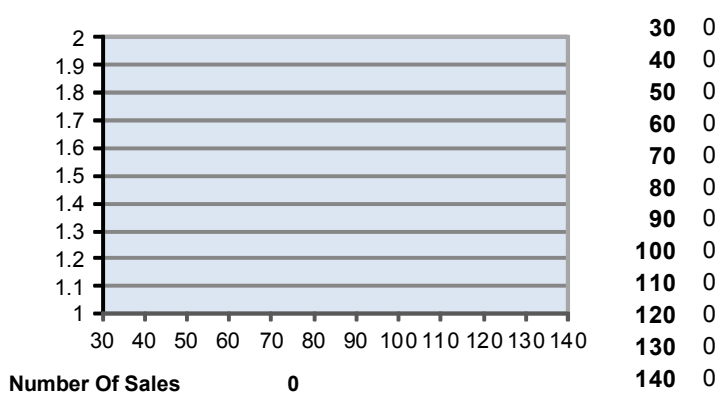
Unimproved land – Fishhawk Lake in Rural Vernonia.
 The Fishhawk Lake Estates area is distinctive due to the nature of the market it encompasses: recreational lake, vacation get-a-way and second home type of properties. Due to having no sales to study for RMV 400 MA 03 SA 36, the decision was made to apply the Selected Ratio of 87 from the MA 03 SA 31 RMV 400 study.

Performance History

	2016	2015	2014	2013	2012
COD		-	26.14	0.00	12.50
PRD		-	1.30	1.00	0.98

COLUMBIA County 2016 Ratio Study

Frequency



Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

95%

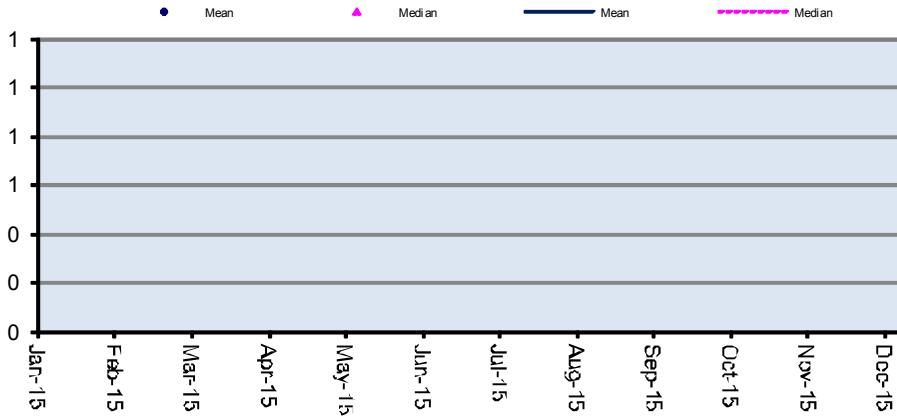
SD

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

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	03	36	000		2	Vernonia							

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	59			
Sales as a percentage of the Population	3.39 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	1,818,230	18.66 %	2,090,965	18.65 %
OSD RMV	1,938,000	19.89 %	1,938,000	17.28 %
Residential Improvement RMV	5,935,660	60.92 %	7,122,792	63.52 %
Farm Improvement RMV	51,490	0.53 %	61,788	0.55 %
SelectedRatioFromSales	87			
RMV Adjustment	100			
Before Ratio	87			
Overall Adjustment Factor	115			
Land Adjustment Factor	115			
OSD Adjustment Factor	100			
Residential Adjustment Factor	120			
Farm Improvement Factor	120			
After Ratio	100			
Selected Ratio	87	2016	Adjustment	115

Explanation

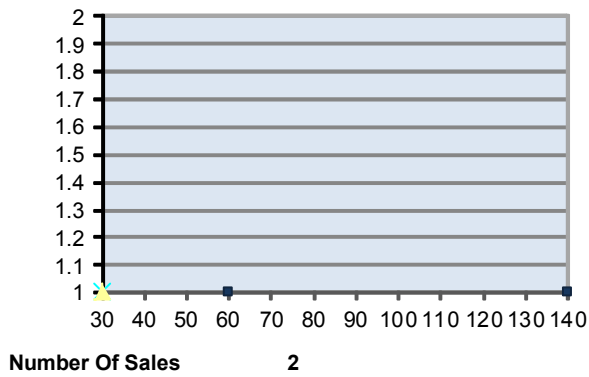
Improved land – Fishhawk Lake in Rural Vernonia.
 Too few sales are available for this study to arrive at a reliable conclusion. Therefore, the Selected Ratio of 87 from the MA 03 SA 31 RMV 401 analysis was applied here.

Performance History

	2016	2015	2014	2013	2012
COD	37.86	4.55	26.14	0.00	12.50
PRD	1.13	1.01	1.30	1.00	0.98

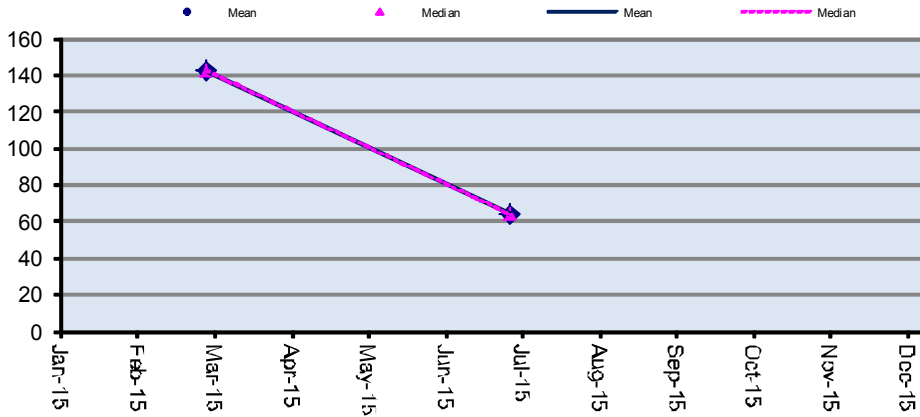
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	103	Wtd Mean	91
40	0	AD	39.00	GeoMean	96
50	0	COD	37.86	PRD	1.13
60	1	Mean	103	95% Confidence	76.44
70	0	SD	55.15		
80	0	COV	53.55		
90	0				
100	0				
110	0				
120	0				
130	0				
140	1				

Central Tendencies

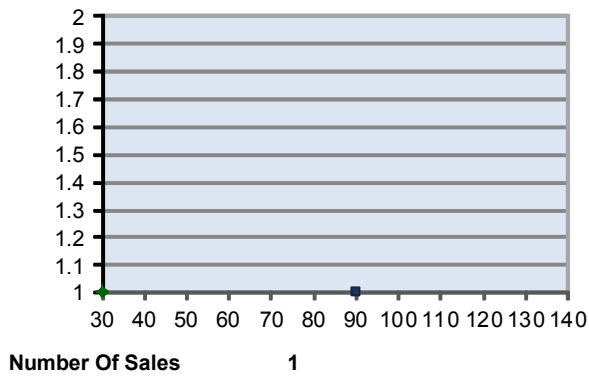


Month	Mean	Median	Sales
Mar-15	142	142	1
Jul-15	64	64	1

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	401	143	33	6N5W06-BC-00400	2015	6155	0.22	86,670	95,000	181,670	282,500	Jul-15	1	64
03	36	000	401	141	33	6N5W06-BC-01400	2015	2213	0.26	58,020	148,430	206,450	145,000	Mar-15	2	142

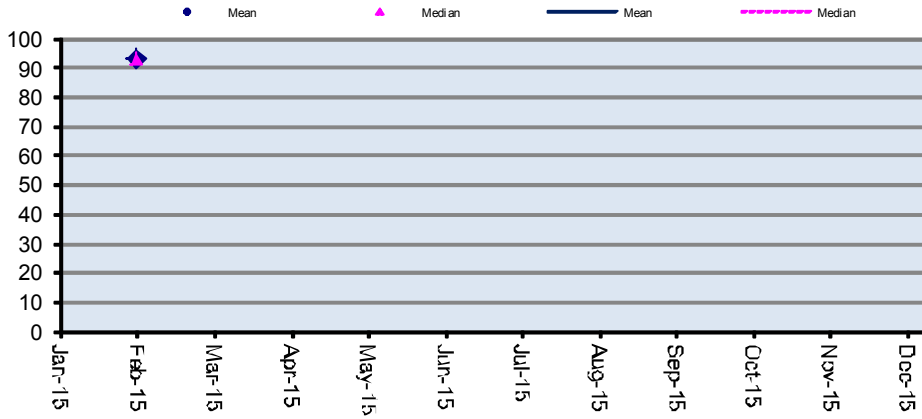
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	93	Wtd Mean	93
40	0	AD	0.00	GeoMean	93
50	0	COD	0.00	PRD	1.00
60	0	Mean	93	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	1.08		
90	1				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Feb-15	93	93	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	37	000	400		33	5N5W25-CD-00400	2015	1188	0.38	29,680	0	29,680	32,000	Feb-15	1	93

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	16			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	571,420	21.58 %	657,133	21.68 %
OSD RMV	594,000	22.43 %	594,000	19.60 %
Residential Improvement RMV	1,465,920	55.35 %	1,759,104	58.04 %
Farm Improvement RMV	16,990	0.64 %	20,388	0.67 %
SelectedRatioFromSales	87			
RMV Adjustment	100			
Before Ratio	87			
Overall Adjustment Factor	115			
Land Adjustment Factor	115			
OSD Adjustment Factor	100			
Residential Adjustment Factor	120			
Farm Improvement Factor	120			
After Ratio	100			
Selected Ratio	87	2016	Adjustment	115

Explanation

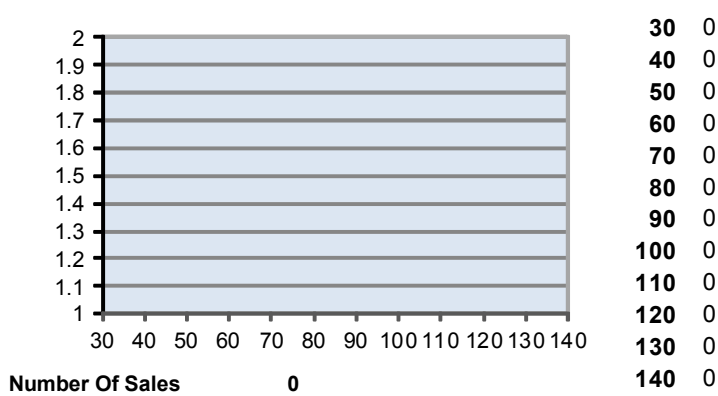
Improved land – Berndts Creek in Rural Vernonia.
Having no sales available to study, the Selected Ratio of 87 from the MA 03 SA 31 RMV 401 analysis was applied here.

Performance History

	2016	2015	2014	2013	2012
COD		-	0.00	-	17.53
PRD		-	1.00	-	1.06

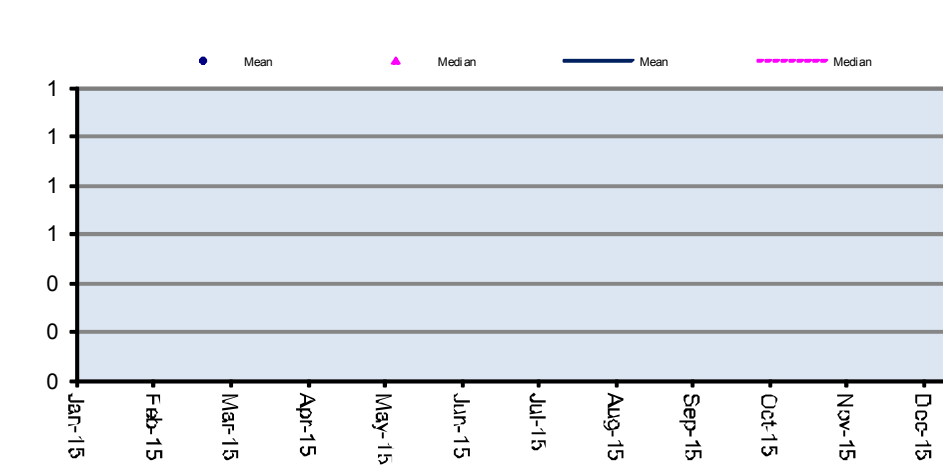
COLUMBIA County 2016 Ratio Study

Frequency



- 30 0 Median
 - 40 0 AD
 - 50 0 COD
 - 60 0 Mean
 - 70 0 SD
 - 80 0 COV
 - 90 0
 - 100 0
 - 110 0
 - 120 0
 - 130 0
 - 140 0
- 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 2016 Ratio Study

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

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	6			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	274,680	25.79 %	315,882	34.01 %
OSD RMV	297,000	27.88 %	297,000	31.98 %
Residential Improvement RMV	433,320	40.68 %	277,325	29.86 %
Farm Improvement RMV	60,210	5.65 %	38,534	4.15 %
SelectedRatioFromSales	115			
RMV Adjustment	100			
Before Ratio	115			
Overall Adjustment Factor	87			
Land Adjustment Factor	115			
OSD Adjustment Factor	100			
Residential Adjustment Factor	64			
Farm Improvement Factor	64			
After Ratio	100			
Selected Ratio	115	2016	Adjustment	87

Explanation

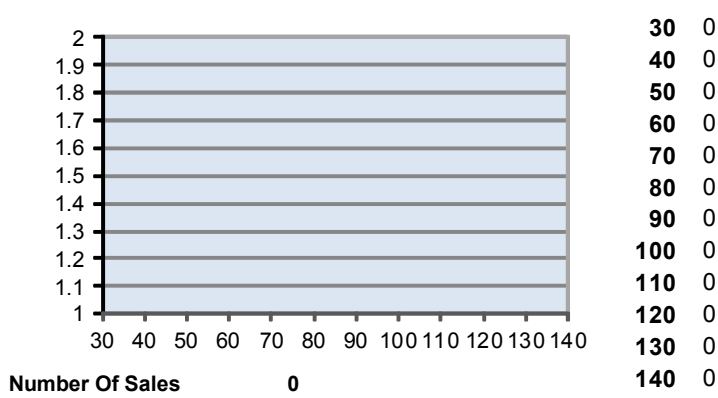
Improved land – Berndts Creek, Manufactured Structures in Rural Vernonia.
 Due to having no sales to analyze for this population of six accounts, the Selected Ratio of 115 from the MA 03 SA 31 RMV 409 analysis was used here.

Performance History

	2016	2015	2014	2013	2012
COD		-	0.00	-	17.53
PRD		-	1.00	-	1.06

COLUMBIA County 2016 Ratio Study

Frequency



Median

Wtd Mean

AD

GeoMean

COD

PRD

Mean

95%

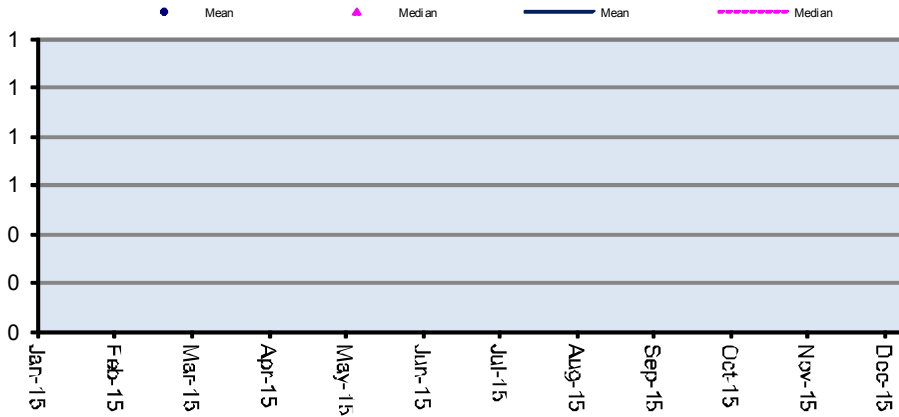
SD

Confidence

COV

Central Tendencies

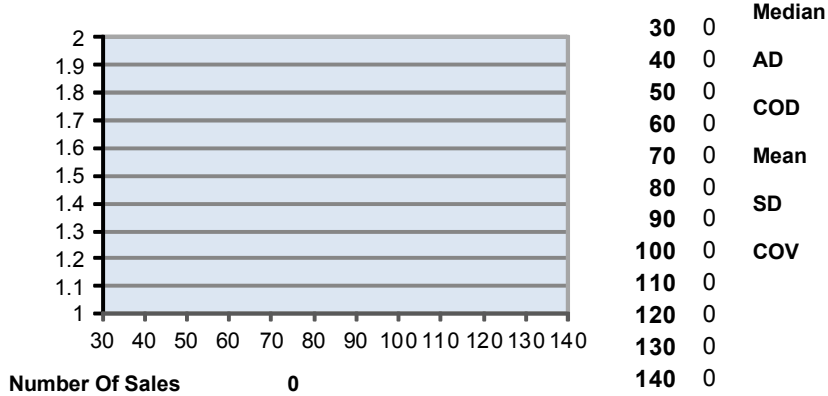
Month Mean Median Sales



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

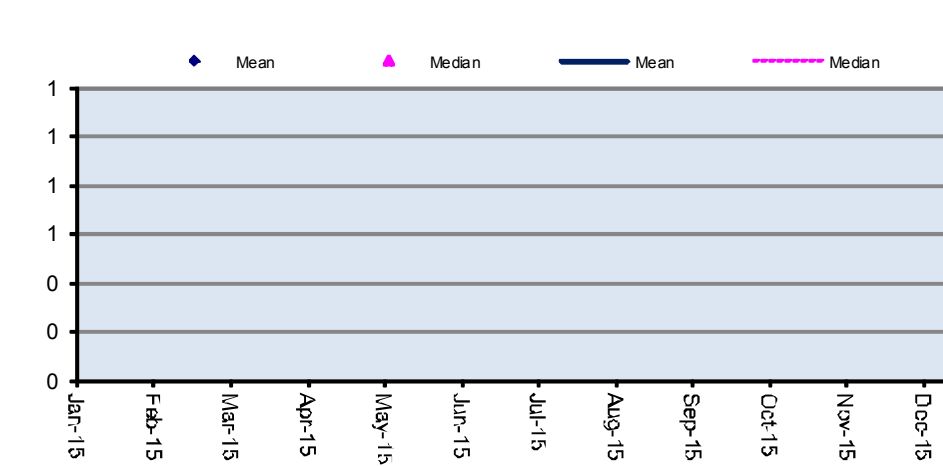
COLUMBIA County 2016 Ratio Study

Frequency



- 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	PRP CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

MAINTENANCE AREA 4

RESIDENTIAL RAINIER

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	04	00	000		1	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED		
Population - Number of Accounts	157			
Sales as a percentage of the Population	0.64 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	7,348,690	100.00 %	7,569,151	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	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

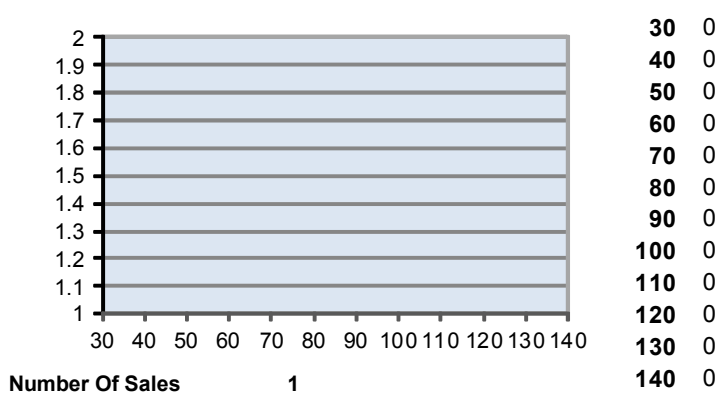
Unimproved land, City of Rainier.
 Not having an adequate number of sales available for this study , the Selected Ratio of 97 from the MA 04 RMV 101, SA 00 analysis was applied here.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	0.00	-	-	0.00
PRD	1.00	1.00	-	-	1.00

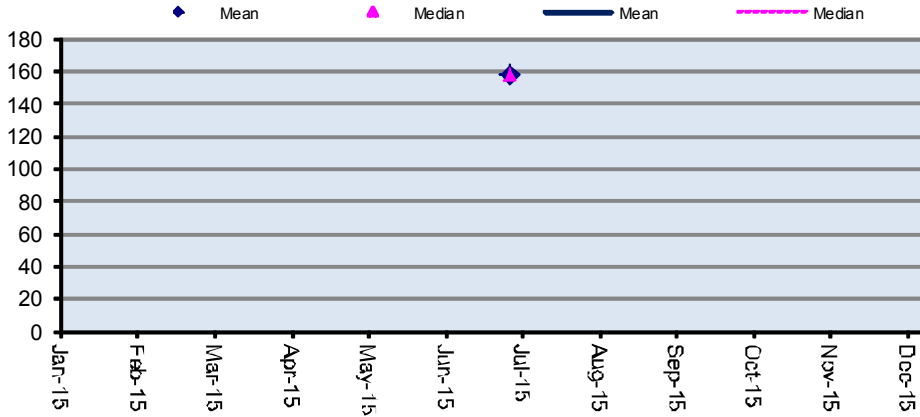
COLUMBIA County 2016 Ratio Study

Frequency



Median	158	Wtd Mean	158
AD	0.00	GeoMean	158
COD	0.00	PRD	1.00
Mean	158	95% Confidence	1.96
SD	1.00		
COV	0.63		

Central Tendencies



Month	Mean	Median	Sales
Jul-15	158	158	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	100		30	7N2W16-DC-07500	2015	5745	0.13	22,150	0	22,150	14,000	Jul-15	1	158

COLUMBIA County 2016 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		18	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	18	RECALCULATED		
Population - Number of Accounts	617			
Sales as a percentage of the Population	2.92 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	25,497,080	29.59 %	26,261,992	29.67 %
OSD RMV	7,994,500	9.28 %	7,994,500	9.03 %
Residential Improvement RMV	52,141,920	60.50 %	53,706,178	60.67 %
Farm Improvement RMV	548,490	0.64 %	564,945	0.64 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	103			
Farm Improvement Factor	103			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

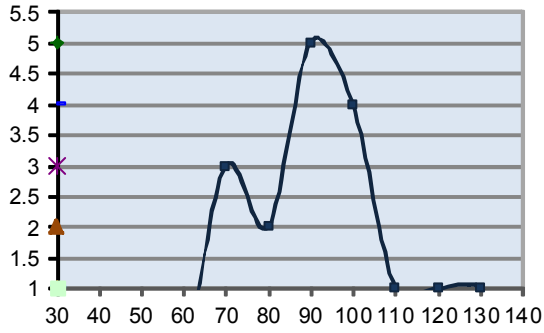
Improved property, City of Rainier.
 Selected the Median of 98. The time adjustment of 99 was applied returning a Selected Ratio Adjustment of 97.

Performance History

	2016	2015	2014	2013	2012
COD	15.48	12.86	14.46	14.01	12.32
PRD	1.05	1.00	1.01	1.01	1.03

COLUMBIA County 2016 Ratio Study

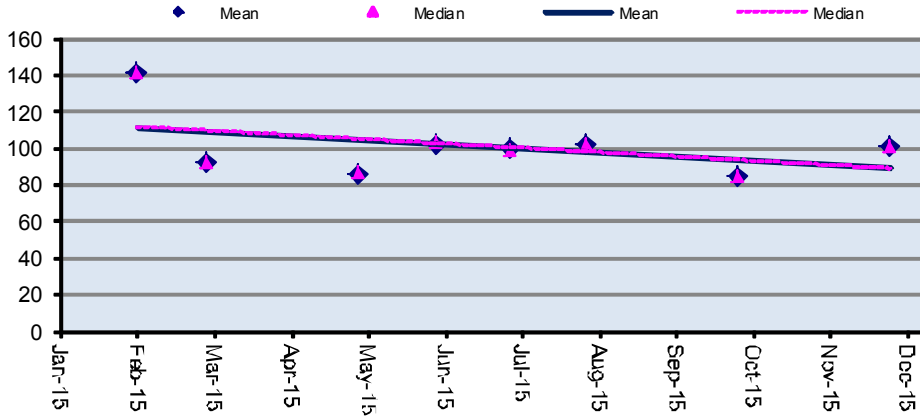
Frequency



30	0	Median	98	Wtd Mean	97
40	0	AD	15.17	GeoMean	100
50	0	COD	15.48	PRD	1.05
60	0	Mean	102	95% Confidence	9.87
70	3	SD	21.37		
80	2	COV	20.95		
90	5				
100	4				
110	1				
120	1				
130	1				
140	0				

Number Of Sales **18**

Central Tendencies



Month	Mean	Median	Sales
Feb-15	141	141	2
Mar-15	92	92	1
May-15	86	87	2
Jun-15	102	103	2
Jul-15	100	99	4
Aug-15	102	102	4
Oct-15	85	85	2
Dec-15	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
04	00	000	101	132	33	7N2W17-DA-01804	2015	3490	0.17	41,940	101,460	143,400	190,000	May-15	1	75
04	00	000	101	142	33	7N2W16-CC-00900	2015	6513	1.96	59,220	134,020	193,240	248,000	Jul-15	2	78
04	00	000	101	132	33	7N2W17-C0-01700	2015	9144	1.90	47,710	131,200	178,910	230,000	Oct-15	3	78
04	00	000	101	131	33	7N2W16-DC-00700	2015	5954	0.13	52,580	73,370	125,950	148,800	Jul-15	4	85
04	00	000	101	143	33	7N2W17-C0-02000	2015	6676	1.76	56,070	125,430	181,500	210,000	Aug-15	5	86
04	00	000	101	143	33	7N2W16-CC-00305	2015	2225	0.21	59,080	99,360	158,440	172,900	Mar-15	6	92
04	00	000	101	132	33	7N2W16-BC-03400	2015	8852	0.11	52,130	103,940	156,070	169,900	Oct-15	7	92
04	00	000	101	135	33	7N2W17-AD-04800	2015	3651	0.23	60,390	91,850	152,240	155,000	May-15	8	98
04	00	000	101	131	33	7N2W16-CD-02900	2015	4382	0.22	60,400	62,100	122,500	125,000	Jun-15	9	98
04	00	000	101	141	33	7N2W17-DB-01500	2015	5792	0.93	118,110	108,140	226,250	229,000	Jul-15	10	99
04	00	000	101	135	33	7N2W16-DC-01800	2015	7416	0.18	58,670	71,630	130,300	129,000	Aug-15	11	101
04	00	000	101	141	33	7N2W16-DB-11001	2015	10682	0.16	53,880	123,680	177,560	175,000	Dec-15	12	101
04	00	000	101	145	33	7N2W16-BB-02500	2015	7893	0.06	34,270	107,200	141,470	139,000	Aug-15	13	102
04	00	000	101	132	33	7N2W16-BC-06800	2015	4960	0.14	59,450	122,280	181,730	170,000	Jun-15	14	107
04	00	000	101	142	33	7N2W16-DA-05500	2015	7471	0.15	54,970	130,970	185,940	159,000	Aug-15	15	117
04	00	000	101	153	30	7N2W17-DB-02200	2015	1227	1.17	41,480	223,510	264,990	215,000	Feb-15	16	123
04	00	000	101	131	33	7N2W16-BC-06700	2015	6648	0.14	54,020	61,810	115,830	85,000	Jul-15	17	136
04	00	000	101	131	33	7N2W16-DC-09100	2015	1088	0.18	53,270	50,260	103,530	65,000	Feb-15	18	159

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
102	04	00	000		0	Rainier							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	4			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	855,660	100.00 %	881,330	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	103			
Farm Improvement Factor	103			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

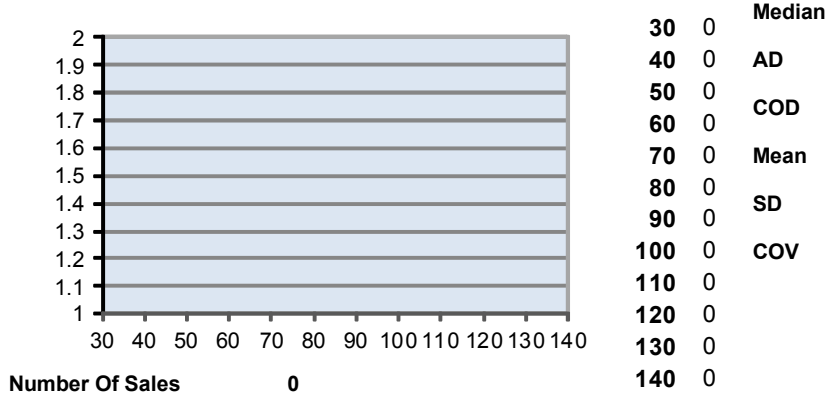
Improved land – Condominium, City of Rainier.
 No sales are available for this study. Therefore the MA 04 SA 00 RMV 101 study was used with a Selected Ratio of 97.

