COLUMBIA COUNTY ASSESSOR

Certified Ratio Study

January 1, 2017

Oregon

Kate Brown, Governor

August 1, 2017

Sue Martin, Assessor
Columbia County
230 Strand Street Rm. 331
St. Helens, OR 97051

Columbia County 2017 Assessor's Certified Ratio Study Acceptance and Recommendations

The Department's Mass Appraisal Review team has completed its required review of your *2017 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, 2017.

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:

Leona Sparks	(503) 856-6959	Leona.Sparks@Oregon.gov
Michael Seyboldt	(971) 718-1866	Michael.Seyboldt@Oregon.gov
William Jennings	(971) 718-1864	William.Jennings@Oregon.gov
Amber Carlton	(971) 283-0938	Amber.Carlton@Oregon.gov
Adrienne Frank	(503) 428-2355	Adrienne.Frank@Oregon.gov
Roxanne Gillespie, MAI, Manager	(503) 347-7536	Roxanne.Gillespie@Oregon.gov
Bram Ekstrand, Manager	(503) 302-1947	Bram.N.Ekstrand@Oregon.gov

Sincerely,

Roxanne Gillespie, MAI, Manager
Program Assistance
Property Tax Division

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

Table of Contents

Certification and Analysis of Valuation Methods and Procedures	2
Introduction: The purpose and description of the Ratio Study	3-13
Appraisal Areas and County Map	14-18
Property Class codes/RMV Class codes and Counts	19-22
Time Adjustment studies	23-41
Grouping Analysis and Study Area list	42-44
Supplemental Notes	45-46
Summary of Ratio Indications: COD and PRD	47-55
Studies Section: Market Area Conclusions and Adjustments:	
Area 1 (City of St. Helens and Columbia City)	57-95
Area 2 (Scappoose)	96-145
Area 3 (Vernonia)	146-187
Area 4 (Rainier)	188-232
Area 5 (Clatskanie)	233-257
Area 6 (Rural St. Helens, Warren, Deer Island)	258-285
Area 7 (Personal Property Manufactured Structure)	286-297
Personal Property Watercraft	298-304
Commercial (including MS Parks and Watercraft)	305-316
Industrial	317-322
Multi-Family (5 plus units)	323-325
Odd Lot	326-334
Islands	335-337
Highest and Best Use Forestland	338-340
COD and PRD Areas of Concern	341-344

Columbia County 2017 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

6/12/17
Date

Joelle Leach, Analyst
Preparer/Contact Person

503-397-2240
Phone

INTRODUCTION

The purpose of 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 2017, this is the relationship between the base set-up real market values for all re-calculated or re-appraised areas. For those areas which are not yet 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.

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.

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 throughout Columbia County.

The Ratio Study:

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 and industrial 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.

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 “usable” 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 "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 datasets. For this ratio study, a trimming method was not applied since all usable sales were deemed appropriate.

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 percent) is developed to bring the sales price to the January 1st assessment date.

Three separate time studies have been performed: one for the RMV Class 1XX properties, another for the RMV Class 4XX properties and one for the RMV Class 019 properties.

For this Ratio Study, the Mid-Point ratio analysis was deemed as the best technique to adjust for change over time for the RMV Class 1XX and 4XX properties. This study is an adjustment to the central tendency and the resulting factor is used to adjust the RMV's to the assessment date.

For the RMV Class 019 properties, the sales price was adjusted for time using the Direct Calculation Analysis on an annual basis.

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.

1. 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 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.

2. Study: each study is two or more pages in length and identifies the RMV 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 list with related statistics. Following are the main elements included in the study:

   A. 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.

   B. Adjustment Calculation Summary - This section identifies the following:

      1) The size of the sales sample used.

      2) The total size of the population in the study, both in terms of absolute numbers and by a percent.

      3) Identifies the values of the population by land RMV, on site development RMV, residential improvement RMV and farm/ancillary buildings) RMV as it 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.

      4) The Selected Ratio from Sales area is the selected Mean, Median, Weighted Mean or Geometric Mean from the sales array. Ratio conclusions are based on the following principles:

         a) 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.

         b) Ratios above and below 100 can be a result of being at or near market. A single trend will result in half the properties being over market and half being under market. A single trend cannot reduce the distribution of ratios within the group.

         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.

C. Understanding the Helion ORCATS Adjustment Calculation program:

1) The "SelectedRatioFromSales" is the product of the central tendency (selected from the the sales array as the best indicator of the market) adjusted by the conclusion from the Time Study.

2) The "RMV Adjustment" is not used at this time and remains as 100.

3) The “Before Ratio” is the product of the selected central tendency and the time adjustment. The resulting ratio is a measure of RMV assessment at an established point in time for the tax year *before* any other adjustments are applied.

4) 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. 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 sales sample of unimproved land 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).

CI. 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.

Percent of properties where RMV is equal to Assessed Value (AV):

	RMV is equal to AV Count	Account total per MA	Percent of the Accounts
MA 1	392	6123	6%
MA 2	640	5893	11%
MA 3	445	3627	12%
MA 4	698	3860	18%
MA 5	535	4040	13%
MA 6	233	3947	6%
Total:	**2,943**	**27,490**	**11%**

Total Number of Sales County wide:

	Number of Arms Length transactions	Sales used in the Ratio Study	Number of Confirmed Sales	Percent Confirmed
MA 1	414	282	250	89%
MA 2	265	167	155	93%
MA 3	143	76	69	91%
MA 4	110	54	49	91%
MA 5	131	65	57	88%
MA 6	144	85	79	93%
MA 7 PPMS	69	34	17	50%
Com/Ind	10	10	10	100%
Apartment	2	2	1	50%
Watercraft	18	5	5	100%
TOTALS:	**1,306**	**780**	**692**	**89%**

89% of usable sales used have been confirmed for the current study.

Performance History

A historical display of performance and 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 RMV class and type is an indication that the RMV Class and/or MA may have a valuation problem. The acceptable measurement of uniformity ranges are when the COD percentages are between 10 and 20.

2. Price Related Differential (PRD): the PRD history measures vertical equity of the RMV. The measurements of vertical equity are:

    a. A PRD above 1.00 suggests that the 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 is 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 RMV 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

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

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.

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).

2. 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.

      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 ratio's 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 or 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.

   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 Class 100, 400	20%
	Real & Personal Manfactured Structure	25%
	Urban Residential RMV Class 101, 109:	
	Homogenous	10%
	Non-Homogenous	15%
	Rural Improved RMV Class 401, 409	20%
	Apartments RMV Class 701	12%
	Commercial Improved RMV Class 201	
	Large/Urban	15%
	Smaller/Urban	20%
	Industrial	No standard has been set
3)	The PRD standard is from .98% to 1.03%	

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 & MAP

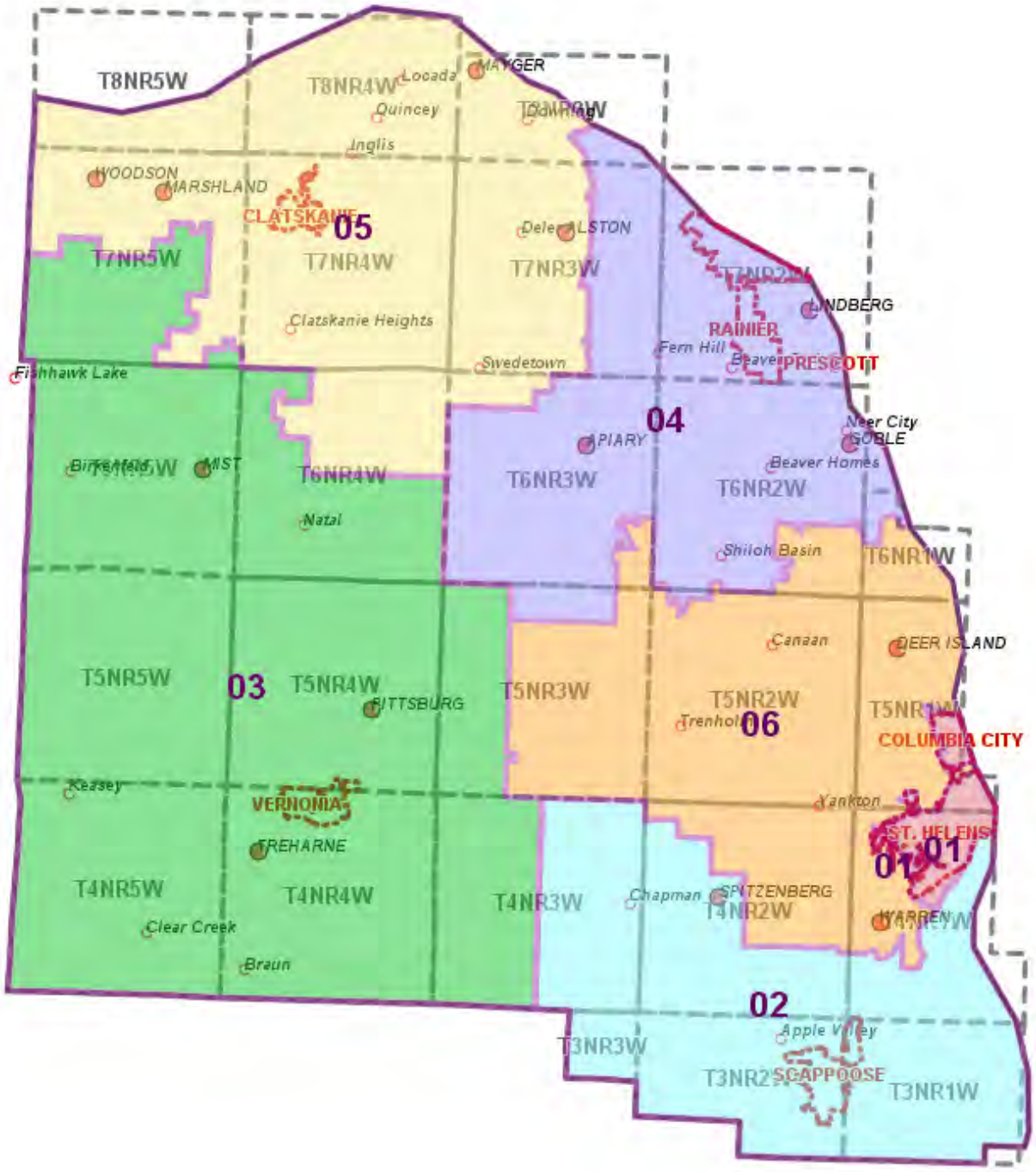
Maintenance Area Descriptions

Maintenance Area 1:	City of St. Helens City of 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 St. Helens and Columbia City Warren Deer Island

<u>County Wide</u>

Maintenance Area 7:	All Personal Property Manufactured Structures

Maintenance Area Map



Established in 1854, Columbia County was originally part of Washington County. Historically, the area was used by the commercial fishing and water transportation industries since the County has 62 miles of the Columbia River running along its east boundary.

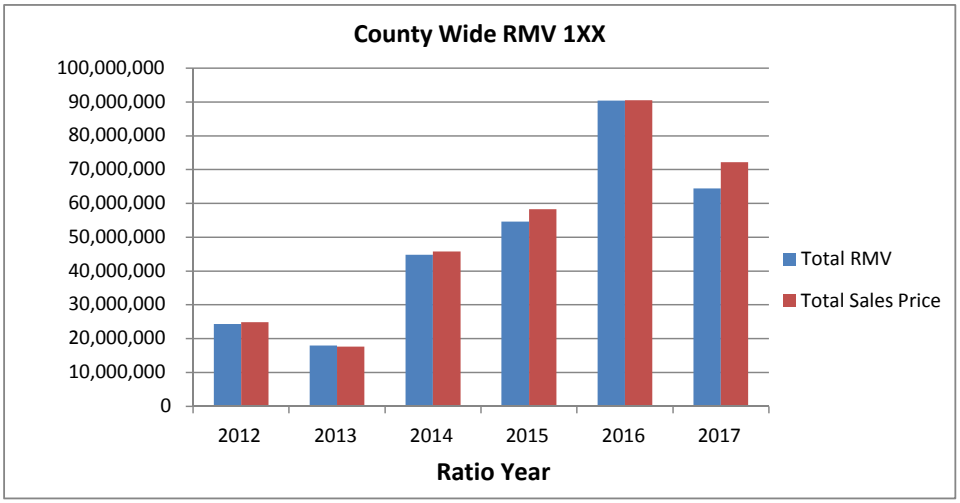
More recently, because of the extensive timber land, the lumber mill industry was a major contributor to the economic growth. However, this has changed over the past 20 years and some of the major contributors are now United States Gypsum, Dyno Nobel, Armstrong World Industries, Cascades Tissue Group and Fred Meyer Stores, just to name a few. There are also areas of farmland (mainly in the dike land areas) and natural gas fields which help to support the changing economy.

Access to Columbia County is via Highway 30 approximately 30 minutes North of the Portland Metropolitan area.

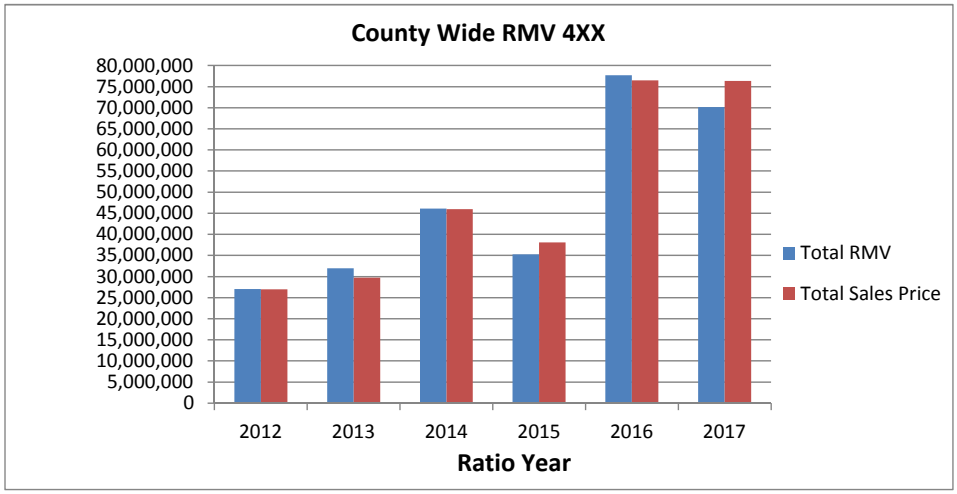
The County seat is the City of St. Helens and is governed by three elected Board of Commissioners who serve four year terms. Having such a large stretch of the Columbia River in our County provides many recreational opportunities such as boating, swimming, fishing, wind surfing, etc. Many have come to live in Columbia County because of its rural atmosphere and because of it's close proximity to Portland. Since rents and housing costs have increased greatly in the Portland area, Columbia County has experienced a steady rise in population which has created a large demand for housing needs in our area.

Sources: www.co.columbia.or.us/about-columbia-county,

Columbia County sales comparison over the past five years:



	Total Sales	Total RMV	Total Sales Price	Difference	Percent Difference
2012	137	24,346,910	24,901,113	554,203	2.23%
2013	99	17,962,600	17,629,567	-333,033	-1.89%
2014	228	44,854,170	45,743,845	889,675	1.94%
2015	276	54,663,700	58,284,242	3,620,542	6.21%
2016	369	90,382,570	90,573,218	190,648	0.21%
2017	268	64,477,110	72,143,010	7,665,900	10.63%



	Total Sales	Total RMV	Total Sales Price	Difference	Percent Difference
2012	121	27,046,970	26,942,218	-104,752	-0.39%
2013	125	31,942,880	29,703,075	-2,239,805	-7.54%
2014	186	46,091,790	45,938,917	-152,873	-0.33%
2015	158	35,266,290	38,116,598	2,850,308	7.48%
2016	268	77,709,020	76,496,539	-1,212,481	-1.59%
2017	224	70,177,260	76,348,594	6,171,334	8.08%

PROPERTY CLASS
&
RMV CLASS

DESCRIPTION & COUNT

Prop Class	RMV Class	Class Description	2017 Count	Prior Year Count	Change from Prior Year
001	020	MISCELLANEOUS, LOGGING PERSONAL PROPERTY	0	0	0
003	003	MISCELLANEOUS, CENTRALLY ASSESSED	118	120	2
008	008	INDUSTRIAL, M&E STATE IPR AND COUNTY RPR PROCESSED	40	47	7
010	010	UNBUILDABLE(SIZE,DEQ DENIAL, ETC) ZONED RESIDENTIAL	125	122	-3
014	101	IMPROVED RESIDENTIAL, HISTORIC	2	2	0
015	101	OPEN SPACE RESIDENTIAL	0	0	0
019	019	PERSONAL PROPERTY MS	1207	1211	4
020	020	UNBUILDABLE(SIZE, DEQ DENIAL,ETC) ZONED COMMERCIAL	10	12	2
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	119	0
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	4	5	1
039	301	ENTERPRIZE ZONE IMPROVED INDUSTRIAL	0	0	0
040	040	UNBUILDABLE(SIZE, DEQ DENIAL,ETC) ZONING NOT SIGNIFICANT	123	124	1
041	401	IMPROVED ONLY TRACT, ZONING NOT SIGNFICANT	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	895	795	-100
101	101	RESIDENTIAL IMPROVED, ZONED RESIDENTIAL	9171	9159	-12
102	102	CONDOMINIUM	51	51	0
109	109	M S IMPROVED, ZONED RESIDENTIAL	422	435	13
110	100	VACANT,H&B RESD 4 OR LESS UNITS ZONING NOT SIGNIFICANT	0	0	0
111	111	RESIDENTIAL, FLOATING PROPERTY	292	280	-12
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	151	152	1
201	201	COMMERCIAL IMPROVED, ZONED COMMERCIAL	793	782	-11
206	201	COMMERCIAL, MARINA/MOORAGE	44	62	18
207	207	ALL M S PARKS, REGARDLESS OF ZONE	42	45	3

Prop Class	RMV Class	Class Description	2017 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	0	3	3
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	35	32	-3
301	301	INDUSTRIAL IMPROVED, ZONED INDUSTRIAL	30	54	24
303	303	INDUSTRIAL B&S STATE IPR PROCESSED	42	37	-5
308	308	INDUSTRIAL B&S COUNTY RPR PROCESSED	12	18	6
309	309	M S IMPROVED, ZONED INDUSTRIAL	0	0	0
330	400	INDUSTRIAL, AGGREGATE MINE	18	19	1
331	401	INDUSTRIAL, AGGREGATE MINE WITH IMPROVEMENTS	0	1	1
333	303	INDUSTRIAL IMPROVED, STATE RESP	3	3	0
338	308	INDUSTRIAL, AGGREGATE MACHINERY AND EQUIPMENT	0	1	1
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	666	677	11
401	401	IMPROVED H&B USE TRACT, ZONING NOT SIGNIFICANT	4775	4748	-27
409	409	M S H&B USE TRACT, ZONING NOT SIGNIFICANT	1264	1263	-1
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	1	0
450	400	VACANT H&B USE TRACT, FARM DEF, ZONED EFU	0	0	0
451	401	IMPROVED H&B USE TRACT, FARM DEF, ZONED EFU	0	0	0
459	409	M S H&B USE TRACT, FARM DEF, ZONED EFU	0	0	0
470	400	VACANT H&B USE TRACT,PERM FARM DISQ, ZONED EFU	0	0	0
471	401	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	152	146	-6
541	401	IMPROVED H&B USE FARM, RECEIVING FARM DEF, ZONED NON-EFU	410	406	-4
549	409	M S H&B USE FARM, RECEIVNG FARM DEF, ZONED NON-EFU	59	58	-1
550	400	VACANT H&B USE FARM, RECEIVING FARM DEF, ZONED EFU	133	136	3
551	401	IMPROVED H&B USE FARM, RECEIVING FARM DEF, ZONED EFU	325	331	6
559	409	M S H&B USE FARM LAND, RECEIVING FARM DEF, ZONED EFU	31	30	-1
580	400	AGRICULTURE, MOSTLY FARM RURAL MULT SPEC ASSMTS	16	18	2
581	401	AGRICULTURE, W/IMPS-MOSTLY FARM RURAL, MULT SPEC ASSMTS	91	87	-4
589	409	M S H&B USE FARM, MULTIPLE SP ASSMT FARM USE PREDOMINANT, ZN NOT SIGN	11	11	0

Prop Class	RMV Class	Class Description	2017 Count	Prior Year Count	Change from Prior Year
600	600	VACANT H&B USE FOREST, NOT DESIGNATED, ZONING NOT SIGNIFICANT	561	560	-1
601	601	IMPROVED H&B FOREST LAND,NOT DESIGNATED, ZONING NOT SIGNIFICANT	1	1	0
609	609	M S H&B FOREST LAND, NOT DESIGNATED, ZONING NOT SIGNIFICANT	0	0	0
640	400	VACANT H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	2067	2021	-46
641	401	IMPRVD H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	2072	2035	-37
649	409	M S H&B USE TRACT FOREST/WLO,DESIGNATED, ZONING NOT SIGNIFICANT	617	612	-5
660	600	VACANT, REFORESTATION	0	0	0
680	400	FOREST LAND, LAND ONLY-MOSTLY FOREST RURAL, MULT SPEC ASMTS	55	57	2
681	401	FOREST LAND, WITH IMPS-MOSTLY FOREST RURAL, MULT SPEC ASMTS	152	161	9
689	409	M S H&B USE FL,MULTIPLE SP ASMT, FL PREDOMINANT,ZN NOT SIGNIFICANT	16	18	2
700	700	VACANT LAND, ZONED MULTI-FAMILY	0	0	0
701	701	IMPROVED 5 OR MORE UNITS, ZONED MULTI-FAMILY AND MS PARK IMPROVED	76	73	-3
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	146	148	2
801	801	RECREATION, WITH IMPROVEMENTS	2	4	2
890	890	RECREATION, HILLCREST/COL ACRES POTENTIAL DEVELOPMENT	300	264	-36
910	200	CHURCH - VACANT	20	19	-1
911	201	CHURCH - IMPROVED	100	101	1
920	200	SCHOOL - VACANT	22	22	0
921	201	SCHOOL - IMPROVED	38	37	-1
930	200	CEMETERY - VACANT	26	26	0
931	201	CEMETERY - IMPROVED	6	6	0
940	200	CITY - VACANT	366	365	-1
941	201	CITY - IMPROVED	105	104	-1
942	201	CITY - LEASED	0	0	0
950	200	COUNTY - VACANT	164	207	43
951	201	COUNTY - IMPROVED	48	54	6
952	201	COUNTY - LEASED	0	0	0
960	200	STATE OWNED - VACANT	163	166	3
961	201	STATE OWNED - IMPROVED	12	11	-1
962	201	STATE - LEASED	4	4	0
964	401	EXEMPT, STATE GAME IN-LIEU OF	25	23	-2
970	200	FEDERALLY OWNED - VACANT	45	45	0
971	201	FEDERALLY OWNED - IMPROVED	9	9	0
976	201	FEDERALLY OWNED - NATIVE AMERICAN HOLDINGS	0	0	0
980	200	BENEVOLENT, FRATERNAL OWNERSHIP - VACANT	10	13	3
981	201	BENEVOLENT, FRATERNAL OWNERSHIP - IMPROVED	64	68	4
982	201	BENEVOLENT, FRATERNAL - LEASED	3	3	0
990	200	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	84	86	2
991	201	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	92	86	-6
994	201	EXEMPT, PORT: EXEMPT IN LIEU-OF PER ORS 307.120	2	2	0
995	201	EXEMPT, GOVERMENT HOUSING AUTHORITIES	8	9	1
996	701	FARM LABOR CAMPS, DAY CARE CENTERS	1	1	0

TIME ADJUSTMENT STUDY

Time Adjustment Study

Property sales within Columbia County from January 1, 2016 through December 31, 2016 were analyzed to determine an adjustment for change over time (time adjustment). These sales were separated into three 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.

3. RMV Class 019: this classing of properties is all personal property manufactured structures located throughout Columbia County. These are personal property manufactured structures located throughout the county.

Conclusions:

The analysis for residential property (RMV Class 1XX) indicates an adjustment of 96% is needed for those properties located in the city limits.

For rural property (RMV Class 4XX) located in all maintenance areas, the time study analysis supports an adjustment of 95%.

For personal property manufactured structures located in MA 7 (RMV Class 019), a direct calculation analysis was performed and the sales price was then adjusted accordingly.

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) also had too few sales therefore, no time adjustment is warranted.

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

1. The product of the selected central tendency which is adjusted by the conclusion from the time study is entered into the "Selected Ratio from Sales" line.

2. Next, no further adjustments are applied and the "RMV Adjustment" line is left at 100.

3. The value of the "Selected Ratio from Sales" and the "RMV Adjustment" value is then calculated and the product is then entered on the "Before Ratio" line.

Historical Time Adjustment Conclusions

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

Year	RMV 1XX	RMV 4XX
2010	99%	99%
2011	90%	89%
2012	103%	98%
2013	98%	93%
2014	97%	106%
2015	104%	97%
2016	99%	101%
2017	96%	95%

Time Study for RMV 1XX

		Month	Count	Cumlative Count	Mean	Median	Wtd. Mean	Selected
	1	Jan	32	32	0.97	0.97	0.97	
	2	Feb	32	64	0.93	0.89	0.92	
	3	Mar	38	102	0.95	0.94	0.94	
	4	Apr	32	134	0.89	0.87	0.87	
	5	May	50	184	0.89	0.86	0.88	
	6	Jun	50	234	0.86	0.86	0.85	
Mid-point	7	Jul	47	281	**0.88**	0.84	0.86	0.88
	8	Aug	48	329	0.85	0.83	0.85	
	9	Sep	52	381	0.84	0.83	0.84	
	10	Oct	39	420	0.83	0.82	0.82	
	11	Nov	36	456	0.82	0.80	0.83	
End of Year	12	Dec	49	505	**0.84**	0.81	0.83	0.84

Total Sales:	505	Total July RMV:	9,451,940	Total Dec RMV:	10,571,980
Middle Sale:	253	Total July SP:	10,949,325	Total Dec SP:	12,663,200

Trend Factor: -0.04

Mid-point time adj: 0.96

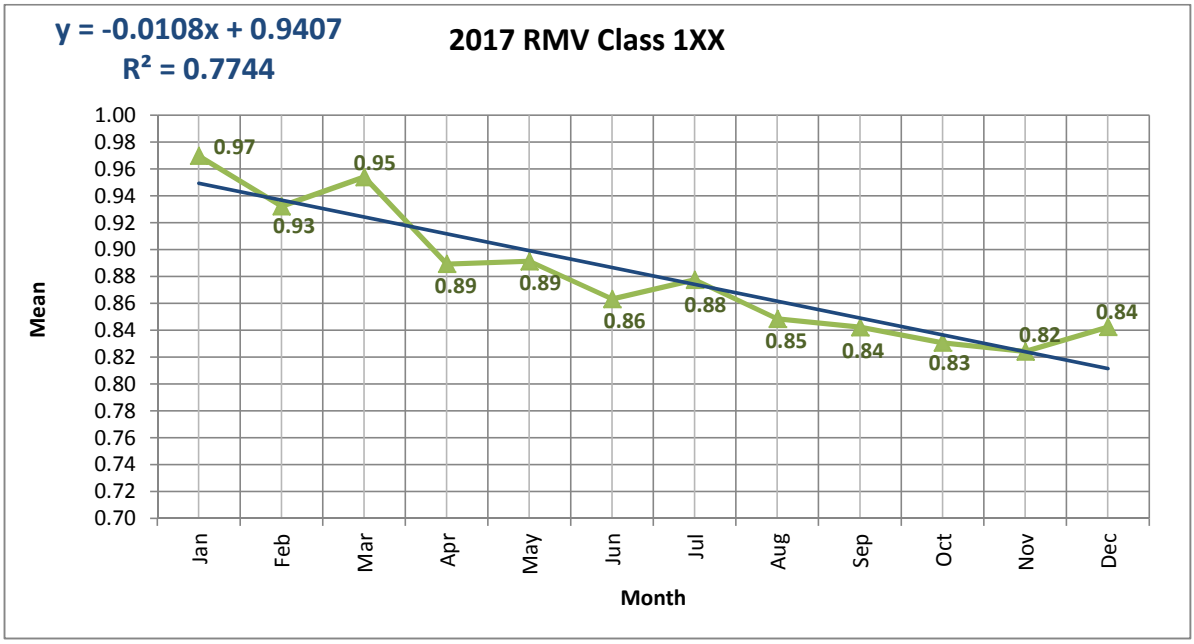
2017 RMV Class 1XX Time Adjustment

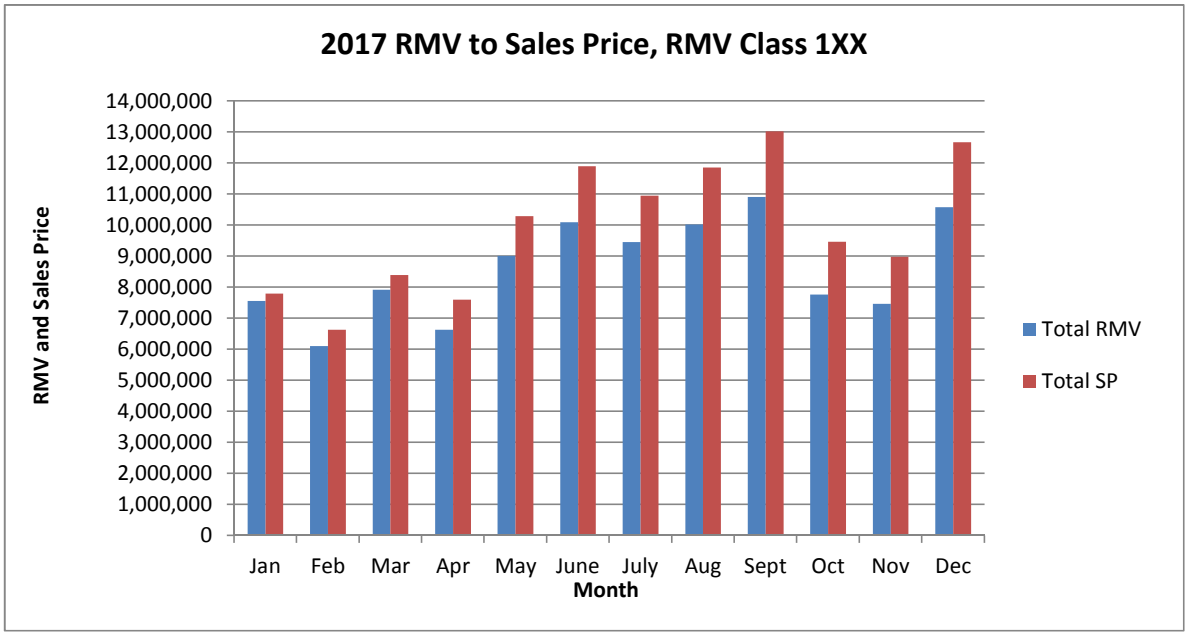
Conclusion: The mid-point of the sales is found to be July (the 7th month), with a corresponding mid-point Mean central tendency of 0.88. The end of year central tendency Mean is 0.84.

(0.84-0.88)/0.88 = -0.04 or -4%

1.00 - 0.04 = .96; the Mid-point Time Adjustment Factor

Time Study for RMV 1XX





Time Study for RMV 1XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Acct Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
1	2017	2	0	0	101	101	143	33	2753	3N1W07-CA-00104	2016	118	0.17	244090	299000	1/4/2016	82	1	1
2	2017	1	0	0	101	101	143	33	10374	4N1W04-BC-07400	2016	33	0.16	214400	235000	1/4/2016	91	1	2
3	2017	1	0	0	101	101	131	33	9863	4N1W03-CB-05500	2016	151	0.20	164710	188300	1/4/2016	87	1	3
4	2017	1	0	0	101	101	154	33	9728	4N1W03-BD-00900	2016	130	0.13	393830	389000	1/7/2016	101	1	4
5	2017	1	0	0	101	101	141	33	13810	5N1W34-CB-04300	2016	149	0.13	202060	190000	1/8/2016	106	1	5
6	2017	2	33	0	101	101	143	33	434066	3N1W07-CC-01001	2016	312	0.09	226260	222500	1/13/2016	102	1	6
7	2017	1	0	0	101	101	141	33	13022	4N1W07-AB-03158	2016	304	0.15	210940	224900	1/15/2016	94	1	7
8	2017	2	0	0	101	101	143	33	433514	3N2W13-CD-03000	2016	301	0.14	260440	302000	1/15/2016	86	1	8
9	2017	1	1	0	100	100		33	14720	5N1W28-DB-03319	2016	356	0.25	63970	60000	1/19/2016	107	1	9
10	2017	1	0	0	101	101	141	33	11488	4N1W05-AB-01003	2016	411	0.13	186800	247000	1/19/2016	76	1	10
11	2017	2	33	0	101	101	143	33	434068	3N1W07-CC-01003	2016	718	0.11	233450	219900	1/19/2016	106	1	11
12	2017	2	33	0	101	101	143	33	434067	3N1W07-CC-01002	2016	950	0.09	227500	225000	1/19/2016	101	1	12
13	2017	2	33	0	101	101	143	33	434078	3N1W07-CC-01013	2016	966	0.09	217250	219900	1/19/2016	99	1	13
14	2017	2	0	0	101	101	143	33	28500	3N2W12-AD-06506	2016	383	0.15	297950	341500	1/20/2016	87	1	14
15	2017	2	0	0	101	101	141	30	3895	3N2W12-CC-02100	2016	417	0.20	190450	220000	1/20/2016	87	1	15
16	2017	2	33	0	101	101	143	30	434069	3N1W07-CC-01004	2016	605	0.11	233050	223900	1/20/2016	104	1	16
17	2017	1	0	0	100	100		30	429105	5N1W33-AD-03000	2016	440	0.22	92210	69000	1/21/2016	134	1	17
18	2017	5	0	0	101	101	144	33	432368	7N4W09-CA-00101	2016	459	0.36	246440	249000	1/21/2016	99	1	18
19	2017	3	0	0	101	101	142	30	22671	4N4W04-AC-06102	2016	441	0.22	197820	205000	1/21/2016	96	1	19
20	2017	1	0	0	101	101	131	30	11085	4N1W04-DC-09300	2016	888	0.13	133490	159900	1/22/2016	83	1	20
21	2017	1	0	0	102	102	152*	30	436632	5N1W34-CD-90002	2016	455	0.00	258410	229000	1/22/2016	113	1	21
22	2017	2	33	0	101	101	143	33	434076	3N1W07-CC-01011	2016	597	0.08	215730	219900	1/25/2016	98	1	22
23	2017	4	0	0	101	101	131	33	21040	7N2W17-C0-02200	2016	576	3.00	214890	252000	1/25/2016	85	1	23
24	2017	2	33	0	101	101	143	33	434077	3N1W07-CC-01012	2016	724	0.08	215750	224900	1/25/2016	96	1	24
25	2017	1	0	0	101	101	143	33	431944	4N1W05-BA-03935	2016	580	0.13	232090	250500	1/26/2016	93	1	25
26	2017	1	1	0	101	101	152	33	14714	5N1W28-DB-03313	2016	533	0.26	369460	405500	1/26/2016	91	1	26
27	2017	2	79	0	101	101	152	33	432007	3N2W11-DD-00317	2016	622	0.34	597420	475000	1/27/2016	126	1	27
28	2017	2	79	0	101	101	163	33	431990	3N2W11-DB-01700	2016	616	0.17	440550	375800	1/27/2016	117	1	28
29	2017	2	0	0	101	101	141	33	2892	3N1W18-BB-00500	2016	611	0.15	218500	280000	1/27/2016	78	1	29
30	2017	1	43	0	101	101	143	33	10647	4N1W04-CA-10400	2016	618	0.08	162740	160000	1/28/2016	102	1	30
31	2017	3	3	0	101	101	143	33	22313	4N4W03-BA-01019	2016	650	0.21	136970	179000	1/28/2016	77	1	31
32	2017	1	0	0	101	101	142	33	10207	4N1W04-DA-09100	2016	734	0.13	249910	251500	1/29/2016	99	1	32
33	2017	1	0	0	101	101	141	33	433452	5N1W32-DB-01900	2016	726	0.17	248840	279900	2/1/2016	89	2	1
34	2017	1	0	0	101	101	131	33	10186	4N1W04-AD-03406	2016	763	0.13	123440	147500	2/2/2016	84	2	2
35	2017	1	0	0	101	101	141	33	11127	4N1W04-DB-15600	2016	815	0.13	198790	205900	2/3/2016	97	2	3
36	2017	2	33	0	101	101	143	33	434075	3N1W07-CC-01010	2016	811	0.11	227350	226000	2/3/2016	101	2	4
37	2017	1	0	0	101	101	141	33	11418	4N1W05-AA-04200	2016	813	0.21	201890	250300	2/3/2016	81	2	5
38	2017	3	0	0	101	101	146	33	22654	4N4W04-AC-04600	2016	840	0.26	243610	306000	2/4/2016	80	2	6
39	2017	1	30	0	101	101	242	33	9916	4N1W04-AA-03403	2016	918	0.13	186540	214000	2/9/2016	87	2	7
40	2017	1	0	0	109	109	452	33	11637	4N1W05-AC-03105	2016	1137	0.28	148840	100000	2/9/2016	149	2	8
41	2017	2	0	0	101	101	143	33	433095	3N2W12-DC-00172	2016	954	0.06	205290	216900	2/10/2016	95	2	9
42	2017	1	0	0	101	101	141	30	433949	4N1W05-BD-01013	2016	958	0.12	201840	233500	2/10/2016	86	2	10
43	2017	1	1	0	101	101	143	30	14496	5N1W28-BA-01200	2016	963	0.11	250430	245500	2/10/2016	102	2	11
44	2017	1	0	0	100	100		31	9474	4N1W03-BB-00600	2016	992	0.13	42970	50000	2/11/2016	86	2	12
45	2017	1	0	0	100	100		33	433917	4N1W03-BB-00702	2016	993	0.13	42970	53000	2/11/2016	81	2	13
46	2017	1	0	0	101	101	141	33	10638	4N1W04-CA-09500	2016	986	0.11	204700	214900	2/11/2016	95	2	14
47	2017	1	0	0	101	101	141	30	431920	4N1W05-BA-03911	2016	994	0.15	209940	240000	2/12/2016	87	2	15
48	2017	2	0	0	101	101	143	33	31224	3N1W18-BB-03100	2016	1143	0.14	260890	315000	2/12/2016	83	2	16
49	2017	1	0	0	101	101	143	30	12262	4N1W05-CC-01808	2016	1025	0.23	259160	289000	2/16/2016	90	2	17
50	2017	5	0	0	100	100		30	434310	7N4W09-CA-00142	2016	1149	0.23	39100	30000	2/17/2016	130	2	18
51	2017	3	0	0	101	101	142	33	433335	4N4W05-AC-03601	2016	1141	0.14	237470	229900	2/17/2016	103	2	19
52	2017	1	0	0	101	101	142	33	13272	5N1W32-DC-01700	2016	1145	0.14	247630	254900	2/17/2016	97	2	20
53	2017	1	0	0	101	101	143	33	433466	5N1W32-DC-00105	2016	1150	0.17	265260	285000	2/17/2016	93	2	21
54	2017	1	30	0	101	101	242	30	11592	4N1W05-AC-01200	2016	1127	0.21	160380	199000	2/17/2016	81	2	22
55	2017	1	0	0	101	101	141	33	432448	5N1W33-DD-09202	2016	1270	0.14	196080	215000	2/19/2016	91	2	23
56	2017	3	0	0	101	101	142	33	433338	4N4W05-AC-03604	2016	1323	0.14	237490	229000	2/19/2016	104	2	24
57	2017	1	0	0	101	101	143	30	433950	4N1W05-BD-01014	2016	1300	0.12	218770	249500	2/23/2016	88	2	25
58	2017	1	0	0	100	100		33	9472	4N1W03-BB-00400	2016	1335	0.07	23060	55000	2/25/2016	42	2	26
59	2017	1	0	0	101	101	135	33	10625	4N1W04-CB-11300	2016	1370	0.14	144640	182000	2/25/2016	79	2	27
60	2017	1	43	0	101	101	143	33	12174	4N1W05-CB-06300	2016	1384	0.07	151900	116000	2/25/2016	131	2	28
61	2017	1	0	0	101	101	154	33	13845	5N1W34-CB-07600	2016	1386	0.25	330940	359900	2/26/2016	92	2	29
62	2017	1	0	0	101	101	141	33	12412	4N1W05-DA-03009	2016	1389	0.17	191140	185000	2/26/2016	103	2	30
63	2017	1	0	0	101	101	143	33	433945	4N1W05-BD-01009	2016	1347	0.13	224840	252000	2/26/2016	89	2	31
64	2017	1	0	0	101	101	141	33	13917	5N1W34-CC-06701	2016	1360	0.13	174050	198000	2/29/2016	88	2	32
65	2017	4	0	0	101	101	133*	33	18270	7N2W16-DC-00900	2016	1567	0.28	164720	165000	3/2/2016	100	3	1
66	2017	2	0	0	101	101	141	33	2853	3N1W07-CB-02600	2016	1605	0.15	219400	250000	3/4/2016	88	3	2
67	2017	1	30	0	101	101	242	33	10048	4N1W04-AB-03800	2016	1642	0.14	193080	201070	3/7/2016	96	3	3
68	2017	3	0	0	101	101	131	33	435952	4N4W05-AD-01802	2016	1744	0.12	175950	184000	3/7/2016	96	3	4
69	2017	1	0	0	101	101	143	33	12461	4N1W05-DB-02105	2016	1640	0.16	210500	230000	3/7/2016	92	3	5
70	2017	1	0	0	101	101	143	33	10378	4N1W04-BC-07800	2016	1796	0.16	270680	270000	3/8/2016	100	3	6
71	2017	3	3	0	101	101	143	33	23080	4N4W04-CB-06600	2016	1786	0.17	151580	187900	3/8/2016	81	3	7

Time Study for RMV 1XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Acct Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
72	2017	2	0	0	101	101	131	33	434761	3N1W07-CB-01904	2016	1792	0.17	190550	259900	3/9/2016	73	3	8
73	2017	1	0	0	101	101	143	33	13035	4N1W07-AB-03171	2016	1794	0.13	206220	220000	3/9/2016	94	3	9
74	2017	4	46	0	101	101	153	33	18525	7N2W17-AD-06302	2016	1798	0.44	348580	282500	3/9/2016	123	3	10
75	2017	1	1	0	101	101	143	33	14191	5N1W21-CD-01202	2016	1840	0.20	229620	232000	3/11/2016	99	3	11
76	2017	2	79	0	101	101	161	33	431989	3N2W11-DB-01600	2016	1839	0.17	428900	418500	3/11/2016	102	3	12
77	2017	1	0	0	101	101	143	33	11499	4N1W05-AC-06600	2016	1919	0.16	217520	243000	3/12/2016	90	3	13
78	2017	2	0	0	101	101	143	33	429874	3N1W07-CC-01409	2016	1887	0.15	281530	339000	3/14/2016	83	3	14
79	2017	1	0	0	101	101	131	33	9837	4N1W03-CB-03800	2016	1970	0.13	145700	165000	3/15/2016	88	3	15
80	2017	1	0	0	101	101	143	33	12686	4N1W06-AD-00900	2016	1897	0.19	215150	239000	3/15/2016	90	3	16
81	2017	1	0	0	100	100		33	429113	5N1W33-AD-03800	2016	1998	0.18	61930	52500	3/16/2016	118	3	17
82	2017	1	0	0	101	101	142	33	13441	5N1W33-DC-02102	2016	2012	0.10	209190	200000	3/17/2016	105	3	18
83	2017	3	0	0	109	109	452	33	23276	4N4W05-AD-05101	2016	2148	0.14	130970	138000	3/18/2016	95	3	19
84	2017	1	0	0	100	100		33	10106	4N1W04-AC-06500	2016	2024	0.67	136230	100000	3/21/2016	136	3	20
85	2017	1	0	0	101	101	143	33	12992	4N1W07-AB-03128	2016	2154	0.12	239610	259000	3/22/2016	93	3	21
86	2017	1	0	0	101	101	141	33	11529	4N1W05-AB-01044	2016	2152	0.13	201030	219900	3/22/2016	91	3	22
87	2017	4	0	0	101	101	144	33	17904	7N2W16-BC-03600	2016	2129	0.46	284870	278000	3/22/2016	102	3	23
88	2017	1	0	0	101	101	141	33	13038	4N1W07-AB-03174	2016	2156	0.12	188050	235500	3/23/2016	80	3	24
89	2017	1	1	0	101	101	131	33	14342	5N1W28-AB-03600	2016	2150	0.23	163840	206000	3/23/2016	80	3	25
90	2017	1	0	0	101	101	143	33	433944	4N1W05-BD-01008	2016	2160	0.12	226430	249500	3/23/2016	91	3	26
91	2017	1	0	0	101	101	141	33	433461	5N1W32-DB-02800	2016	2186	0.24	262910	251500	3/24/2016	105	3	27
92	2017	1	0	0	101	101	141	33	12936	4N1W06-DD-06600	2016	2158	0.12	180110	175000	3/24/2016	103	3	28
93	2017	4	0	0	101	101	134	33	17950	7N2W16-CA-05001	2016	2231	0.13	150490	131000	3/28/2016	115	3	29
94	2017	3	0	0	101	101	131	33	23099	4N4W04-DA-01500	2016	2234	0.13	115100	142000	3/28/2016	81	3	30
95	2017	5	0	0	101	101	141	33	26338	7N4W17-BB-01500	2016	2356	0.23	177790	182500	3/28/2016	97	3	31
96	2017	1	0	0	101	101	133	33	9580	4N1W03-BC-00408	2016	2310	0.20	180310	191500	3/28/2016	94	3	32
97	2017	1	30	0	101	101	242	33	12015	4N1W05-CA-00200	2016	2313	1.56	256420	255000	3/29/2016	101	3	33
98	2017	1	21	0	101	101	143	33	14225	5N1W21-CD-04400	2016	2397	0.23	299130	325000	3/29/2016	92	3	34
99	2017	2	33	0	101	101	143	33	433109	3N2W12-DC-02508	2016	2449	0.06	219570	218300	3/29/2016	101	3	35
100	2017	1	0	0	101	101	131	33	12142	4N1W05-CB-02800	2016	2353	0.20	172720	235000	3/30/2016	73	3	36
101	2017	2	0	0	101	101	143	33	433092	3N2W12-DC-00169	2016	2325	0.06	208820	229900	3/30/2016	91	3	37
102	2017	1	0	0	101	101	141	33	11873	4N1W05-BC-04800	2016	2474	0.13	201180	230000	3/31/2016	87	3	38
103	2017	1	0	0	101	101	143	33	11526	4N1W05-AB-01041	2016	2362	0.13	213930	244600	4/1/2016	87	4	1
104	2017	4	47	0	101	101	143	33	22169	7N2W16-BB-03100	2016	2525	0.10	222860	255000	4/6/2016	87	4	2
105	2017	5	0	0	101	101	142	33	26033	7N4W08-DA-00700	2016	2532	0.30	241820	200000	4/6/2016	121	4	3
106	2017	2	0	0	101	101	143	30	433510	3N2W13-CD-02600	2016	2566	0.14	265550	303000	4/6/2016	88	4	4
107	2017	5	0	0	100	100		30	434315	7N4W09-CA-00147	2016	2627	0.22	38320	30000	4/7/2016	128	4	5
108	2017	1	30	0	101	101	232*	33	434727	4N1W04-DC-01302	2016	2523	0.13	128250	121500	4/7/2016	106	4	6
109	2017	1	0	0	101	101	141	33	433453	5N1W32-DB-02000	2016	2544	0.17	262170	287500	4/7/2016	91	4	7
110	2017	2	0	0	101	101	141	33	3849	3N2W12-CC-00312	2016	2924	0.10	159200	195000	4/8/2016	82	4	8
111	2017	2	0	0	101	101	143	33	4222	3N2W12-DC-00120	2016	2623	0.14	270190	337000	4/12/2016	80	4	9
112	2017	1	0	0	101	101	143	33	433441	5N1W32-DB-00800	2016	2652	0.22	281520	272500	4/12/2016	103	4	10
113	2017	1	0	0	101	101	146	33	9888	4N1W04-AA-01300	2016	2659	0.27	222150	249900	4/12/2016	89	4	11
114	2017	5	0	0	101	101	146*	33	25956	7N4W08-CD-02300	2016	2697	0.17	223120	215000	4/12/2016	104	4	12
115	2017	1	0	0	101	101	141	33	13006	4N1W07-AB-03142	2016	2686	0.12	187250	227000	4/14/2016	82	4	13
116	2017	2	0	0	101	101	145	33	432019	3N2W13-AD-04506	2016	2793	0.23	222470	285000	4/14/2016	78	4	14
117	2017	1	0	0	101	101	143	33	13173	4N1W08-BB-08600	2016	2714	0.16	239810	300000	4/15/2016	80	4	15
118	2017	1	0	0	101	101	135	33	10855	4N1W04-CB-08600	2016	2773	0.12	121880	160000	4/18/2016	76	4	16
119	2017	1	0	0	101	101	151	33	11710	4N1W05-AD-03500	2016	2789	0.51	324020	396000	4/18/2016	82	4	17
120	2017	1	80	0	101	101	153	33	9452	4N1W03-BA-07805	2016	2787	0.02	250540	272000	4/18/2016	92	4	18
121	2017	3	0	0	101	101	141	33	23144	4N4W05-AA-00400	2016	2856	0.20	240800	267100	4/20/2016	90	4	19
122	2017	1	0	0	101	101	151	33	13283	5N1W32-DC-02700	2016	3080	0.69	343130	410000	4/21/2016	84	4	20
123	2017	1	0	0	101	101	143	33	12962	4N1W06-DD-09200	2016	3024	0.11	182800	240100	4/25/2016	76	4	21
124	2017	1	0	0	101	101	232	33	13938	5N1W34-CC-09000	2016	2969	0.13	128850	168500	4/26/2016	76	4	22
125	2017	5	0	0	101	101	132	33	25885	7N4W08-CB-02900	2016	3013	0.21	121190	130000	4/26/2016	93	4	23
126	2017	1	0	0	101	101	132	33	13826	5N1W34-CB-05900	2016	3051	0.13	157850	182000	4/26/2016	87	4	24
127	2017	3	39	0	101	101	143	33	22299	4N4W03-BA-01005	2016	3691	0.17	189530	235000	4/26/2016	81	4	25
128	2017	1	30	0	101	101	232	33	11168	4N1W04-DC-02800	2016	3761	0.13	125810	170000	4/26/2016	74	4	26
129	2017	1	0	0	101	101	143	33	433483	5N1W32-DC-00122	2016	3026	0.20	275920	310000	4/27/2016	89	4	27
130	2017	1	0	0	101	101	132	30	10406	4N1W04-BD-00110	2016	3028	0.19	157660	150000	4/27/2016	105	4	28
131	2017	1	0	0	101	101	141	33	12302	4N1W05-CD-00800	2016	3059	0.38	223760	252700	4/27/2016	89	4	29
132	2017	1	0	0	101	101	124	30	11804	4N1W05-DA-06800	2016	3107	0.12	121230	155000	4/28/2016	78	4	30
133	2017	2	0	0	101	101	142	33	3068	3N2W11-AA-00129	2016	3240	0.25	260690	301500	4/28/2016	86	4	31
134	2017	2	0	0	101	101	145*	33	3962	3N2W12-DA-00800	2016	3546	0.14	221130	272750	4/29/2016	81	4	32
135	2017	3	0	0	100	100		33	436993	4N4W04-AB-00401	2016	3114	0.21	33610	25000	5/2/2016	134	5	1
136	2017	1	0	0	101	101	131	33	9835	4N1W03-CB-03600	2016	3103	0.11	108480	157900	5/2/2016	69	5	2
137	2017	1	1	0	101	101	142	33	14729	5N1W28-DB-03704	2016	3092	0.23	261160	279000	5/2/2016	94	5	3
138	2017	2	0	0	101	101	143	33	3869	3N2W12-CC-01206	2016	3187	0.16	209630	248000	5/2/2016	85	5	4
139	2017	1	0	0	101	101	141	33	13440	5N1W33-DC-02100	2016	3216	0.11	204360	204900	5/2/2016	100	5	5
140	2017	1	0	0	101	101	151	33	12578	4N1W05-DC-03108	2016	3185	0.28	335920	353500	5/3/2016	95	5	6
141	2017	2	0	0	101	101	142	33	3138	3N2W11-AA-01300	2016	3247	0.18	240670	295000	5/4/2016	82	5	7
142	2017	1	0	0	101	101	143	33	11492	4N1W05-AB-01007	2016	3300	0.13	198810	244900	5/5/2016	81	5	8

Time Study for RMV 1XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Acct Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
143	2017	1	0	0	101	101	143	33	12976	4N1W07-AB-03112	2016	3303	0.13	261800	305000	5/9/2016	86	5	9
144	2017	4	0	0	101	101	142	30	18066	7N2W16-CC-00319	2016	3549	0.34	314810	294000	5/9/2016	107	5	10
145	2017	1	0	0	101	101	143	33	10381	4N1W04-BC-08100	2016	3524	0.16	250450	293000	5/9/2016	85	5	11
146	2017	2	0	0	101	101	143	33	4713	3N2W13-BC-01400	2016	3515	0.17	239210	272250	5/10/2016	88	5	12
147	2017	2	0	0	101	101	141	33	4471	3N2W13-AC-03327	2016	3960	0.15	222390	274000	5/10/2016	81	5	13
148	2017	2	80	0	100	100		33	3593	3N2W12-BC-00227	2016	3537	0.18	61280	79900	5/11/2016	77	5	14
149	2017	5	0	0	100	100		33	25625	7N4W08-AC-00800	2016	3624	0.91	48490	63500	5/11/2016	76	5	15
150	2017	2	0	0	101	101	141	33	4017	3N2W12-DA-04108	2016	3575	0.18	207240	276000	5/11/2016	75	5	16
151	2017	2	0	0	101	101	143	33	3284	3N2W12-AB-00112	2016	3573	0.18	205370	256500	5/12/2016	80	5	17
152	2017	2	0	0	101	101	141	30	434763	3N1W07-CB-01906	2016	3586	0.18	219680	240000	5/12/2016	92	5	18
153	2017	4	0	0	101	101	141	33	432957	7N2W17-AC-02803	2016	3610	0.24	233960	208000	5/12/2016	112	5	19
154	2017	1	21	0	101	101	143	33	14094	5N1W21-CA-05000	2016	6344	0.23	233700	268000	5/12/2016	87	5	20
155	2017	4	0	0	101	101	142	33	18613	7N2W17-DB-02601	2016	3655	0.36	206270	203000	5/13/2016	102	5	21
156	2017	3	0	0	100	100		30	22790	4N4W04-BB-01000	2016	3676	0.23	35020	40000	5/16/2016	88	5	22
157	2017	3	0	0	100	100		30	434717	4N4W04-BB-01406	2016	3674	0.23	35020	40000	5/16/2016	88	5	23
158	2017	2	0	0	101	101	143	33	433096	3N2W12-DC-00173	2016	3614	0.06	205230	238000	5/16/2016	86	5	24
159	2017	1	0	0	101	101	143	30	433407	4N1W05-CB-10900	2016	3795	0.21	249280	250000	5/16/2016	100	5	25
160	2017	4	0	0	101	101	142	33	435523	7N2W16-CD-03902	2016	3763	0.20	274400	285000	5/16/2016	96	5	26
161	2017	1	0	0	102	102	134	33	10497	4N1W04-BD-90400	2016	3653	0.00	118940	111000	5/16/2016	107	5	27
162	2017	2	0	0	101	101	141	33	3893	3N2W12-CC-01900	2016	3758	0.21	187850	232000	5/17/2016	81	5	28
163	2017	1	0	0	100	100		33	12316	4N1W05-CD-00905	2016	3800	0.20	53520	58000	5/18/2016	92	5	29
164	2017	3	0	0	100	100		33	22598	4N4W04-AC-00400	2016	3755	1.38	27660	45000	5/18/2016	61	5	30
165	2017	4	0	0	101	101	133	33	18169	7N2W16-DA-05000	2016	3819	0.16	122360	130000	5/19/2016	94	5	31
166	2017	1	0	0	101	101	141	33	12308	4N1W05-CD-00806	2016	3814	0.18	192170	250000	5/19/2016	77	5	32
167	2017	1	0	0	101	101	121	33	12423	4N1W05-DA-04300	2016	3885	0.14	108510	117500	5/19/2016	92	5	33
168	2017	5	0	0	101	101	142	33	26212	7N4W09-B0-01900	2016	3817	0.80	231440	177000	5/20/2016	131	5	34
169	2017	1	0	0	101	101	131	33	10966	4N1W04-DA-10700	2016	3934	0.13	135710	175000	5/23/2016	78	5	35
170	2017	2	0	0	101	101	143	33	433113	3N2W12-DC-02511	2016	3846	0.06	204270	230000	5/23/2016	89	5	36
171	2017	2	79	0	101	101	152	33	3230	3N2W11-DA-02609	2016	4244	0.60	382850	463000	5/24/2016	83	5	37
172	2017	3	0	0	101	101	141	33	435122	4N4W04-BB-01407	2016	4340	0.23	232060	259000	5/24/2016	90	5	38
173	2017	1	0	0	101	101	143	33	433454	5N1W32-DB-02100	2016	4204	0.17	259470	305000	5/25/2016	85	5	39
174	2017	5	0	0	101	101	131	33	26013	7N4W08-CD-08200	2016	4260	0.13	110540	145000	5/25/2016	76	5	40
175	2017	2	0	0	101	101	131	33	4821	3N2W13-BD-09600	2016	4618	0.07	99890	149900	5/25/2016	67	5	41
176	2017	1	0	0	102	102	151	30	9468	4N1W03-BA-90206	2016	4265	0.00	192120	220000	5/25/2016	87	5	42
177	2017	5	0	0	101	101	135*	33	25800	7N4W08-CA-02500	2016	3954	0.16	120150	146500	5/26/2016	82	5	43
178	2017	1	0	0	101	101	143	33	12157	4N1W05-CB-04700	2016	4380	0.17	225970	324900	5/26/2016	70	5	44
179	2017	2	0	0	101	101	141	33	4074	3N2W12-DB-02700	2016	4378	0.18	180940	255000	5/27/2016	71	5	45
180	2017	3	0	0	109	109	452*	33	22718	4N4W04-AD-04701	2016	4363	0.11	141510	115000	5/27/2016	123	5	46
181	2017	3	0	0	109	109	452*	33	22511	4N4W03-BD-00701	2016	4398	0.19	121180	85000	5/27/2016	143	5	47
182	2017	1	0	0	101	101	131	33	13535	5N1W33-CD-02800	2016	4593	0.12	148340	200000	5/31/2016	74	5	48
183	2017	1	0	0	101	101	141	33	11584	4N1W05-AC-00400	2016	4392	0.18	186530	238000	5/31/2016	78	5	49
184	2017	4	0	0	101	101	136	33	18213	7N2W16-DB-09100	2016	4490	0.15	131200	161000	5/31/2016	81	5	50
185	2017	2	0	0	101	101	141	33	3935	3N2W12-CD-02005	2016	4604	0.18	192820	259000	6/1/2016	74	6	1
186	2017	2	0	0	101	101	131*	33	3309	3N2W12-AC-00104	2016	4606	0.31	202630	288000	6/2/2016	70	6	2
187	2017	2	0	0	102	102	144	33	432035	3N2W12-CC-91004	2016	6814	0.00	192470	158000	6/3/2016	122	6	3
188	2017	2	0	0	101	101	142	33	3153	3N2W11-AD-00800	2016	4675	0.27	294360	351000	6/6/2016	84	6	4
189	2017	2	0	0	101	101	131	33	3509	3N2W12-BA-03400	2016	4945	0.21	153880	195000	6/6/2016	79	6	5
190	2017	1	0	0	101	101	143	33	12852	4N1W06-DC-05100	2016	4894	0.20	237830	276000	6/7/2016	86	6	6
191	2017	1	30	0	101	101	242	33	13100	4N1W08-BA-02200	2016	4852	0.16	197030	260000	6/8/2016	76	6	7
192	2017	2	0	0	101	101	143	33	4667	3N2W13-BA-06100	2016	4943	0.14	239150	325000	6/9/2016	74	6	8
193	2017	2	0	0	101	101	143	33	4405	3N2W13-AA-06200	2016	4938	0.15	230380	297400	6/10/2016	77	6	9
194	2017	1	0	0	101	101	151	33	13322	5N1W33-AD-02300	2016	4959	0.26	346550	435000	6/10/2016	80	6	10
195	2017	1	0	0	101	101	142	33	13894	5N1W34-CC-04500	2016	4957	0.13	178680	225000	6/10/2016	79	6	11
196	2017	3	0	0	101	101	145	33	429818	4N4W05-AA-00406	2016	4933	0.16	215300	239900	6/10/2016	90	6	12
197	2017	1	43	0	101	101	143	33	29006	4N1W08-BA-01613	2016	5054	0.11	199860	215000	6/11/2016	93	6	13
198	2017	1	0	0	101	101	143	30	28949	4N1W05-CC-00712	2016	5051	0.17	237910	265000	6/13/2016	90	6	14
199	2017	2	0	0	101	101	131	33	4070	3N2W12-DB-02500	2016	5083	0.21	187490	284000	6/13/2016	66	6	15
200	2017	2	0	0	101	101	143	30	4241	3N2W12-DC-00139	2016	5085	0.14	276080	355000	6/14/2016	78	6	16
201	2017	2	0	0	101	101	131	33	3999	3N2W12-DD-09000	2016	5091	0.14	149480	217000	6/14/2016	69	6	17
202	2017	1	0	0	101	101	143	33	12001	4N1W05-CA-00113	2016	5095	0.13	239870	270000	6/14/2016	89	6	18
203	2017	1	0	0	101	101	142	33	12765	4N1W06-DA-05100	2016	5140	0.23	238970	300000	6/15/2016	80	6	19
204	2017	2	0	0	101	101	141	33	4300	3N2W12-DD-02800	2016	5143	0.19	184200	210500	6/15/2016	88	6	20
205	2017	3	0	0	101	101	131	33	22650	4N4W04-AC-04200	2016	5207	0.17	132220	145500	6/15/2016	91	6	21
206	2017	2	0	0	101	101	143	33	28515	3N2W12-AD-06521	2016	5178	0.17	372600	479900	6/15/2016	78	6	22
207	2017	2	0	0	101	101	121	33	3393	3N2W12-AC-04300	2016	5145	0.23	140890	162000	6/16/2016	87	6	23
208	2017	3	38	0	109	109	452*	33	23124	4N4W05-AA-00304	2016	5212	0.43	132770	135500	6/17/2016	98	6	24
209	2017	2	0	0	101	101	141	33	4030	3N2W12-DA-04121	2016	5435	0.20	205090	249900	6/20/2016	82	6	25
210	2017	2	0	0	101	101	143	33	433502	3N2W13-CD-01800	2016	5640	0.14	235490	272500	6/20/2016	86	6	26
211	2017	1	0	0	101	101	141	30	11462	4N1W04-BB-01600	2016	5232	0.24	182980	208000	6/21/2016	88	6	27
212	2017	2	0	0	109	109	462	33	3457	3N2W12-AD-05401	2016	5346	0.17	197650	220000	6/21/2016	90	6	28
213	2017	1	1	0	100	100		33	436083	5N1W21-BC-03500	2016	5444	0.36	65070	80000	6/22/2016	81	6	29