Performance History

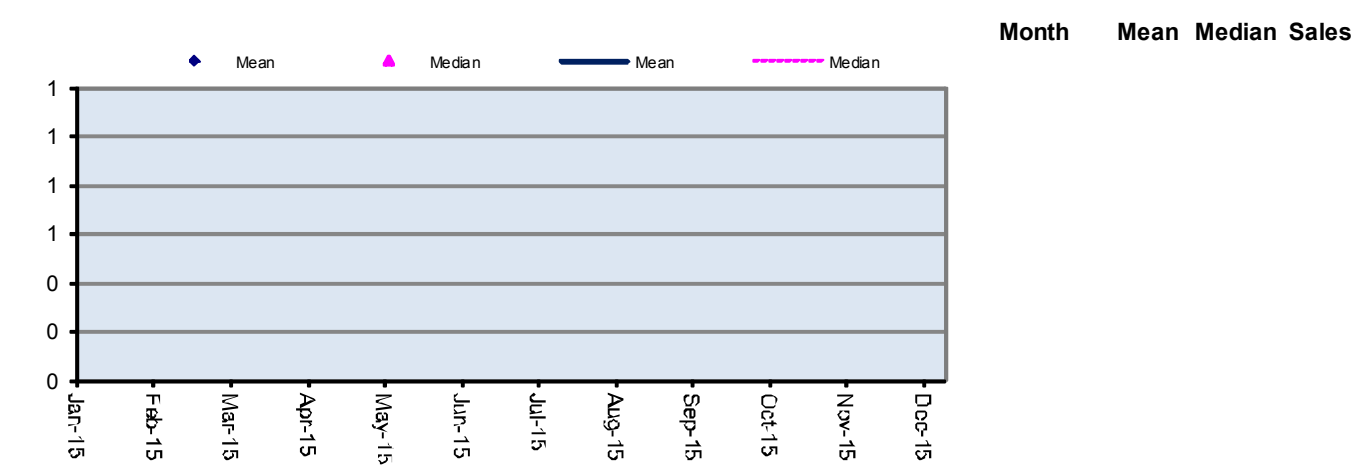
	2016	2015	2014	2013	2012
COD	-	-	-	14.01	12.32
PRD	-	-	-	1.01	1.03

COLUMBIA County 2016 Ratio Study

Frequency



Central Tendencies



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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
		CLS											

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	04	00	000		4	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	4	RECALCULATED		
Population - Number of Accounts	94			
Sales as a percentage of the Population	4.26 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	3,699,400	33.00 %	3,810,382	39.95 %
OSD RMV	1,146,000	10.22 %	1,146,000	12.01 %
Residential Improvement RMV	6,194,190	55.26 %	4,459,817	46.75 %
Farm Improvement RMV	170,250	1.52 %	122,580	1.29 %
SelectedRatioFromSales	117			
RMV Adjustment	100			
Before Ratio	117			
Overall Adjustment Factor	85			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	72			
Farm Improvement Factor	72			
After Ratio	100			
Selected Ratio	117	2016	Adjustment	85

Explanation

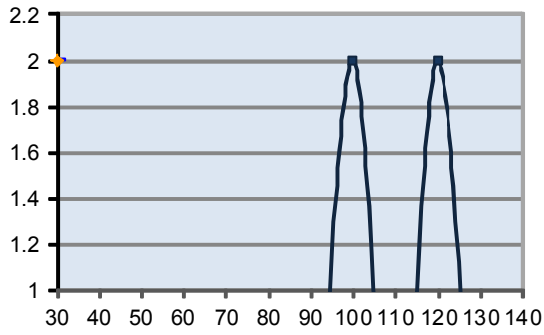
Improved land – Manufactured Structure, City of Rainier.
 Selected the Median of 118 and applied the time adjustment of 99 to it. The result is a Selected Ratio of 117.

Performance History

	2016	2015	2014	2013	2012
COD	8.05	12.86	14.46	14.01	12.32
PRD	0.99	1.00	1.01	1.01	1.03

COLUMBIA County 2016 Ratio Study

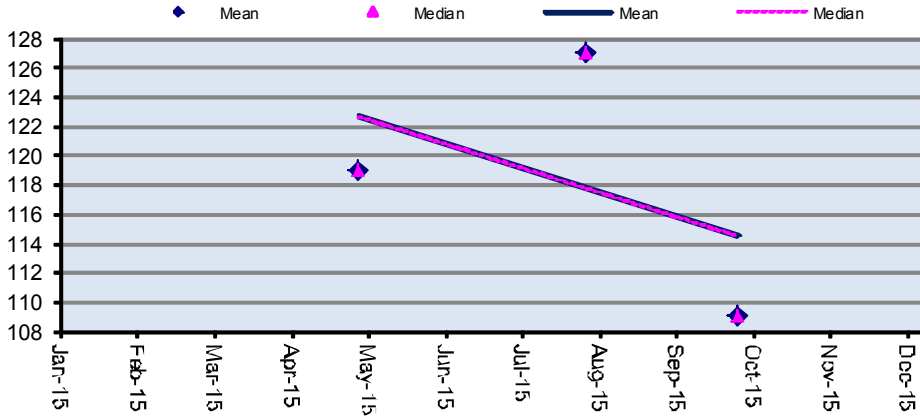
Frequency



30	0	Median	118	Wtd Mean	119
40	0	AD	9.50	GeoMean	118
50	0	COD	8.05	PRD	0.99
60	0	Mean	118	95% Confidence	10.79
70	0	SD	11.02		
80	0	COV	9.33		
90	0				
100	2				
110	0				
120	2				
130	0				
140	0				

Number Of Sales **4**

Central Tendencies



Month	Mean	Median	Sales
May-15	119	119	2
Aug-15	127	127	1
Oct-15	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	00	000	109	452	33	7N2W17-BC-00101	2015	3863	0.52	76,430	84,500	160,930	148,000	May-15	1	109
04	00	000	109	462	33	7N2W17-AD-03200	2015	8647	0.12	49,120	68,490	117,610	108,000	Oct-15	2	109
04	00	000	109	452	33	7N2W17-BD-04000	2015	7339	1.14	53,660	174,380	228,040	179,900	Aug-15	3	127
04	00	000	109	452	33	7N2W17-DA-01003	2015	3444	0.45	71,370	95,540	166,910	129,500	May-15	4	129

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
101	04	40	000		1	Rainier							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	1			
Population - Number of Accounts	24			
Sales as a percentage of the Population	4.17 %			
Prior Year Population Values				
Land RMV	1,125,320	28.16 %	1,159,080	28.09 %
OSD RMV	449,500	11.25 %	449,500	10.89 %
Residential Improvement RMV	2,394,880	59.93 %	2,490,675	60.35 %
Farm Improvement RMV	26,500	0.66 %	27,560	0.67 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	104			
Farm Improvement Factor	104			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

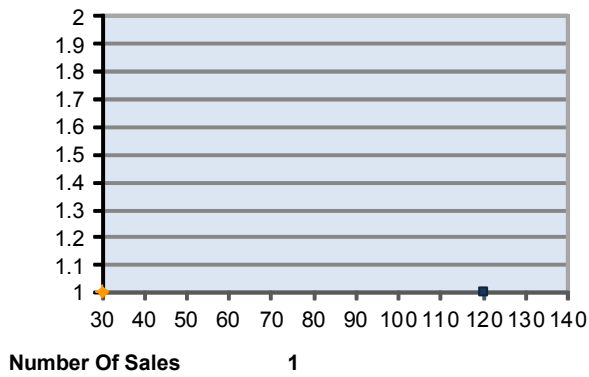
Improved land – Duplex/Triplex/Fourplex, City of Rainier
 With having only one sale available for this analysis, it was decided to use the Selected Ratio of 97 from the MA 04 RMV 101, SA 00 study.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	-	-	-	-
PRD	1.00	-	-	-	-

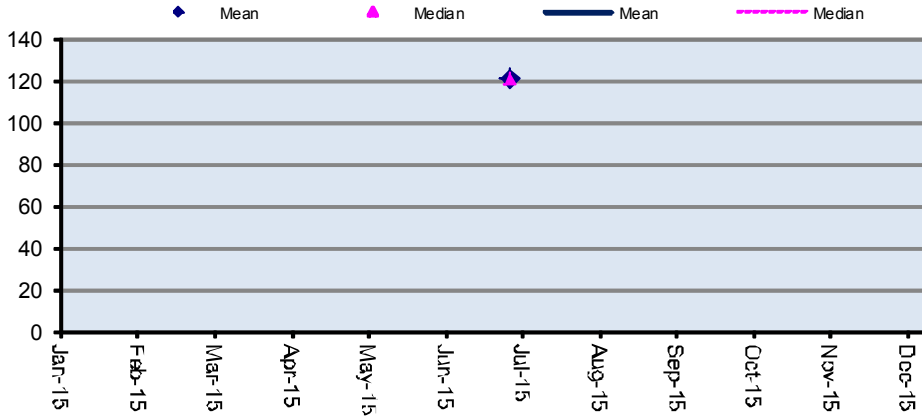
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	121	Wtd Mean	121
40	0	AD	0.00	GeoMean	121
50	0	COD	0.00	PRD	1.00
60	0	Mean	121	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	0.83		
90	0				
100	0				
110	0				
120	1				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Jul-15	121	121	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	40	000	101	142	33	7N2W21-A0-00301	2015	6393	1.30	140,130	203,290	343,420	283,000	Jul-15	1	121

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	10			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	385,240	100.00 %	385,240	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	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

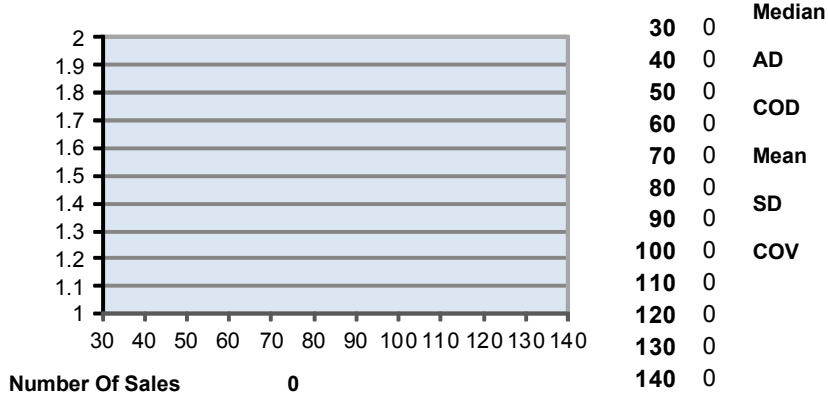
Unimproved land – Riverview Drive & Maple Drive, City of Rainier.
 The Selected Ratio of 97 from the MA 04 SA 00 RMV 100 study since there were no sales available for this study.

Performance History

	2016	2015	2014	2013	2012
COD		0.00	-	-	0.00
PRD		1.00	-	-	1.00

COLUMBIA County 2016 Ratio Study

Frequency



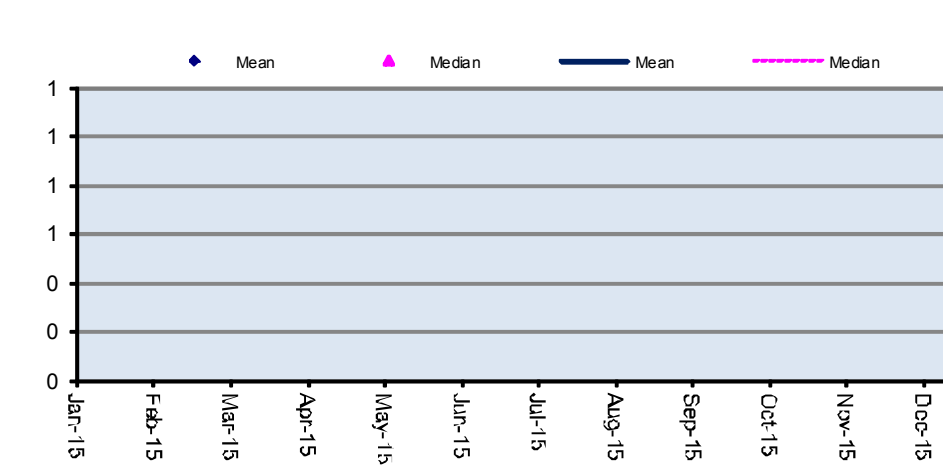
Wtd Mean

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 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
101	04	46	000		0	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	34			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	1,745,050	22.31 %	1,797,402	22.35 %
OSD RMV	483,000	6.17 %	483,000	6.00 %
Residential Improvement RMV	5,556,430	71.02 %	5,723,123	71.15 %
Farm Improvement RMV	38,810	0.50 %	39,974	0.50 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	103			
Farm Improvement Factor	103			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

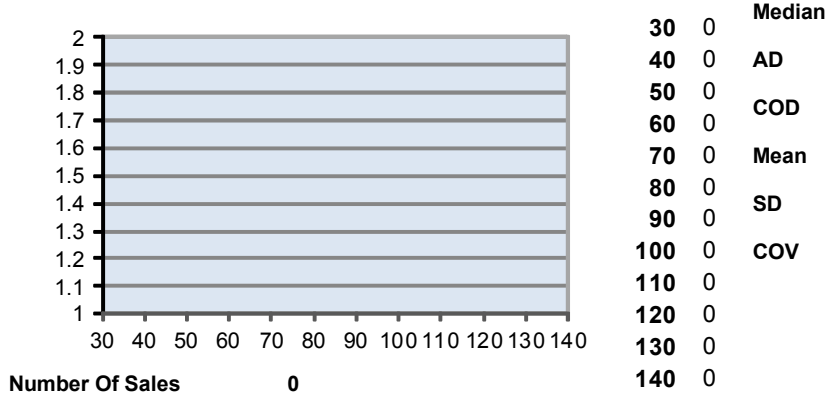
Improved land – Riverview Drive & Maple Drive, City of Rainier.
 Because there are no sales available for this study it was decided to use the Selected Ratio of 97 from the MA 04 SA 00 RMV 101 analysis.

Performance History

	2016	2015	2014	2013	2012
COD		12.86	14.46	14.01	12.32
PRD		1.00	1.01	1.01	1.03

COLUMBIA County 2016 Ratio Study

Frequency



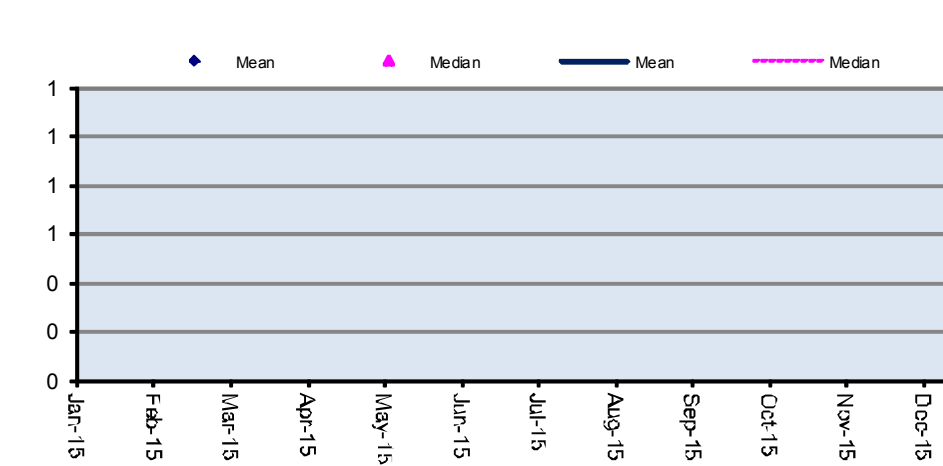
Wtd Mean

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 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	04	47	000		2	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	8			
Sales as a percentage of the Population	25.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	205,470	100.00 %	211,634	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	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

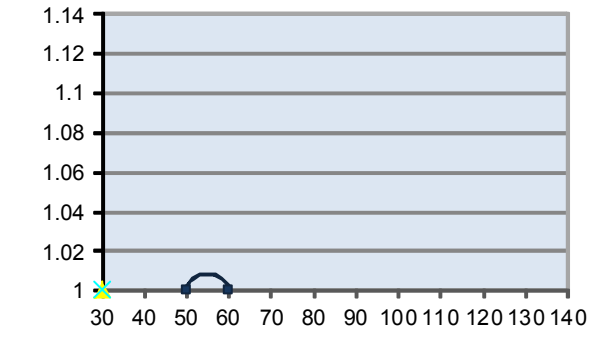
Unimproved land – Rainier Riverfront Estates, City of Rainier.
 The sales available are not adequate for this analysis. It was decided to use the Selected Ratio of 97 from the MA 04 SA 00 RMV 100 study.

Performance History

	2016	2015	2014	2013	2012
COD	7.50	-	1.79	-	-
PRD	0.98	-	0.99	-	-

COLUMBIA County 2016 Ratio Study

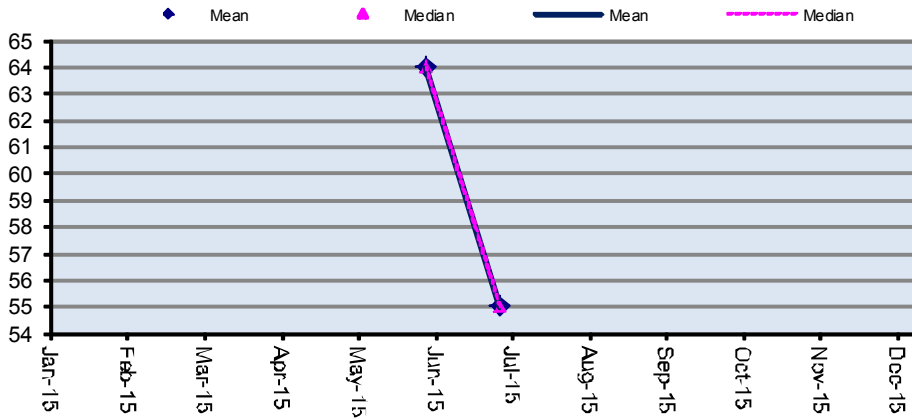
Frequency



30	0	Median	60	Wtd Mean	61
40	0	AD	4.50	GeoMean	60
50	1	COD	7.50	PRD	0.98
60	1	Mean	60	95% Confidence	8.87
70	0	SD	6.40		
80	0	COV	10.67		
90	0				
100	0				
110	0				
120	0				
130	0				
140	0				

Number Of Sales 2

Central Tendencies



Month	Mean	Median	Sales
Jun-15	64	64	1
Jul-15	55	55	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	47	000	100	141	33	7N2W16-BB-03113	2015	6434	0.18	49,920	0	49,920	90,000	Jul-15	1	55
04	47	000	100	000	33	7N2W16-BB-03109	2015	4316	0.24	96,590	0	96,590	150,000	Jun-15	2	64

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
101	04	47	000		2	Rainier							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	2			
Population - Number of Accounts	42			
Sales as a percentage of the Population	4.76 %			
Prior Year Population Values				
Land RMV	1,406,030	17.97 %	1,448,211	18.01 %
OSD RMV	630,000	8.05 %	630,000	7.84 %
Residential Improvement RMV	5,788,940	73.98 %	5,962,608	74.15 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	103			
Farm Improvement Factor	103			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

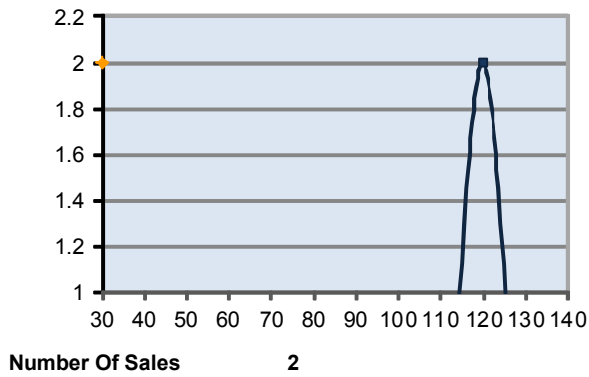
Improved land – Rainier Riverfront Estates, City of Rainier.
 With too few sales available, the Selected Ratio of 97 from the MA 04 SA 00 RMV 101 study was applied here.

Performance History

	2016	2015	2014	2013	2012
COD	1.61	0.00	1.79	14.01	3.19
PRD	1.00	1.00	0.99	1.01	1.00

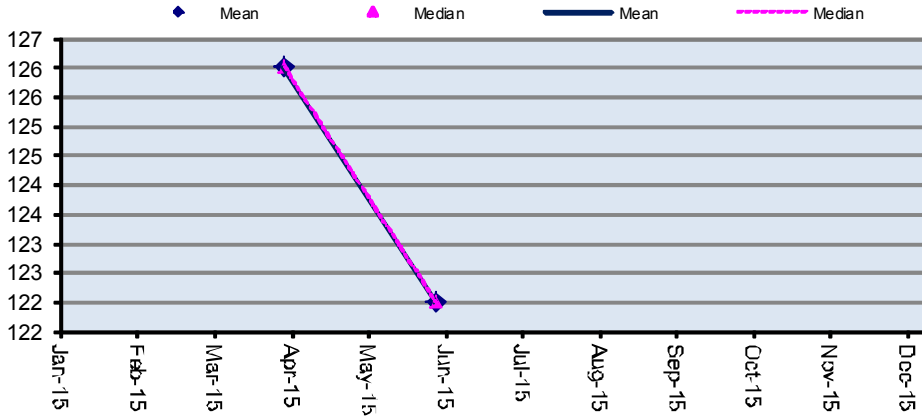
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	124	Wtd Mean	124
40	0	AD	2.00	GeoMean	124
50	0	COD	1.61	PRD	1.00
60	0	Mean	124	95% Confidence	3.92
70	0	SD	2.83		
80	0	COV	2.28		
90	0				
100	0				
110	0				
120	2				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Apr-15	126	126	1
Jun-15	122	122	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	47	000	101	143	33	7N2W16-BB-02100	2015	4323	0.06	35,620	127,740	163,360	134,000	Jun-15	1	122
04	47	000	101	143	33	7N2W16-BB-01700	2015	2561	0.06	34,270	144,740	179,010	142,000	Apr-15	2	126

COLUMBIA County 2016 Ratio Study

RMV																				
Class	MA	SA	NH	Year	# of	Location		RMV	Class	MA	SA	NH	Year	# of	Location					
400	04	41	000		0	Rainier		400	04	42	000		2		Rainier					

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	616			
Sales as a percentage of the Population	0.32 %	Pre-Trend	Post Trend	Post Trend
Prior Year Population Values		Brkdwn	Values	Brkdwn
Land RMV	101,541,650	100.00 %	94,433,735	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	107			
RMV Adjustment	100			
Before Ratio	107			
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	107	2016	Adjustment	93

Explanation

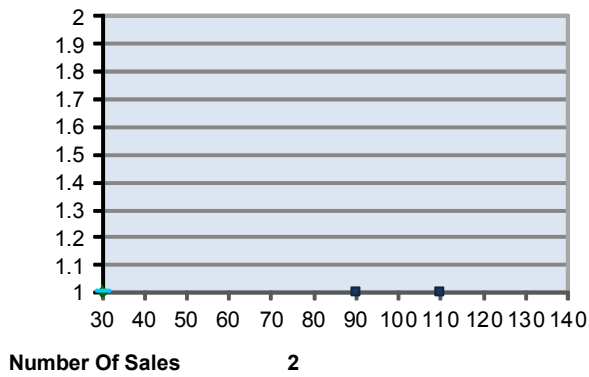
Unimproved land – Rural Rainier
 There are too few sales available for this analysis. Therefore the Selected Ratio of 107 from the MA 04 SA 41 & 42 RMV 401 study was applied here.

Performance History

	2016	2015	2014	2013	2012
COD	11.76	0.00	0.00	18.50	-
PRD	1.00	1.00	1.00	1.02	-

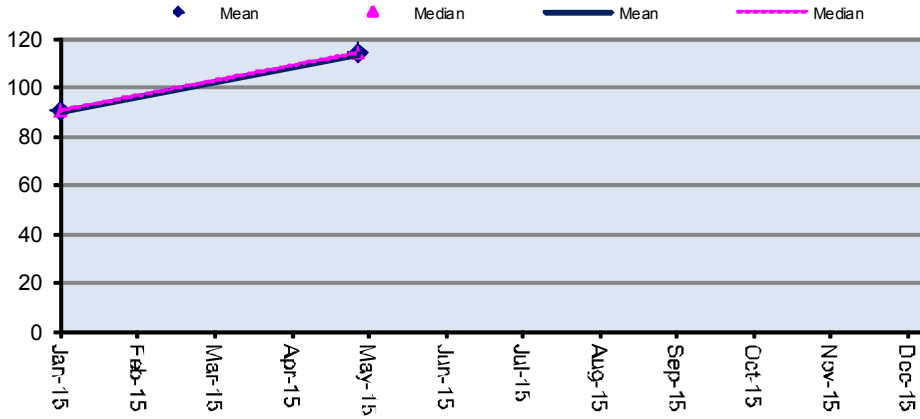
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	102	Wtd Mean	102
40	0	AD	12.00	GeoMean	101
50	0	COD	11.76	PRD	1.00
60	0	Mean	102	95% Confidence	23.52
70	0	SD	16.97		
80	0	COV	16.64		
90	1				
100	0				
110	1				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Jan-15	90	90	1
May-15	114	114	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	400		33	6N2W15-AB-00203	2015	492	3.85	58,650	0	58,650	65,000	Jan-15	1	90
04	42	000	400		33	6N2W12-00-00402	2015	3380	8.12	69,450	0	69,450	61,000	May-15	2	114

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
401	04	41	000		5	Rainier	401	04	42	000		11	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	16	RECALCULATED		
Population - Number of Accounts	1,225			
Sales as a percentage of the Population	1.31 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	109,780,558	38.83 %	102,095,919	38.77 %
OSD RMV	45,157,080	15.97 %	45,157,080	17.15 %
Residential Improvement RMV	108,719,920	38.45 %	98,935,127	37.57 %
Farm Improvement RMV	19,090,490	6.75 %	17,181,441	6.52 %
SelectedRatioFromSales	107			
RMV Adjustment	100			
Before Ratio	107			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	100			
Residential Adjustment Factor	91			
Farm Improvement Factor	91			
After Ratio	100			
Selected Ratio	107	2016	Adjustment	93

Explanation

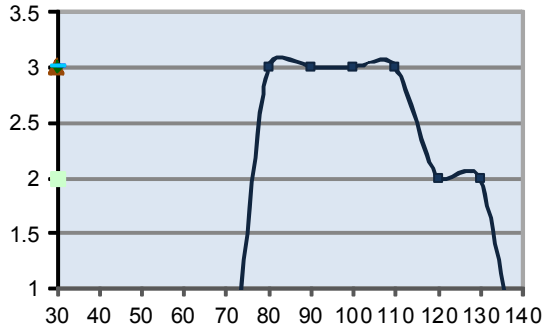
Improved land – Rural Rainier.
 Selected the Median of 106 which is bracketed by the Mean (105) and the Weighted Mean (107). After applying the time adjustment of 101, the Selected Ratio is 107.

Performance History

	2016	2015	2014	2013	2012
COD	13.27	13.75	11.26	6.25	14.81
PRD	0.98	0.98	0.99	1.02	1.01

COLUMBIA County 2016 Ratio Study

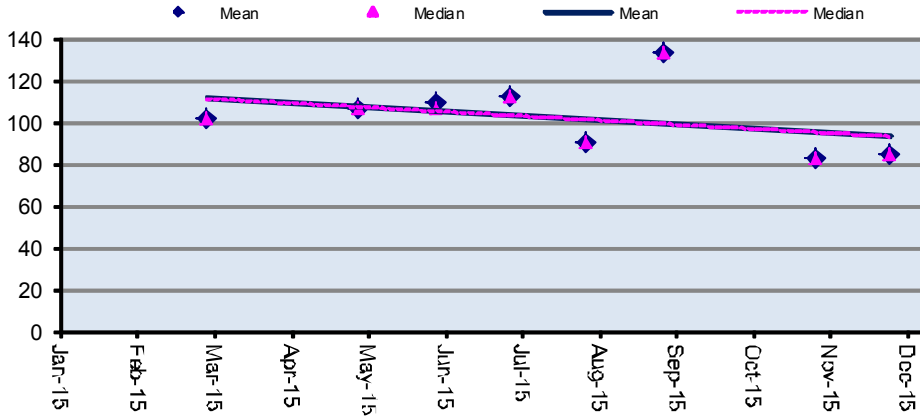
Frequency



30	0	Median	106	Wtd Mean	107
40	0	AD	14.06	GeoMean	104
50	0	COD	13.27	PRD	0.98
60	0	Mean	105	95% Confidence	8.45
70	0	SD	17.25		
80	3	COV	16.43		
90	3				
100	3				
110	3				
120	2				
130	2				
140	0				

Number Of Sales **16**

Central Tendencies



Month	Mean	Median	Sales
Mar-15	102	102	2
May-15	106	106	1
Jun-15	109	106	7
Jul-15	112	112	2
Aug-15	90	90	1
Sep-15	133	133	1
Nov-15	83	83	1
Dec-15	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	42	000	401	131	33	6N2W16-B0-00102	2015	1944	5.01	108,090	133,600	241,690	292,000	Mar-15	1	83
04	41	000	401	142	33	7N2W28-BB-00701	2015	10037	1.00	62,750	148,240	210,990	255,000	Nov-15	2	83
04	42	000	401	131	33	6N2W21-A0-01300	2015	10052	4.68	105,130	62,680	167,810	200,000	Dec-15	3	84
04	41	000	401	141	33	7N2W19-A0-00500	2015	5275	4.32	101,880	136,410	238,290	265,000	Jun-15	4	90
04	42	000	401	141	33	6N2W16-C0-00200	2015	6694	6.87	123,970	173,410	297,380	332,000	Aug-15	5	90
04	41	000	401	141	33	7N2W17-BD-03900	2015	5236	1.66	83,690	170,550	254,240	276,000	Jun-15	6	92
04	42	000	401	141	33	6N2W33-00-00800	2015	5219	7.30	127,700	137,840	265,540	255,000	Jun-15	7	104
04	41	000	401	142	30	7N3W14-A0-00100	2015	3992	3.20	90,600	228,210	318,810	300,000	May-15	8	106
04	42	000	401	142	30	6N2W03-00-01404	2015	5355	5.00	116,090	172,550	288,640	270,000	Jun-15	9	107
04	41	000	401	141	33	7N2W17-C0-01100	2015	6262	3.69	89,520	149,640	239,160	216,900	Jul-15	10	110
04	42	000	401	142	33	7N2W33-C0-00400	2015	6015	10.00	147,000	173,780	320,780	286,750	Jun-15	11	112
04	42	000	401	142	33	6N2W33-00-01000	2015	6547	11.97	184,730	199,360	384,090	340,000	Jul-15	12	113
04	42	000	401	141	33	6N2W15-00-01000	2015	1606	8.10	134,670	111,690	246,360	204,900	Mar-15	13	120
04	42	000	401	141	33	6N3W14-00-00600	2015	4353	20.00	209,000	163,250	372,250	295,000	Jun-15	14	126
04	42	000	401	146	33	6N2W17-00-01200	2015	8186	27.88	252,790	324,930	577,720	435,000	Sep-15	15	133
04	42	000	401	141	33	6N2W03-00-01403	2015	4853	19.50	216,580	237,570	454,150	339,000	Jun-15	16	134

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
409	04	41	000		2	Rainier	409	04	42	000		3	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	5	RECALCULATED		
Population - Number of Accounts	367			
Sales as a percentage of the Population	1.36 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	28,338,400	39.27 %	26,354,712	39.26 %
OSD RMV	16,072,500	22.27 %	16,072,500	23.94 %
Residential Improvement RMV	21,969,030	30.44 %	19,552,437	29.13 %
Farm Improvement RMV	5,787,580	8.02 %	5,150,946	7.67 %
SelectedRatioFromSales	107			
RMV Adjustment	100			
Before Ratio	107			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	100			
Residential Adjustment Factor	89			
Farm Improvement Factor	89			
After Ratio	100			
Selected Ratio	107	2016	Adjustment	93

Explanation

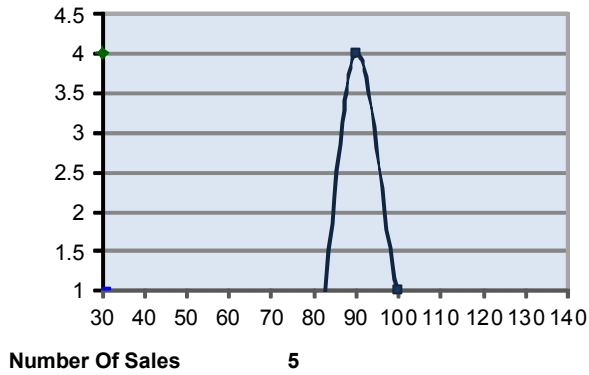
Improved land – Manufactured Structure, Rural Rainier.
 There are only 5 sales available out of this population of 367 accounts. Because of the low quantity of sales to analyze, it has been decided to use the Selected Ratio of 107 from the MA 04 SA 41 & 42 RMV 401 study.

Performance History

	2016	2015	2014	2013	2012
COD	3.58	13.75	11.26	6.25	14.81
PRD	1.00	0.98	0.99	1.02	1.01

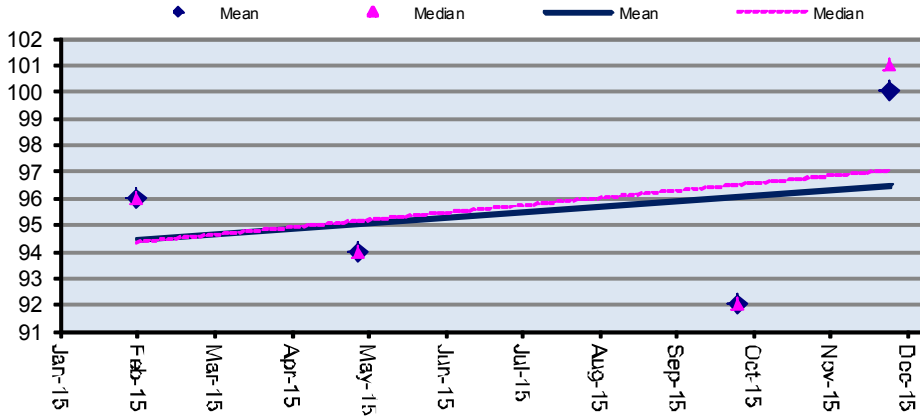
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	95	Wtd Mean	96
40	0	AD	3.40	GeoMean	96
50	0	COD	3.58	PRD	1.00
60	0	Mean	96	95% Confidence	4.82
70	0	SD	5.50		
80	0	COV	5.73		
90	4				
100	1				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Feb-15	96	96	1
May-15	94	94	1
Oct-15	92	92	1
Dec-15	100	101	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
04	41	000	409	462	33	7N2W17-C0-00900	2015	8926	3.71	100,010	108,020	208,030	225,000	Oct-15	1	92
04	41	000	409	452	33	7N2W21-AB-01600	2015	3920	1.00	62,750	53,230	115,980	124,000	May-15	2	94
04	42	000	409	462	33	6N2W15-AB-00101	2015	10234	4.58	104,230	175,860	280,090	295,000	Dec-15	3	95
04	42	000	409	452	33	6N2W10-00-00604	2015	1437	4.79	106,110	86,050	192,160	199,900	Feb-15	4	96
04	42	000	409	452	33	6N2W15-00-01100	2015	10482	3.43	93,020	96,880	189,900	180,000	Dec-15	5	106

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	04	44	000		1	Rainier							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	1			
Population - Number of Accounts	13			
Sales as a percentage of the Population	7.69 %			
Prior Year Population Values				
Land RMV	213,000	100.00 %	198,090	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	107			
RMV Adjustment	100			
Before Ratio	107			
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	107	2016	Adjustment	93

Explanation

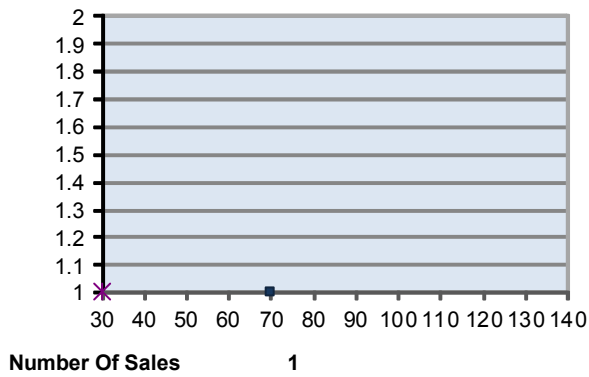
Unimproved land – Prescott
 Only one sale is available to study for the unimproved Prescott area. Because of this, it was decided to use the Selected Ratio of 107 from the MA 04 SA 41 & 42 RMV 400 study.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	-	0.00	18.50	-
PRD	1.00	-	1.00	1.02	-

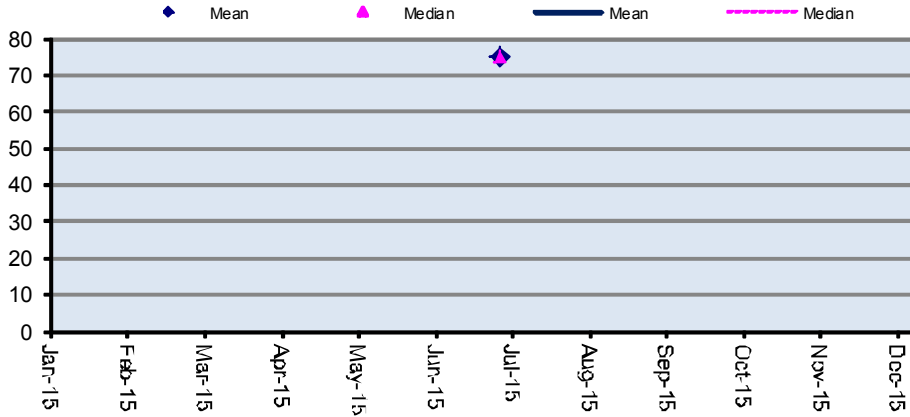
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	75	Wtd Mean	75
40	0	AD	0.00	GeoMean	75
50	0	COD	0.00	PRD	1.00
60	0	Mean	75	95% Confidence	1.96
70	1	SD	1.00		
80	0	COV	1.33		
90	0				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Jul-15	75	75	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	44	000	400		33	7N2W35-AD-02502	2015	6145	0.60	13,500	0	13,500	18,000	Jul-15	1	75

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
401	04	44	000		0	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	42			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	1,152,930	17.82 %	1,072,225	17.78 %
OSD RMV	1,349,000	20.85 %	1,349,000	22.36 %
Residential Improvement RMV	3,866,760	59.76 %	3,518,752	58.33 %
Farm Improvement RMV	101,330	1.57 %	92,210	1.53 %
SelectedRatioFromSales	107			
RMV Adjustment	100			
Before Ratio	107			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	100			
Residential Adjustment Factor	91			
Farm Improvement Factor	91			
After Ratio	100			
Selected Ratio	107	2016	Adjustment	93

Explanation

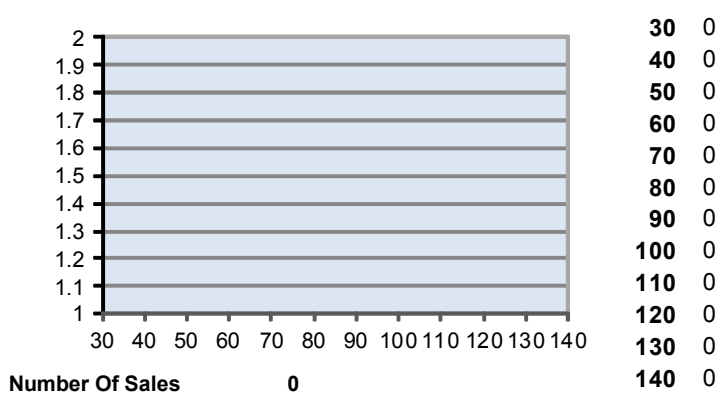
Improved land – Prescott
 With not having any sales to study for this analysis, the Selected Ratio of 107 was applied from the MA 04 SA 41 & 42 RMV 401 study.

Performance History

	2016	2015	2014	2013	2012
COD		0.00	11.26	6.25	14.81
PRD		1.00	0.99	1.02	1.01

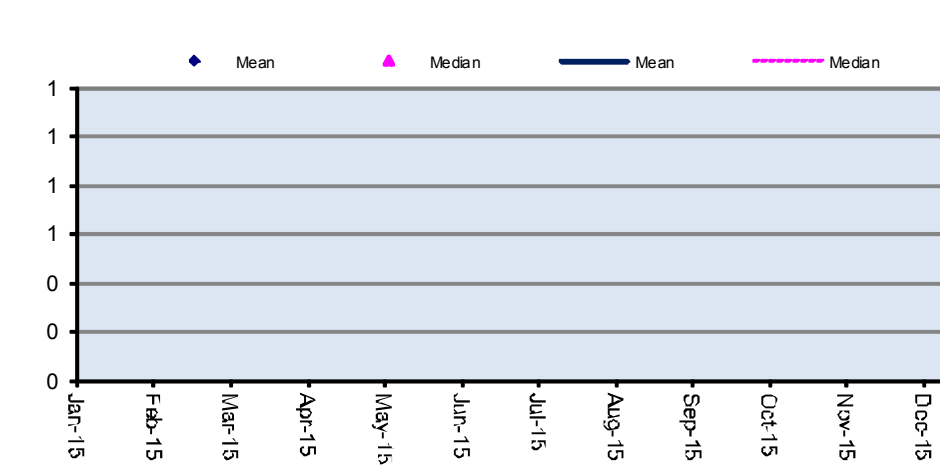
COLUMBIA County 2016 Ratio Study

Frequency



- 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	PRP 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 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	04	44	000		0	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	4			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	69,370	16.03 %	64,514	16.01 %
OSD RMV	114,000	26.35 %	114,000	28.30 %
Residential Improvement RMV	246,870	57.06 %	222,183	55.15 %
Farm Improvement RMV	2,420	0.56 %	2,178	0.54 %
SelectedRatioFromSales	107			
RMV Adjustment	100			
Before Ratio	107			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	100			
Residential Adjustment Factor	90			
Farm Improvement Factor	90			
After Ratio	100			
Selected Ratio	107	2016	Adjustment	93

Explanation

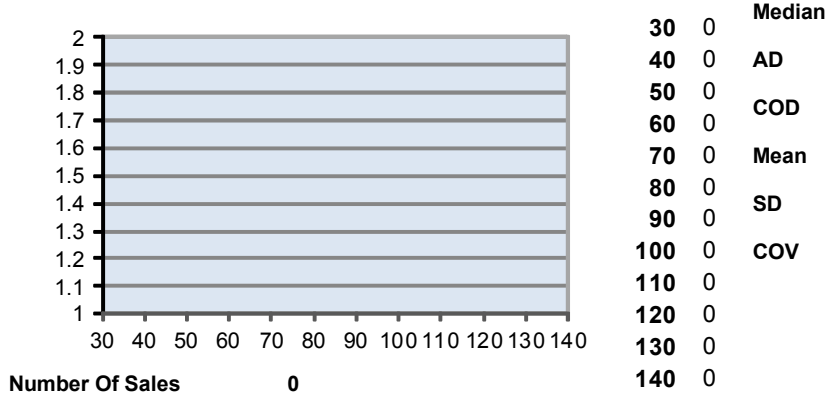
Improved land – Manufactured Structure, Prescott
 The Selected Ratio of 107 was applied from the MA 04 SA 41 & 42 RMV 409 study due to not having any sales information available for this analysis.

Performance History

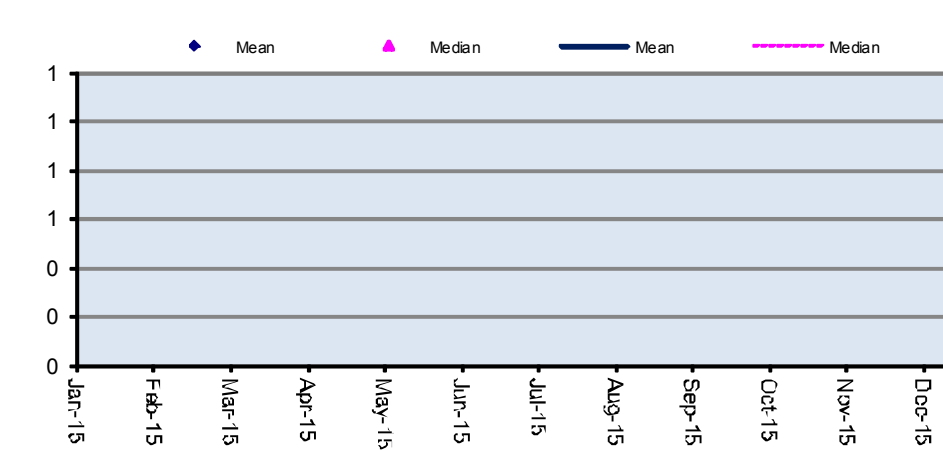
	2016	2015	2014	2013	2012
COD		0.00	11.26	6.25	14.81
PRD		1.00	0.99	1.02	1.01

COLUMBIA County 2016 Ratio Study

Frequency



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 2016 Ratio Study

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

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	1,665,330	100.00 %	1,548,757	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	107			
RMV Adjustment	100			
Before Ratio	107			
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	107	2016	Adjustment	93

Explanation

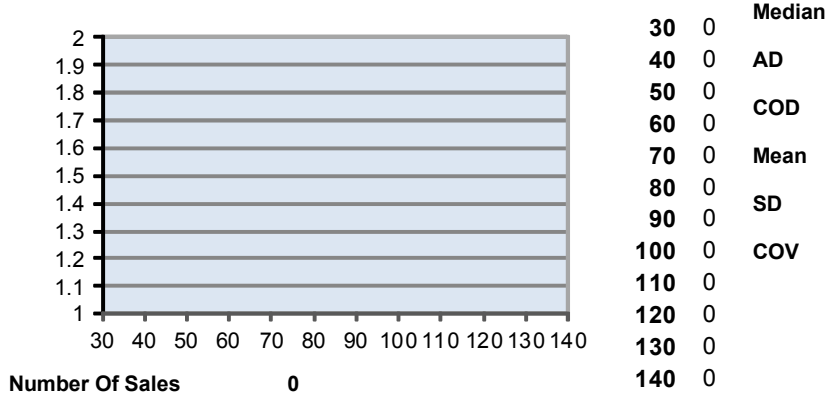
Unimproved land – Dike Land, Rural Rainier
 No sales are available. Therefore, the MA 04 SA 41 & 42 RMV 400 Selected Ratio of 107 was used for this study.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	0.00	18.50	-
PRD	-	-	1.00	1.02	-

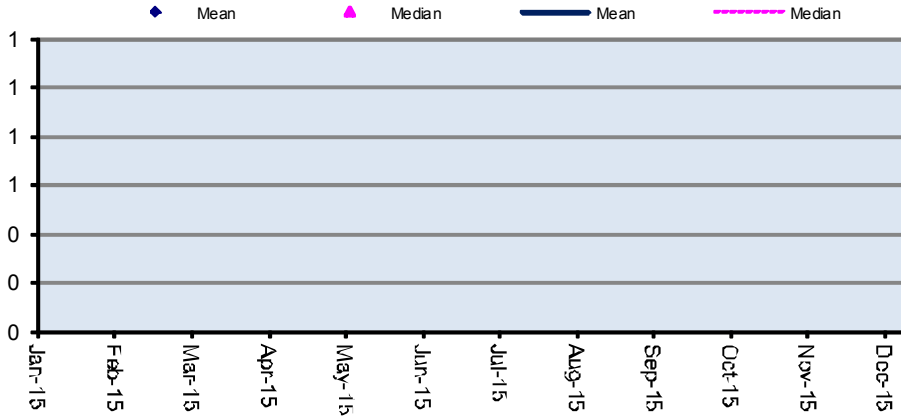
COLUMBIA County 2016 Ratio Study

Frequency



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 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	04	45	000		2	Rainier							

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	66			
Sales as a percentage of the Population	3.03 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	9,620,300	60.60 %	8,946,879	60.60 %
OSD RMV	1,873,500	11.80 %	1,873,500	12.69 %
Residential Improvement RMV	3,279,000	20.66 %	2,951,100	19.99 %
Farm Improvement RMV	1,101,540	6.94 %	991,386	6.72 %
SelectedRatioFromSales	107			
RMV Adjustment	100			
Before Ratio	107			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	100			
Residential Adjustment Factor	90			
Farm Improvement Factor	90			
After Ratio	100			
Selected Ratio	107	2016	Adjustment	93

Explanation

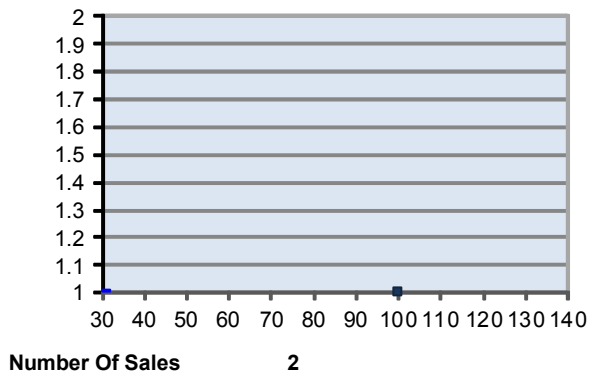
Improved land – Dike Land, Rural Rainier
 There are too few reliable sales available for this study. Therefore, the Selected Ratio of 107 was applied to this analysis from the MA 04 SA 41 & 42 RMV 401 area.

Performance History

	2016	2015	2014	2013	2012
COD	22.48	0.00	11.26	6.25	14.81
PRD	1.01	1.00	0.99	1.02	1.01

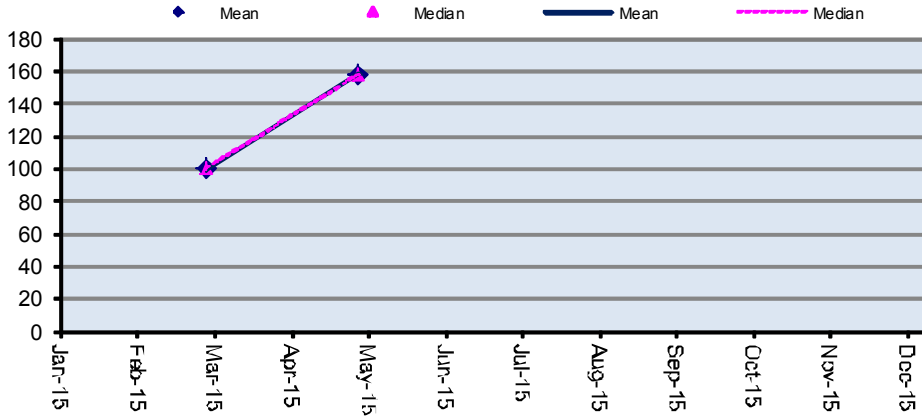
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	129	Wtd Mean	128
40	0	AD	29.00	GeoMean	126
50	0	COD	22.48	PRD	1.01
60	0	Mean	129	95% Confidence	56.84
70	0	SD	41.01		
80	0	COV	31.79		
90	0				
100	1				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Mar-15	100	100	1
May-15	158	158	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	45	000	401	142	33	7N3W12-00-00101	2015	1777	2.62	83,760	156,870	240,630	240,000	Mar-15	1	100
04	45	000	401	133	33	7N2W07-C0-00500	2015	4191	20.00	267,000	97,160	364,160	231,000	May-15	2	158

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	04	45	000		0	Rainier							

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	360,010	26.33 %	334,809	26.30 %
OSD RMV	432,000	31.59 %	432,000	33.93 %
Residential Improvement RMV	367,370	26.87 %	323,286	25.39 %
Farm Improvement RMV	208,030	15.21 %	183,066	14.38 %
SelectedRatioFromSales	107			
RMV Adjustment	100			
Before Ratio	107			
Overall Adjustment Factor	93			
Land Adjustment Factor	93			
OSD Adjustment Factor	100			
Residential Adjustment Factor	88			
Farm Improvement Factor	88			
After Ratio	100			
Selected Ratio	107	2016	Adjustment	93

Explanation

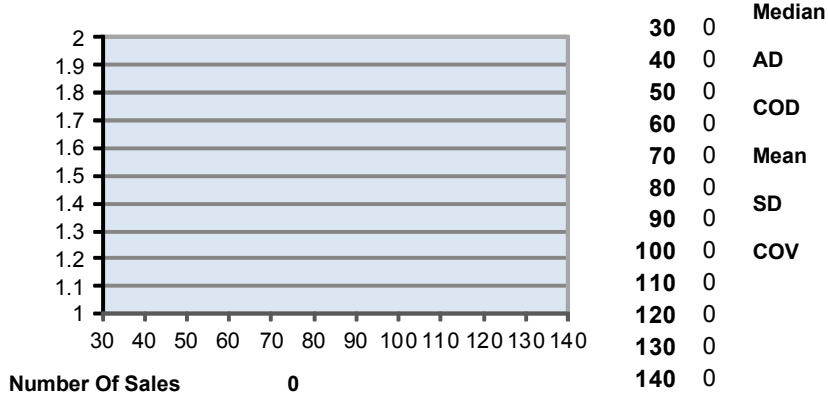
Improved land – Manufactured Structure – Dike Land, Rural Rainier
 There are no sales for this study of Dike Land with manufactured structures. Due to the lack of sales, the Selected Ratio of 107 from MA 04 SA 41 & 42 RMV 409 was applied here.