Time Study for RMV 1XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Acct Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
214	2017	4	0	0	101	101	134	33	17988	7N2W16-CA-09100	2016	5376	0.06	115100	115000	6/22/2016	100	6	30
215	2017	1	0	0	101	101	135	33	11714	4N1W05-AD-03800	2016	5433	0.20	178790	211000	6/23/2016	85	6	31
216	2017	5	0	0	101	101	142	33	25728	7N4W08-BC-03600	2016	5467	0.34	237920	212000	6/24/2016	112	6	32
217	2017	1	0	0	101	101	134	30	13897	5N1W34-CC-04800	2016	5424	0.13	138330	155000	6/24/2016	89	6	33
218	2017	2	0	0	101	101	141	30	4020	3N2W12-DA-04111	2016	5646	0.20	217090	235000	6/24/2016	92	6	34
219	2017	1	0	0	101	101	141	30	9558	4N1W03-BB-09200	2016	5441	0.27	148330	150000	6/25/2016	99	6	35
220	2017	2	0	0	101	101	143	33	2761	3N1W07-CA-00112	2016	5481	0.17	210280	267500	6/27/2016	79	6	36
221	2017	3	3	0	101	101	131	30	22466	4N4W03-BC-07300	2016	5483	0.51	131920	130000	6/28/2016	101	6	37
222	2017	2	0	0	101	101	143	33	4654	3N2W13-BA-04704	2016	5585	0.15	238450	284990	6/28/2016	84	6	38
223	2017	2	0	0	101	101	143	30	2831	3N1W07-CA-01302	2016	5583	0.20	249380	301500	6/28/2016	83	6	39
224	2017	1	0	0	101	101	141	33	433547	4N1W04-CA-07401	2016	5550	0.13	204580	239500	6/28/2016	85	6	40
225	2017	1	0	0	101	101	141	33	11987	4N1W05-BD-08000	2016	5633	0.12	197470	250000	6/28/2016	79	6	41
226	2017	2	0	0	102	102	143	33	432031	3N2W12-CC-90002	2016	5587	0.00	198800	207000	6/28/2016	96	6	42
227	2017	1	0	0	100	100		30	9668	4N1W03-BC-07400	2016	5738	0.27	39730	45000	6/29/2016	88	6	43
228	2017	1	0	0	101	101	143	33	12479	4N1W05-DB-02123	2016	5590	0.16	221600	250000	6/29/2016	89	6	44
229	2017	2	0	0	101	101	143	33	433119	3N2W12-DC-02517	2016	5602	0.06	190590	222000	6/29/2016	86	6	45
230	2017	1	0	0	101	101	132	33	10157	4N1W04-AD-01900	2016	5628	0.15	145840	129500	6/29/2016	113	6	46
231	2017	2	0	0	101	101	143	33	3877	3N2W12-CC-01214	2016	5635	0.17	212800	270000	6/29/2016	79	6	47
232	2017	2	79	0	101	101	162	33	431999	3N2W11-DB-02600	2016	5765	0.20	470090	445500	6/30/2016	106	6	48
233	2017	1	0	0	101	101	135	33	10813	4N1W05-DA-09600	2016	5824	0.22	147940	171000	6/30/2016	87	6	49
234	2017	1	30	0	101	101	232	30	13450	5N1W33-DC-02801	2016	5682	0.14	135440	219000	6/30/2016	62	6	50
235	2017	1	0	0	101	101	143	33	12851	4N1W06-DC-05000	2016	5746	0.25	222000	270000	7/1/2016	82	7	1
236	2017	1	0	0	101	101	131	33	10606	4N1W04-CA-06400	2016	5830	0.11	107590	143000	7/5/2016	75	7	2
237	2017	1	0	0	101	101	143	33	11884	4N1W05-BC-06000	2016	5842	0.12	243180	295000	7/6/2016	82	7	3
238	2017	1	0	0	101	101	141	33	433459	5N1W32-DB-02600	2016	5970	0.18	244510	265400	7/6/2016	92	7	4
239	2017	1	0	0	101	101	143	33	433438	5N1W32-DB-00500	2016	5968	0.20	291070	283000	7/6/2016	103	7	5
240	2017	1	0	0	101	101	131*	33	13616	5N1W33-DD-05900	2016	5871	0.13	142110	194125	7/7/2016	73	7	6
241	2017	1	1	0	101	101	132	33	14315	5N1W28-AB-00800	2016	5903	0.11	143270	142500	7/7/2016	101	7	7
242	2017	1	0	0	101	101	143	33	12775	4N1W06-DA-06400	2016	5893	0.16	222000	269500	7/7/2016	82	7	8
243	2017	1	0	0	101	101	131	33	12526	4N1W05-DB-05000	2016	5869	0.98	314470	270000	7/7/2016	116	7	9
244	2017	1	0	0	101	101	141*	33	12286	4N1W05-CD-00100	2016	5899	0.41	227530	246500	7/7/2016	92	7	10
245	2017	1	0	0	101	101	135	33	9799	4N1W03-BD-06900	2016	5901	0.13	146130	210000	7/8/2016	70	7	11
246	2017	3	0	0	101	101	131	33	22656	4N4W04-AC-04800	2016	6315	0.15	102860	124000	7/8/2016	83	7	12
247	2017	1	0	0	101	101	131	33	10677	4N1W04-CA-13600	2016	6511	0.12	129480	183000	7/8/2016	71	7	13
248	2017	5	0	0	101	101	132	33	25777	7N4W08-CA-01001	2016	5971	0.46	151210	137200	7/11/2016	110	7	14
249	2017	4	47	0	101	101	143	33	22029	7N2W16-BB-00200	2016	6031	0.08	204790	225000	7/11/2016	91	7	15
250	2017	2	0	0	101	101	135	33	3755	3N2W12-CA-06400	2016	6047	0.16	150220	229000	7/12/2016	66	7	16
251	2017	1	1	0	101	101	131	33	14115	5N1W21-CB-00600	2016	6038	0.29	142530	180000	7/13/2016	79	7	17
252	2017	1	0	0	101	101	131	33	10352	4N1W04-BC-05100	2016	6120	0.09	136510	196000	7/13/2016	70	7	18
253	2017	2	0	0	101	101	143	33	4745	3N2W13-BD-02100	2016	6592	0.15	216230	285000	7/13/2016	76	7	19
254	2017	1	21	0	101	101	141	33	14096	5N1W21-CA-05200	2016	6172	0.23	236260	256200	7/14/2016	92	7	20
255	2017	1	43	0	101	101	143	33	10649	4N1W04-CA-10402	2016	6174	0.07	156690	176000	7/14/2016	89	7	21
256	2017	1	0	0	101	101	141	30	31112	4N1W04-BC-09600	2016	6118	0.25	199680	204000	7/15/2016	98	7	22
257	2017	1	0	0	101	101	143	33	12814	4N1W06-DC-01300	2016	6346	0.15	236600	257000	7/15/2016	92	7	23
258	2017	1	0	0	101	101	143	33	11850	4N1W05-CB-10100	2016	6281	0.12	243390	289900	7/19/2016	84	7	24
259	2017	4	0	0	100	100		33	21069	7N2W17-DB-02302	2016	6283	0.50	61980	40000	7/20/2016	155	7	25
260	2017	1	0	0	101	101	141	33	12590	4N1W05-DC-04500	2016	6367	0.24	218440	235900	7/20/2016	93	7	26
261	2017	1	0	0	101	101	141	33	13105	4N1W08-BA-02700	2016	6357	0.15	177750	235000	7/21/2016	76	7	27
262	2017	1	1	0	101	101	151	33	14521	5N1W28-BD-00600	2016	6363	0.33	288220	337000	7/22/2016	86	7	28
263	2017	2	33	0	101	101	143	33	433106	3N2W12-DC-02505	2016	6461	0.06	208980	215000	7/22/2016	97	7	29
264	2017	1	0	0	101	101	143	33	11997	4N1W05-CA-00109	2016	6387	0.16	227620	273000	7/22/2016	83	7	30
265	2017	2	0	0	101	101	143	33	4270	3N2W12-DD-00722	2016	6383	0.18	210140	281100	7/22/2016	75	7	31
266	2017	5	0	0	101	101	142	33	26328	7N4W17-BB-00500	2016	6365	0.21	171020	180000	7/22/2016	95	7	32
267	2017	5	0	0	101	101	142	33	25592	7N4W07-AD-01400	2016	6355	0.21	236020	250000	7/22/2016	94	7	33
268	2017	1	0	0	101	101	141	33	12270	4N1W05-CC-01817	2016	6536	0.16	186070	237000	7/22/2016	79	7	34
269	2017	4	0	0	101	101	134	30	18150	7N2W16-DA-02501	2016	7125	0.05	148780	179000	7/22/2016	83	7	35
270	2017	1	1	0	101	101	142	33	14560	5N1W28-CA-00800	2016	6543	0.51	304060	293000	7/25/2016	104	7	36
271	2017	1	0	0	101	101	132	33	11073	4N1W04-DB-11300	2016	6556	0.13	150140	190000	7/27/2016	79	7	37
272	2017	2	0	0	101	101	141	33	3407	3N2W12-AD-02408	2016	6554	0.15	203690	255000	7/27/2016	80	7	38
273	2017	1	0	0	101	101	141	33	13485	5N1W33-DC-06000	2016	6485	0.11	178010	213000	7/27/2016	84	7	39
274	2017	2	0	0	101	101	144	33	2946	3N2W01-CC-00112	2016	6637	0.19	250860	327500	7/27/2016	77	7	40
275	2017	2	0	0	101	101	143	30	433088	3N2W12-DC-00165	2016	6548	0.07	217440	243000	7/28/2016	89	7	41
276	2017	2	79	0	101	101	153	33	3234	3N2W11-DA-02613	2016	6538	0.18	327600	408000	7/28/2016	80	7	42
277	2017	2	0	0	101	101	142	33	2948	3N2W01-CC-00300	2016	6599	0.34	273360	329000	7/28/2016	83	7	43
278	2017	1	0	0	101	101	135	33	12546	4N1W05-CD-02700	2016	6605	0.29	152830	179000	7/28/2016	85	7	44
279	2017	1	0	0	101	101	141	33	433458	5N1W32-DB-02500	2016	6722	0.18	241930	270000	7/28/2016	90	7	45
280	2017	2	0	0	101	101	143	33	4677	3N2W13-BA-07100	2016	6601	0.16	249330	297500	7/29/2016	84	7	46
281	2017	3	3	0	101	101	143	33	22395	4N4W03-BB-06700	2016	6724	0.57	157360	150000	7/29/2016	105	7	47
282	2017	3	0	0	101	101	132*	33	23093	4N4W04-DA-00900	2016	6767	0.17	161260	200000	8/2/2016	81	8	1
283	2017	1	0	0	101	101	143	33	13175	4N1W08-BB-08800	2016	6795	0.18	221150	280000	8/4/2016	79	8	2
284	2017	1	0	0	101	101	141	33	12711	4N1W06-AD-04500	2016	6902	0.16	201240	265000	8/8/2016	76	8	3

Time Study for RMV 1XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Acct Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
285	2017	4	0	0	100	100		33	435666	7N2W21-AB-00106	2016	7013	0.15	35110	50000	8/9/2016	70	8	4
286	2017	1	0	0	101	101	134	33	9965	4N1W04-AA-07500	2016	6968	0.13	166180	194700	8/9/2016	85	8	5
287	2017	1	0	0	101	101	141	33	11205	4N1W04-DC-06000	2016	6978	0.13	181360	260000	8/9/2016	70	8	6
288	2017	2	0	0	101	101	144	33	2943	3N2W01-CC-00109	2016	6972	0.17	298170	380000	8/10/2016	78	8	7
289	2017	1	0	0	101	101	133	33	11739	4N1W05-AC-08400	2016	6933	0.21	156130	213600	8/10/2016	73	8	8
290	2017	2	0	0	101	101	143	33	28516	3N2W12-AD-06522	2016	6976	0.22	342420	399000	8/10/2016	86	8	9
291	2017	5	0	0	101	101	131	33	25718	7N4W08-BC-02500	2016	6974	0.19	122440	150000	8/11/2016	82	8	10
292	2017	2	33	0	101	101	143	33	429769	3N2W13-AA-04412	2016	6936	0.07	205900	225000	8/11/2016	92	8	11
293	2017	1	0	0	101	101	142	33	12721	4N1W06-DA-01000	2016	7003	0.21	275390	291500	8/11/2016	94	8	12
294	2017	1	0	0	101	101	131	33	11172	4N1W04-DC-03000	2016	6994	0.11	128110	200000	8/11/2016	64	8	13
295	2017	1	0	0	101	101	143	33	431935	4N1W05-BA-03926	2016	7046	0.14	223110	300000	8/11/2016	74	8	14
296	2017	3	0	0	101	101	135*	33	23266	4N4W05-AD-04200	2016	7299	0.22	149950	185700	8/11/2016	81	8	15
297	2017	2	79	0	101	101	161	33	432001	3N2W11-DD-00311	2016	7187	0.26	438470	450000	8/15/2016	97	8	16
298	2017	3	38	0	109	109	463*	33	23127	4N4W05-AA-00307	2016	7176	0.48	188730	164500	8/15/2016	115	8	17
299	2017	2	33	0	101	101	141	33	3452	3N2W12-DA-06300	2016	7149	0.14	201170	233717	8/16/2016	86	8	18
300	2017	1	0	0	101	101	131	33	9637	4N1W03-BC-04700	2016	7147	0.16	157210	216000	8/16/2016	73	8	19
301	2017	2	0	0	101	101	143	33	4523	3N2W13-AD-05900	2016	7247	0.14	241520	329000	8/16/2016	73	8	20
302	2017	1	0	0	101	101	143*	33	11479	4N1W05-AD-15500	2016	7274	0.16	256520	300000	8/16/2016	86	8	21
303	2017	4	0	0	109	109	452	30	18445	7N2W17-AC-01802	2016	7139	0.35	175070	159180	8/17/2016	110	8	22
304	2017	4	0	0	100	640		33	21102	7N2W21-B0-00200	2016	7279	27.01	73130	75000	8/18/2016	98	8	23
305	2017	2	0	0	101	101	143	33	433097	3N2W12-DC-00174	2016	7245	0.06	208520	250000	8/18/2016	83	8	24
306	2017	1	0	0	101	101	132	33	10879	4N1W04-DA-00600	2016	7398	0.13	170860	230000	8/18/2016	74	8	25
307	2017	1	0	0	101	101	141	33	11076	4N1W04-DB-11501	2016	7435	0.13	165710	199000	8/18/2016	83	8	26
308	2017	2	80	0	101	101	154	33	3591	3N2W12-BC-00225	2016	7241	0.21	470820	595000	8/19/2016	79	8	27
309	2017	5	0	0	101	101	142	33	25648	7N4W08-AD-00400	2016	7276	0.42	252230	200000	8/19/2016	126	8	28
310	2017	1	0	0	101	101	143	33	12011	4N1W05-CA-00123	2016	7319	0.13	232260	295000	8/22/2016	79	8	29
311	2017	1	0	0	101	101	143	33	12902	4N1W06-DD-03000	2016	7321	0.21	225960	274100	8/22/2016	82	8	30
312	2017	4	0	0	101	101	134*	33	18354	7N2W16-DC-09400	2016	7558	0.21	149090	165500	8/22/2016	90	8	31
313	2017	1	21	0	101	101	141	33	14149	5N1W21-CB-03900	2016	7410	0.25	199530	258500	8/23/2016	77	8	32
314	2017	1	0	0	101	101	143	33	433943	4N1W05-BD-01007	2016	7630	0.12	221650	259400	8/23/2016	85	8	33
315	2017	1	0	0	101	101	131	33	10671	4N1W04-CA-12700	2016	7433	0.13	149750	230000	8/24/2016	65	8	34
316	2017	4	0	0	101	101	142	33	18054	7N2W16-CC-00306	2016	7412	0.73	291420	256000	8/25/2016	114	8	35
317	2017	1	0	0	101	101	153	33	12100	4N1W05-CB-00135	2016	7453	0.12	319670	305000	8/25/2016	105	8	36
318	2017	1	0	0	101	101	132	33	10581	4N1W04-CA-03700	2016	7443	0.11	131270	155000	8/25/2016	85	8	37
319	2017	1	0	0	101	101	122	33	11139	4N1W04-DB-16601	2016	7451	0.13	105630	155000	8/25/2016	68	8	38
320	2017	1	0	0	101	101	142	33	11573	4N1W05-AB-04211	2016	7447	0.16	276850	314900	8/25/2016	88	8	39
321	2017	3	0	0	101	101	131	33	22700	4N4W04-AD-02800	2016	7496	0.19	125400	142800	8/25/2016	88	8	40
322	2017	1	0	0	101	101	141	33	11971	4N1W05-BD-06300	2016	7449	0.12	189590	244000	8/26/2016	78	8	41
323	2017	1	0	0	101	101	141	33	433405	4N1W05-CB-10700	2016	7478	0.16	225620	230000	8/29/2016	98	8	42
324	2017	1	0	0	101	101	131	33	12348	4N1W05-CD-01213	2016	7595	0.11	148720	223500	8/29/2016	67	8	43
325	2017	1	0	0	101	101	143	33	12926	4N1W06-DD-05600	2016	7646	0.13	241610	280500	8/29/2016	86	8	44
326	2017	1	21	0	101	101	143*	33	14150	5N1W21-CB-04000	2016	7598	0.28	253400	314900	8/29/2016	80	8	45
327	2017	2	0	0	101	101	135	33	3498	3N2W12-BA-02300	2016	7583	0.61	199040	199900	8/30/2016	100	8	46
328	2017	2	0	0	101	101	143	33	436523	3N2W13-CD-06600	2016	7649	0.14	272190	325000	8/30/2016	84	8	47
329	2017	1	0	0	101	101	141	33	13002	4N1W07-AB-03138	2016	7656	0.11	192860	225000	8/31/2016	86	8	48
330	2017	3	0	0	101	101	135	33	23338	4N4W05-AD-11500	2016	7691	0.11	147580	177000	9/1/2016	83	9	1
331	2017	1	0	0	101	101	141	33	12801	4N1W06-DB-01002	2016	7873	0.28	232040	279500	9/2/2016	83	9	2
332	2017	3	0	0	101	101	141	33	22651	4N4W04-AC-04300	2016	8052	0.19	196030	195000	9/2/2016	101	9	3
333	2017	3	0	0	101	101	143	33	429816	4N4W05-AA-00404	2016	8017	0.53	235760	242000	9/3/2016	97	9	4
334	2017	2	0	0	101	101	141	33	2839	3N1W07-CA-02100	2016	7797	0.23	242710	302900	9/6/2016	80	9	5
335	2017	2	0	0	101	101	141	33	3301	3N2W12-AB-00210	2016	7831	0.14	188040	235000	9/6/2016	80	9	6
336	2017	1	0	0	109	109	462*	30	10036	5N1W33-DC-13300	2016	7773	0.17	124950	148900	9/6/2016	84	9	7
337	2017	1	43	0	101	101	143	33	11916	4N1W05-BD-01120	2016	7842	0.09	171510	195000	9/7/2016	88	9	8
338	2017	2	0	0	101	101	131	33	4115	3N2W12-DB-06300	2016	7909	0.12	137440	232000	9/8/2016	59	9	9
339	2017	2	0	0	101	101	143	33	4437	3N2W13-AC-02500	2016	7879	0.14	213340	275000	9/8/2016	78	9	10
340	2017	1	0	0	101	101	131	33	13646	5N1W33-DD-08301	2016	7911	0.13	138330	246000	9/8/2016	56	9	11
341	2017	4	0	0	101	101	132	33	18299	7N2W16-DC-03900	2016	7907	0.28	171650	180000	9/8/2016	95	9	12
342	2017	1	0	0	101	101	141	30	13919	5N1W34-CC-06900	2016	7918	0.13	163320	189000	9/9/2016	86	9	13
343	2017	1	21	0	101	101	141	33	14091	5N1W21-CA-04700	2016	7985	0.23	219300	261999	9/9/2016	84	9	14
344	2017	2	0	0	101	101	143	33	3106	3N2W11-AA-01007	2016	8083	0.19	248140	347900	9/9/2016	71	9	15
345	2017	3	0	0	101	101	141	33	22908	4N4W04-BD-01601	2016	7995	0.18	183320	219500	9/12/2016	84	9	16
346	2017	1	0	0	101	101	143	33	12867	4N1W06-DC-06600	2016	8060	0.14	210390	265000	9/12/2016	79	9	17
347	2017	1	21	0	101	101	143	33	14243	5N1W21-CD-06200	2016	8107	0.23	239360	270400	9/12/2016	89	9	18
348	2017	1	0	0	101	101	142	33	29162	4N1W05-AB-05200	2016	8130	0.69	364640	400000	9/12/2016	91	9	19
349	2017	2	0	0	109	109	452	33	3165	3N2W11-AD-02100	2016	8132	0.44	215040	210000	9/12/2016	102	9	20
350	2017	1	0	0	101	101	141	33	11943	4N1W05-BD-03200	2016	8029	0.14	191050	250000	9/13/2016	76	9	21
351	2017	1	0	0	101	101	142	30	10209	4N1W04-DA-08700	2016	8034	0.13	176900	180000	9/13/2016	98	9	22
352	2017	4	46	0	101	101	144	33	18544	7N2W17-DA-00402	2016	8128	0.50	361830	350000	9/13/2016	103	9	23
353	2017	1	0	0	101	101	141	33	11519	4N1W05-AB-01034	2016	8062	0.13	197830	259000	9/14/2016	76	9	24
354	2017	2	0	0	101	101	141	33	3044	3N2W11-AA-00105	2016	8126	0.19	202780	310000	9/14/2016	65	9	25
355	2017	1	21	0	101	101	143	33	14230	5N1W21-CD-04900	2016	8200	0.23	222750	269000	9/15/2016	83	9	26

Time Study for RMV 1XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Acct Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
356	2017	1	0	0	101	101	131	33	10839	4N1W05-DA-12200	2016	8415	0.11	138010	182400	9/15/2016	76	9	27
357	2017	1	0	0	101	101	131	33	10908	4N1W04-DA-03200	2016	8216	0.13	134390	185000	9/17/2016	73	9	28
358	2017	3	0	0	101	101	142*	33	22680	4N4W04-AD-00800	2016	8142	0.20	189380	226500	9/18/2016	84	9	29
359	2017	1	31	0	101	101	242	33	14036	5N1W21-BD-02300	2016	8262	0.28	225960	247000	9/21/2016	91	9	30
360	2017	1	0	0	101	101	143	33	12909	4N1W06-DD-03800	2016	8296	0.13	252470	308000	9/21/2016	82	9	31
361	2017	1	0	0	101	101	131	33	13584	5N1W33-DA-03500	2016	8324	0.12	128100	164900	9/21/2016	78	9	32
362	2017	2	0	0	101	101	143	33	4426	3N2W13-AC-01400	2016	8299	0.14	227130	295000	9/21/2016	77	9	33
363	2017	5	0	0	101	101	136	33	25814	7N4W08-CA-03800	2016	8331	0.11	167970	175000	9/22/2016	96	9	34
364	2017	1	0	0	101	101	143	33	12554	4N1W05-CD-03300	2016	8329	0.18	209960	243450	9/22/2016	86	9	35
365	2017	4	0	0	101	101	131	30	18157	7N2W16-DA-04000	2016	8373	0.15	108870	100000	9/22/2016	109	9	36
366	2017	1	0	0	101	101	141	33	431961	4N1W05-CC-02503	2016	8389	0.14	196490	245000	9/22/2016	80	9	37
367	2017	1	0	0	101	101	143	33	12819	4N1W06-DC-01800	2016	8484	0.30	253760	312000	9/22/2016	81	9	38
368	2017	2	0	0	101	101	143	33	31207	3N1W18-BB-01900	2016	8467	0.14	273590	350000	9/23/2016	78	9	39
369	2017	1	0	0	101	101	143	33	12010	4N1W05-CA-00122	2016	8421	0.13	250390	290000	9/26/2016	86	9	40
370	2017	1	1	0	101	101	131	33	14484	5N1W28-BA-00400	2016	8391	0.17	150970	199000	9/26/2016	76	9	41
371	2017	1	30	0	101	101	232	33	11286	4N1W04-DA-13500	2016	8423	0.13	145490	205000	9/27/2016	71	9	42
372	2017	1	1	0	101	101	152	33	14752	5N1W28-DB-06100	2016	8447	0.19	384960	430000	9/27/2016	90	9	43
373	2017	4	0	0	101	101	142	33	18209	7N2W16-DB-08600	2016	8470	0.17	181850	178100	9/27/2016	102	9	44
374	2017	3	0	0	101	101	141	33	434717	4N4W04-BB-01406	2016	8547	0.23	221460	258700	9/27/2016	86	9	45
375	2017	2	80	0	101	101	153	33	3600	3N2W12-BC-00234	2016	8535	0.17	340650	367350	9/28/2016	93	9	46
376	2017	2	0	0	101	101	142	33	2947	3N2W01-CC-00200	2016	8511	0.54	318700	349900	9/28/2016	91	9	47
377	2017	3	0	0	100	100		30	23152	4N4W05-AA-00900	2016	8680	1.06	26620	32000	9/29/2016	83	9	48
378	2017	2	80	0	101	101	154	30	3595	3N2W12-BC-00229	2016	8513	0.18	413260	513000	9/29/2016	81	9	49
379	2017	1	0	0	101	101	143	30	12910	4N1W06-DD-04000	2016	8559	0.13	197880	235000	9/29/2016	84	9	50
380	2017	2	0	0	101	101	131	33	3436	3N2W12-AD-03800	2016	8556	0.23	185460	198000	9/29/2016	94	9	51
381	2017	1	0	0	101	101	141	33	12272	4N1W05-CC-01819	2016	8837	0.16	188490	238000	9/29/2016	79	9	52
382	2017	2	0	0	101	101	143	33	28508	3N2W12-AD-06514	2016	8777	0.14	297530	350000	10/3/2016	85	10	1
383	2017	5	0	0	101	101	141	33	26337	7N4W17-BB-01400	2016	8716	0.23	210950	234000	10/4/2016	90	10	2
384	2017	1	0	0	101	101	141*	33	12625	4N1W05-DC-08101	2016	8720	0.16	222650	275000	10/4/2016	81	10	3
385	2017	2	0	0	101	101	141	33	4619	3N2W13-BA-02100	2016	8779	0.24	209030	269000	10/6/2016	78	10	4
386	2017	1	0	0	101	101	136	33	11071	4N1W04-DB-11100	2016	8861	0.13	168980	200000	10/7/2016	84	10	5
387	2017	5	0	0	101	101	136*	33	26314	7N4W17-BA-01600	2016	8905	0.35	152590	225000	10/7/2016	68	10	6
388	2017	1	0	0	101	101	143	33	13107	4N1W08-BA-02900	2016	8870	0.14	201070	253000	10/10/2016	79	10	7
389	2017	2	79	0	101	101	151	33	3167	3N2W11-DB-01400	2016	8897	0.19	290200	448000	10/10/2016	65	10	8
390	2017	5	0	0	101	101	142	33	25667	7N4W08-AD-02300	2016	8823	0.23	184470	199000	10/11/2016	93	10	9
391	2017	1	0	0	101	101	142	33	11617	4N1W05-AC-02711	2016	8868	0.17	226060	269000	10/11/2016	84	10	10
392	2017	3	0	0	101	101	142	33	433021	4N4W05-AC-01704	2016	9014	0.11	221850	280000	10/11/2016	79	10	11
393	2017	2	0	0	101	101	141	33	4111	3N2W12-DB-05900	2016	8899	0.17	180830	250000	10/12/2016	72	10	12
394	2017	2	0	0	101	101	143	33	4519	3N2W13-AD-05500	2016	8982	0.14	254060	345000	10/12/2016	74	10	13
395	2017	1	30	0	101	101	232*	33	10636	4N1W04-CA-09300	2016	8987	0.22	228280	355000	10/12/2016	64	10	14
396	2017	5	0	0	101	101	141	33	25892	7N4W08-CB-03600	2016	8999	0.17	163340	180000	10/13/2016	91	10	15
397	2017	2	0	0	101	101	143	33	433098	3N2W12-DC-00175	2016	8997	0.06	205290	245000	10/14/2016	84	10	16
398	2017	1	0	0	101	101	143	33	12932	4N1W06-DD-06200	2016	9043	0.13	198880	251000	10/14/2016	79	10	17
399	2017	1	1	0	101	101	132	33	14611	5N1W28-DA-01700	2016	9047	0.11	139600	186000	10/17/2016	75	10	18
400	2017	1	0	0	101	101	141*	30	12140	4N1W05-CB-02600	2016	9113	0.32	195720	200000	10/17/2016	98	10	19
401	2017	1	0	0	101	101	132	33	10566	4N1W04-CA-02200	2016	9140	0.08	132150	176000	10/18/2016	75	10	20
402	2017	1	0	0	101	101	131	33	10609	4N1W04-CA-06700	2016	9161	0.22	147080	150000	10/18/2016	98	10	21
403	2017	1	0	0	101	101	132	33	13669	5N1W33-DD-10000	2016	9173	0.13	188070	205000	10/20/2016	92	10	22
404	2017	1	0	0	101	101	131	33	13615	5N1W33-DD-05801	2016	9209	0.13	128250	195000	10/20/2016	66	10	23
405	2017	1	0	0	101	101	141	33	433457	5N1W32-DB-02400	2016	9687	0.16	244070	271600	10/20/2016	90	10	24
406	2017	1	0	0	101	101	143	33	12864	4N1W06-DC-06300	2016	9252	0.26	234440	262500	10/21/2016	89	10	25
407	2017	1	0	0	101	101	152	33	11363	4N1W05-BC-08300	2016	9347	0.33	408700	385000	10/21/2016	106	10	26
408	2017	1	0	0	101	101	131	33	10705	4N1W04-CA-16300	2016	9250	0.13	131830	175000	10/21/2016	75	10	27
409	2017	3	0	0	100	100		33	22494	4N4W03-BC-10304	2016	9451	0.46	69580	60000	10/24/2016	116	10	28
410	2017	3	0	0	101	101	132	33	23345	4N4W05-AD-12000	2016	9317	0.23	120910	151000	10/24/2016	80	10	29
411	2017	1	1	0	101	101	132	33	14678	5N1W28-DB-00200	2016	9401	0.23	229970	260000	10/24/2016	88	10	30
412	2017	2	0	0	101	101	143	33	31201	3N1W18-BB-01600	2016	9388	0.14	280150	328825	10/24/2016	85	10	31
413	2017	1	0	0	101	101	131*	33	14994	4N1W08-BA-00800	2016	9358	0.29	148990	176000	10/24/2016	85	10	32
414	2017	1	0	0	101	101	131	33	11029	4N1W04-DB-06600	2016	9376	0.13	138320	169900	10/25/2016	81	10	33
415	2017	1	0	0	101	101	143	33	12099	4N1W05-CB-00134	2016	9378	0.12	235600	277500	10/25/2016	85	10	34
416	2017	2	0	0	101	101	143	33	3025	3N2W02-DD-00634	2016	9432	0.17	297620	380000	10/26/2016	78	10	35
417	2017	1	0	0	101	101	131	33	17124	4N1W08-DB-00900	2016	9434	0.76	213830	225000	10/27/2016	95	10	36
418	2017	3	0	0	101	101	131	33	23200	4N4W05-AC-03902	2016	9531	0.11	126380	153700	10/27/2016	82	10	37
419	2017	1	1	0	101	101	141	33	14480	5N1W28-AD-05802	2016	9449	0.11	209340	260000	10/28/2016	81	10	38
420	2017	1	0	0	101	101	132	33	9923	4N1W04-AA-04300	2016	9492	0.13	124690	182000	10/28/2016	69	10	39
421	2017	1	0	0	101	101	143	33	11834	4N1W05-BC-00800	2016	9957	0.16	236680	275000	11/1/2016	86	11	1
422	2017	1	0	0	101	101	143	33	12089	4N1W05-CB-00124	2016	9637	0.13	256610	300000	11/2/2016	86	11	2
423	2017	5	0	0	101	101	142	33	25724	7N4W08-BC-03200	2016	9668	0.18	239580	225000	11/2/2016	106	11	3
424	2017	1	0	0	101	101	141	30	12714	4N1W06-DA-00300	2016	9678	0.18	206730	243500	11/3/2016	85	11	4
425	2017	1	0	0	101	101	131	33	10870	4N1W04-CB-10000	2016	9676	0.24	158480	239900	11/3/2016	66	11	5
426	2017	1	0	0	101	101	141	33	11539	4N1W05-AC-05800	2016	9704	0.22	184580	240000	11/4/2016	77	11	6

Time Study for RMV 1XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Acct Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
427	2017	5	0	0	101	101	144*	33	26152	7N4W08-DC-01400	2016	9710	0.17	166970	215000	11/4/2016	78	11	7
428	2017	3	0	0	101	101	141	33	22479	4N4W03-BC-09300	2016	9779	0.19	159530	216400	11/7/2016	74	11	8
429	2017	1	0	0	101	101	143	33	13211	4N1W08-BC-06000	2016	9820	0.16	219500	275000	11/7/2016	80	11	9
430	2017	1	0	0	101	101	131	33	12371	4N1W05-DA-00800	2016	9781	0.23	160640	256000	11/7/2016	63	11	10
431	2017	1	0	0	100	100		33	12360	4N1W05-CD-02100	2016	9950	0.24	55530	70000	11/8/2016	79	11	11
432	2017	1	0	0	101	101	143	33	10395	4N1W05-AD-15600	2016	9822	0.18	219300	259900	11/8/2016	84	11	12
433	2017	1	1	0	101	101	154	33	14291	5N1W28-AA-01903	2016	9825	0.18	388920	425000	11/8/2016	92	11	13
434	2017	1	0	0	101	101	143	33	13034	4N1W07-AB-03170	2016	9828	0.12	214550	276500	11/8/2016	78	11	14
435	2017	3	0	0	100	100		30	436958	4N4W05-AD-02201	2016	9819	0.37	63060	75000	11/9/2016	84	11	15
436	2017	1	0	0	101	101	143	33	12092	4N1W05-CB-00127	2016	9809	0.11	230360	274000	11/9/2016	84	11	16
437	2017	1	0	0	101	101	141	33	11443	4N1W05-AA-06700	2016	9842	0.23	190750	259900	11/10/2016	73	11	17
438	2017	1	0	0	101	101	143	30	12984	4N1W07-AB-03120	2016	9962	0.19	288290	290000	11/10/2016	99	11	18
439	2017	1	0	0	101	101	143	30	12985	4N1W07-AB-03121	2016	9961	0.22	289820	290000	11/10/2016	100	11	19
440	2017	1	0	0	101	101	143	33	10372	4N1W04-BC-07200	2016	9905	0.16	250620	270500	11/10/2016	93	11	20
441	2017	2	0	0	101	101	141	33	2876	3N1W07-CC-02600	2016	9903	0.17	221310	300000	11/11/2016	74	11	21
442	2017	1	0	0	101	101	131	33	9886	4N1W04-AA-01100	2016	9955	0.27	160500	202000	11/14/2016	79	11	22
443	2017	1	1	0	101	101	143	33	14124	5N1W21-CB-01200	2016	10041	0.23	225660	275000	11/15/2016	82	11	23
444	2017	3	3	0	101	101	135	33	23060	4N4W04-CB-03900	2016	10045	0.14	130340	214000	11/15/2016	61	11	24
445	2017	1	21	0	101	101	141	33	14246	5N1W21-CD-06600	2016	10340	0.23	227130	287000	11/15/2016	79	11	25
446	2017	1	0	0	101	101	141	33	11175	4N1W04-DC-03300	2016	10075	0.13	214810	239900	11/18/2016	90	11	26
447	2017	3	0	0	101	101	143	33	429538	4N4W04-BB-01404	2016	10130	0.23	279080	334500	11/18/2016	83	11	27
448	2017	2	0	0	101	101	143	33	4434	3N2W13-AC-02200	2016	10204	0.15	211020	276000	11/18/2016	76	11	28
449	2017	3	0	0	101	101	131	33	22720	4N4W04-AD-05000	2016	10190	0.15	125860	167500	11/21/2016	75	11	29
450	2017	1	0	0	101	101	131*	33	12629	4N1W05-DC-08400	2016	10410	0.43	160670	198000	11/22/2016	81	11	30
451	2017	1	0	0	101	101	131	33	9869	4N1W03-CB-05902	2016	11033	0.13	151550	190000	11/23/2016	80	11	31
452	2017	1	0	0	101	101	141	33	433460	5N1W32-DB-02700	2016	10342	0.18	253620	275500	11/28/2016	92	11	32
453	2017	2	0	0	101	101	131	33	3507	3N2W12-BA-03200	2016	10401	0.15	154010	235700	11/29/2016	65	11	33
454	2017	1	0	0	101	101	154	33	11485	4N1W05-AB-00503	2016	10415	1.00	452830	451000	11/30/2016	100	11	34
455	2017	2	0	0	101	101	141	33	4282	3N2W12-DD-01000	2016	10469	0.17	179940	229900	11/30/2016	78	11	35
456	2017	5	0	0	101	101	136	33	25606	7N4W08-AB-01000	2016	10462	0.23	130000	125000	11/30/2016	104	11	36
457	2017	5	0	0	101	101	135*	33	26085	7N4W08-DA-05100	2016	10471	0.21	151870	212000	12/1/2016	72	12	1
458	2017	1	0	0	101	101	121	33	9500	4N1W03-BB-03200	2016	10567	0.13	93750	135000	12/1/2016	69	12	2
459	2017	1	0	0	101	101	141	33	433469	5N1W32-DC-00108	2016	10628	0.23	279110	321800	12/1/2016	87	12	3
460	2017	1	0	0	101	101	141	33	11547	4N1W05-AB-02700	2016	10577	0.20	180490	242500	12/5/2016	74	12	4
461	2017	1	0	0	101	101	143	33	13150	4N1W08-BB-06300	2016	10593	0.16	235180	295000	12/5/2016	80	12	5
462	2017	1	1	0	101	101	141	33	436085	5N1W21-BC-03700	2016	10617	0.54	295310	365000	12/6/2016	81	12	6
463	2017	2	0	0	101	101	143	33	434082	3N1W07-CC-01017	2016	10672	0.14	251280	321000	12/6/2016	78	12	7
464	2017	1	0	0	101	101	143	33	12297	4N1W05-CD-00500	2016	10664	0.14	191910	240000	12/6/2016	80	12	8
465	2017	2	0	0	101	101	142	33	3098	3N2W11-AA-00900	2016	11279	2.00	332510	324000	12/7/2016	103	12	9
466	2017	1	0	0	101	101	143	33	429113	5N1W33-AD-03800	2016	10658	0.18	271240	359900	12/8/2016	75	12	10
467	2017	1	0	0	101	101	143	33	12833	4N1W06-DC-03200	2016	10676	0.16	243250	295000	12/8/2016	82	12	11
468	2017	1	0	0	101	101	141	30	12406	4N1W05-DA-03003	2016	10785	0.16	192860	209000	12/8/2016	92	12	12
469	2017	2	0	0	102	102	144	33	432032	3N2W12-CC-91001	2016	10788	0.00	192470	165000	12/8/2016	117	12	13
470	2017	4	0	0	101	101	132	33	18520	7N2W17-AD-06000	2016	10896	0.55	198500	233500	12/13/2016	85	12	14
471	2017	1	0	0	101	101	131	33	10646	4N1W04-CA-10300	2016	10822	0.11	139460	201600	12/13/2016	69	12	15
472	2017	2	0	0	101	101	141	30	4768	3N2W13-BD-03700	2016	10841	0.25	203180	216500	12/13/2016	94	12	16
473	2017	1	1	0	101	101	141	33	436083	5N1W21-BC-03500	2016	11065	0.36	303960	379900	12/13/2016	80	12	17
474	2017	2	0	0	101	101	131	33	4153	3N2W12-DB-10000	2016	11025	0.19	171870	285000	12/13/2016	60	12	18
475	2017	1	1	0	101	101	131	33	14368	5N1W28-AC-01001	2016	10820	0.11	132180	179000	12/14/2016	74	12	19
476	2017	3	0	0	101	101	145	33	429814	4N4W05-AA-00402	2016	10827	0.18	267710	340000	12/14/2016	79	12	20
477	2017	1	0	0	101	101	143	33	433940	4N1W05-BD-01004	2016	10932	0.14	253840	265000	12/14/2016	96	12	21
478	2017	1	1	0	101	101	141	33	15617	5N1W21-BC-03800	2016	11186	0.48	308550	384000	12/14/2016	80	12	22
479	2017	1	0	0	101	101	131	33	10574	4N1W04-CA-03000	2016	10853	0.11	141080	191000	12/16/2016	74	12	23
480	2017	1	1	0	101	101	152	33	14710	5N1W28-DB-03309	2016	11002	0.23	446020	430000	12/16/2016	104	12	24
481	2017	1	0	0	101	101	143	33	11868	4N1W05-BC-04300	2016	10859	0.26	240630	289900	12/16/2016	83	12	25
482	2017	1	0	0	101	101	141	33	12887	4N1W06-DD-01400	2016	10906	0.17	189030	237000	12/19/2016	80	12	26
483	2017	2	0	0	101	101	143	33	31235	3N1W18-BB-03500	2016	10929	0.14	275280	345000	12/19/2016	80	12	27
484	2017	2	80	0	101	101	153	33	3572	3N2W12-BC-00206	2016	11027	0.23	342560	487000	12/19/2016	70	12	28
485	2017	1	0	0	101	101	133	33	13558	5N1W33-DA-02000	2016	11037	0.27	171820	250000	12/19/2016	69	12	29
486	2017	1	0	0	101	101	134	33	10039	5N1W33-DC-13500	2016	11013	0.21	158010	197000	12/19/2016	80	12	30
487	2017	1	0	0	101	101	143	33	12063	4N1W05-CA-03900	2016	11000	0.14	240940	284000	12/20/2016	85	12	31
488	2017	1	1	0	101	101	131	33	14398	5N1W28-AC-02701	2016	11006	0.24	162240	236500	12/20/2016	69	12	32
489	2017	1	0	0	101	101	141	30	12656	4N1W05-DD-00600	2016	11035	0.16	222130	260000	12/20/2016	85	12	33
490	2017	1	0	0	101	101	143	33	11940	4N1W05-BD-02900	2016	11145	0.20	227790	264900	12/20/2016	86	12	34
491	2017	1	0	0	101	101	143	33	13257	5N1W32-DC-00200	2016	11055	0.19	282540	300000	12/21/2016	94	12	35
492	2017	1	0	0	101	101	143	33	12004	4N1W05-CA-00116	2016	11045	0.13	244920	262450	12/21/2016	93	12	36
493	2017	1	0	0	101	101	143	30	433477	5N1W32-DC-00116	2016	11056	0.21	283120	300000	12/21/2016	94	12	37
494	2017	2	0	0	101	101	143	33	433081	3N2W12-DC-00158	2016	11078	0.08	219190	253500	12/22/2016	86	12	38
495	2017	1	0	0	101	101	131	33	13518	5N1W33-DC-09100	2016	11208	0.11	135660	181500	12/23/2016	75	12	39
496	2017	3	0	0	100	100		33	23235	4N4W05-AD-01301	2016	11292	0.34	43340	36500	12/27/2016	119	12	40
497	2017	1	0	0	101	101	143	33	11844	4N1W05-BC-01900	2016	11141	0.15	258590	319000	12/27/2016	81	12	41

Time Study for RMV 1XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Acct Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
498	2017	1	0	0	101	101	131	33	10871	4N1W04-CB-10101	2016	11180	0.15	124640	160000	12/27/2016	78	12	42
499	2017	2	0	0	101	101	141	33	3503	3N2W12-BA-02800	2017	85	0.23	193920	210000	12/27/2016	92	12	43
500	2017	3	0	0	109	109	452*	33	23407	4N4W05-DA-03402	2016	11147	0.19	127980	140650	12/27/2016	91	12	44
501	2017	1	0	0	101	101	132	33	11315	4N1W04-DA-13800	2016	11284	0.13	169350	229000	12/28/2016	74	12	45
502	2017	2	0	0	101	101	141	33	3942	3N2W12-CD-02012	2016	11268	0.20	182310	200000	12/28/2016	91	12	46
503	2017	1	0	0	101	101	143	33	12903	4N1W06-DD-03100	2017	280	0.24	255540	249600	12/29/2016	102	12	47
504	2017	3	0	0	109	109	463*	33	22625	4N4W04-AC-01801	2016	11297	0.23	152930	152500	12/29/2016	100	12	48
505	2017	2	0	0	101	101	143	33	433080	3N2W12-DC-00157	2017	30	0.07	189940	226500	12/30/2016	84	12	49

TOTAL SALES: 505

Time Study for RMV 4XX

		Month	Count	Cumulative Count	Mean	Median	Wtd. Mean	Selected
	1	Jan	14	14	1.00	0.98	0.99	
	2	Feb	15	29	1.01	0.94	1.03	
	3	Mar	12	41	0.97	0.93	0.94	
	4	Apr	21	62	0.95	0.96	0.95	
	5	May	19	81	0.92	0.93	0.92	
	6	Jun	27	108	0.89	0.87	0.90	
Mid-point	7	Jul	23	131	**0.93**	0.88	0.91	0.93
	8	Aug	25	156	0.88	0.90	0.88	
	9	Sep	22	178	0.93	0.92	0.93	
	10	Oct	15	193	0.93	0.87	0.89	
	11	Nov	13	206	0.92	0.90	0.92	
End of Year	12	Dec	18	224	**0.88**	0.84	0.86	0.88

Total Sales:	224	Total July RMV:	7,552,930	Total Dec RMV:	5,297,640
Middle Sale:	112	Total July SP:	8,284,050	Total Dec SP:	6,136,735

Trend Factor: -0.05

Mid-point time adj: 0.95

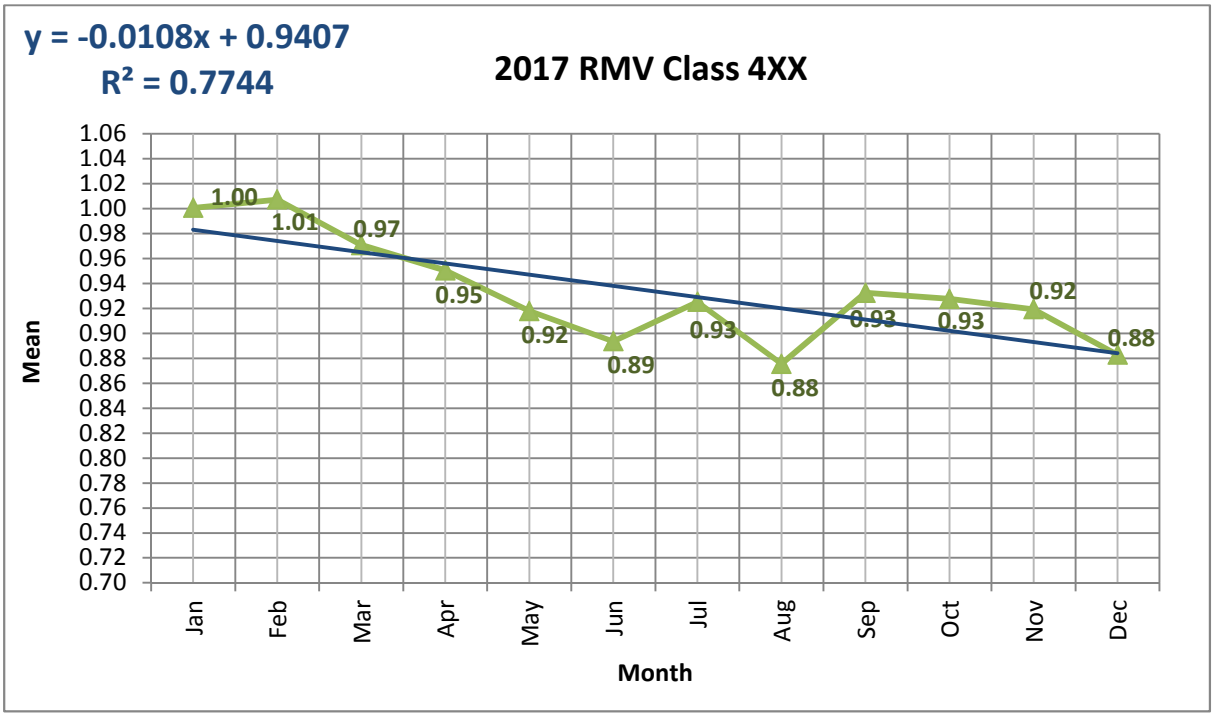
2017 RMV Class 4XX Time Adjustment

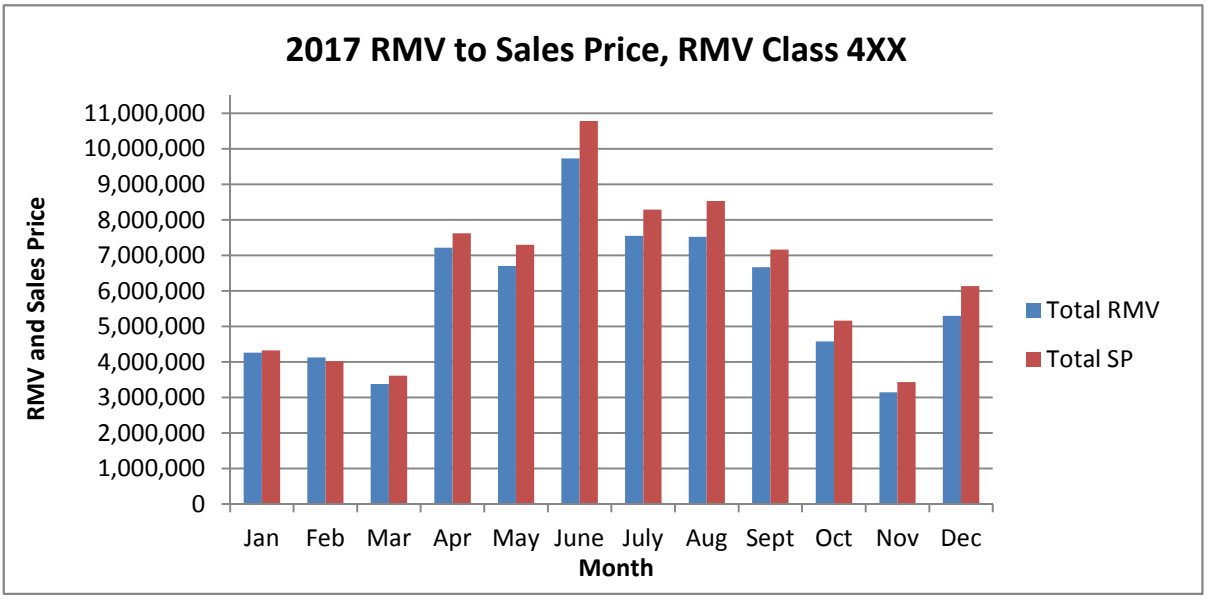
Conclusion: The mid-point of the sales is found to be July (the 7th month), with a corresponding mid-point Mean central tendency of 0.93. The end of year central tendency Mean is 0.88.

(0.88-0.93)/0.93 = -0.05 or -5%

1.00 - 0.05 = .95; the Mid-point Time Adjustment Factor

Time Study for RMV 4XX





Columbia County 2017 Ratio Study

Time Study for RMV 4XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Total Land Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
1	2017	6	61	0	400	640		30	15170	4N1W18-A0-02501	2016	69	2.57	154040	141500	1/5/2016	109	1	1
2	2017	2	21	0	401	401	126	33	7442	3N2W24-C0-03900	2016	228	0.63	193830	209000	1/9/2016	93	1	2
3	2017	6	61	0	401	401	143*	30	8870	4N1W19-D0-01705	2016	250	2.60	375060	370000	1/13/2016	101	1	3
4	2017	6	63	0	401	401	131*	33	15518	5N1W07-B0-00900	2016	248	3.65	227160	260000	1/13/2016	87	1	4
5	2017	2	21	0	401	401	131	33	8388	4N2W35-CB-00501	2016	306	0.97	207250	194900	1/15/2016	106	1	5
6	2017	5	55	0	401	551	133*	33	28109	8N4W23-B0-00900	2016	308	16.35	242040	195900	1/18/2016	124	1	6
7	2017	2	21	0	401	401	141*	33	7493	4N1W30-C0-00700	2016	387	2.48	440030	385000	1/20/2016	114	1	7
8	2017	6	61	0	401	401	151	33	16820	4N1W07-BA-00505	2016	425	1.00	356670	380000	1/22/2016	94	1	8
9	2017	6	62	0	401	641	142	33	15339	4N2W11-00-00902	2016	447	10.17	465070	535000	1/22/2016	87	1	9
10	2017	5	51	0	401	401	141*	33	21669	7N3W20-00-00602	2016	522	4.63	264400	285000	1/25/2016	93	1	10
11	2017	6	61	0	401	401	131	33	15049	4N1W08-BD-03600	2016	612	0.25	234800	239900	1/26/2016	98	1	11
12	2017	2	21	0	401	401	142*	30	7430	3N2W24-C0-02600	2016	703	1.61	478410	500000	1/26/2016	96	1	12
13	2017	6	61	0	401	401	141	33	15410	4N2W12-DD-00202	2016	609	1.36	316180	311759	1/27/2016	101	1	13
14	2017	6	61	0	401	401	136*	30	8666	4N1W19-AA-02400	2016	730	2.12	307350	314900	1/28/2016	98	1	14
15	2017	6	62	0	400	640		33	435881	5N1W30-00-02506	2016	728	5.00	124200	140000	2/1/2016	89	2	1
16	2017	2	23	0	401	641	144*	33	8507	4N2W07-00-00203	2016	847	10.37	484270	420000	2/3/2016	115	2	2
17	2017	6	63	0	401	401	143*	33	16011	5N2W11-00-01003	2016	842	2.63	309810	328000	2/5/2016	94	2	3
18	2017	3	31	0	409	409	452*	33	24292	4N5W12-00-01001	2016	851	8.21	242180	235000	2/5/2016	103	2	4
19	2017	3	31	0	400	400		33	24054	4N4W08-AD-00700	2016	1022	1.17	29200	45000	2/8/2016	65	2	5
20	2017	5	51	0	401	401	135	33	28261	8N4W27-DC-00200	2016	911	0.64	129450	145000	2/8/2016	89	2	6
21	2017	6	61	0	400	400		30	8925	4N2W13-A0-03002	2016	1016	5.00	165600	150000	2/11/2016	110	2	7
22	2017	4	42	0	401	641		33	19114	6N2W04-B0-00500	2016	1095	27.50	242350	165000	2/16/2016	147	2	8
23	2017	3	31	0	409	409	472*	33	25044	6N4W30-A0-00500	2016	1074	6.15	229160	245300	2/16/2016	93	2	9
24	2017	5	51	0	401	401	152	33	27952	8N3W19-DB-00900	2016	1205	0.54	247070	219000	2/19/2016	113	2	10
25	2017	4	42	0	401	401	144	33	19161	6N2W06-00-00100	2016	1238	21.94	332760	375000	2/22/2016	89	2	11
26	2017	6	61	0	401	541	163*	33	17452	5N1W31-00-01800	2016	1294	4.77	648720	529300	2/22/2016	123	2	12
27	2017	6	64	0	401	641	141*	33	17639	5N3W01-A0-01900	2016	1409	3.18	278890	299000	2/22/2016	93	2	13
28	2017	2	22	0	401	401	141*	30	7766	4N2W18-AA-00500	2016	1531	2.94	393200	449000	2/24/2016	88	2	14
29	2017	5	51	0	401	401	142*	33	26472	7N3W30-A0-00100	2016	1375	5.00	268220	269500	2/26/2016	100	2	15
30	2017	6	63	0	401	641	141*	33	16088	5N2W12-A0-00401	2016	1542	6.00	270320	221000	3/2/2016	122	3	1
31	2017	3	31	0	401	401	141	33	23886	4N4W03-BA-01006	2016	1626	0.58	191260	212100	3/3/2016	90	3	2
32	2017	6	61	0	401	401	143	33	17309	4N2W01-00-03201	2016	1766	5.93	519900	635000	3/4/2016	82	3	3
33	2017	6	61	0	401	401	141*	33	16553	4N1W06-A0-00410	2016	1880	1.00	302700	395000	3/8/2016	77	3	4
34	2017	2	22	0	409	409	473*	33	7742	4N2W17-D0-01002	2016	2076	2.00	308400	314500	3/12/2016	98	3	5
35	2017	3	31	0	409	649	453*	33	24222	4N4W29-00-01102	2016	1877	14.48	294070	320000	3/14/2016	92	3	6
36	2017	5	51	0	400	640		33	20455	7N3W04-C0-01600	2016	2044	4.28	45160	40000	3/21/2016	113	3	7
37	2017	5	51	0	400	400		33	434434	7N3W04-C0-01602	2016	2043	4.19	44690	50000	3/21/2016	89	3	8
38	2017	6	62	0	401	401	141*	33	16263	5N2W26-D0-01100	2016	2118	8.49	520530	500000	3/22/2016	104	3	9
39	2017	6	61	0	401	401	141*	33	8909	4N2W13-A0-02201	2016	2121	2.00	345140	375000	3/23/2016	92	3	10
40	2017	2	22	0	401	401	143	33	7602	4N2W16-00-03301	2016	2237	2.56	381750	410000	3/28/2016	93	3	11
41	2017	3	40	0	401	401	233	33	23946	4N4W05-DA-10900	2016	2395	0.37	155060	138000	3/31/2016	112	3	12
42	2017	6	61	0	401	401	153*	33	8860	4N1W19-D0-01302	2016	2399	2.06	491340	579500	4/4/2016	85	4	1
43	2017	4	41	0	401	401	141	33	19529	7N2W18-00-01000	2016	2481	3.00	244740	290000	4/4/2016	84	4	2
44	2017	6	61	0	401	401	135*	33	16795	4N1W07-AD-00600	2016	2479	0.84	278640	265000	4/5/2016	105	4	3
45	2017	6	61	0	401	401	132	33	15038	4N1W08-BC-01300	2016	2491	0.84	263260	261000	4/6/2016	101	4	4
46	2017	2	21	0	401	401	155*	33	28662	3N2W14-00-02105	2016	2660	5.00	694830	750000	4/6/2016	93	4	5
47	2017	5	51	0	401	401	141*	33	20421	7N3W04-B0-00700	2016	2684	4.62	278190	339000	4/13/2016	82	4	6
48	2017	6	61	0	401	401	131*	33	17033	4N1W08-CA-02200	2016	2654	0.40	218470	189700	4/13/2016	115	4	7
49	2017	3	36	0	401	401	131	33	25308	6N5W06-BD-02500	2016	3510	0.22	130960	185000	4/13/2016	71	4	8
50	2017	5	51	0	401	401	136	33	27803	7N4W04-A0-01900	2016	2682	1.74	160590	149000	4/14/2016	108	4	9
51	2017	3	31	0	401	641	141*	30	24282	4N5W12-00-00300	2016	2723	18.39	484880	424843	4/14/2016	114	4	10
52	2017	6	62	0	401	641	142*	33	16158	5N2W24-00-00302	2016	2726	3.30	334710	347500	4/14/2016	96	4	11
53	2017	2	22	0	401	641	153*	33	7608	4N2W16-00-03800	2016	2728	4.50	521130	555000	4/14/2016	94	4	12
54	2017	5	51	0	401	401	143*	33	28419	8N4W36-A0-01200	2016	2791	4.59	302520	310000	4/15/2016	98	4	13
55	2017	6	62	0	401	401	154*	33	17525	5N2W35-AA-01200	2016	2796	2.52	595800	585000	4/18/2016	102	4	14
56	2017	6	62	0	401	401	143	33	17330	4N2W02-00-01803	2016	2862	2.00	378420	392000	4/20/2016	97	4	15
57	2017	6	61	0	401	401	156*	33	9278	4N1W18-D0-00400	2016	2833	2.67	763390	735000	4/20/2016	104	4	16
58	2017	6	61	0	401	401	135*	33	9023	4N2W23-B0-00600	2016	2860	1.00	272150	388000	4/20/2016	70	4	17
59	2017	6	61	0	400	400		33	17321	4N2W01-00-03509	2016	2870	2.04	126000	160000	4/21/2016	79	4	18
60	2017	3	31	0	409	409	442*	33	24045	4N4W08-AA-00300	2016	2875	1.20	133700	110000	4/22/2016	122	4	19
61	2017	6	61	0	401	401	131*	33	15025	4N1W08-BB-04300	2016	2911	0.46	250790	287000	4/25/2016	87	4	20
62	2017	6	61	0	401	401	141*	33	15010	4N1W08-BB-02900	2016	3066	0.56	288380	320000	4/27/2016	90	4	21
63	2017	2	21	0	401	401	153	33	8039	4N2W25-C0-00602	2016	3245	1.96	438070	459000	5/4/2016	95	5	1
64	2017	6	61	0	401	401	154*	33	8841	4N1W19-CA-03900	2016	3440	0.89	459090	429900	5/6/2016	107	5	2
65	2017	6	61	0	401	401	141*	33	17523	5N2W35-AA-00500	2016	3527	4.44	363960	425000	5/6/2016	86	5	3
66	2017	5	51	0	400	640		33	26295	7N4W16-BB-00700	2016	3437	3.10	33460	43000	5/9/2016	78	5	4
67	2017	6	61	0	401	401	153*	33	17369	4N2W12-D0-00400	2016	3577	2.00	594640	635000	5/9/2016	94	5	5
68	2017	6	61	0	401	401	155	33	9042	4N2W23-DB-00400	2016	3555	2.00	502000	652500	5/11/2016	77	5	6
69	2017	2	22	0	401	401	143*	33	7756	4N2W18-00-00900	2016	3612	1.02	348030	424900	5/11/2016	82	5	7

Columbia County 2017 Ratio Study

Time Study for RMV 4XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Total Land Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
70	2017	4	41	0	401	401	151	33	19965	7N2W28-BB-00700	2016	3579	5.03	326030	398000	5/12/2016	82	5	8
71	2017	5	51	0	401	401	141*	33	27152	7N4W15-DB-02800	2016	3670	2.15	259900	325000	5/16/2016	80	5	9
72	2017	2	64	0	401	401	166	33	6340	3N2W22-AD-12200	2016	3714	1.40	933280	1005000	5/17/2016	93	5	10
73	2017	6	61	0	401	401	146*	33	17302	4N2W01-00-02600	2016	3750	0.75	305300	270000	5/18/2016	113	5	11
74	2017	2	21	0	401	401	141*	33	8089	4N2W25-D0-02300	2016	3771	0.70	253720	299900	5/18/2016	85	5	12
75	2017	5	51	0	401	641	151*	33	27157	7N4W15-DC-00702	2016	3797	7.73	365610	380000	5/19/2016	96	5	13
76	2017	2	21	0	400	580		33	8127	4N2W26-D0-00200	2016	4263	3.13	183010	186000	5/24/2016	98	5	14
77	2017	4	41	0	401	401	142	33	19633	7N2W19-AA-00300	2016	4394	0.94	250100	270000	5/25/2016	93	5	15
78	2017	3	36	0	401	401	145	33	25276	6N5W06-BC-04500	2016	4364	0.34	145650	159000	5/26/2016	92	5	16
79	2017	6	61	0	400	400		33	437134	4N1W07-C0-00301	2016	4386	4.85	165050	211400	5/27/2016	78	5	17
80	2017	2	22	0	401	641	143*	33	5091	4N3W24-00-02702	2016	4366	6.61	390260	350000	5/27/2016	112	5	18
81	2017	6	61	0	401	401	142*	33	16994	4N1W08-BC-02000	2016	4390	0.93	387800	370000	5/27/2016	105	5	19
82	2017	5	51	0	401	641	143*	30	27264	7N4W18-00-01604	2016	5087	34.43	361330	420000	6/1/2016	86	6	1
83	2017	4	41	0	400	640		33	20058	7N2W30-00-01900	2016	4674	13.05	78350	72900	6/2/2016	107	6	2
84	2017	2	21	0	401	401	142	33	5247	3N1W07-CB-00800	2016	4621	1.00	392420	475000	6/2/2016	83	6	3
85	2017	6	61	0	401	551	154*	33	17559	5N2W36-00-00212	2016	4717	10.00	680420	710000	6/2/2016	96	6	4
86	2017	5	55	0	401	551	146*	33	27348	7N5W03-00-01300	2016	4855	5.02	335310	347000	6/3/2016	97	6	5
87	2017	2	21	0	401	401	141	33	7948	4N2W25-AD-01000	2016	5828	0.37	262880	329900	6/6/2016	80	6	6
88	2017	6	61	0	400	400		33	9049	4N2W23-DB-01100	2016	4887	2.05	126170	149000	6/7/2016	85	6	7
89	2017	5	51	0	409	409	452*	33	28147	8N4W25-00-01300	2016	5030	9.22	200880	230000	6/12/2016	87	6	8
90	2017	6	63	0	401	401	141	33	434127	5N2W10-A0-00307	2016	5136	5.01	314740	354000	6/13/2016	89	6	9
91	2017	6	61	0	401	401	134	33	17311	4N2W01-00-03301	2016	5069	0.98	288990	365000	6/14/2016	79	6	10
92	2017	6	61	0	401	401	136*	33	9166	4N2W24-C0-00100	2016	5149	2.00	270870	275000	6/14/2016	98	6	11
93	2017	6	62	0	401	641	154*	33	17500	5N2W25-D0-01200	2016	5077	4.88	646650	725000	6/15/2016	89	6	12
94	2017	3	31	0	401	641	143*	33	24233	4N4W31-00-00104	2016	5058	21.13	432590	510000	6/16/2016	85	6	13
95	2017	2	21	0	401	401	154	33	8077	4N2W25-D0-01606	2016	5488	2.25	658600	669000	6/16/2016	98	6	14
96	2017	2	21	0	401	401	141*	33	7475	4N1W30-B0-01100	2016	5167	2.22	363970	365000	6/17/2016	100	6	15
97	2017	3	31	0	401	641	144*	33	24520	5N4W28-00-00901	2016	5397	3.44	275130	320000	6/17/2016	86	6	16
98	2017	6	61	0	401	401	141*	33	8733	4N1W19-B0-01400	2016	5395	1.91	390790	475000	6/21/2016	82	6	17
99	2017	6	61	0	401	401	141*	33	9133	4N2W24-B0-00604	2016	5350	2.00	347950	412000	6/22/2016	84	6	18
100	2017	2	21	0	401	401	163*	33	5218	3N1W07-BC-00100	2016	5391	3.02	866660	740000	6/22/2016	117	6	19
101	2017	5	51	0	401	641	151	33	26624	7N4W22-00-00220	2016	5463	5.13	287050	288000	6/23/2016	100	6	20
102	2017	6	61	0	401	401	143*	33	17349	4N2W12-C0-02100	2016	5494	2.09	458340	575000	6/27/2016	80	6	21
103	2017	6	61	0	401	401	143*	33	17062	4N1W08-CC-00101	2016	5598	1.00	362560	399500	6/27/2016	91	6	22
104	2017	6	61	0	401	401	141*	33	9279	4N1W18-D0-00401	2016	5486	2.10	400680	450000	6/27/2016	89	6	23
105	2017	3	31	0	409	409	452*	33	24479	5N4W23-D0-01400	2016	5609	1.92	194510	232000	6/27/2016	84	6	24
106	2017	6	61	0	401	401	153*	33	9182	4N2W24-C0-01002	2016	5631	2.01	441660	489000	6/29/2016	90	6	25
107	2017	5	51	0	401	401	141*	33	28375	8N4W34-CC-01100	2016	5684	1.88	193340	277000	6/29/2016	70	6	26
108	2017	6	63	0	400	640		33	15861	5N2W02-00-00600	2016	5725	14.10	100610	125000	6/30/2016	80	6	27
109	2017	2	21	0	401	401	154	33	8105	4N2W26-00-00600	2016	5767	5.01	527400	515000	7/5/2016	102	7	1
110	2017	5	51	0	401	401	131*	30	26494	7N3W30-A0-02300	2016	5773	4.80	198240	210000	7/6/2016	94	7	2
111	2017	4	41	0	409	409	452	33	18862	7N3W24-00-00403	2016	5856	2.49	172330	223000	7/6/2016	77	7	3
112	2017	2	21	0	401	401	151	33	8071	4N2W25-D0-01600	2016	5897	2.12	440360	520000	7/7/2016	85	7	4
113	2017	3	31	0	401	401	135*	33	24009	4N4W07-D0-00502	2016	5959	4.17	218770	304000	7/8/2016	72	7	5
114	2017	6	61	0	401	541	143*	33	8580	4N1W18-00-00101	2016	6065	5.06	458750	589000	7/8/2016	78	7	6
115	2017	2	64	0	401	401	155	33	6858	3N2W22-DA-08700	2016	5995	0.89	422280	530900	7/11/2016	80	7	7
116	2017	2	21	0	401	401	154	33	8076	4N2W25-D0-01605	2016	6027	2.39	526900	599500	7/11/2016	88	7	8
117	2017	3	37	0	401	401	131	33	24721	5N5W25-CB-00700	2016	6005	0.30	196850	162750	7/11/2016	121	7	9
118	2017	6	64	0	409	409	462	33	17832	5N2W30-00-00400	2016	6254	83.57	498120	367500	7/11/2016	136	7	10
119	2017	5	51	0	401	401	141*	30	20578	7N3W09-00-00500	2016	6104	4.13	236690	249000	7/13/2016	95	7	11
120	2017	4	41	0	401	401	141	33	19967	7N2W28-BB-00900	2016	6106	0.70	205480	235000	7/13/2016	87	7	12
121	2017	3	36	0	400	400		33	25314	6N5W06-BD-03100	2016	6178	0.41	14310	15000	7/15/2016	95	7	13
122	2017	6	62	0	401	401	141	33	17529	5N2W35-AB-00400	2016	6126	3.06	308320	356000	7/15/2016	87	7	14
123	2017	2	21	0	401	641	143	33	433915	4N2W33-A0-00403	2016	6182	5.01	436980	413500	7/18/2016	106	7	15
124	2017	2	21	0	401	401	142	33	5509	3N2W02-00-02901	2016	6285	3.40	527930	495000	7/18/2016	107	7	16
125	2017	3	31	0	400	640		33	24112	4N4W09-00-01000	2016	6531	38.46	197960	184000	7/25/2016	108	7	17
126	2017	4	42	0	401	641	143*	33	21476	6N2W23-00-00401	2016	6514	12.17	299480	349900	7/25/2016	86	7	18
127	2017	5	51	0	401	401	141	33	27148	7N4W15-DB-02400	2016	6640	2.81	224870	281000	7/25/2016	80	7	19
128	2017	6	62	0	401	641	151	33	17432	5N1W30-00-02503	2016	6726	5.00	549660	597000	7/25/2016	92	7	20
129	2017	3	37	0	401	401	131*	33	24732	5N5W25-CC-00800	2016	6546	0.84	207510	237000	7/27/2016	88	7	21
130	2017	6	61	0	401	401	143	33	9189	4N2W24-C0-01800	2016	6565	1.37	346960	500000	7/28/2016	69	7	22
131	2017	5	51	0	401	401	155*	33	26410	7N5W36-B0-00200	2016	6603	5.00	336780	350000	7/29/2016	96	7	23
132	2017	6	61	0	400	400		30	15186	4N1W17-CB-03200	2016	6751	1.26	81990	103000	8/1/2016	80	8	1
133	2017	6	62	0	401	401	142*	33	16237	5N2W25-D0-00800	2016	6787	2.32	302950	330000	8/2/2016	92	8	2
134	2017	2	22	0	409	649	452	33	5069	4N3W24-00-01300	2016	7239	6.50	295710	299900	8/2/2016	99	8	3
135	2017	2	64	0	401	401	156	33	6273	3N2W22-AD-04900	2016	6782	1.12	612100	775000	8/3/2016	79	8	4
136	2017	5	51	0	401	401	144*	33	26807	7N3W18-00-01502	2016	6785	4.22	288400	327000	8/4/2016	88	8	5
137	2017	5	51	0	401	641	135	30	27873	7N4W11-00-01200	2016	6810	7.84	203230	296000	8/4/2016	69	8	6
138	2017	2	63	0	401	401	143	33	31347	3N2W24-AC-01500	2016	7011	0.38	256150	323500	8/11/2016	79	8	7