Performance History

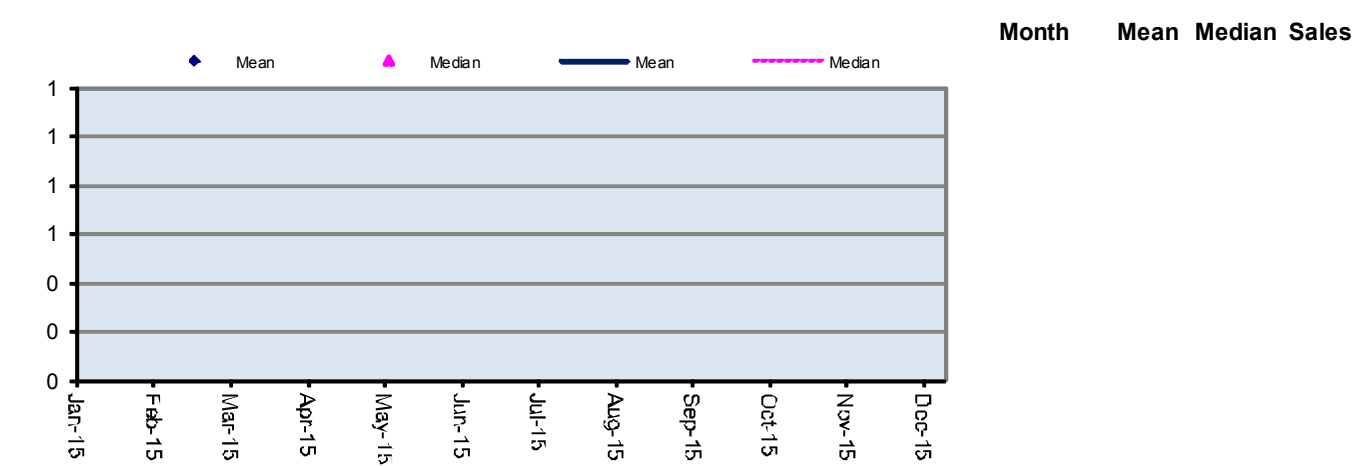
	2016	2015	2014	2013	2012
COD		0.00	11.26	6.25	14.81
PRD		1.00	0.99	1.02	1.01

COLUMBIA County 2016 Ratio Study

Frequency



Central Tendencies



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 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 NO	RATIO NO

MAINTENANCE AREA 5

RESIDENTIAL CLATSKANIE

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	05	00	000		1	Clatskanie							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	1			
Population - Number of Accounts	106			
Sales as a percentage of the Population	0.94 %			
Prior Year Population Values				
Land RMV	7,552,970	100.00 %	7,250,851	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	104			
RMV Adjustment	100			
Before Ratio	104			
Overall Adjustment Factor	96			
Land Adjustment Factor	96			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	104	2016	Adjustment	96

Explanation

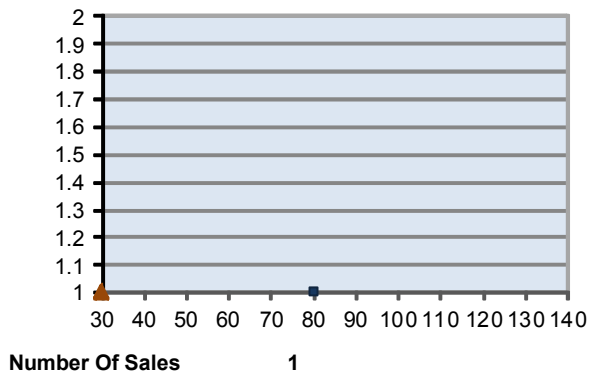
Unimproved land, City of Clatskanie.
 For this study there is only one sale available. Therefore, the Selected Ratio of 104 was applied from the MA 05 SA 00 RMV 101 analysis.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	-	-	-	-
PRD	1.00	-	-	-	-

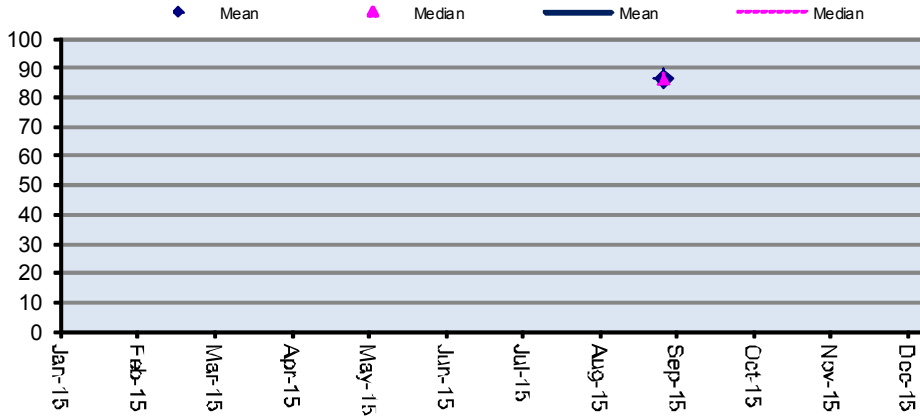
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	86	Wtd Mean	86
40	0	AD	0.00	GeoMean	86
50	0	COD	0.00	PRD	1.00
60	0	Mean	86	95% Confidence	1.96
70	0	SD	1.00		
80	1	COV	1.16		
90	0				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Sep-15	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	00	000	100		33	7N4W08-CD-05400	2015	8038	0.18	38,630	0	38,630	45,000	Sep-15	1	86

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	05	00	000		20	Clatskanie							

Adjustment Calculation Summary

Sample - Number of Sales	20	RECALCULATED		
Population - Number of Accounts	513			
Sales as a percentage of the Population	3.90 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	20,759,590	26.90 %	19,929,206	26.97 %
OSD RMV	7,269,500	9.42 %	7,269,500	9.84 %
Residential Improvement RMV	48,487,590	62.82 %	46,063,211	62.33 %
Farm Improvement RMV	667,940	0.87 %	634,543	0.86 %
SelectedRatioFromSales	104			
RMV Adjustment	100			
Before Ratio	104			
Overall Adjustment Factor	96			
Land Adjustment Factor	96			
OSD Adjustment Factor	100			
Residential Adjustment Factor	95			
Farm Improvement Factor	95			
After Ratio	100			
Selected Ratio	104	2016	Adjustment	96

Explanation

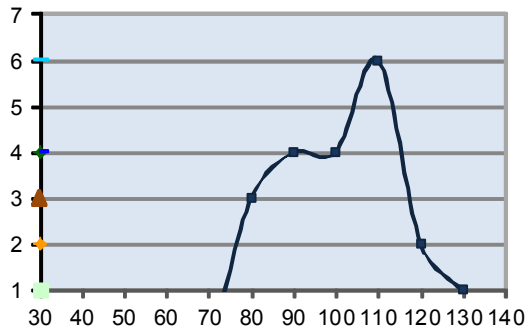
Improved property, City of Clatskanie.
 The Mean of 105 was selected for this analysis and is bracketed by the Weighted Mean (104) and the Median (106) . The time adjustment of 99 was applied which resulted in a Selected Ratio of 104.

Performance History

	2016	2015	2014	2013	2012
COD	9.39	12.50	12.14	6.57	11.72
PRD	1.01	1.01	1.00	1.00	1.02

COLUMBIA County 2016 Ratio Study

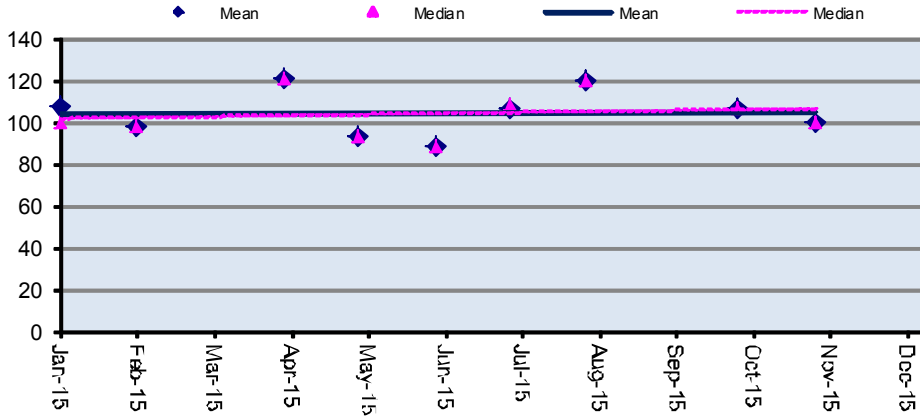
Frequency



30	0	Median	106	Wtd Mean	104
40	0	AD	9.95	GeoMean	105
50	0	COD	9.39	PRD	1.01
60	0	Mean	105	95% Confidence	5.41
70	0	SD	12.35		
80	3	COV	11.76		
90	4				
100	4				
110	6				
120	2				
130	1				
140	0				

Number Of Sales **20**

Central Tendencies



Month	Mean	Median	Sales
Jan-15	107	100	3
Feb-15	98	98	2
Apr-15	121	121	1
May-15	93	93	1
Jun-15	88	88	1
Jul-15	106	108	6
Aug-15	120	120	2
Oct-15	106	106	2
Nov-15	100	100	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
05	00	000	101	136	30	7N4W08-CA-04400	2015	1357	0.12	52,030	77,990	130,020	154,500	Feb-15	1	84
05	00	000	101	136	33	7N4W08-CA-01100	2015	4637	0.17	46,280	80,630	126,910	144,000	Jun-15	2	88
05	00	000	101	132	33	7N4W08-CB-07100	2015	669	0.16	53,800	67,040	120,840	136,000	Jan-15	3	89
05	00	000	101	141	33	7N4W08-BC-03000	2015	6206	0.19	54,470	92,640	147,110	160,000	Jul-15	4	92
05	00	000	101	131	33	7N4W08-CB-01800	2015	4056	0.36	59,560	63,160	122,720	132,300	May-15	5	93
05	00	000	101	142	33	7N4W09-CB-01100	2015	9366	0.34	58,870	138,220	197,090	206,000	Nov-15	6	96
05	00	000	101	142	33	7N4W09-CB-03300	2015	8610	0.32	58,270	164,100	222,370	225,000	Oct-15	7	99
05	00	000	101	136	30	7N4W08-DA-05000	2015	6376	0.10	51,280	66,510	117,790	113,000	Jul-15	8	104
05	00	000	101	142	33	7N4W08-BC-00400	2015	9538	0.61	70,550	209,640	280,190	269,400	Nov-15	9	104
05	00	000	101	132	33	7N4W08-CD-02600	2015	6414	0.15	53,710	68,380	122,090	116,000	Jul-15	10	105
05	00	000	101	131	33	7N4W08-DA-01700	2015	7179	0.38	60,770	73,840	134,610	125,000	Aug-15	11	108
05	00	000	101	132	33	7N4W08-BD-00300	2015	139	0.19	54,640	142,270	196,910	177,000	Jan-15	12	111
05	00	000	101	131	33	7N4W08-CB-04300	2015	6333	0.19	54,470	56,660	111,130	100,000	Jul-15	13	111
05	00	000	101	143	30	7N4W09-C0-00202	2015	1059	0.64	102,420	141,000	243,420	218,000	Feb-15	14	112
05	00	000	101	132	33	7N4W08-AD-03500	2015	5687	0.11	52,010	77,090	129,100	115,000	Jul-15	15	112
05	00	000	101	142	33	7N4W08-BD-00200	2015	9149	0.37	60,110	142,740	202,850	180,000	Oct-15	16	113
05	00	000	101	141	33	7N4W08-CD-09100	2015	5928	0.13	52,810	89,560	142,370	125,000	Jul-15	17	114
05	00	000	101	142	30	7N4W08-BC-01300	2015	452	0.21	55,300	119,300	174,600	145,000	Jan-15	18	120
05	00	000	101	131	33	7N4W09-CB-01501	2015	2665	0.22	55,560	56,900	112,460	93,000	Apr-15	19	121

COLUMBIA County 2016 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	00	000	101	136	33	7N4W08-CA-04700	2015	6686	0.34	59,020	76,040	135,060	103,000	Aug-15	20	131

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	05	00	000		1	Clatskanie							

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED		
Population - Number of Accounts	50			
Sales as a percentage of the Population	2.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	2,663,060	43.22 %	2,556,538	43.21 %
OSD RMV	728,500	11.82 %	728,500	12.31 %
Residential Improvement RMV	2,611,570	42.38 %	2,480,992	41.93 %
Farm Improvement RMV	158,700	2.58 %	150,765	2.55 %
SelectedRatioFromSales	104			
RMV Adjustment	100			
Before Ratio	104			
Overall Adjustment Factor	96			
Land Adjustment Factor	96			
OSD Adjustment Factor	100			
Residential Adjustment Factor	95			
Farm Improvement Factor	95			
After Ratio	100			
Selected Ratio	104	2016	Adjustment	96

Explanation

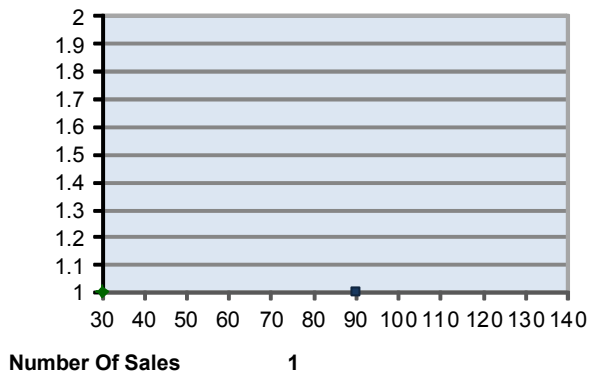
Improved property – Manufactured Structures, City of Clatskanie.
 There are too few sales for this analysis. Therefore, it was decided to use the Selected Ratio of 104 from the MA 05 SA 00 RMV 101 study and to apply it here.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	12.50	12.14	6.57	11.72
PRD	1.00	1.01	1.00	1.00	1.02

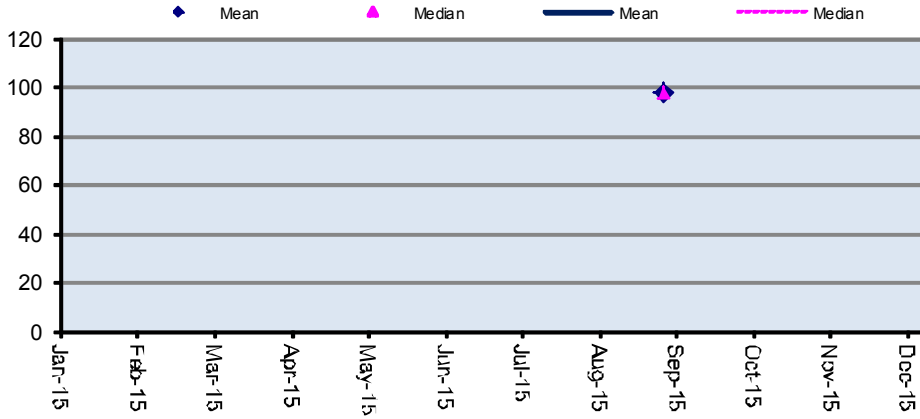
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	98	Wtd Mean	98
40	0	AD	0.00	GeoMean	98
50	0	COD	0.00	PRD	1.00
60	0	Mean	98	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	1.02		
90	1				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Sep-15	98	98	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	109	463	33	7N4W08-CA-00603	2015	8011	0.21	55,020	105,940	160,960	165,000	Sep-15	1	98

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	05	40	000		2	Clatskanie							

Adjustment Calculation Summary

Sample - Number of Sales	2	RECALCULATED		
Population - Number of Accounts	21			
Sales as a percentage of the Population	9.52 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	861,000	25.93 %	826,560	25.96 %
OSD RMV	436,000	13.13 %	436,000	13.69 %
Residential Improvement RMV	2,017,890	60.78 %	1,916,996	60.20 %
Farm Improvement RMV	5,120	0.15 %	4,864	0.15 %
SelectedRatioFromSales	104			
RMV Adjustment	100			
Before Ratio	104			
Overall Adjustment Factor	96			
Land Adjustment Factor	96			
OSD Adjustment Factor	100			
Residential Adjustment Factor	95			
Farm Improvement Factor	95			
After Ratio	100			
Selected Ratio	104	2016	Adjustment	96

Explanation

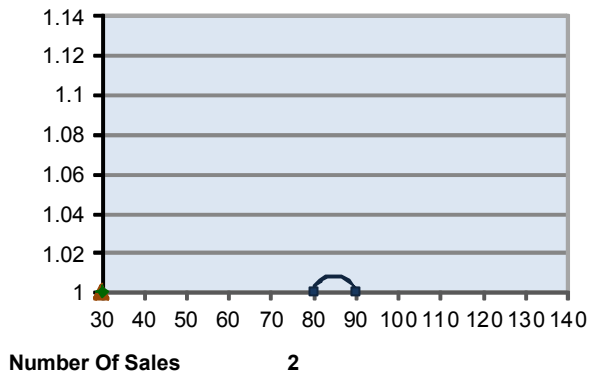
Improved land – Duplex/Triplex/Fourplex, City of Clatskanie
 The sale sample is too small to be adequate for this analysis. Because of this, it was decided to use the Selected Ratio of 104 from the MA 05 SA 00 RMV 101 study and to apply it here.

Performance History

	2016	2015	2014	2013	2012
COD	3.30	-	-	-	-
PRD	1.00	-	-	-	-

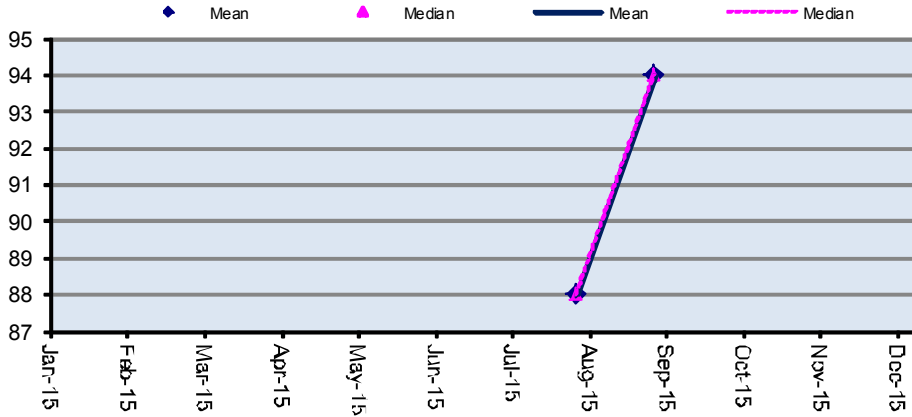
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	91	Wtd Mean	91
40	0	AD	3.00	GeoMean	91
50	0	COD	3.30	PRD	1.00
60	0	Mean	91	95% Confidence	5.88
70	0	SD	4.24		
80	1	COV	4.66		
90	1				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Aug-15	88	88	1
Sep-15	94	94	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	40	000	101	232	30	7N4W08-DA-03402	2015	6950	0.41	63,520	77,520	141,040	160,000	Aug-15	1	88
05	40	000	101	232	33	7N4W08-DA-00900	2015	8377	0.16	55,230	85,530	140,760	150,000	Sep-15	2	94

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	App # of Sales	Location	RMV Class	MA	SA	NH	Year	App # of Sales	Location
400	05	51	000		3	Clatskanie							

Adjustment Calculation Summary

Sample - Number of Sales	3	RECALCULATED		
Population - Number of Accounts	687			
Sales as a percentage of the Population	0.44 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	109,638,180	100.00 %	112,927,325	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	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

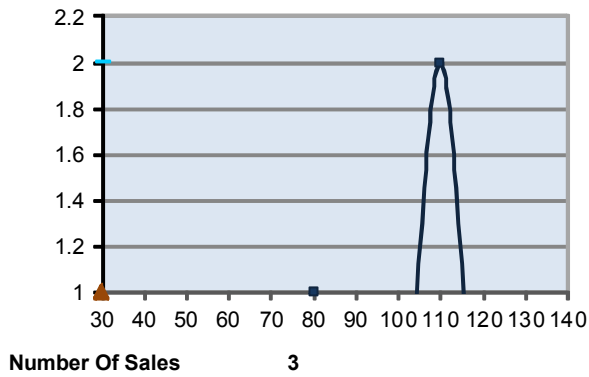
Unimproved land, Rural Clatskanie
 Due to having too few sales resulting in less the one per cent of the population, the Selected Ratio of 97 from the MA 05 SA 51 RMV 401 study has been applied here.

Performance History

	2016	2015	2014	2013	2012
COD	12.31	22.57	20.83	0.00	17.86
PRD	1.06	1.03	1.09	1.00	0.95

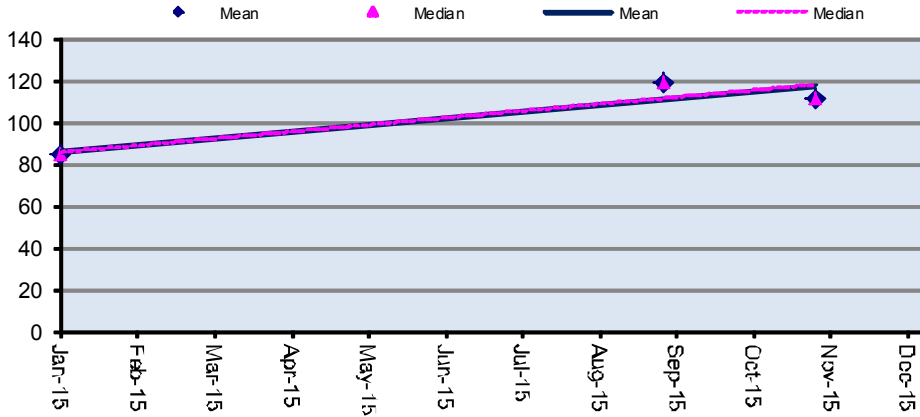
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	111	Wtd Mean	99
40	0	AD	13.67	GeoMean	103
50	0	COD	12.31	PRD	1.06
60	0	Mean	105	95% Confidence	20.76
70	0	SD	18.34		
80	1	COV	17.47		
90	0				
100	0				
110	2				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Jan-15	84	84	1
Sep-15	119	119	1
Nov-15	111	111	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		33	7N3W09-B0-00700	2015	279	5.23	73,500	0	73,500	87,900	Jan-15	1	84
05	51	000	400		33	7N5W10-00-00508	2015	9736	5.17	38,890	0	38,890	35,000	Nov-15	2	111
05	51	000	400		30	7N4W13-00-02001	2015	8239	6.63	57,020	0	57,020	48,000	Sep-15	3	119

COLUMBIA County 2016 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		33	Clatskanie							

Adjustment Calculation Summary

Sample - Number of Sales	33	RECALCULATED		
Population - Number of Accounts	1,293			
Sales as a percentage of the Population	2.55 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	71,552,490	27.11 %	73,699,065	27.11 %
OSD RMV	47,426,690	17.97 %	47,426,690	17.45 %
Residential Improvement RMV	124,045,090	47.00 %	129,006,894	47.45 %
Farm Improvement RMV	20,888,200	7.91 %	21,723,728	7.99 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	104			
Farm Improvement Factor	104			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

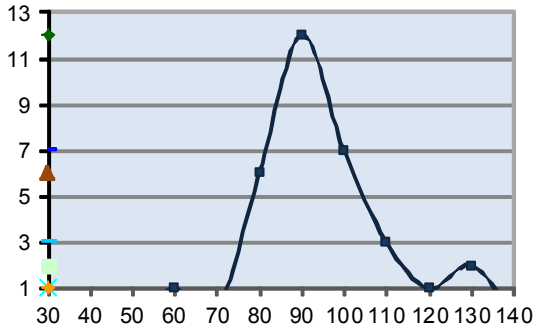
Improved property, Rural Clatskanie
 Selected the Median of 96 from this sales array due to the high and low ratios in the dataset. The time adjustment of 101 was applied, resulting in a Selected Ratio of 97.

Performance History

	2016	2015	2014	2013	2012
COD	13.04	13.29	14.17	14.40	15.38
PRD	1.00	1.03	1.02	1.01	1.04

COLUMBIA County 2016 Ratio Study

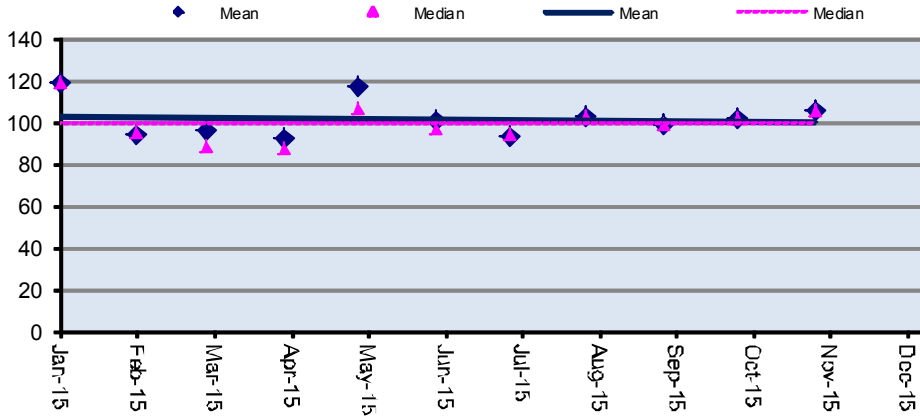
Frequency



30	0	Median	96	Wtd Mean	101
40	0	AD	12.52	GeoMean	99
50	0	COD	13.04	PRD	1.00
60	1	Mean	101	95% Confidence	5.94
70	0	SD	17.41		
80	6	COV	17.24		
90	12				
100	7				
110	3				
120	1				
130	2				
140	0				

Number Of Sales **33**

Central Tendencies



Month	Mean	Median	Sales
Dec-14	103	103	1
Jan-15	119	119	1
Feb-15	94	95	2
Mar-15	96	88	3
Apr-15	92	87	6
May-15	117	106	5
Jun-15	101	97	3
Jul-15	93	94	5
Aug-15	103	103	4
Sep-15	99	99	1
Oct-15	102	102	1
Nov-15	105	105	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	401	300	33	7N4W09-A0-00500	2015	2705	7.29	47,880	500	48,380	75,000	Apr-15	1	65
05	51	000	401	143	33	7N4W22-00-00200	2015	2066	7.86	104,890	154,620	259,510	317,281	Mar-15	2	82
05	51	000	401	141	33	7N3W04-D0-01900	2015	2346	7.93	105,150	107,720	212,870	258,000	Apr-15	3	83
05	51	000	401	141	33	7N3W10-A0-01201	2015	8143	1.36	63,260	124,660	187,920	223,300	Aug-15	4	84
05	51	000	401	141	33	7N3W18-A0-00800	2015	3086	5.00	87,420	182,710	270,130	317,000	Apr-15	5	85
05	51	000	401	145	30	7N5W01-00-02600	2015	2993	1.05	60,490	138,150	198,640	225,000	Apr-15	6	88
05	51	000	401	131	33	7N5W11-00-00207	2015	6431	1.80	67,210	123,280	190,490	215,000	Jul-15	7	89
05	51	000	401	146	33	7N4W05-DC-00901	2015	6473	2.41	83,910	160,350	244,260	272,000	Jul-15	8	90
05	51	000	401	141	33	7N4W15-DB-01400	2015	3749	1.67	66,040	142,220	208,260	230,000	May-15	9	91
05	51	000	401	141	33	7N4W21-00-00300	2015	4684	3.73	83,510	146,990	230,500	250,000	Jun-15	10	92
05	51	000	401	141	33	7N4W27-00-01303	2015	1391	3.56	82,330	145,460	227,790	245,000	Feb-15	11	93
05	51	000	401	131	30	7N4W16-BA-00700	2015	7467	0.34	58,000	109,910	167,910	180,000	Aug-15	12	93
05	51	000	401	141	33	7N3W16-C0-02900	2015	1780	8.78	107,980	145,500	253,480	270,000	Mar-15	13	94
05	51	000	401	131	33	7N5W11-00-00209	2015	5747	1.73	66,580	85,870	152,450	163,000	Jul-15	14	94
05	51	000	401	141	33	8N3W32-00-01000	2015	5884	1.46	64,160	140,330	204,490	214,900	Jul-15	15	95
05	51	000	401	146	33	7N4W03-D0-01300	2015	1230	2.51	73,800	157,010	230,810	240,000	Feb-15	16	96
05	51	000	401	141	33	7N4W09-BA-01400	2015	4097	0.36	58,000	101,120	159,120	165,025	May-15	17	96
05	51	000	401	141	33	8N4W34-CC-01300	2015	6055	5.85	96,020	98,740	194,760	200,000	Jul-15	18	97
05	51	000	401	141	33	8N4W34-A0-00101	2015	8400	7.38	103,170	126,510	229,680	232,000	Sep-15	19	99

COLUMBIA County 2016 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	153	33	7N3W16-C0-02100	2015	5248	4.85	89,740	262,440	352,180	345,000	Jun-15	20	102
05	51	000	401	142	33	7N3W08-A0-01102	2015	8608	7.37	103,140	138,980	242,120	237,500	Oct-15	21	102
05	51	000	401	143	30	7N4W16-DD-00400	2015	8	6.37	98,790	200,250	299,040	290,000	Dec-14	22	103
05	51	000	401	141	33	7N4W27-00-00903	2015	7140	3.96	85,120	154,200	239,320	232,000	Aug-15	23	103
05	51	000	401	143	33	7N4W10-A0-00400	2015	10004	6.22	98,060	124,250	222,310	212,300	Nov-15	24	105
05	51	000	401	141	33	8N3W19-C0-01000	2015	4187	19.78	155,480	168,670	324,150	307,000	May-15	25	106
05	51	000	401	131	33	7N3W04-C0-00100	2015	5424	18.46	176,380	103,330	279,710	259,000	Jun-15	26	108
05	51	000	401	141	30	7N4W27-00-00900	2015	3226	2.30	71,830	147,250	219,080	200,000	Apr-15	27	110
05	51	000	401	132	33	7N4W09-B0-01200	2015	2003	5.23	92,000	97,210	189,210	170,000	Mar-15	28	111
05	51	000	401	142	33	8N4W34-A0-02600	2015	477	0.33	58,000	119,630	177,630	149,000	Jan-15	29	119
05	51	000	401	141	33	7N3W06-00-00801	2015	2625	35.00	214,500	212,180	426,680	349,000	Apr-15	30	122
05	51	000	401	142	33	7N3W05-D0-00700	2015	3775	39.14	228,160	217,090	445,250	335,000	May-15	31	133
05	51	000	401	146	33	7N3W33-00-00301	2015	6763	14.07	125,900	162,280	288,180	216,500	Aug-15	32	133
05	51	000	401	300	33	7N4W16-00-00500	2015	3778	32.22	161,200	156,200	317,400	202,000	May-15	33	157

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location	
409	05	51	000		8	Clatskanie								

Adjustment Calculation Summary

Sample - Number of Sales	8	RECALCULATED		
Population - Number of Accounts	469			
Sales as a percentage of the Population	1.71 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	23,897,940	30.71 %	24,614,878	30.81 %
OSD RMV	19,361,460	24.88 %	19,361,460	24.23 %
Residential Improvement RMV	26,996,200	34.70 %	28,076,048	35.14 %
Farm Improvement RMV	7,550,760	9.70 %	7,852,790	9.83 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	104			
Farm Improvement Factor	104			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

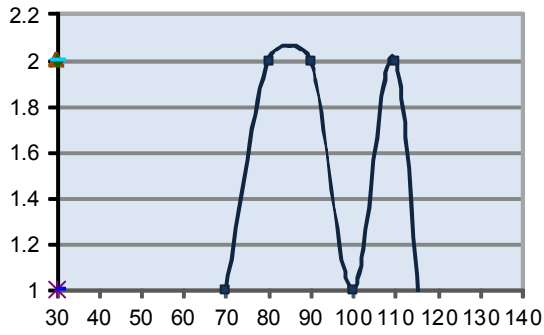
Improved property – Manufactured Structure, Rural Clatskanie
 Selected the Mean of 96 which is supported by the Weighted Mean (95) and the Median (94).
 The time adjustment of 101 was then applied, resulting in a Selected Ratio of 97.

Performance History

	2016	2015	2014	2013	2012
COD	10.24	13.29	14.17	14.40	15.38
PRD	1.01	1.03	1.02	1.01	1.04

COLUMBIA County 2016 Ratio Study

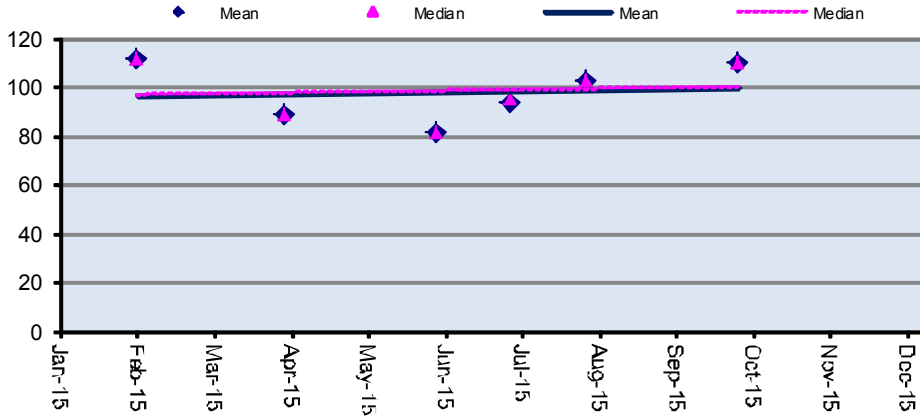
Frequency



30	0	Median	94	Wtd Mean	95
40	0	AD	9.63	GeoMean	95
50	0	COD	10.24	PRD	1.01
60	0	Mean	96	95% Confidence	8.38
70	1	SD	12.09		
80	2	COV	12.59		
90	2				
100	1				
110	2				
120	0				
130	0				
140	0				

Number Of Sales 8

Central Tendencies



Month	Mean	Median	Sales
Feb-15	112	112	1
Apr-15	89	89	1
Jun-15	81	81	2
Jul-15	94	95	2
Aug-15	103	103	1
Oct-15	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	51	000	409	452	33	7N3W04-A0-00400	2015	5101	3.39	81,130	84,160	165,290	213,000	Jun-15	1	78
05	51	000	409	452	33	7N4W07-D0-00300	2015	5172	1.00	60,000	65,560	125,560	149,000	Jun-15	2	84
05	51	000	409	452	33	7N3W18-B0-00700	2015	3162	1.38	63,450	87,380	150,830	170,000	Apr-15	3	89
05	51	000	409	452	33	7N3W34-A0-01000	2015	5575	3.79	83,930	55,740	139,670	147,844	Jul-15	4	94
05	51	000	409	452	33	7N3W08-A0-00900	2015	6432	6.46	99,210	29,500	128,710	135,000	Jul-15	5	95
05	51	000	409	452	33	7N3W34-A0-01200	2015	7136	5.00	90,500	69,760	160,260	155,000	Aug-15	6	103
05	51	000	409	462	33	8N4W27-DA-00100	2015	8454	2.53	73,990	134,400	208,390	189,400	Oct-15	7	110
05	51	000	409	452	33	7N3W15-B0-02200	2015	1001	2.57	74,360	98,560	172,920	155,000	Feb-15	8	112

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	117			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	17,654,370	100.00 %	17,654,370	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	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

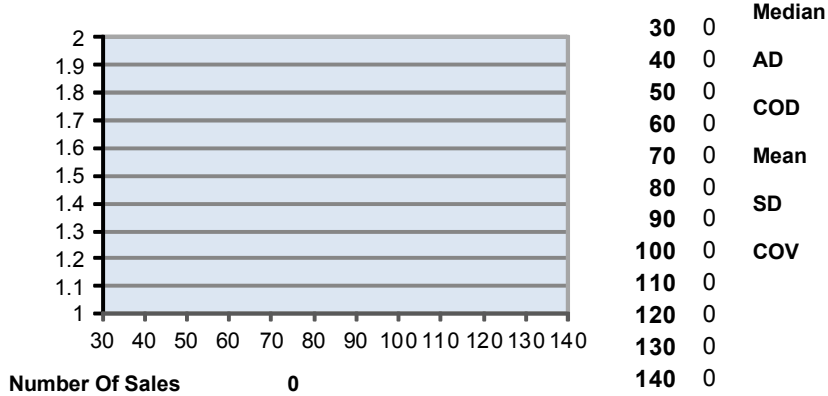
Unimproved Land – Dike Land, Rural Clatskanie
 There are no sales available for this study. Therefore, the Selected Ratio of 97 from MA 05 SA 51 RMV 400 analysis was applied here.

Performance History

	2016	2015	2014	2013	2012
COD		33.75	20.83	0.00	17.86
PRD		0.87	1.09	1.00	0.95

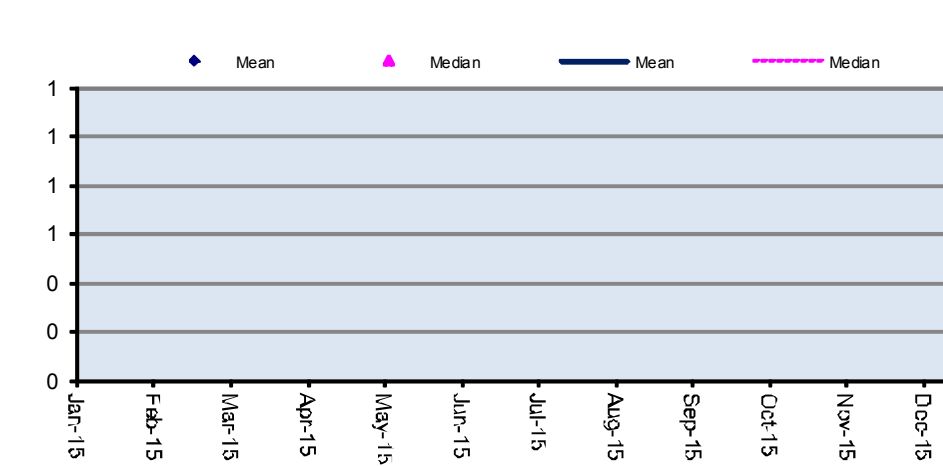
COLUMBIA County 2016 Ratio Study

Frequency



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 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
401	05	55	000		2	Clatskanie							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	2			
Population - Number of Accounts	261			
Sales as a percentage of the Population	0.77 %			
Prior Year Population Values				
Land RMV	35,339,790	55.86 %	36,399,984	55.87 %
OSD RMV	7,331,500	11.59 %	7,331,500	11.25 %
Residential Improvement RMV	14,823,760	23.43 %	15,416,710	23.66 %
Farm Improvement RMV	5,771,960	9.12 %	6,002,838	9.21 %
SelectedRatioFromSales	97			
RMV Adjustment	100			
Before Ratio	97			
Overall Adjustment Factor	103			
Land Adjustment Factor	103			
OSD Adjustment Factor	100			
Residential Adjustment Factor	104			
Farm Improvement Factor	104			
After Ratio	100			
Selected Ratio	97	2016	Adjustment	103

Explanation

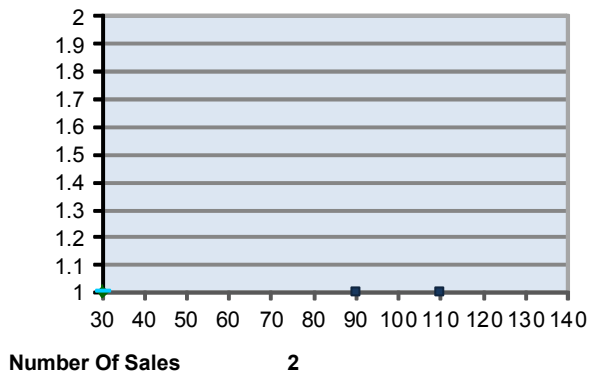
Improved Land – Dike Land, Rural Clatskanie
 With having only two sales available for this analysis, it was decided to use the MA 05 SA 51 RMV 401 Selected Ratio of 97.

Performance History

	2016	2015	2014	2013	2012
COD	11.21	13.13	14.17	14.40	15.38
PRD	0.98	1.00	1.02	1.01	1.04

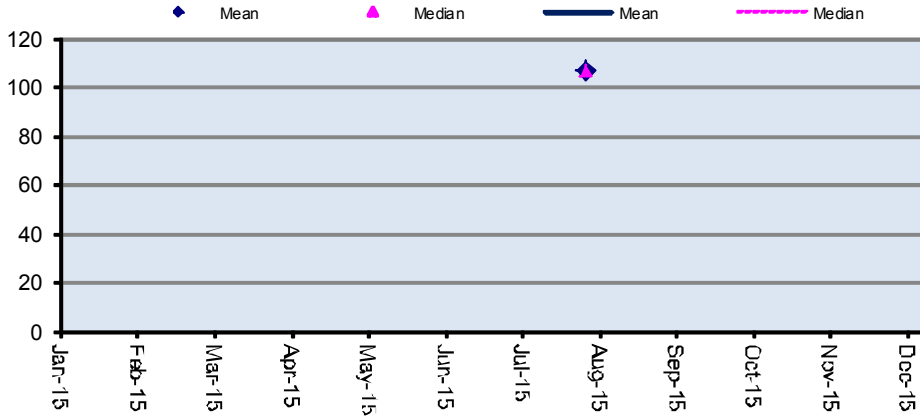
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	107	Wtd Mean	109
40	0	AD	12.00	GeoMean	106
50	0	COD	11.21	PRD	0.98
60	0	Mean	107	95% Confidence	23.52
70	0	SD	16.97		
80	0	COV	15.86		
90	1				
100	0				
110	1				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Aug-15	107	107	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
05	55	000	401	144	33	8N4W31-B0-01100	2015	7135	11.27	120,500	135,870	256,370	270,000	Aug-15	1	95
05	55	000	401	142	33	8N5W35-00-00900	2015	6916	32.24	213,880	209,060	422,940	355,000	Aug-15	2	119

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	05	55	000		1	Clatskanie							

Adjustment Calculation Summary

		1	RECALCULATED		
		31	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales		1			
Population - Number of Accounts		31			
Sales as a percentage of the Population		3.23 %			
Prior Year Population Values					
Land RMV	2,576,110		41.44 %	2,653,393	41.52 %
OSD RMV	1,205,000		19.39 %	1,205,000	18.86 %
Residential Improvement RMV	1,682,500		27.07 %	1,749,800	27.38 %
Farm Improvement RMV	752,440		12.10 %	782,538	12.24 %
SelectedRatioFromSales		97			
RMV Adjustment		100			
Before Ratio		97			
Overall Adjustment Factor		103			
Land Adjustment Factor		103			
OSD Adjustment Factor		100			
Residential Adjustment Factor		104			
Farm Improvement Factor		104			
After Ratio		100			
Selected Ratio		97	2016	Adjustment	103

Explanation

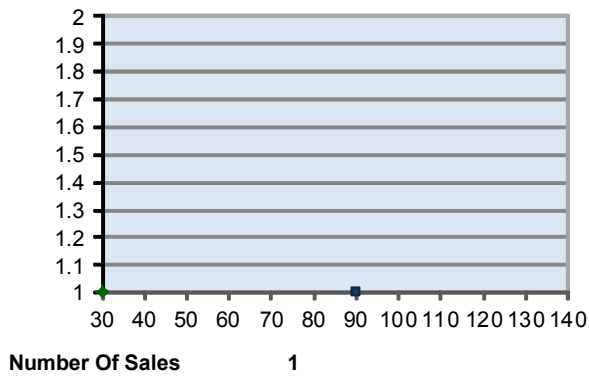
Improved Land – Dike Land - Manufactured Structure, Rural Clatskanie
 For this analysis, there is only one sale available. Because of this lack of sales, the Selected Ratio of 97 from the MA 05 SA 51 RMV 409 study was used.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	13.13	14.17	14.40	15.38
PRD	1.00	1.00	1.02	1.01	1.04

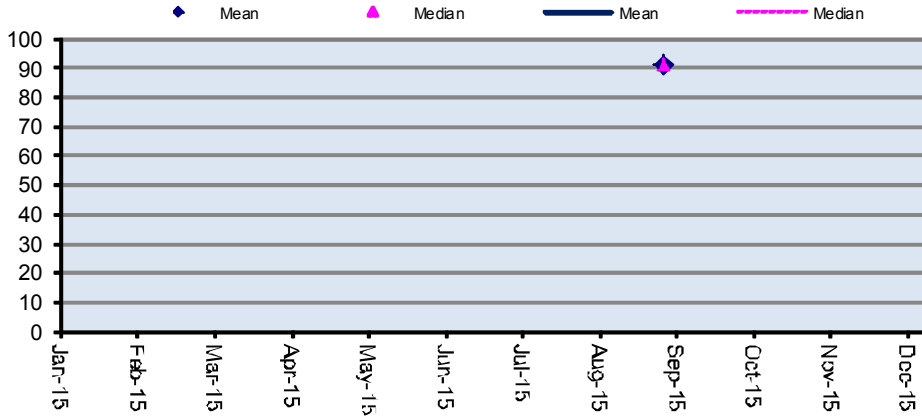
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	91	Wtd Mean	91
40	0	AD	0.00	GeoMean	91
50	0	COD	0.00	PRD	1.00
60	0	Mean	91	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	1.10		
90	1				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Sep-15	91	91	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	409	452	33	7N4W04-00-00200	2015	7954	3.01	78,480	53,390	131,870	145,000	Sep-15	1	91

MAINTENANCE AREA 6

**RURAL RESIDENTIAL
AREAS OF ST. HELENS,
WARREN & DEER ISLAND**

COLUMBIA County 2016 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		5	Rural St Helens	400	06	64	000		0	Rural St Helens
400	06	62	000		3	Rural St Helens							

Adjustment Calculation Summary

		9	RECALCULATED		
		690			
		1.30 %	Pre-Trend Brkdown	Post Trend Values	Post Trend Brkdown
Sample - Number of Sales					
Population - Number of Accounts					
Sales as a percentage of the Population					
Prior Year Population Values					
Land RMV	350,822,660		100.00 %	322,756,847	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		109			
RMV Adjustment		100			
Before Ratio		109			
Overall Adjustment Factor		92			
Land Adjustment Factor		92			
OSD Adjustment Factor		100			
Residential Adjustment Factor		100			
Farm Improvement Factor		100			
After Ratio		100			
Selected Ratio	109	2016	Adjustment	92	

Explanation

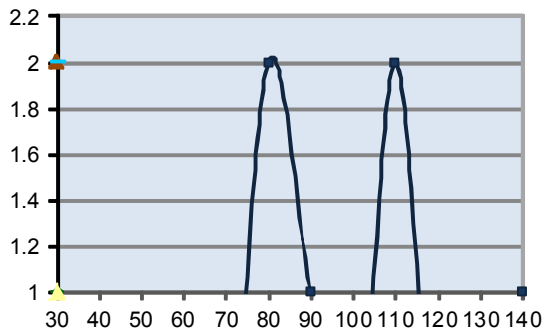
Unimproved land, Rural St. Helens, Warren, Deer Island
 The sales date is insufficient for analysis. Therefore, it was decided to apply the Selected Ratio of 109 from the RMV 401 SA 61, SA 62, SA 63 and SA 64 study here.

Performance History

	2016	2015	2014	2013	2012
COD	24.84	13.87	20.26	4.05	-
PRD	1.02	1.01	1.05	1.00	-

COLUMBIA County 2016 Ratio Study

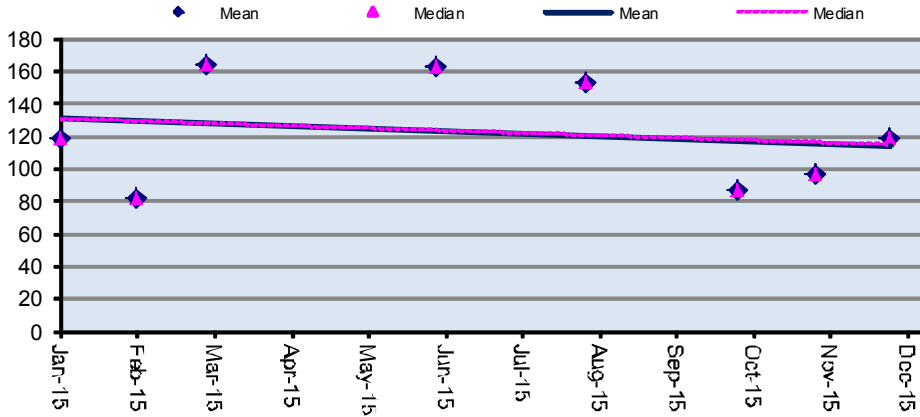
Frequency



30	0	Median	119	Wtd Mean	124
40	0	AD	29.56	GeoMean	122
50	0	COD	24.84	PRD	1.02
60	0	Mean	127	95% Confidence	22.92
70	0	SD	35.09		
80	2	COV	27.63		
90	1				
100	0				
110	2				
120	0				
130	0				
140	1				

Number Of Sales **9**

Central Tendencies



Month	Mean	Median	Sales
Jan-15	119	119	1
Feb-15	82	82	1
Mar-15	164	164	1
Jun-15	162	162	2
Aug-15	153	153	1
Oct-15	86	86	1
Nov-15	96	96	1
Dec-15	118	118	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	61	000	400		33	4N2W24-B0-00606	2015	808	2.00	136,000	0	136,000	165,000	Feb-15	1	82
06	62	000	400		30	4N2W01-00-01802	2015	8993	1.00	136,000	0	136,000	158,000	Oct-15	2	86
06	61	000	400		30	4N1W19-B0-01503	2015	9834	4.50	178,040	0	178,040	185,000	Nov-15	3	96
06	61	000	400		33	5N1W31-CC-00500	2015	10771	2.00	136,000	0	136,000	115,000	Dec-15	4	118
06	61	000	400		33	4N1W07-C0-01300	2015	675	2.21	160,270	0	160,270	135,000	Jan-15	5	119
06	63	000	400		33	5N2W10-A0-00303	2015	4710	10.03	360,440	0	360,440	250,000	Jun-15	6	144
06	62	000	400		33	4N2W02-00-04203	2015	7183	2.26	213,660	0	213,660	140,000	Aug-15	7	153
06	62	000	400		33	4N2W02-00-04002	2015	1774	19.35	209,570	0	209,570	127,500	Mar-15	8	164
06	61	000	400		33	4N2W12-D0-01300	2015	4681	2.79	151,830	0	151,830	85,000	Jun-15	9	179

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	06	61	000		58	Rural St Helens	401	06	63	000		5	Rural St Helens
401	06	62	000		3	Rural St Helens	401	06	64	000		2	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	68
Population - Number of Accounts	2,493
Sales as a percentage of the Population	2.73 %
Prior Year Population Values	
Land RMV	402,449,560
OSD RMV	107,248,590
Residential Improvement RMV	308,423,640
Farm Improvement RMV	46,104,980
SelectedRatioFromSales	109
RMV Adjustment	100
Before Ratio	109
Overall Adjustment Factor	92
Land Adjustment Factor	92
OSD Adjustment Factor	100
Residential Adjustment Factor	90
Farm Improvement Factor	90
After Ratio	100
Selected Ratio	109
2016	Adjustment
	92

RECALCULATED

Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
46.57 %	370,253,595	46.48 %
12.41 %	107,248,590	13.46 %
35.69 %	277,581,276	34.85 %
5.33 %	41,494,482	5.21 %

Explanation

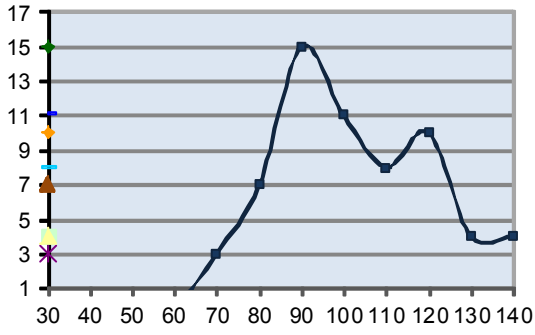
Improved land, Rural St. Helens, Warren, Deer Island (Note: SA 56 is a unique neighborhood comprised of manufactured structures, there are no conventionally built homes in this area).
 For this analysis, the Median of 108 was selected and the time adjustment of 101 was applied, resulting in a Selected Ratio adjustment of 109.

Performance History

	2016	2015	2014	2013	2012
COD	17.03	12.88	13.58	12.72	-
PRD	1.03	1.02	1.02	1.04	-

COLUMBIA County 2016 Ratio Study

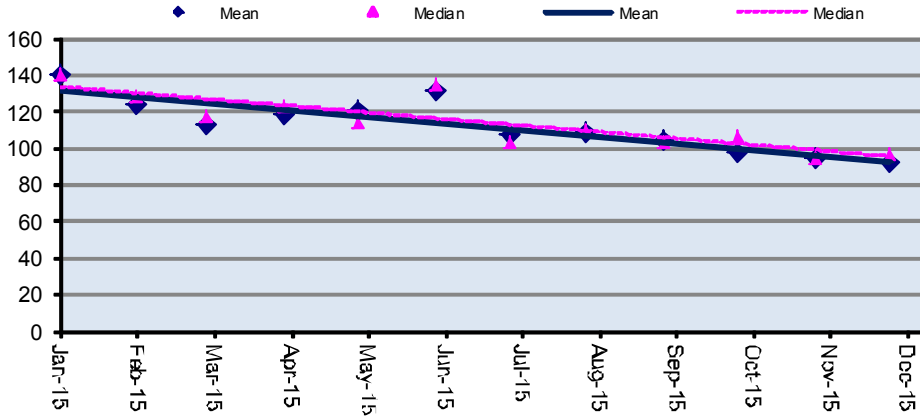
Frequency



30	0	Median	108	Wtd Mean	109
40	0	AD	18.40	GeoMean	110
50	0	COD	17.03	PRD	1.03
60	0	Mean	112	95% Confidence	5.39
70	3	SD	22.68		
80	7	COV	20.25		
90	15				
100	11				
110	8				
120	10				
130	4				
140	4				

Number Of Sales **68**

Central Tendencies



Month	Mean	Median	Sales
Jan-15	140	140	2
Feb-15	124	128	5
Mar-15	113	117	4
Apr-15	118	123	4
May-15	121	114	9
Jun-15	131	135	7
Jul-15	107	103	7
Aug-15	109	110	10
Sep-15	104	103	6
Oct-15	98	106	4
Nov-15	94	94	6
Dec-15	92	97	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	61	000	401	300	33	4N2W13-00-02300	2015	4373	42.22	152,040	31,950	183,990	255,000	Jun-15	1	72
06	61	000	401	144	33	5N2W36-00-01300	2015	8780	1.48	148,640	170,210	318,850	430,000	Oct-15	2	74
06	61	000	401	144	33	4N1W05-BB-01000	2015	10182	2.76	189,470	171,790	361,260	457,000	Dec-15	3	79
06	61	000	401	144	33	4N1W19-C0-00500	2015	5655	0.95	140,000	156,860	296,860	364,000	Jul-15	4	82
06	61	000	401	153	33	4N1W07-DA-00300	2015	7469	1.01	116,680	286,290	402,970	480,000	Aug-15	5	84
06	61	000	401	134	33	4N1W08-CB-00500	2015	7348	2.00	184,000	145,910	329,910	385,000	Aug-15	6	86
06	61	000	401	143	33	4N2W24-D0-02101	2015	9604	3.00	204,000	241,970	445,970	520,000	Nov-15	7	86
06	61	000	401	141	33	4N1W07-DD-01100	2015	1952	1.17	127,560	258,580	386,140	445,000	Mar-15	8	87
06	61	000	401	300	33	4N1W06-B0-03400	2015	10367	2.00	136,000	16,830	152,830	175,000	Dec-15	9	87
06	61	000	401	142	33	4N2W12-D0-00800	2015	7462	2.09	172,150	153,150	325,300	365,000	Aug-15	10	89
06	61	000	401	142	33	5N1W31-CC-00501	2015	7364	3.00	204,000	178,390	382,390	425,000	Aug-15	11	90
06	61	000	401	142	33	4N1W08-BD-00500	2015	7817	1.15	126,200	240,130	366,330	405,000	Sep-15	12	90
06	61	000	401	141	33	4N1W08-AC-00400	2015	9716	0.80	142,000	115,470	257,470	283,700	Nov-15	13	91
06	61	000	401	153	33	4N1W07-BA-00507	2015	1092	1.00	140,000	274,130	414,130	449,000	Feb-15	14	92
06	61	000	401	131	33	4N1W07-DB-00200	2015	7989	0.47	152,000	54,720	206,720	225,000	Sep-15	15	92
06	61	000	401	131	30	4N1W08-BC-00600	2015	9349	0.62	142,000	84,520	226,520	242,500	Nov-15	16	93
06	61	000	401	135	33	4N1W06-A0-00314	2015	2135	1.31	164,240	86,000	250,240	266,000	Mar-15	17	94
06	61	000	401	141	33	4N1W06-B0-02001	2015	9487	2.05	188,310	162,830	351,140	369,900	Nov-15	18	95
06	61	000	401	153	33	5N2W36-C0-00207	2015	6471	2.31	176,080	332,580	508,660	528,300	Jul-15	19	96