Time Study for RMV 4XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Total Land Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
139	2017	4	42	0	401	641	146*	33	21607	6N2W33-00-00200	2016	7018	50.00	646010	595000	8/11/2016	109	8	8
140	2017	5	55	0	401	551	134*	33	27361	7N5W04-00-01200	2016	7043	14.13	274470	320000	8/11/2016	86	8	9
141	2017	6	61	0	401	401	142	33	17424	4N2W13-A0-01600	2016	7123	3.35	333510	356000	8/11/2016	94	8	10
142	2017	4	42	0	401	401	142	33	19051	6N2W03-00-00804	2016	7052	2.24	218450	242000	8/12/2016	90	8	11
143	2017	5	51	0	401	401	141	33	20910	7N3W18-A0-00800	2016	7069	5.00	285440	339000	8/15/2016	84	8	12
144	2017	2	21	0	401	641	154	33	28654	3N2W09-00-00603	2016	7185	10.00	661760	750000	8/15/2016	88	8	13
145	2017	4	42	0	409	409	462*	33	21504	6N2W27-00-01300	2016	7181	6.48	243770	240000	8/16/2016	102	8	14
146	2017	6	61	0	401	401	143*	33	16937	4N1W07-DB-01200	2016	7151	1.03	364100	520000	8/17/2016	70	8	15
147	2017	6	61	0	401	401	152	33	17315	4N2W01-00-03503	2016	7178	2.05	541780	583000	8/17/2016	93	8	16
148	2017	5	55	0	401	401	133*	33	26860	7N4W05-00-00600	2016	7256	2.07	186100	190000	8/18/2016	98	8	17
149	2017	5	51	0	401	401	141*	30	20443	7N3W04-C0-00500	2016	7420	5.11	218250	230000	8/22/2016	95	8	18
150	2017	6	61	0	400	400		33	8886	4N1W30-B0-00100	2016	7427	11.04	338240	438000	8/24/2016	77	8	19
151	2017	6	61	0	401	401	141	33	8645	4N1W19-AA-00500	2016	7520	1.19	243170	270000	8/26/2016	90	8	20
152	2017	4	42	0	401	641	452	33	19293	6N2W11-00-00302	2016	7593	9.11	223840	207500	8/26/2016	108	8	21
153	2017	4	42	0	400	640		33	433590	6N2W21-A0-01401	2016	7585	5.20	57480	105000	8/30/2016	55	8	22
154	2017	5	51	0	401	401	131	33	28183	8N4W26-C0-01600	2016	7651	4.61	179870	187500	8/30/2016	96	8	23
155	2017	2	21	0	409	649	472*	33	8191	4N2W27-CB-00100	2016	7697	8.16	358680	345000	8/30/2016	104	8	24
156	2017	5	51	0	409	409	452	33	27736	7N4W03-B0-00300	2016	7642	0.17	105140	159900	8/30/2016	66	8	25
157	2017	6	62	0	401	401	131	33	17535	5N2W35-AD-00200	2016	7694	0.69	186890	212000	9/1/2016	88	9	1
158	2017	5	51	0	401	641	136*	33	27205	7N4W16-D0-00702	2016	7770	3.44	222810	240000	9/2/2016	93	9	2
159	2017	4	41	0	401	401	141*	33	19991	7N2W29-00-01400	2016	7829	9.47	257940	285000	9/6/2016	91	9	3
160	2017	4	42	0	401	641	143*	33	21209	6N2W15-00-00900	2016	7914	39.52	415800	459000	9/8/2016	91	9	4
161	2017	3	31	0	401	401	131*	33	24869	5N4W11-00-00600	2016	8027	14.03	289030	235000	9/8/2016	123	9	5
162	2017	3	31	0	401	641	145	33	24142	4N4W18-00-00400	2016	8007	9.25	430270	500000	9/11/2016	86	9	6
163	2017	2	21	0	401	401	141*	33	7474	4N1W30-B0-01000	2016	8004	2.26	370510	385000	9/12/2016	96	9	7
164	2017	4	42	0	400	400		30	19273	6N2W10-00-00602	2016	8023	3.46	42170	48000	9/13/2016	88	9	8
165	2017	6	61	0	400	400		33	435056	5N2W36-00-00216	2016	8106	5.99	158890	210000	9/14/2016	76	9	9
166	2017	5	51	0	401	401	151*	33	26497	7N3W30-A0-02600	2016	8562	4.70	326160	347500	9/14/2016	94	9	10
167	2017	5	51	0	401	401	300*	33	435686	7N5W10-00-00509	2016	8110	6.11	52020	47000	9/15/2016	111	9	11
168	2017	2	21	0	401	401	141*	33	7953	4N2W25-AD-01700	2016	8160	0.38	280970	379900	9/16/2016	74	9	12
169	2017	2	22	0	409	649	462*	33	8552	4N2W20-00-00106	2016	8840	4.50	335900	315000	9/20/2016	107	9	13
170	2017	5	51	0	400	640		33	435683	7N3W31-00-00606	2016	8518	10.04	72170	115000	9/22/2016	63	9	14
171	2017	6	61	0	401	401	143*	33	8940	4N2W13-D0-00901	2016	8306	5.01	433270	579000	9/22/2016	75	9	15
172	2017	6	61	0	401	401	162	33	9051	4N2W23-DB-01300	2016	8419	2.13	738770	679000	9/23/2016	109	9	16
173	2017	2	21	0	401	641	141	33	5968	3N2W17-00-00900	2016	8763	3.90	350310	329700	9/23/2016	106	9	17
174	2017	4	42	0	401	401	155	33	21414	6N2W21-A0-01101	2016	8426	6.59	389620	425000	9/26/2016	92	9	18
175	2017	6	61	0	401	401	141*	33	16632	4N1W06-C0-00801	2016	8564	2.64	316890	374900	9/26/2016	85	9	19
176	2017	6	61	0	401	401	135*	33	15405	4N2W12-DA-00700	2016	8446	2.00	286860	240000	9/26/2016	120	9	20
177	2017	5	51	0	401	641	154	33	26722	7N4W27-00-00905	2016	8575	9.83	462040	499900	9/29/2016	92	9	21
178	2017	4	41	0	401	401	142	33	20287	7N3W14-D0-01700	2016	8978	5.10	245730	260000	9/29/2016	95	9	22
179	2017	6	63	0	401	401	144*	30	16002	5N2W11-00-00700	2016	8685	8.50	392870	560000	10/4/2016	70	10	1
180	2017	4	42	0	401	641	141	33	19231	6N2W09-00-00700	2016	8781	5.85	311080	307500	10/6/2016	101	10	2
181	2017	5	51	0	401	641	144*	33	27312	7N5W01-00-02700	2016	9116	11.23	346240	439000	10/17/2016	79	10	3
182	2017	6	61	0	401	401	142*	33	17354	4N2W12-C0-02600	2016	9404	2.10	373880	431000	10/17/2016	87	10	4
183	2017	6	61	0	401	401	152	33	17000	4N1W08-BD-01100	2016	9157	2.18	393100	450000	10/18/2016	87	10	5
184	2017	6	61	0	401	401	141	33	16671	4N1W06-C0-02905	2016	9175	2.02	318240	382500	10/18/2016	83	10	6
185	2017	2	21	0	401	641	135	32	435973	3N2W11-AD-00103	2016	9218	6.27	295460	349000	10/19/2016	85	10	7
186	2017	2	21	0	401	401	141	33	8259	4N2W34-A0-00400	2016	9225	1.37	309650	275000	10/19/2016	113	10	8
187	2017	4	41	0	401	641	143*	33	20241	7N3W13-00-00700	2016	9437	4.51	350640	395000	10/19/2016	89	10	9
188	2017	6	63	0	400	640		33	15882	5N2W03-00-01004	2016	9255	10.00	143500	98707	10/20/2016	145	10	10
189	2017	3	31	0	401	401	144*	33	24829	5N4W03-00-00700	2016	9246	3.32	372440	389900	10/20/2016	96	10	11
190	2017	6	64	0	401	641	143*	33	16286	5N2W27-B0-01800	2016	9408	4.25	341670	375000	10/26/2016	91	10	12
191	2017	6	63	0	401	401	300*	33	434095	5N2W12-00-00705	2016	9506	5.64	145440	175000	10/26/2016	83	10	13
192	2017	2	21	0	401	401	133	33	8232	4N2W28-DA-00100	2016	9510	3.44	263990	254900	10/27/2016	104	10	14
193	2017	2	21	0	400	640		33	437262	3N2W10-00-00201	2016	9672	25.18	217580	275000	10/31/2016	79	10	15
194	2017	3	37	0	409	409	473*	33	24731	5N5W25-CC-00700	2016	9776	0.41	258480	260000	11/4/2016	99	11	1
195	2017	4	41	0	401	401	142	33	19606	7N2W19-A0-01800	2016	10670	2.56	225300	240000	11/8/2016	94	11	2
196	2017	6	61	0	401	401	131*	33	17009	4N1W08-BD-04200	2016	9907	2.98	286400	315000	11/10/2016	91	11	3
197	2017	6	61	0	401	401	131	33	434972	4N1W17-B0-02402	2016	9913	1.51	242890	297700	11/11/2016	82	11	4
198	2017	4	41	0	401	641	143*	33	20180	7N3W11-B0-00601	2016	9985	7.05	291240	349900	11/14/2016	83	11	5
199	2017	4	41	0	401	401	132*	33	20267	7N3W13-C0-00500	2016	9996	4.23	220610	281000	11/14/2016	79	11	6
200	2017	3	31	0	409	409	463*	33	25043	6N4W30-A0-00400	2016	9948	11.74	304590	282000	11/14/2016	108	11	7
201	2017	3	36	0	401	401	141	33	25301	6N5W06-BD-01800	2016	10012	0.20	169930	195000	11/15/2016	87	11	8
202	2017	5	51	0	401	641	143	30	26723	7N4W27-00-00906	2016	10120	4.86	306600	340000	11/17/2016	90	11	9
203	2017	4	41	0	401	401	142	33	19518	7N2W17-DC-00600	2016	10214	1.40	232310	276000	11/21/2016	84	11	10
204	2017	3	36	0	401	401	131	33	25305	6N5W06-BD-02200	2016	10216	0.30	125120	132500	11/22/2016	94	11	11
205	2017	4	42	0	409	409	452	33	19281	6N2W10-00-00701	2016	10349	1.00	148130	166000	11/29/2016	89	11	12
206	2017	2	22	0	409	409	452*	33	7809	4N2W18-D0-00200	2016	10407	5.80	336050	294000	11/29/2016	114	11	13
207	2017	5	51	0	400	640		33	20500	7N3W05-D0-00200	2016	10473	9.70	69770	62000	12/1/2016	113	12	1

Time Study for RMV 4XX

#	Ratio Year	MA	SA	NH	RMV Class	Prop Class	Stat Class	Rej Code	Acct No	Map #	Book	Page	Total Land Size	Total RMV	Sale Price	Sales Date	Before Ratio	# of Mo.	Count per Mo.
208	2017	3	31	0	401	401	153*	33	23867	4N4W00-00-02101	2016	10560	2.75	352150	436900	12/2/2016	81	12	2
209	2017	3	31	0	401	401	143*	33	25482	6N5W24-00-00900	2016	11076	2.56	304680	342437	12/2/2016	89	12	3
210	2017	6	62	0	401	401	142*	33	15342	4N2W11-00-00905	2016	10591	5.00	388070	465000	12/5/2016	83	12	4
211	2017	2	21	0	401	401	165*	33	8083	4N2W25-D0-01612	2016	10651	2.00	816600	744700	12/6/2016	110	12	5
212	2017	2	64	0	401	401	154	33	6351	3N2W22-AD-13300	2016	10849	0.57	404000	578698	12/6/2016	70	12	6
213	2017	4	42	0	401	401	146*	33	21583	6N2W31-00-00703	2016	11053	2.79	218130	279000	12/9/2016	78	12	7
214	2017	6	61	0	409	409	452*	33	9230	4N2W24-D0-00800	2016	10843	2.84	298190	349000	12/14/2016	85	12	8
215	2017	3	36	0	401	401	141	33	25254	6N5W06-BC-02300	2016	10893	0.24	226800	306000	12/16/2016	74	12	9
216	2017	6	61	0	401	401	136*	33	9172	4N2W24-C0-00300	2016	10900	1.41	232140	360000	12/16/2016	64	12	10
217	2017	5	51	0	401	401	131	33	28354	8N4W34-C0-00400	2016	11003	1.27	139060	187000	12/20/2016	74	12	11
218	2017	6	61	0	401	401	151*	33	8773	4N1W19-C0-00210	2016	11031	2.01	519550	535000	12/20/2016	97	12	12
219	2017	4	41	0	401	401	300*	33	19954	7N2W28-00-00302	2016	11185	3.75	112320	115000	12/20/2016	98	12	13
220	2017	6	62	0	401	641	300*	33	16169	5N2W24-00-00902	2016	11008	6.90	180040	125000	12/20/2016	144	12	14
221	2017	2	21	0	400	640		33	7960	4N2W25-D0-03300	2016	11286	6.02	186050	245000	12/23/2016	76	12	15
222	2017	6	62	0	401	401	132	33	15606	5N1W19-00-01102	2017	26	4.33	282590	293000	12/23/2016	96	12	16
223	2017	6	61	0	401	401	146	33	437195	4N1W07-C0-00302	2016	11270	3.63	360110	403000	12/28/2016	89	12	17
224	2017	6	63	0	401	401	136	33	16078	5N2W12-00-02500	2016	11214	0.72	207390	310000	12/28/2016	67	12	18

TOTAL SALES: 224

GROUPING ANALYSIS
and
STUDY AREA LIST

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

AREA 2 - Scappoose

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

2017: SA 77 (Scappoose Industrial Airpark) was added for industrial property surrounding the Scappoose Airport.

AREA 3 - Vernonia

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

AREA 4 - Rainier

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

AREA 5 - Clatskanie

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

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

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

AREA 7 - Personal Property Manufactured Structures, County wide

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

SUPPLEMENTAL NOTES

Areas of Re-appraisal:

Maintenance 1, City of St. Helens

At the time of this report, a re-appraisal of unimproved and improved property located in MA 01 (City of St. Helens) is in process. The sales used in this Ratio Study have been re-appraised.

Areas on Re-calculation:

Maintenance 1	City of Columbia City
Maintenance 2	Scappoose
Maintenance 3	Vernonia
Maintenance 4	Rainier
Maintenance 5	Clatskanie
Maintenance 6	Rural areas of St. Helens, Warren & Deer Island.
Maintenance 7	Personal Propety Manufactured Structures, County wide
Watercraft	Personal Property Watercraft (Floating homes, Boathouse & Combinations) located county wide.

New Study Area

In Scappoose, a new Study Area was created (SA 77-Scappoose Industrial Airpark). This area is the located around the Scappoose Airport. Because of the proximity to the airport, much of this area sells quite differently than other industrial land located in the Scappoose area.

Changed Study Areas

In the City of St, Helens, SA 80 (Yachts Landing, Planned Unit Development) has been moved out of SA 00 (City of St. Helens, general area). This study area is unique because it is a hybrid of condominiums and attached housing which shares a common area.

SUMMARY
of
RATIO INDICATIONS

Summary of Ratio Indications

2017 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2017	003	01	00	000	100	100	100	100			☐
2017	003	01	01	000	100	100	100	100			☐
2017	003	02	00	000	100	100	100	100			☐
2017	003	03	00	000	100	100	100	100			☐
2017	003	03	06	000	100	100	100	100			☐
2017	003	04	00	000	100	100	100	100			☐
2017	003	04	41	000	100	100	100	100			☐
2017	003	05	00	000	100	100	100	100			☐
2017	003	06	00	000	100	100	100	100			☐
2017	008	01	00	000	100	100	100	100			☐
2017	008	01	90	000	100	100	100	100			☐
2017	008	02	00	000	100	100	100	100			☐
2017	008	02	90	000	100	100	100	100			☐
2017	008	03	00	000	100	100	100	100			☐
2017	008	03	09	000	100	100	100	100			☐
2017	008	03	90	000	100	100	100	100			☐
2017	008	04	00	000	100	100	100	100			☐
2017	008	04	90	000	100	100	100	100			☐
2017	008	05	00	000	100	100	100	100			☐
2017	008	05	90	000	100	100	100	100			☐
2017	008	06	00	000	100	100	100	100			☐
2017	008	06	90	000	100	100	100	100			☐
2017	010	01	00	000	100	100	100	100			☑
2017	010	01	01	000	100	100	100	100			☑
2017	010	01	15	000	100	100	100	100			☑
2017	010	02	00	000	100	100	100	100			☑
2017	010	03	00	000	100	100	100	100			☑
2017	010	03	03	000	100	100	100	100			☑
2017	010	04	00	000	100	100	100	100			☑
2017	010	05	00	000	100	100	100	100			☑
2017	019	07	01	000	100	100	100	100	18.90	.95	☑
2017	019	07	02	000	100	100	100	100	18.90	.95	☑
2017	019	07	03	000	100	100	100	100	19.74	.95	☑
2017	019	07	04	000	100	100	100	100	19.74	.95	☑
2017	019	07	05	000	100	100	100	100	19.74	.95	☑
2017	019	07	06	000	100	100	100	100	18.90	.95	☑
2017	019	07	27	000	100	100	100	100	7.57	1.08	☑
2017	019	07	28	000	100	100	100	100	18.90	.95	☑
2017	019	07	30	000	100	100	100	100	19.59	1.10	☑
2017	019	07	31	000	100	100	100	100	18.90	.95	☑
2017	019	07	35	000	100	100	100	100	19.74	.95	☑
2017	020	01	00	000	100	100	100	100			☑
2017	020	02	00	000	100	100	100	100			☑
2017	020	03	00	000	100	100	100	100			☑
2017	020	04	00	000	100	100	100	100			☑

Summary of Ratio Indications

2017 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2017	020	05	00	000	100	100	100	100			☑
2017	030	01	00	000	100	100	100	100			☑
2017	030	03	00	000	100	100	100	100			☑
2017	030	04	00	000	100	100	100	100			☑
2017	030	05	00	000	100	100	100	100			☑
2017	030	06	00	000	100	100	100	100			☑
2017	032	03	00	000	100	100	100	100			☐
2017	032	03	31	000	100	100	100	100			☐
2017	040	02	00	000	100	100	100	100			☑
2017	040	02	21	000	100	100	100	100			☑
2017	040	03	00	000	100	100	100	100			☑
2017	040	03	03	000	100	100	100	100			☑
2017	040	04	00	000	100	100	100	100			☑
2017	040	04	41	000	100	100	100	100			☑
2017	040	04	42	000	100	100	100	100			☑
2017	040	04	44	000	100	100	100	100			☑
2017	040	05	00	000	100	100	100	100			☑
2017	040	06	00	000	100	100	100	100			☑
2017	040	06	61	000	100	100	100	100			☑
2017	040	06	62	000	100	100	100	100			☑
2017	100	01	00	000	123	100	100	123	20.98	.99	☐
2017	100	01	01	000	111	100	100	111	13.83	1.02	☑
2017	100	01	15	000	123	100	100	123			☐
2017	100	02	00	000	128	100	100	128			☑
2017	100	02	79	000	108	100	100	108			☑
2017	100	03	00	000	119	100	100	119	22.59	1.03	☑
2017	100	03	03	000	122	100	100	122			☑
2017	100	03	38	000	98	100	100	98			☑
2017	100	04	00	000	104	100	100	104	32.31	1.05	☑
2017	100	04	46	000	104	100	100	104			☑
2017	100	04	47	000	118	100	100	118			☑
2017	100	05	00	000	110	100	100	110	18.49	1.09	☑
2017	101	01	00	000	123	100	122	119	8.65	.99	☐
2017	101	01	01	000	111	100	127	119	10.61	1.00	☑
2017	101	01	15	000	123	100	117	119			☐
2017	101	01	21	000	111	100	132	122	5.56	1.00	☑
2017	101	01	30	000	123	100	141	127	15.00	1.03	☐
2017	101	01	31	000	111	100	123	115	.00	1.00	☑
2017	101	01	43	000	123	100	109	110	13.47	1.03	☐
2017	101	01	80	000	123	100	115	114	.00	1.00	☑
2017	101	02	00	000	128	100	134	128	7.69	1.00	☑
2017	101	02	28	000	128	100	97	105	3.92	1.01	☑
2017	101	02	33	000	128	100	97	105	3.92	1.01	☑
2017	101	02	79	000	108	100	109	108	15.75	1.00	☑
2017	101	02	80	000	128	100	134	130	7.81	1.01	☑

Summary of Ratio Indications

2017 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2017	101	03	00	000	119	100	126	119	8.20	1.00	☑
2017	101	03	03	000	122	100	133	122	17.78	1.04	☑
2017	101	03	39	000	119	100	124	119	.00	1.00	☑
2017	101	03	40	000	119	100	131	119			☑
2017	101	04	00	000	104	100	105	104	8.78	.99	☑
2017	101	04	40	000	104	100	105	104			☑
2017	101	04	46	000	104	100	104	104	8.85	1.01	☑
2017	101	04	47	000	118	100	120	118	2.25	1.00	☑
2017	101	05	00	000	110	100	112	110	13.32	1.01	☑
2017	101	05	40	000	110	100	112	110			☑
2017	102	01	00	000	100	100	98	98	11.11	1.02	☐
2017	102	02	00	000	100	100	93	93	8.83	1.02	☑
2017	102	02	21	000	100	100	110	110			☑
2017	102	04	00	000	100	100	104	104			☑
2017	109	01	00	000	123	100	100	119	29.17	1.06	☐
2017	109	01	01	000	111	100	135	119			☑
2017	109	01	15	000	123	100	100	119			☐
2017	109	02	00	000	128	100	93	109	6.25	1.00	☑
2017	109	03	00	000	104	100	106	104	18.00	1.03	☑
2017	109	03	03	000	122	100	133	122			☑
2017	109	03	38	000	98	100	97	98	8.02	.99	☑
2017	109	04	00	000	104	100	105	104	.00	1.00	☑
2017	109	05	00	000	110	100	113	110			☑
2017	111	01	95	000	100	100	100	100			☐
2017	111	01	97	000	100	100	100	100			☐
2017	111	02	95	000	100	100	100	100			☐
2017	111	02	97	000	100	100	100	100			☐
2017	111	04	95	000	100	100	100	100			☐
2017	111	04	97	000	100	100	100	100			☐
2017	111	05	95	000	100	100	100	100			☐
2017	111	05	97	000	100	100	100	100			☐
2017	111	06	95	000	100	100	100	100			☐
2017	111	06	97	000	100	100	100	100			☐
2017	200	01	00	000	100	100	100	100	26.47	1.11	☑
2017	200	01	01	000	100	100	100	100	26.47	1.11	☑
2017	200	01	71	000	100	100	100	100			☐
2017	200	01	72	000	100	100	100	100	26.47	1.11	☑
2017	200	01	73	000	100	100	100	100	26.47	1.11	☑
2017	200	02	00	000	100	100	100	100	26.47	1.11	☑
2017	200	02	71	000	100	100	100	100	26.47	1.11	☑
2017	200	02	72	000	100	100	100	100	26.47	1.11	☑
2017	200	02	73	000	100	100	100	100	26.47	1.11	☑
2017	200	03	00	000	100	100	100	100	.00	1.00	☑
2017	200	03	71	000	100	100	100	100			☐
2017	200	03	72	000	100	100	100	100			☐

Summary of Ratio Indications

2017 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2017	200	03	73	000	100	100	100	100	.00	1.00	☑
2017	200	04	00	000	100	100	100	100	.00	1.00	☑
2017	200	04	71	000	100	100	100	100	.00	1.00	☑
2017	200	04	72	000	100	100	100	100	.00	1.00	☑
2017	200	04	73	000	100	100	100	100	.00	1.00	☑
2017	200	05	00	000	100	100	100	100	.00	1.00	☑
2017	200	05	71	000	100	100	100	100			☐
2017	200	05	72	000	100	100	100	100			☐
2017	200	05	73	000	100	100	100	100			☐
2017	200	06	00	000	100	100	100	100	26.47	1.11	☑
2017	200	06	71	000	100	100	100	100			☐
2017	200	06	72	000	100	100	100	100	26.47	1.11	☑
2017	200	06	73	000	100	100	100	100			☐
2017	201	01	00	000	100	100	100	100	22.85	1.12	☑
2017	201	01	01	000	100	100	100	100	22.85	1.12	☑
2017	201	01	71	000	100	100	100	100	22.85	1.12	☑
2017	201	01	72	000	100	100	100	100	22.85	1.12	☑
2017	201	01	73	000	100	100	100	100	22.85	1.12	☑
2017	201	02	00	000	100	100	100	100	22.85	1.12	☑
2017	201	02	71	000	100	100	100	100	22.85	1.12	☑
2017	201	02	72	000	100	100	100	100	22.85	1.12	☑
2017	201	02	73	000	100	100	100	100	22.85	1.12	☑
2017	201	02	95	000	100	100	100	100	22.85	1.12	☑
2017	201	02	97	000	100	100	100	100	22.85	1.12	☑
2017	201	03	00	000	100	100	100	100	25.29	1.07	☑
2017	201	03	03	000	100	100	100	100			☐
2017	201	03	71	000	100	100	100	100			☐
2017	201	03	72	000	100	100	100	100			☐
2017	201	03	73	000	100	100	100	100	25.29	1.07	☑
2017	201	04	00	000	100	100	100	100	25.29	1.07	☑
2017	201	04	71	000	100	100	100	100	25.29	1.07	☑
2017	201	04	72	000	100	100	100	100	25.29	1.07	☑
2017	201	04	73	000	100	100	100	100			☐
2017	201	05	00	000	100	100	100	100	25.29	1.07	☑
2017	201	05	71	000	100	100	100	100	25.29	1.07	☑
2017	201	05	72	000	100	100	100	100	25.29	1.07	☑
2017	201	05	73	000	100	100	100	100			☐
2017	201	06	00	000	100	100	100	100	22.85	1.12	☑
2017	201	06	71	000	100	100	100	100			☐
2017	201	06	72	000	100	100	100	100	22.85	1.12	☑
2017	201	06	73	000	100	100	100	100	22.85	1.12	☑
2017	207	01	00	000	100	100	100	100			☑
2017	207	01	01	000	100	100	100	100			☑
2017	207	02	00	000	100	100	100	100			☑
2017	207	03	00	000	100	100	100	100			☑

Summary of Ratio Indications

2017 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2017	207	04	00	000	100	100	100	100			☑
2017	207	05	00	000	100	100	100	100			☑
2017	207	06	00	000	100	100	100	100			☑
2017	209	01	71	000	100	100	100	100			☐
2017	209	01	72	000	100	100	100	100			☐
2017	209	01	73	000	100	100	100	100			☐
2017	209	02	71	000	100	100	100	100			☐
2017	209	02	72	000	100	100	100	100			☐
2017	209	02	73	000	100	100	100	100			☐
2017	209	03	71	000	100	100	100	100			☐
2017	209	03	72	000	100	100	100	100			☐
2017	209	03	73	000	100	100	100	100			☐
2017	209	04	71	000	100	100	100	100			☐
2017	209	04	72	000	100	100	100	100			☐
2017	209	04	73	000	100	100	100	100			☐
2017	209	05	71	000	100	100	100	100			☐
2017	209	05	72	000	100	100	100	100			☐
2017	209	05	73	000	100	100	100	100			☐
2017	209	06	71	000	100	100	100	100			☐
2017	209	06	72	000	100	100	100	100			☐
2017	209	06	73	000	100	100	100	100			☐
2017	300	01	00	000	100	100	100	100	.00	1.00	☑
2017	300	01	74	000	100	100	100	100			☐
2017	300	02	00	000	100	100	100	100	.00	1.00	☑
2017	300	02	74	000	100	100	100	100	.00	1.00	☑
2017	300	02	77	000	100	100	100	100	.00	1.00	☑
2017	300	03	00	000	100	100	100	100	.00	1.00	☑
2017	300	03	74	000	100	100	100	100			☐
2017	300	04	00	000	100	100	100	100	.00	1.00	☑
2017	300	04	74	000	100	100	100	100			☐
2017	300	05	00	000	100	100	100	100	.00	1.00	☑
2017	300	05	74	000	100	100	100	100			☐
2017	300	06	00	000	100	100	100	100	.00	1.00	☑
2017	300	06	74	000	100	100	100	100			☐
2017	301	01	00	000	100	100	100	100			☑
2017	301	01	74	000	100	100	100	100			☐
2017	301	01	78	000	100	100	100	100			☐
2017	301	01	90	000	100	100	100	100			☐
2017	301	02	00	000	100	100	100	100			☑
2017	301	02	74	000	100	100	100	100			☑
2017	301	02	77	000	100	100	100	100			☑
2017	301	03	00	000	100	100	100	100			☑
2017	301	03	74	000	100	100	100	100			☐
2017	301	04	00	000	100	100	100	100			☑
2017	301	04	74	000	100	100	100	100			☑

Summary of Ratio Indications

2017 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2017	301	05	00	000	100	100	100	100			☑
2017	301	05	74	000	100	100	100	100			☐
2017	301	05	90	000	100	100	100	100			☐
2017	301	06	00	000	100	100	100	100			☑
2017	301	06	74	000	100	100	100	100			☐
2017	301	06	78	000	100	100	100	100			☐
2017	301	06	90	000	100	100	100	100			☐
2017	303	01	00	000	100	100	100	100			☐
2017	303	01	78	000	100	100	100	100			☐
2017	303	02	00	000	100	100	100	100			☐
2017	303	03	00	000	100	100	100	100			☐
2017	303	04	00	000	100	100	100	100			☐
2017	303	05	00	000	100	100	100	100			☐
2017	303	06	00	000	100	100	100	100			☐
2017	308	01	00	000	100	100	100	100			☐
2017	308	01	74	000	100	100	100	100			☐
2017	308	01	90	000	100	100	100	100			☐
2017	308	02	00	000	100	100	100	100			☐
2017	308	02	74	000	100	100	100	100			☐
2017	308	02	90	000	100	100	100	100			☐
2017	308	03	00	000	100	100	100	100			☐
2017	308	03	74	000	100	100	100	100			☐
2017	308	04	00	000	100	100	100	100			☐
2017	308	04	74	000	100	100	100	100			☐
2017	308	04	90	000	100	100	100	100			☐
2017	308	05	00	000	100	100	100	100			☐
2017	308	05	74	000	100	100	100	100			☐
2017	308	06	00	000	100	100	100	100			☐
2017	308	06	74	000	100	100	100	100			☐
2017	308	06	90	000	100	100	100	100			☐
2017	309	01	74	000	100	100	100	100			☐
2017	309	02	74	000	100	100	100	100			☐
2017	309	02	77	000	100	100	100	100			☐
2017	309	03	74	000	100	100	100	100			☐
2017	309	04	74	000	100	100	100	100			☐
2017	309	05	74	000	100	100	100	100			☐
2017	309	06	74	000	100	100	100	100			☐
2017	333	02	00	000	100	100	100	100			☐
2017	333	06	78	000	100	100	100	100			☐
2017	400	01	00	000	100	100	100	100			☐
2017	400	02	00	000	100	100	100	100			☐
2017	400	02	21	000	110	100	100	110	11.39	1.01	☑
2017	400	02	22	000	109	100	100	109			☑
2017	400	02	23	000	109	100	100	109			☑
2017	400	02	25	000	110	100	100	110			☑

Summary of Ratio Indications

2017 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2017	400	02	41	000	100	100	100	100			☐
2017	400	02	45	000	110	100	100	110			☑
2017	400	02	60	000	100	100	100	100			☑
2017	400	02	62	000	110	100	100	110	11.39	1.01	☑
2017	400	02	63	000	132	100	100	132			☑
2017	400	02	64	000	132	100	100	132			☑
2017	400	03	00	000	100	100	100	100			☐
2017	400	03	31	000	115	100	100	115	25.00	.87	☑
2017	400	03	36	000	120	100	100	120	.00	1.00	☑
2017	400	03	37	000	101	100	100	101			☑
2017	400	04	00	000	100	100	100	100			☐
2017	400	04	41	000	119	100	100	119	.00	1.00	☑
2017	400	04	42	000	115	100	100	115	22.92	1.11	☑
2017	400	04	44	000	115	100	100	115			☑
2017	400	04	45	000	119	100	100	119			☑
2017	400	05	00	000	100	100	100	100			☐
2017	400	05	51	000	116	100	100	116	19.55	1.06	☑
2017	400	05	55	000	108	100	100	108			☑
2017	400	05	60	000	100	100	100	100			☑
2017	400	06	56	000	120	100	100	120	14.38	1.04	☑
2017	400	06	61	000	120	100	100	120	14.38	1.04	☑
2017	400	06	62	000	115	100	100	115	.00	1.00	☑
2017	400	06	63	000	118	100	100	118	29.02	1.03	☑
2017	400	06	64	000	118	100	100	118	29.02	1.03	☑
2017	400	06	65	000	120	100	100	120			☑
2017	401	02	21	000	110	100	113	110	9.96	1.00	☑
2017	401	02	22	000	109	100	112	109	11.35	1.00	☑
2017	401	02	23	000	109	100	112	109	11.35	1.00	☑
2017	401	02	25	000	110	100	112	110			☑
2017	401	02	41	000	110	100	113	110	9.96	1.00	☑
2017	401	02	45	000	110	100	112	110			☑
2017	401	02	62	000	110	100	113	110	9.96	1.00	☑
2017	401	02	63	000	132	100	138	132	6.33	.98	☑
2017	401	02	64	000	132	100	138	132	6.33	.98	☑
2017	401	03	31	000	115	100	120	115	12.73	1.01	☑
2017	401	03	36	000	120	100	127	120	10.11	1.02	☑
2017	401	03	37	000	101	100	101	101	15.87	1.03	☑
2017	401	03	40	000	94	100	87	94	.00	1.00	☑
2017	401	04	41	000	119	100	126	119	5.78	1.01	☑
2017	401	04	42	000	115	100	121	115	14.89	1.02	☑
2017	401	04	44	000	115	100	121	115			☑
2017	401	04	45	000	119	100	128	119			☑
2017	401	05	51	000	116	100	122	116	9.18	1.01	☑
2017	401	05	55	000	108	100	111	108	11.48	1.02	☑
2017	401	06	61	000	120	100	118	116	11.22	1.01	☑

Summary of Ratio Indications

2017 Ratio Study

YEAR	RMV CLASS	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC
2017	401	06	62	000	115	100	119	115	10.20	1.03	☑
2017	401	06	63	000	118	100	125	118	11.74	1.02	☑
2017	401	06	64	000	118	100	125	118	11.74	1.02	☑
2017	401	06	65	000	120	100	125	120			☑
2017	409	02	21	000	110	100	116	110	.00	1.00	☑
2017	409	02	22	000	101	100	102	101	5.83	1.00	☑
2017	409	02	23	000	101	100	102	101	5.83	1.00	☑
2017	409	02	25	000	110	100	123	110			☑
2017	409	02	41	000	110	100	116	110	.00	1.00	☑
2017	409	02	45	000	110	100	123	110			☑
2017	409	02	62	000	110	100	116	110	.00	1.00	☑
2017	409	02	64	000	132	100	100	132			☑
2017	409	03	31	000	108	100	113	108	10.88	1.02	☑
2017	409	03	37	000	101	100	102	101	.00	1.00	☑
2017	409	04	41	000	119	100	131	119	.00	1.00	☑
2017	409	04	42	000	115	100	125	115	6.77	.99	☑
2017	409	04	44	000	115	100	123	115			☑
2017	409	04	45	000	119	100	135	119			☑
2017	409	05	51	000	116	100	126	116	13.82	.97	☑
2017	409	05	55	000	108	100	112	108			☑
2017	409	06	56	000	120	100	120	116	.00	1.00	☑
2017	409	06	61	000	120	100	120	116	.00	1.00	☑
2017	409	06	62	000	115	100	124	115			☑
2017	409	06	63	000	118	100	129	118	.00	1.00	☑
2017	409	06	64	000	118	100	129	118	.00	1.00	☑
2017	409	06	65	000	120	100	121	120			☑
2017	600	02	06	000	100	100	100	100			☑
2017	600	03	06	000	100	100	100	100			☑
2017	600	04	06	000	100	100	100	100			☑
2017	600	05	06	000	100	100	100	100			☑
2017	600	06	06	000	100	100	100	100			☑
2017	601	04	00	000	100	100	100	100			☐
2017	701	01	00	000	116	100	116	116	5.00	1.05	☑
2017	701	02	00	000	116	100	116	116	5.00	1.05	☑
2017	701	03	00	000	116	100	116	116	5.00	1.05	☑
2017	701	04	00	000	116	100	116	116	5.00	1.05	☑
2017	701	05	00	000	116	100	116	116	5.00	1.05	☑
2017	701	06	00	000	116	100	116	116	5.00	1.05	☑
2017	800	02	63	000	100	100	100	100			☑
2017	800	02	64	000	100	100	100	100			☑
2017	800	05	60	000	100	100	100	100			☑
2017	801	03	31	000	100	100	100	100			☐
2017	890	02	63	000	100	100	100	100			☑
2017	890	02	64	000	100	100	100	100			☑

MARKET AREA ANALYSIS, ADJUSTMENTS & CONCLUSIONS SECTION

RESIDENTIAL PROPERTY

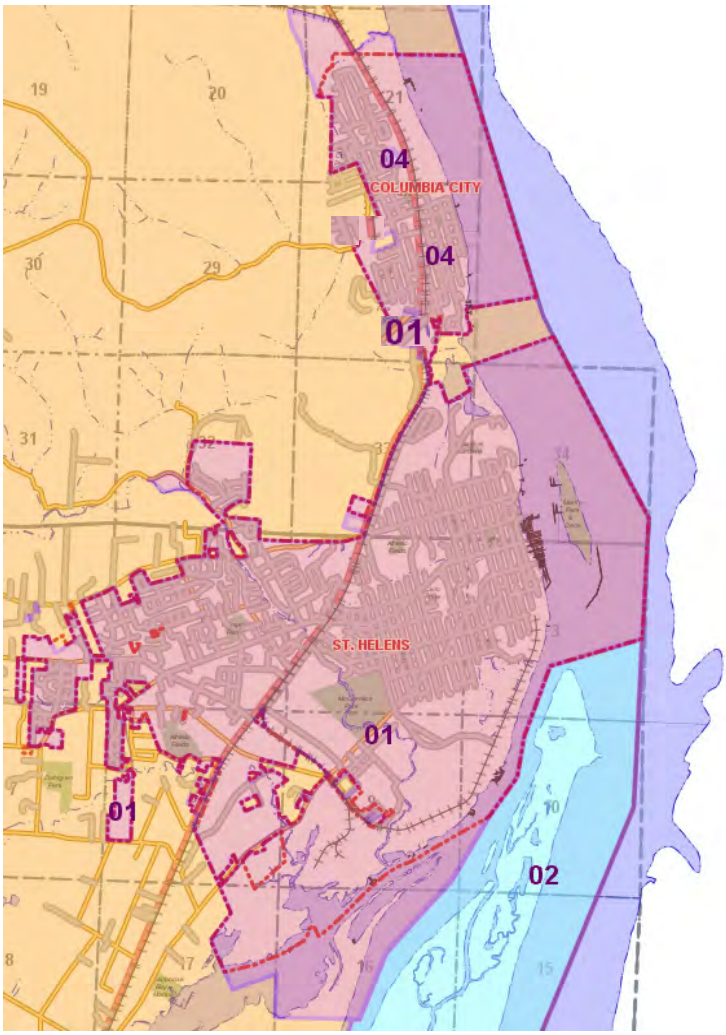
MAINTENANCE AREA 1

ST. HELENS & COLUMBIA CITY

Maintenance 01 - St. Helens

St. Helens was founded in 1850 and was then incorporated in 1889. It is approximately 4.53 square miles of land in size. Being located directly on the Columbia River, St. Helens was originally established as the main port for merchants. However, this idea diminished over time due to the development of roads and railroads which brought the bulk of the trade through Portland. (Sources: www.ci.st-helens.or.us and www.twrps.com/history/communities/st-helens).

St. Helens is the County seat for Columbia County and is located approximately 30 miles northwest of the Portland Metro area. The town sits along the Columbia River and is on the National Registry of Historic Places. Access to the town by land is via Highway 30 which follows the Columbia River. The city supports many government offices, 12 parks, a movie theater, a swimming pool, a library, several shopping facilities, banks, medical offices, several public elementary schools, one public secondary school along with other community agencies and resources.



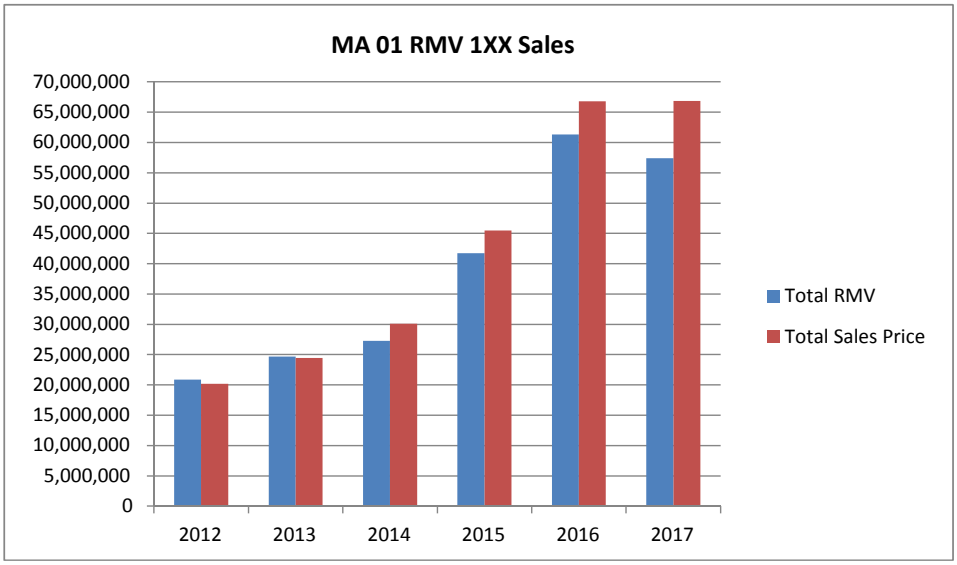
Like the Scappoose area, St. Helens has seen a boost in population. This is partly due to the influx of people moving to this area from Portland.

Maintenance 1 - Columbia City

During the 1830's, Columbia City played a major roll in river transportation with Steamboat and/or Stern-wheeler passenger and freight activities. During World War II, a 4-bay shipyard was built in South Columbia City where wood ships were built for the US Government until the end of the war.

In 1926, the City of Columbia City received it's charter. There is a City Hall and there are other services available such as: a gas station/mini-mart, athletic club, one school, a library, a museum and a small post office. (Source: www.columbia-city.org)

St. Helens comparison of usable sales over the past five years:



	Total Sales	Total RMV	Total Sales Price	Difference	Percent Difference
2012	137	24,346,910	24,901,113	554,203	2.23%
2013	99	17,962,600	17,629,567	-333,033	-1.89%
2014	228	44,854,170	45,743,845	889,675	1.94%
2015	276	54,663,700	58,284,242	3,620,542	6.21%
2016	369	90,382,570	90,573,218	190,648	0.21%
2017	268	64,477,110	72,143,010	7,665,900	10.63%

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	01	00	000		8	St Helens

Adjustment Calculation Summary

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	8			
Population - Number of Accounts	209			
Sales as a percentage of the Population	3.83 %			
Prior Year Population Values				
Land RMV	13,419,180	100.00 %	16,505,591	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	81			
RMV Adjustment	100			
Before Ratio	81			
Overall Adjustment Factor	123			
Land Adjustment Factor	123			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **81** **2017** **Adjustment** **123**

Explanation

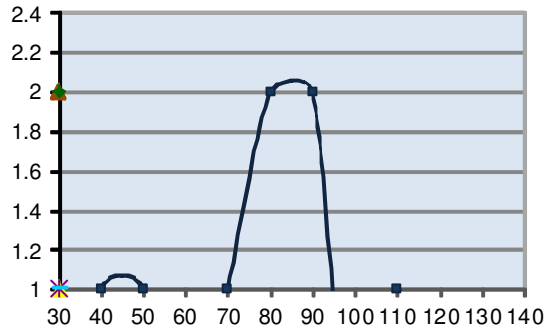
RMV 100: SA 00
Unimproved land, City of St. Helens.
The sales array of vacant land for the City of St. Helens General Area returned 8 sales which is 3.83% of the population. The Median of 84 was selected as the best indicator and was then adjusted by 96 (the Time Study conclusion). The resulting overall ratio is 123. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD	20.98	30.99	17.93	0.00	-
PRD	0.99	0.82	1.11	1.00	-

COLUMBIA County **2017** Ratio Study

Frequency



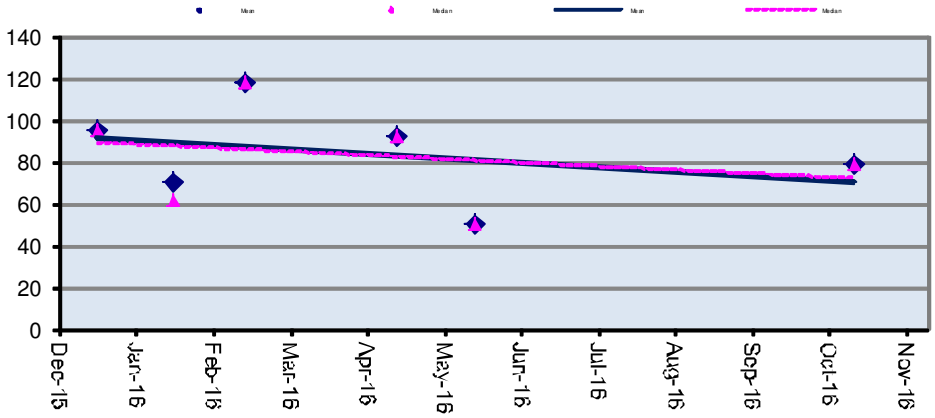
30	0
40	1
50	1
60	0
70	1
80	2
90	2
100	0
110	1
120	0
130	0
140	0

Median	**84**
AD	**17.63**
COD	**20.98**
Mean	**80**
SD	**24.48**
COV	**30.60**

Wtd Mean	**81**
GeoMean	**77**
PRD	**0.99**
95% Confidence	**16.96**

Number Of Sales **8**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	95	95	1
Feb-16	70	62	3
Mar-16	118	118	1
May-16	92	92	1
Jun-16	50	50	1
Nov-16	79	79	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	00	000	100		33	4N1W03-BB-00400	2016	1335	0.07	23,060	0	23,060	55,000	Feb-16	1	42
01	00	000	100		30	4N1W03-BC-07400	2016	5738	0.27	22,700	0	22,700	45,000	Jun-16	2	50
01	00	000	100		33	4N1W05-CD-02100	2016	9950	0.24	55,530	0	55,530	70,000	Nov-16	3	79
01	00	000	100		33	4N1W03-BB-00702	2016	993	0.13	42,970	0	42,970	53,000	Feb-16	4	81
01	00	000	100		30	4N1W03-BB-00600	2016	992	0.13	42,970	0	42,970	50,000	Feb-16	5	86
01	00	000	100		33	4N1W05-CD-00905	2016	3800	0.20	53,520	0	53,520	58,000	May-16	6	92
01	00	000	100		30	5N1W33-AD-03000	2016	440	0.22	65,210	0	65,210	69,000	Jan-16	7	95
01	00	000	100	000	33	5N1W33-AD-03800	2016	1998	0.18	61,930	0	61,930	52,500	Mar-16	8	118

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	00	000	1995	217	St Helens

Adjustment Calculation Summary

Sample - Number of Sales	217			
Population - Number of Accounts	3,807			
Sales as a percentage of the Population	5.70 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	198,218,900	28.31 %	243,809,247	29.22 %
OSD RMV	99,417,070	14.20 %	99,417,070	11.91 %
Residential Improvement RMV	399,146,790	57.00 %	486,959,084	58.36 %
Farm Improvement RMV	3,491,990	0.50 %	4,260,228	0.51 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	123
OSD Adjustment Factor	100
Residential Adjustment Factor	122
Farm Improvement Factor	122
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

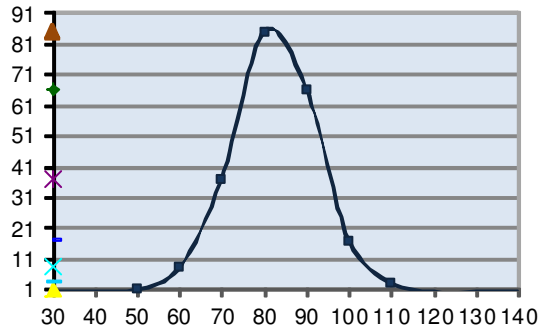
RMV 101: SA 00
Improved property, City of St. Helens
For this analysis, the Mean, Median and GeoMean returned the same ratio of 87. This is further supported by the Weighted Mean of 88. Therefore, the Mean (87) was selected and was then adjusted by 96, the conclusion from the RMV Class 1XX Time Study. This resulted in a Before Ratio of 84 and an Overall Adjustment of 119. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD	8.65	11.23	11.33	12.31	10.19
PRD	0.99	1.01	1.00	1.00	1.01

COLUMBIA County **2017** Ratio Study

Frequency



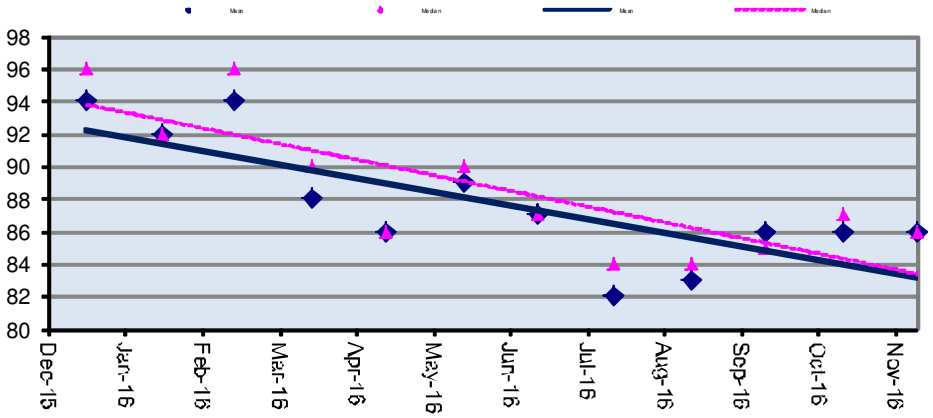
30	0
40	0
50	1
60	8
70	37
80	85
90	66
100	17
110	3
120	0
130	0
140	0

Median	**87**
AD	**7.53**
COD	**8.65**
Mean	**87**
SD	**9.76**
COV	**11.22**

Wtd Mean	**88**
GeoMean	**87**
PRD	**0.99**
95% Confidence	**1.30**

Number Of Sales **217**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	94	96	9
Feb-16	92	92	17
Mar-16	94	96	16
Apr-16	88	90	16
May-16	86	86	14
Jun-16	89	90	14
Jul-16	87	87	23
Aug-16	82	84	25
Sep-16	83	84	18
Oct-16	86	85	19
Nov-16	86	87	20
Dec-16	86	86	26

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-DD-08301	2016	7911	0.13	70,100	67,710	137,810	246,000	Sep-16	1	56
01	00	000	101	131	33	4N1W05-DA-00800	2016	9781	0.23	80,970	81,580	162,550	256,000	Nov-16	2	63
01	00	000	101	131	33	4N1W04-CB-10000	2016	9676	0.24	82,680	72,270	154,950	239,900	Nov-16	3	65
01	00	000	101	141	33	4N1W04-DC-06000	2016	6978	0.13	70,100	100,920	171,020	260,000	Aug-16	4	66
01	00	000	101	131	33	4N1W04-DC-03000	2016	6994	0.11	64,040	72,890	136,930	200,000	Aug-16	5	68
01	00	000	101	131	33	4N1W04-CA-12700	2016	7433	0.13	70,570	86,280	156,850	230,000	Aug-16	6	68
01	00	000	101	132	33	4N1W04-AA-04300	2016	9492	0.13	70,100	54,120	124,220	182,000	Oct-16	7	68
01	00	000	101	131	33	4N1W05-CD-01213	2016	7595	0.11	65,440	88,920	154,360	223,500	Aug-16	8	69
01	00	000	101	131	33	4N1W04-CA-10300	2016	10822	0.11	65,430	74,030	139,460	201,600	Dec-16	9	69
01	00	000	101	135	33	4N1W03-BD-06900	2016	5901	0.13	70,100	78,720	148,820	210,000	Jul-16	10	71
01	00	000	101	131	33	4N1W04-BC-05100	2016	6120	0.09	58,620	80,120	138,740	196,000	Jul-16	11	71
01	00	000	101	131	33	4N1W03-CB-03600	2016	3103	0.11	65,430	48,840	114,270	157,900	May-16	12	72
01	00	000	101	143	33	4N1W05-CB-04700	2016	4380	0.17	86,530	146,710	233,240	324,900	May-16	13	72
01	00	000	101	131	33	5N1W33-DD-05900	2016	5871	0.13	70,100	69,520	139,620	194,125	Jul-16	14	72
01	00	000	101	131	33	4N1W04-CA-13600	2016	6511	0.12	66,600	65,440	132,040	183,000	Jul-16	15	72
01	00	000	101	131	33	4N1W03-BC-04700	2016	7147	0.16	75,110	81,310	156,420	216,000	Aug-16	16	72
01	00	000	101	131	33	4N1W04-DA-03200	2016	8216	0.13	70,100	65,240	135,340	185,000	Sep-16	17	73
01	00	000	101	131	33	5N1W33-DD-05801	2016	9209	0.13	69,770	73,230	143,000	195,000	Oct-16	18	73
01	00	000	101	141	33	4N1W05-AB-02700	2016	10577	0.20	80,530	97,330	177,860	242,500	Dec-16	19	73

COLUMBIA County **2017** 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	4N1W05-CB-02800	2016	2353	0.20	80,590	94,100	174,690	235,000	Mar-16	20	74
01	00	000	101	131	33	5N1W33-CD-02800	2016	4593	0.12	66,630	81,240	147,870	200,000	May-16	21	74
01	00	000	101	133	33	4N1W05-AC-08400	2016	6933	0.21	80,890	76,560	157,450	213,600	Aug-16	22	74
01	00	000	101	141	33	4N1W05-AA-06700	2016	9842	0.23	81,960	109,230	191,190	259,900	Nov-16	23	74
01	00	000	101	131	33	4N1W04-CA-03000	2016	10853	0.11	65,430	75,650	141,080	191,000	Dec-16	24	74
01	00	000	101	135	33	4N1W05-AD-03800	2016	5433	0.20	80,440	77,920	158,360	211,000	Jun-16	25	75
01	00	000	101	131	33	4N1W05-DA-12200	2016	8415	0.11	62,970	74,480	137,450	182,400	Sep-16	26	75
01	00	000	101	131	33	4N1W04-CA-16300	2016	9250	0.13	70,510	61,320	131,830	175,000	Oct-16	27	75
01	00	000	101	143	33	5N1W33-AD-03800	2016	10658	0.18	88,930	182,760	271,690	359,900	Dec-16	28	75
01	00	000	101	131	33	5N1W33-DC-09100	2016	11208	0.11	65,430	70,610	136,040	181,500	Dec-16	29	75
01	00	000	101	131	33	4N1W04-CA-06400	2016	5830	0.11	65,430	42,880	108,310	143,000	Jul-16	30	76
01	00	000	101	121	33	4N1W03-BB-03200	2016	10567	0.13	70,100	32,800	102,900	135,000	Dec-16	31	76
01	00	000	101	141	33	4N1W05-AC-00400	2016	4392	0.18	78,070	105,580	183,650	238,000	May-16	32	77
01	00	000	101	141	33	4N1W06-AD-04500	2016	6902	0.16	75,750	128,190	203,940	265,000	Aug-16	33	77
01	00	000	101	131	33	5N1W33-DA-03500	2016	8324	0.12	67,180	59,080	126,260	164,900	Sep-16	34	77
01	00	000	101	132	33	4N1W04-CA-02200	2016	9140	0.08	53,950	82,230	136,180	176,000	Oct-16	35	77
01	00	000	101	135	33	4N1W04-CB-08600	2016	2773	0.12	65,520	59,330	124,850	160,000	Apr-16	36	78
01	00	000	101	151	33	4N1W05-AD-03500	2016	2789	0.51	103,510	204,580	308,090	396,000	Apr-16	37	78
01	00	000	101	232	33	5N1W34-CC-09000	2016	2969	0.13	80,100	50,670	130,770	168,500	Apr-16	38	78
01	00	000	101	143	33	4N1W06-DD-09200	2016	3024	0.11	65,110	121,310	186,420	240,100	Apr-16	39	78
01	00	000	101	131	33	4N1W04-DA-10700	2016	3934	0.13	70,100	65,550	135,650	175,000	May-16	40	78
01	00	000	101	142	33	5N1W34-CC-04500	2016	4957	0.13	70,100	106,360	176,460	225,000	Jun-16	41	78
01	00	000	101	143	33	4N1W05-BA-03926	2016	7046	0.14	80,600	154,690	235,290	300,000	Aug-16	42	78
01	00	000	101	131	33	4N1W04-CB-10101	2016	11180	0.15	74,380	50,700	125,080	160,000	Dec-16	43	78
01	00	000	101	122	33	4N1W04-DB-16601	2016	7451	0.13	70,100	53,020	123,120	155,000	Aug-16	44	79
01	00	000	101	131	33	4N1W04-AA-01100	2016	9955	0.27	83,760	76,740	160,500	202,000	Nov-16	45	79
01	00	000	101	131	33	4N1W03-CB-05902	2016	11033	0.13	70,100	80,320	150,420	190,000	Nov-16	46	79
01	00	000	101	151	33	5N1W33-AD-02300	2016	4959	0.26	94,740	254,060	348,800	435,000	Jun-16	47	80
01	00	000	101	141	33	4N1W05-AC-05800	2016	9704	0.22	81,430	110,580	192,010	240,000	Nov-16	48	80
01	00	000	101	141	33	4N1W05-AB-01003	2016	411	0.13	78,970	122,080	201,050	247,000	Jan-16	49	81
01	00	000	101	142	33	4N1W06-DA-05100	2016	5140	0.23	93,100	151,050	244,150	300,000	Jun-16	50	81
01	00	000	101	141	33	4N1W08-BA-02700	2016	6357	0.15	83,840	107,040	190,880	235,000	Jul-16	51	81
01	00	000	101	141	33	4N1W05-BD-06300	2016	7449	0.12	74,160	123,980	198,140	244,000	Aug-16	52	81
01	00	000	101	141	33	4N1W05-AB-01034	2016	8062	0.13	78,970	130,950	209,920	259,000	Sep-16	53	81
01	00	000	101	141	33	4N1W05-CC-02503	2016	8389	0.14	72,510	125,620	198,130	245,000	Sep-16	54	81
01	00	000	101	141	33	4N1W05-DC-08101	2016	8720	0.16	75,850	146,290	222,140	275,000	Oct-16	55	81
01	00	000	101	131	33	4N1W05-DC-08400	2016	10410	0.43	97,470	62,430	159,900	198,000	Nov-16	56	81
01	00	000	101	141	33	4N1W05-AA-04200	2016	813	0.21	81,230	123,790	205,020	250,300	Feb-16	57	82
01	00	000	101	143	33	4N1W08-BB-08600	2016	2714	0.16	85,510	160,280	245,790	300,000	Apr-16	58	82
01	00	000	101	143	33	4N1W08-BB-08800	2016	6795	0.18	88,620	142,030	230,650	280,000	Aug-16	59	82
01	00	000	101	141	33	4N1W05-BD-03200	2016	8029	0.14	80,780	123,790	204,570	250,000	Sep-16	60	82
01	00	000	101	143	33	4N1W06-DC-06600	2016	8060	0.14	79,390	138,860	218,250	265,000	Sep-16	61	82
01	00	000	101	143	33	4N1W05-CD-00500	2016	10664	0.14	71,470	126,050	197,520	240,000	Dec-16	62	82
01	00	000	101	131	30	4N1W04-DC-09300	2016	888	0.13	70,100	62,290	132,390	159,900	Jan-16	63	83
01	00	000	101	135	33	4N1W04-CB-11300	2016	1370	0.14	70,690	80,350	151,040	182,000	Feb-16	64	83
01	00	000	101	141	33	5N1W34-CC-06701	2016	1360	0.13	70,100	94,230	164,330	198,000	Feb-16	65	83

COLUMBIA County **2017** Ratio Study

APAR	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	143	33	4N1W05-CA-00123	2016	7319	0.13	77,810	165,760	243,570	295,000	Aug-16	66	83
01	00	000	101	136	33	4N1W04-DB-11100	2016	8861	0.13	70,100	95,070	165,170	200,000	Oct-16	67	83
01	00	000	101	143	33	4N1W06-DD-06200	2016	9043	0.13	78,040	129,740	207,780	251,000	Oct-16	68	83
01	00	000	101	131	33	4N1W04-DB-06600	2016	9376	0.13	70,100	71,300	141,400	169,900	Oct-16	69	83
01	00	000	101	134	33	5N1W33-DC-13500	2016	11013	0.21	81,150	81,440	162,590	197,000	Dec-16	70	83
01	00	000	101	132	33	4N1W04-DA-13800	2016	11284	0.13	70,100	120,600	190,700	229,000	Dec-16	71	83
01	00	000	101	141	33	4N1W05-CD-00806	2016	3814	0.18	88,840	122,150	210,990	250,000	May-16	72	84
01	00	000	101	141	33	4N1W05-BD-08000	2016	5633	0.12	73,250	137,510	210,760	250,000	Jun-16	73	84
01	00	000	101	132	33	4N1W04-DA-00600	2016	7398	0.13	70,100	122,120	192,220	230,000	Aug-16	74	84
01	00	000	101	141	33	4N1W04-DB-11501	2016	7435	0.13	70,100	96,100	166,200	199,000	Aug-16	75	84
01	00	000	101	141	33	4N1W06-DB-01002	2016	7873	0.28	83,490	151,440	234,930	279,500	Sep-16	76	84
01	00	000	101	143	33	4N1W05-CA-00122	2016	8421	0.13	77,840	167,000	244,840	290,000	Sep-16	77	84
01	00	000	101	143	33	4N1W07-AB-03170	2016	9828	0.12	75,400	158,240	233,640	276,500	Nov-16	78	84
01	00	000	101	141	33	5N1W32-DC-00108	2016	10628	0.23	92,900	177,280	270,180	321,800	Dec-16	79	84
01	00	000	101	141	33	4N1W06-DD-01400	2016	10906	0.17	87,170	111,750	198,920	237,000	Dec-16	80	84
01	00	000	101	143	33	5N1W32-DB-02100	2016	4204	0.17	86,200	172,980	259,180	305,000	May-16	81	85
01	00	000	101	141	33	4N1W05-CC-01817	2016	6536	0.16	85,570	115,860	201,430	237,000	Jul-16	82	85
01	00	000	101	143	33	4N1W08-BA-02900	2016	8870	0.14	81,070	133,520	214,590	253,000	Oct-16	83	85
01	00	000	101	143	33	4N1W05-CB-00134	2016	9378	0.12	75,650	159,950	235,600	277,500	Oct-16	84	85
01	00	000	101	143	33	4N1W08-BC-06000	2016	9820	0.16	85,520	149,220	234,740	275,000	Nov-16	85	85
01	00	000	101	143	33	4N1W08-BB-06300	2016	10593	0.16	85,510	165,700	251,210	295,000	Dec-16	86	85
01	00	000	101	141	33	4N1W07-AB-03174	2016	2156	0.12	74,940	126,780	201,720	235,500	Mar-16	87	86
01	00	000	101	124	30	4N1W05-DA-06800	2016	3107	0.12	66,550	67,000	133,550	155,000	Apr-16	88	86
01	00	000	101	143	33	4N1W05-AB-01007	2016	3300	0.13	78,970	132,550	211,520	244,900	May-16	89	86
01	00	000	101	143	33	4N1W05-BC-06000	2016	5842	0.12	73,380	181,320	254,700	295,000	Jul-16	90	86
01	00	000	101	143	33	4N1W06-DA-06400	2016	5893	0.16	85,640	145,980	231,620	269,500	Jul-16	91	86
01	00	000	101	141	33	5N1W33-DC-06000	2016	6485	0.11	65,430	118,700	184,130	213,000	Jul-16	92	86
01	00	000	101	135	33	4N1W05-CD-02700	2016	6605	0.29	84,830	69,200	154,030	179,000	Jul-16	93	86
01	00	000	101	134	33	4N1W04-AA-07500	2016	6968	0.13	70,100	96,600	166,700	194,700	Aug-16	94	86
01	00	000	101	141	30	5N1W34-CC-06900	2016	7918	0.13	70,100	92,020	162,120	189,000	Sep-16	95	86
01	00	000	101	143	33	4N1W05-CD-03300	2016	8329	0.18	88,250	122,200	210,450	243,450	Sep-16	96	86
01	00	000	101	143	33	4N1W06-DC-01800	2016	8484	0.30	97,280	172,180	269,460	312,000	Sep-16	97	86
01	00	000	101	141	33	4N1W05-CC-01819	2016	8837	0.16	85,570	118,320	203,890	238,000	Sep-16	98	86
01	00	000	101	143	33	4N1W06-DC-03200	2016	10676	0.16	84,780	168,100	252,880	295,000	Dec-16	99	86
01	00	000	101	143	33	4N1W05-BC-01900	2016	11141	0.15	83,510	189,660	273,170	319,000	Dec-16	100	86
01	00	000	101	131	33	4N1W04-AD-03406	2016	763	0.13	70,100	57,710	127,810	147,500	Feb-16	101	87
01	00	000	101	142	33	5N1W33-DC-02102	2016	2012	0.10	60,400	113,990	174,390	200,000	Mar-16	102	87
01	00	000	101	141	33	4N1W07-AB-03142	2016	2686	0.12	74,770	123,210	197,980	227,000	Apr-16	103	87
01	00	000	101	132	33	5N1W34-CB-05900	2016	3051	0.13	70,100	87,800	157,900	182,000	Apr-16	104	87
01	00	000	101	141	33	4N1W04-CA-07401	2016	5550	0.13	70,080	137,820	207,900	239,500	Jun-16	105	87
01	00	000	101	132	33	4N1W04-DB-11300	2016	6556	0.13	70,100	94,740	164,840	190,000	Jul-16	106	87
01	00	000	101	143	33	4N1W06-DD-03000	2016	7321	0.21	91,620	146,570	238,190	274,100	Aug-16	107	87
01	00	000	101	132	33	4N1W04-CA-03700	2016	7443	0.11	65,430	69,470	134,900	155,000	Aug-16	108	87
01	00	000	101	142	33	4N1W05-AB-04211	2016	7447	0.16	85,460	189,350	274,810	314,900	Aug-16	109	87
01	00	000	101	132	33	5N1W33-DD-10000	2016	9173	0.13	70,100	108,230	178,330	205,000	Oct-16	110	87
01	00	000	101	131	33	4N1W08-BA-00800	2016	9358	0.29	84,980	67,810	152,790	176,000	Oct-16	111	87