COLUMBIA County 2016 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	33	4N2W24-D0-00106	2015	9540	2.01	184,360	261,860	446,220	465,000	Nov-15	20	96
06	61	000	401	131	33	4N2W13-A0-02100	2015	10562	0.50	152,000	95,280	247,280	255,000	Dec-15	21	97
06	61	000	401	143	33	4N1W19-B0-01306	2015	3446	2.04	184,950	186,570	371,520	380,000	May-15	22	98
06	61	000	401	144	30	4N2W24-B0-01101	2015	7626	2.00	184,000	109,220	293,220	300,000	Sep-15	23	98
06	61	000	401	143	33	5N1W31-00-01000	2015	5516	1.87	175,160	175,090	350,250	353,000	Jul-15	24	99
06	61	000	401	142	33	4N1W06-A0-00309	2015	9090	1.01	116,680	324,440	441,120	447,000	Oct-15	25	99
06	63	000	401	121	33	5N1W08-CB-01800	2015	9329	0.23	152,000	41,720	193,720	189,000	Nov-15	26	102
06	61	000	401	153	33	4N1W07-AD-01602	2015	2606	1.31	137,080	341,990	479,070	460,000	Apr-15	27	104
06	61	000	401	141	30	4N1W17-B0-09300	2015	7451	1.25	133,000	105,370	238,370	230,000	Aug-15	28	104
06	61	000	401	300	33	4N1W06-DB-00500	2015	5421	2.68	105,060	31,710	136,770	130,000	Jun-15	29	105
06	62	000	401	145	33	5N2W24-B0-00402	2015	5794	8.72	279,200	145,880	425,080	399,900	Jul-15	30	106
06	61	000	401	135	30	4N2W24-D0-01700	2015	8905	2.99	203,800	51,430	255,230	240,000	Oct-15	31	106
06	61	000	401	141	33	4N1W18-C0-01100	2015	10232	5.65	277,620	130,410	408,030	383,200	Dec-15	32	106
06	61	000	401	142	33	4N1W05-BA-00800	2015	6189	0.94	143,160	146,480	289,640	270,000	Jul-15	33	107
06	61	000	401	131	33	4N1W08-CC-01800	2015	8174	2.00	184,000	76,970	260,970	245,000	Sep-15	34	107
06	61	000	401	141	33	4N1W07-C0-01304	2015	3334	2.00	184,000	307,310	491,310	454,000	May-15	35	108
06	61	000	401	141	33	4N1W19-CA-01800	2015	3332	0.34	152,000	141,950	293,950	270,000	May-15	36	109
06	61	000	401	131	33	4N1W05-CC-02000	2015	6048	1.00	140,000	61,100	201,100	182,200	Jul-15	37	110
06	61	000	401	135	33	4N1W19-BA-00900	2015	3483	2.03	184,760	86,570	271,330	240,000	May-15	38	113
06	61	000	401	154	33	4N1W19-C0-01806	2015	3492	5.48	233,780	423,430	657,210	575,000	May-15	39	114
06	61	000	401	143	33	4N1W08-BB-02600	2015	7738	0.96	140,000	162,560	302,560	266,000	Sep-15	40	114
06	62	000	401	141	33	5N2W24-00-00601	2015	7240	5.33	231,990	231,040	463,030	404,000	Aug-15	41	115
06	61	000	401	135	33	4N2W23-B0-00600	2015	9152	1.00	152,000	111,780	263,780	229,000	Oct-15	42	115
06	61	000	401	141	33	4N1W05-BA-04300	2015	6641	0.35	152,000	115,000	267,000	230,000	Aug-15	43	116
06	63	000	401	153	33	5N2W10-00-00101	2015	2199	3.20	208,060	307,880	515,940	439,900	Mar-15	44	117
06	61	000	401	143	33	4N2W24-AA-00400	2015	2608	0.33	152,000	160,100	312,100	259,500	Apr-15	45	120
06	61	000	401	131	30	4N1W07-BD-00600	2015	7448	6.25	244,510	68,400	312,910	260,000	Aug-15	46	120
06	61	000	401	131	33	4N2W25-A0-00400	2015	839	1.35	139,800	100,660	240,460	199,500	Feb-15	47	121
06	61	000	401	141	33	4N1W08-CB-01300	2015	4121	0.54	152,000	198,700	350,700	287,000	May-15	48	122
06	61	000	401	146	33	4N1W08-D0-01500	2015	8467	3.80	220,010	183,140	403,150	329,900	Sep-15	49	122
06	62	000	401	141	33	5N2W24-00-01101	2015	2946	5.80	237,600	118,760	356,360	289,380	Apr-15	50	123
06	61	000	401	136	33	5N1W31-D0-00103	2015	7035	4.05	224,270	122,400	346,670	279,000	Aug-15	51	124
06	61	000	401	141	33	4N1W07-AB-02200	2015	2949	0.37	155,160	133,420	288,580	227,000	Apr-15	52	127
06	61	000	401	132	33	4N1W07-C0-01700	2015	2399	2.00	184,000	118,000	302,000	236,650	Feb-15	53	128
06	61	000	401	141	30	4N1W19-B0-01408	2015	5823	1.90	177,200	129,500	306,700	240,000	May-15	54	128
06	61	000	401	141	30	4N1W17-B0-03100	2015	115	0.30	152,000	81,130	233,130	175,000	Jan-15	55	133
06	64	000	401	141	33	5N2W09-00-00405	2015	5164	5.69	236,290	195,940	432,230	325,000	Jun-15	56	133
06	61	000	401	121	33	4N1W19-AA-00900	2015	1090	0.29	152,000	35,520	187,520	140,000	Feb-15	57	134
06	61	000	401	143	33	4N1W19-CA-02000	2015	5360	0.40	152,000	162,980	314,980	230,000	Jun-15	58	137
06	61	000	401	145	33	4N2W23-C0-00200	2015	3945	1.58	155,440	192,170	347,610	245,000	May-15	59	142
06	63	000	401	142	33	5N2W11-00-00500	2015	4884	10.00	288,000	131,630	419,630	293,000	Jun-15	60	143
06	61	000	401	300	33	4N1W19-AD-00700	2015	1089	7.53	217,430	19,720	237,150	165,000	Feb-15	61	144
06	61	000	401	131	30	4N1W17-B0-08600	2015	190	0.44	152,000	76,640	228,640	157,000	Jan-15	62	146
06	63	000	401	142	33	5N2W12-00-01300	2015	6491	15.00	280,040	240,480	520,520	342,000	Jul-15	63	152
06	61	000	401	144	33	4N2W23-C0-00602	2015	2150	5.01	210,140	32,340	242,480	158,000	Mar-15	64	153
06	63	000	401	141	33	5N2W11-00-01904	2015	3417	7.10	259,420	177,910	437,330	285,000	May-15	65	153

COLUMBIA County 2016 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	64	000	401	300	30	5N2W26-C0-00300	2015	4462	19.42	347,880	236,660	584,540	360,000	Jun-15	66	162
06	61	000	401	151	30	5N1W31-00-00500	2015	6733	25.28	403,550	357,890	761,440	471,445	Aug-15	67	162
06	61	000	401	141	30	4N1W08-BB-03200	2015	5361	0.48	152,000	72,150	224,150	135,000	Jun-15	68	166

COLUMBIA County 2016 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
409	06	61	000		5	Rural St Helens	409	06	64	000		2	Rural St Helens
409	06	62	000		0	Rural St Helens							

Adjustment Calculation Summary

		8	RECALCULATED		
		472			
		1.69 %	Pre-Trend Brkdown	Post Trend Values	Post Trend Brkdown
Sample - Number of Sales					
Population - Number of Accounts					
Sales as a percentage of the Population					
Prior Year Population Values					
Land RMV	80,375,120	56.16 %	73,945,110	56.12 %	
OSD RMV	21,747,870	15.20 %	21,747,870	16.51 %	
Residential Improvement RMV	31,876,100	22.27 %	28,050,968	21.29 %	
Farm Improvement RMV	9,106,390	6.36 %	8,013,623	6.08 %	
SelectedRatioFromSales	109				
RMV Adjustment	100				
Before Ratio	109				
Overall Adjustment Factor	92				
Land Adjustment Factor	92				
OSD Adjustment Factor	100				
Residential Adjustment Factor	88				
Farm Improvement Factor	88				
After Ratio	100				
Selected Ratio	109	2016	Adjustment	92	

Explanation

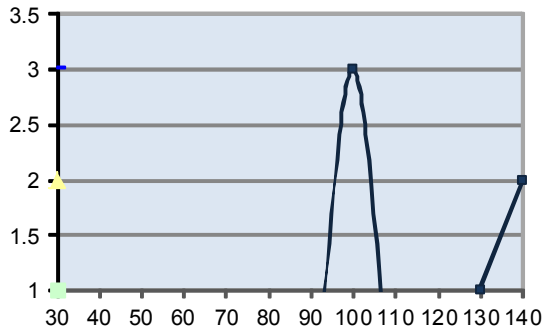
Improved land - Manufactured Structure - Rural St. Helens, Warren, Deer Island (Note: SA 56 is a unique neighborhood comprised of manufactured structures, there are no conventionally built homes in this area). Because the sales data is small in comparison to the population, it was decided to use the RMV 401 SA 61, SA 62, SA 63 and SA 64 study Selected Ratio of 109 and apply it here.

Performance History

	2016	2015	2014	2013	2012
COD	14.52	12.88	13.58	12.72	-
PRD	1.04	1.02	1.02	1.04	-

COLUMBIA County 2016 Ratio Study

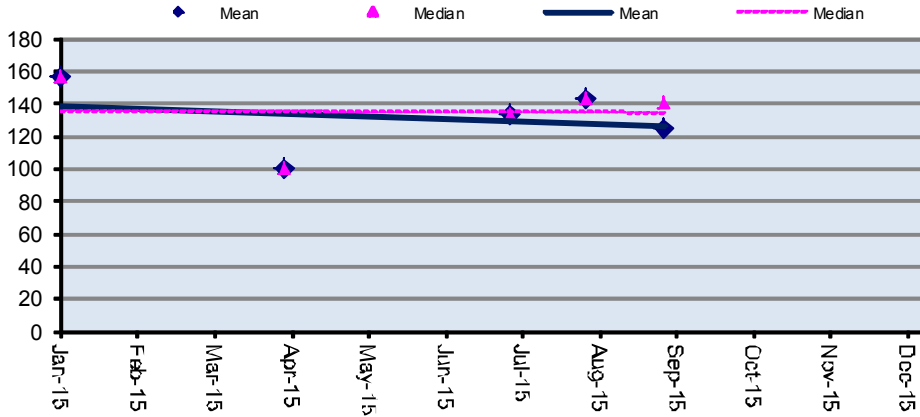
Frequency



30	0	Median	136	Wtd Mean	124
40	0	AD	19.75	GeoMean	127
50	0	COD	14.52	PRD	1.04
60	0	Mean	129	95% Confidence	15.93
70	0	SD	22.99		
80	0	COV	17.82		
90	0				
100	3				
110	0				
120	0				
130	1				
140	2				

Number Of Sales 8

Central Tendencies



Month	Mean	Median	Sales
Jan-15	157	157	1
Apr-15	100	100	1
Jul-15	133	133	1
Aug-15	143	143	1
Sep-15	124	140	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	61	000	409	452	33	4N2W24-AC-00900	2015	2577	0.56	152,000	74,080	226,080	226,000	Apr-15	1	100
06	61	000	409	452	33	4N1W18-B0-02300	2015	8357	6.42	247,570	110,780	358,350	349,000	Sep-15	2	103
06	61	000	409	463	33	4N1W07-C0-00600	2015	8114	2.07	185,550	131,580	317,130	305,000	Sep-15	3	104
06	61	000	409	452	30	4N1W07-BD-00700	2015	6132	0.92	140,000	85,680	225,680	170,000	Jul-15	4	133
06	64	000	409	452	33	6N3W36-00-01202	2015	7827	5.68	236,170	93,640	329,810	235,000	Sep-15	5	140
06	64	000	409	452	33	5N2W27-A0-01100	2015	7603	5.01	228,160	57,750	285,910	200,000	Aug-15	6	143
06	63	000	409	452	33	5N2W11-B0-00300	2015	8233	10.16	289,930	89,930	379,860	253,500	Sep-15	7	150
06	61	000	409	442	33	4N2W24-D0-02700	2015	342	2.00	184,000	11,930	195,930	125,000	Jan-15	8	157

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	06	65	000		1	Rural St Helens							

Adjustment Calculation Summary

Sample - Number of Sales	1	RECALCULATED		
Population - Number of Accounts	8			
Sales as a percentage of the Population	12.50 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	4,614,050	100.00 %	4,244,926	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	109			
RMV Adjustment	100			
Before Ratio	109			
Overall Adjustment Factor	92			
Land Adjustment Factor	92			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			
Selected Ratio	109	2016	Adjustment	92

Explanation

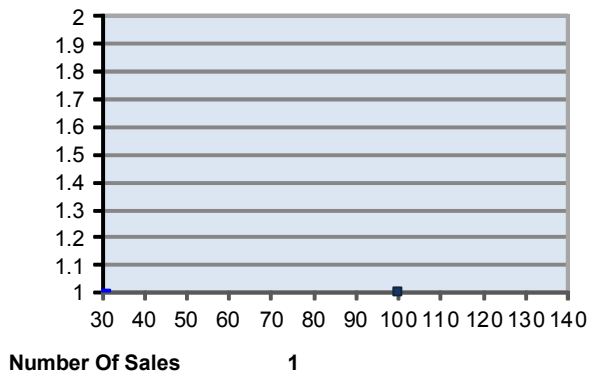
Unimproved Land – Dike Land - Rural St. Helens, Warren, Deer Island
 There is only one sale available which is not adequate for this analysis. Therefore the Selected Ratio of 109 from the MA 06 SA 56, 61, 62, 63 & 64 study was applied here.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	-	20.26	4.05	-
PRD	1.00	-	1.05	1.00	-

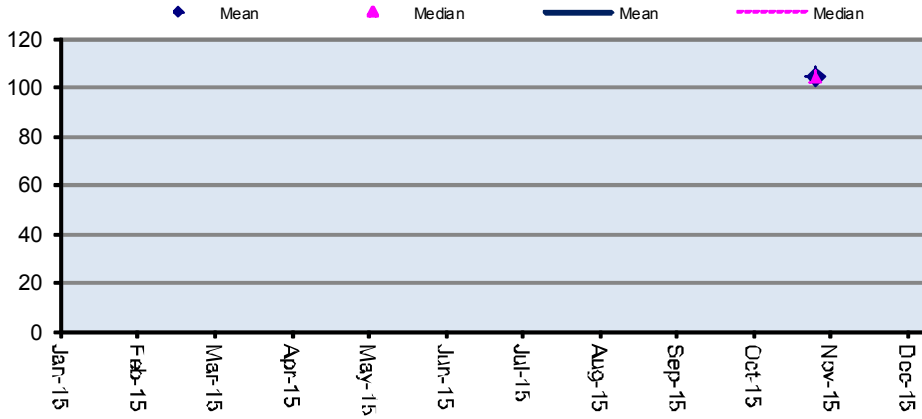
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	104	Wtd Mean	104
40	0	AD	0.00	GeoMean	104
50	0	COD	0.00	PRD	1.00
60	0	Mean	104	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	0.96		
90	0				
100	1				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Nov-15	104	104	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	65	000	400		33	5N1W08-00-00300	2015	9974	30.45	259,470	0	259,470	250,000	Nov-15	1	104

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	06	65	000		0	Rural St Helens							

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
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	48,898,690	93.74 %	44,986,795	93.75 %
OSD RMV	608,620	1.17 %	608,620	1.27 %
Residential Improvement RMV	1,758,060	3.37 %	1,582,254	3.30 %
Farm Improvement RMV	896,980	1.72 %	807,282	1.68 %
SelectedRatioFromSales	109			
RMV Adjustment	100			
Before Ratio	109			
Overall Adjustment Factor	92			
Land Adjustment Factor	92			
OSD Adjustment Factor	100			
Residential Adjustment Factor	90			
Farm Improvement Factor	90			
After Ratio	100			
Selected Ratio	109	2016	Adjustment	92

Explanation

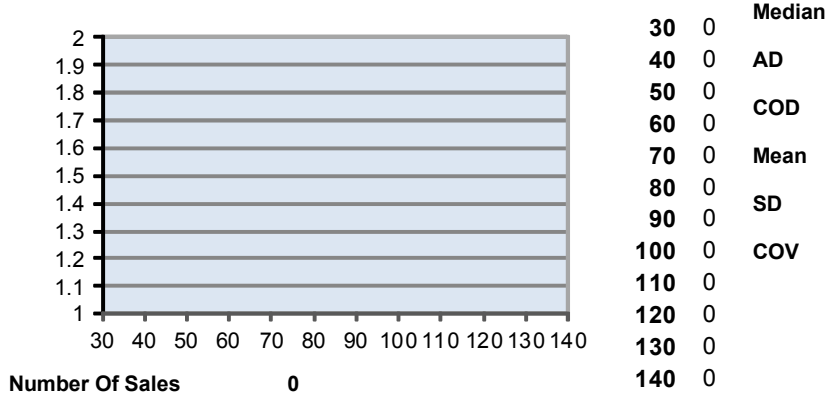
Improved Land – Dike Land - Rural St. Helens, Warren, Deer Island
 Having no sales data available, it was decided to apply the Selected Ratio of 109 from the MA 06 SA 61, 62, 63 & 64 study here.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	13.58	12.72	9.22
PRD	-	-	1.02	1.04	1.01

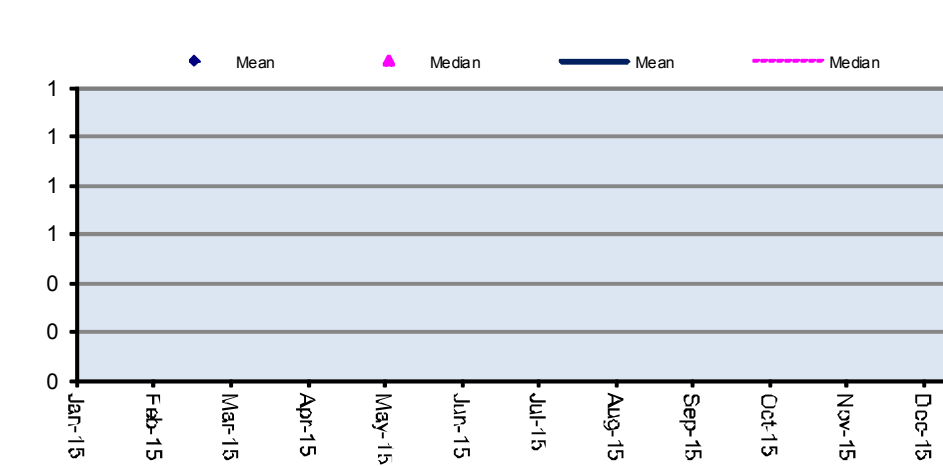
COLUMBIA County 2016 Ratio Study

Frequency



- 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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	Year	# of Sales	Location	RMV Class	MA	SA	NH	Year	# of Sales	Location
409	06	65	000		0	Rural St Helens							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	1			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	278,390	47.94 %	256,119	48.03 %
OSD RMV	22,440	3.86 %	22,440	4.21 %
Residential Improvement RMV	203,030	34.97 %	184,757	34.65 %
Farm Improvement RMV	76,800	13.23 %	69,888	13.11 %
SelectedRatioFromSales	109			
RMV Adjustment	100			
Before Ratio	109			
Overall Adjustment Factor	92			
Land Adjustment Factor	92			
OSD Adjustment Factor	100			
Residential Adjustment Factor	91			
Farm Improvement Factor	91			
After Ratio	100			
Selected Ratio	109	2016	Adjustment	92

Explanation

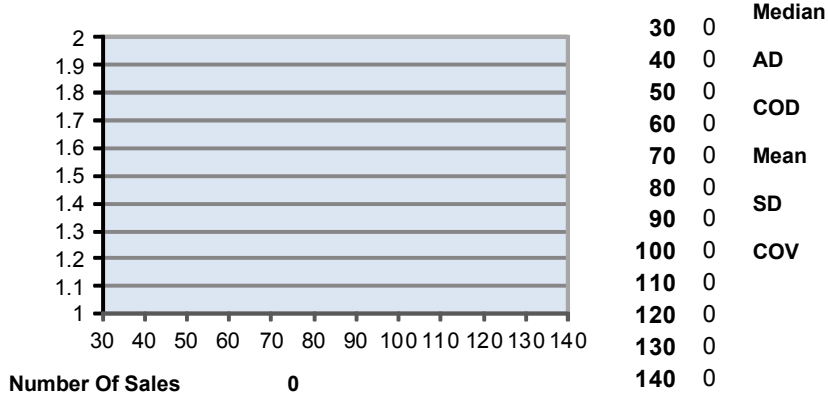
Improved Land – Dike Land, Manufactured Structures - Rural St. Helens, Warren, Deer Island
 For this study, there are no sales available to review. Therefore, the Selected Ratio of 109 from the MA 06 SA 56, 61, 62, 63 & 64 study was used.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	13.58	12.72	9.22
PRD	-	-	1.02	1.04	1.01

COLUMBIA County 2016 Ratio Study

Frequency



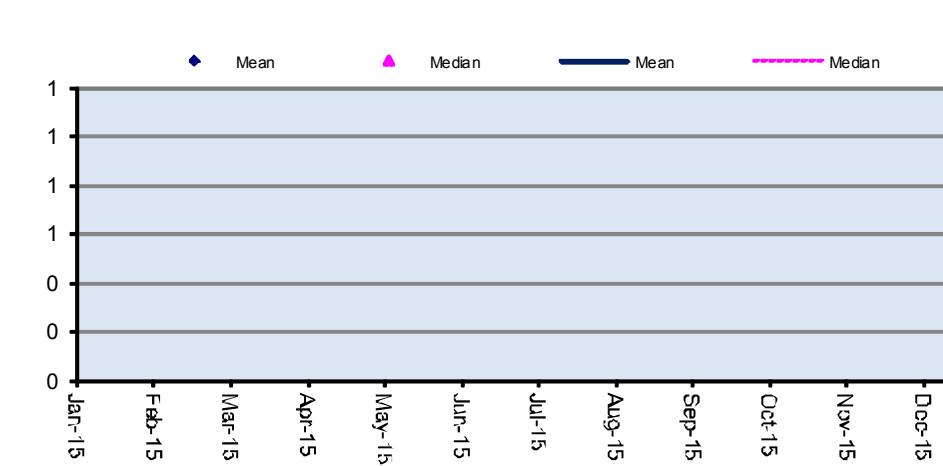
Wtd Mean

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

**MAINTENANCE
AREA 7**

RMV CLASS 019

**PERSONAL PROPERTY
MANUFACTURED
STUCTURES**

COLUMBIA County 2016 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	27	000		5	St. Helens
019	07	02	000		5	Maintenance Area 2	019	07	28	000		1	Columbia City
019	07	06	000		3	Maintenance Area 6	019	07	31	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	14	RECALCULATED		
Population - Number of Accounts	605			
Sales as a percentage of the Population	2.31%	Pre-Trend Brkdown	Post Trend Values	Post Trend Brkdown
Prior Year Population Values				
Land RMV		0.00 %	0	0.00 %
OSD RMV		0.00 %	0	0.00 %
Residential Improvement RMV	20,913,470	100.00 %	19,658,662	100.00 %
Farm Improvement RMV		0.00 %	0	0.00 %
SelectedRatioFromSales	106			
RMV Adjustment	100			
Before Ratio	106			
Overall Adjustment Factor	94			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	94			
Farm Improvement Factor	94			
After Ratio	100			
Selected Ratio	106	2016	Adjustment	94

Explanation

Personal Property Manufactured Structures – South Columbia County
 This analysis is comprised of personal property manufactured structures (PPMS) located through out South Columbia County. The Median of 107 was selected and the the time adjustment of 99 was applied. The result is a Selected Ratio of 106. Please see the following page for the analysis and additional comments.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study Personal Property Manufactured Structures

RMV Class	MA	SA	# of Accts	Location	RMV Class	MA	SA	# of Accts	Location
019	07	01	1	Maintenance Area 1	019	07	27	115	Crestwood Village-St. Helens
019	07	02	246	Maintenance Area 2	019	07	28	42	Columbia City Estates-Col. City
019	07	06	179	Maintenance Area 6	019	07	31	22	Crown Point-Scappoose

Acct #	MA	SA	Rej Code	Home ID	X-Plate Number	Year Built	Stat Class	Sale Date	Sales Price	Park Buy In	Concess	Adj Sales Price	2016 Base RMV	Ratio
1538	7	6	30	167898	85058	1973	442	02/09/15	\$28,000	\$0	\$0	\$28,000	\$19,360	69
436559	7	2	33	375374	375374	1980	451	03/05/15	\$22,000	\$0	\$0	\$22,000	\$21,680	99
1079	7	27	30	285407	239354	1996	442	04/01/15	\$48,000	\$0	\$0	\$48,000	\$44,380	92
1082	7	27	33	286015	240104	1995	442	04/30/15	\$27,000	\$0	\$0	\$27,000	\$37,640	139
1438	7	6	33	254927	198974	1994	442	06/29/15	\$32,000	\$0	\$0	\$32,000	\$38,890	122
1109	7	27	30	289473	244208	1997	442	07/01/15	\$36,000	\$0	\$0	\$36,000	\$50,370	140
1121	7	27	30	291018	246108	1998	452	07/16/15	\$34,678	\$0	\$0	\$34,678	\$51,510	149
1541	7	6	30	169300	86928	1973	441	09/14/15	\$15,000	\$0	\$0	\$15,000	\$11,350	76
465	7	2	33	247403	189117	1985	442	09/30/15	\$28,000	\$0	\$0	\$28,000	\$27,430	98
1262	7	28	33	276978	228593	1994	453	10/01/15	\$70,000	\$0	\$0	\$70,000	\$75,030	107
534	7	2	33	297410	253277	2000	442	10/02/15	\$38,255	\$0	\$0	\$38,255	\$38,930	102
372	7	2	30	202918	130953	1975	451	10/02/15	\$13,000	\$0	\$0	\$13,000	\$13,820	106
398	7	2	30	222816	157507	1978	451	10/15/15	\$24,000	\$0	\$0	\$24,000	\$30,280	126
1100	7	27	30	288221	242736	1996	442	11/15/15	\$38,908	\$0	\$0	\$38,908	\$51,100	131
												\$454,841	\$511,770	
Mean					111	COD	18	Population: 605						
Median					107	COV	21	Sales %: 2.31%						
GeoMean					109	AAD	19							
Wtd. Mean					113	PRD	99							

Conclusion:

This analysis is comprised of personal property manufactured structures (PPMS) located through out South Columbia County. Due to similar movement within the market, Crestwood Village (SA 27, Columbia City Estates (SA 28) and Crown Point (SA 31) were included with the PPMS General Area (SA 01, SA 02 and SA 06) study. The total population of these areas is 605 and there were a total of 14 useable sales. The sales as a percentage is 2.31%. The Median of 107 was selected as this central tendency is not distorted by the extreme ratios present in this sample.