COLUMBIA County **2017** Ratio Study

APAR	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	143	33	4N1W05-CB-00127	2016	9809	0.11	73,120	166,560	239,680	274,000	Nov-16	112	87
01	00	000	101	143	33	4N1W05-AD-15600	2016	9822	0.18	88,460	138,850	227,310	259,900	Nov-16	113	87
01	00	000	101	143	33	4N1W05-BC-04300	2016	10859	0.26	94,920	157,260	252,180	289,900	Dec-16	114	87
01	00	000	101	131	33	4N1W03-CB-05500	2016	151	0.20	80,530	85,320	165,850	188,300	Jan-16	115	88
01	00	000	101	131	33	4N1W03-CB-03800	2016	1970	0.13	70,100	75,600	145,700	165,000	Mar-16	116	88
01	00	000	101	143	33	4N1W05-CB-10100	2016	6281	0.12	75,620	180,380	256,000	289,900	Jul-16	117	88
01	00	000	101	143	33	4N1W05-CA-00109	2016	6387	0.16	85,480	154,170	239,650	273,000	Jul-16	118	88
01	00	000	101	143	33	4N1W05-BD-01007	2016	7630	0.12	73,620	155,520	229,140	259,400	Aug-16	119	88
01	00	000	101	142	33	4N1W05-AC-02711	2016	8868	0.17	86,950	149,210	236,160	269,000	Oct-16	120	88
01	00	000	101	141	33	5N1W32-DB-01900	2016	726	0.17	86,200	163,360	249,560	279,900	Feb-16	121	89
01	00	000	101	143	33	4N1W07-AB-03112	2016	3303	0.13	78,550	192,830	271,380	305,000	May-16	122	89
01	00	000	101	135	33	4N1W05-DA-09600	2016	5824	0.22	81,310	70,340	151,650	171,000	Jun-16	123	89
01	00	000	101	143	33	4N1W06-DC-05000	2016	5746	0.25	93,910	145,140	239,050	270,000	Jul-16	124	89
01	00	000	101	143	33	4N1W05-AD-15500	2016	7274	0.16	85,670	180,630	266,300	300,000	Aug-16	125	89
01	00	000	101	153	33	4N1W05-CB-00135	2016	7453	0.12	75,440	195,240	270,680	305,000	Aug-16	126	89
01	00	000	101	143	33	4N1W06-DD-03800	2016	8296	0.13	78,530	196,580	275,110	308,000	Sep-16	127	89
01	00	000	101	143	33	4N1W06-DC-06300	2016	9252	0.26	94,520	138,480	233,000	262,500	Oct-16	128	89
01	00	000	101	143	33	4N1W05-CB-00124	2016	9637	0.13	76,300	189,400	265,700	300,000	Nov-16	129	89
01	00	000	101	141	30	4N1W05-DD-00600	2016	11035	0.16	85,500	146,100	231,600	260,000	Dec-16	130	89
01	00	000	101	133	33	5N1W33-DA-02000	2016	11037	0.27	113,200	110,010	223,210	250,000	Dec-16	131	89
01	00	000	101	143	33	4N1W05-AB-01041	2016	2362	0.13	78,970	141,330	220,300	244,600	Apr-16	132	90
01	00	000	101	143	33	5N1W32-DC-00122	2016	3026	0.20	91,450	188,400	279,850	310,000	Apr-16	133	90
01	00	000	101	151	33	5N1W32-DC-02700	2016	3080	0.69	131,390	237,690	369,080	410,000	Apr-16	134	90
01	00	000	101	151	33	4N1W05-DC-03108	2016	3185	0.28	84,180	235,660	319,840	353,500	May-16	135	90
01	00	000	101	143	33	4N1W04-BC-08100	2016	3524	0.16	85,630	176,610	262,240	293,000	May-16	136	90
01	00	000	101	141	33	4N1W07-AB-03138	2016	7656	0.11	73,140	130,170	203,310	225,000	Aug-16	137	90
01	00	000	101	143	33	4N1W06-DD-05600	2016	7646	0.13	77,230	176,340	253,570	280,500	Aug-16	138	90
01	00	000	101	143	30	4N1W06-DD-04000	2016	8559	0.13	77,270	134,940	212,210	235,000	Sep-16	139	90
01	00	000	101	141	33	5N1W32-DB-02400	2016	9687	0.16	85,610	157,600	243,210	271,600	Oct-16	140	90
01	00	000	101	141	30	4N1W06-DA-00300	2016	9678	0.18	88,340	131,390	219,730	243,500	Nov-16	141	90
01	00	000	101	143	33	4N1W05-BC-00800	2016	9957	0.16	85,510	162,690	248,200	275,000	Nov-16	142	90
01	00	000	101	141	33	4N1W04-DC-03300	2016	10075	0.13	70,100	144,880	214,980	239,900	Nov-16	143	90
01	00	000	101	143	33	4N1W05-CA-03900	2016	11000	0.14	80,120	175,600	255,720	284,000	Dec-16	144	90
01	00	000	101	143	33	4N1W05-BD-02900	2016	11145	0.20	91,200	148,510	239,710	264,900	Dec-16	145	90
01	00	000	101	143	33	4N1W04-BC-07400	2016	33	0.16	85,610	128,170	213,780	235,000	Jan-16	146	91
01	00	000	101	141	30	4N1W05-BD-01013	2016	958	0.12	73,460	140,000	213,460	233,500	Feb-16	147	91
01	00	000	101	141	33	5N1W32-DB-02000	2016	2544	0.17	86,200	176,690	262,890	287,500	Apr-16	148	91
01	00	000	101	134	30	5N1W34-CC-04800	2016	5424	0.13	70,100	70,320	140,420	155,000	Jun-16	149	91
01	00	000	101	141	33	4N1W05-CD-00100	2016	5899	0.41	95,800	127,450	223,250	246,500	Jul-16	150	91
01	00	000	101	141	33	4N1W05-DC-04500	2016	6367	0.24	82,590	133,220	215,810	235,900	Jul-16	151	91
01	00	000	101	141	33	5N1W32-DB-02500	2016	6722	0.18	88,960	157,600	246,560	270,000	Jul-16	152	91
01	00	000	101	141	30	4N1W05-BA-03911	2016	994	0.15	83,690	137,770	221,460	240,000	Feb-16	153	92
01	00	000	101	143	30	4N1W05-BD-01014	2016	1300	0.12	73,540	156,460	230,000	249,500	Feb-16	154	92
01	00	000	101	154	33	5N1W34-CB-07600	2016	1386	0.25	94,180	236,450	330,630	359,900	Feb-16	155	92
01	00	000	101	143	33	4N1W05-BD-01009	2016	1347	0.13	76,800	156,060	232,860	252,000	Feb-16	156	92
01	00	000	101	141	33	4N1W05-BC-04800	2016	2474	0.13	77,050	135,460	212,510	230,000	Mar-16	157	92

COLUMBIA County **2017** Ratio Study

APAR	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	143	30	4N1W05-CC-01808	2016	1025	0.23	92,980	177,230	270,210	289,000	Feb-16	158	93
01	00	000	101	141	33	4N1W04-DB-15600	2016	815	0.13	70,100	121,540	191,640	205,900	Feb-16	159	93
01	00	000	101	141	33	5N1W33-DD-09202	2016	1270	0.14	71,530	128,760	200,290	215,000	Feb-16	160	93
01	00	000	101	146	33	4N1W04-AA-01300	2016	2659	0.27	83,870	148,580	232,450	249,900	Apr-16	161	93
01	00	000	101	141	33	4N1W05-CD-00800	2016	3059	0.38	105,860	128,000	233,860	252,700	Apr-16	162	93
01	00	000	101	141	30	4N1W04-BB-01600	2016	5232	0.24	82,430	110,450	192,880	208,000	Jun-16	163	93
01	00	000	101	141	30	4N1W04-BC-09600	2016	6118	0.25	83,120	106,900	190,020	204,000	Jul-16	164	93
01	00	000	101	141	33	5N1W32-DB-02600	2016	5970	0.18	88,990	157,600	246,590	265,400	Jul-16	165	93
01	00	000	101	141	33	5N1W32-DB-02700	2016	10342	0.18	99,370	157,600	256,970	275,500	Nov-16	166	93
01	00	000	101	143	33	5N1W32-DC-00105	2016	1150	0.17	86,200	182,060	268,260	285,000	Feb-16	167	94
01	00	000	101	143	33	4N1W05-BD-01008	2016	2160	0.12	73,810	160,140	233,950	249,500	Mar-16	168	94
01	00	000	101	133	33	4N1W03-BC-00408	2016	2310	0.20	80,740	98,950	179,690	191,500	Mar-16	169	94
01	00	000	101	143	33	4N1W06-DC-05100	2016	4894	0.20	91,450	167,220	258,670	276,000	Jun-16	170	94
01	00	000	101	143	33	4N1W05-CA-00113	2016	5095	0.13	79,030	175,300	254,330	270,000	Jun-16	171	94
01	00	000	101	143	30	5N1W32-DC-00116	2016	11056	0.21	91,970	190,870	282,840	300,000	Dec-16	172	94
01	00	000	101	143	33	5N1W32-DC-00200	2016	11055	0.19	89,880	192,370	282,250	300,000	Dec-16	173	94
01	00	000	101	141	33	4N1W04-CA-09500	2016	986	0.11	65,430	139,670	205,100	214,900	Feb-16	174	95
01	00	000	101	143	33	4N1W05-AC-06600	2016	1919	0.16	85,480	145,500	230,980	243,000	Mar-16	175	95
01	00	000	101	143	30	4N1W05-CC-00712	2016	5051	0.17	86,750	164,030	250,780	265,000	Jun-16	176	95
01	00	000	101	143	33	4N1W05-BA-03935	2016	580	0.13	77,770	162,030	239,800	250,500	Jan-16	177	96
01	00	000	101	143	33	4N1W04-BC-07800	2016	1796	0.16	85,490	173,250	258,740	270,000	Mar-16	178	96
01	00	000	101	141	33	4N1W05-AB-01044	2016	2152	0.13	78,970	131,860	210,830	219,900	Mar-16	179	96
01	00	000	101	143	33	4N1W05-DB-02123	2016	5590	0.16	85,310	154,550	239,860	250,000	Jun-16	180	96
01	00	000	101	142	33	5N1W32-DC-01700	2016	1145	0.14	80,110	167,540	247,650	254,900	Feb-16	181	97
01	00	000	101	143	33	4N1W06-AD-00900	2016	1897	0.19	89,750	141,810	231,560	239,000	Mar-16	182	97
01	00	000	101	143	33	4N1W07-AB-03128	2016	2154	0.12	74,520	177,870	252,390	259,000	Mar-16	183	97
01	00	000	101	131	33	4N1W08-DB-00900	2016	9434	0.76	151,580	67,570	219,150	225,000	Oct-16	184	97
01	00	000	101	143	33	4N1W04-BC-07200	2016	9905	0.16	85,640	176,440	262,080	270,500	Nov-16	185	97
01	00	000	101	141	30	4N1W05-DA-03003	2016	10785	0.16	85,480	118,190	203,670	209,000	Dec-16	186	97
01	00	000	101	141	33	4N1W07-AB-03158	2016	304	0.15	82,490	138,980	221,470	224,900	Jan-16	187	98
01	00	000	101	143	33	4N1W07-AB-03171	2016	1794	0.13	76,870	138,760	215,630	220,000	Mar-16	188	98
01	00	000	101	143	33	4N1W05-DB-02105	2016	1640	0.16	84,660	141,500	226,160	230,000	Mar-16	189	98
01	00	000	101	121	33	4N1W05-DA-04300	2016	3885	0.14	72,320	42,520	114,840	117,500	May-16	190	98
01	00	000	101	143	33	4N1W05-BD-01004	2016	10932	0.14	81,790	177,640	259,430	265,000	Dec-16	191	98
01	00	000	101	143	33	4N1W05-CA-00116	2016	11045	0.13	79,240	177,790	257,030	262,450	Dec-16	192	98
01	00	000	101	142	33	4N1W04-DA-09100	2016	734	0.13	70,100	178,410	248,510	251,500	Jan-16	193	99
01	00	000	101	143	33	4N1W06-DC-01300	2016	6346	0.15	83,640	171,140	254,780	257,000	Jul-16	194	99
01	00	000	101	142	30	4N1W04-DA-08700	2016	8034	0.13	70,100	108,440	178,540	180,000	Sep-16	195	99
01	00	000	101	131	33	4N1W04-CA-06700	2016	9161	0.22	109,480	38,600	148,080	150,000	Oct-16	196	99
01	00	000	101	143	30	4N1W07-AB-03120	2016	9962	0.19	90,640	197,360	288,000	290,000	Nov-16	197	99
01	00	000	101	154	33	4N1W03-BD-00900	2016	130	0.13	100,800	286,360	387,160	389,000	Jan-16	198	100
01	00	000	101	142	33	4N1W06-DA-01000	2016	7003	0.21	91,990	198,880	290,870	291,500	Aug-16	199	100
01	00	000	101	141	30	4N1W05-CB-02600	2016	9113	0.32	87,230	111,810	199,040	200,000	Oct-16	200	100
01	00	000	101	143	30	4N1W07-AB-03121	2016	9961	0.22	92,170	197,360	289,530	290,000	Nov-16	201	100
01	00	000	101	141	33	5N1W33-DC-02100	2016	3216	0.11	64,190	143,700	207,890	204,900	May-16	202	101
01	00	000	101	142	33	4N1W05-AB-05200	2016	8130	0.69	131,330	275,000	406,330	400,000	Sep-16	203	102

COLUMBIA County **2017** 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	143	33	5N1W32-DB-00800	2016	2652	0.22	92,470	188,920	281,390	272,500	Apr-16	204	103
01	00	000	101	143	33	5N1W32-DB-00500	2016	5968	0.20	102,020	188,920	290,940	283,000	Jul-16	205	103
01	00	000	101	141	33	5N1W32-DB-02800	2016	2186	0.24	104,370	157,600	261,970	251,500	Mar-16	206	104
01	00	000	101	143	30	4N1W05-CB-10900	2016	3795	0.21	91,690	169,210	260,900	250,000	May-16	207	104
01	00	000	101	141	33	4N1W05-CB-10700	2016	7478	0.16	85,780	152,800	238,580	230,000	Aug-16	208	104
01	00	000	101	152	33	4N1W05-BC-08300	2016	9347	0.33	87,730	315,950	403,680	385,000	Oct-16	209	105
01	00	000	101	154	33	4N1W05-AB-00503	2016	10415	1.00	135,980	339,170	475,150	451,000	Nov-16	210	105
01	00	000	101	132	30	4N1W04-BD-00110	2016	3028	0.19	79,290	79,370	158,660	150,000	Apr-16	211	106
01	00	000	101	141	33	5N1W34-CB-04300	2016	149	0.13	70,100	135,060	205,160	190,000	Jan-16	212	108
01	00	000	101	131	33	4N1W05-DB-05000	2016	5869	0.98	161,740	130,420	292,160	270,000	Jul-16	213	108
01	00	000	101	141	33	4N1W05-DA-03009	2016	1389	0.17	87,160	114,740	201,900	185,000	Feb-16	214	109
01	00	000	101	141	33	4N1W06-DD-06600	2016	2158	0.12	74,050	117,750	191,800	175,000	Mar-16	215	110
01	00	000	101	143	33	4N1W06-DD-03100	2017	280	0.24	93,670	187,070	280,740	249,600	Dec-16	216	112
01	00	000	101	132	33	4N1W04-AD-01900	2016	5628	0.15	74,960	70,850	145,810	129,500	Jun-16	217	113

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	2			
Population - Number of Accounts	89			
Sales as a percentage of the Population	2.25 %			
Prior Year Population Values				
Land RMV	4,520,400	33.60 %	5,560,092	38.36 %
OSD RMV	2,359,000	17.53 %	2,359,000	16.28 %
Residential Improvement RMV	6,381,170	47.43 %	6,381,170	44.03 %
Farm Improvement RMV	194,020	1.44 %	194,020	1.34 %
SelectedRatioFromSales	84			
RMV Adjustment	100			
Before Ratio	84			
Overall Adjustment Factor	119			
Land Adjustment Factor	123			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

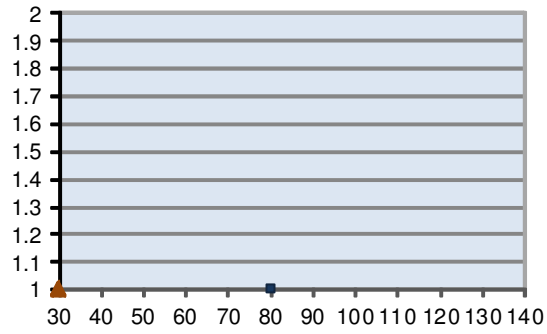
RMV 109: SA 00
Improved property - Manufactured Structure, City of St. Helens
There were only two "good" sales within the study period and these sales did not provide an adequate sampling with which an accurate conclusion could be made. Also, the two sales returned a large “gap” between the ratios. Because of these factors, it was decided to apply the selected time adjusted central tendency from the Improved RMV Class 101 study in the same area but to leave the Improvement(s) adjustment factor 100. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD	29.17	14.29	11.33	12.31	10.19
PRD	1.06	1.01	1.00	1.00	1.01

COLUMBIA County **2017** Ratio Study

Frequency



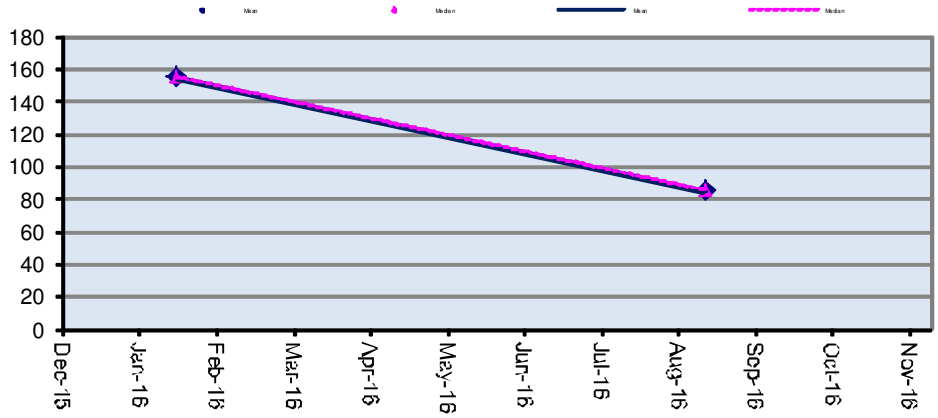
30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	0
120	0
130	0
140	0

Median	**120**
AD	**35.00**
COD	**29.17**
Mean	**120**
SD	**49.50**
COV	**41.25**

Wtd Mean	**113**
GeoMean	**115**
PRD	**1.06**
95% Confidence	**68.60**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Feb-16	155	155	1
Sep-16	85	85	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	462	30	5N1W33-DC-13300	2016	7773	0.17	76,770	49,600	126,370	148,900	Sep-16	1	85
01	00	000	109	452	33	4N1W05-AC-03105	2016	1137	0.28	84,250	71,110	155,360	100,000	Feb-16	2	155

COLUMBIA County **2017** Ratio Study

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	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	1,949,720	100.00 %	2,398,156	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	81			
RMV Adjustment	100			
Before Ratio	81			
Overall Adjustment Factor	123			
Land Adjustment Factor	123			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **81** **2017** **Adjustment** **123**

Explanation

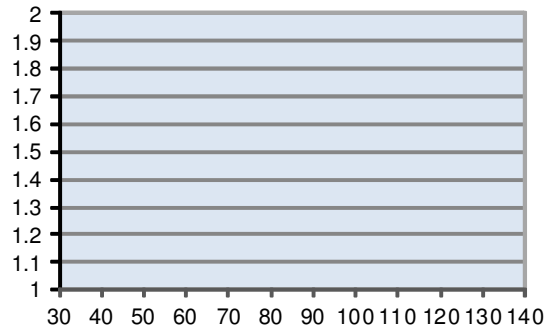
RMV 100: SA 15
Unimproved land – River Front, City of St. Helens and City of Columbia City
There are no unimproved land sales available for this analysis. Therefore, the Selected Ratio of 81 from the Unimproved land study for the City of St. Helens was used (SA 00, RMV Class 100). Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD		-	0.00	11.50	-
PRD		-	1.00	1.01	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

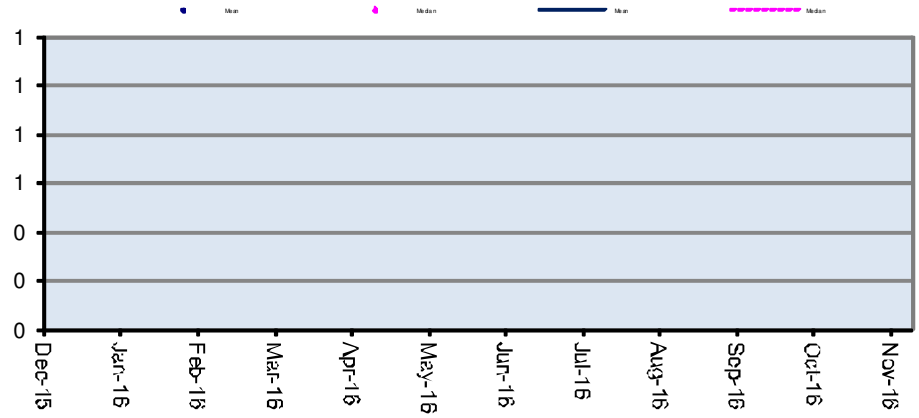
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

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

Adjustment Calculation Summary

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	0			
Population - Number of Accounts	46			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	11,169,050	44.46 %	13,737,932	45.99 %
OSD RMV	1,127,000	4.49 %	1,127,000	3.77 %
Residential Improvement RMV	12,807,970	50.98 %	14,985,325	50.17 %
Farm Improvement RMV	18,580	0.07 %	21,739	0.07 %
SelectedRatioFromSales	84			
RMV Adjustment	100			
Before Ratio	84			
Overall Adjustment Factor	119			
Land Adjustment Factor	123			
OSD Adjustment Factor	100			
Residential Adjustment Factor	117			
Farm Improvement Factor	117			
After Ratio	100			

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

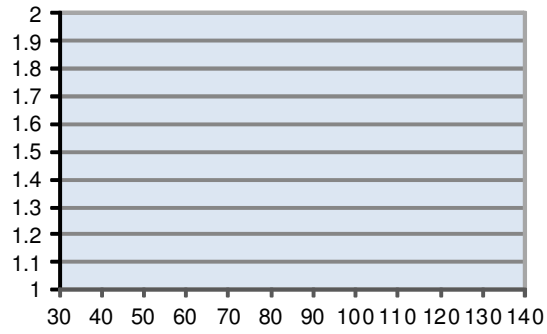
Improved land – River Front, City of St. Helens and City of Columbia City
There are no improved sales available for this analysis. Therefore, the "Selected Ratio from Sales" of 84 from the RMV Class 101 Improved study for the City of St. Helens was applied here. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD		-	0.68	11.50	22.36
PRD		-	1.00	1.01	1.02

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

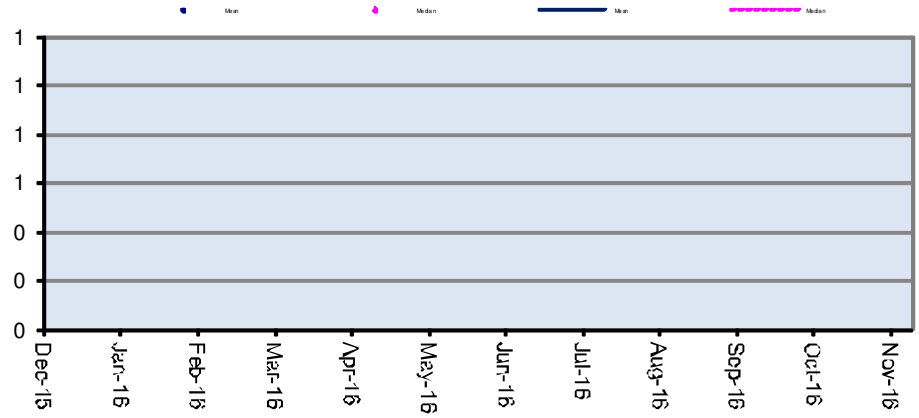
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** 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	537,220	71.16 %	660,781	75.21 %
OSD RMV	54,000	7.15 %	54,000	6.15 %
Residential Improvement RMV	163,760	21.69 %	163,760	18.64 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	84			
RMV Adjustment	100			
Before Ratio	84			
Overall Adjustment Factor	119			
Land Adjustment Factor	123			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

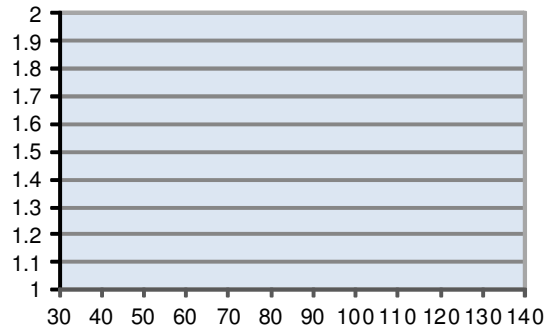
RMV 109: SA 15
Improved land (Manufactured Structure) – River Front, City of St. Helens and City of Columbia City
There are no improved sales available for this analysis. Therefore, the Selected Ratio from Sales of 84 from the MA 1 RMV Class 109 improved land (manufactured structure) study for the City of St. Helens was used and no adjustment was applied to the improvements. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.
but to leave the Improvement(s) adjustment factor 100

Performance History

	2017	2016	2015	2014	2013
COD		-	0.68	11.50	22.36
PRD		-	1.00	1.01	1.02

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

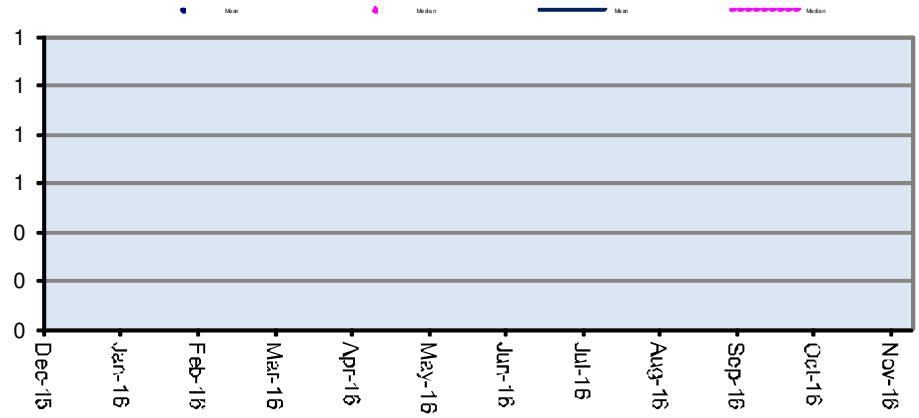
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	30	000	1995	10	St Helens

Adjustment Calculation Summary

Sample - Number of Sales	10			
Population - Number of Accounts	212			
Sales as a percentage of the Population	4.72 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	10,449,760	27.35 %	12,853,205	26.50 %
OSD RMV	8,472,000	22.17 %	8,472,000	17.47 %
Residential Improvement RMV	19,259,550	50.41 %	27,155,966	55.98 %
Farm Improvement RMV	24,710	0.06 %	24,710	0.05 %

SelectedRatioFromSales	79
RMV Adjustment	100
Before Ratio	79
Overall Adjustment Factor	127
Land Adjustment Factor	123
OSD Adjustment Factor	100
Residential Adjustment Factor	141
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **79** **2017** **Adjustment** **127**

Explanation

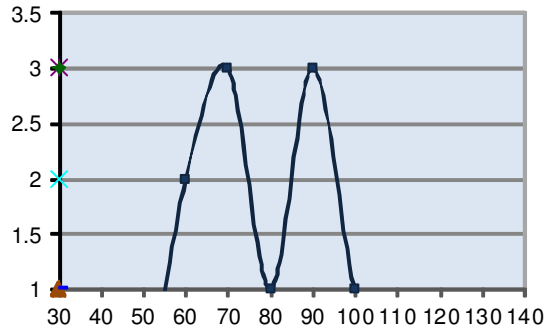
RMV 101: SA 30
Improved land – Duplex/Triplex/Fourplex, City of St. Helens
The population of this study is 212 and there are a total of 10 sales available for analysis. The Mean of 82 was selected and is supported by the GeoMean (81), Median (80) and the Weighted Mean (80). The Mean was adjusted for time using the conclusion from the residential time study (96) thus returning an Selected Ratio of 79. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD	15.00	14.68	7.80	12.31	10.19
PRD	1.03	1.01	0.98	1.00	1.01

COLUMBIA County **2017** Ratio Study

Frequency



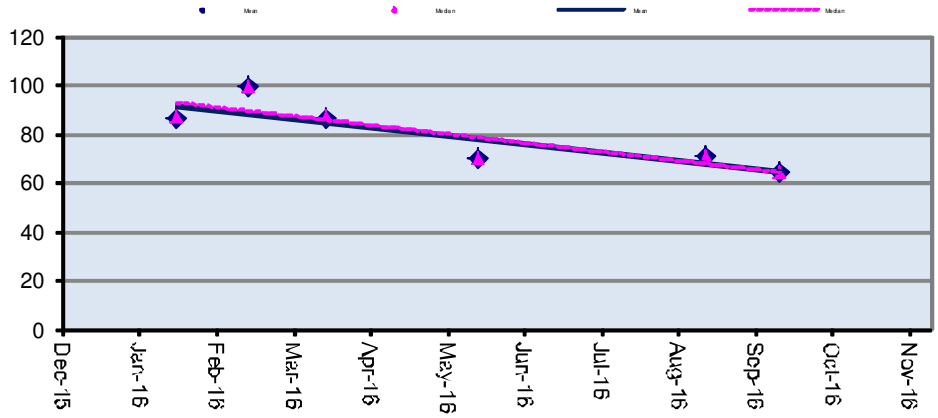
30	0
40	0
50	0
60	2
70	3
80	1
90	3
100	1
110	0
120	0
130	0
140	0

Median	**80**
AD	**12.00**
COD	**15.00**
Mean	**82**
SD	**14.37**
COV	**17.52**

Wtd Mean	**80**
GeoMean	**81**
PRD	**1.03**
95% Confidence	**8.91**

Number Of Sales **10**

Central Tendencies



Month	Mean	Median	Sales
Feb-16	86	87	2
Mar-16	99	99	2
Apr-16	86	87	2
Jun-16	70	70	2
Sep-16	71	71	1
Oct-16	64	64	1

APAR	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	30	5N1W33-DC-02801	2016	5682	0.14	81,270	53,360	134,630	219,000	Jun-16	1	61
01	30	000	101	232	33	4N1W04-CA-09300	2016	8987	0.22	150,860	77,420	228,280	355,000	Oct-16	2	64
01	30	000	101	232	33	4N1W04-DA-13500	2016	8423	0.13	80,100	65,390	145,490	205,000	Sep-16	3	71
01	30	000	101	232	33	4N1W04-DC-02800	2016	3761	0.13	80,100	47,060	127,160	170,000	Apr-16	4	75
01	30	000	101	242	33	4N1W08-BA-02200	2016	4852	0.16	85,700	116,270	201,970	260,000	Jun-16	5	78
01	30	000	101	242	30	4N1W05-AC-01200	2016	1127	0.21	91,170	74,810	165,980	199,000	Feb-16	6	83
01	30	000	101	242	33	4N1W04-AA-03403	2016	918	0.13	80,100	112,120	192,220	214,000	Feb-16	7	90
01	30	000	101	242	33	4N1W04-AB-03800	2016	1642	0.14	81,270	113,320	194,590	201,070	Mar-16	8	97
01	30	000	101	232	33	4N1W04-DC-01302	2016	2523	0.13	80,130	38,720	118,850	121,500	Apr-16	9	98
01	30	000	101	242	33	4N1W05-CA-00200	2016	2313	1.56	158,060	98,360	256,420	255,000	Mar-16	10	101

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	43	000	1995	5	St Helens

Adjustment Calculation Summary

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	5			
Population - Number of Accounts	100			
Sales as a percentage of the Population	5.00 %			
Prior Year Population Values				
Land RMV	3,162,520	17.91 %	3,889,900	20.00 %
OSD RMV	2,700,000	15.29 %	2,700,000	13.89 %
Residential Improvement RMV	11,793,410	66.80 %	12,854,817	66.11 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	91			
RMV Adjustment	100			
Before Ratio	91			
Overall Adjustment Factor	110			
Land Adjustment Factor	123			
OSD Adjustment Factor	100			
Residential Adjustment Factor	109			
Farm Improvement Factor	109			
After Ratio	100			

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

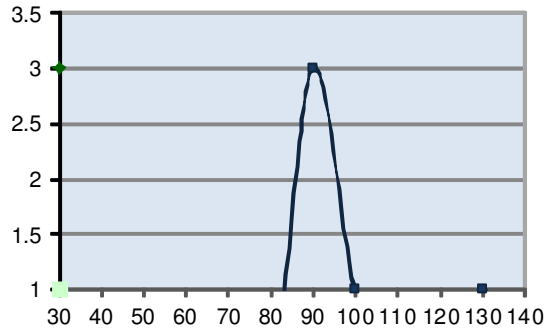
RMV 101: SA 43
Improved land - Town house/Row house, City of St. Helens
Selected the Median of 95 applying the time adjustment of 96 resulting in a Selected ratio adjustment of 91. The Overall Adjustment Factor is 110 for this study area. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD	13.47	14.68	7.80	9.00	10.72
PRD	1.03	1.01	0.98	1.00	1.03

COLUMBIA County **2017** Ratio Study

Frequency



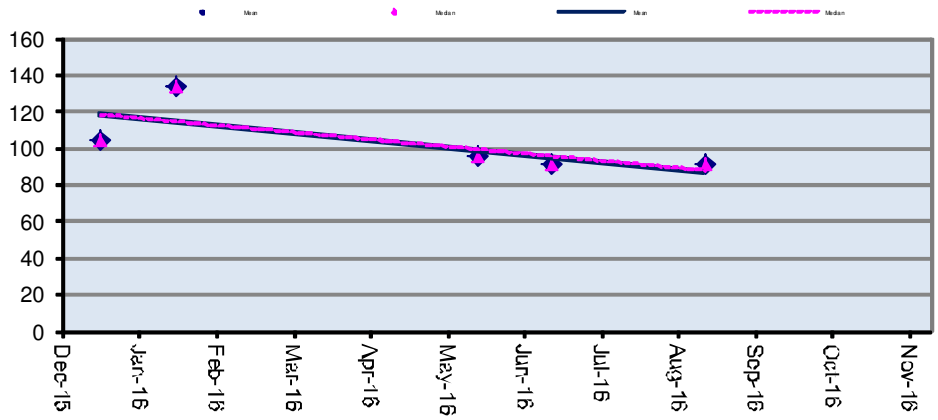
30	0
40	0
50	0
60	0
70	0
80	0
90	3
100	1
110	0
120	0
130	1
140	0

Median	**95**
AD	**12.80**
COD	**13.47**
Mean	**103**
SD	**18.12**
COV	**17.60**

Wtd Mean	**100**
GeoMean	**102**
PRD	**1.03**
95% Confidence	**15.89**

Number Of Sales **5**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	104	104	1
Feb-16	134	134	1
Jun-16	95	95	1
Jul-16	91	91	1
Sep-16	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
01	43	000	101	143	33	4N1W04-CA-10402	2016	6174	0.07	54,600	106,320	160,920	176,000	Jul-16	1	91
01	43	000	101	143	33	4N1W05-BD-01120	2016	7842	0.09	61,510	115,870	177,380	195,000	Sep-16	2	91
01	43	000	101	143	33	4N1W08-BA-01613	2016	5054	0.11	63,220	140,850	204,070	215,000	Jun-16	3	95
01	43	000	101	143	33	4N1W04-CA-10400	2016	618	0.08	60,650	105,950	166,600	160,000	Jan-16	4	104
01	43	000	101	143	33	4N1W05-CB-06300	2016	1384	0.07	55,340	100,060	155,400	116,000	Feb-16	5	134

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	80	000	1995	1	St Helens

Adjustment Calculation Summary

RECALCULATED

			Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	1				
Population - Number of Accounts	15				
Sales as a percentage of the Population	6.67 %				
Prior Year Population Values					
Land RMV	386,580		10.90 %	475,493	11.74 %
OSD RMV	378,000		10.66 %	378,000	9.33 %
Residential Improvement RMV	2,780,920		78.44 %	3,198,058	78.93 %
Farm Improvement RMV	0		0.00 %	0	0.00 %
SelectedRatioFromSales	88				
RMV Adjustment	100				
Before Ratio	88				
Overall Adjustment Factor	114				
Land Adjustment Factor	123				
OSD Adjustment Factor	100				
Residential Adjustment Factor	115				
Farm Improvement Factor	115				
After Ratio	100				

Selected Ratio **88** **2017** **Adjustment** **114**

Explanation

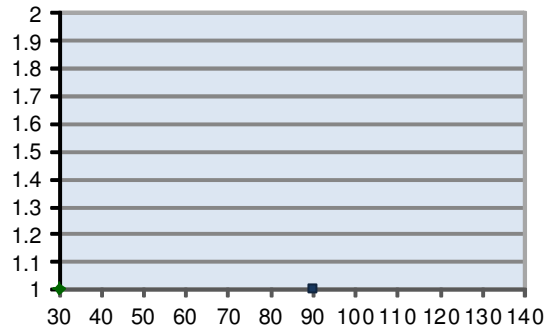
RMV 101: SA 80
Improved land - Yachts Landing-PUD, City of St. Helens and City of Columbia City
The Yachts Landing study area is a planned unit development consisting of a hybrid of condominiums and attached housing with shared common areas. This area is located right along the Columbia River, next to the County Courthouse. For this analysis, the Mean (92) was selected and then the time adjustment of 96 was applied, returning a Selected Ratio of 88. The Overall Adjustment is 114. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	-	-	-	-
PRD	1.00	-	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



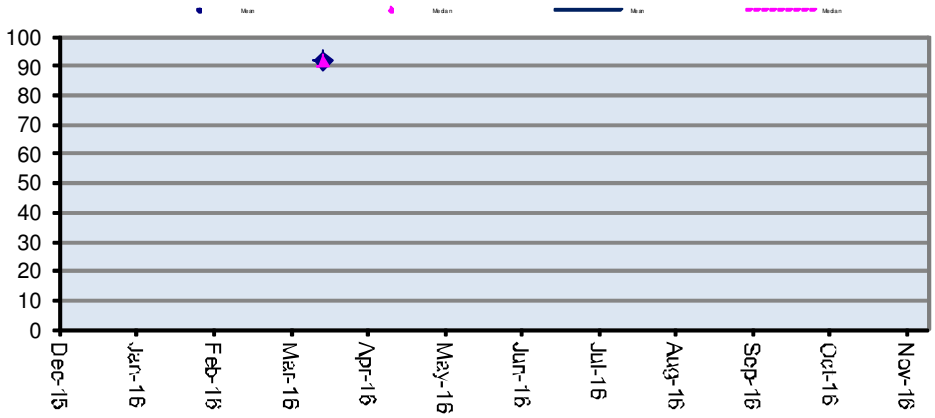
30	0
40	0
50	0
60	0
70	0
80	0
90	1
100	0
110	0
120	0
130	0
140	0

Median	**92**
AD	**0.00**
COD	**0.00**
Mean	**92**
SD	**1.00**
COV	**1.09**

Wtd Mean	**92**
GeoMean	**92**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Apr-16	92	92	1

APAR	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	80	000	101	153	33	4N1W03-BA-07805	2016	2787	0.02	39,400	211,140	250,540	272,000	Apr-16	1	92

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
102	01	00	000		3	St Helens

Adjustment Calculation Summary

Sample - Number of Sales	3			
Population - Number of Accounts	27			
Sales as a percentage of the Population	11.11 %	**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	4,390,610	100.00 %	4,302,798	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	102
RMV Adjustment	100
Before Ratio	102
Overall Adjustment Factor	98
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	98
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **102** **2017** **Adjustment** **98**

Explanation

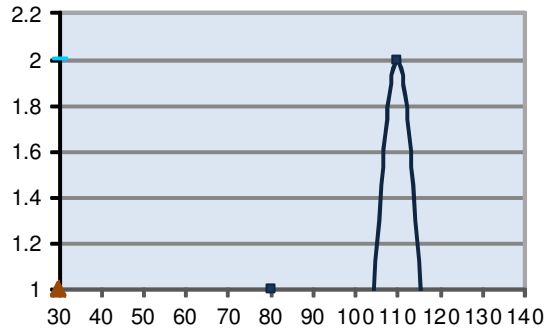
RMV 102: SA 00
Improved property - Condominium, City of St. Helens
Selected the Mean of 106 which is supported by the Weighted Mean (104) and the GeoMean (105). The time adjustment conclusion of 96 was then applied which then resulted in an Selected Ratio of 102. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD	11.11	2.88	-	-	10.19
PRD	1.02	0.99	-	-	1.01

COLUMBIA County **2017** Ratio Study

Frequency



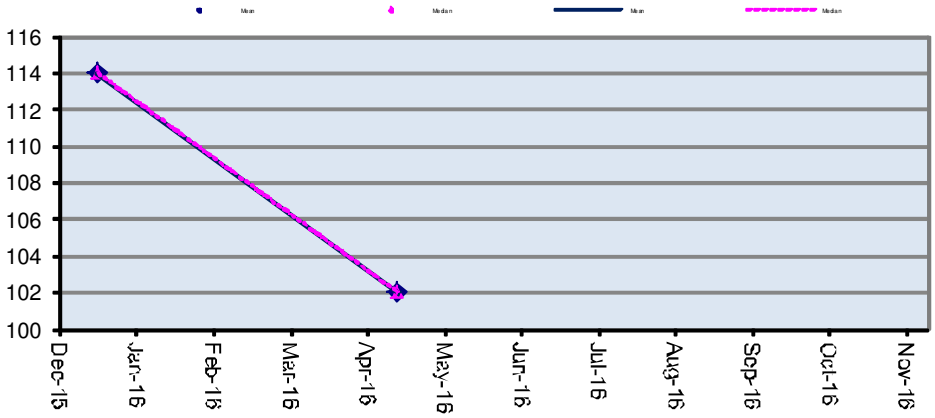
30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	2
120	0
130	0
140	0

Median	**114**
AD	**12.67**
COD	**11.11**
Mean	**106**
SD	**16.52**
COV	**15.59**

Wtd Mean	**104**
GeoMean	**105**
PRD	**1.02**
95% Confidence	**18.70**

Number Of Sales **3**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	114	114	1
May-16	102	102	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	00	000	102	151	30	4N1W03-BA-90206	2016	4265	0	0	192,120	192,120	220,000	May-16	1	87
01	00	000	102	152	30	5N1W34-CD-90002	2016	455	0	0	260,410	260,410	229,000	Jan-16	2	114
01	00	000	102	134	33	4N1W04-BD-90400	2016	3653	0	0	130,190	130,190	111,000	May-16	3	117

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	01	01	000		2	Columbia City

Adjustment Calculation Summary

Sample - Number of Sales	2	**RECALCULATED**		
Population - Number of Accounts	36			
Sales as a percentage of the Population	5.56 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	3,767,030	100.00 %	4,181,403	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** **2017** **Adjustment** **111**

Explanation

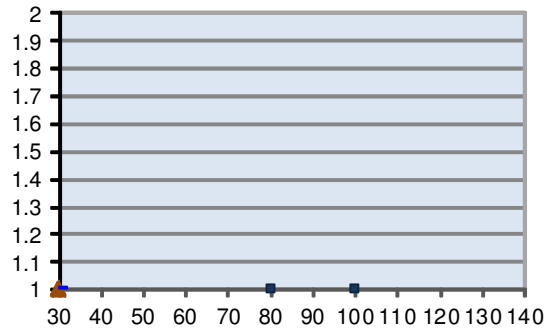
RMV 100: SA 01
Unimproved land, City of Columbia City.
This study is comprised of vacant land located within the small town of Columbia City. This area underwent a full re-appraisal last assessment year (01/01/16). The Median of 94 was selected as an appropriate indicator and has been adjusted by the conclusion of 96 from the RMV Class 1XX time study. The resulting Selected Ratio is 90 lending to an Overall Adjustment of 111.

Performance History

	2017	2016	2015	2014	2013
COD	13.83	-	-	-	0.00
PRD	1.02	-	-	-	1.00

COLUMBIA County **2017** Ratio Study

Frequency



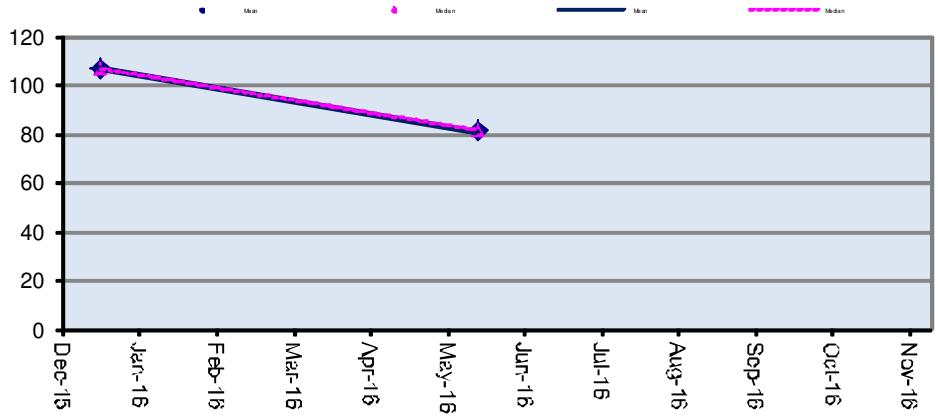
30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	1
110	0
120	0
130	0
140	0

Median	**94**
AD	**13.00**
COD	**13.83**
Mean	**94**
SD	**18.38**
COV	**19.56**

Wtd Mean	**92**
GeoMean	**93**
PRD	**1.02**
95% Confidence	**25.48**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	107	107	1
Jun-16	81	81	1

APAR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	01	000	100		33	5N1W21-BC-03500	2016	5444	0.36	65,070	0	65,070	80,000	Jun-16	1	81
01	01	000	100		33	5N1W28-DB-03319	2016	356	0.25	63,970	0	63,970	60,000	Jan-16	2	107

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	01	000	1995	22	Columbia City

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	22				
Population - Number of Accounts	524				
Sales as a percentage of the Population	4.20 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	36,383,820		28.53 %	40,386,040	26.63 %
OSD RMV	16,645,500		13.05 %	16,645,500	10.97 %
Residential Improvement RMV	74,151,380		58.14 %	94,172,253	62.09 %
Farm Improvement RMV	368,880		0.29 %	468,478	0.31 %
SelectedRatioFromSales	84				
RMV Adjustment	100				
Before Ratio	84				
Overall Adjustment Factor	119				
Land Adjustment Factor	111				
OSD Adjustment Factor	100				
Residential Adjustment Factor	127				
Farm Improvement Factor	127				
After Ratio	100				

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

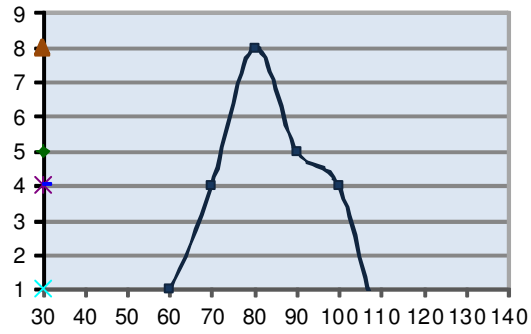
RMV 101: SA 01
Improved land, City of Columbia City.
This analysis consists of improved properties located in the City of Columbia City. Like the unimproved land in Columbia City, this area also underwent a full re-appraisal last assessment year (01/01/16). The central tendency selected is the Mean of 87 due to the normal distribution of ratios in the array. The time adjustment of 96 was then applied to the central tendency. The resulting Selected Ratio is 84.

Performance History

	2017	2016	2015	2014	2013
COD	10.61	10.04	12.13	12.30	8.39
PRD	1.00	1.01	1.00	1.01	1.01

COLUMBIA County **2017** Ratio Study

Frequency



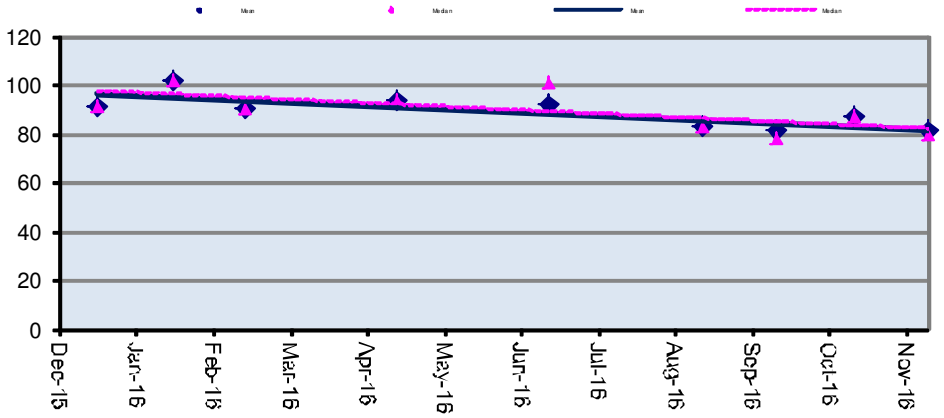
30	0
40	0
50	0
60	1
70	4
80	8
90	5
100	4
110	0
120	0
130	0
140	0

Median	**84**
AD	**8.91**
COD	**10.61**
Mean	**87**
SD	**10.49**
COV	**12.06**

Wtd Mean	**87**
GeoMean	**86**
PRD	**1.00**
95% Confidence	**4.38**

Number Of Sales **22**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	91	91	1
Feb-16	102	102	1
Mar-16	90	90	2
May-16	94	94	1
Jul-16	92	101	4
Sep-16	83	83	2
Oct-16	81	78	3
Nov-16	87	87	2
Dec-16	81	80	6

APAR	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-AC-02701	2016	11006	0.24	90,960	71,280	162,240	236,500	Dec-16	1	69
01	01	000	101	131	33	5N1W28-AC-01001	2016	10820	0.11	81,530	50,650	132,180	179,000	Dec-16	2	74
01	01	000	101	132	33	5N1W28-DA-01700	2016	9047	0.11	82,250	57,350	139,600	186,000	Oct-16	3	75
01	01	000	101	131	33	5N1W28-BA-00400	2016	8391	0.17	86,610	64,360	150,970	199,000	Sep-16	4	76
01	01	000	101	131	33	5N1W21-CB-00600	2016	6038	0.29	93,710	48,820	142,530	180,000	Jul-16	5	79
01	01	000	101	131	33	5N1W28-AB-03600	2016	2150	0.23	90,250	73,590	163,840	206,000	Mar-16	6	80
01	01	000	101	141	33	5N1W21-BC-03500	2016	11065	0.36	98,070	205,890	303,960	379,900	Dec-16	7	80
01	01	000	101	141	33	5N1W21-BC-03800	2016	11186	0.48	105,000	203,550	308,550	384,000	Dec-16	8	80
01	01	000	101	141	33	5N1W28-AD-05802	2016	9449	0.11	92,100	117,240	209,340	260,000	Oct-16	9	81
01	01	000	101	141	33	5N1W21-BC-03700	2016	10617	0.54	109,550	185,760	295,310	365,000	Dec-16	10	81
01	01	000	101	143	33	5N1W21-CB-01200	2016	10041	0.23	90,470	135,190	225,660	275,000	Nov-16	11	82
01	01	000	101	151	33	5N1W28-BD-00600	2016	6363	0.33	100,390	187,830	288,220	337,000	Jul-16	12	86
01	01	000	101	132	33	5N1W28-DB-00200	2016	9401	0.23	113,120	116,850	229,970	260,000	Oct-16	13	88
01	01	000	101	152	33	5N1W28-DB-06100	2016	8447	0.19	109,720	275,240	384,960	430,000	Sep-16	14	90
01	01	000	101	152	33	5N1W28-DB-03313	2016	533	0.26	127,560	241,900	369,460	405,500	Jan-16	15	91
01	01	000	101	154	33	5N1W28-AA-01903	2016	9825	0.18	120,150	268,770	388,920	425,000	Nov-16	16	92
01	01	000	101	142	33	5N1W28-DB-03704	2016	3092	0.23	90,230	170,930	261,160	279,000	May-16	17	94
01	01	000	101	143	33	5N1W21-CD-01202	2016	1840	0.20	88,340	141,280	229,620	232,000	Mar-16	18	99
01	01	000	101	132	33	5N1W28-AB-00800	2016	5903	0.11	92,100	51,170	143,270	142,500	Jul-16	19	101

COLUMBIA County **2017** 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	143	30	5N1W28-BA-01200	2016	963	0.11	82,250	168,180	250,430	245,500	Feb-16	20	102
01	01	000	101	142	33	5N1W28-CA-00800	2016	6543	0.51	151,480	152,580	304,060	293,000	Jul-16	21	104
01	01	000	101	152	33	5N1W28-DB-03309	2016	11002	0.23	113,120	332,900	446,020	430,000	Dec-16	22	104

COLUMBIA County **2017** Ratio Study

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	**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	519,380	38.20 %	576,512	35.62 %
OSD RMV	264,000	19.42 %	264,000	16.31 %
Residential Improvement RMV	567,180	41.71 %	765,693	47.31 %
Farm Improvement RMV	9,200	0.68 %	12,420	0.77 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	111
OSD Adjustment Factor	100
Residential Adjustment Factor	135
Farm Improvement Factor	135
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

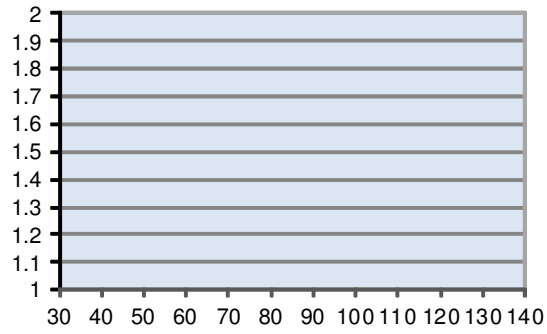
RMV 109: SA 01
Improved land - Manufactured Structure, City of Columbia City.
Due to having no sales available of properties that are improved with manufactured structures for this analysis, the Selected Ratio of 84 from the Columbia City improved study (RMV Class 101) was applied here.

Performance History

	2017	2016	2015	2014	2013
COD		-	12.13	12.30	8.39
PRD		-	1.00	1.01	1.01

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

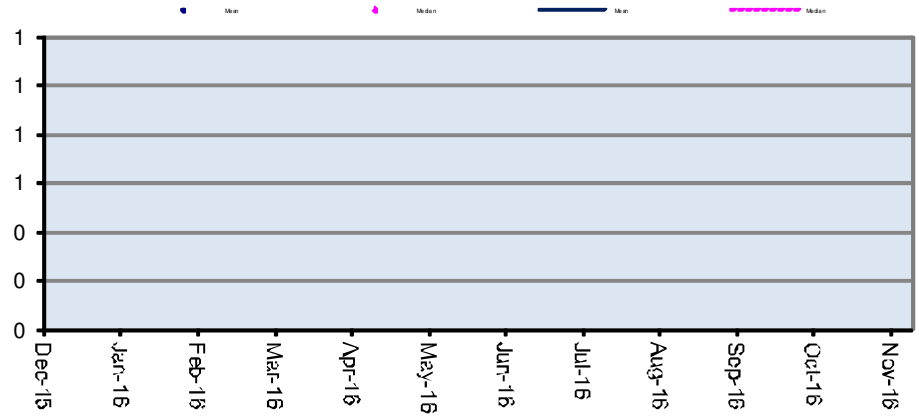
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	21	000	1995	9	Columbia City							

Adjustment Calculation Summary

RECALCULATED

			Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	9				
Population - Number of Accounts	217				
Sales as a percentage of the Population	4.15 %				
Prior Year Population Values					
Land RMV	12,817,280		25.38 %	14,227,181	23.05 %
OSD RMV	7,062,000		13.98 %	7,062,000	11.44 %
Residential Improvement RMV	30,401,190		60.19 %	40,129,571	65.02 %
Farm Improvement RMV	224,490		0.44 %	296,327	0.48 %
SelectedRatioFromSales	82				
RMV Adjustment	100				
Before Ratio	82				
Overall Adjustment Factor	122				
Land Adjustment Factor	111				
OSD Adjustment Factor	100				
Residential Adjustment Factor	132				
Farm Improvement Factor	132				
After Ratio	100				

Selected Ratio **82** **2017** **Adjustment** **122**

Explanation

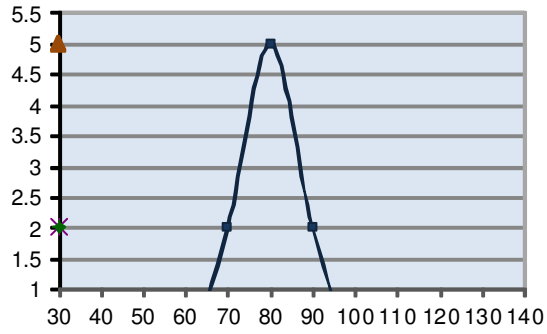
RMV 101: SA 21
Improved land – McBride Meadows/Sophie Park, City of Columbia City.
This study area consists of homogeneous properties of residential homes located North of Columbia City which has easy access to Highway 30. The central tendency determined to be a good indicator is the Mean of 85 which is supported by the Weighted Mean (85) and the Median (84). The conclusion of 96 from the time adjustment study for RMV 1XX was applied here resulting in a Selected Ratio of 82.

Performance History

	2017	2016	2015	2014	2013
COD	5.56	8.40	6.43	10.58	8.39
PRD	1.00	1.01	1.00	1.02	1.01

COLUMBIA County **2017** Ratio Study

Frequency



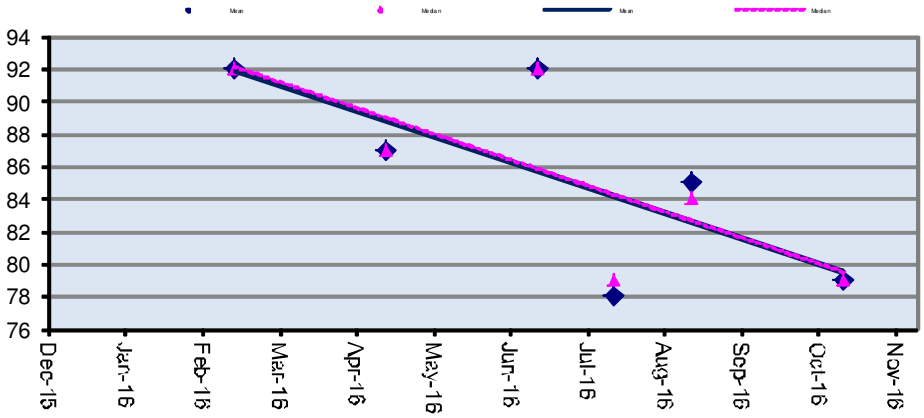
30	0
40	0
50	0
60	0
70	2
80	5
90	2
100	0
110	0
120	0
130	0
140	0

Median	**84**
AD	**4.67**
COD	**5.56**
Mean	**85**
SD	**5.57**
COV	**6.55**

Wtd Mean	**85**
GeoMean	**85**
PRD	**1.00**
95% Confidence	**3.64**

Number Of Sales **9**

Central Tendencies



Month	Mean	Median	Sales
Mar-16	92	92	1
May-16	87	87	1
Jul-16	92	92	1
Aug-16	78	79	2
Sep-16	85	84	3
Nov-16	79	79	1

APPR	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-CB-03900	2016	7410	0.25	91,400	108,130	199,530	258,500	Aug-16	1	77
01	21	000	101	141	33	5N1W21-CD-06600	2016	10340	0.23	90,240	136,890	227,130	287,000	Nov-16	2	79
01	21	000	101	143	33	5N1W21-CB-04000	2016	7598	0.28	93,020	160,380	253,400	314,900	Aug-16	3	80
01	21	000	101	143	33	5N1W21-CD-04900	2016	8200	0.23	90,390	132,360	222,750	269,000	Sep-16	4	83
01	21	000	101	141	33	5N1W21-CA-04700	2016	7985	0.23	90,480	128,820	219,300	261,999	Sep-16	5	84
01	21	000	101	143	33	5N1W21-CA-05000	2016	6344	0.23	90,290	143,410	233,700	268,000	May-16	6	87
01	21	000	101	143	33	5N1W21-CD-06200	2016	8107	0.23	90,390	148,970	239,360	270,400	Sep-16	7	89
01	21	000	101	143	33	5N1W21-CD-04400	2016	2397	0.23	90,340	208,790	299,130	325,000	Mar-16	8	92
01	21	000	101	141	33	5N1W21-CA-05200	2016	6172	0.23	90,290	145,970	236,260	256,200	Jul-16	9	92

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	31	000	1995	1	Columbia City

Adjustment Calculation Summary

Sample - Number of Sales	1	**RECALCULATED**		
Population - Number of Accounts	10			
Sales as a percentage of the Population	10.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	667,090	27.95 %	740,470	26.94 %
OSD RMV	465,000	19.48 %	465,000	16.92 %
Residential Improvement RMV	1,241,800	52.03 %	1,527,414	55.57 %
Farm Improvement RMV	12,730	0.53 %	15,658	0.57 %

SelectedRatioFromSales	87
RMV Adjustment	100
Before Ratio	87
Overall Adjustment Factor	115
Land Adjustment Factor	111
OSD Adjustment Factor	100
Residential Adjustment Factor	123
Farm Improvement Factor	123
After Ratio	100

Selected Ratio **87** **2017** **Adjustment** **115**

Explanation

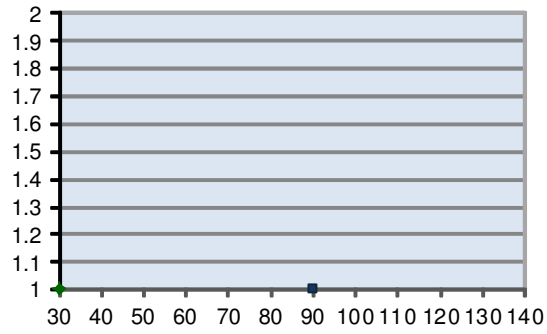
RMV 101: SA 31
Improved study of Duplex/Triplex/Fourplex properties located in the City of Columbia City. This study area was re-appraised last assessment year (01/01/16) and all accounts are now on re-calculation. The population of this study area is 10 and the sales as a percentage is 10%. Although one sale is available for this analysis, it is deemed a good indicator of how the market is moving within this classification of property. Therefore the Median of 91 was selected and then adjusted by 96, the conclusion from the time study for 1XX properties. The result is a Selected Ratio of 87.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	-	0.00	12.30	8.39
PRD	1.00	-	1.00	1.01	1.01

COLUMBIA County **2017** Ratio Study

Frequency



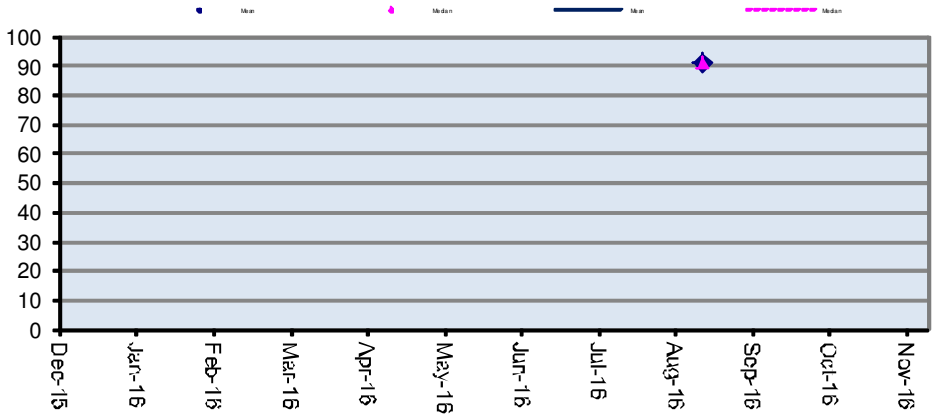
30	0
40	0
50	0
60	0
70	0
80	0
90	1
100	0
110	0
120	0
130	0
140	0

Median	**91**
AD	**0.00**
COD	**0.00**
Mean	**91**
SD	**1.00**
COV	**1.10**

Wtd Mean	**91**
GeoMean	**91**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Sep-16	91	91	1

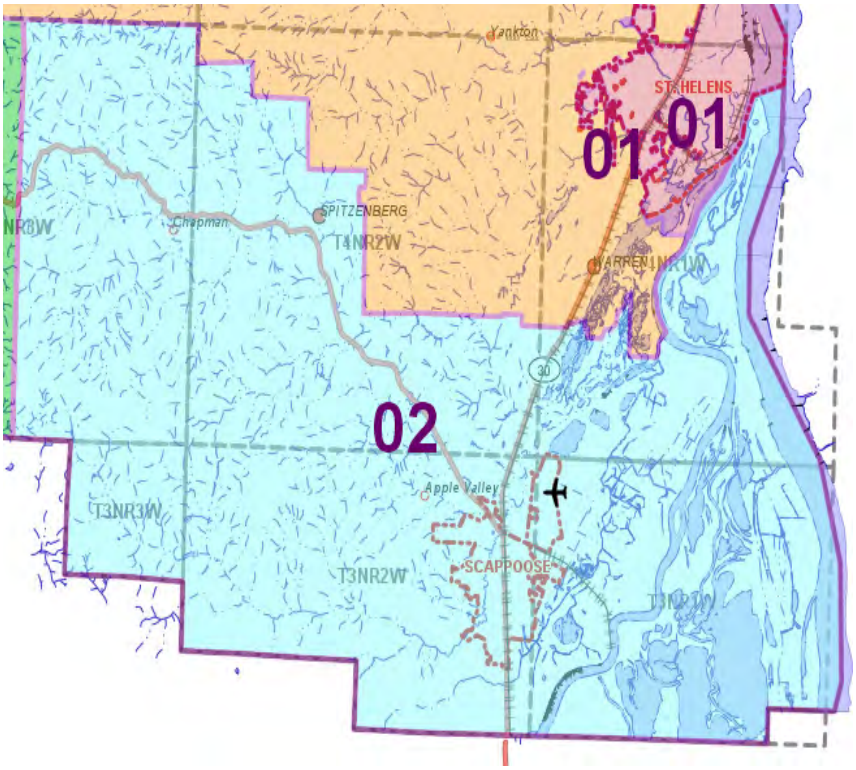
AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
01	31	000	101	242	33	5N1W21-BD-02300	2016	8262	0.28	106,520	119,440	225,960	247,000	Sep-16	1	91

MAINTENANCE AREA 2

SCAPPOOSE

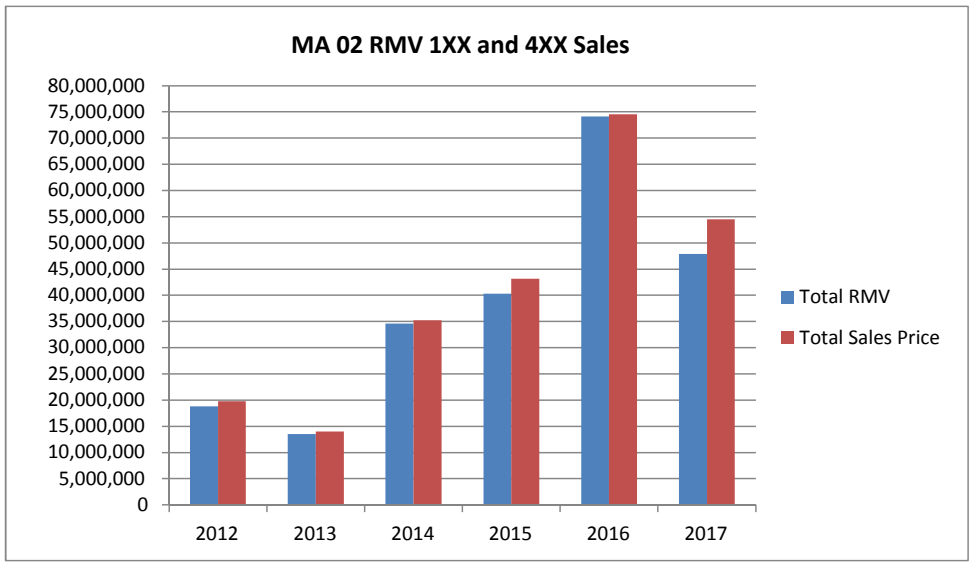
MA 02 – Scappoose

The Northwest Chinook Indians first inhabited this area now called Scappoose which means “Gravelly Plain”. Settlers begin arriving to Scappoose in 1828 and by 1852 the first saw mill was built. This opened the door for commercial and industrial business (such as the Hudson Bay Company) and also drew more people to the area. In 1884 the railroad came through and provided transportation to Goble, Oregon where barges ferried passengers and train cars across the Columbia River to Washington state. In 1921, the City of Scappoose was incorporated.



Today, the Maintenance 02 area covers approximately 94.11 square miles of residential and rural properties. Just lying approximately 21 miles North of Portland, it's proximity to the metropolitan area makes Scappoose an ideal place to live for those who want a quiet lifestyle while still being close to the “big city”. Scappoose offers many amenities such as: one public high school, three public elementary schools and one private elementary school. There are also shopping centers, a public library, a movie theater, many restaurants, professional and medical offices, along with plenty of recreational opportunities. This area also has a small airport. This aviation district is bringing in new development and industry from Boeing, PCC and Cascade Paper. Because of this, we have seen a boost in population thus bringing with it an increase in housing needs. This housing shortage has caused a fast rise in the market value of real estate and has created a shortage of homes available in relation to the population growth. (Source: www.scappoose-historicalsociety.org)

Scappoose comparison of usable sales over the past five years:



	Total Sales	Total RMV	Total Sales Price	Difference	Percent Difference
2012	99	18,785,220	19,762,956	977,736	4.95%
2013	67	13,494,450	14,023,709	529,259	3.77%
2014	153	34,592,400	35,256,145	663,745	1.88%
2015	176	40,304,830	43,150,531	2,845,701	6.59%
2016	265	74,133,990	74,575,915	441,925	0.59%
2017	167	47,923,730	54,502,280	6,578,550	12.07%

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	0				
Population - Number of Accounts	249				
Sales as a percentage of the Population	0.00 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	19,332,030		99.86 %	24,744,998	99.89 %
OSD RMV	27,450		0.14 %	27,450	0.11 %
Residential Improvement RMV	0		0.00 %	0	0.00 %
Farm Improvement RMV	0		0.00 %	0	0.00 %
SelectedRatioFromSales	78				
RMV Adjustment	100				
Before Ratio	78				
Overall Adjustment Factor	128				
Land Adjustment Factor	128				
OSD Adjustment Factor	100				
Residential Adjustment Factor	100				
Farm Improvement Factor	100				
After Ratio	100				

Selected Ratio **78** **2017** **Adjustment** **128**

Explanation

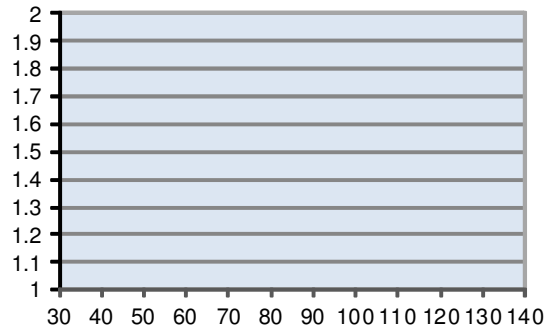
RMV 100: SA 00
Undeveloped land, City of Scappoose.
No sales of unimproved land were available for this analysis. Therefore the Selected Ratio indicator from the improved properties RMV Class 101 of 78 is recommended and applied here.

Performance History

	2017	2016	2015	2014	2013
COD		-	5.56	20.28	0.00
PRD		-	1.01	1.03	1.00

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

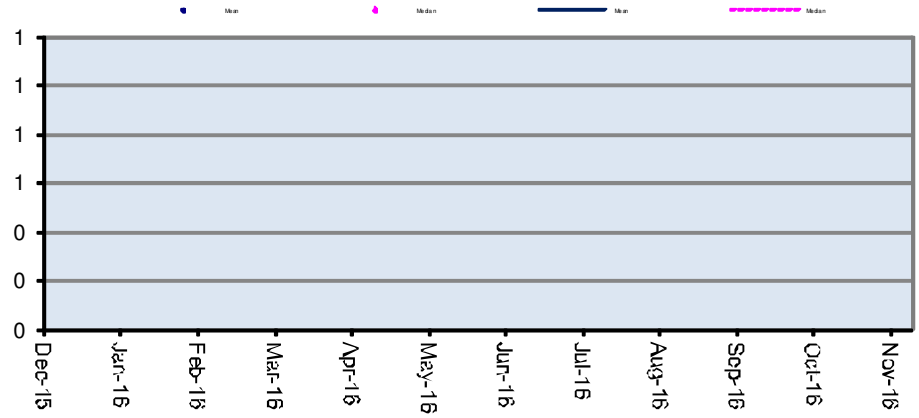
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	00	000		93	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	93	**RECALCULATED**		
Population - Number of Accounts	2,011			
Sales as a percentage of the Population	4.62 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	131,148,312	28.89 %	167,869,839	28.94 %
OSD RMV	59,748,000	13.16 %	59,748,000	10.30 %
Residential Improvement RMV	260,643,640	57.42 %	349,262,478	60.22 %
Farm Improvement RMV	2,346,340	0.52 %	3,144,096	0.54 %

SelectedRatioFromSales	78
RMV Adjustment	100
Before Ratio	78
Overall Adjustment Factor	128
Land Adjustment Factor	128
OSD Adjustment Factor	100
Residential Adjustment Factor	134
Farm Improvement Factor	134
After Ratio	100

Selected Ratio **78** **2017** **Adjustment** **128**

Explanation

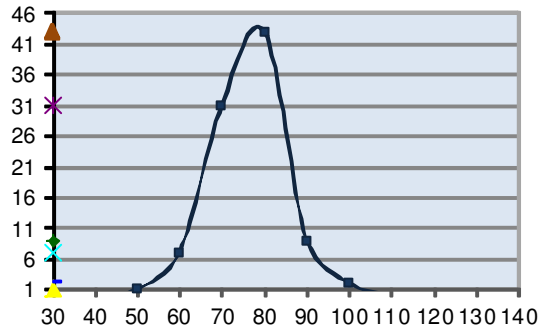
RMV 101: SA 00
Improved property of Single Family dwellings located in the City of Scappoose.
The Median, Mean and Weighted Mean all returned ratio indications of 81 for this analysis. The central tendency of 81 was then adjusted by 96 from the time study conclusion. The Selected Ratio for this study is 78.

Performance History

	2017	2016	2015	2014	2013
COD	7.69	7.90	8.66	10.06	7.54
PRD	1.00	1.01	1.01	1.00	1.01

COLUMBIA County **2017** Ratio Study

Frequency



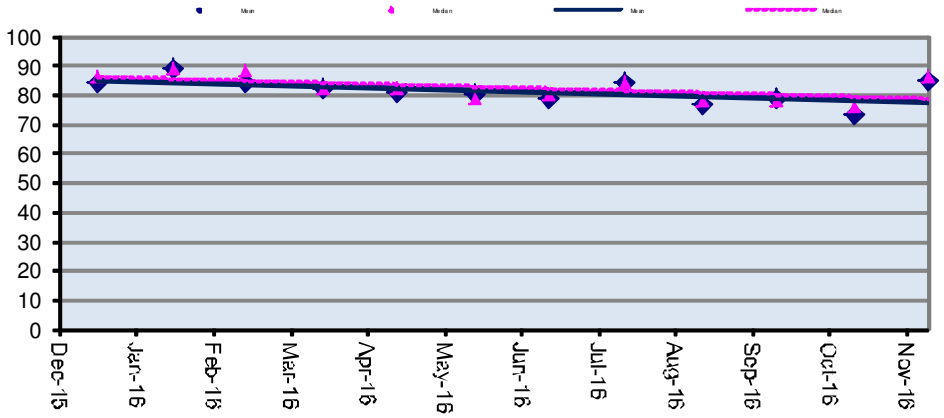
30	0
40	0
50	1
60	7
70	31
80	43
90	9
100	2
110	0
120	0
130	0
140	0

Median	**81**
AD	**6.23**
COD	**7.69**
Mean	**81**
SD	**8.09**
COV	**9.98**

Wtd Mean	**81**
GeoMean	**80**
PRD	**1.00**
95% Confidence	**1.64**

Number Of Sales **93**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	84	86	5
Feb-16	89	89	2
Mar-16	84	88	4
Apr-16	82	82	6
May-16	81	82	12
Jun-16	80	79	20
Jul-16	79	80	8
Aug-16	84	84	6
Sep-16	77	78	10
Oct-16	79	78	7
Nov-16	73	76	4
Dec-16	85	86	9

APAR	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	131	33	3N2W12-DB-06300	2016	7909	0.12	81,120	56,320	137,440	232,000	Sep-16	1	59
02	00	000	101	131	33	3N2W12-DB-10000	2016	11025	0.19	86,810	85,060	171,870	285,000	Dec-16	2	60
02	00	000	101	141	33	3N2W11-AA-00105	2016	8126	0.19	93,220	109,560	202,780	310,000	Sep-16	3	65
02	00	000	101	131	33	3N2W12-BA-03200	2016	10401	0.15	83,830	70,180	154,010	235,700	Nov-16	4	65
02	00	000	101	131	33	3N2W12-DB-02500	2016	5083	0.21	90,290	97,200	187,490	284,000	Jun-16	5	66
02	00	000	101	135	33	3N2W12-CA-06400	2016	6047	0.16	83,790	66,430	150,220	229,000	Jul-16	6	66
02	00	000	101	131	33	3N2W13-BD-09600	2016	4618	0.07	64,050	35,840	99,890	149,900	May-16	7	67
02	00	000	101	131	33	3N2W12-DD-09000	2016	5091	0.14	82,370	67,110	149,480	217,000	Jun-16	8	69
02	00	000	101	131	33	3N2W12-AC-00104	2016	4606	0.31	101,500	101,130	202,630	288,000	Jun-16	9	70
02	00	000	101	141	33	3N2W12-DB-02700	2016	4378	0.18	86,160	94,780	180,940	255,000	May-16	10	71
02	00	000	101	143	33	3N2W11-AA-01007	2016	8083	0.19	86,850	161,290	248,140	347,900	Sep-16	11	71
02	00	000	101	141	33	3N2W12-DB-05900	2016	8899	0.17	85,420	95,410	180,830	250,000	Oct-16	12	72
02	00	000	101	131	33	3N1W07-CB-01904	2016	1792	0.17	85,500	105,050	190,550	259,900	Mar-16	13	73
02	00	000	101	143	33	3N2W13-AD-05900	2016	7247	0.14	82,540	158,980	241,520	329,000	Aug-16	14	73
02	00	000	101	141	33	3N2W12-CD-02005	2016	4604	0.18	85,690	107,130	192,820	259,000	Jun-16	15	74
02	00	000	101	143	33	3N2W13-BA-06100	2016	4943	0.14	82,410	156,740	239,150	325,000	Jun-16	16	74
02	00	000	101	143	33	3N2W13-AD-05500	2016	8982	0.14	82,370	171,690	254,060	345,000	Oct-16	17	74
02	00	000	101	141	33	3N1W07-CC-02600	2016	9903	0.17	85,420	135,890	221,310	300,000	Nov-16	18	74
02	00	000	101	141	33	3N2W12-DA-04108	2016	3575	0.18	86,170	121,070	207,240	276,000	May-16	19	75

COLUMBIA County **2017** Ratio Study

APAR	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-DD-00722	2016	6383	0.18	86,490	123,650	210,140	281,100	Jul-16	20	75
02	00	000	101	143	33	3N2W13-BD-02100	2016	6592	0.15	82,950	133,280	216,230	285,000	Jul-16	21	76
02	00	000	101	143	33	3N2W13-AC-02200	2016	10204	0.15	83,040	127,980	211,020	276,000	Nov-16	22	76
02	00	000	101	143	33	3N2W13-AA-06200	2016	4938	0.15	83,150	147,230	230,380	297,400	Jun-16	23	77
02	00	000	101	144	33	3N2W01-CC-00112	2016	6637	0.19	87,020	163,840	250,860	327,500	Jul-16	24	77
02	00	000	101	143	33	3N2W13-AC-01400	2016	8299	0.14	82,430	144,700	227,130	295,000	Sep-16	25	77
02	00	000	101	141	33	3N1W18-BB-00500	2016	611	0.15	82,920	135,580	218,500	280,000	Jan-16	26	78
02	00	000	101	145	33	3N2W13-AD-04506	2016	2793	0.23	94,370	128,100	222,470	285,000	Apr-16	27	78
02	00	000	101	143	30	3N2W12-DC-00139	2016	5085	0.14	82,470	193,610	276,080	355,000	Jun-16	28	78
02	00	000	101	143	33	3N2W12-AD-06521	2016	5178	0.17	85,150	287,450	372,600	479,900	Jun-16	29	78
02	00	000	101	144	33	3N2W01-CC-00109	2016	6972	0.17	85,440	212,730	298,170	380,000	Aug-16	30	78
02	00	000	101	143	33	3N2W13-AC-02500	2016	7879	0.14	82,750	130,590	213,340	275,000	Sep-16	31	78
02	00	000	101	143	33	3N1W18-BB-01900	2016	8467	0.14	82,370	191,220	273,590	350,000	Sep-16	32	78
02	00	000	101	141	33	3N2W13-BA-02100	2016	8779	0.24	96,020	113,010	209,030	269,000	Oct-16	33	78
02	00	000	101	143	33	3N2W02-DD-00634	2016	9432	0.17	90,910	206,710	297,620	380,000	Oct-16	34	78
02	00	000	101	141	33	3N2W12-DD-01000	2016	10469	0.17	85,420	94,520	179,940	229,900	Nov-16	35	78
02	00	000	101	143	33	3N1W07-CC-01017	2016	10672	0.14	82,720	168,560	251,280	321,000	Dec-16	36	78
02	00	000	101	131	33	3N2W12-BA-03400	2016	4945	0.21	91,110	62,770	153,880	195,000	Jun-16	37	79
02	00	000	101	143	33	3N1W07-CA-00112	2016	5481	0.17	85,420	124,860	210,280	267,500	Jun-16	38	79
02	00	000	101	143	33	3N2W12-CC-01214	2016	5635	0.17	85,180	127,620	212,800	270,000	Jun-16	39	79
02	00	000	101	143	33	3N2W12-DC-00120	2016	2623	0.14	82,430	187,760	270,190	337,000	Apr-16	40	80
02	00	000	101	143	33	3N2W12-AB-00112	2016	3573	0.18	85,920	119,450	205,370	256,500	May-16	41	80
02	00	000	101	141	33	3N2W12-AD-02408	2016	6554	0.15	83,120	120,570	203,690	255,000	Jul-16	42	80
02	00	000	101	141	33	3N1W07-CA-02100	2016	7797	0.23	93,930	148,780	242,710	302,900	Sep-16	43	80
02	00	000	101	141	33	3N2W12-AB-00210	2016	7831	0.14	82,570	105,470	188,040	235,000	Sep-16	44	80
02	00	000	101	143	33	3N1W18-BB-03500	2016	10929	0.14	82,370	192,910	275,280	345,000	Dec-16	45	80
02	00	000	101	145	33	3N2W12-DA-00800	2016	3546	0.14	82,540	138,590	221,130	272,750	Apr-16	46	81
02	00	000	101	141	33	3N2W12-CC-01900	2016	3758	0.21	91,170	96,680	187,850	232,000	May-16	47	81
02	00	000	101	141	33	3N2W13-AC-03327	2016	3960	0.15	83,550	138,840	222,390	274,000	May-16	48	81
02	00	000	101	143	33	3N1W07-CA-00104	2016	118	0.17	85,420	158,670	244,090	299,000	Jan-16	49	82
02	00	000	101	141	33	3N2W12-CC-00312	2016	2924	0.10	79,920	79,280	159,200	195,000	Apr-16	50	82
02	00	000	101	142	33	3N2W11-AA-01300	2016	3247	0.18	92,120	148,550	240,670	295,000	May-16	51	82
02	00	000	101	141	33	3N2W12-DA-04121	2016	5435	0.20	87,620	117,470	205,090	249,900	Jun-16	52	82
02	00	000	101	143	33	3N1W18-BB-03100	2016	1143	0.14	82,410	178,480	260,890	315,000	Feb-16	53	83
02	00	000	101	143	33	3N1W07-CC-01409	2016	1887	0.15	82,960	198,570	281,530	339,000	Mar-16	54	83
02	00	000	101	143	30	3N1W07-CA-01302	2016	5583	0.20	88,730	160,650	249,380	301,500	Jun-16	55	83
02	00	000	101	142	33	3N2W01-CC-00300	2016	6599	0.34	111,270	162,090	273,360	329,000	Jul-16	56	83
02	00	000	101	143	33	3N2W12-DC-00174	2016	7245	0.06	58,640	149,880	208,520	250,000	Aug-16	57	83
02	00	000	101	142	33	3N2W11-AD-00800	2016	4675	0.27	99,080	195,280	294,360	351,000	Jun-16	58	84
02	00	000	101	143	33	3N2W13-BA-04704	2016	5585	0.15	83,760	154,690	238,450	284,990	Jun-16	59	84
02	00	000	101	143	33	3N2W13-BA-07100	2016	6601	0.16	84,270	165,060	249,330	297,500	Jul-16	60	84
02	00	000	101	143	33	3N2W13-CD-06600	2016	7649	0.14	82,730	189,460	272,190	325,000	Aug-16	61	84
02	00	000	101	143	33	3N2W12-DC-00175	2016	8997	0.06	58,640	146,650	205,290	245,000	Oct-16	62	84
02	00	000	101	143	33	3N2W12-DC-00157	2017	30	0.07	65,360	124,580	189,940	226,500	Dec-16	63	84
02	00	000	101	143	33	3N2W12-CC-01206	2016	3187	0.16	83,920	125,710	209,630	248,000	May-16	64	85
02	00	000	101	143	33	3N2W12-AD-06514	2016	8777	0.14	82,800	214,730	297,530	350,000	Oct-16	65	85

COLUMBIA County **2017** 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	3N1W18-BB-01600	2016	9388	0.14	82,370	197,780	280,150	328,825	Oct-16	66	85
02	00	000	101	143	33	3N2W13-CD-03000	2016	301	0.14	82,370	178,070	260,440	302,000	Jan-16	67	86
02	00	000	101	142	33	3N2W11-AA-00129	2016	3240	0.25	112,640	148,050	260,690	301,500	Apr-16	68	86
02	00	000	101	143	33	3N2W12-DC-00173	2016	3614	0.06	58,640	146,590	205,230	238,000	May-16	69	86
02	00	000	101	143	33	3N2W12-DC-02517	2016	5602	0.06	59,290	131,300	190,590	222,000	Jun-16	70	86
02	00	000	101	143	33	3N2W13-CD-01800	2016	5640	0.14	82,670	152,820	235,490	272,500	Jun-16	71	86
02	00	000	101	143	33	3N2W12-AD-06522	2016	6976	0.22	91,810	250,610	342,420	399,000	Aug-16	72	86
02	00	000	101	143	33	3N2W12-DC-00158	2016	11078	0.08	69,670	149,520	219,190	253,500	Dec-16	73	86
02	00	000	101	141	30	3N2W12-CC-02100	2016	417	0.20	88,940	101,510	190,450	220,000	Jan-16	74	87
02	00	000	101	143	33	3N2W12-AD-06506	2016	383	0.15	83,220	214,730	297,950	341,500	Jan-16	75	87
02	00	000	101	121	33	3N2W12-AC-04300	2016	5145	0.23	93,770	47,120	140,890	162,000	Jun-16	76	87
02	00	000	101	141	33	3N1W07-CB-02600	2016	1605	0.15	83,390	136,010	219,400	250,000	Mar-16	77	88
02	00	000	101	143	30	3N2W13-CD-02600	2016	2566	0.14	82,610	182,940	265,550	303,000	Apr-16	78	88
02	00	000	101	143	33	3N2W13-BC-01400	2016	3515	0.17	85,130	154,080	239,210	272,250	May-16	79	88
02	00	000	101	141	33	3N2W12-DD-02800	2016	5143	0.19	86,980	97,220	184,200	210,500	Jun-16	80	88
02	00	000	101	143	33	3N2W12-DC-02511	2016	3846	0.06	59,290	144,980	204,270	230,000	May-16	81	89
02	00	000	101	143	30	3N2W12-DC-00165	2016	6548	0.07	62,500	154,940	217,440	243,000	Jul-16	82	89
02	00	000	101	143	33	3N2W12-DC-00169	2016	2325	0.06	58,640	150,180	208,820	229,900	Mar-16	83	91
02	00	000	101	142	33	3N2W01-CC-00200	2016	8511	0.54	123,750	194,950	318,700	349,900	Sep-16	84	91
02	00	000	101	141	33	3N2W12-CD-02012	2016	11268	0.20	88,500	93,810	182,310	200,000	Dec-16	85	91
02	00	000	101	141	30	3N1W07-CB-01906	2016	3586	0.18	85,990	133,690	219,680	240,000	May-16	86	92
02	00	000	101	141	30	3N2W12-DA-04111	2016	5646	0.20	88,500	128,590	217,090	235,000	Jun-16	87	92
02	00	000	101	141	33	3N2W12-BA-02800	2017	85	0.23	93,360	100,560	193,920	210,000	Dec-16	88	92
02	00	000	101	131	33	3N2W12-AD-03800	2016	8556	0.23	93,770	91,690	185,460	198,000	Sep-16	89	94
02	00	000	101	141	30	3N2W13-BD-03700	2016	10841	0.25	97,430	105,750	203,180	216,500	Dec-16	90	94
02	00	000	101	143	33	3N2W12-DC-00172	2016	954	0.06	58,640	146,650	205,290	216,900	Feb-16	91	95
02	00	000	101	135	33	3N2W12-BA-02300	2016	7583	0.61	118,620	80,420	199,040	199,900	Aug-16	92	100
02	00	000	101	142	33	3N2W11-AA-00900	2016	11279	2.00	208,020	124,490	332,510	324,000	Dec-16	93	103

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	02	00	000		2	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	2	**RECALCULATED**		
Population - Number of Accounts	63			
Sales as a percentage of the Population	3.17 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	3,641,801	42.22 %	4,661,505	49.59 %
OSD RMV	1,494,500	17.33 %	1,494,500	15.90 %
Residential Improvement RMV	3,253,430	37.72 %	3,025,690	32.19 %
Farm Improvement RMV	235,290	2.73 %	218,820	2.33 %

SelectedRatioFromSales	92
RMV Adjustment	100
Before Ratio	92
Overall Adjustment Factor	109
Land Adjustment Factor	128
OSD Adjustment Factor	100
Residential Adjustment Factor	93
Farm Improvement Factor	93
After Ratio	100

Selected Ratio **92** **2017** **Adjustment** **109**

Explanation

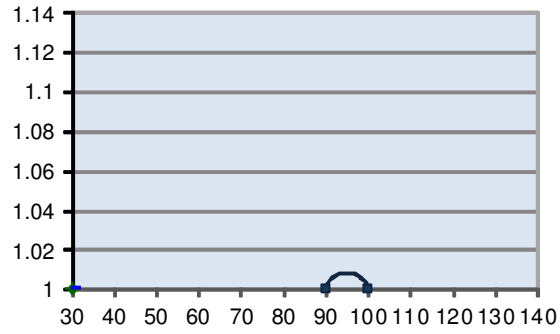
RMV 109: SA 00
Improved property - Manufactured Structure, City of Scappoose.
It has been found that the properties which have Manufactured Structures as the main residence move quite differently within the market than those properties that have Single Family dwellings. This is in part due to the type financing available. Because of this, it was decided the ratio indicators that were returned from this study are adequate and deemed appropriate. The Mean, Median, Weighted Mean and GeoMean have resulted in the same conclusion of 96. This ratio was then adjusted by 96 which is the conclusion from the time study. The resulting Selected Ratio of 92 was then applied.

Performance History

	2017	2016	2015	2014	2013
COD	6.25	-	8.66	10.06	7.54
PRD	1.00	-	1.01	1.00	1.01

COLUMBIA County **2017** Ratio Study

Frequency



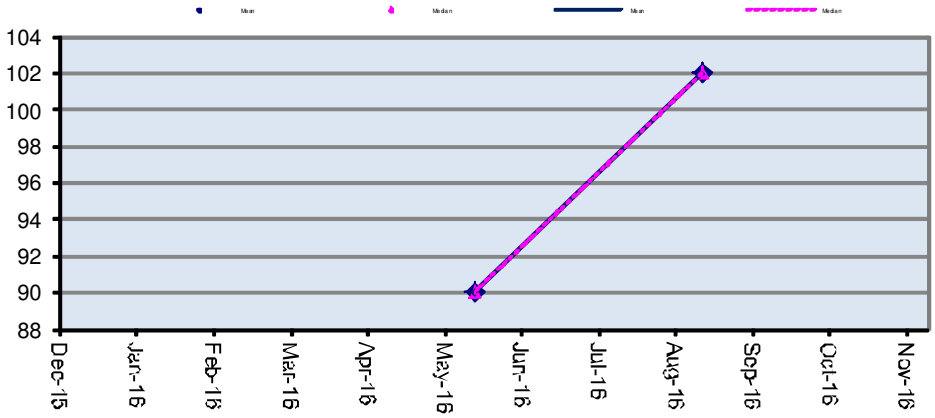
30	0
40	0
50	0
60	0
70	0
80	0
90	1
100	1
110	0
120	0
130	0
140	0

Median	**96**
AD	**6.00**
COD	**6.25**
Mean	**96**
SD	**8.49**
COV	**8.84**

Wtd Mean	**96**
GeoMean	**96**
PRD	**1.00**
95% Confidence	**11.76**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Jun-16	90	90	1
Sep-16	102	102	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	00	000	109	462	33	3N2W12-AD-05401	2016	5346	0.17	84,850	112,800	197,650	220,000	Jun-16	1	90
02	00	000	109	452	33	3N2W11-AD-02100	2016	8132	0.44	118,860	96,180	215,040	210,000	Sep-16	2	102

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	28	000		0	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	33	000		12	Scappoose

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	12				
Population - Number of Accounts	156				
Sales as a percentage of the Population	7.69 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	7,632,270		23.86 %	9,769,306	29.11 %
OSD RMV	5,725,000		17.90 %	5,725,000	17.06 %
Residential Improvement RMV	18,572,610		58.07 %	18,015,432	53.68 %
Farm Improvement RMV	55,160		0.17 %	53,505	0.16 %
SelectedRatioFromSales	95				
RMV Adjustment	100				
Before Ratio	95				
Overall Adjustment Factor	105				
Land Adjustment Factor	128				
OSD Adjustment Factor	100				
Residential Adjustment Factor	97				
Farm Improvement Factor	97				
After Ratio	100				

Selected Ratio **95** **2017** **Adjustment** **105**

Explanation

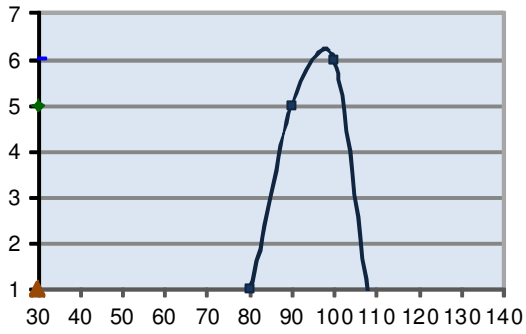
RMV 101: SA 28 & SA 33
Duplex/Triplex/Fourplex and Town house/Row house/Common wall, City of Scappoose
This study consists of Multi-Family homes as well as town houses, row houses and/or those dwellings that share a common wall. The Mean of 99 was selected from this sales array which is bracketed by the Median (100) and the Weighted Mean (98). After applying the conclusion form the time study (96), the Selected Ratio is 95.

Performance History

	2017	2016	2015	2014	2013
COD	3.92	11.23	2.06	-	7.54
PRD	1.01	1.02	1.00	-	1.01

COLUMBIA County **2017** Ratio Study

Frequency



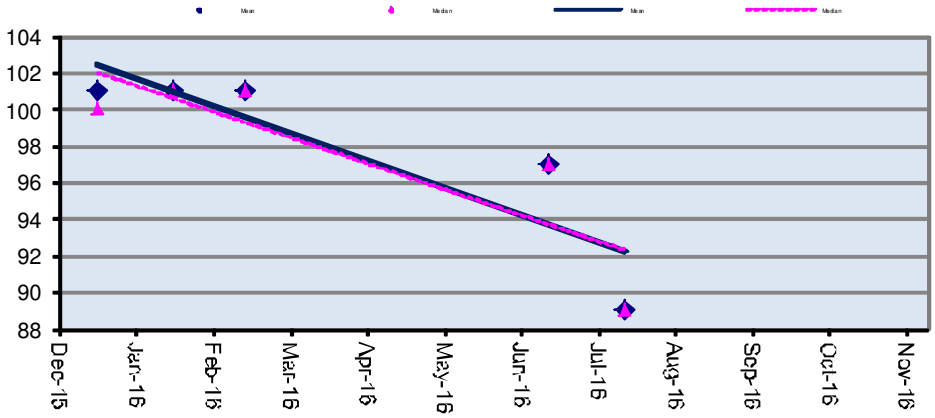
30	0
40	0
50	0
60	0
70	0
80	1
90	5
100	6
110	0
120	0
130	0
140	0

Median	**100**
AD	**3.92**
COD	**3.92**
Mean	**99**
SD	**5.45**
COV	**5.51**

Wtd Mean	**98**
GeoMean	**98**
PRD	**1.01**
95% Confidence	**3.08**

Number Of Sales **12**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	101	100	7
Feb-16	101	101	1
Mar-16	101	101	1
Jul-16	97	97	1
Aug-16	89	89	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	141	33	3N2W12-DA-06300	2016	7149	0.14	82,850	118,320	201,170	233,717	Aug-16	1	86
02	33	000	101	143	33	3N2W13-AA-04412	2016	6936	0.07	66,390	139,510	205,900	225,000	Aug-16	2	92
02	33	000	101	143	33	3N1W07-CC-01012	2016	724	0.08	69,860	145,890	215,750	224,900	Jan-16	3	96
02	33	000	101	143	33	3N2W12-DC-02505	2016	6461	0.06	57,340	151,640	208,980	215,000	Jul-16	4	97
02	33	000	101	143	33	3N1W07-CC-01011	2016	597	0.08	69,840	145,890	215,730	219,900	Jan-16	5	98
02	33	000	101	143	33	3N1W07-CC-01013	2016	966	0.09	71,360	145,890	217,250	219,900	Jan-16	6	99
02	33	000	101	143	33	3N1W07-CC-01002	2016	950	0.09	74,580	152,920	227,500	225,000	Jan-16	7	101
02	33	000	101	143	33	3N1W07-CC-01010	2016	811	0.11	80,380	146,970	227,350	226,000	Feb-16	8	101
02	33	000	101	143	33	3N2W12-DC-02508	2016	2449	0.06	59,290	160,280	219,570	218,300	Mar-16	9	101
02	33	000	101	143	33	3N1W07-CC-01001	2016	312	0.09	73,790	152,470	226,260	222,500	Jan-16	10	102
02	33	000	101	143	30	3N1W07-CC-01004	2016	605	0.11	80,530	152,520	233,050	223,900	Jan-16	11	104
02	33	000	101	143	33	3N1W07-CC-01003	2016	718	0.11	80,530	152,920	233,450	219,900	Jan-16	12	106

COLUMBIA County **2017** Ratio Study

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	5			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	312,130	100.00 %	337,100	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	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** **2017** **Adjustment** **108**

Explanation

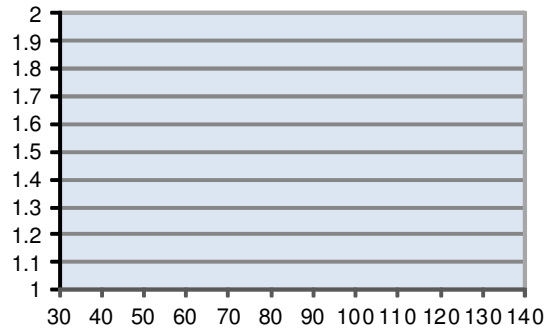
RMV 100: SA 79
Unimproved land – Keys Landing and Keys Crest, City of Scappoose
No sales are available for this study area of undeveloped properties. Therefore, the Selected Ratio (93) from the improved properties located in this study area has been applied here.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	-
PRD		-	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

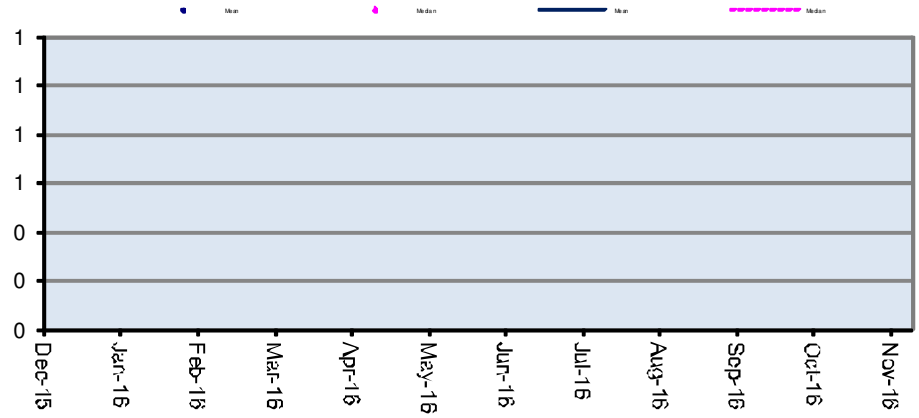
PRD

95% Confidence

Number Of Sales **0**

Central Tendencies

Month	Mean	Median	Sales



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	79	000		8	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	8	**RECALCULATED**		
Population - Number of Accounts	51			
Sales as a percentage of the Population	15.69 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	3,418,590	16.65 %	3,692,077	16.63 %
OSD RMV	1,555,500	7.58 %	1,555,500	7.01 %
Residential Improvement RMV	15,555,440	75.77 %	16,955,430	76.37 %
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	109
Farm Improvement Factor	109
After Ratio	100

Selected Ratio **93** **2017** **Adjustment** **108**

Explanation

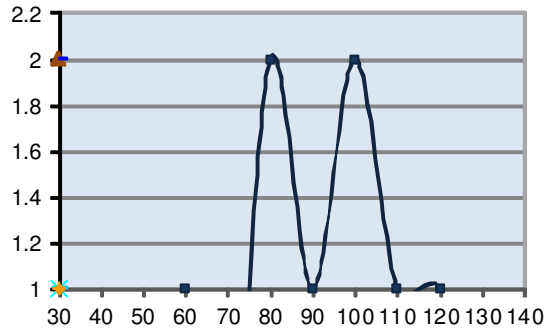
RMV 101: SA 79
Improved land – Keys Landing and Keys Crest, City of Scappoose
This area is a smaller subdivision of Class 5 and Class 6 properties that are not typical for the area. For this study, the Mean with an indicated ratio of 97 was selected. The time adjustment of 96 was then applied accordingly.

Performance History

	2017	2016	2015	2014	2013
COD	15.75	7.16	5.29	10.14	4.04
PRD	1.00	1.00	1.00	0.99	1.01

COLUMBIA County **2017** Ratio Study

Frequency



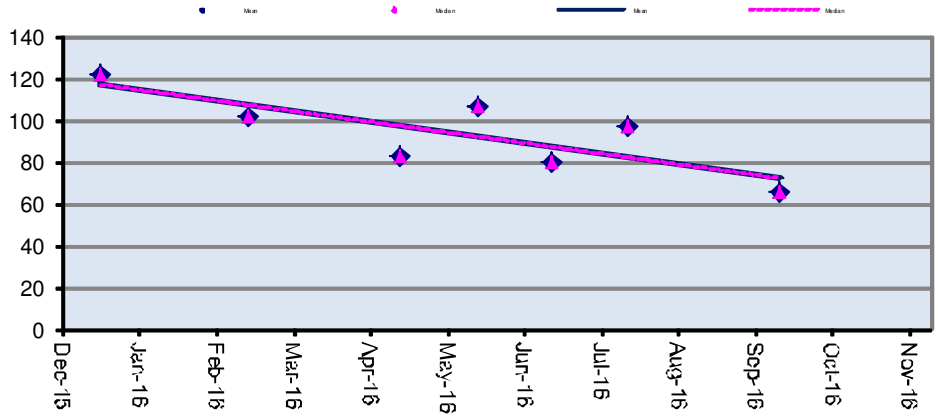
30	0
40	0
50	0
60	1
70	0
80	2
90	1
100	2
110	1
120	1
130	0
140	0

Median	**100**
AD	**15.75**
COD	**15.75**
Mean	**97**
SD	**20.20**
COV	**20.82**

Wtd Mean	**97**
GeoMean	**95**
PRD	**1.00**
95% Confidence	**14.00**

Number Of Sales **8**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	122	122	2
Mar-16	102	102	1
May-16	83	83	1
Jun-16	106	106	1
Jul-16	80	80	1
Aug-16	97	97	1
Oct-16	65	65	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-DB-01400	2016	8897	0.19	86,770	203,430	290,200	448,000	Oct-16	1	65
02	79	000	101	153	33	3N2W11-DA-02613	2016	6538	0.18	86,590	241,010	327,600	408,000	Jul-16	2	80
02	79	000	101	152	33	3N2W11-DA-02609	2016	4244	0.60	109,250	273,600	382,850	463,000	May-16	3	83
02	79	000	101	161	33	3N2W11-DD-00311	2016	7187	0.26	97,520	340,950	438,470	450,000	Aug-16	4	97
02	79	000	101	161	33	3N2W11-DB-01600	2016	1839	0.17	85,420	343,480	428,900	418,500	Mar-16	5	102
02	79	000	101	162	33	3N2W11-DB-02600	2016	5765	0.20	87,990	382,100	470,090	445,500	Jun-16	6	106
02	79	000	101	163	33	3N2W11-DB-01700	2016	616	0.17	85,430	355,120	440,550	375,800	Jan-16	7	117
02	79	000	101	152	33	3N2W11-DD-00317	2016	622	0.34	103,610	493,810	597,420	475,000	Jan-16	8	126

COLUMBIA County **2017** Ratio Study

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	45			
Sales as a percentage of the Population	8.89 %			
Prior Year Population Values				
Land RMV	3,059,070	18.30 %	3,915,610	18.01 %
OSD RMV	1,372,500	8.21 %	1,372,500	6.31 %
Residential Improvement RMV	12,280,510	73.48 %	16,455,883	75.68 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	77
RMV Adjustment	100
Before Ratio	77
Overall Adjustment Factor	130
Land Adjustment Factor	128
OSD Adjustment Factor	100
Residential Adjustment Factor	134
Farm Improvement Factor	134
After Ratio	100

Selected Ratio **77** **2017** **Adjustment** **130**

Explanation

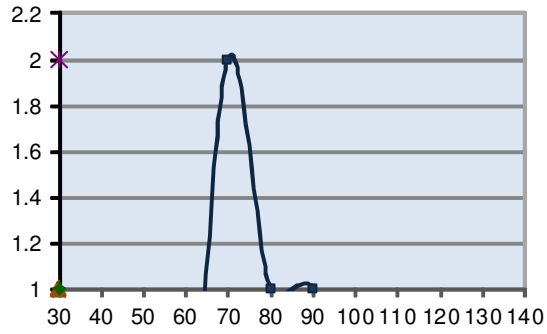
RMV 101: SA 80
Improved land – Columbia River View Estates, City of Scappoose
Columbia River View Estates is a homogeneous subdivision located northwest of Highway 30. Analysis of the sales array shows that the Median and Weighted Mean with ratio indications of 80 are the best indicators for this grouping. The Mean of 81 closely supports this. Therefore the ratio of 80 was adjusted by the conclusion from the time study (96).Therefore, the Selected Ratio of 77 was applied.

Performance History

	2017	2016	2015	2014	2013
COD	7.81	4.08	8.08	1.22	4.04
PRD	1.01	1.00	1.01	1.00	1.01

COLUMBIA County **2017** Ratio Study

Frequency



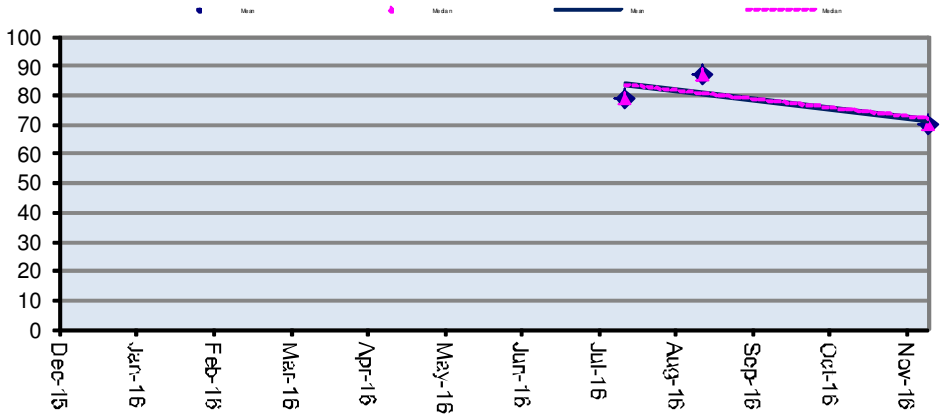
30	0
40	0
50	0
60	0
70	2
80	1
90	1
100	0
110	0
120	0
130	0
140	0

Median	**80**
AD	**6.25**
COD	**7.81**
Mean	**81**
SD	**9.47**
COV	**11.69**

Wtd Mean	**80**
GeoMean	**80**
PRD	**1.01**
95% Confidence	**9.28**

Number Of Sales **4**

Central Tendencies



Month	Mean	Median	Sales
Aug-16	79	79	1
Sep-16	87	87	2
Dec-16	70	70	1

APPR	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	153	33	3N2W12-BC-00206	2016	11027	0.23	100,710	241,850	342,560	487,000	Dec-16	1	70
02	80	000	101	154	33	3N2W12-BC-00225	2016	7241	0.21	89,940	380,880	470,820	595,000	Aug-16	2	79
02	80	000	101	154	30	3N2W12-BC-00229	2016	8513	0.18	99,600	313,660	413,260	513,000	Sep-16	3	81
02	80	000	101	153	33	3N2W12-BC-00234	2016	8535	0.17	90,990	249,660	340,650	367,350	Sep-16	4	93

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
102	02	00	000		3	Scappoose

Adjustment Calculation Summary

RECALCULATED

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	3			
Population - Number of Accounts	8			
Sales as a percentage of the Population	37.50 %			
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	1,555,720	100.00 %	1,446,820	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	108
RMV Adjustment	100
Before Ratio	108
Overall Adjustment Factor	93
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	93
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **108** **2017** **Adjustment** **93**

Explanation

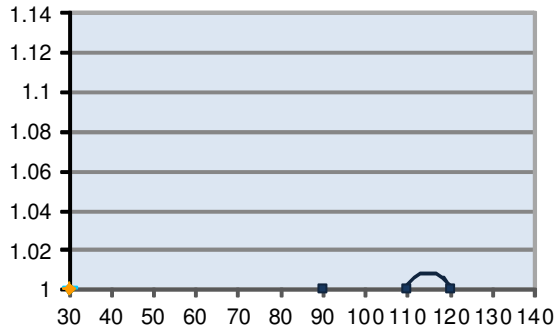
RMV 102: SA 00
Improved property– Condominium, City of Scappoose
This grouping of Condominiums located in the City of Scappoose has a population of 8 with 3 sales available for this study. After review of the data, the best ratio indicator is the Mean of 112 which is supported by the Weighted Mean (110) and the GeoMean (111). This indicator has been adjusted by the conclusion from the time study (96) returning a Selected Ratio of 108.

Performance History

	2017	2016	2015	2014	2013
COD	8.83	-	-	-	7.54
PRD	1.02	-	-	-	1.01

COLUMBIA County **2017** Ratio Study

Frequency



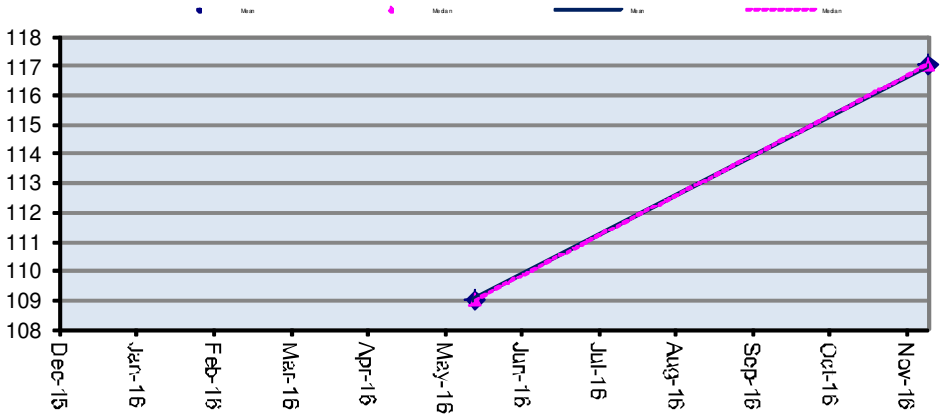
30	0
40	0
50	0
60	0
70	0
80	0
90	1
100	0
110	1
120	1
130	0
140	0

Median	**117**
AD	**10.33**
COD	**8.83**
Mean	**112**
SD	**13.80**
COV	**12.32**

Wtd Mean	**110**
GeoMean	**111**
PRD	**1.02**
95% Confidence	**15.62**

Number Of Sales **3**

Central Tendencies



Month	Mean	Median	Sales
Jun-16	109	109	2
Dec-16	117	117	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
02	00	000	102	143	33	3N2W12-CC-90002	2016	5587	0	0	198,800	198,800	207,000	Jun-16	1	96
02	00	000	102	144	33	3N2W12-CC-91001	2016	10788	0	0	192,470	192,470	165,000	Dec-16	2	117
02	00	000	102	144	33	3N2W12-CC-91004	2016	6814	0	0	192,470	192,470	158,000	Jun-16	3	122

COLUMBIA County **2017** Ratio Study

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	644,960	100.00 %	709,456	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	110
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

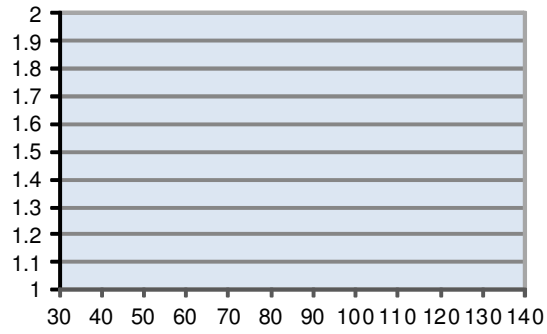
RMV 102, SA 21
Improved land – Condominium, Rural Value Zone 1, Rural Scappoose
These Condominium properties are located in the rural areas of Scappoose (SA 21, Value Zone 1), just beyond the city limits of Scappoose. No sales were identified in this area for the study period. Therefore, the Selected Ratio (91) from the analysis of improved properties located in SA 21, SA 41 and SA 62 was applied here.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	2.00	10.38
PRD		-	-	1.00	1.03

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

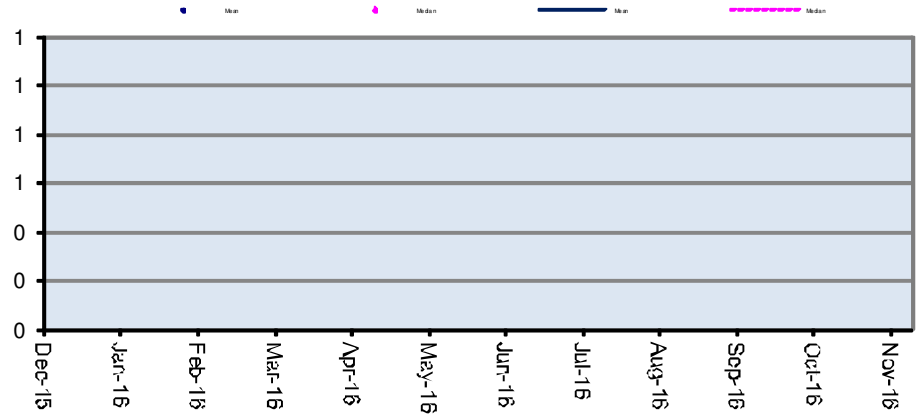
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	21	000		3	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	62	000		0	Scappoose

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	3			
Population - Number of Accounts	214			
Sales as a percentage of the Population	1.40 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	38,100,450	100.00 %	41,910,495	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	110
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

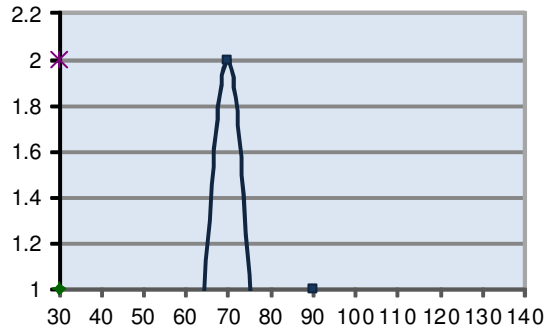
RMV 400, SA 21, SA 41 & SA 62
Value Zone 1 (21), Sauvies Island (41, no active accounts) and Freeman Road (62) in Rural Scappoose.
The sales within this array did not present a clear picture of the market. Therefore, the Selected Ratio (91) from the improved sales analysis within the same study areas has been applied here.

Performance History

	2017	2016	2015	2014	2013
COD	11.39	0.00	0.00	8.96	-
PRD	1.01	1.00	1.00	1.02	-

COLUMBIA County **2017** Ratio Study

Frequency



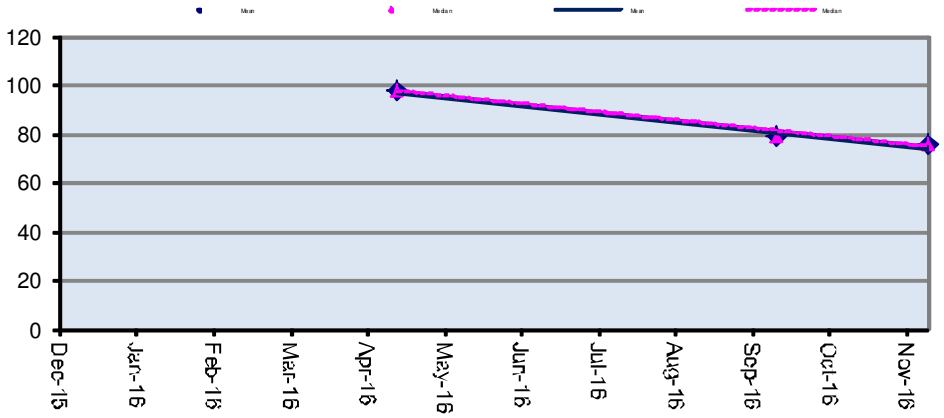
30	0
40	0
50	0
60	0
70	2
80	0
90	1
100	0
110	0
120	0
130	0
140	0

Median	**79**
AD	**9.00**
COD	**11.39**
Mean	**84**
SD	**11.94**
COV	**14.21**

Wtd Mean	**83**
GeoMean	**84**
PRD	**1.01**
95% Confidence	**13.51**

Number Of Sales **3**

Central Tendencies



Month	Mean	Median	Sales
May-16	98	98	1
Oct-16	79	79	1
Dec-16	76	76	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	4N2W25-D0-03300	2016	11286	6.02	186,050	0	186,050	245,000	Dec-16	1	76
02	21	000	400		33	3N2W10-00-00201	2016	9672	25.18	217,580	0	217,580	275,000	Oct-16	2	79
02	21	000	400		33	4N2W26-D0-00200	2016	4263	3.13	183,010	0	183,010	186,000	May-16	3	98

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	21	000		25	Scappoose
401	02	41	000		0	Sauvie Island
401	02	62	000		0	Scappoose

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	25			
Population - Number of Accounts	1,117			
Sales as a percentage of the Population	2.24 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	161,841,531	39.97 %	178,025,684	39.95 %
OSD RMV	54,626,930	13.49 %	54,626,930	12.26 %
Residential Improvement RMV	165,745,920	40.93 %	187,292,890	42.03 %
Farm Improvement RMV	22,720,530	5.61 %	25,674,199	5.76 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	110
OSD Adjustment Factor	100
Residential Adjustment Factor	113
Farm Improvement Factor	113
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

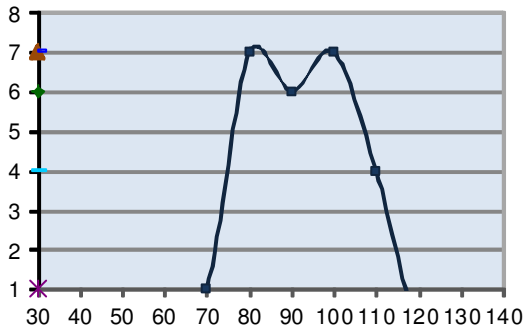
RMV 401, SA 21, SA 41 & SA 62
Improved land – Value Zone 1 (21), Sauvies Island (41) and Freeman Road (62) in Rural Scappoose. For this analysis of rural properties, the Median of 96 was selected as the best ratio indicator. The central tendency is further supported by the Mean, Weighted Mean and GeoMean. As determined in the time study for rural properties, the adjustment of 95 was applied to this central tendency and then entered as the Selected Ratio (91). Thus, the Overall Adjustment Factor is 110.

Performance History

	2017	2016	2015	2014	2013
COD	9.96	13.44	12.19	10.38	10.38
PRD	1.00	1.02	1.02	1.01	1.03

COLUMBIA County **2017** Ratio Study

Frequency



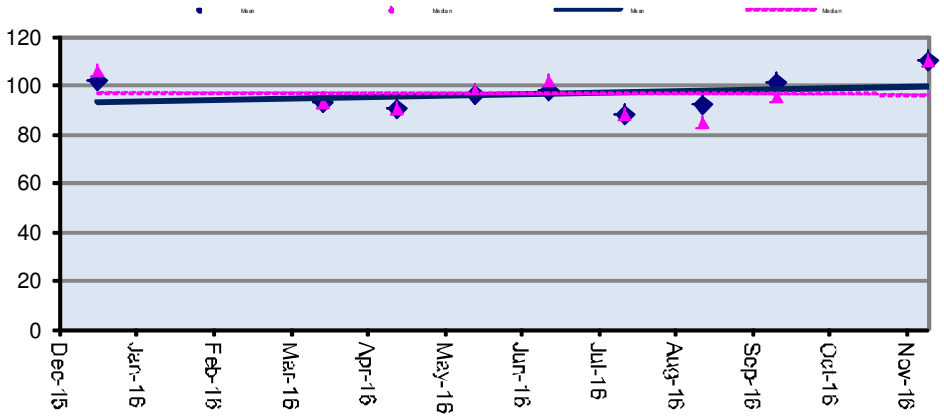
30	0
40	0
50	0
60	0
70	1
80	7
90	6
100	7
110	4
120	0
130	0
140	0

Median	**96**
AD	**9.56**
COD	**9.96**
Mean	**97**
SD	**11.52**
COV	**11.88**

Wtd Mean	**97**
GeoMean	**96**
PRD	**1.00**
95% Confidence	**4.52**

Number Of Sales **25**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	102	106	4
Apr-16	93	93	1
May-16	90	90	2
Jun-16	96	98	5
Jul-16	98	102	5
Aug-16	88	88	1
Sep-16	92	85	3
Oct-16	101	95	3
Dec-16	110	110	1

APAR	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	141	33	4N2W25-AD-01700	2016	8160	0.38	128,300	152,670	280,970	379,900	Sep-16	1	74
02	21	000	401	141	33	4N2W25-AD-01000	2016	5828	0.37	128,300	134,580	262,880	329,900	Jun-16	2	80
02	21	000	401	142	33	3N1W07-CB-00800	2016	4621	1.00	138,300	254,120	392,420	475,000	Jun-16	3	83
02	21	000	401	141	33	4N2W25-D0-02300	2016	3771	0.70	133,300	120,420	253,720	299,900	May-16	4	85
02	21	000	401	151	33	4N2W25-D0-01600	2016	5897	2.12	214,900	225,460	440,360	520,000	Jul-16	5	85
02	21	000	401	135	33	3N2W11-AD-00103	2016	9218	6.27	185,760	109,700	295,460	349,000	Oct-16	6	85
02	21	000	401	154	33	4N2W25-D0-01605	2016	6027	2.39	219,840	307,060	526,900	599,500	Jul-16	7	88
02	21	000	401	154	33	3N2W09-00-00603	2016	7185	10.00	245,500	416,260	661,760	750,000	Aug-16	8	88
02	21	000	401	126	33	3N2W24-C0-03900	2016	228	0.63	133,300	60,530	193,830	209,000	Jan-16	9	93
02	21	000	401	155	33	3N2W14-00-02105	2016	2660	5.00	238,000	456,830	694,830	750,000	Apr-16	10	93
02	21	000	401	153	33	4N2W25-C0-00602	2016	3245	1.96	209,540	228,530	438,070	459,000	May-16	11	95
02	21	000	401	142	30	3N2W24-C0-02600	2016	703	1.61	218,620	259,790	478,410	500,000	Jan-16	12	96
02	21	000	401	141	33	4N1W30-B0-01000	2016	8004	2.26	227,270	143,240	370,510	385,000	Sep-16	13	96
02	21	000	401	154	33	4N2W25-D0-01606	2016	5488	2.25	217,280	441,320	658,600	669,000	Jun-16	14	98
02	21	000	401	141	33	4N1W30-B0-01100	2016	5167	2.22	216,720	147,250	363,970	365,000	Jun-16	15	100
02	21	000	401	154	33	4N2W26-00-00600	2016	5767	5.01	247,900	279,500	527,400	515,000	Jul-16	16	102
02	21	000	401	133	33	4N2W28-DA-00100	2016	9510	3.44	180,400	83,590	263,990	254,900	Oct-16	17	104
02	21	000	401	131	33	4N2W35-CB-00501	2016	306	0.97	138,300	68,950	207,250	194,900	Jan-16	18	106
02	21	000	401	143	33	4N2W33-A0-00403	2016	6182	5.01	264,720	172,260	436,980	413,500	Jul-16	19	106

COLUMBIA County **2017** Ratio Study

APAR	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	141	33	3N2W17-00-00900	2016	8763	3.90	236,860	113,450	350,310	329,700	Sep-16	20	106
02	21	000	401	142	33	3N2W02-00-02901	2016	6285	3.40	260,320	267,610	527,930	495,000	Jul-16	21	107
02	21	000	401	165	33	4N2W25-D0-01612	2016	10651	2.00	212,500	604,100	816,600	744,700	Dec-16	22	110
02	21	000	401	141	33	4N2W34-A0-00400	2016	9225	1.37	165,780	143,870	309,650	275,000	Oct-16	23	113
02	21	000	401	141	33	4N1W30-C0-00700	2016	387	2.48	221,480	218,550	440,030	385,000	Jan-16	24	114
02	21	000	401	163	33	3N1W07-BC-00100	2016	5391	3.02	308,940	557,720	866,660	740,000	Jun-16	25	117

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	21	000		1	Scappoose
409	02	41	000		0	Sauvie Island
409	02	62	000		0	Scappoose

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	1				
Population - Number of Accounts	200				
Sales as a percentage of the Population	0.50 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	27,788,010		51.06 %	30,566,811	51.13 %
OSD RMV	10,508,380		19.31 %	10,508,380	17.58 %
Residential Improvement RMV	12,422,880		22.83 %	14,410,541	24.11 %
Farm Improvement RMV	3,699,580		6.80 %	4,291,513	7.18 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	110
OSD Adjustment Factor	100
Residential Adjustment Factor	116
Farm Improvement Factor	116
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

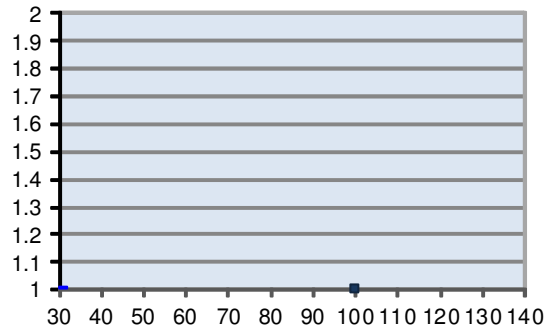
RMV 409: SA 21, SA 41, SA 62
Improved land - Manufactured Structure - Value Zone 1 (21), Sauvies Island (41) and Freeman Road (62) in Rural Scappoose. A single sale was identified in this study period, a sample too small to use as a determination of the current market. Therefore, it is recommended to apply the conclusion from the RMV Class 401 properties located in these study areas (96 ratio, 95 time adjustment).

Performance History

	2017	2016	2015	2014	2013
COD	0.00	5.56	12.19	13.45	10.38
PRD	1.00	1.00	1.02	1.02	1.03

COLUMBIA County **2017** Ratio Study

Frequency



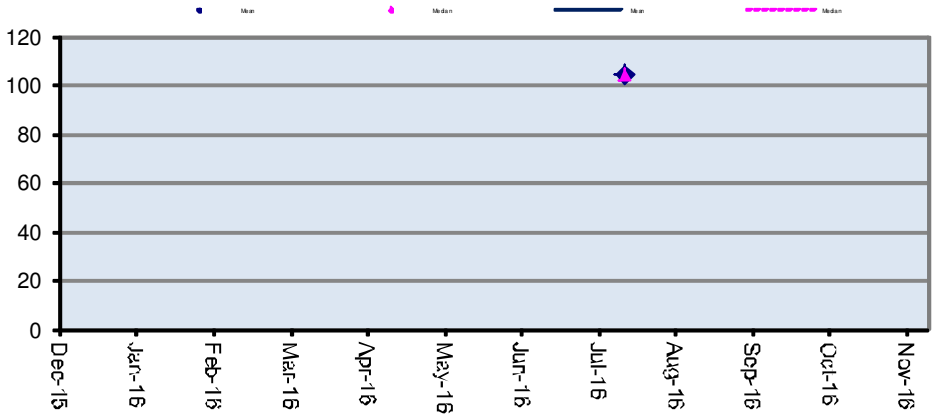
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	1
110	0
120	0
130	0
140	0

Median	**104**
AD	**0.00**
COD	**0.00**
Mean	**104**
SD	**1.00**
COV	**0.96**

Wtd Mean	**104**
GeoMean	**104**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Aug-16	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
02	21	000	409	472	33	4N2W27-CB-00100	2016	7697	8.16	227,170	131,510	358,680	345,000	Aug-16	1	104

COLUMBIA County **2017** Ratio Study

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

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

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	0			
Population - Number of Accounts	154			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	39,991,030	100.00 %	43,590,223	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	92
RMV Adjustment	100
Before Ratio	92
Overall Adjustment Factor	109
Land Adjustment Factor	109
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **92** **2017** **Adjustment** **109**

Explanation

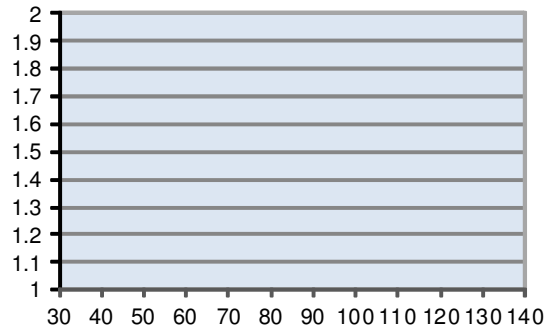
RMV 400: SA 22 & 23
Unimproved land – Value Zone 2 (22) & Value Zone 3 (23) in Rural Scappoose.
With having no sales available for this analysis of rural properties, it was decided to use the Selected Ratio of 92 from the conclusion of the RMV 401 study located in the same areas.