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	30	000		15	Scappoose							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	15			
Population - Number of Accounts	145			
Sales as a percentage of the Population	10.34%			
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	11,410,540	100.00 %	12,323,383	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	93			
RMV Adjustment	100			
Before Ratio	93			
Overall Adjustment Factor	108			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	108			
Farm Improvement Factor	108			
After Ratio	100			
Selected Ratio	93	2016	Adjustment	108

Explanation

Personal Property Manufactured Structures – Springlake Park, City of Scappoose
 Selected the Median of 94 for Springlake Park (SA 30). The Selected Ratio is 93 after applying the time adjustment of 99. Refer to additional comments and analysis on the following page.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

**COLUMBIA County 2016 Ratio Study
Personal Property Manufactured Structures**

RMV Class	MA	SA	# of Accts	Location											
019	07	30	145	Springlake Park-Scappoose											
Acct	MA	SA	Rej Code	Home ID	X-Plate Number	Year Built	Stat Class	Sale Date	Sales Price	Park Buy In	Concess	Adj Sales Price	2016 Base RMV	Ratio	
104	7	30	33	254804	198824	1988	452	02/27/15	\$63,500	\$16,000		\$47,500	\$49,440	104	
125	7	30	30	263068	209838	1990	452	03/16/15	\$65,000	\$16,000		\$49,000	\$50,870	104	
176	7	30	33	286311	240457	1997	442	04/09/15	\$99,500	\$16,000	\$5,000	\$78,500	\$61,900	79	
94	7	30	33	251023	193843	1995	452	04/10/15	\$119,500	\$16,000		\$103,500	\$97,500	94	
126	7	30	30	263151	209940	1991	452	04/23/15	\$59,000	\$16,000		\$43,000	\$68,900	160	
141	7	30	33	275572	226718	1993	452	04/24/15	\$106,500	\$16,000		\$90,500	\$89,070	98	
167	7	30	33	284160	237787	1996	452	04/28/15	\$69,000	\$16,000		\$53,000	\$78,510	148	
156	7	30	33	281888	235035	1994	452	05/27/15	\$105,000	\$16,000		\$89,000	\$81,460	92	
96	7	30	30	251095	193928	1990	452	07/07/15	\$84,000	\$16,000		\$68,000	\$59,480	87	
112	7	30	30	258945	204237	1990	452	08/07/15	\$99,900	\$16,000		\$83,900	\$65,100	78	
110	7	30	33	257382	202164	1989	452	08/17/15	\$67,250	\$16,000		\$51,250	\$46,030	90	
429793	7	30	30	311355	311355	2006	462	08/28/15	\$159,900	\$16,000		\$143,900	\$126,410	88	
30249	7	30	30	307228	307228	2005	462	09/16/15	\$165,000	\$16,000		\$149,000	\$119,630	80	
30423	7	30	33	279780	232327	1995	452	10/23/15	\$85,000	\$16,000		\$69,000	\$78,490	114	
235	7	30	30	283276	236719	1995	452	11/30/15	\$110,000	\$16,000		\$94,000	\$88,970	95	
												\$1,213,050	\$1,161,760		

Mean	101	COD	16	Population:	145
Median	94	COV	23	Sales %:	10.34%
GeoMean	98	AAD	15		
Wtd. Mean	96	PRD	105		

Conclusion:

This grouping of Personal Property Manufactures Structures (PPMS) is located in SA 30 (Springlake Park) in the City of Scappoose. The total population of this study area is 145 and there were a total of 15 useable sales. The sales as a percentage is 10.34%. Due to the presence of varied ratios in the sales available, the Median of 94 was selected for personal property manufactured structures located in MA 07 SA 30 (Springlake Park).

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	03	000		0	Maintenance Area 3	019	07	05	000		3	Maintenance Area 5
019	07	04	000		1	Maintenance Area 4							

Adjustment Calculation Summary

Sample - Number of Sales	4	RECALCULATED		
Population - Number of Accounts	417			
Sales as a percentage of the Population	0.96%	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV		0.00 %	0	0.00 %
OSD RMV		0.00 %	0	0.00 %
Residential Improvement RMV	10,479,780	100.00 %	6,183,070	100.00 %
Farm Improvement RMV		0.00 %	0	0.00 %
SelectedRatioFromSales	169			
RMV Adjustment	100			
Before Ratio	169			
Overall Adjustment Factor	59			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	59			
Farm Improvement Factor	59			
After Ratio	100			
Selected Ratio	169	2016	Adjustment	59

Explanation

Personal Property Manufactured Structures – North Columbia County
 These personal property manufactures structures are located in South Columbia County (Vernonia, Rainier, Clatskanie). The Mean of 170 was selected and adjusted by 99 from the time study. The result is a Selected Ratio of 169. See the following page for further comments and documentation.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study Personal Property Manufactured Structures

RMV Class	MA	SA	# of Accts	Location	RMV Class	MA	SA	# of Accts	Location
019	07	03	11	Maintenance Area 3	019	07	05	196	Maintenance Area 5
019	07	04	210	Maintenance Area 4					

Acct #	MA	SA	Rej Code	Home ID	X-Plate Number	Year Built	Stat Class	Sale Date	Sales Price	Park Buy In	Concess	Adj Sales Price	2016 Base RMV	Ratio
1937	7	4	33	166285	82860	1972	441	03/25/15	\$6,000	\$0	\$0	\$6,000	\$9,550	159
1996	7	5	33	201147	128607	1975	452	03/10/15	\$15,000	\$0	\$0	\$15,000	\$27,960	186
2508	7	5	33	253343	196907	1988	442	10/31/15	\$25,000	\$0	\$0	\$25,000	\$39,060	156
2513	7	5	33	257126	201833	1988	442	10/22/15	\$22,500	\$0	\$0	\$22,500	\$39,680	176
												<u>\$68,500</u>	<u>\$116,250</u>	

Mean	170	COD	7	Population: 417
Median	168	COV	7	Sales %: .96%
GeoMean	169	AAD	12	
Wtd. Mean	170	PRD	100	

Conclusion:

This analysis is comprised of personal property manufactured structures (PPMS) located through out North Columbia County in the MA 07 General Areas of SA 03, SA 04 and SA 05. The total population of North MA 07 is 417 and the percent of useable sales is 96%. The Mean of 170 was deemed the most reliable of the ratio averages and is supported by the Weighted Mean.

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location	
019	07	35	000		4	Vernonia								

Adjustment Calculation Summary

Sample - Number of Sales	4	RECALCULATED		
Population - Number of Accounts	21			
Sales as a percentage of the Population	19 %	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	288,540	100.00 %	170,239	100.00 %
Farm Improvement RMV		0.00 %	0	0.00 %
SelectedRatioFromSales	169			
RMV Adjustment	100			
Before Ratio	169			
Overall Adjustment Factor	59			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Residential Adjustment Factor	59			
Farm Improvement Factor	59			
After Ratio	100			
Selected Ratio	169	2016	Adjustment	59

Explanation

Personal Property Manufactured Structures – Riverside Meadows, City of Vernonia
 These Personal Property Manufactures Structures (PPMS) are located in the City of Vernonia (Riverside Meadows) and lie in the FEMA flood way. Because of the lack of sales available for analysis it has been decided to use the Selected Ratio of 169 from the North County study. See the following page for the analysis and comments.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study
Personal Property Manufactured Structures

RMV Class	MA	SA	# of Accts	Location											
019	07	35	21	Riverside Meadows-Vernonia											
Acct	MA	SA	Rej Code	Home ID	X-Plate Number	Year Built	Stat Class	Sale Date	Sales Price	Park Buy In	Other Concess.	Adj Sales Price	2016 Base RMV	Ratio	
2352	7	35	30	157711	71235	1972	441	4/13/2015	\$3,250	\$0	\$0	\$3,250	\$6,850	211	
2342	7	35	30	270912	220314	1993	442	3/31/2015	\$5,500	\$0	\$0	\$5,500	\$25,750	468	
2327	7	35	30	210018	140346	1977	442	9/2/2015	\$10,000	\$0	\$0	\$10,000	\$11,490	115	
2339	7	35	30	262214	208630	1990	442	10/30/2015	\$6,000	\$0	\$0	\$6,000	\$20,640	344	
												\$24,750	\$64,730		
Mean					284	COD		73	Population:						21
Median					277	COV		69	Sales %:						19%
GeoMean					250	AAD		191							
Wtd. Mean					262	PRD		109							

Conclusion:

These Personal Property Manufactures Structures (PPMS) are located in the City of Vernonia (Riverside Meadows) and lie in the FEMA flood way. Because of the unique nature of this area due to the flood way and the way in which they move within the market, a new Study Area (SA 35) has been created. The population total is 21. There are only 4 sales for this study. Because of the lack of sales available for analysis it has been decided to use the Selected Ratio of 169 from the North County study. This results in an overall adjustment of 59.

**ALL
MAINTENANCE
AREAS**

RMV CLASS 111

**PERSONAL PROPERTY
FLOATING HOMES
BOATHOUSES
COMBINATIONS**

COLUMBIA County 2016 Ratio Study
 Personal Property
 Floating Property

RMV Class	MA	SA	# of Accts	Location	RMV Class	MA	SA	# of Accts	Location
111	01	95	46	St. Helens	111	04	97	2	Rainier
111	01	97	5	St. Helens	111	05	95	33	Clatskanie
111	02	95	137	Scappoose	111	05	97	14	Clatskanie
111	02	97	7	Scappoose	111	06	95	18	Rural St.Helens
111	04	95	7	Rainier	111	06	97	10	Rural St.Helens

Sale	MA	SA	RJ Code	PP/W Acct	Tax ID	RMV Class	Sale Date	Sales Price	Pd Concess	Adj Sales Price	2016 Base RMV	Ratio
1	2	95	33	3311	432181	111	01/14/15	204,000	0	204,000	221,430	1.09
2	2	95	33	4005	432179	111	02/12/15	74,000	0	74,000	79,790	1.08
3	2	95	33	3347	432216	111	8/12/15	275,000	0	275,000	117,990	0.43
4	2	95	33	3134	432249	111	11/13/15	60,000	0	60,000	48,020	0.80
										613,000	467,230	

Mean	0.85	COD	21.06	Population:	279
Median	0.94	COV	35.94	Sales %:	1.43%
GeoMean	0.80	AAD	0.20		
Wtd. Mean	0.76	PRD	1.11		

Conclusion:

This analysis is comprised of personal property floating property (Floating Homes, Combinations and Boathouses) located through out Columbia County. The total population of these properties is 279 and there were a total of 4 useable sales. The sales as a percentage is 1.43%. The unique nature of these properties and the varying uses they have (primary residences, recreational use, boat storage, etc) makes conducting an analysis difficult. Also, the study is further complicated by the manner in which these sales are reported (via personal property returns). Due to these problematic factors and the limited number of sales available, it is recommended to apply no trend to Floating Properties for the 2016 ratio year. NOTE: a re-appraisal of all floating properties is currently in process. The sales used in this analysis have been re-appraised.

**ALL
MAINTENANCE
AREAS**

**RMV CLASSES 2XX
COMMERCIAL
PROPERTIES**

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	03	00	000		0	Vernonia	200	02	71	000		0	Scappoose
200	03	73	000		0	Vernonia	200	02	72	000		0	Scappoose
200	06	00	000		0	Rural St Helens	200	04	72	000		0	Rainier
200	02	73	000		0	Scappoose	200	01	72	000		0	St Helens/Col City
200	06	72	000		0	Rural St Helens	200	04	00	000		1	Rainier
200	04	73	000		0	Rainier	200	05	00	000		0	Clatskanie
200	06	63	000		0	Rural St Helens	200	01	01	000		0	Columbia City
200	01	00	000		0	St Helens	200	04	71	000		0	Rainier
200	02	00	000		2	Scappoose	200	04	41	000		0	Rainier
200	01	73	000		0	St Helens/Col City							

Adjustment Calculation Summary

Sample - Number of Sales	3	RECALCULATED		
Population - Number of Accounts	528			
Sales as a percentage of the Population	0.57 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	27,926,760	100.00 %	27,926,760	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	2016	Adjustment	100

Explanation

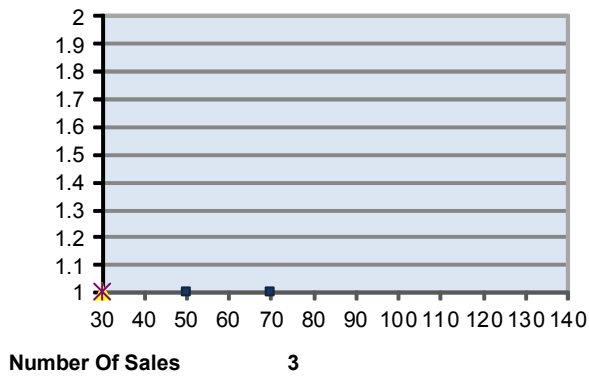
Unimproved land – Commercial, Countywide
 This dataset is too small to perform a thorough analysis with having only 4 sales available out of a population of 528 accounts. Therefore it was decided to use 100 as the Selected Ratio. No time adjustment was applied to this study.

Performance History

	2016	2015	2014	2013	2012
COD	118.47	9.65	0.00	0.00	14.56
PRD	1.58	1.01	1.00	1.00	1.00

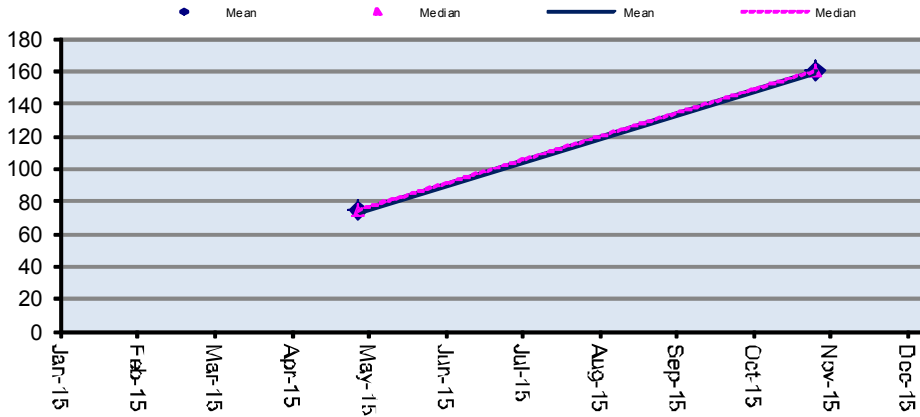
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	74	Wtd Mean	83
40	0	AD	87.67	GeoMean	104
50	1	COD	118.47	PRD	1.58
60	0	Mean	131	95% Confidence	129.39
70	1	SD	114.34		
80	0	COV	87.29		
90	0				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
May-15	74	74	1
Nov-15	160	160	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
04	00	000	200		33	7N2W17-BA-00607	2015	9870	0.52	125,910	0	125,910	219,000	Nov-15	1	57
02	00	000	200		33	3N2W13-DB-00100	2015	3919	2.89	625,740	0	625,740	850,000	May-15	2	74
02	00	000	200		33	3N2W12-AD-06529	2015	9569	0.45	197,610	0	197,610	75,000	Nov-15	3	263

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
201	01	00	000		4	St Helens	201	03	73	000		0	Vernonia
201	01	01	000		0	Columbia City	201	04	00	000		0	Rainier
201	01	71	000		0	St Helens/Col City	201	04	71	000		0	Rainier
201	01	72	000		0	St Helens/Col City	201	04	72	000		0	Rainier
201	01	73	000		0	St Helens/Col City	201	05	00	000		0	Clatskanie
201	02	00	000		2	Scappoose	201	05	71	000		0	Clatskanie
201	02	71	000		0	Scappoose	201	05	72	000		0	Clatskanie
201	02	72	000		0	Scappoose	201	06	00	000		0	Rural St Helens
201	02	73	000		0	Scappoose	201	06	72	000		0	Rural St Helens
201	03	00	000		0	Vernonia	201	06	73	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	6	RECALCULATED		
Population - Number of Accounts	1,105			
Sales as a percentage of the Population	0.54 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	113,512,040	31.82 %	113,512,040	31.82 %
OSD RMV	25,500	0.01 %	25,500	0.01 %
Residential Improvement RMV	243,007,190	68.13 %	243,007,190	68.13 %
Farm Improvement RMV	154,850	0.04 %	154,850	0.04 %
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	2016	Adjustment	100

Explanation

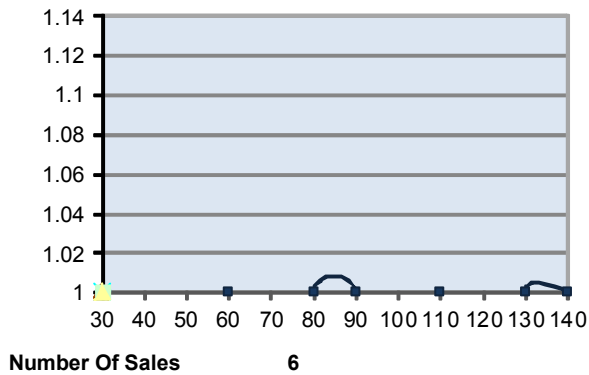
Improved land – Commercial, Countywide
 There are 6 sales available for this analysis. Because of the limited number of sales available, it has been decided to use 100 as the Selected Ratio. No time adjustment was applied at this time.

Performance History

	2016	2015	2014	2013	2012
COD	25.63	21.23	15.07	10.91	18.02
PRD	0.93	1.15	1.02	0.99	1.09

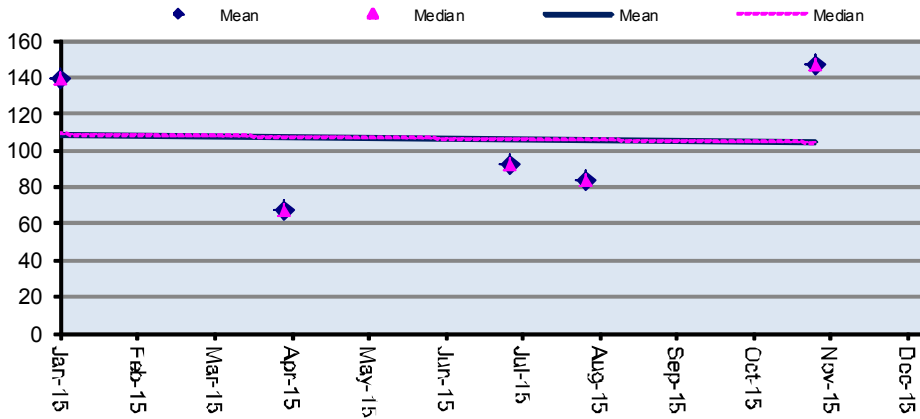
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	106	Wtd Mean	116
40	0	AD	27.17	GeoMean	104
50	0	COD	25.63	PRD	0.93
60	1	Mean	108	95% Confidence	25.72
70	0	SD	32.14		
80	1	COV	29.76		
90	1				
100	0				
110	1				
120	0				
130	1				
140	1				

Central Tendencies



Month	Mean	Median	Sales
Jan-14	119	119	1
Jan-15	139	139	1
Apr-15	67	67	1
Jul-15	92	92	1
Aug-15	83	83	1
Nov-15	147	147	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	201	543	30	4N1W04-BD-08600	2015	2962	0.15	43,920	158,180	202,100	300,000	Apr-15	1	67
01	00	000	201	579	33	4N1W04-AC-00102	2015	7165	0.27	74,290	96,130	170,420	206,500	Aug-15	2	83
01	00	000	201	574	33	4N1W03-BD-07300	2015	6027	0.23	91,500	293,610	385,110	420,000	Jul-15	3	92
02	00	000	201	582	33	3N2W01-A0-01301	2014	708	2.52	612,620	399,830	1,012,450	850,000	Jan-14	4	119
01	00	000	201	572	30	4N1W04-CA-00800	2015	809	0.20	57,060	157,830	214,890	155,000	Jan-15	5	139
02	00	000	201	574	33	3N2W13-B0-01700	2015	9978	1.14	394,370	770,000	1,164,370	790,000	Nov-15	6	147

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
207	01	00	000		0	St Helens	207	04	00	000		0	Rainier
207	01	01	000		0	Columbia City	207	05	00	000		0	Clatskanie
207	02	00	000		0	Scappoose	207	06	00	000		0	Rural St Helens
207	03	00	000		0	Vernonia	207	06	56	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	0	RECALCULATED		
Population - Number of Accounts	36			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	17,397,659	44.38 %	17,397,659	44.38 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	21,793,740	55.59 %	21,793,740	55.59 %
Farm Improvement RMV	14,230	0.04 %	14,230	0.04 %
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	2016	Adjustment	100

Explanation

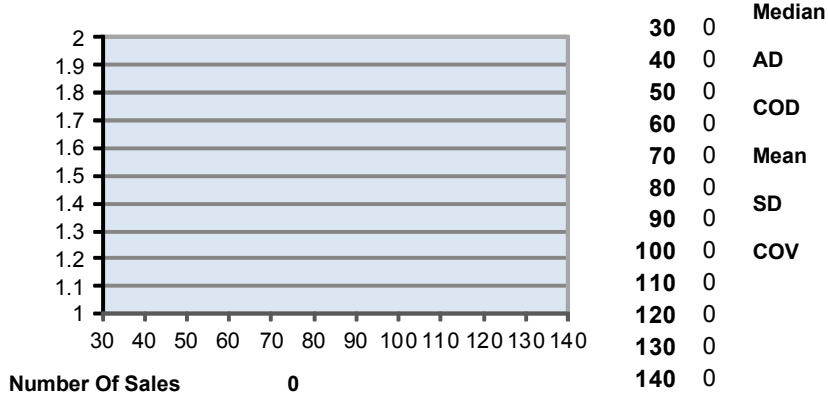
Improved land – Manufactured Home Parks, Countywide
 These properties are appraised based on income. Because of this, no adjustment has been applied.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study

Frequency



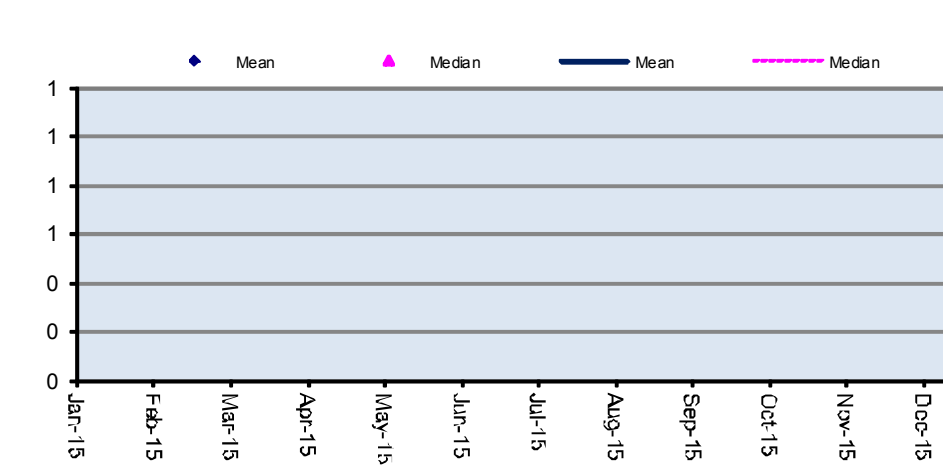
Wtd Mean

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	PRP 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 2016 Ratio Study

Commercial Floating Property

RMV Class	MA	SA	# of Accts	Location	RMV Class	MA	SA	# of Accts	Location
221	02	00	2	Scappoose	221	06	00	1	Rural St. Helens

Sale	Code Area	Account	Tax ID	Marine Board #	RMV Class	Sale Date	Adjusted Sales Price	MA	SA	RJ Code	RMV	Ratio
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Sample - Number of Sales	0	Median	0	COD	0
Population - Number of Accounts Sales	3	Mean GeoMean	0	SD	0
as a percentage of the Population	0.00 %	Weighted Mean	0	COV	0
			0	AAD	0
				PRD	0

Analysis:

The analysis for RMV Class 221, SA 00 (Commercial Floating Properties) cannot be performed using the current ORCATS Ratio Study program. Instead, the analysis was performed by tracking the useable sales from 1/1/2015 through 12/31/15 using Excel.

Explanation:

There were no useable sales available for this study. Therefore, it is recommend not to apply an adjustment at this time.

**ALL
MAINTENANCE
AREAS**

RMV CLASS 3XX

**INDUSTRIAL
PROPERTY**

COLUMBIA County 2016 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		0	St Helens	300	04	00	000		1	Rainier
300	02	00	000		0	Scappoose	300	05	00	000		0	Clatskanie
300	03	00	000		0	Vernonia	300	06	00	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	1			
Population - Number of Accounts	121			
Sales as a percentage of the Population	0.83 %	Pre-Trend Brkdown	Post Trend Values	Post Trend Brkdown
Prior Year Population Values				
Land RMV	41,345,230	100.00 %	41,345,230	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	2016	Adjustment	100

Explanation

Unimproved land – Industrial, Countywide

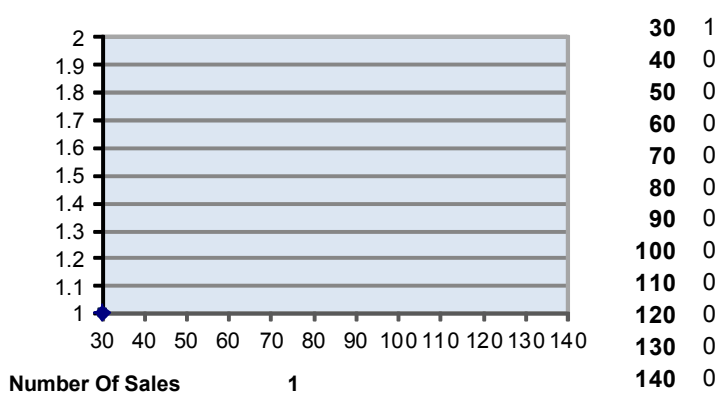
There is 1 sale available for this analysis which is too few to perform an adequate study. Therefore, a Selected Ratio of 100 was deemed appropriate to apply with no time adjustment.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	0.00	-	0.00	-
PRD	1.00	1.00	-	1.00	-

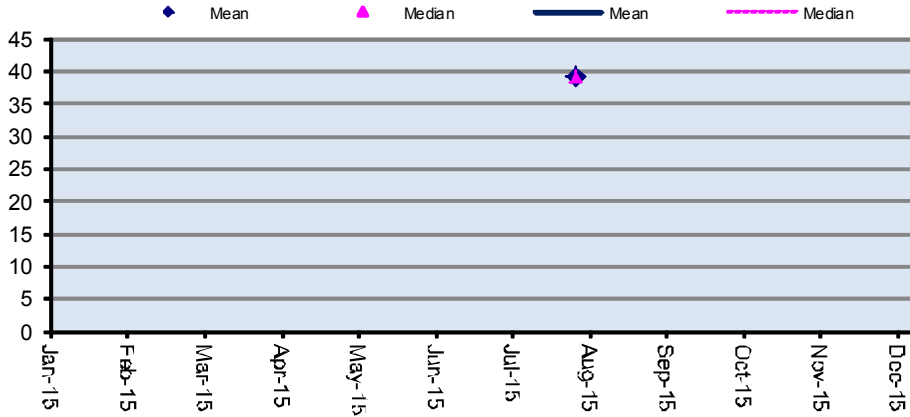
COLUMBIA County 2016 Ratio Study

Frequency



Median	39	Wtd Mean	39
AD	0.00	GeoMean	39
COD	0.00	PRD	1.00
Mean	39	95% Confidence	1.96
SD	1.00		
COV	2.56		

Central Tendencies



Month	Mean	Median	Sales
Aug-15	39	39	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	300		33	7N2W17-00-00100	2015	7168	9.51	611,680	0	611,680	1,563,750	Aug-15	1	39

COLUMBIA County 2016 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	00	000		0	Rainier
301	02	00	000		0	Scappoose	301	04	74	000		0	Rainier
301	02	74	000		1	Scappoose	301	05	00	000		0	Clatskanie
301	03	00	000		0	Vernonia	301	06	00	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	1			
Population - Number of Accounts	79			
Sales as a percentage of the Population	1.27 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	18,041,370	65.83 %	18,041,370	65.83 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	9,340,800	34.08 %	9,340,800	34.08 %
Farm Improvement RMV	25,490	0.09 %	25,490	0.09 %
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	2016	Adjustment	100

Explanation

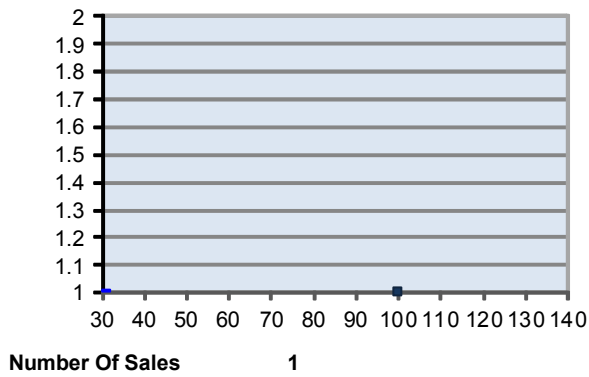
Improved Land – Industrial, Countywide
 Since there is only one sale available for this study, it was decided to use the Selected Ratio of 100 with no time adjustment applied.