Performance History

	2017	2016	2015	2014	2013
COD		-	0.00	8.96	-
PRD		-	1.00	1.02	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

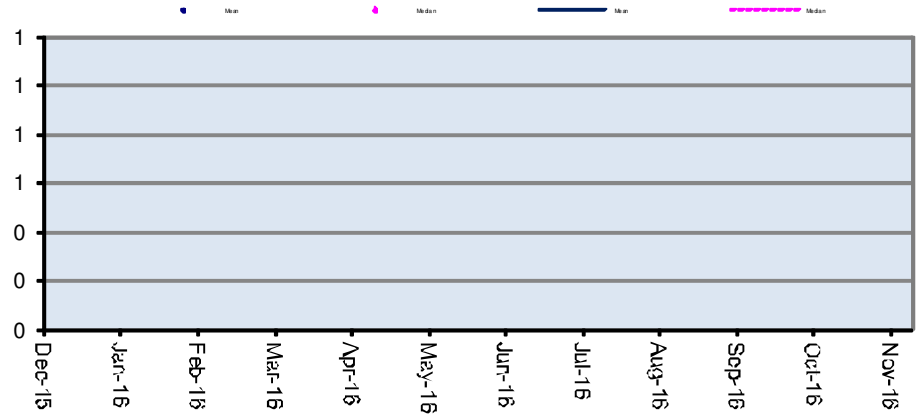
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	22	000		5	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	23	000		1	Scappoose

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	6				
Population - Number of Accounts	327				
Sales as a percentage of the Population	1.83 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	49,078,940		44.15 %	53,496,045	44.13 %
OSD RMV	14,901,640		13.41 %	14,901,640	12.29 %
Residential Improvement RMV	42,048,130		37.83 %	47,093,906	38.84 %
Farm Improvement RMV	5,129,810		4.61 %	5,745,387	4.74 %
SelectedRatioFromSales	92				
RMV Adjustment	100				
Before Ratio	92				
Overall Adjustment Factor	109				
Land Adjustment Factor	109				
OSD Adjustment Factor	100				
Residential Adjustment Factor	112				
Farm Improvement Factor	112				
After Ratio	100				

Selected Ratio **92** **2017** **Adjustment** **109**

Explanation

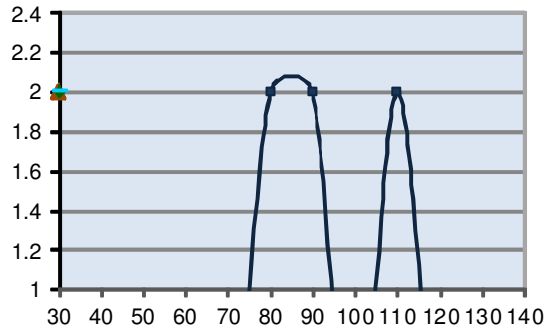
RMV 401: SA 22 & 23
Improved land – Value Zone 2 (22) & Value Zone 3 (23) in Rural Scappoose.
For this grouping of rural Scappoose properties, the Mean of 97 was selected (supported by the Weighted Mean and GeoMean) and then was adjusted by the time study conclusion of 95. This resulted in a Selected Ratio of 92 and an Overall Adjustment Factor of 109.

Performance History

	2017	2016	2015	2014	2013
COD	11.35	5.64	12.19	10.38	10.38
PRD	1.00	1.00	1.02	1.01	1.03

COLUMBIA County **2017** Ratio Study

Frequency



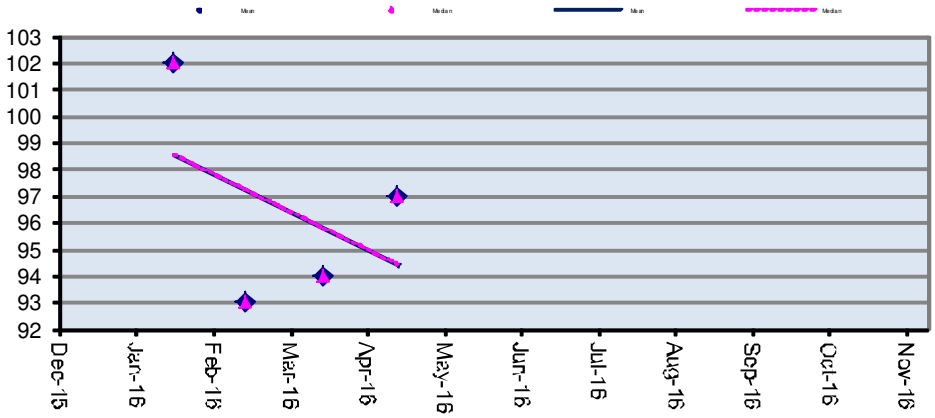
30	0
40	0
50	0
60	0
70	0
80	2
90	2
100	0
110	2
120	0
130	0
140	0

Median	**94**
AD	**10.67**
COD	**11.35**
Mean	**97**
SD	**13.27**
COV	**13.68**

Wtd Mean	**97**
GeoMean	**96**
PRD	**1.00**
95% Confidence	**10.62**

Number Of Sales **6**

Central Tendencies



Month	Mean	Median	Sales
Feb-16	102	102	2
Mar-16	93	93	1
Apr-16	94	94	1
May-16	97	97	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	22	000	401	143	33	4N2W18-00-00900	2016	3612	1.02	139,820	208,210	348,030	424,900	May-16	1	82
02	22	000	401	141	30	4N2W18-AA-00500	2016	1531	2.94	229,900	163,300	393,200	449,000	Feb-16	2	88
02	22	000	401	143	33	4N2W16-00-03301	2016	2237	2.56	222,950	158,800	381,750	410,000	Mar-16	3	93
02	22	000	401	153	33	4N2W16-00-03800	2016	2728	4.50	237,800	283,330	521,130	555,000	Apr-16	4	94
02	22	000	401	143	33	4N3W24-00-02702	2016	4366	6.61	223,030	167,230	390,260	350,000	May-16	5	112
02	23	000	401	144	33	4N2W07-00-00203	2016	847	10.37	245,890	238,380	484,270	420,000	Feb-16	6	115

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	22	000		4	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	23	000		0	Scappoose

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	4				
Population - Number of Accounts	143				
Sales as a percentage of the Population	2.80 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	23,014,170		53.52 %	23,244,312	53.47 %
OSD RMV	7,706,520		17.92 %	7,706,520	17.73 %
Residential Improvement RMV	9,633,800		22.41 %	9,826,476	22.60 %
Farm Improvement RMV	2,643,270		6.15 %	2,696,135	6.20 %
SelectedRatioFromSales	99				
RMV Adjustment	100				
Before Ratio	99				
Overall Adjustment Factor	101				
Land Adjustment Factor	101				
OSD Adjustment Factor	100				
Residential Adjustment Factor	102				
Farm Improvement Factor	102				
After Ratio	100				

Selected Ratio **99** **2017** **Adjustment** **101**

Explanation

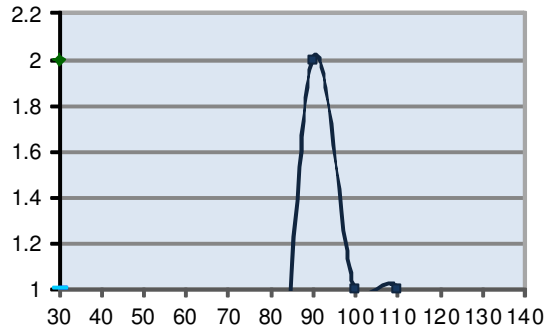
RMV 409: SA 22 & 23
Improved land - Manufactured Structure - Value Zone 2 (22) & Value Zone 3 (23) in Rural Scappoose.
The Mean, Weighted Mean and GeoMean with ratio indications of 104 have been selected as the best indicator for this group of rural properties improved with manufactured structures. After applying the time adjustment of 95, the Selected Ratio is 99.

Performance History

	2017	2016	2015	2014	2013
COD	5.83	5.94	12.19	13.45	10.38
PRD	1.00	0.99	1.02	1.02	1.03

COLUMBIA County **2017** Ratio Study

Frequency



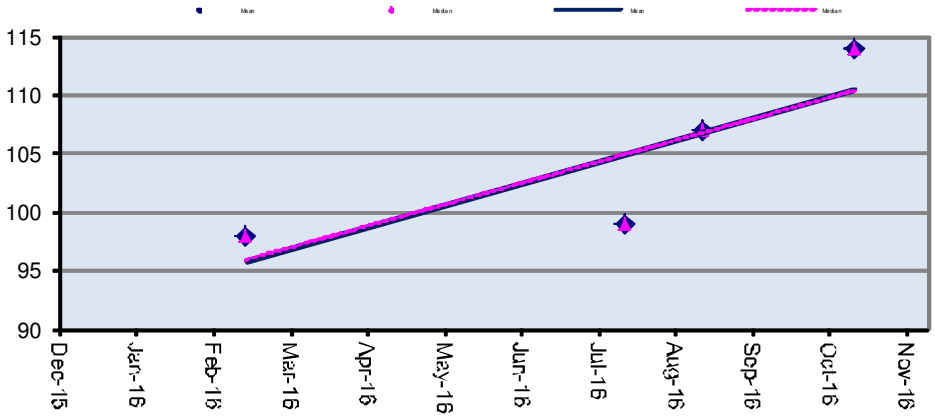
30	0
40	0
50	0
60	0
70	0
80	0
90	2
100	1
110	1
120	0
130	0
140	0

Median	**103**
AD	**6.00**
COD	**5.83**
Mean	**104**
SD	**7.53**
COV	**7.24**

Wtd Mean	**104**
GeoMean	**104**
PRD	**1.00**
95% Confidence	**7.38**

Number Of Sales **4**

Central Tendencies



Month	Mean	Median	Sales
Mar-16	98	98	1
Aug-16	99	99	1
Sep-16	107	107	1
Nov-16	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	22	000	409	473	33	4N2W17-D0-01002	2016	2076	2.00	196,800	111,600	308,400	314,500	Mar-16	1	98
02	22	000	409	452	33	4N3W24-00-01300	2016	7239	6.50	223,010	72,700	295,710	299,900	Aug-16	2	99
02	22	000	409	462	33	4N2W20-00-00106	2016	8840	4.50	201,340	134,560	335,900	315,000	Sep-16	3	107
02	22	000	409	452	33	4N2W18-D0-00200	2016	10407	5.80	240,810	95,240	336,050	294,000	Nov-16	4	114

COLUMBIA County **2017** Ratio Study

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

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	45	000		0	Sauvie Island

Adjustment Calculation Summary

Sample - Number of Sales	0	**RECALCULATED**		
Population - Number of Accounts	59			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	19,607,730	100.00 %	21,568,503	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	110
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

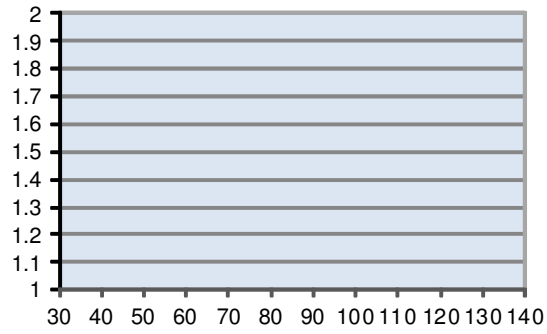
RMV 400: SA 25 & SA 45
Unimproved land – Dike land in Scappoose (SA 25) & Sauvies Island (45)
No sales information was available for this study. Therefore, the Median ratio of 96 and time adjustment of 95 from the undeveloped land study for MA 02 SA 21, SA 41 and SA 62 analysis was applied here, resulting in a Selected Ratio of 91.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	8.96	-
PRD		-	-	1.02	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

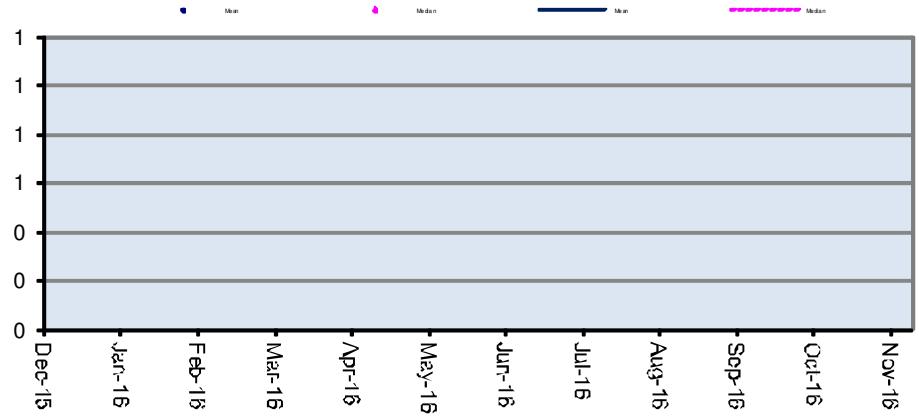
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	25	000		0	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	45	000		0	Sauvie Island

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	0			
Population - Number of Accounts	59			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	35,579,310	72.18 %	39,137,241	72.17 %
OSD RMV	2,228,880	4.52 %	2,228,880	4.11 %
Residential Improvement RMV	6,606,810	13.40 %	7,399,627	13.64 %
Farm Improvement RMV	4,878,680	9.90 %	5,464,122	10.08 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	110
OSD Adjustment Factor	100
Residential Adjustment Factor	112
Farm Improvement Factor	112
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

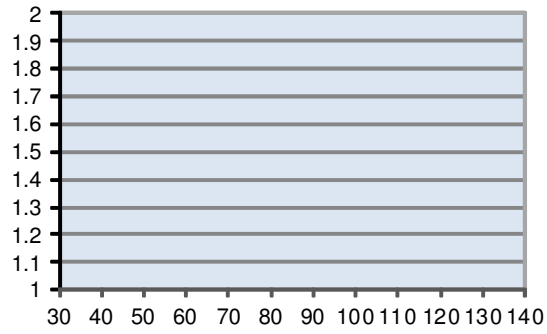
RMV 401: SA 25 & SA 45
Improved land – Dike land in Scappoose (SA 25) & Sauvies Island (45)
No Sales were identified in these areas for the study period. Therefore, the conclusion from the improved properties in the MA 02 SA 21, SA 41 and SA 62 analysis is recommended, with a Selected Ratio indicator of 91.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	-	10.38	10.38
PRD		1.00	-	1.01	1.03

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

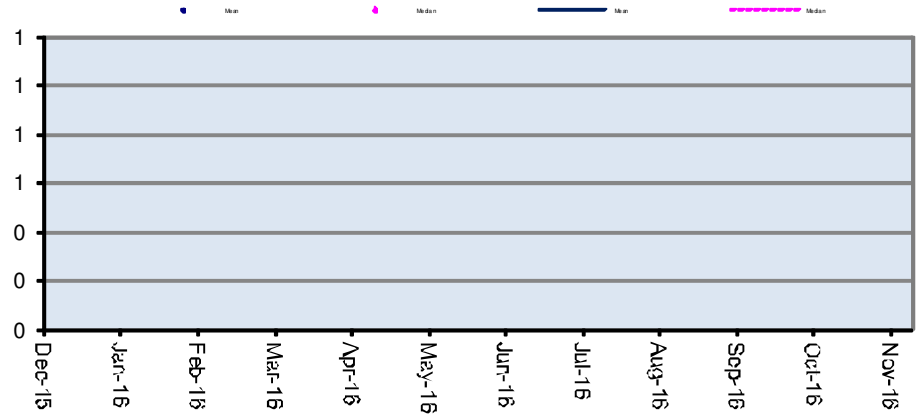
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

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

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

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	0			
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	3,138,770	86.46 %	3,452,647	86.46 %
OSD RMV	277,500	7.64 %	277,500	6.95 %
Residential Improvement RMV	66,430	1.83 %	81,709	2.05 %
Farm Improvement RMV	147,670	4.07 %	181,634	4.55 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	110
OSD Adjustment Factor	100
Residential Adjustment Factor	123
Farm Improvement Factor	123
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

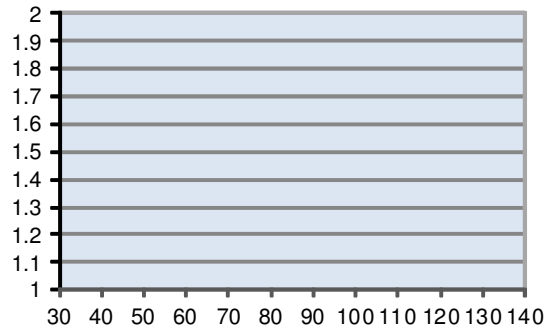
RMV 409: SA 25 & SA 45
Improved land – Manufactured Structure – Dike land in Scappoose (SA 25) & Sauvies Island (45)
Due to having no sales available for this study, it was decided to use the Median of 96 from the MA 02 SA 21, SA 41 and SA 62 rural property improved with manufactured structures study and was adjusted by the time study conclusion (95). The result is a Selected Ratio of 91 and an Overall Adjustment Factor of 110.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	13.45	10.38
PRD		-	-	1.02	1.03

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

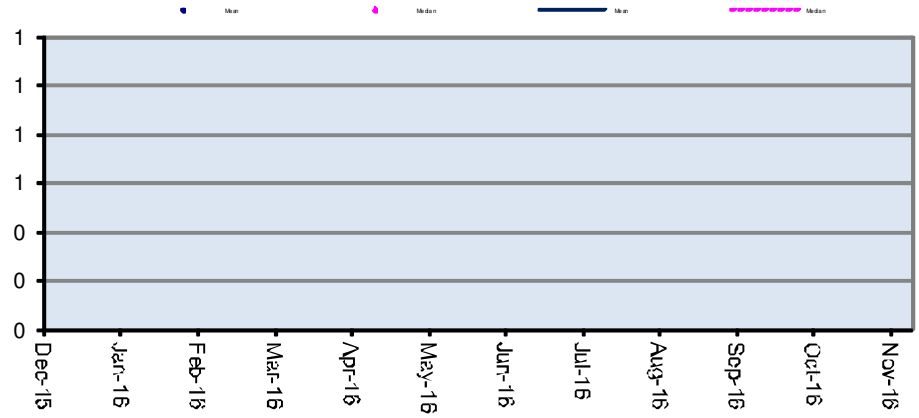
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	63	000		0	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	64	000		0	Scappoose

Adjustment Calculation Summary

Sample - Number of Sales	0	**RECALCULATED**		
Population - Number of Accounts	23			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	1,635,340	100.00 %	2,158,649	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	76
RMV Adjustment	100
Before Ratio	76
Overall Adjustment Factor	132
Land Adjustment Factor	132
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **76** **2017** **Adjustment** **132**

Explanation

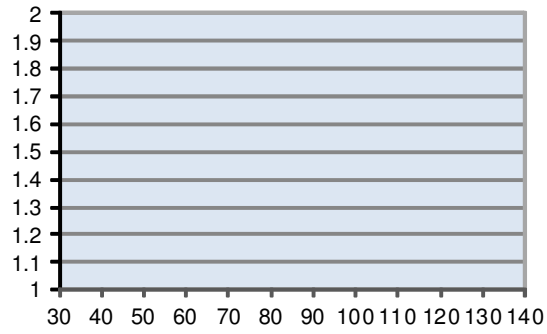
RMV 400: SA 63 & SA 64
Undeveloped land – Columbia Acres (63) & Hillcrest (64) in Rural Scappoose.
No Sales were identified in these areas for the study period. Therefore, the conclusion from the improved properties in these study areas is recommended, with a Selected Ratio of 76.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	0.00	8.96	-
PRD		1.00	1.00	1.02	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

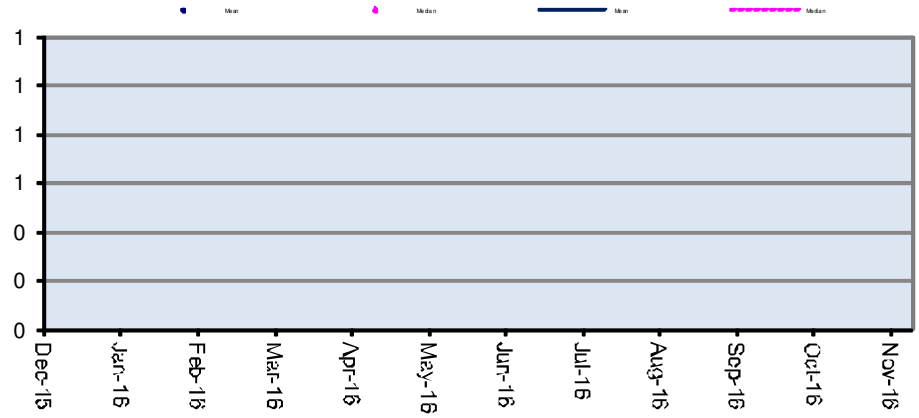
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	63	000		1	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	64	000		4	Scappoose

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	5				
Population - Number of Accounts	94				
Sales as a percentage of the Population	5.32 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	7,163,680		20.66 %	9,456,058	20.68 %
OSD RMV	4,457,010		12.85 %	4,457,010	9.75 %
Residential Improvement RMV	22,706,540		65.49 %	31,335,025	68.53 %
Farm Improvement RMV	344,670		0.99 %	475,645	1.04 %
SelectedRatioFromSales	76				
RMV Adjustment	100				
Before Ratio	76				
Overall Adjustment Factor	132				
Land Adjustment Factor	132				
OSD Adjustment Factor	100				
Residential Adjustment Factor	138				
Farm Improvement Factor	138				
After Ratio	100				

Selected Ratio **76** **2017** **Adjustment** **132**

Explanation

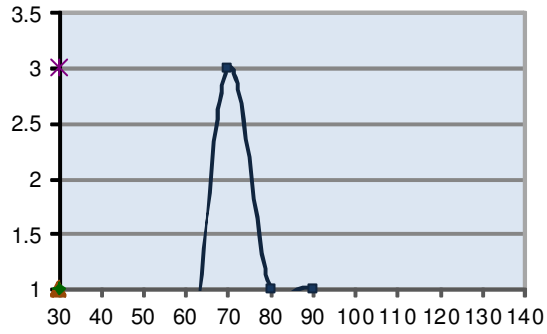
RMV 401: SA 63 & SA 64
Improved land – Columbia Acres (63) & Hillcrest (64) in Rural Scappoose.
The properties in this study area are in a highly desirable location since they are located South of the City of Scappoose and have easy access to Highway 30. A rural setting of mountain and territorial views with upscale homes makes this area unique. The selected central tendency is the Mean of 80 which is supported by the Weighted Mean (82) and the GeoMean (80). The time adjustment conclusion of 95 was then applied to the Mean. The Selected Ratio is 76.

Performance History

	2017	2016	2015	2014	2013
COD	6.33	13.44	12.19	10.38	10.38
PRD	0.98	1.02	1.02	1.01	1.03

COLUMBIA County **2017** Ratio Study

Frequency



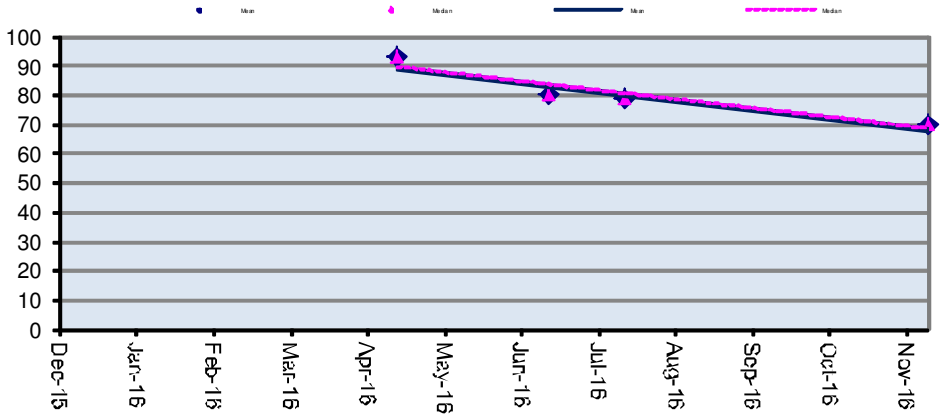
30	0
40	0
50	0
60	0
70	3
80	1
90	1
100	0
110	0
120	0
130	0
140	0

Median	**79**
AD	**5.00**
COD	**6.33**
Mean	**80**
SD	**8.23**
COV	**10.29**

Wtd Mean	**82**
GeoMean	**80**
PRD	**0.98**
95% Confidence	**7.21**

Number Of Sales **5**

Central Tendencies



Month	Mean	Median	Sales
May-16	93	93	1
Jul-16	80	80	1
Aug-16	79	79	2
Dec-16	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	64	000	401	154	33	3N2W22-AD-13300	2016	10849	0.57	128,300	275,700	404,000	578,698	Dec-16	1	70
02	63	000	401	143	33	3N2W24-AC-01500	2016	7011	0.38	128,300	127,850	256,150	323,500	Aug-16	2	79
02	64	000	401	156	33	3N2W22-AD-04900	2016	6782	1.12	147,240	464,860	612,100	775,000	Aug-16	3	79
02	64	000	401	155	33	3N2W22-DA-08700	2016	5995	0.89	138,300	283,980	422,280	530,900	Jul-16	4	80
02	64	000	401	166	33	3N2W22-AD-12200	2016	3714	1.40	177,820	755,460	933,280	1,005,000	May-16	5	93

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	64	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	77,800	34.35 %	102,696	40.86 %
OSD RMV	55,500	24.51 %	55,500	22.08 %
Residential Improvement RMV	93,160	41.14 %	93,160	37.06 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	76
RMV Adjustment	100
Before Ratio	76
Overall Adjustment Factor	132
Land Adjustment Factor	132
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **76** **2017** **Adjustment** **132**

Explanation

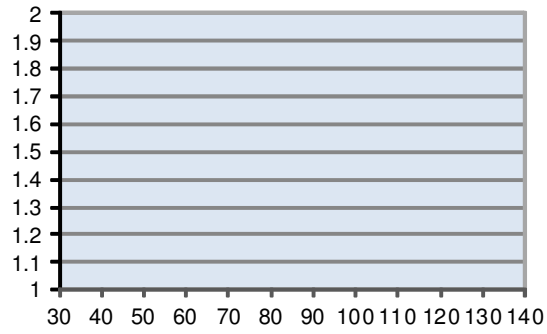
RMV 409: SA 64
Improved land - Manufactured Structure - Hillcrest (64) in Rural Scappoose.
Having no sales data available for this study with a population of 1 account, it was decided to implement the conclusion from the RMV Class 401 analysis and to apply an adjustment to the land only. There is not enough data available to warrant an adjustment to the improvements at this time.

Performance History

	2017	2016	2015	2014	2013
COD		5.56	12.19	13.45	10.38
PRD		1.00	1.02	1.02	1.03

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

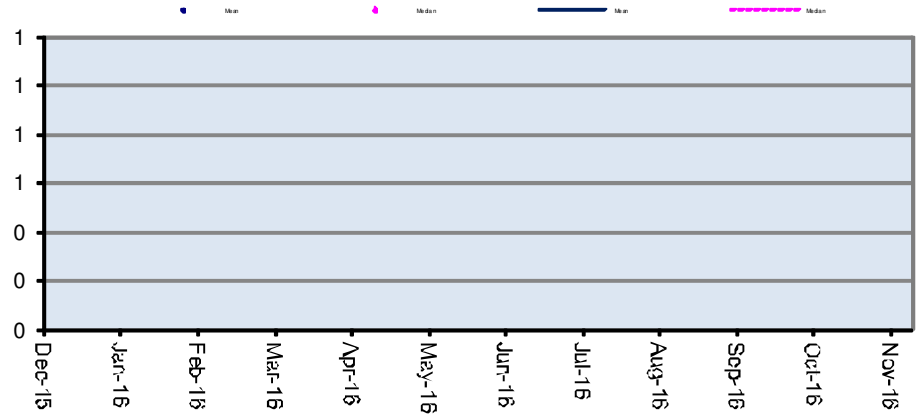
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

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

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

Adjustment Calculation Summary

		RECALCULATED		
Sample - Number of Sales	0			
Population - Number of Accounts	448			
Sales as a percentage of the Population	0.00 %	**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** **2017** **Adjustment** **100**

Explanation

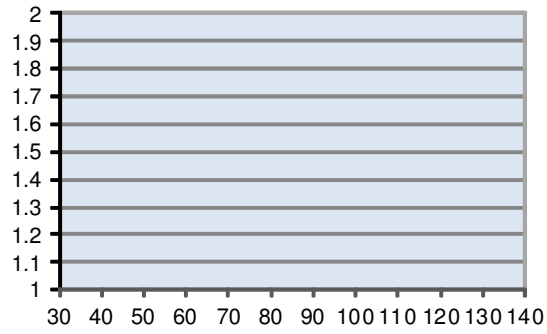
RMV 800 & RMV 890: SA 63 & SA 64
Undeveloped land – Columbia Acres (63) & Hillcrest (64), Rural Scappoose
These properties are very small vacant lots which can only be developed if they are combined or irrevocably bound. Generally, they are of minimal value until such time that they can be combined or irrevocably bound and then the RMV class is changed to 4XX. Because of the unique nature of these groupings and having no sales data available, it is recommended to make no adjustment at this time.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	-	-	-
PRD		1.00	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

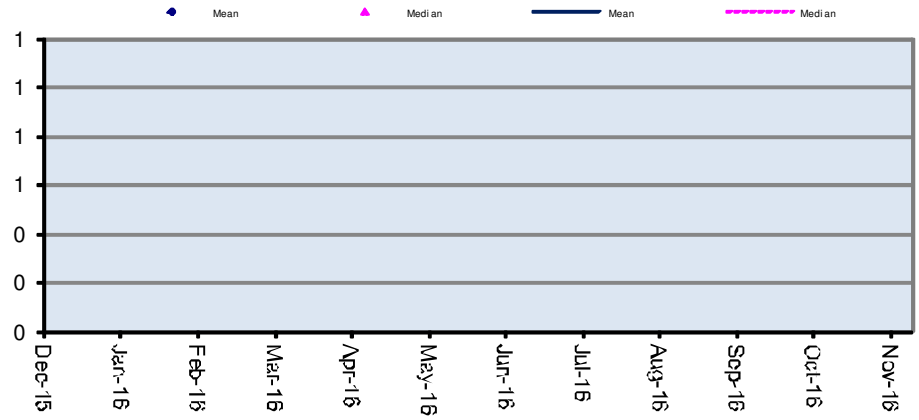
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



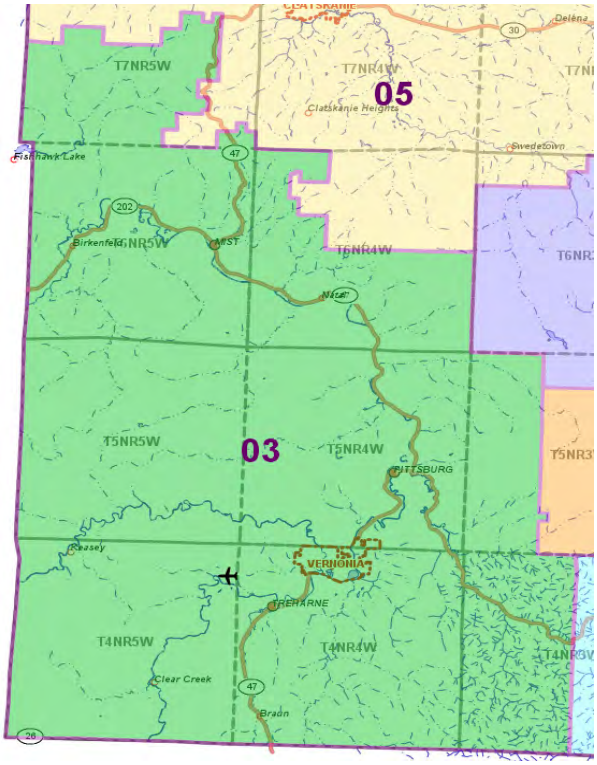
Month	Mean	Median	Sales

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

MAINTENANCE AREA 3

VERNONIA

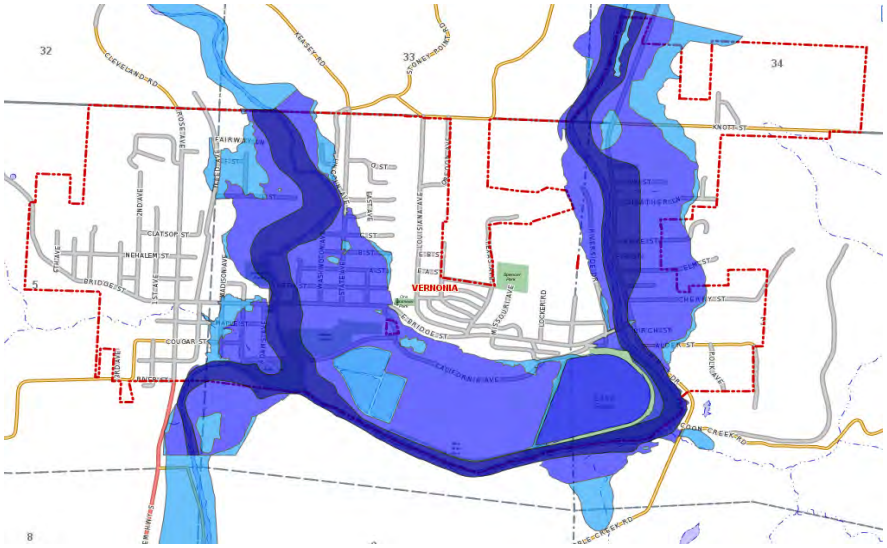
MA 03 - Vernonia



Homesteading of Vernonia (Maintenance 03) began in 1874 when settlers moved in from Washington County. The name “Vernonia” was derived from the daughter of one of the early settlers, her name was Vernona. In 1879, a dirt road was built connecting Vernonia with St. Helens which brought freight and mail between the two cities.

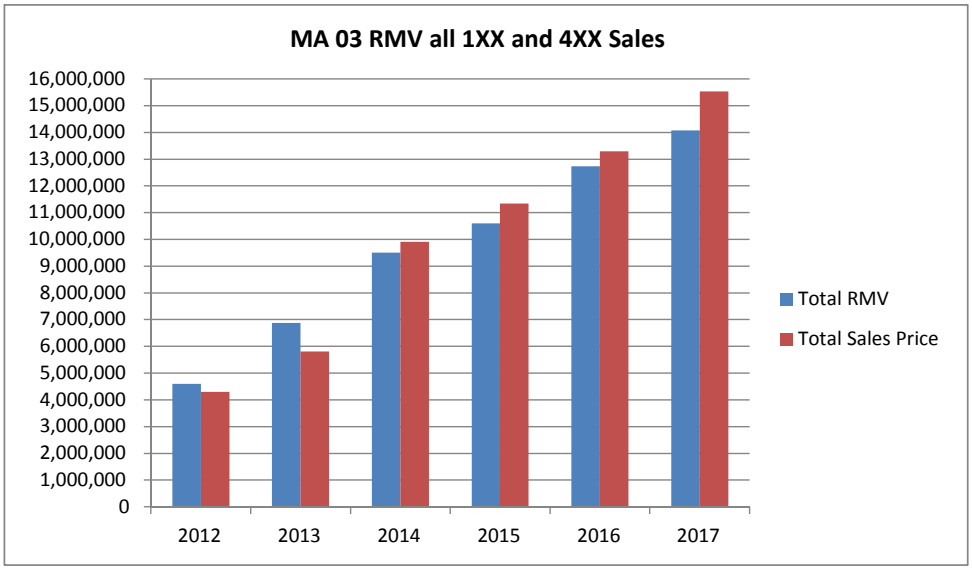
Around the 1920's, the largest saw mill in the world was built called the “Oregon-American Sawmill”. But the logging life was short lived and the mill was shut down in the 1950's. During this time, many settlers came from the South and with that they brought their southern traditions and segregation.

Devastating flooding has always been a part of Vernonia's history, with the first record flood occurring in 1894 and then the great flood hitting the following year in 1895 when Bunker Hill received 5 feet of snow. The next time a flood occurred and brought this extreme level of devastation was in February of 1996. The last major flood occurred in December of 2007 which damaged most of the residential properties located within the City (See map). It was at this time that many homes lying within the FEMA flood way were required to have their homes elevated in order to mitigate future flood damage. Those properties located in the FEMA floodway are in Study Area 03.

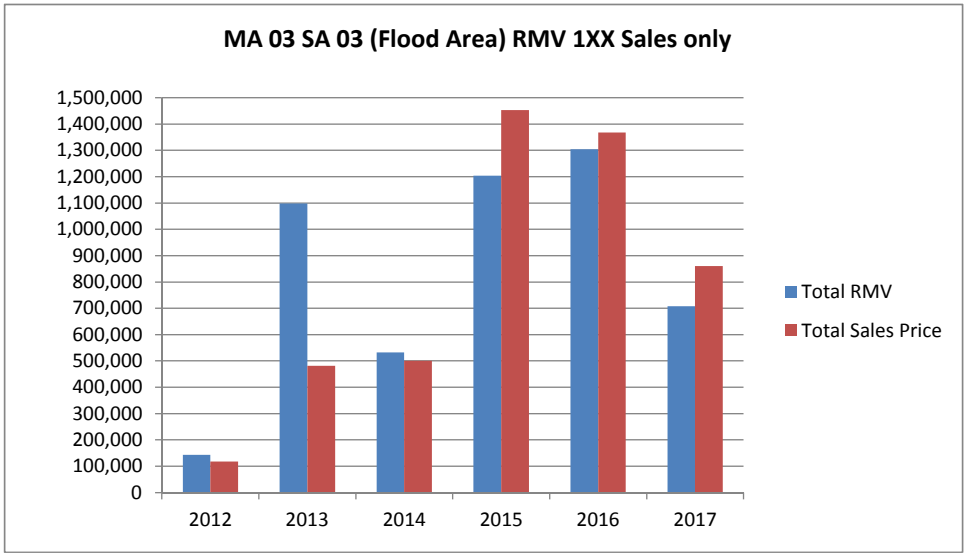


Vernonia is a quiet community located 45 miles northwest of Portland. Maintenance Area 03 is 248.01 square miles in size and the City of Vernonia is 1.61 square miles. The City and surrounding rural areas have several parks, a library, schools, police and fire services, government facilities, trails to hike, the Vernonia Lake, museums, small shops, restaurants, etc. Source: www.vernonia-or.gov

Vernonia comparison of usable sales over the past five years:



	Total Sales	Total RMV	Total Sales Price	Difference	Percent Difference
2012	30	4,593,840	4,293,957	-299,883	-6.98%
2013	32	6,876,300	5,813,733	-1,062,567	-18.28%
2014	55	9,504,190	9,907,154	402,964	4.07%
2015	67	10,600,840	11,341,840	741,000	6.53%
2016	70	12,738,250	13,296,202	557,952	4.20%
2017	77	14,069,940	15,526,880	1,456,940	9.38%



	Total Sales	Total RMV	Total Sales Price	Difference	Percent Difference
2012	1	142,510	118,000	-24,510	20.77%
2013	8	1,098,150	480,833	-617,317	-128.38%
2014	6	532,020	501,000	-31,020	6.19%
2015	10	1,204,380	1,453,100	248,720	17.12%
2016	10	1,304,420	1,368,303	63,883	4.67%
2017	5	708,170	860,900	152,730	17.74%

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	03	00	000		8	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	8	**RECALCULATED**		
Population - Number of Accounts	148			
Sales as a percentage of the Population	5.41 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	6,522,920	100.00 %	7,762,275	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	84			
RMV Adjustment	100			
Before Ratio	84			
Overall Adjustment Factor	119			
Land Adjustment Factor	119			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

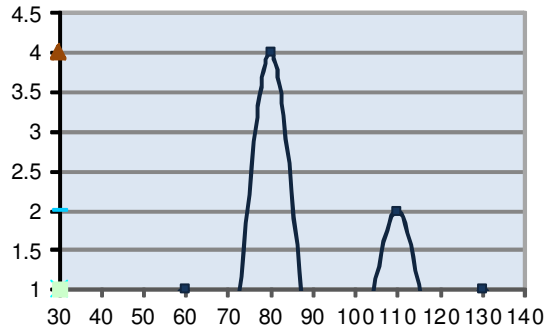
RMV 100: SA 00
Unimproved land, City of Vernonia
This study is comprised of undeveloped land located within the City of Vernonia. The Median of 88 was selected due the high and low ratios present in the sales array. This central tendency was also adjusted by the conclusion of 96 from the time study for residential properties. The result is a Selected Ratio of 84.

Performance History

	2017	2016	2015	2014	2013
COD	22.59	8.91	11.01	0.00	-
PRD	1.03	1.01	1.01	1.00	-

COLUMBIA County **2017** Ratio Study

Frequency



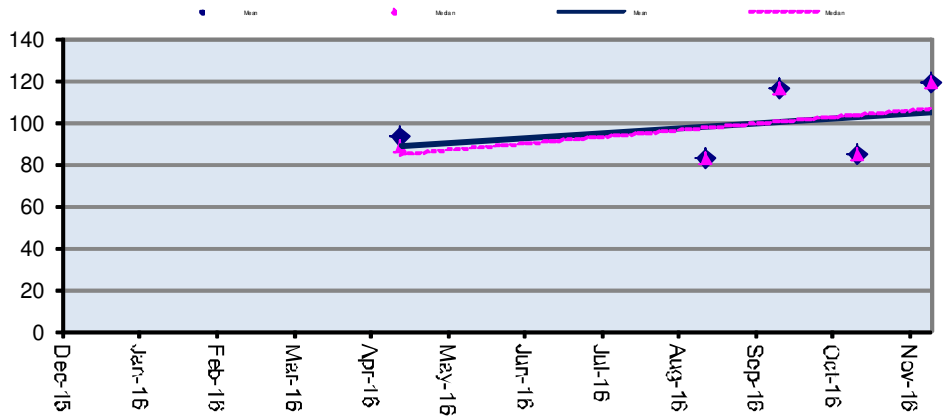
30	0
40	0
50	0
60	1
70	0
80	4
90	0
100	0
110	2
120	0
130	1
140	0

Median	**88**
AD	**19.88**
COD	**22.59**
Mean	**97**
SD	**24.01**
COV	**24.76**

Wtd Mean	**94**
GeoMean	**94**
PRD	**1.03**
95% Confidence	**16.64**

Number Of Sales **8**

Central Tendencies



Month	Mean	Median	Sales
May-16	93	88	4
Sep-16	83	83	1
Oct-16	116	116	1
Nov-16	84	84	1
Dec-16	119	119	1

APAR	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		33	4N4W04-AC-00400	2016	3755	1.38	27,660	0	27,660	45,000	May-16	1	61
03	00	000	100		30	4N4W05-AA-00900	2016	8680	1.06	26,620	0	26,620	32,000	Sep-16	2	83
03	00	000	100		30	4N4W05-AD-02201	2016	9819	0.37	63,060	0	63,060	75,000	Nov-16	3	84
03	00	000	100		30	4N4W04-BB-01000	2016	3676	0.23	35,020	0	35,020	40,000	May-16	4	88
03	00	000	100		30	4N4W04-BB-01406	2016	3674	0.23	35,020	0	35,020	40,000	May-16	5	88
03	00	000	100		33	4N4W03-BC-10304	2016	9451	0.46	69,580	0	69,580	60,000	Oct-16	6	116
03	00	000	100		33	4N4W05-AD-01301	2016	11292	0.34	43,340	0	43,340	36,500	Dec-16	7	119
03	00	000	100		33	4N4W04-AB-00401	2016	3114	0.21	33,610	0	33,610	25,000	May-16	8	134

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	03	00	000		27	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	27	**RECALCULATED**		
Population - Number of Accounts	502			
Sales as a percentage of the Population	5.38 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	18,111,290	24.74 %	21,552,435	24.74 %
OSD RMV	14,726,000	20.12 %	14,726,000	16.90 %
Residential Improvement RMV	39,314,570	53.71 %	49,536,358	56.85 %
Farm Improvement RMV	1,045,200	1.43 %	1,316,952	1.51 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	119
OSD Adjustment Factor	100
Residential Adjustment Factor	126
Farm Improvement Factor	126
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

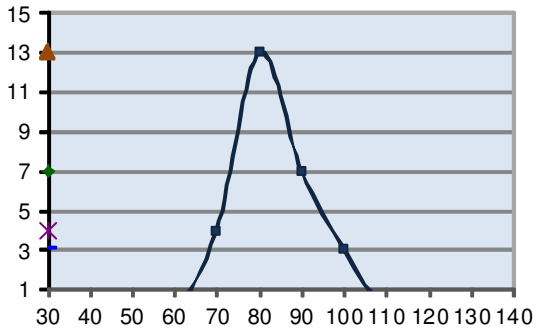
RMV 101: SA 00
Improved land, City of Vernonia
All improved properties in the City of Vernonia, located outside the flood way. This grouping of sales contains a sampling of ratios without any extreme highs or lows. Therefore, the Mean of 87 was selected as a clear indication of the market and the time adjustment of 96 was applied accordingly. After the resulting Selected Ratio was entered, the Overall Adjustment Factor returned a ratio of 119.

Performance History

	2017	2016	2015	2014	2013
COD	8.20	10.32	15.86	9.67	17.73
PRD	1.00	1.01	1.03	1.01	1.06

COLUMBIA County **2017** Ratio Study

Frequency



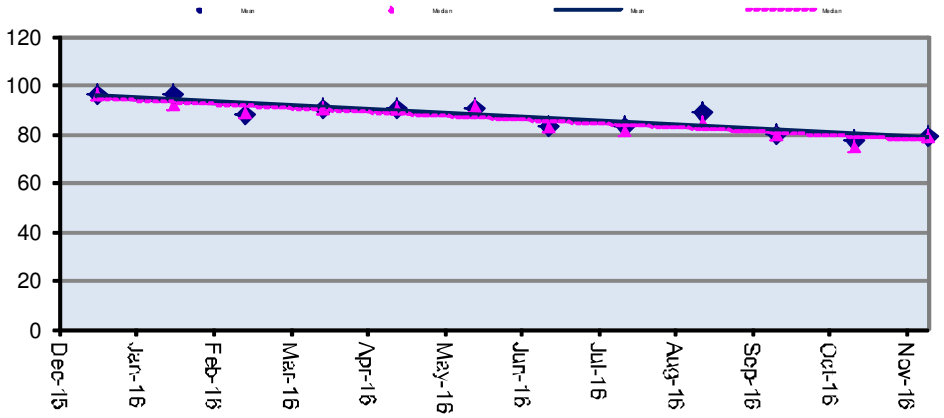
30	0
40	0
50	0
60	0
70	4
80	13
90	7
100	3
110	0
120	0
130	0
140	0

Median	**84**
AD	**6.89**
COD	**8.20**
Mean	**87**
SD	**8.29**
COV	**9.53**

Wtd Mean	**87**
GeoMean	**86**
PRD	**1.00**
95% Confidence	**3.13**

Number Of Sales **27**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	96	96	1
Feb-16	96	92	3
Mar-16	88	89	2
Apr-16	90	90	1
May-16	90	90	1
Jun-16	90	91	2
Jul-16	83	83	1
Aug-16	83	81	3
Sep-16	89	85	6
Oct-16	80	80	3
Nov-16	77	75	3
Dec-16	79	79	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
03	00	000	101	141	33	4N4W03-BC-09300	2016	9779	0.19	64,020	95,510	159,530	216,400	Nov-16	1	74
03	00	000	101	131	33	4N4W04-AD-05000	2016	10190	0.15	60,710	65,150	125,860	167,500	Nov-16	2	75
03	00	000	101	142	33	4N4W05-AC-01704	2016	9014	0.11	58,040	163,810	221,850	280,000	Oct-16	3	79
03	00	000	101	145	33	4N4W05-AA-00402	2016	10827	0.18	62,650	205,060	267,710	340,000	Dec-16	4	79
03	00	000	101	146	33	4N4W04-AC-04600	2016	840	0.26	70,050	173,560	243,610	306,000	Feb-16	5	80
03	00	000	101	132	33	4N4W05-AD-12000	2016	9317	0.23	67,520	53,390	120,910	151,000	Oct-16	6	80
03	00	000	101	131	33	4N4W04-DA-01500	2016	2234	0.13	59,520	55,580	115,100	142,000	Mar-16	7	81
03	00	000	101	132	33	4N4W04-DA-00900	2016	6767	0.17	68,210	93,050	161,260	200,000	Aug-16	8	81
03	00	000	101	135	33	4N4W05-AD-04200	2016	7299	0.22	67,520	82,430	149,950	185,700	Aug-16	9	81
03	00	000	101	131	33	4N4W05-AC-03902	2016	9531	0.11	58,040	68,340	126,380	153,700	Oct-16	10	82
03	00	000	101	131	33	4N4W04-AC-04800	2016	6315	0.15	60,330	42,530	102,860	124,000	Jul-16	11	83
03	00	000	101	135	33	4N4W05-AD-11500	2016	7691	0.11	58,040	89,540	147,580	177,000	Sep-16	12	83
03	00	000	101	143	33	4N4W04-BB-01404	2016	10130	0.23	67,520	211,560	279,080	334,500	Nov-16	13	83
03	00	000	101	141	33	4N4W04-BD-01601	2016	7995	0.18	63,320	120,000	183,320	219,500	Sep-16	14	84
03	00	000	101	142	33	4N4W04-AD-00800	2016	8142	0.20	64,490	124,890	189,380	226,500	Sep-16	15	84
03	00	000	101	141	33	4N4W04-BB-01406	2016	8547	0.23	67,520	153,940	221,460	258,700	Sep-16	16	86
03	00	000	101	131	33	4N4W04-AD-02800	2016	7496	0.19	63,440	61,960	125,400	142,800	Aug-16	17	88
03	00	000	101	141	33	4N4W05-AA-00400	2016	2856	0.20	64,970	175,830	240,800	267,100	Apr-16	18	90
03	00	000	101	141	33	4N4W04-BB-01407	2016	4340	0.23	67,520	164,540	232,060	259,000	May-16	19	90

COLUMBIA County **2017** Ratio Study

APAR	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	145	33	4N4W05-AA-00406	2016	4933	0.16	61,520	153,780	215,300	239,900	Jun-16	20	90
03	00	000	101	131	33	4N4W04-AC-04200	2016	5207	0.17	62,560	69,660	132,220	145,500	Jun-16	21	91
03	00	000	101	142	30	4N4W04-AC-06102	2016	441	0.22	66,630	131,190	197,820	205,000	Jan-16	22	96
03	00	000	101	131	33	4N4W05-AD-01802	2016	1744	0.12	58,080	117,870	175,950	184,000	Mar-16	23	96
03	00	000	101	143	33	4N4W05-AA-00404	2016	8017	0.53	91,140	144,620	235,760	242,000	Sep-16	24	97
03	00	000	101	141	33	4N4W04-AC-04300	2016	8052	0.19	64,160	131,870	196,030	195,000	Sep-16	25	101
03	00	000	101	142	33	4N4W05-AC-03601	2016	1141	0.14	60,120	177,350	237,470	229,900	Feb-16	26	103
03	00	000	101	142	33	4N4W05-AC-03604	2016	1323	0.14	60,140	177,350	237,490	229,000	Feb-16	27	104

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	03	00	000		5	Vernonia

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	5			
Population - Number of Accounts	81			
Sales as a percentage of the Population	6.17 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	2,990,640	27.35 %	3,110,266	27.32 %
OSD RMV	2,437,500	22.29 %	2,437,500	21.41 %
Residential Improvement RMV	5,281,360	48.30 %	5,598,242	49.17 %
Farm Improvement RMV	225,890	2.07 %	239,443	2.10 %
SelectedRatioFromSales	96			
RMV Adjustment	100			
Before Ratio	96			
Overall Adjustment Factor	104			
Land Adjustment Factor	104			
OSD Adjustment Factor	100			
Residential Adjustment Factor	106			
Farm Improvement Factor	106			
After Ratio	100			

Selected Ratio **96** **2017** **Adjustment** **104**

Explanation

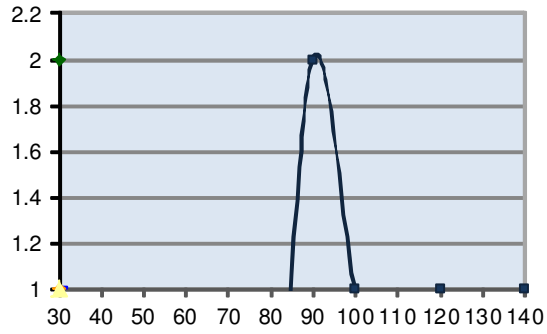
RMV 109: SA 00
Improved Land – Manufactured Structure, City of Vernonia
The Overall Adjustment Factor is 104 after selecting the Median of 100 and applying the time adjustment of 96 for this array of properties improved with manufactured structures within the city limits of Vernonia.

Performance History

	2017	2016	2015	2014	2013
COD	18.00	2.46	15.86	9.67	17.73
PRD	1.03	1.00	1.03	1.01	1.06

COLUMBIA County **2017** Ratio Study

Frequency



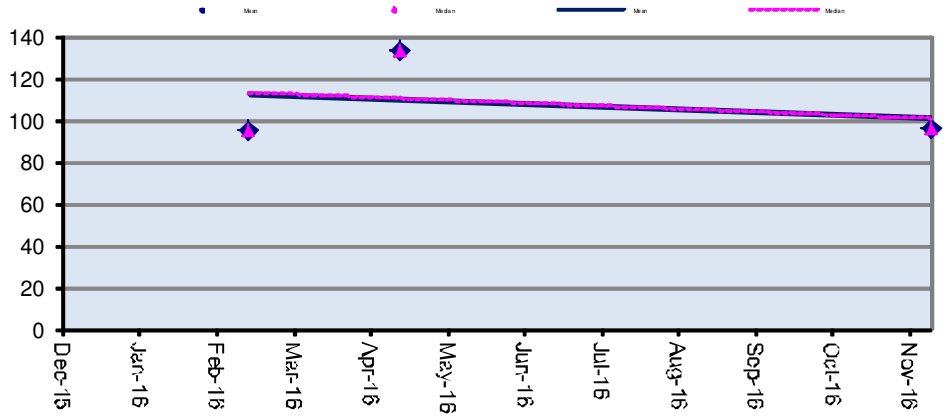
30	0
40	0
50	0
60	0
70	0
80	0
90	2
100	1
110	0
120	1
130	0
140	1

Median	**100**
AD	**18.00**
COD	**18.00**
Mean	**110**
SD	**22.05**
COV	**20.04**

Wtd Mean	**107**
GeoMean	**109**
PRD	**1.03**
95% Confidence	**19.32**

Number Of Sales **5**

Central Tendencies



Month	Mean	Median	Sales
Mar-16	95	95	1
May-16	133	133	2
Dec-16	96	96	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	109	452	33	4N4W05-DA-03402	2016	11147	0.19	64,080	63,900	127,980	140,650	Dec-16	1	91
03	00	000	109	452	33	4N4W05-AD-05101	2016	2148	0.14	60,210	70,760	130,970	138,000	Mar-16	2	95
03	00	000	109	463	33	4N4W04-AC-01801	2016	11297	0.23	67,520	85,410	152,930	152,500	Dec-16	3	100
03	00	000	109	452	33	4N4W04-AD-04701	2016	4363	0.11	58,040	83,470	141,510	115,000	May-16	4	123
03	00	000	109	452	33	4N4W03-BD-00701	2016	4398	0.19	63,820	57,360	121,180	85,000	May-16	5	143

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	0	**RECALCULATED**		
Population - Number of Accounts	89			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	2,036,540	100.00 %	2,484,579	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	82
RMV Adjustment	100
Before Ratio	82
Overall Adjustment Factor	122
Land Adjustment Factor	122
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **82** **2017** **Adjustment** **122**

Explanation

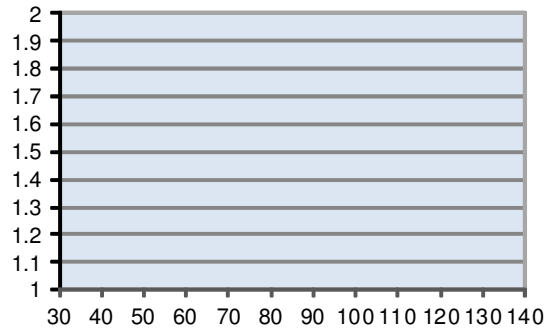
RMV 100: SA 03
Undeveloped land – located in the Floodway - City of Vernonia
There were no undeveloped land sales available for this analysis. Therefore, the conclusion from the residential improved property study (RMV 101) which is located in the same area has been applied here.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	12.81	-
PRD		-	-	1.06	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

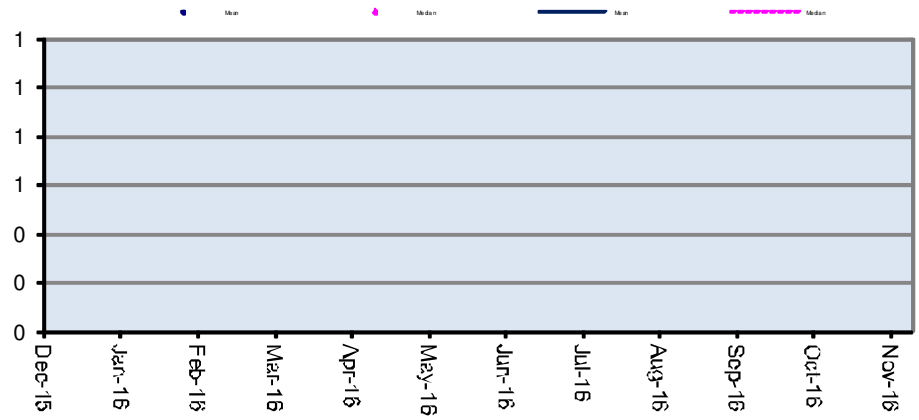
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	5	**RECALCULATED**		
Population - Number of Accounts	291			
Sales as a percentage of the Population	1.72 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	6,404,390	21.79 %	7,813,356	21.78 %
OSD RMV	7,631,940	25.97 %	7,631,940	21.28 %
Residential Improvement RMV	14,697,070	50.01 %	19,547,103	54.50 %
Farm Improvement RMV	657,650	2.24 %	874,675	2.44 %

SelectedRatioFromSales	82
RMV Adjustment	100
Before Ratio	82
Overall Adjustment Factor	122
Land Adjustment Factor	122
OSD Adjustment Factor	100
Residential Adjustment Factor	133
Farm Improvement Factor	133
After Ratio	100

Selected Ratio **82** **2017** **Adjustment** **122**

Explanation

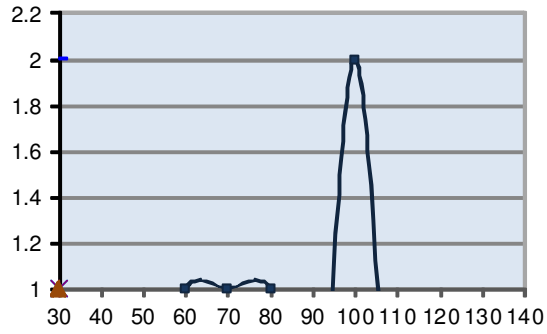
RMV 101: SA 03
Improved land – located in the Floodway - City of Vernonia
This study area is for those improved properties located within the designated FEMA Floodway in the City of Vernonia. For this analysis, the Mean (85) was selected and adjusted by 96 (the conclusion from the time study). The Selected Ratio is 82.

Performance History

	2017	2016	2015	2014	2013
COD	17.78	8.87	15.71	12.81	31.21
PRD	1.04	0.99	1.05	1.06	1.32

COLUMBIA County **2017** Ratio Study

Frequency



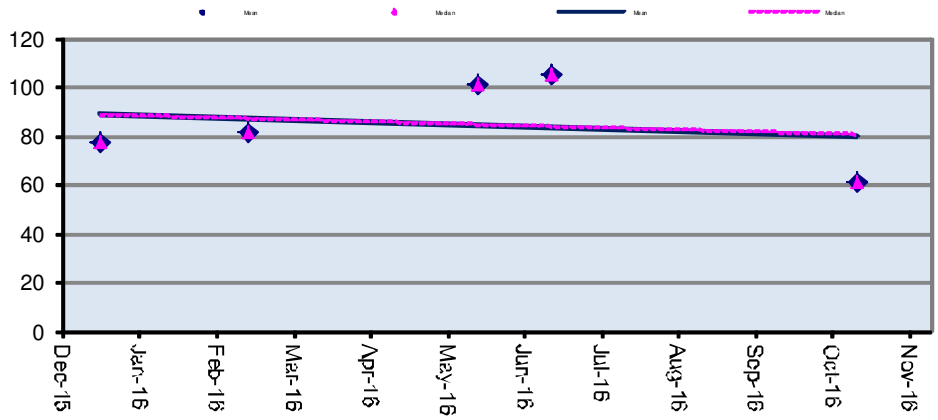
30	0
40	0
50	0
60	1
70	1
80	1
90	0
100	2
110	0
120	0
130	0
140	0

Median	**81**
AD	**14.40**
COD	**17.78**
Mean	**85**
SD	**18.11**
COV	**21.31**

Wtd Mean	**82**
GeoMean	**83**
PRD	**1.04**
95% Confidence	**15.87**

Number Of Sales **5**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	77	77	1
Mar-16	81	81	1
Jun-16	101	101	1
Jul-16	105	105	1
Nov-16	61	61	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	135	33	4N4W04-CB-03900	2016	10045	0.14	49,910	80,430	130,340	214,000	Nov-16	1	61
03	03	000	101	143	33	4N4W03-BA-01019	2016	650	0.21	55,040	81,930	136,970	179,000	Jan-16	2	77
03	03	000	101	143	33	4N4W04-CB-06600	2016	1786	0.17	51,780	99,800	151,580	187,900	Mar-16	3	81
03	03	000	101	131	30	4N4W03-BC-07300	2016	5483	0.51	80,140	51,780	131,920	130,000	Jun-16	4	101
03	03	000	101	143	33	4N4W03-BB-06700	2016	6724	0.57	85,640	71,720	157,360	150,000	Jul-16	5	105

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	03	03	000		0	Vernonia

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	0			
Population - Number of Accounts	50			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	1,497,060	26.25 %	1,826,413	26.20 %
OSD RMV	1,365,000	23.93 %	1,365,000	19.58 %
Residential Improvement RMV	2,567,300	45.02 %	3,414,509	48.99 %
Farm Improvement RMV	273,800	4.80 %	364,154	5.22 %

SelectedRatioFromSales	82
RMV Adjustment	100
Before Ratio	82
Overall Adjustment Factor	122
Land Adjustment Factor	122
OSD Adjustment Factor	100
Residential Adjustment Factor	133
Farm Improvement Factor	133
After Ratio	100

Selected Ratio **82** **2017** **Adjustment** **122**

Explanation

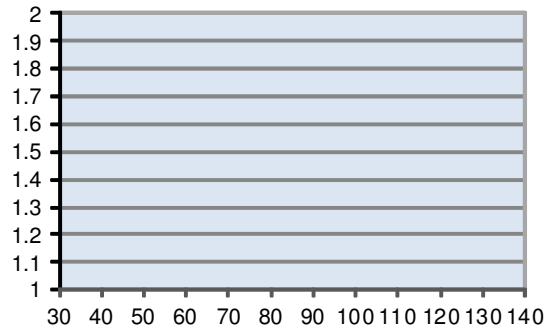
RMV 109 SA 03
Improved land – located in the Floodway, Manufactured Structure - City of Vernonia
No "good" sales were available in this area. Therefore, the conclusion from the improved properties in these study area is recommended, with a ratio indicator of 85 and a time adjustment of 96. The Selected Ratio is 82.

Performance History

	2017	2016	2015	2014	2013
COD		15.38	15.71	12.81	31.21
PRD		0.99	1.05	1.06	1.32

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

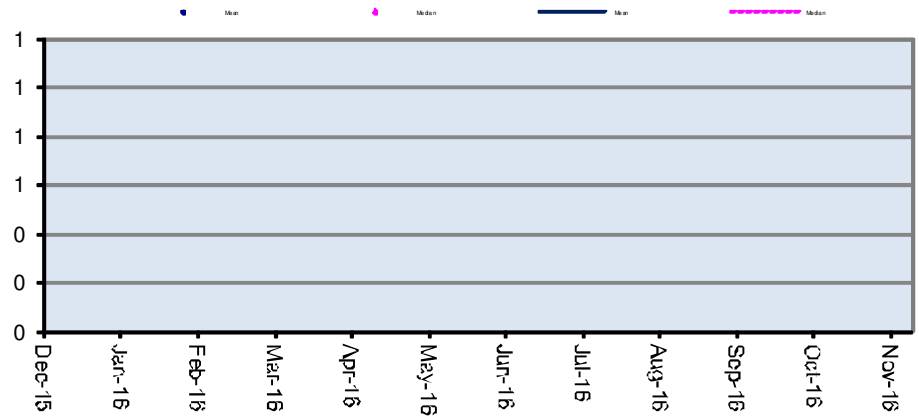
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	03	38	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	2			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	92,630	100.00 %	90,777	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	102			
RMV Adjustment	100			
Before Ratio	102			
Overall Adjustment Factor	98			
Land Adjustment Factor	98			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **102** **2017** **Adjustment** **98**

Explanation

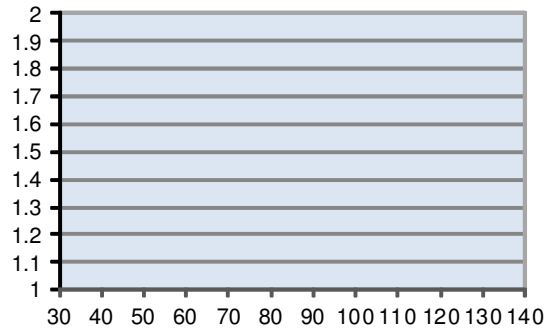
RMV 100: SA 38
Unimproved land - Roseview Heights, City of Vernonia
Due to having no bare land sales available, it was decided to use the selected ratio of 102 from the Roseview Heights improved study.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	-
PRD		-	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

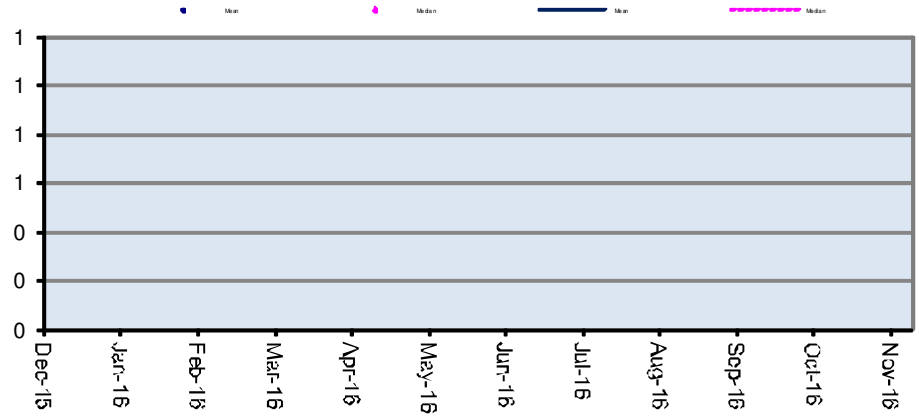
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

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

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	2			
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	1,101,060	31.58 %	1,079,039	31.61 %
OSD RMV	682,500	19.58 %	682,500	20.00 %
Residential Improvement RMV	1,700,880	48.79 %	1,649,854	48.34 %
Farm Improvement RMV	2,020	0.06 %	1,959	0.06 %

SelectedRatioFromSales	102
RMV Adjustment	100
Before Ratio	102
Overall Adjustment Factor	98
Land Adjustment Factor	98
OSD Adjustment Factor	100
Residential Adjustment Factor	97
Farm Improvement Factor	97
After Ratio	100

Selected Ratio **102** **2017** **Adjustment** **98**

Explanation

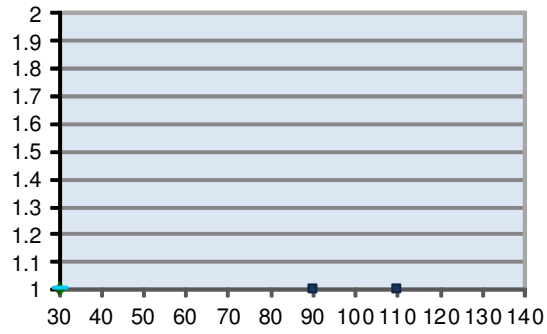
RMV 109: SA 38
Improved land - Roseview Heights, City of Vernonia
This area is a small subdivision located within the City of Vernonia which is comprised of manufactured structures and various accessory items/buildings. The Median of 106 was selected and is supported by the Median and GeoMean. The time adjustment conclusion (96) was then applied to the Median. This returns a Selected Ratio of 102.

Performance History

	2017	2016	2015	2014	2013
COD	8.02	8.33	0.00	9.32	17.73
PRD	0.99	1.01	1.00	1.02	1.06

COLUMBIA County **2017** Ratio Study

Frequency



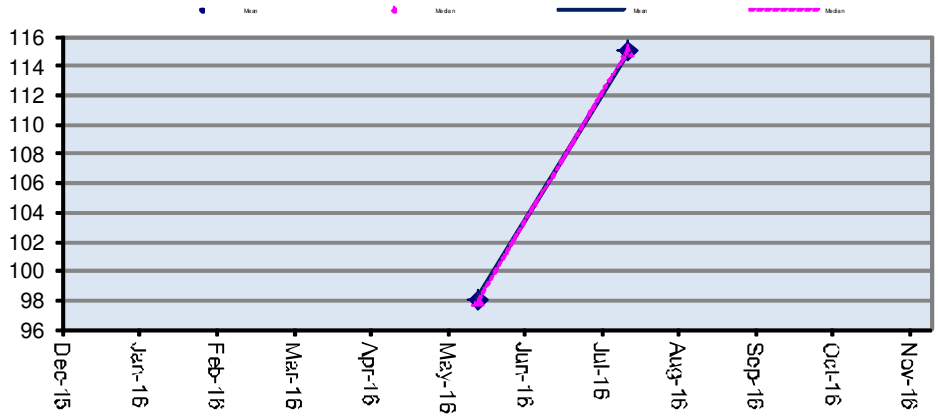
30	0
40	0
50	0
60	0
70	0
80	0
90	1
100	0
110	1
120	0
130	0
140	0

Median	**106**
AD	**8.50**
COD	**8.02**
Mean	**106**
SD	**12.04**
COV	**11.36**

Wtd Mean	**107**
GeoMean	**106**
PRD	**0.99**
95% Confidence	**16.69**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Jun-16	98	98	1
Aug-16	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	452	33	4N4W05-AA-00304	2016	5212	0.43	83,970	48,800	132,770	135,500	Jun-16	1	98
03	38	000	109	463	33	4N4W05-AA-00307	2016	7176	0.48	87,660	101,070	188,730	164,500	Aug-16	2	115

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	03	39	000		1	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	1	**RECALCULATED**		
Population - Number of Accounts	14			
Sales as a percentage of the Population	7.14 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	571,420	20.07 %	679,990	20.05 %
OSD RMV	455,000	15.98 %	455,000	13.41 %
Residential Improvement RMV	1,804,110	63.38 %	2,237,096	65.95 %
Farm Improvement RMV	16,130	0.57 %	20,001	0.59 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	119
OSD Adjustment Factor	100
Residential Adjustment Factor	124
Farm Improvement Factor	124
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

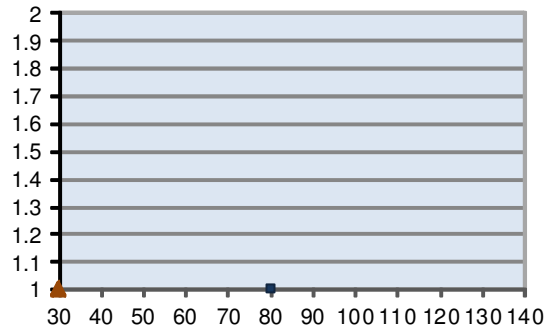
RMV 101: SA 39
Improved land – Heather Park, City of Vernonia
A single sale was identified in this study period which is too small of a sample to be used as a determination of the current market. Therefore it is recommended that the conclusion from the improved properties in the City of Vernonia, SA 00 be applied here (Mean 87; time adjustment 96 = Selected Ratio of 84).

Performance History

	2017	2016	2015	2014	2013
COD	0.00	2.24	15.86	9.67	17.73
PRD	1.00	1.00	1.03	1.01	1.06

COLUMBIA County **2017** Ratio Study

Frequency



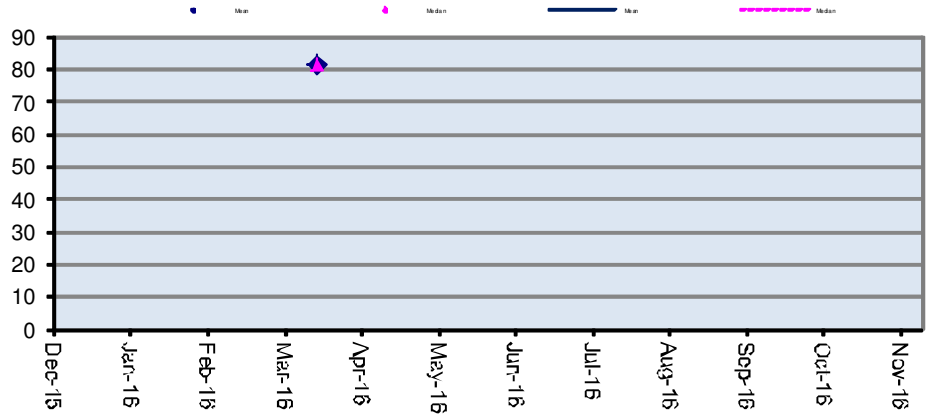
30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	0
120	0
130	0
140	0

Median	**81**
AD	**0.00**
COD	**0.00**
Mean	**81**
SD	**1.00**
COV	**1.23**

Wtd Mean	**81**
GeoMean	**81**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Apr-16	81	81	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
03	39	000	101	143	33	4N4W03-BA-01005	2016	3691	0.17	62,260	127,270	189,530	235,000	Apr-16	1	81

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	03	40	000		0	Vernonia

Adjustment Calculation Summary

			RECALCULATED	
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	258,010	20.56 %	307,032	20.59 %
OSD RMV	392,000	31.24 %	392,000	26.29 %
Residential Improvement RMV	601,840	47.97 %	788,410	52.87 %
Farm Improvement RMV	2,810	0.22 %	3,681	0.25 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	119
OSD Adjustment Factor	100
Residential Adjustment Factor	131
Farm Improvement Factor	131
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

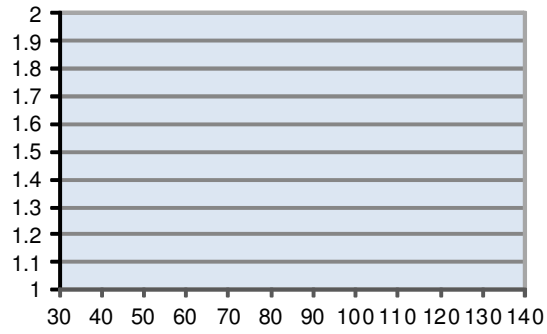
RMV 101: SA 40
Improved land – Duplex/Triplex/Fourplex, City of Vernonia
With having no sales data available for this study, the Selected Ratio of 84 from the analysis of improved properties in the general area of the City of Vernonia was deemed appropriate to apply here.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	-	9.67	17.73
PRD		1.00	-	1.01	1.06

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

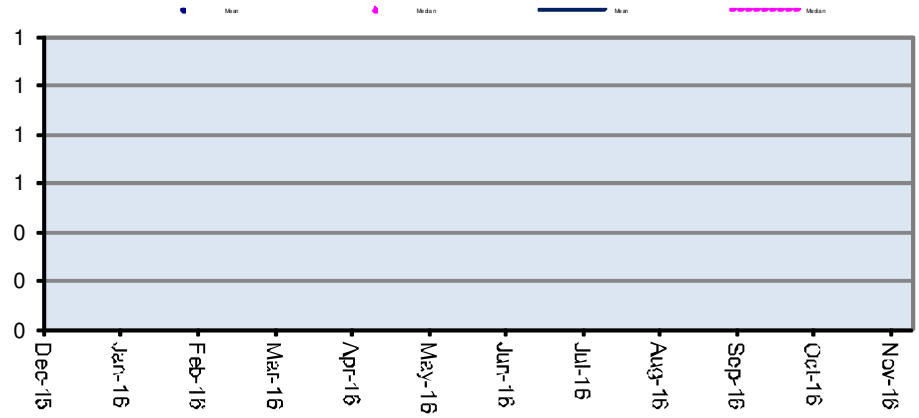
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

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	578			
Sales as a percentage of the Population	0.35 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	142,204,700	100.00 %	163,535,405	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** **2017** **Adjustment** **115**

Explanation

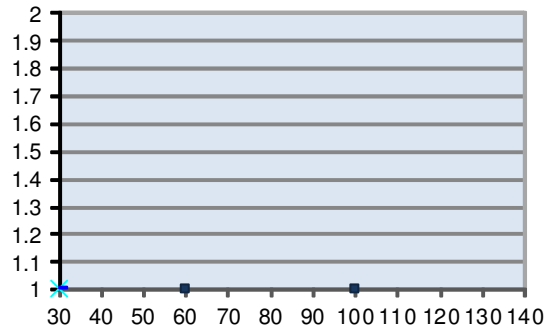
RMV 400: SA 31
Undeveloped land – Value Zone 1 (31) in Rural Vernonia.
Only two "Good" sales were available for analysis for the study period. These sales did not present a clear picture of the market. Therefore, the conclusion from the improved properties is applied here (Selected Ratio of 87).

Performance History

	2017	2016	2015	2014	2013
COD	25.00	8.93	15.51	13.40	-
PRD	0.87	1.02	1.04	0.97	-

COLUMBIA County **2017** Ratio Study

Frequency



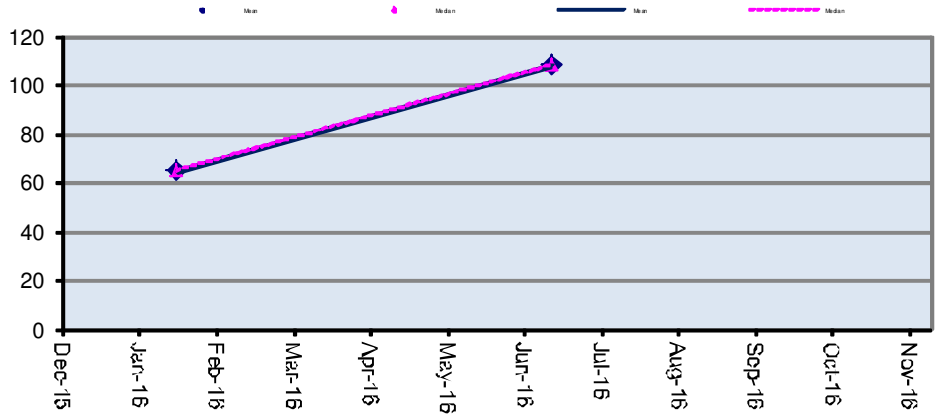
30	0
40	0
50	0
60	1
70	0
80	0
90	0
100	1
110	0
120	0
130	0
140	0

Median	**86**
AD	**21.50**
COD	**25.00**
Mean	**86**
SD	**30.41**
COV	**35.36**

Wtd Mean	**99**
GeoMean	**84**
PRD	**0.87**
95% Confidence	**42.15**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Feb-16	65	65	1
Jul-16	108	108	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
03	31	000	400		33	4N4W08-AD-00700	2016	1022	1.17	29,200	0	29,200	45,000	Feb-16	1	65
03	31	000	400		33	4N4W09-00-01000	2016	6531	38.46	197,960	0	197,960	184,000	Jul-16	2	108

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	10	**RECALCULATED**		
Population - Number of Accounts	706			
Sales as a percentage of the Population	1.42 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	70,886,640	38.83 %	81,519,636	38.90 %
OSD RMV	29,698,050	16.27 %	29,698,050	14.17 %
Residential Improvement RMV	68,601,760	37.58 %	82,322,112	39.28 %
Farm Improvement RMV	13,373,910	7.33 %	16,048,692	7.66 %

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** **2017** **Adjustment** **115**

Explanation

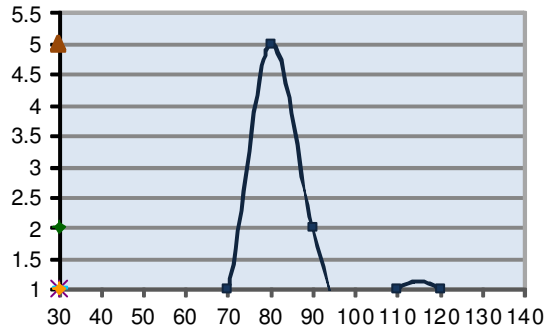
RMV 401: SA 31
Improved land – Value Zone 1 (31) in Rural Vernonia.
For this study of developed property located throughout Rural Vernonia, 10 “good” sales are available for analysis. The Mean of 92 was selected as the best indicator of the market and was then adjusted by the conclusion from the time study (95). As a result, the Selected Ratio is 87.

Performance History

	2017	2016	2015	2014	2013
COD	12.73	7.16	18.26	12.88	13.10
PRD	1.01	1.00	1.06	1.01	1.01

COLUMBIA County **2017** Ratio Study

Frequency



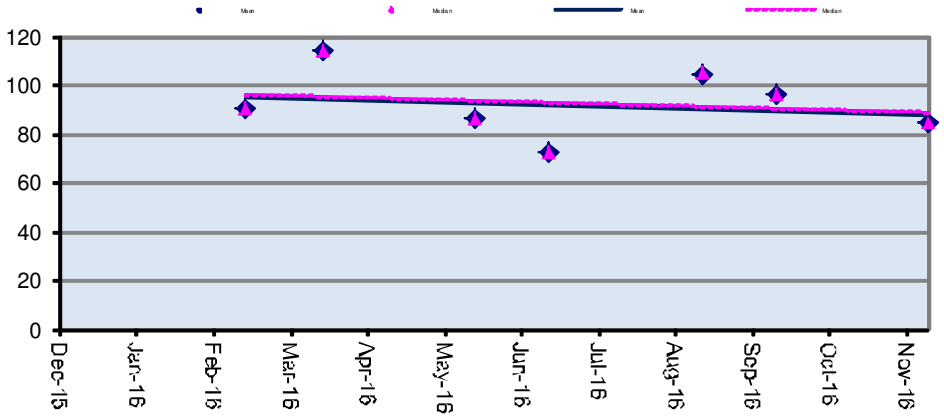
30	0
40	0
50	0
60	0
70	1
80	5
90	2
100	0
110	1
120	1
130	0
140	0

Median	**88**
AD	**11.20**
COD	**12.73**
Mean	**92**
SD	**15.33**
COV	**16.67**

Wtd Mean	**91**
GeoMean	**91**
PRD	**1.01**
95% Confidence	**9.50**

Number Of Sales **10**

Central Tendencies



Month	Mean	Median	Sales
Mar-16	90	90	1
Apr-16	114	114	1
Jun-16	86	86	2
Jul-16	72	72	1
Sep-16	104	105	2
Oct-16	96	96	1
Dec-16	85	85	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	31	000	401	135	33	4N4W07-D0-00502	2016	5959	4.17	142,530	76,240	218,770	304,000	Jul-16	1	72
03	31	000	401	153	33	4N4W00-00-02101	2016	10560	2.75	121,670	230,480	352,150	436,900	Dec-16	2	81
03	31	000	401	143	33	4N4W31-00-00104	2016	5058	21.13	180,470	252,120	432,590	510,000	Jun-16	3	85
03	31	000	401	144	33	5N4W28-00-00901	2016	5397	3.44	132,610	142,520	275,130	320,000	Jun-16	4	86
03	31	000	401	145	33	4N4W18-00-00400	2016	8007	9.25	166,870	263,400	430,270	500,000	Sep-16	5	86
03	31	000	401	143	33	6N5W24-00-00900	2016	11076	2.56	118,190	186,490	304,680	342,437	Dec-16	6	89
03	31	000	401	141	33	4N4W03-BA-01006	2016	1626	0.58	81,000	110,260	191,260	212,100	Mar-16	7	90
03	31	000	401	144	33	5N4W03-00-00700	2016	9246	3.32	101,730	270,710	372,440	389,900	Oct-16	8	96
03	31	000	401	141	30	4N5W12-00-00300	2016	2723	18.39	174,020	310,860	484,880	424,843	Apr-16	9	114
03	31	000	401	131	33	5N4W11-00-00600	2016	8027	14.03	138,230	150,800	289,030	235,000	Sep-16	10	123

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	03	31	000		6	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	6	**RECALCULATED**		
Population - Number of Accounts	186			
Sales as a percentage of the Population	3.23 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	17,336,780	41.41 %	18,723,722	41.43 %
OSD RMV	9,640,560	23.03 %	9,640,560	21.33 %
Residential Improvement RMV	11,452,950	27.35 %	12,941,834	28.64 %
Farm Improvement RMV	3,438,150	8.21 %	3,885,110	8.60 %

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** **2017** **Adjustment** **108**

Explanation

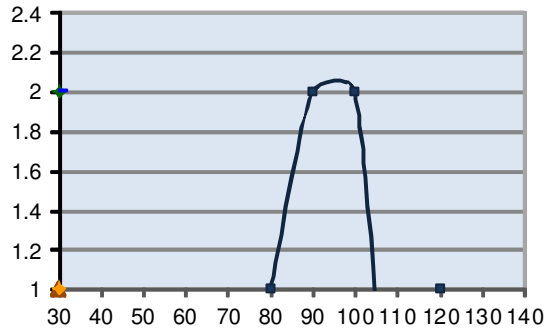
proved land – Manufactured Structure in Rural Vernonia.
This grouping of properties consists of those improved with manufactured structures located in the rural areas of Vernonia. For this study, the Median of 98 was selected which is supported by the Weighted Mean (98). The Median was then adjusted by 95 the adjustment from the time study for a Selected Ratio of 93.

Performance History

	2017	2016	2015	2014	2013
COD	10.88	14.21	18.26	12.88	13.10
PRD	1.02	0.98	1.06	1.01	1.01

COLUMBIA County **2017** Ratio Study

Frequency



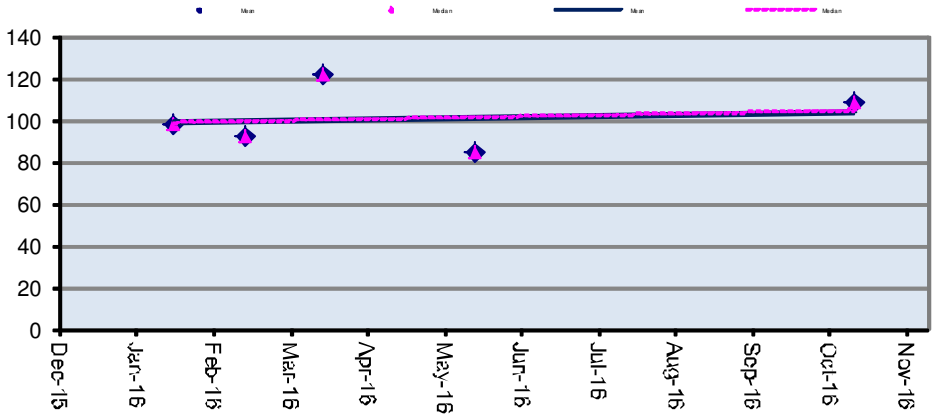
30	0
40	0
50	0
60	0
70	0
80	1
90	2
100	2
110	0
120	1
130	0
140	0

Median	**98**
AD	**10.67**
COD	**10.88**
Mean	**100**
SD	**13.61**
COV	**13.61**

Wtd Mean	**98**
GeoMean	**100**
PRD	**1.02**
95% Confidence	**10.89**

Number Of Sales **6**

Central Tendencies



Month	Mean	Median	Sales
Feb-16	98	98	2
Mar-16	92	92	1
Apr-16	122	122	1
Jun-16	84	84	1
Nov-16	108	108	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
03	31	000	409	452	33	5N4W23-D0-01400	2016	5609	1.92	105,920	88,590	194,510	232,000	Jun-16	1	84
03	31	000	409	453	33	4N4W29-00-01102	2016	1877	14.48	169,860	124,210	294,070	320,000	Mar-16	2	92
03	31	000	409	472	33	6N4W30-A0-00500	2016	1074	6.15	159,880	69,280	229,160	245,300	Feb-16	3	93
03	31	000	409	452	33	4N5W12-00-01001	2016	851	8.21	165,280	76,900	242,180	235,000	Feb-16	4	103
03	31	000	409	463	33	6N4W30-A0-00400	2016	9948	11.74	168,260	136,330	304,590	282,000	Nov-16	5	108
03	31	000	409	442	33	4N4W08-AA-00300	2016	2875	1.20	87,950	45,750	133,700	110,000	Apr-16	6	122

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	1	**RECALCULATED**		
Population - Number of Accounts	27			
Sales as a percentage of the Population	3.70 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	700,740	100.00 %	840,888	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	83			
RMV Adjustment	100			
Before Ratio	83			
Overall Adjustment Factor	120			
Land Adjustment Factor	120			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **83** **2017** **Adjustment** **120**

Explanation

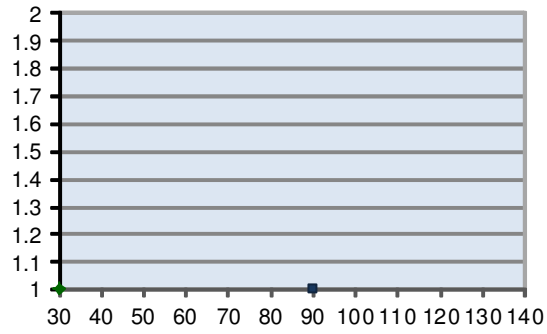
RMV 400: SA 36
Unimproved land – Fishhawk Lake in Rural Vernonia.
There was a single sale found during the study period which does not provide a significant sampling for this analysis. Therefore the conclusion from the improved properties in this area (87 ratio, 95 time adjustment factor) is recommended.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	-	-	26.14	0.00
PRD	1.00	-	-	1.30	1.00

COLUMBIA County **2017** Ratio Study

Frequency



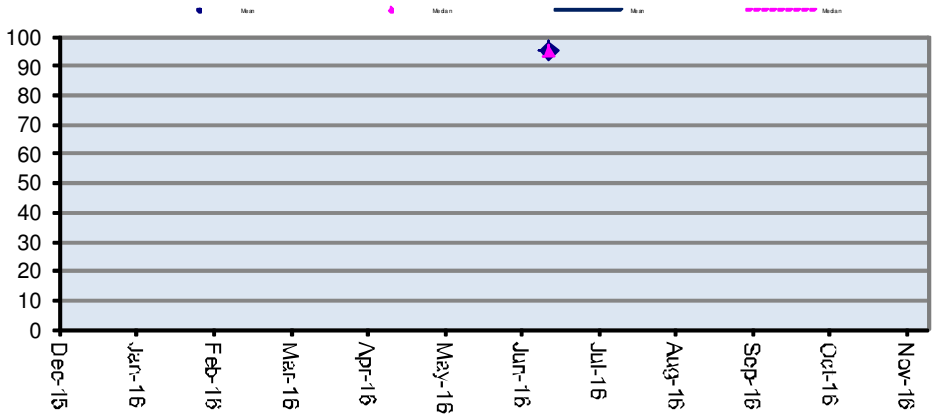
30	0
40	0
50	0
60	0
70	0
80	0
90	1
100	0
110	0
120	0
130	0
140	0

Median	**95**
AD	**0.00**
COD	**0.00**
Mean	**95**
SD	**1.00**
COV	**1.05**

Wtd Mean	**95**
GeoMean	**95**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Jul-16	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
03	36	000	400		33	6N5W06-BD-03100	2016	6178	0.41	14,310	0	14,310	15,000	Jul-16	1	95

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	03	36	000		5	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	5	**RECALCULATED**		
Population - Number of Accounts	59			
Sales as a percentage of the Population	8.47 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	2,027,170	18.95 %	2,432,604	18.92 %
OSD RMV	2,166,000	20.25 %	2,166,000	16.84 %
Residential Improvement RMV	6,452,990	60.32 %	8,195,297	63.73 %
Farm Improvement RMV	50,900	0.48 %	64,643	0.50 %

SelectedRatioFromSales	83
RMV Adjustment	100
Before Ratio	83
Overall Adjustment Factor	120
Land Adjustment Factor	120
OSD Adjustment Factor	100
Residential Adjustment Factor	127
Farm Improvement Factor	127
After Ratio	100

Selected Ratio **83** **2017** **Adjustment** **120**

Explanation

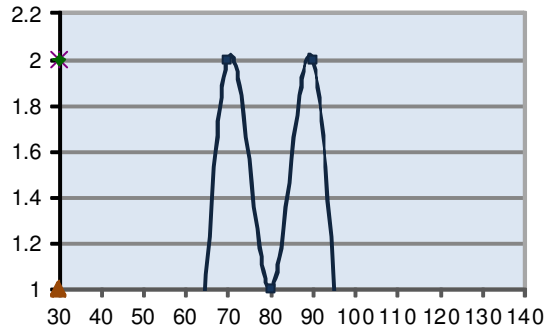
RMV 401: SA 36
Improved land – Fishhawk Lake in Rural Vernonia.
The Fishhawk Lake Estates is a private community that surrounds a 100 acre man made lake. The area is distinctive due to the nature of the market it encompasses: recreational lake, vacation get-a-way and second home type properties. The Selected Ratio of 83 was applied. This ratio was determined from the central tendency of 87 (the Median) which was then adjusted by 95, the conclusion from the time adjustment study for rural properties.

Performance History

	2017	2016	2015	2014	2013
COD	10.11	37.86	4.55	26.14	0.00
PRD	1.02	1.13	1.01	1.30	1.00

COLUMBIA County **2017** Ratio Study

Frequency



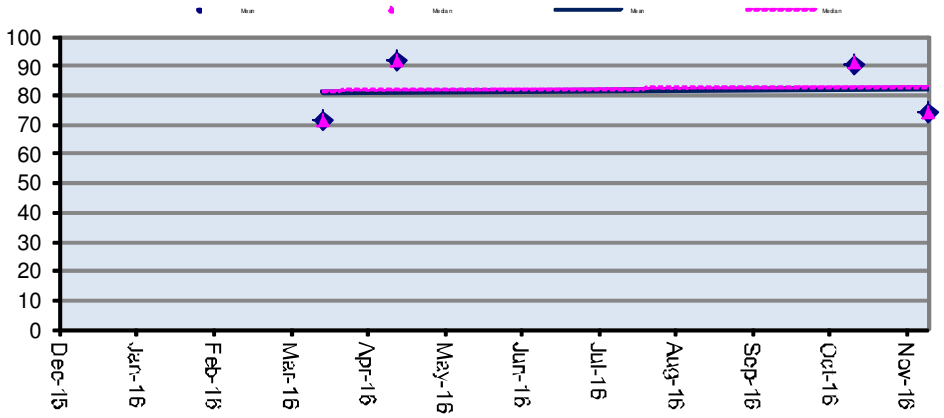
30	0
40	0
50	0
60	0
70	2
80	1
90	2
100	0
110	0
120	0
130	0
140	0

Median	**87**
AD	**8.80**
COD	**10.11**
Mean	**84**
SD	**10.51**
COV	**12.51**

Wtd Mean	**82**
GeoMean	**83**
PRD	**1.02**
95% Confidence	**9.21**

Number Of Sales **5**

Central Tendencies



Month	Mean	Median	Sales
Apr-16	71	71	1
May-16	92	92	1
Nov-16	90	91	2
Dec-16	74	74	1

APAR	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	131	33	6N5W06-BD-02500	2016	3510	0.22	55,890	75,070	130,960	185,000	Apr-16	1	71
03	36	000	401	141	33	6N5W06-BC-02300	2016	10893	0.24	94,090	132,710	226,800	306,000	Dec-16	2	74
03	36	000	401	141	33	6N5W06-BD-01800	2016	10012	0.20	76,720	93,210	169,930	195,000	Nov-16	3	87
03	36	000	401	145	33	6N5W06-BC-04500	2016	4364	0.34	55,890	89,760	145,650	159,000	May-16	4	92
03	36	000	401	131	33	6N5W06-BD-02200	2016	10216	0.30	76,720	48,400	125,120	132,500	Nov-16	5	94

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	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	4			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	198,140	100.00 %	200,121	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** **2017** **Adjustment** **101**

Explanation

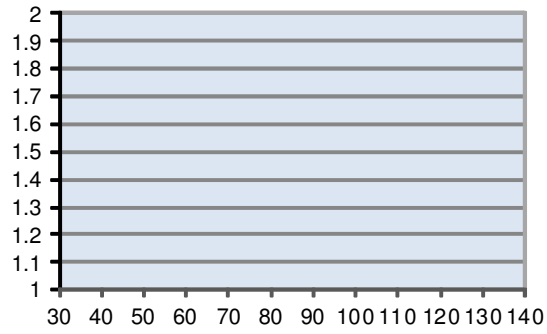
RMV 400: SA 37
Unimproved land – Berndts Creek in Rural Vernonia.
Because there there are no sales available out of the 4 accounts of unimproved land located in Berndts Creek subdivision, it was decided to apply the Selected Ratio of 99 from the improved analysis located in the same area.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	-	0.00	-
PRD		1.00	-	1.00	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

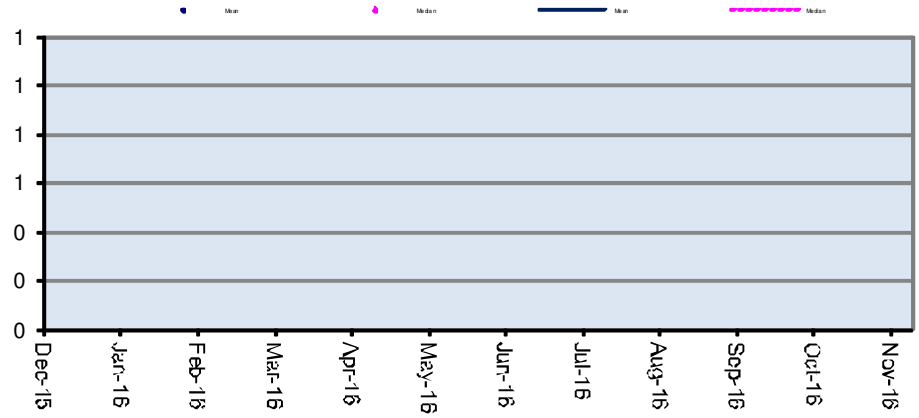
PRD

95% Confidence

Number Of Sales **0**

Central Tendencies

Month	Mean	Median	Sales



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	03	37	000		2	Vernonia

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	2			
Population - Number of Accounts	16			
Sales as a percentage of the Population	12.50 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	691,680	23.28 %	698,597	23.33 %
OSD RMV	696,000	23.42 %	696,000	23.24 %
Residential Improvement RMV	1,567,250	52.74 %	1,582,923	52.86 %
Farm Improvement RMV	16,830	0.57 %	16,998	0.57 %

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** **2017** **Adjustment** **101**

Explanation

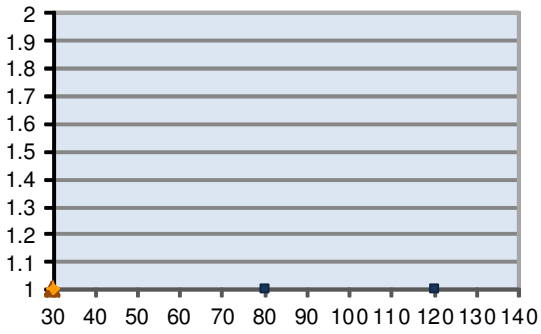
RMV 401: SA 37
Improved land – Berndts Creek in Rural Vernonia.
Berndts Creek is a small subdivision located off Keasey Road in the northwest rural Vernonia area. There are two sales available for this study which are 12.5% of the population. The Median of 104 was selected and is supported by the Mean (104). The time conclusion of 95 was then applied and returned the Selected Ratio of 99.

Performance History

	2017	2016	2015	2014	2013
COD	15.87	-	-	0.00	-
PRD	1.03	-	-	1.00	-

COLUMBIA County **2017** Ratio Study

Frequency



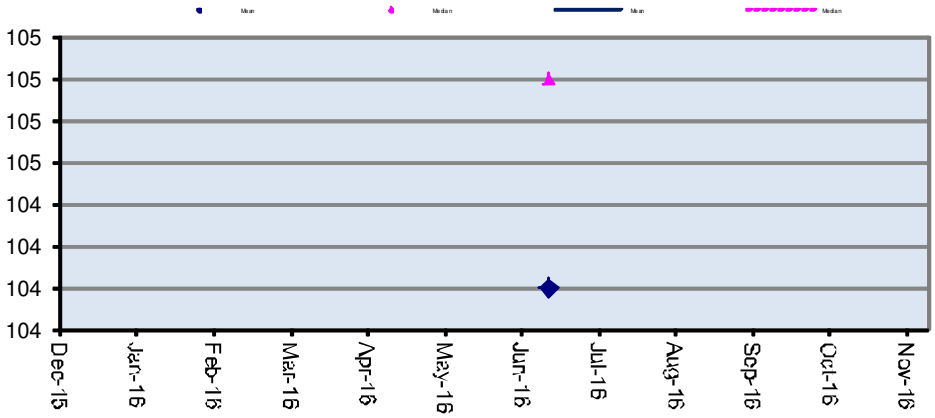
30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	0
120	1
130	0
140	0

Median	**104**
AD	**16.50**
COD	**15.87**
Mean	**104**
SD	**23.35**
COV	**22.45**

Wtd Mean	**101**
GeoMean	**103**
PRD	**1.03**
95% Confidence	**32.35**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Jul-16	104	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	37	000	401	131	33	5N5W25-CC-00800	2016	6546	0.84	111,370	96,140	207,510	237,000	Jul-16	1	88
03	37	000	401	131	33	5N5W25-CB-00700	2016	6005	0.30	111,370	85,480	196,850	162,750	Jul-16	2	121

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	03	37	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	6			
Sales as a percentage of the Population	16.67 %			
Prior Year Population Values				
Land RMV	332,500	25.42 %	335,825	25.37 %
OSD RMV	348,000	26.60 %	348,000	26.29 %
Residential Improvement RMV	568,070	43.43 %	579,431	43.77 %
Farm Improvement RMV	59,500	4.55 %	60,690	4.58 %

SelectedRatioFromSales	99
RMV Adjustment	100
Before Ratio	99
Overall Adjustment Factor	101
Land Adjustment Factor	101
OSD Adjustment Factor	100
Residential Adjustment Factor	102
Farm Improvement Factor	102
After Ratio	100

Selected Ratio **99** **2017** **Adjustment** **101**

Explanation

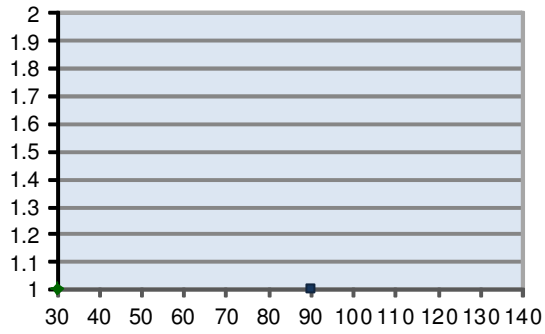
RMV 409: SA 37
Improved land – Berndts Creek, Manufactured Structures in Rural Vernonia.
Due to having only a single sale to analyze for this population of six accounts, the Selected Ratio of 99 from the improved SFD analysis was used here.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	-	-	0.00	-
PRD	1.00	-	-	1.00	-

COLUMBIA County **2017** Ratio Study

Frequency



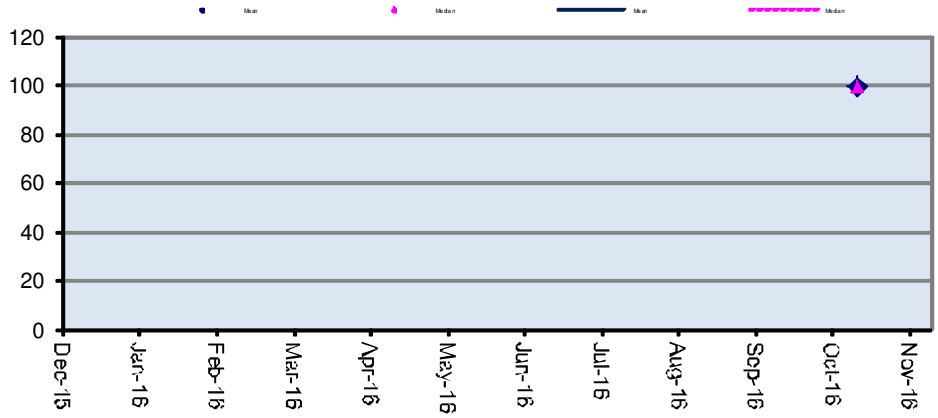
30	0
40	0
50	0
60	0
70	0
80	0
90	1
100	0
110	0
120	0
130	0
140	0

Median	**99**
AD	**0.00**
COD	**0.00**
Mean	**99**
SD	**1.00**
COV	**1.01**

Wtd Mean	**99**
GeoMean	**99**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Nov-16	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
03	37	000	409	473	33	5N5W25-CC-00700	2016	9776	0.41	111,370	147,110	258,480	260,000	Nov-16	1	99

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	03	40	000		1	Vernonia

Adjustment Calculation Summary

Sample - Number of Sales	1	**RECALCULATED**		
Population - Number of Accounts	1			
Sales as a percentage of the Population	100.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	46,670	30.10 %	43,870	30.15 %
OSD RMV	56,500	36.44 %	56,500	38.83 %
Residential Improvement RMV	51,890	33.46 %	45,144	31.02 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	106
RMV Adjustment	100
Before Ratio	106
Overall Adjustment Factor	94
Land Adjustment Factor	94
OSD Adjustment Factor	100
Residential Adjustment Factor	87
Farm Improvement Factor	87
After Ratio	100

Selected Ratio **106** **2017** **Adjustment** **94**

Explanation

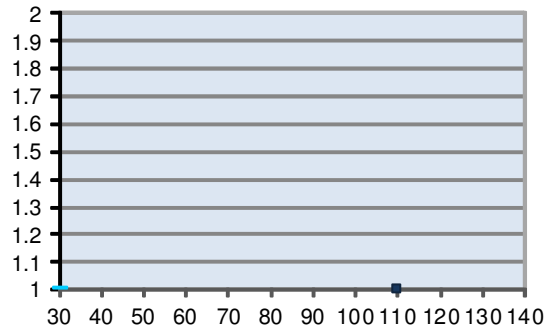
RMV 401: SA 40
Improved land – Duplex/Triplex/Fourplex in Rural Vernonia.
There is one multi-family property located in rural Vernonia which sold this year resulting in a 100% of the sales to population. Therefore, all the indicators (Mean, Median, Weighted Mean, GeoMean) have returned a ratio of 112 which was applied and then adjusted for time. The Selected Ratio is 106.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	-	-	12.88	13.10
PRD	1.00	-	-	1.01	1.01

COLUMBIA County **2017** Ratio Study

Frequency



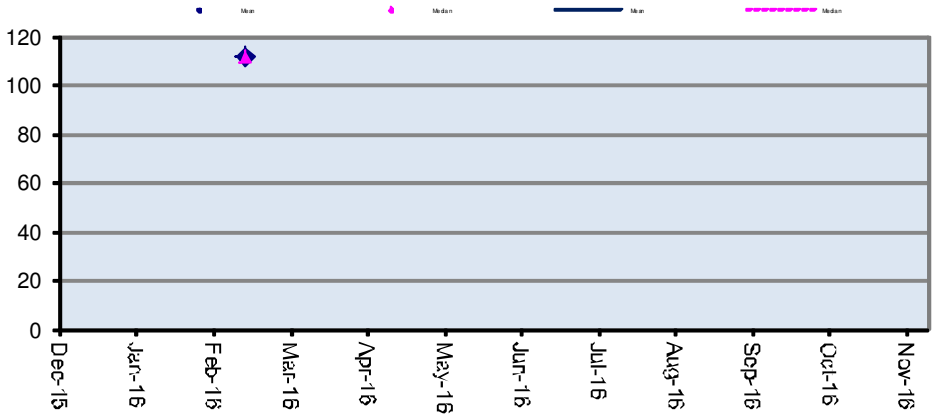
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	1
120	0
130	0
140	0

Median	**112**
AD	**0.00**
COD	**0.00**
Mean	**112**
SD	**1.00**
COV	**0.89**

Wtd Mean	**112**
GeoMean	**112**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



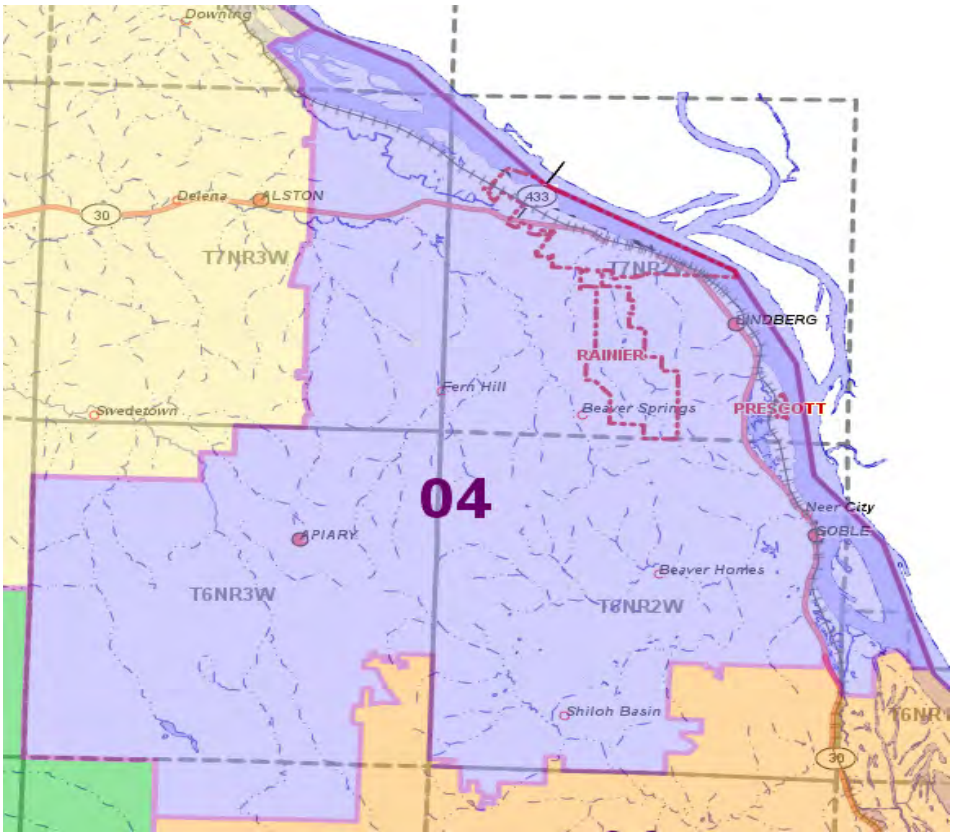
Month	Mean	Median	Sales
Mar-16	112	112	1

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	401	233	33	4N4W05-DA-10900	2016	2395	0.37	103,170	51,890	155,060	138,000	Mar-16	1	112

MAINTENANCE AREA 4

RAINIER

MA 04 - Rainier



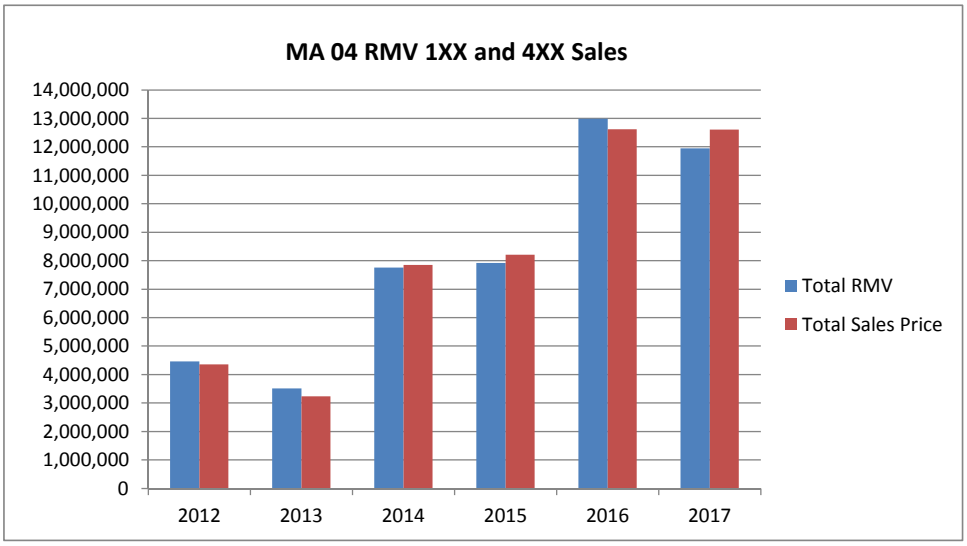
Maintenance Area 04 includes the City of Rainier and surrounding rural properties which is approximately 101.31 square miles in size. The City of Rainier was founded in 1851 and incorporated in 1885. The city is located 47 miles northwest of the Portland Metropolitan area by traveling Highway 30.

The Lewis and Clark Bridge was opened in 1930 providing easy access to Longview, Washington where medical facilities, recreation areas and shopping can be found. .
In 1976, the Trojan Nuclear Power Plant was opened and in 1992 the plant ceased operation. The plant was later decommissioned which created a large economic impact on Rainier and many residents found themselves with no other option but to re-locate.
(Soure: www.cityofrainier.com)

MA 04 also encompasses the bedroom community of Prescott which is located 4 miles south of the City of Rainier along the beaches of the Columbia River. This is a unique community with a very small population of 55 people and measures only 40 acres in size. The town was named after the local sawmill owner in 1905 and was incorporated in 1947.
(Source:www.en.wikipedia.org/wiki/Prescott,_Oregon)

Also worth mentioning is the small town of Goble because it was once the primary transportation connection to Washington State. In1895 Goble was plotted and at that time it then became an active town of loggers, trains and river boats. It was here that the ferries would take passengers and train cars across the Columbia River to Kalama, Washington. The Railroad and ferries created jobs and also eliminated the need to use a rowboat to haul passengers and mail across the Columbia River. As many as six trains a day stopped on their way to Seattle. Timber and steam were also good for the economy of Goble since many steamboats would stop to “fuel up” due to the plentiful timber that surrounded the area. But eventually the town diminished, partly due to the completion of Highway 30. The hotel, two mills, boarding house, barber shops, hardware store, two general stores, church and school were left empty as the residents moved away. Today, Goble is a quiet place and no longer the “hub” of transportation. (Source: www.gobletavern.com/history.html)

Rainier comparison of usable sales over the past five years:



	Total # Sales	Total RMV	Total Sales Price	Difference	Percent Difference
2012	27	4,458,450	4,352,500	-105,950	-2.43%
2013	21	3,512,040	3,230,575	-281,465	-8.71%
2014	42	7,756,040	7,852,250	96,210	1.23%
2015	45	7,922,360	8,211,221	288,861	3.52%
2016	63	12,985,430	12,615,662	-369,768	-2.93%
2017	54	11,948,770	12,605,480	656,710	5.21%

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	04	00	000		3	Rainier

Adjustment Calculation Summary

RECALCULATED

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	3			
Population - Number of Accounts	153			
Sales as a percentage of the Population	1.96 %			
Prior Year Population Values				
Land RMV	7,290,580	100.00 %	7,582,203	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	96			
RMV Adjustment	100			
Before Ratio	96			
Overall Adjustment Factor	104			
Land Adjustment Factor	104			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **96** **2017** **Adjustment** **104**

Explanation

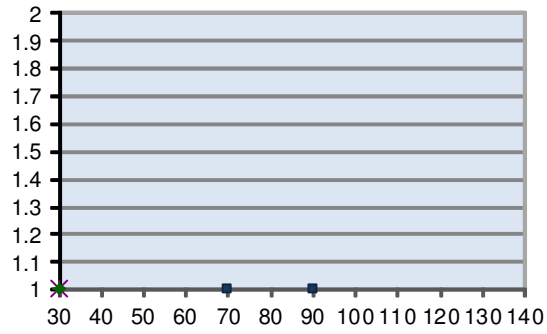
RMV 100: SA 00
Undeveloped land, City of Rainier.
There are not an adequate number of sales available for this study. Therefore, the Selected Ratio of 98 from the improved single family dwelling analysis in the same area was applied here.

Performance History

	2017	2016	2015	2014	2013
COD	32.31	0.00	0.00	-	-
PRD	1.05	1.00	1.00	-	-

COLUMBIA County **2017** Ratio Study

Frequency



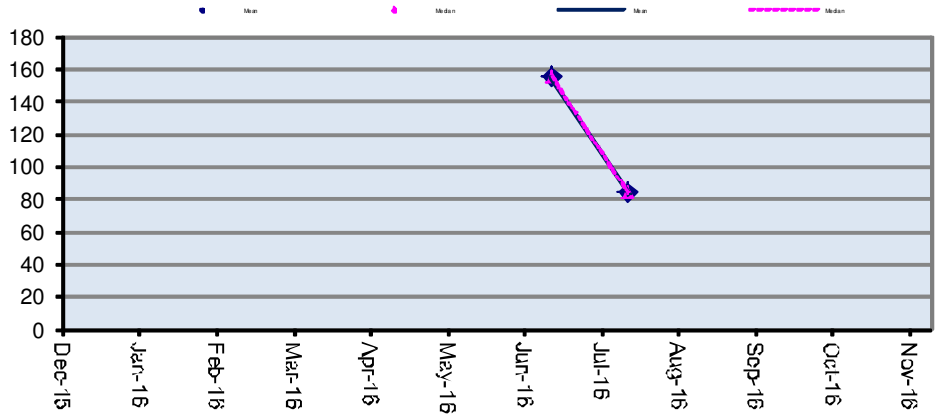
30	0
40	0
50	0
60	0
70	1
80	0
90	1
100	0
110	0
120	0
130	0
140	0

Median	**98**
AD	**31.67**
COD	**32.31**
Mean	**108**
SD	**43.32**
COV	**40.11**

Wtd Mean	**103**
GeoMean	**102**
PRD	**1.05**
95% Confidence	**49.02**

Number Of Sales **3**

Central Tendencies



Month	Mean	Median	Sales
Jul-16	155	155	1
Aug-16	84	84	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	100		33	7N2W21-AB-00106	2016	7013	0.15	35,110	0	35,110	50,000	Aug-16	1	70
04	00	000	100		33	7N2W21-B0-00200	2016	7279	27.01	73,130	0	73,130	75,000	Aug-16	2	98
04	00	000	100		33	7N2W17-DB-02302	2016	6283	0.50	61,980	0	61,980	40,000	Jul-16	3	155

COLUMBIA County **2017** Ratio Study

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	619			
Sales as a percentage of the Population	2.91 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	26,166,260	28.50 %	27,212,910	28.45 %
OSD RMV	9,548,500	10.40 %	9,548,500	9.98 %
Residential Improvement RMV	55,531,040	60.48 %	58,307,592	60.95 %
Farm Improvement RMV	564,420	0.61 %	592,641	0.62 %

SelectedRatioFromSales	96
RMV Adjustment	100
Before Ratio	96
Overall Adjustment Factor	104
Land Adjustment Factor	104
OSD Adjustment Factor	100
Residential Adjustment Factor	105
Farm Improvement Factor	105
After Ratio	100

Selected Ratio **96** **2017** **Adjustment** **104**

Explanation

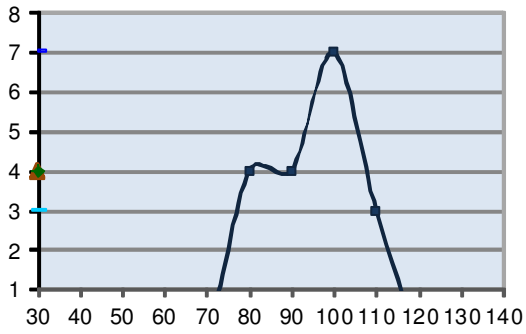
RMV 101: SA 00
Improved property, City of Rainier.
Improved residential properties located within the City of Rainier. The Median of 100 was selected which is supported by the Weighted Mean (99) and the Mean (98). The time adjustment for residential properties of 96 was applied to the Median and returned a Selected Ratio of 96.

Performance History

	2017	2016	2015	2014	2013
COD	8.78	15.48	12.86	14.46	14.01
PRD	0.99	1.05	1.00	1.01	1.01

COLUMBIA County **2017** Ratio Study

Frequency



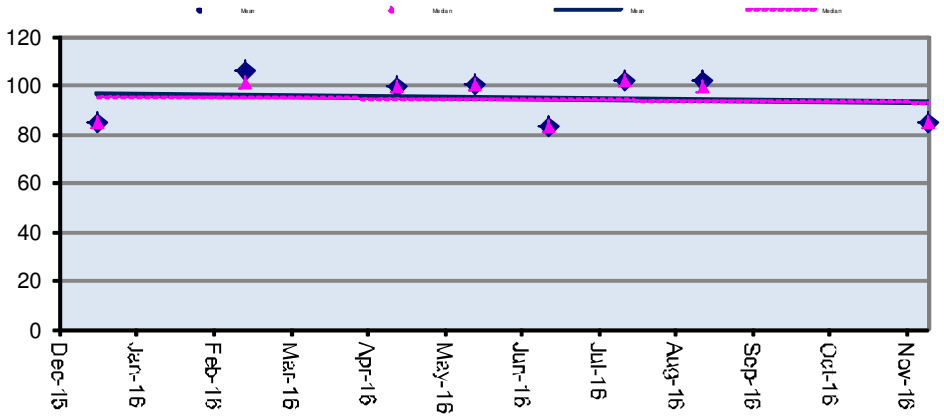
30	0
40	0
50	0
60	0
70	0
80	4
90	4
100	7
110	3
120	0
130	0
140	0

Median	**100**
AD	**8.78**
COD	**8.78**
Mean	**98**
SD	**10.69**
COV	**10.91**

Wtd Mean	**99**
GeoMean	**98**
PRD	**0.99**
95% Confidence	**4.94**

Number Of Sales **18**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	85	85	1
Mar-16	106	101	3
May-16	99	99	6
Jun-16	100	100	1
Jul-16	83	83	1
Aug-16	102	102	2
Sep-16	102	99	3
Dec-16	85	85	1

APAR	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	136	33	7N2W16-DB-09100	2016	4490	0.15	57,110	74,090	131,200	161,000	May-16	1	81
04	00	000	101	134	30	7N2W16-DA-02501	2016	7125	0.05	38,880	109,900	148,780	179,000	Jul-16	2	83
04	00	000	101	131	33	7N2W17-C0-02200	2016	576	3.00	85,680	129,210	214,890	252,000	Jan-16	3	85
04	00	000	101	132	33	7N2W17-AD-06000	2016	10896	0.55	93,380	105,120	198,500	233,500	Dec-16	4	85
04	00	000	101	134	33	7N2W16-DC-09400	2016	7558	0.21	59,190	89,900	149,090	165,500	Aug-16	5	90
04	00	000	101	133	33	7N2W16-DA-05000	2016	3819	0.16	59,970	62,390	122,360	130,000	May-16	6	94
04	00	000	101	132	33	7N2W16-DC-03900	2016	7907	0.28	68,330	103,320	171,650	180,000	Sep-16	7	95
04	00	000	101	142	33	7N2W16-CD-03902	2016	3763	0.20	58,520	215,880	274,400	285,000	May-16	8	96
04	00	000	101	133	33	7N2W16-DC-00900	2016	1567	0.28	63,650	101,070	164,720	165,000	Mar-16	9	100
04	00	000	101	134	33	7N2W16-CA-09100	2016	5376	0.06	39,970	75,130	115,100	115,000	Jun-16	10	100
04	00	000	101	144	33	7N2W16-BC-03600	2016	2129	0.46	88,680	196,190	284,870	278,000	Mar-16	11	102
04	00	000	101	142	33	7N2W17-DB-02601	2016	3655	0.36	69,510	136,760	206,270	203,000	May-16	12	102
04	00	000	101	142	33	7N2W16-DB-08600	2016	8470	0.17	56,740	125,110	181,850	178,100	Sep-16	13	102
04	00	000	101	142	30	7N2W16-CC-00319	2016	3549	0.34	72,870	241,940	314,810	294,000	May-16	14	107
04	00	000	101	131	30	7N2W16-DA-04000	2016	8373	0.15	68,060	40,810	108,870	100,000	Sep-16	15	109
04	00	000	101	141	33	7N2W17-AC-02803	2016	3610	0.24	67,670	166,290	233,960	208,000	May-16	16	112
04	00	000	101	142	33	7N2W16-CC-00306	2016	7412	0.73	93,080	198,340	291,420	256,000	Aug-16	17	114
04	00	000	101	134	33	7N2W16-CA-05001	2016	2231	0.13	57,060	93,430	150,490	131,000	Mar-16	18	115

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	04	00	000		1	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	1	**RECALCULATED**		
Population - Number of Accounts	93			
Sales as a percentage of the Population	1.08 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	3,790,910	32.31 %	3,942,546	32.28 %
OSD RMV	1,389,000	11.84 %	1,389,000	11.37 %
Residential Improvement RMV	6,381,760	54.39 %	6,700,848	54.87 %
Farm Improvement RMV	171,830	1.46 %	180,422	1.48 %

SelectedRatioFromSales	96
RMV Adjustment	100
Before Ratio	96
Overall Adjustment Factor	104
Land Adjustment Factor	104
OSD Adjustment Factor	100
Residential Adjustment Factor	105
Farm Improvement Factor	105
After Ratio	100

Selected Ratio **96** **2017** **Adjustment** **104**

Explanation

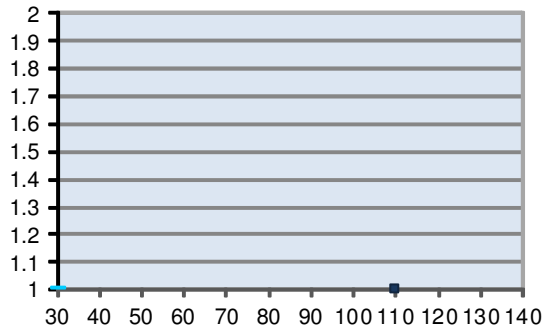
RMV 109: SA 00
Improved land – Manufactured Structure, City of Rainier.
There was a single sale found during the study period which does not provide a significant sampling for analysis. Therefore, the study from the improved single family dwelling was deemed appropriate and hence applied here (Selected Ratio of 96).

Performance History

	2017	2016	2015	2014	2013
COD	0.00	8.05	12.86	14.46	14.01
PRD	1.00	0.99	1.00	1.01	1.01

COLUMBIA County **2017** Ratio Study

Frequency



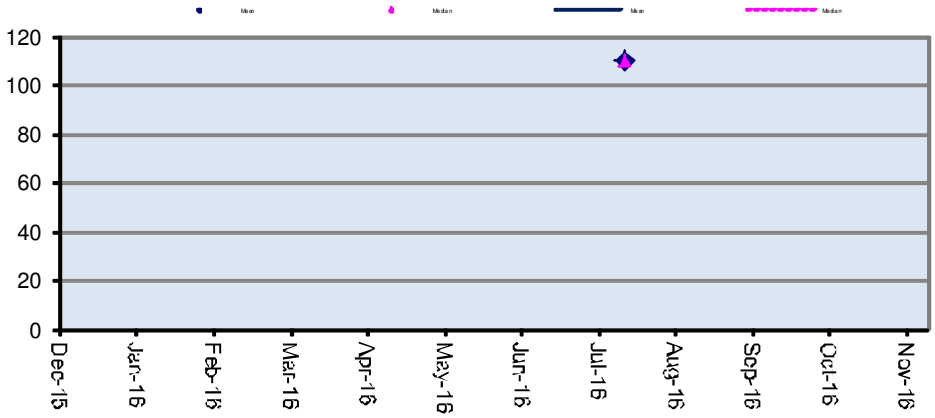
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	1
120	0
130	0
140	0

Median	**110**
AD	**0.00**
COD	**0.00**
Mean	**110**
SD	**1.00**
COV	**0.91**

Wtd Mean	**110**
GeoMean	**110**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	**Mean**	**Median**	**Sales**
Aug-16	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
04	00	000	109	452	30	7N2W17-AC-01802	2016	7139	0.35	76,490	98,580	175,070	159,180	Aug-16	1	110

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# 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	827,620	100.00 %	860,725	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	96
RMV Adjustment	100
Before Ratio	96
Overall Adjustment Factor	104
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	104
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **96** **2017** **Adjustment** **104**

Explanation

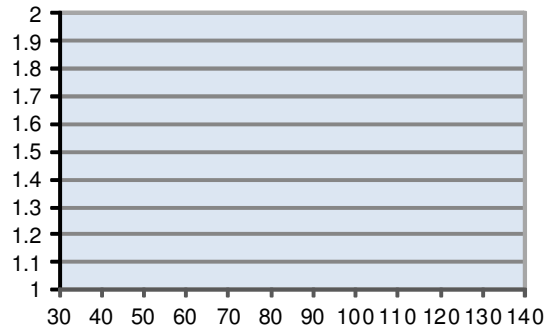
RMV 102: SA 00
Improved land – Condominium, City of Rainier.
This analysis is comprised of condominiums located within the City of Rainier. At this time, no sales were identified in this area for the study period. Because of the lack of sales data, the Selected Ratio of 96 from the improved residential properties was applied to this population of accounts within this study.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	14.01
PRD		-	-	-	1.01

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

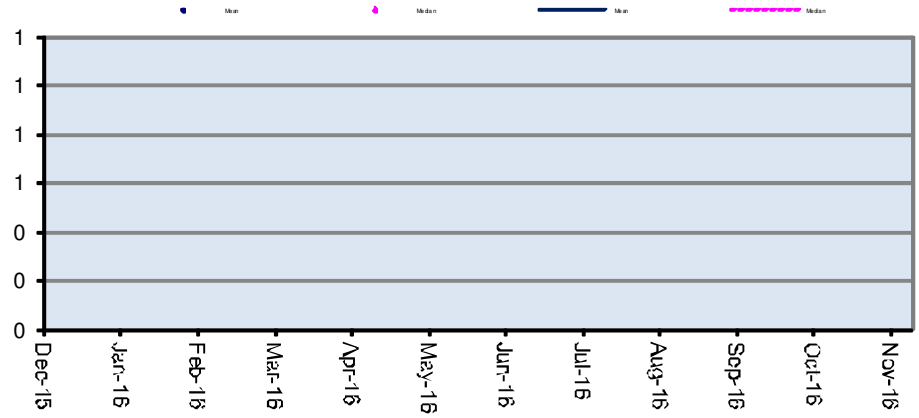
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	04	40	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	25			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	1,198,600	28.14 %	1,246,544	28.12 %
OSD RMV	545,000	12.80 %	545,000	12.29 %
Residential Improvement RMV	2,489,640	58.45 %	2,614,122	58.97 %
Farm Improvement RMV	26,100	0.61 %	27,405	0.62 %
SelectedRatioFromSales	96			
RMV Adjustment	100			
Before Ratio	96			
Overall Adjustment Factor	104			
Land Adjustment Factor	104			
OSD Adjustment Factor	100			
Residential Adjustment Factor	105			
Farm Improvement Factor	105			
After Ratio	100			

Selected Ratio **96** **2017** **Adjustment** **104**

Explanation

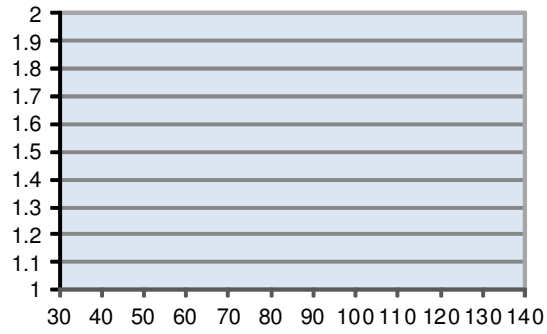
RMV 101: SA 40
Improved land – Duplex/Triplex/Fourplex, City of Rainier
With having no sales available for this analysis, it was decided to use the Selected Ratio of 96 from the single family dwelling residential study.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	-	-	-
PRD		1.00	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

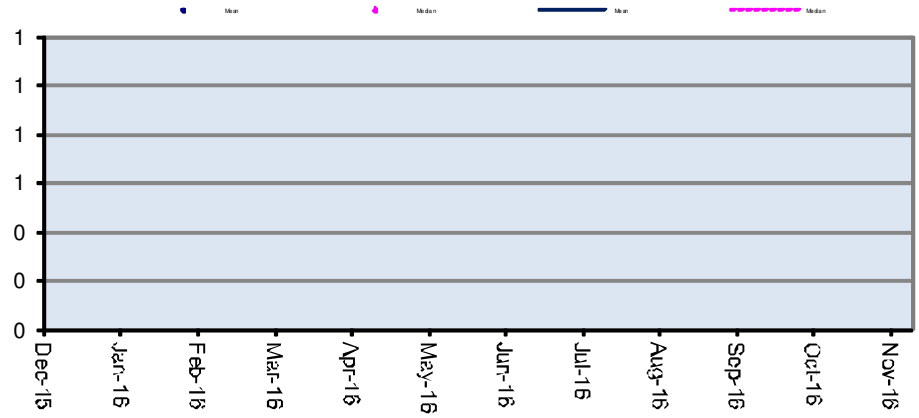
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	04	46	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	10			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	397,720	100.00 %	413,629	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %
SelectedRatioFromSales	96			
RMV Adjustment	100			
Before Ratio	96			
Overall Adjustment Factor	104			
Land Adjustment Factor	104			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **96** **2017** **Adjustment** **104**

Explanation

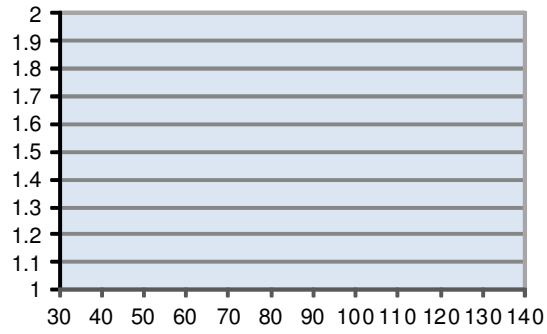
RMV 100: SA 46
Unimproved land – Riverview Drive & Maple Drive, City of Rainier.
Due to having no bare land sales available for this analysis, it was decided to use the Selected Ratio of 96 from the SA 00 undeveloped study.