Performance History

	2016	2015	2014	2013	2012
COD	0.00	0.00	-	-	3.13
PRD	1.00	1.00	-	-	0.99

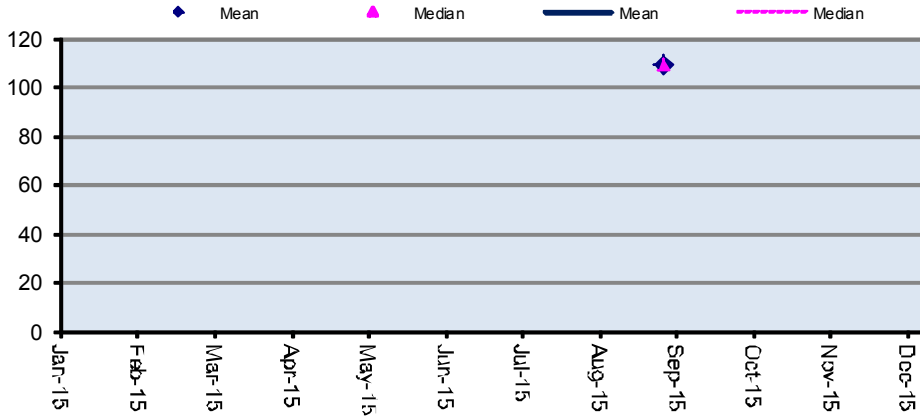
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	109	Wtd Mean	109
40	0	AD	0.00	GeoMean	109
50	0	COD	0.00	PRD	1.00
60	0	Mean	109	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	0.92		
90	0				
100	1				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Sep-15	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
02	74	000	301	595	33	4N2W36-D0-00300	2015	8116	25.24	533,890	44,330	578,220	530,000	Sep-15	1	109

**ALL
MAINTENANCE
AREAS**

RMV CLASS 701

**MULTI FAMILY
(5 PLUS UNITS)**

COLUMBIA County 2016 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		1	St Helens	701	04	00	000		0	Rainier
701	02	00	000		0	Scappoose	701	05	00	000		0	Clatskanie
701	03	00	000		0	Vernonia	701	06	00	000		0	Rural St Helens

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	1			
Population - Number of Accounts	82			
Sales as a percentage of the Population	1.22 %			
Prior Year Population Values				
Land RMV	10,292,390	21.51 %	10,292,390	21.51 %
OSD RMV	15,500	0.03 %	15,500	0.03 %
Residential Improvement RMV	37,538,950	78.46 %	37,538,950	78.46 %
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	2016	Adjustment	100

Explanation

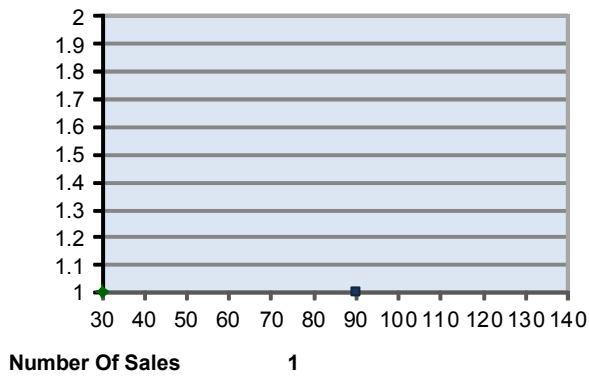
Improved Land – Apartments, Countywide
 Having too few sales available for this analysis, the Selected Ratio of 100 from the improved Commercial study was used (MA 01 SA 00, 01, 71, 72, 73, 74; MA 02 SA 00, 71, 72, 73, 74; MA 03 SA 00, 71, 72, 73, 74; MA 04 SA 00, 71, 72, 73, 74; MA 05 SA 00, 71, 72, 73, 74; MA 06 SA 00, 71, 72, 73, 74).

Performance History

	2016	2015	2014	2013	2012
COD	0.00	0.00	-	-	-
PRD	1.00	1.00	-	-	-

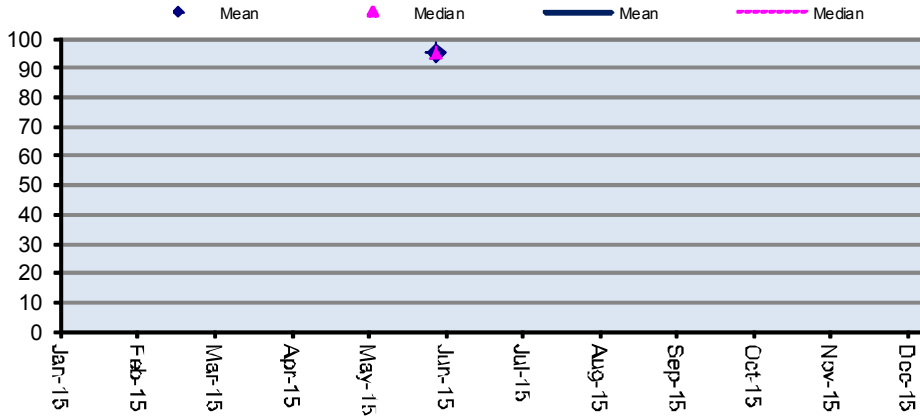
COLUMBIA County 2016 Ratio Study

Frequency



30	0	Median	95	Wtd Mean	95
40	0	AD	0.00	GeoMean	95
50	0	COD	0.00	PRD	1.00
60	0	Mean	95	95% Confidence	1.96
70	0	SD	1.00		
80	0	COV	1.05		
90	1				
100	0				
110	0				
120	0				
130	0				
140	0				

Central Tendencies



Month	Mean	Median	Sales
Jun-15	95	95	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	701	762	33	4N1W04-CB-03800	2015	5420	0.54	126,790	415,810	542,600	570,000	Jun-15	1	95

**ALL
MAINTENANCE
AREAS**

**ODD LOTS:
RMV CLASS 010
RMV CLASS 020
RMV CLASS 030
RMV CLASS 040**

COLUMBIA County 2016 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	01	15	000		0	St Helens	010	04	00	000		0	Rainier
010	02	00	000		0	Scappoose	010	05	00	000		0	Clatskanie

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	152			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	126,350	94.74 %	126,350	94.74 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	7,020	5.26 %	7,020	5.26 %
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	2016	Adjustment	100

Explanation

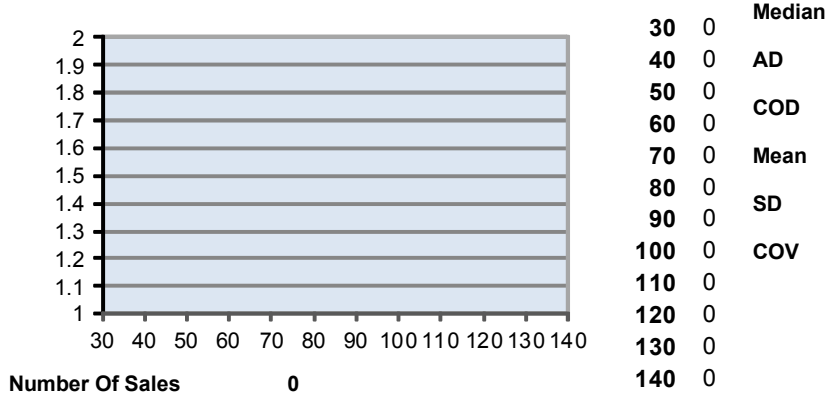
Odd Lot – Unbuildable, zoned residential
 This study is comprised of those odd lots which are not buildable due to size, DEQ denial, etc and are located in the incorporated areas of Columbia County. They have been identified as having minimal value for assessment reasons. The improvement value displayed on this report represents paving and is considered to be of little value. Therefore, it was deemed no adjustment was warranted at this time.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study

Frequency



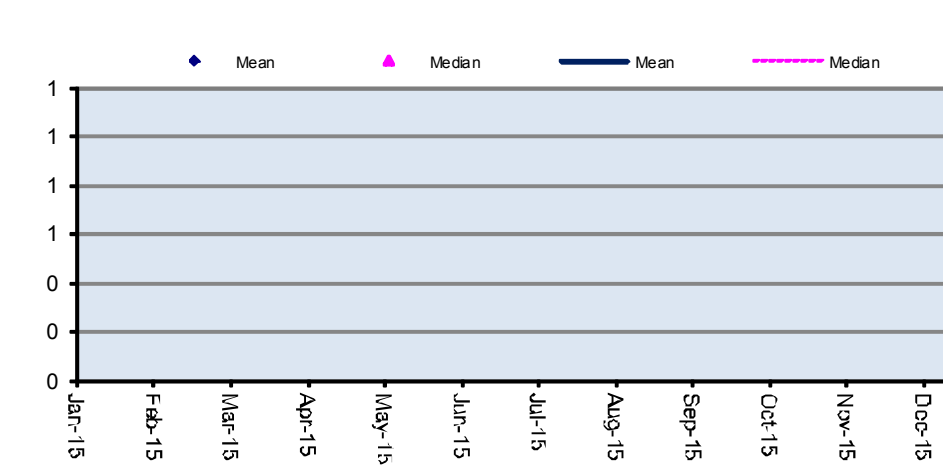
Wtd Mean

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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

COLUMBIA County 2016 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	04	00	000		0	Rainier
020	02	00	000		0	Scappoose	020	05	00	000		0	Clatskanie
020	03	00	000		0	Vernonia							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdw	Post Trend Values	Post Trend Brkdw
Sample - Number of Sales	0			
Population - Number of Accounts	13			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	12,810	53.64 %	12,810	53.64 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	11,070	46.36 %	11,070	46.36 %
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	2016	Adjustment	100

Explanation

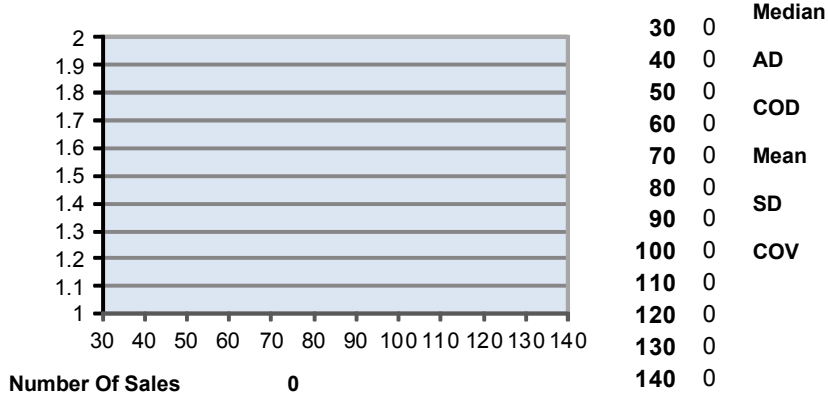
Odd Lot – Unbuildable, zoned commercial
 These properties are zoned commercial and are located throughout Columbia County. Because of their size, shape and/or location they are considered as odd lots and have been given minimal value. It is recommended that no adjustment be made to these properties for the current year.

Performance History

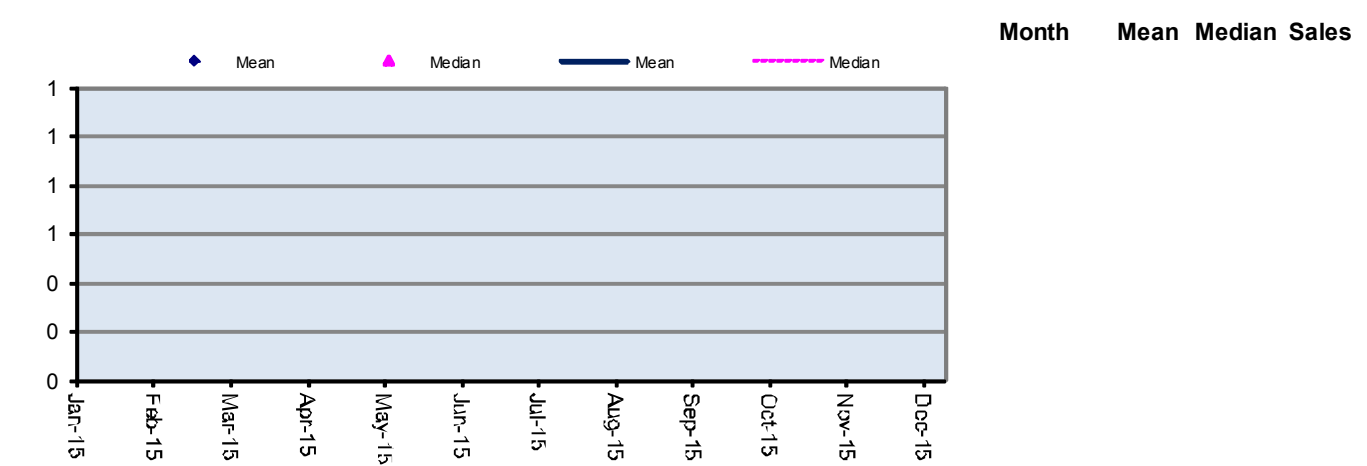
	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study

Frequency



Central Tendencies



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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
		CLS											

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
030	01	00	000		0	St Helens	030	05	00	000		0	Clatskanie
030	03	00	000		0	Vernonia	030	06	00	000		0	Rural St Helens
030	04	00	000		0	Rainier							

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdw	Post Trend Values	Post Trend Brkdw
Sample - Number of Sales	0			
Population - Number of Accounts	122			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	90,800	100.00 %	90,800	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	2016	Adjustment	100

Explanation

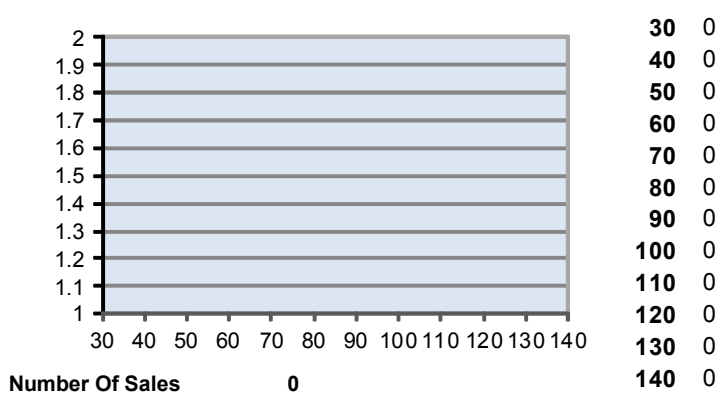
Odd Lot – Unbuildable, zoned industrial
 This analysis is for those odd lots which are zoned industrial. They are of insufficient size for development but may provide access to other sites. These properties are given a minimal value and no adjustment is recommended.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

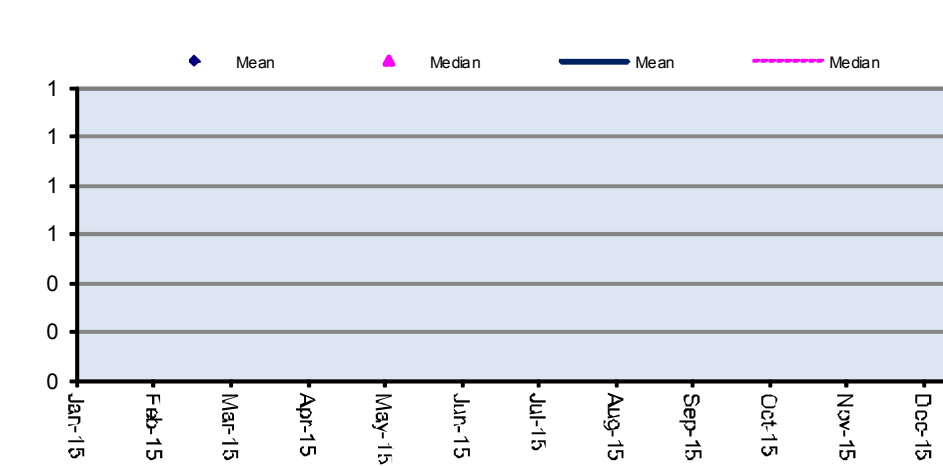
COLUMBIA County 2016 Ratio Study

Frequency



- 30 0 Median
 - 40 0 AD
 - 50 0 COD
 - 60 0 Mean
 - 70 0 SD
 - 80 0 COV
 - 90 0
 - 100 0
 - 110 0
 - 120 0
 - 130 0
 - 140 0
- 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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO
		CLS											

COLUMBIA County 2016 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	42	000		0	Rainier
040	02	21	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	61	000		0	Rural St Helens
040	04	41	000		0	Rainier	040	06	62	000		0	Rural St Helens

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	164			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	133,690	100.00 %	133,690	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 2016 Adjustment 100

Explanation

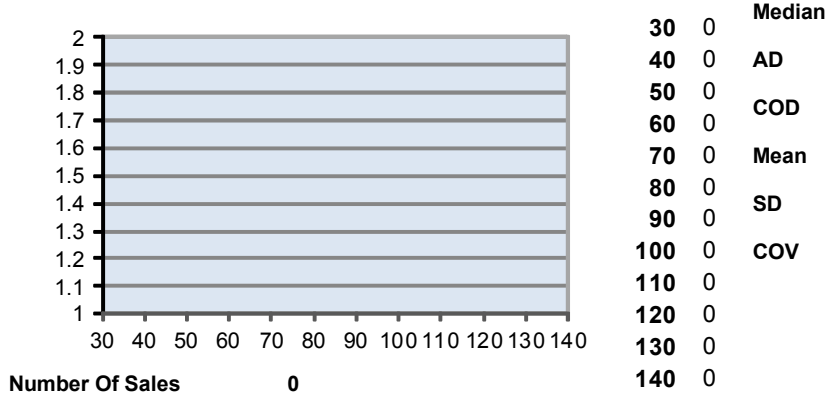
Odd Lot – Unbuildable, zoning not significant
 These are properties located within rural Columbia County. Due to their size, shape and/or location they are considered to have minimal value. Therefore, no adjustment is to be applied for the current year.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study

Frequency



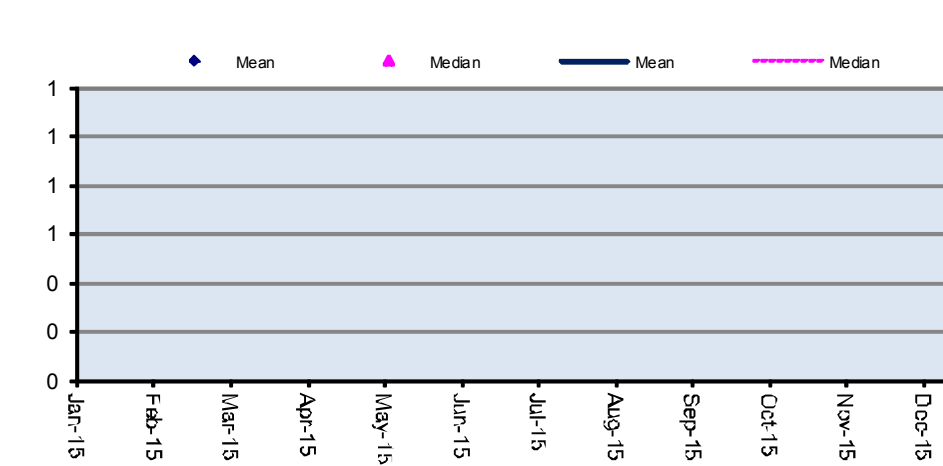
Wtd Mean

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

**ALL
MAINTENANCE
AREAS**

STUDY AREA 60

ISLANDS

COLUMBIA County 2016 Ratio Study

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

Adjustment Calculation Summary

		RECALCULATED		
		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	11			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	682,970	100.00 %	682,970	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	2016	Adjustment	100

Explanation

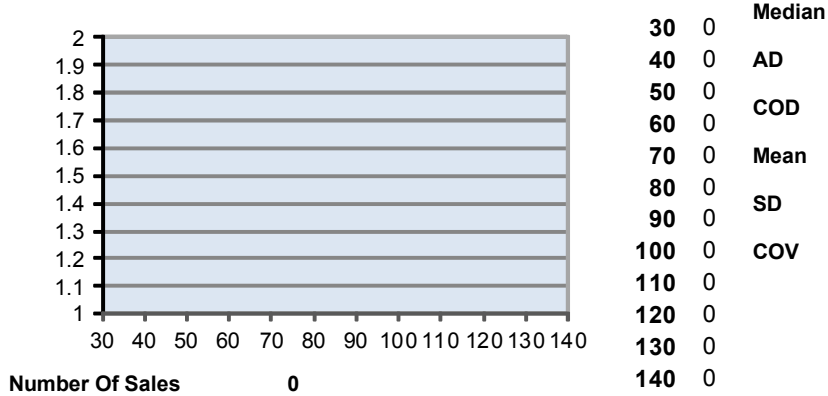
Islands
 This analysis comprises those properties located on the Columbia River (Islands). They have very little marketability due to access and development limitations. Therefore it is recommended that no adjustment be applied.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study

Frequency



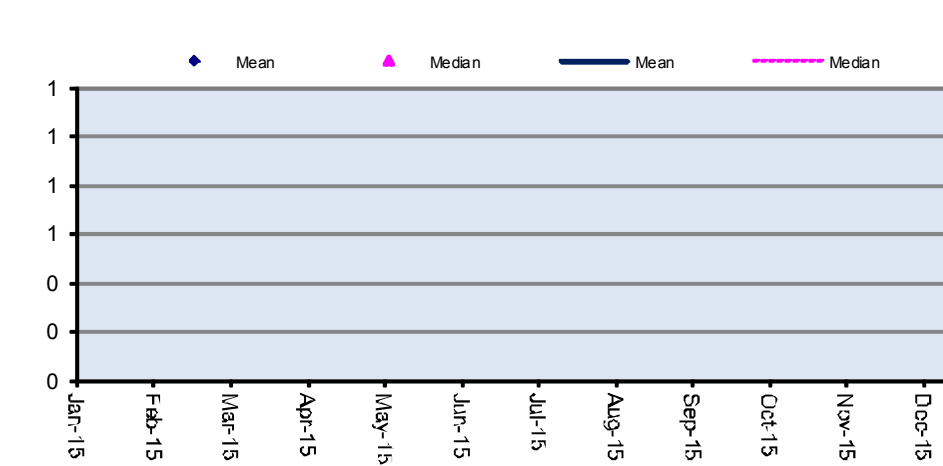
Wtd Mean

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

**ALL
MAINTENANCE
AREAS**

RMV CLASS 600

**STUDY AREA 06
HIGHEST AND BEST USE
FOREST LANDS**

COLUMBIA County 2016 Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
600	02	06	000		0	Scappoose	600	05	06	000		0	Clatskanie
600	03	06	000		0	Vernonia	600	06	06	000		0	Rural St Helens
600	04	06	000		0	Rainier							

Adjustment Calculation Summary

		0	RECALCULATED		
		595			
		0.00 %	Pre-Trend Brkdown	Post Trend Values	Post Trend Brkdown
Sample - Number of Sales					
Population - Number of Accounts					
Sales as a percentage of the Population					
Prior Year Population Values					
Land RMV	97,879,100	100.00 %	97,879,100	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	2016	Adjustment	100	

Explanation

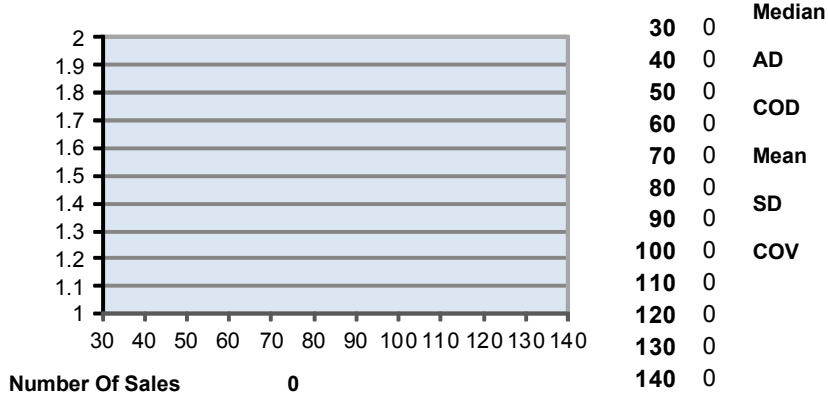
This grouping of Highest and Best Use Forest Land properties are located throughout Columbia County. They are large tracts of land and many may have topographical issues as well as access limitations which hinder the "useability" of the property. The Real Market Values that are applied each assessment year to H&BU properties are determined by the Department of Revenue annually. Therefore, no adjustment was applied.

Performance History

	2016	2015	2014	2013	2012
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2016 Ratio Study

Frequency



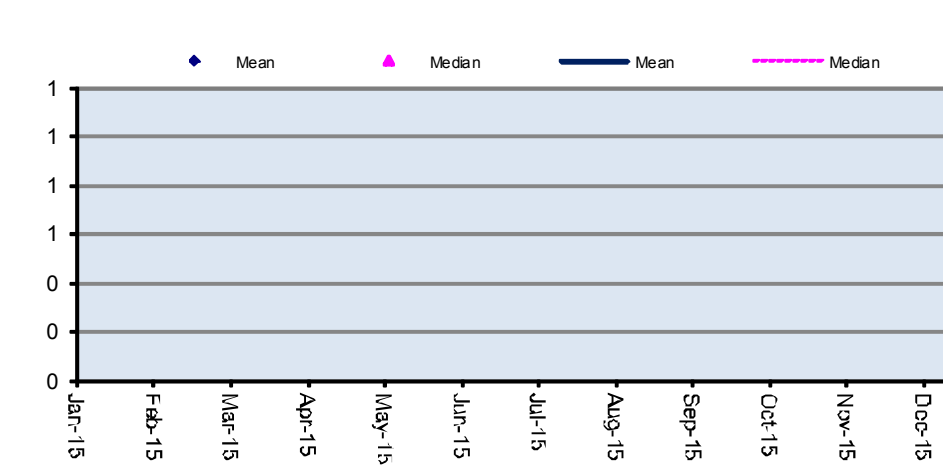
Wtd Mean

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	BLD CLS	RJ CD	ACCOUNT NO	BOOK PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE RATIO NO

**ALL
MAINTENANCE
AREAS**

**COEFFICIENT OF
DISPERSION**

&

**PRICE RELATED
DIFFERENTIAL**

AREAS OF CONCERN

COLUMBIA County 2016 Ratio Study

Coefficient of Dispersion

Following are the Coefficients of Dispersion by Maintenance Area, Study Area and RMV Class from the sales date of January 1, 2015 through December 31, 2015. This is the sales study period used in the 2016 Ratio Report.

Current COD Standards:

Type of property (RMV Class)	Max COD
Vacant Land (100, 400)	20
Real & PPMS	25
Urban residential (101)	
Homogenous	10
Non-homogenous	15
Rural Improved (101, 401)	20
Apartments (701)	12
Other Income (201)	
Large urban	15
Smaller rural	20

The Coefficient of Dispersion for the properties listed below have exceeded the current standards. Columbia County's areas of concern are:

MA	SA	RMV Class	Number of Accounts Affected	Current Year COD	Prior Year COD			
					1 Year	2 Years	3 Years	4 Years
04	00	101	617	15.48	12.86	14.46	14.01	12.32

Explanation:

Improved properties located in the City of Rainier (general area) slightly exceed the COD standard as noted above. However, the current year COD still appears to be in line with the prior years and the impact is negligible. In the future, it is anticipated the COD will be back in compliance.

Price Related Differential

Following are the Areas of Concern for the Price Related Differential (PRD) by Maintenance Area, Study Area and RMV Class. This data is from the sales file dated January 1, 2015 through December 31, 2015 and has been used in the 2016 Ratio Report.

MA	SA	RMV Class	PRD	Under .98	Over 1.03
04	00	101	1.05		X

If the PRD is over 1.03, then the PRD is regressive. This means the low-value properties are overvalued and high-value properties are undervalued.

When the PRD is below .98, then the properties are considered progressive. This means the high-value properties are overvalued and low-value properties are undervalued.