Performance History

	2017	2016	2015	2014	2013
COD		-	0.00	-	-
PRD		-	1.00	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

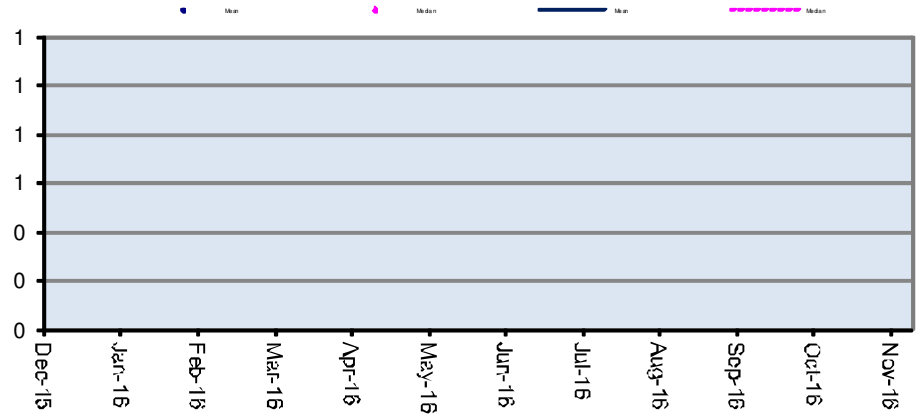
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	04	46	000		2	Rainier

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	2			
Population - Number of Accounts	34			
Sales as a percentage of the Population	5.88 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	1,803,320	21.41 %	1,875,453	21.46 %
OSD RMV	579,000	6.87 %	579,000	6.63 %
Residential Improvement RMV	5,987,030	71.07 %	6,226,511	71.26 %
Farm Improvement RMV	54,280	0.64 %	56,451	0.65 %
SelectedRatioFromSales	96			
RMV Adjustment	100			
Before Ratio	96			
Overall Adjustment Factor	104			
Land Adjustment Factor	104			
OSD Adjustment Factor	100			
Residential Adjustment Factor	104			
Farm Improvement Factor	104			
After Ratio	100			

Selected Ratio **96** **2017** **Adjustment** **104**

Explanation

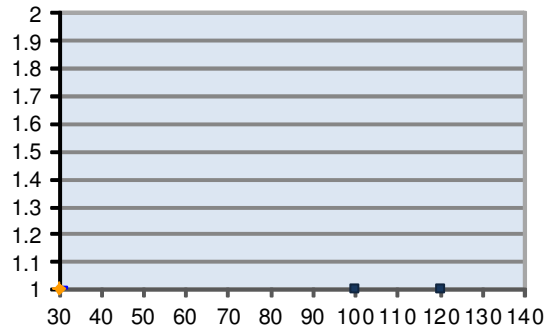
RMV 101: SA 46
Improved land – Riverview Drive & Maple Drive, City of Rainier.
Only 2 sales were identified during the sales period resulting in an inadequate sampling. Therefore the conclusion from the improved properties in SA 00 is recommended (Selected Ratio of 96).

Performance History

	2017	2016	2015	2014	2013
COD	8.85	-	12.86	14.46	14.01
PRD	1.01	-	1.00	1.01	1.01

COLUMBIA County **2017** Ratio Study

Frequency



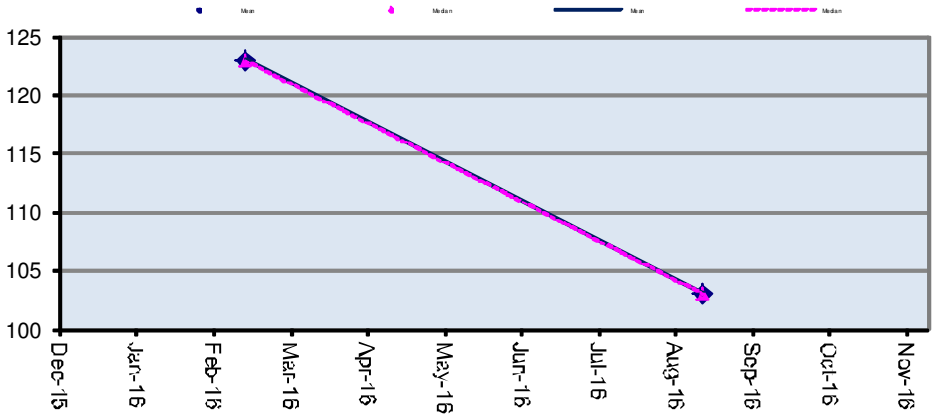
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	1
110	0
120	1
130	0
140	0

Median	**113**
AD	**10.00**
COD	**8.85**
Mean	**113**
SD	**14.14**
COV	**12.52**

Wtd Mean	**112**
GeoMean	**113**
PRD	**1.01**
95% Confidence	**19.60**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Mar-16	123	123	1
Sep-16	103	103	1

APAR	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	46	000	101	144	33	7N2W17-DA-00402	2016	8128	0.50	80,040	281,790	361,830	350,000	Sep-16	1	103
04	46	000	101	153	33	7N2W17-AD-06302	2016	1798	0.44	98,680	249,900	348,580	282,500	Mar-16	2	123

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	04	47	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	8			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	256,000	100.00 %	302,080	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	85			
RMV Adjustment	100			
Before Ratio	85			
Overall Adjustment Factor	118			
Land Adjustment Factor	118			
OSD Adjustment Factor	100			
Residential Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Selected Ratio **85** **2017** **Adjustment** **118**

Explanation

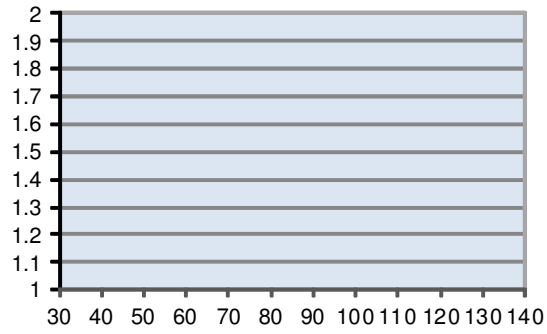
RMV 100: SA 47
Unimproved land – Rainier Riverfront Estates, City of Rainier.
No sales were identified in this area. Therefore, it was decided to use conclusion from the improved study located in the same area (Selected Ratio of 85).

Performance History

	2017	2016	2015	2014	2013
COD		7.50	-	1.79	-
PRD		0.98	-	0.99	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

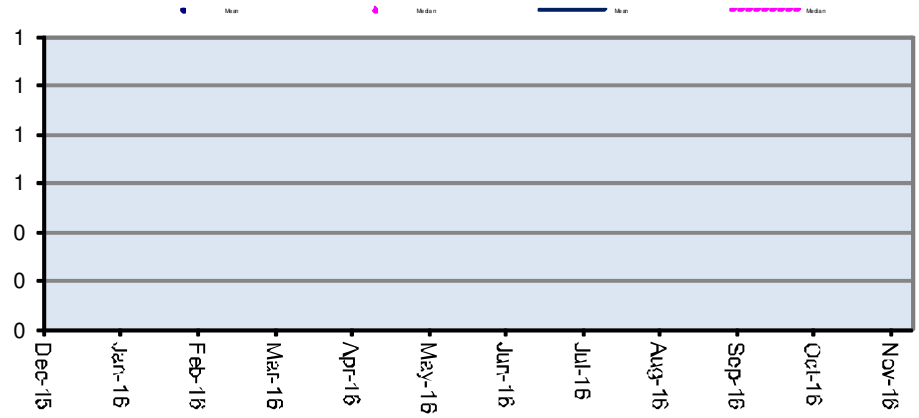
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	2	**RECALCULATED**		
Population - Number of Accounts	43			
Sales as a percentage of the Population	4.65 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	2,087,500	23.70 %	2,463,250	23.74 %
OSD RMV	774,000	8.79 %	774,000	7.46 %
Residential Improvement RMV	5,948,020	67.52 %	7,137,624	68.80 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	85
RMV Adjustment	100
Before Ratio	85
Overall Adjustment Factor	118
Land Adjustment Factor	118
OSD Adjustment Factor	100
Residential Adjustment Factor	120
Farm Improvement Factor	120
After Ratio	100

Selected Ratio **85** **2017** **Adjustment** **118**

Explanation

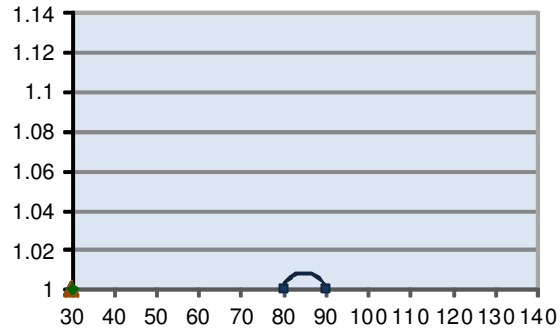
RMV 101: SA 47
Improved land – Rainier Riverfront Estates, City of Rainier.
Rainier Riverfront Estates is a small subdivision located on the Columbia River. The ratio selected is the Median of 89 which is also supported by the Mean, Weighted Mean and GeoMean. The time adjustment conclusion of 96 was then applied to the ratio indicator, resulting in a Selected Ratio of 85.

Performance History

	2017	2016	2015	2014	2013
COD	2.25	1.61	0.00	1.79	14.01
PRD	1.00	1.00	1.00	0.99	1.01

COLUMBIA County **2017** Ratio Study

Frequency



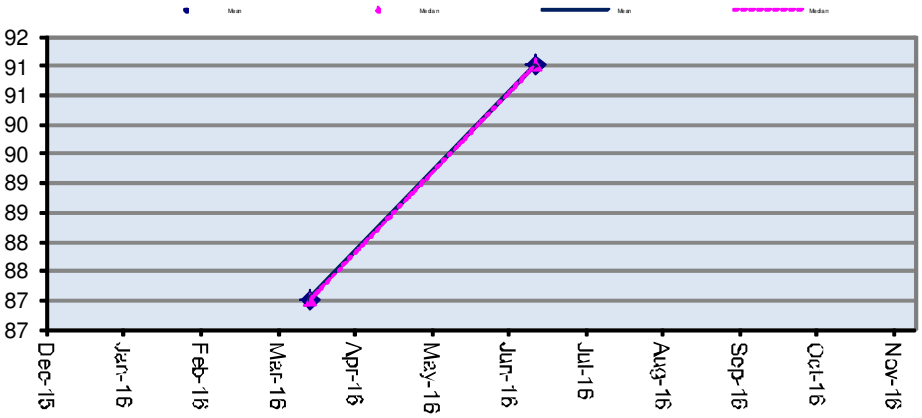
30	0
40	0
50	0
60	0
70	0
80	1
90	1
100	0
110	0
120	0
130	0
140	0

Median	**89**
AD	**2.00**
COD	**2.25**
Mean	**89**
SD	**2.83**
COV	**3.18**

Wtd Mean	**89**
GeoMean	**89**
PRD	**1.00**
95% Confidence	**3.92**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Apr-16	87	87	1
Jul-16	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
04	47	000	101	143	33	7N2W16-BB-03100	2016	2525	0.10	72,500	150,360	222,860	255,000	Apr-16	1	87
04	47	000	101	143	33	7N2W16-BB-00200	2016	6031	0.08	72,500	132,290	204,790	225,000	Jul-16	2	91

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	1	**RECALCULATED**		
Population - Number of Accounts	233			
Sales as a percentage of the Population	0.43 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	22,585,780	100.00 %	26,877,078	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	119
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

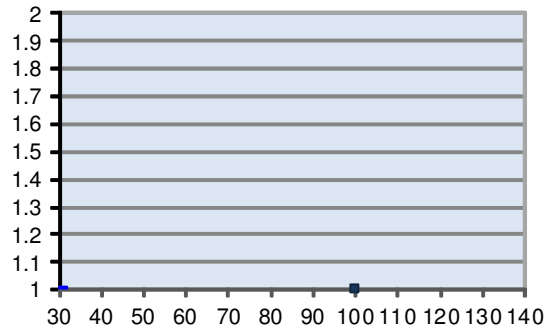
RMV 400: SA 41
Unimproved land – Rural Rainier (Value Zone 1)
With only a single sale available for this analysis, it was deemed appropriate to apply the Selected Ratio of 84 from the improved property study located in the same area.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	11.76	0.00	0.00	18.50
PRD	1.00	1.00	1.00	1.00	1.02

COLUMBIA County **2017** Ratio Study

Frequency



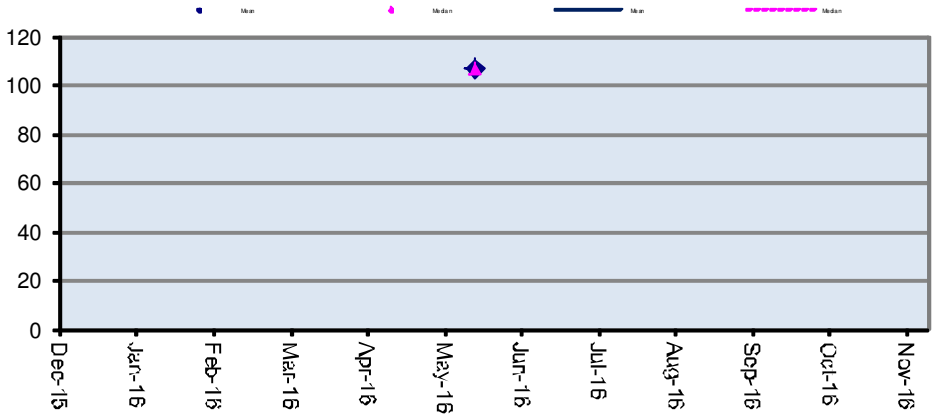
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	1
110	0
120	0
130	0
140	0

Median	**107**
AD	**0.00**
COD	**0.00**
Mean	**107**
SD	**1.00**
COV	**0.93**

Wtd Mean	**107**
GeoMean	**107**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Jun-16	107	107	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
04	41	000	400		33	7N2W30-00-01900	2016	4674	13.05	78,350	0	78,350	72,900	Jun-16	1	107

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	04	41	000		12	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	12	**RECALCULATED**		
Population - Number of Accounts	557			
Sales as a percentage of the Population	2.15 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	39,956,195	30.44 %	47,547,872	30.41 %
OSD RMV	23,888,360	18.20 %	23,888,360	15.28 %
Residential Improvement RMV	59,892,640	45.63 %	75,464,726	48.26 %
Farm Improvement RMV	7,512,370	5.72 %	9,465,586	6.05 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	119
OSD Adjustment Factor	100
Residential Adjustment Factor	126
Farm Improvement Factor	126
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

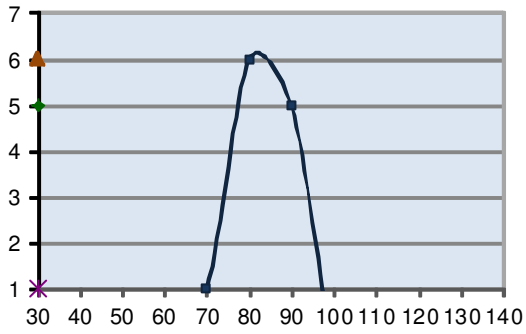
RMV 401: SA 41
Improved land – Rural Rainier (Value Zone 1)
For this analysis of improved property sales in Value Zone 1-Rainier, the Median and Mean both returned ratio indicators of 88. This ratio was selected for this study and then adjusted by 95, the time study conclusion. As a result, the Selected Ratio entered is 84.

Performance History

	2017	2016	2015	2014	2013
COD	5.78	13.27	13.75	11.26	6.25
PRD	1.01	0.98	0.98	0.99	1.02

COLUMBIA County **2017** Ratio Study

Frequency



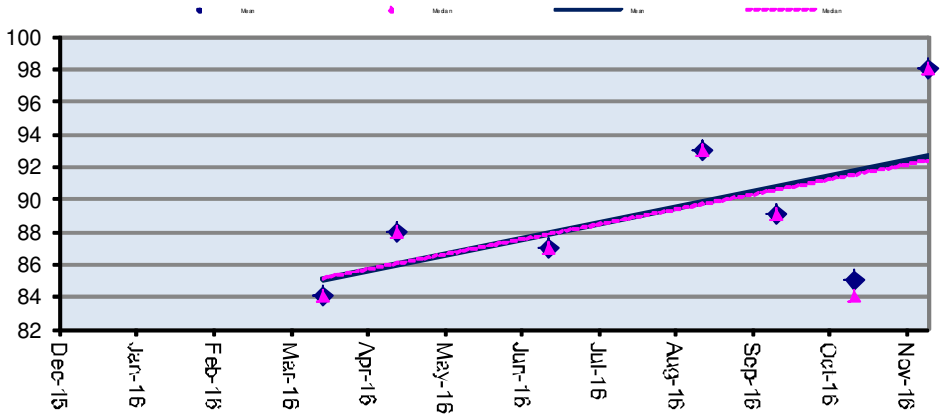
30	0
40	0
50	0
60	0
70	1
80	6
90	5
100	0
110	0
120	0
130	0
140	0

Median	**88**
AD	**5.08**
COD	**5.78**
Mean	**88**
SD	**5.99**
COV	**6.81**

Wtd Mean	**87**
GeoMean	**88**
PRD	**1.01**
95% Confidence	**3.39**

Number Of Sales **12**

Central Tendencies



Month	Mean	Median	Sales
Apr-16	84	84	1
May-16	88	88	2
Jul-16	87	87	1
Sep-16	93	93	2
Oct-16	89	89	1
Nov-16	85	84	4
Dec-16	98	98	1

APAR	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	401	132	33	7N3W13-C0-00500	2016	9996	4.23	103,370	117,240	220,610	281,000	Nov-16	1	79
04	41	000	401	151	33	7N2W28-BB-00700	2016	3579	5.03	114,100	211,930	326,030	398,000	May-16	2	82
04	41	000	401	143	33	7N3W11-B0-00601	2016	9985	7.05	126,040	165,200	291,240	349,900	Nov-16	3	83
04	41	000	401	141	33	7N2W18-00-01000	2016	2481	3.00	91,680	153,060	244,740	290,000	Apr-16	4	84
04	41	000	401	142	33	7N2W17-DC-00600	2016	10214	1.40	72,650	159,660	232,310	276,000	Nov-16	5	84
04	41	000	401	141	33	7N2W28-BB-00900	2016	6106	0.70	67,020	138,460	205,480	235,000	Jul-16	6	87
04	41	000	401	143	33	7N3W13-00-00700	2016	9437	4.51	105,700	244,940	350,640	395,000	Oct-16	7	89
04	41	000	401	141	33	7N2W29-00-01400	2016	7829	9.47	129,040	128,900	257,940	285,000	Sep-16	8	91
04	41	000	401	142	33	7N2W19-AA-00300	2016	4394	0.94	67,720	182,380	250,100	270,000	May-16	9	93
04	41	000	401	142	33	7N2W19-A0-01800	2016	10670	2.56	86,560	138,740	225,300	240,000	Nov-16	10	94
04	41	000	401	142	33	7N3W14-D0-01700	2016	8978	5.10	110,650	135,080	245,730	260,000	Sep-16	11	95
04	41	000	401	300	33	7N2W28-00-00302	2016	11185	3.75	99,000	13,320	112,320	115,000	Dec-16	12	98

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	04	41	000		1	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	1	**RECALCULATED**		
Population - Number of Accounts	122			
Sales as a percentage of the Population	0.82 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	7,732,410	32.93 %	9,201,568	32.91 %
OSD RMV	6,063,500	25.82 %	6,063,500	21.69 %
Residential Improvement RMV	7,747,200	32.99 %	10,148,832	36.30 %
Farm Improvement RMV	1,940,680	8.26 %	2,542,291	9.09 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	119
OSD Adjustment Factor	100
Residential Adjustment Factor	131
Farm Improvement Factor	131
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

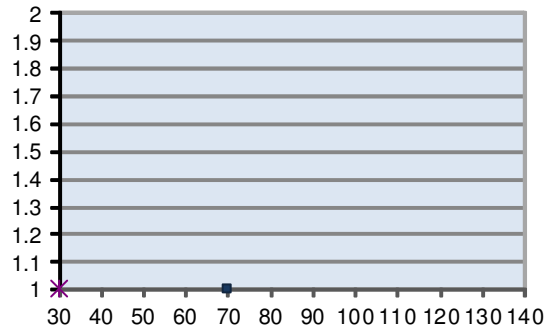
RMV 409: SA 41
Improved land – Manufactured Structure, Rural Rainier (Value Zone 1)
There is only 1 sale available out of this population of 122 accounts. Because of the low quantity of sales to analyze, it has been decided to use the selected ratio of 84 from the RMV 401 study in the same area.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	3.58	13.75	11.26	6.25
PRD	1.00	1.00	0.98	0.99	1.02

COLUMBIA County **2017** Ratio Study

Frequency



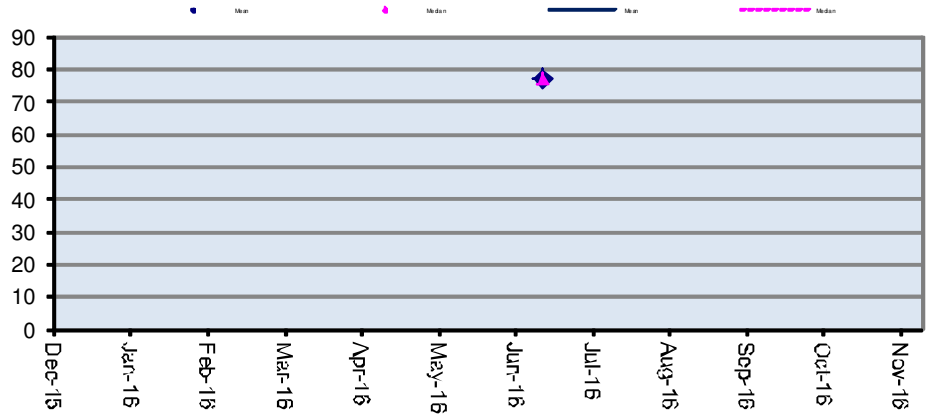
30	0
40	0
50	0
60	0
70	1
80	0
90	0
100	0
110	0
120	0
130	0
140	0

Median	**77**
AD	**0.00**
COD	**0.00**
Mean	**77**
SD	**1.00**
COV	**1.30**

Wtd Mean	**77**
GeoMean	**77**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Jul-16	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
04	41	000	409	452	33	7N3W24-00-00403	2016	5856	2.49	85,750	86,580	172,330	223,000	Jul-16	1	77

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	04	42	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	386			
Sales as a percentage of the Population	0.52 %			
Prior Year Population Values				
Land RMV	72,264,290	100.00 %	83,103,934	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** **2017** **Adjustment** **115**

Explanation

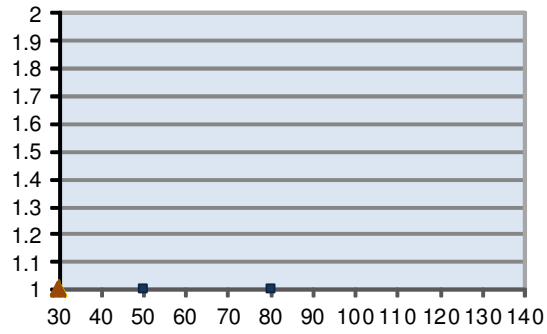
RMV 400: SA 42
Unimproved land – Rural Rainier (Value Zone 2)
There are too few sales available for this analysis. Therefore, the Selected Ratio (87) from the improved property study was applied here.

Performance History

	2017	2016	2015	2014	2013
COD	22.92	11.76	0.00	0.00	18.50
PRD	1.11	1.00	1.00	1.00	1.02

COLUMBIA County **2017** Ratio Study

Frequency



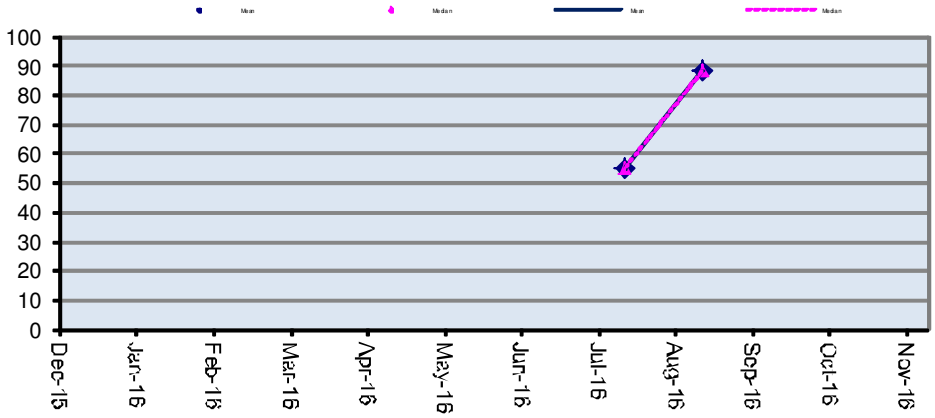
30	0
40	0
50	1
60	0
70	0
80	1
90	0
100	0
110	0
120	0
130	0
140	0

Median	**72**
AD	**16.50**
COD	**22.92**
Mean	**72**
SD	**23.35**
COV	**32.42**

Wtd Mean	**65**
GeoMean	**69**
PRD	**1.11**
95% Confidence	**32.35**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Aug-16	55	55	1
Sep-16	88	88	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	6N2W21-A0-01401	2016	7585	5.20	57,480	0	57,480	105,000	Aug-16	1	55
04	42	000	400		30	6N2W10-00-00602	2016	8023	3.46	42,170	0	42,170	48,000	Sep-16	2	88

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	04	42	000		10	Rainier

Adjustment Calculation Summary

Sample - Number of Sales	10	**RECALCULATED**		
Population - Number of Accounts	665			
Sales as a percentage of the Population	1.50 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	62,532,260	39.32 %	71,912,099	39.29 %
OSD RMV	26,980,500	16.96 %	26,980,500	14.74 %
Residential Improvement RMV	57,983,850	36.46 %	70,160,459	38.33 %
Farm Improvement RMV	11,547,530	7.26 %	13,972,511	7.63 %

SelectedRatioFromSales	87
RMV Adjustment	100
Before Ratio	87
Overall Adjustment Factor	115
Land Adjustment Factor	115
OSD Adjustment Factor	100
Residential Adjustment Factor	121
Farm Improvement Factor	121
After Ratio	100

Selected Ratio **87** **2017** **Adjustment** **115**

Explanation

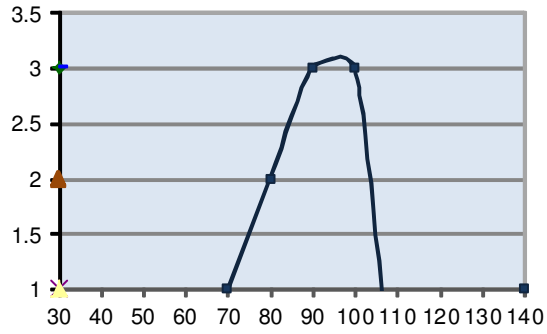
RMV 401: SA 42
Improved land – Rural Rainier (Value Zone 2)
The Median with a ratio of 92 has been selected as the best indicator for this grouping of properties. After the time adjustment of 95 was applied, the result is a Selected Ratio of 87.

Performance History

	2017	2016	2015	2014	2013
COD	14.89	13.27	13.75	11.26	6.25
PRD	1.02	0.98	0.98	0.99	1.02

COLUMBIA County **2017** Ratio Study

Frequency



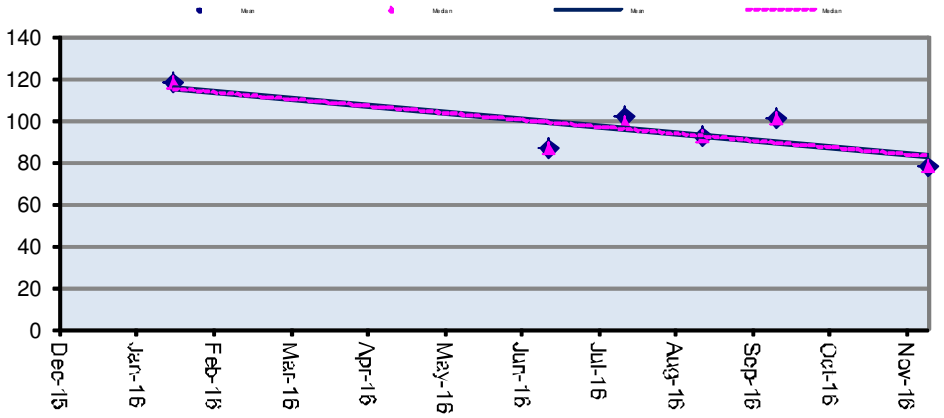
30	0
40	0
50	0
60	0
70	1
80	2
90	3
100	3
110	0
120	0
130	0
140	1

Median	**92**
AD	**13.70**
COD	**14.89**
Mean	**99**
SD	**19.42**
COV	**19.61**

Wtd Mean	**97**
GeoMean	**97**
PRD	**1.02**
95% Confidence	**12.03**

Number Of Sales **10**

Central Tendencies



Month	Mean	Median	Sales
Feb-16	118	118	2
Jul-16	86	86	1
Aug-16	102	99	3
Sep-16	92	92	2
Oct-16	101	101	1
Dec-16	78	78	1

APAR	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	146	33	6N2W31-00-00703	2016	11053	2.79	89,240	128,890	218,130	279,000	Dec-16	1	78
04	42	000	401	143	33	6N2W23-00-00401	2016	6514	12.17	161,020	138,460	299,480	349,900	Jul-16	2	86
04	42	000	401	144	33	6N2W06-00-00100	2016	1238	21.94	212,780	119,980	332,760	375,000	Feb-16	3	89
04	42	000	401	142	33	6N2W03-00-00804	2016	7052	2.24	82,830	135,620	218,450	242,000	Aug-16	4	90
04	42	000	401	143	33	6N2W15-00-00900	2016	7914	39.52	294,340	121,460	415,800	459,000	Sep-16	5	91
04	42	000	401	155	33	6N2W21-A0-01101	2016	8426	6.59	122,580	267,040	389,620	425,000	Sep-16	6	92
04	42	000	401	141	33	6N2W09-00-00700	2016	8781	5.85	116,950	194,130	311,080	307,500	Oct-16	7	101
04	42	000	401	452	33	6N2W11-00-00302	2016	7593	9.11	153,010	70,830	223,840	207,500	Aug-16	8	108
04	42	000	401	146	33	6N2W33-00-00200	2016	7018	50.00	241,260	404,750	646,010	595,000	Aug-16	9	109
04	42	000	401		33	6N2W04-B0-00500	2016	1095	27.50	242,350	0	242,350	165,000	Feb-16	10	147

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

Sample - Number of Sales	2	**RECALCULATED**		
Population - Number of Accounts	247			
Sales as a percentage of the Population	0.81 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	18,864,060	38.12 %	21,693,669	38.10 %
OSD RMV	12,085,000	24.42 %	12,085,000	21.22 %
Residential Improvement RMV	14,746,460	29.80 %	18,433,075	32.37 %
Farm Improvement RMV	3,786,090	7.65 %	4,732,613	8.31 %

SelectedRatioFromSales	87
RMV Adjustment	100
Before Ratio	87
Overall Adjustment Factor	115
Land Adjustment Factor	115
OSD Adjustment Factor	100
Residential Adjustment Factor	125
Farm Improvement Factor	125
After Ratio	100

Selected Ratio **87** **2017** **Adjustment** **115**

Explanation

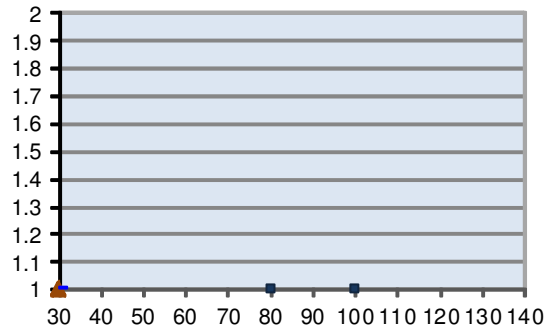
RMV 409: SA 42
Improved land – Manufactured Structure, Rural Rainier (Value Zone 2)
The sales data is insufficient to study since the sales sample is too small to present a clear picture of the market. Therefore, it has been decided to use the Selected Ratio of 87 from the improved single family dwelling study in the same area.

Performance History

	2017	2016	2015	2014	2013
COD	6.77	3.58	13.75	11.26	6.25
PRD	0.99	1.00	0.98	0.99	1.02

COLUMBIA County **2017** Ratio Study

Frequency



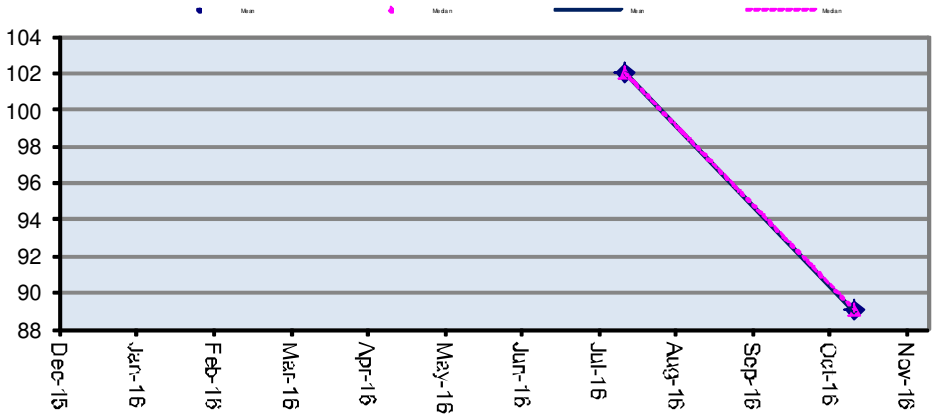
30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	1
110	0
120	0
130	0
140	0

Median	**96**
AD	**6.50**
COD	**6.77**
Mean	**96**
SD	**9.22**
COV	**9.60**

Wtd Mean	**97**
GeoMean	**95**
PRD	**0.99**
95% Confidence	**12.78**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Aug-16	102	102	1
Nov-16	89	89	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
04	42	000	409	452	33	6N2W10-00-00701	2016	10349	1.00	67,720	80,410	148,130	166,000	Nov-16	1	89
04	42	000	409	462	33	6N2W27-00-01300	2016	7181	6.48	121,760	122,010	243,770	240,000	Aug-16	2	102

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	0			
Population - Number of Accounts	12			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	178,890	100.00 %	205,724	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** **2017** **Adjustment** **115**

Explanation

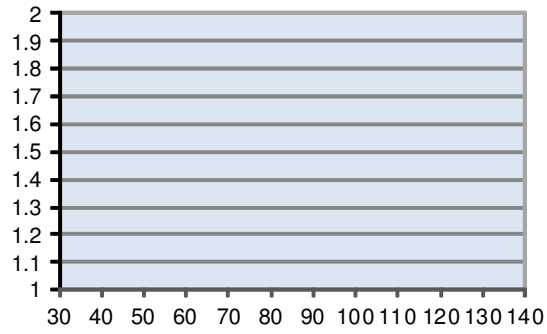
RMV 400: SA 44
Unimproved land – Prescott
There are no “good” sales available to study for the unimproved Prescott area. Because of this, it was decided to use the selected ratio indicator of 87 from the SA 42, RMV Class 400 study.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	-	0.00	18.50
PRD		1.00	-	1.00	1.02

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

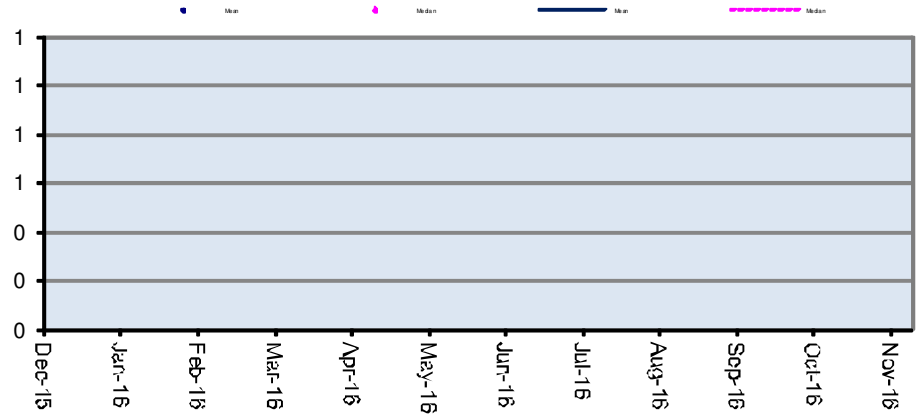
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	0				
Population - Number of Accounts	44				
Sales as a percentage of the Population	0.00 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	1,091,030		16.03 %	1,254,685	16.00 %
OSD RMV	1,569,500		23.05 %	1,569,500	20.01 %
Residential Improvement RMV	4,033,090		59.24 %	4,880,039	62.23 %
Farm Improvement RMV	114,330		1.68 %	138,339	1.76 %
SelectedRatioFromSales	87				
RMV Adjustment	100				
Before Ratio	87				
Overall Adjustment Factor	115				
Land Adjustment Factor	115				
OSD Adjustment Factor	100				
Residential Adjustment Factor	121				
Farm Improvement Factor	121				
After Ratio	100				

Selected Ratio **87** **2017** **Adjustment** **115**

Explanation

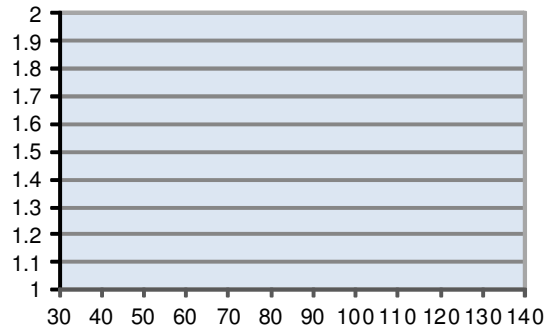
Improved land – Prescott
Prescott is a former mill-town community located on the Columbia River South of Rainier. No sales were identified in this area. Therefore, it was decided to use conclusion from the improved study located in Study Area 42 (ratio of 92 multiplied by the time adjustment of 95).

Performance History

	2017	2016	2015	2014	2013
COD		-	0.00	11.26	6.25
PRD		-	1.00	0.99	1.02

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

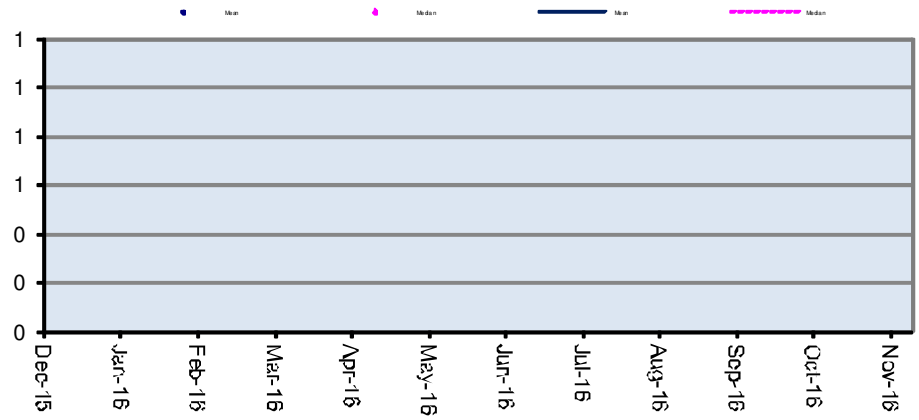
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

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	63,270	14.24 %	72,761	14.21 %
OSD RMV	129,000	29.03 %	129,000	25.20 %
Residential Improvement RMV	249,730	56.19 %	307,168	60.01 %
Farm Improvement RMV	2,400	0.54 %	2,952	0.58 %

SelectedRatioFromSales	87
RMV Adjustment	100
Before Ratio	87
Overall Adjustment Factor	115
Land Adjustment Factor	115
OSD Adjustment Factor	100
Residential Adjustment Factor	123
Farm Improvement Factor	123
After Ratio	100

Selected Ratio **87** **2017** **Adjustment** **115**

Explanation

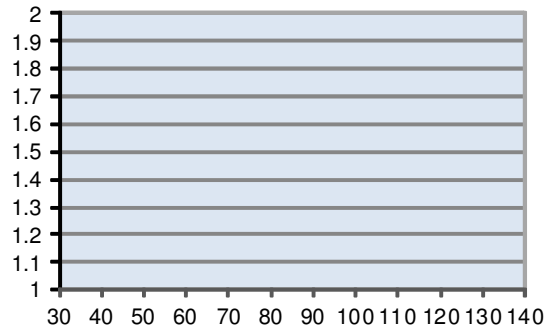
RMV 409: SA 44
Improved land – Manufactured Structure, Prescott
No sales were identified in these areas for the study period. Therefore, the conclusion from the improved properties located in SA 42 is recommended and applied here (Selected Ratio of 87).

Performance History

	2017	2016	2015	2014	2013
COD		-	0.00	11.26	6.25
PRD		-	1.00	0.99	1.02

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

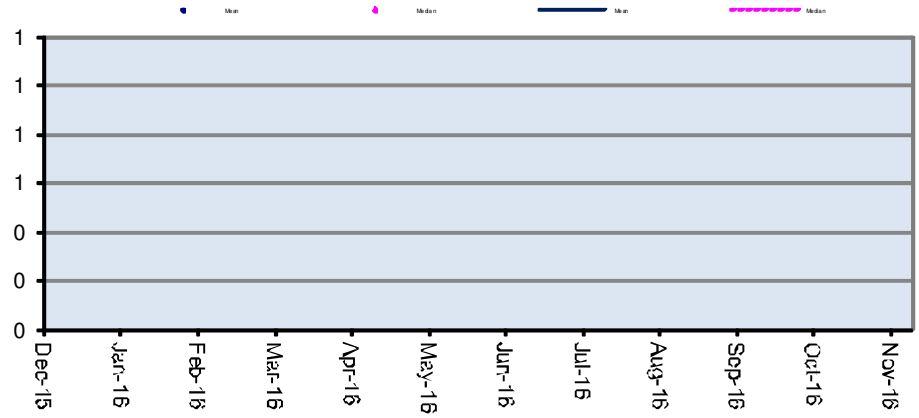
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** 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

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	1,556,730	100.00 %	1,852,509	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	119
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

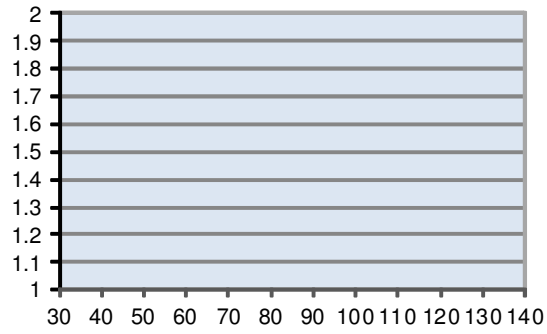
RMV 400: SA 45
Unimproved land – Dike Land, Rural Rainier
No sales are available. Therefore, the RMV Class 400 analysis located in Study Area 41 was applied here (ratio 88 X time adjustment 95 = Selected Ratio of 84).

Performance History

	2017	2016	2015	2014	2013
COD		-	-	0.00	18.50
PRD		-	-	1.00	1.02

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

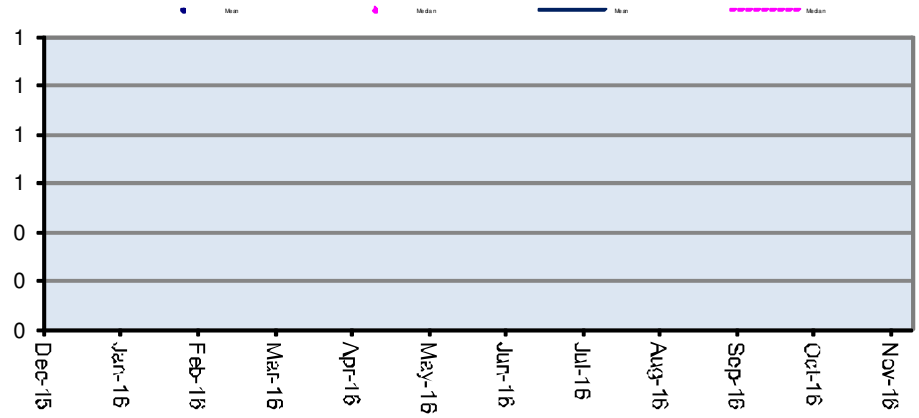
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	04	45	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	66			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	8,971,390	57.23 %	10,675,954	57.19 %
OSD RMV	2,107,500	13.44 %	2,107,500	11.29 %
Residential Improvement RMV	3,486,160	22.24 %	4,462,285	23.90 %
Farm Improvement RMV	1,111,100	7.09 %	1,422,208	7.62 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	119
OSD Adjustment Factor	100
Residential Adjustment Factor	128
Farm Improvement Factor	128
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

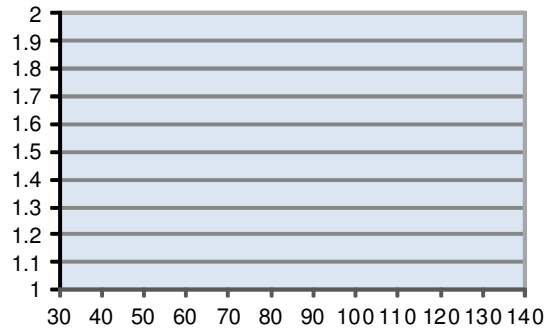
RMV 401: SA 45
Improved land – Dike Land, Rural Rainier
There are no reliable sales available for this study. Therefore, the central tendency of 88 and the time conclusion of 95 was applied to this analysis from the study performed on improved property located in SA 41. Thus, the Selected Ratio is 84.

Performance History

	2017	2016	2015	2014	2013
COD		22.48	0.00	11.26	6.25
PRD		1.01	1.00	0.99	1.02

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

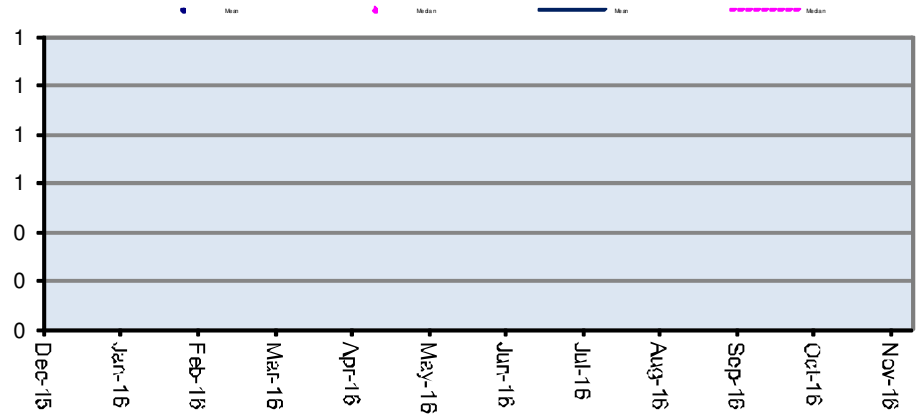
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

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	334,880	24.02 %	398,507	24.02 %
OSD RMV	486,000	34.85 %	486,000	29.30 %
Residential Improvement RMV	368,810	26.45 %	497,894	30.02 %
Farm Improvement RMV	204,690	14.68 %	276,332	16.66 %

SelectedRatioFromSales	84
RMV Adjustment	100
Before Ratio	84
Overall Adjustment Factor	119
Land Adjustment Factor	119
OSD Adjustment Factor	100
Residential Adjustment Factor	135
Farm Improvement Factor	135
After Ratio	100

Selected Ratio **84** **2017** **Adjustment** **119**

Explanation

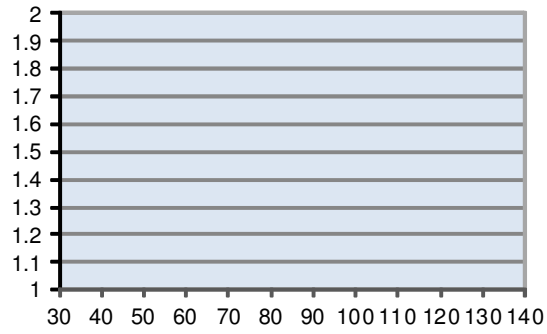
RMV 409: SA 45
Improved land – Manufactured Structure – Dike Land, Rural Rainier
There are no sales for this study of Dike Land with manufactured structures. Due to the lack of sales, the selected ratio of 84 from SA 41 RMV Class 409 was applied here.

Performance History

	2017	2016	2015	2014	2013
COD		-	0.00	11.26	6.25
PRD		-	1.00	0.99	1.02

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

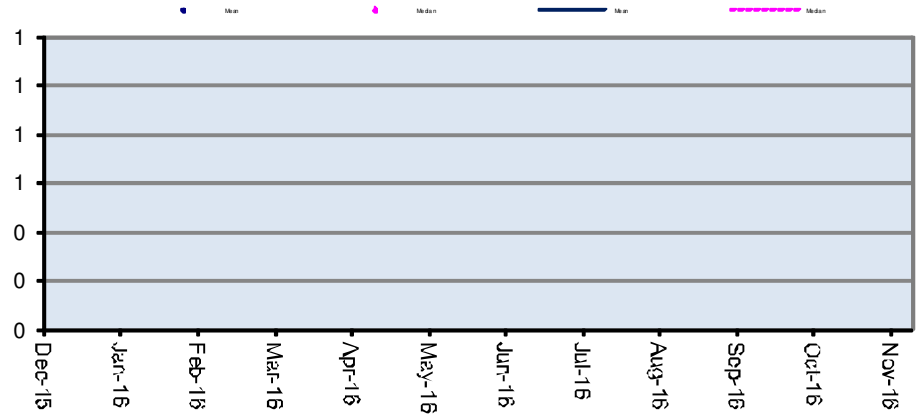
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

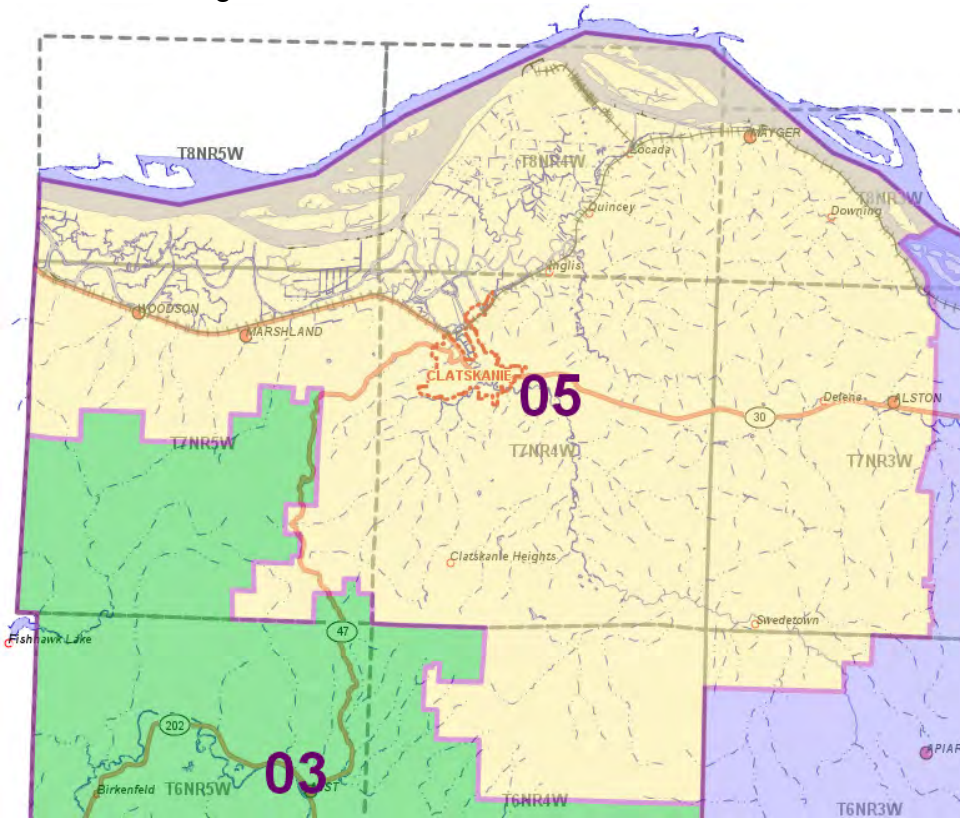
AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO

MAINTENANCE AREA 5

CLATSKANIE

MA 05 - Clatskanie

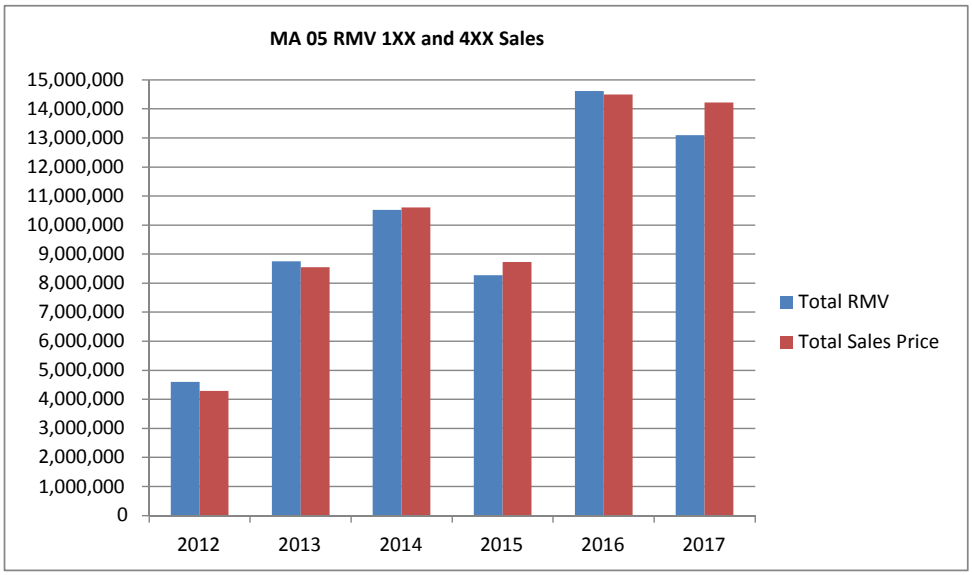
Maintenance Area 05 (Clatskanie) is located 61 miles northwest of Portland and 35 miles east from the town of Astoria. Thirteen miles away is the Lewis and Clark Bridge in Rainier, which provides access to Washington state and other amenities.



The Tlatskanai Indians were the first residents of Maintenance Area 05 and the City was named Clatskanie after them. A little while after Lewis and Clark came through, settlers in 1852 began to arrive. In 1878, Clatskanie's first steamboat was built which ran on the Clatskanie River and then met up with the Columbia River. This steamboat was used to connect with other riverboats which then transported passengers and freight up and down the Columbia River. The Clatskanie River was re-channeled in the 1800's and then in the early 1900's the area which is known as the Dike was created to gain more land for farming. After the Dike area was formed the term "Little Holland" began to be used for some time instead of Clatskanie because of the dike area features. In 1918, the Columbia River Highway was completed which finally provided a link to Portland. The area that we now refer to as Port Westward was once the site of the Beaver Army Ammunition Depot during World War II. This location was also used for the dismantling of ships after the war. The major industry which helped to form Clatskanie is logging. But there are other occupations such as commercial fishing, farming, and sawmills found in and around Clatskanie as well.

The City of Clatskanie was incorporated in 1891. There are many municipal and recreational services available to residents making Clatskanie a desirable place to live. The size of MA 5 is approximately 135.33 square miles of rural and residential properties. The City of Clatskanie is 1.19 square miles in size. (Source: www.cityofclatskanie.com and www.clatskanie.org/history.htm)

Clatskanie comparison of usable sales over the past five years:



	Total Sales	Total RMV	Total Sales Price	Difference	Percent Difference
2012	27	4,595,830	4,290,385	-305,445	-7.12%
2013	42	8,754,170	8,548,087	-206,083	-2.41%
2014	61	10,524,760	10,609,569	84,809	0.80%
2015	54	8,271,680	8,725,197	453,517	5.20%
2016	76	14,610,760	14,488,650	-122,110	-0.84%
2017	65	13,090,540	14,216,900	1,126,360	7.92%

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	05	00	000		3	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	3	**RECALCULATED**		
Population - Number of Accounts	101			
Sales as a percentage of the Population	2.97 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	7,108,920	100.00 %	7,819,812	100.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	0	0.00 %	0	0.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	110
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

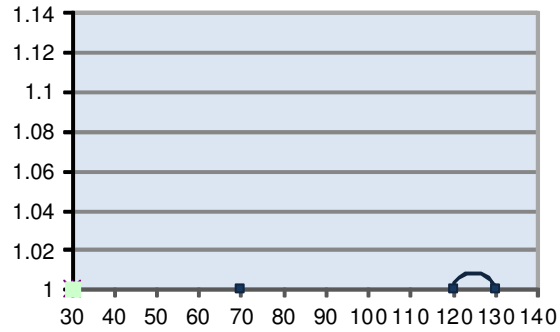
RMV 100: SA 00
Unimproved land, City of Clatskanie.
For this study of undeveloped land in the City of Clatskanie, no sales data was available. Therefore, the conclusion from the improved properties located in the same study area was applied. (Selected Ratio of 91).

Performance History

	2017	2016	2015	2014	2013
COD	18.49	0.00	-	-	-
PRD	1.09	1.00	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



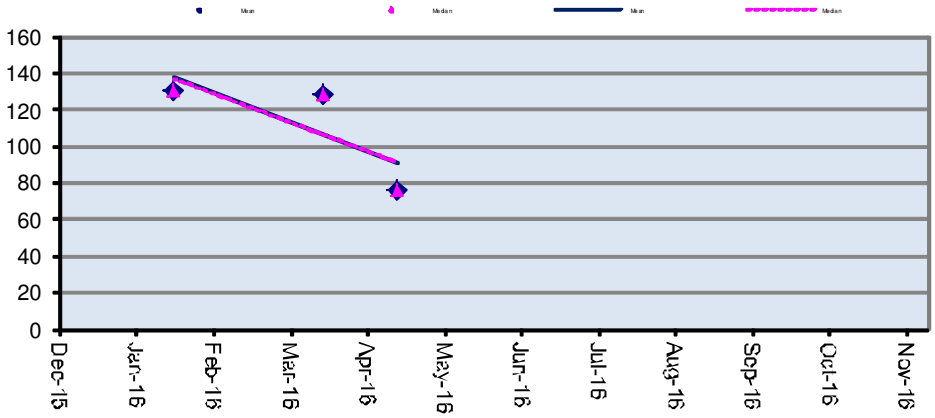
30	0
40	0
50	0
60	0
70	1
80	0
90	0
100	0
110	0
120	1
130	1
140	0

Median	**128**
AD	**23.67**
COD	**18.49**
Mean	**111**
SD	**30.62**
COV	**27.58**

Wtd Mean	**102**
GeoMean	**108**
PRD	**1.09**
95% Confidence	**34.65**

Number Of Sales **3**

Central Tendencies



Month	Mean	Median	Sales
Feb-16	130	130	1
Apr-16	128	128	1
May-16	76	76	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-AC-00800	2016	3624	0.91	48,490	0	48,490	63,500	May-16	1	76
05	00	000	100		30	7N4W09-CA-00147	2016	2627	0.22	38,320	0	38,320	30,000	Apr-16	2	128
05	00	000	100		30	7N4W09-CA-00142	2016	1149	0.23	39,100	0	39,100	30,000	Feb-16	3	130

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	05	00	000		23	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	23	**RECALCULATED**		
Population - Number of Accounts	512			
Sales as a percentage of the Population	4.49 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	19,957,650	24.68 %	21,953,415	24.61 %
OSD RMV	7,973,000	9.86 %	7,973,000	8.94 %
Residential Improvement RMV	52,233,440	64.61 %	58,501,453	65.59 %
Farm Improvement RMV	685,860	0.85 %	768,163	0.86 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	110
OSD Adjustment Factor	100
Residential Adjustment Factor	112
Farm Improvement Factor	112
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

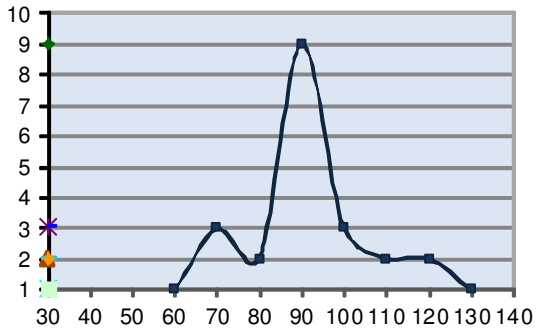
RMV 101: SA 00
Improved property, City of Clatskanie.
All single family site built residential properties located in the City of Clatskanie. The Median of 95 was selected for this analysis and is supported by the Weighted Mean (96) and the Mean (97). The time adjustment of 96 was then applied and the resulting selected ratio is 91.

Performance History

	2017	2016	2015	2014	2013
COD	13.32	9.39	12.50	12.14	6.57
PRD	1.01	1.01	1.01	1.00	1.00

COLUMBIA County **2017** Ratio Study

Frequency



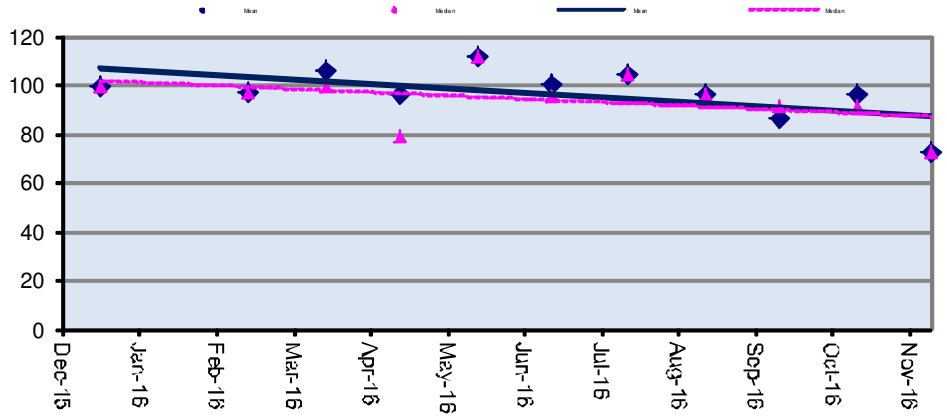
30	0
40	0
50	0
60	1
70	3
80	2
90	9
100	3
110	2
120	2
130	1
140	0

Median	**95**
AD	**12.65**
COD	**13.32**
Mean	**97**
SD	**16.51**
COV	**17.02**

Wtd Mean	**96**
GeoMean	**95**
PRD	**1.01**
95% Confidence	**6.75**

Number Of Sales **23**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	99	99	1
Mar-16	97	97	1
Apr-16	106	99	3
May-16	96	79	3
Jun-16	112	112	1
Jul-16	100	95	3
Aug-16	104	104	2
Sep-16	96	96	1
Oct-16	86	91	4
Nov-16	96	91	3
Dec-16	72	72	1

APAR	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	7N4W17-BA-01600	2016	8905	0.35	59,050	93,540	152,590	225,000	Oct-16	1	68
05	00	000	101	135	33	7N4W08-DA-05100	2016	10471	0.21	55,170	96,700	151,870	212,000	Dec-16	2	72
05	00	000	101	131	33	7N4W08-CD-08200	2016	4260	0.13	52,670	57,870	110,540	145,000	May-16	3	76
05	00	000	101	144	33	7N4W08-DC-01400	2016	9710	0.17	53,890	113,080	166,970	215,000	Nov-16	4	78
05	00	000	101	135	33	7N4W08-CA-02500	2016	3954	0.16	53,760	66,390	120,150	146,500	May-16	5	82
05	00	000	101	131	33	7N4W08-BC-02500	2016	6974	0.19	54,390	68,050	122,440	150,000	Aug-16	6	82
05	00	000	101	141	33	7N4W17-BB-01400	2016	8716	0.23	55,880	155,070	210,950	234,000	Oct-16	7	90
05	00	000	101	141	33	7N4W08-CB-03600	2016	8999	0.17	53,960	109,380	163,340	180,000	Oct-16	8	91
05	00	000	101	132	33	7N4W08-CB-02900	2016	3013	0.21	54,880	66,310	121,190	130,000	Apr-16	9	93
05	00	000	101	142	33	7N4W08-AD-02300	2016	8823	0.23	55,880	128,590	184,470	199,000	Oct-16	10	93
05	00	000	101	142	33	7N4W07-AD-01400	2016	6355	0.21	43,670	192,350	236,020	250,000	Jul-16	11	94
05	00	000	101	142	33	7N4W17-BB-00500	2016	6365	0.21	55,010	116,010	171,020	180,000	Jul-16	12	95
05	00	000	101	136	33	7N4W08-CA-03800	2016	8331	0.11	51,790	116,180	167,970	175,000	Sep-16	13	96
05	00	000	101	141	33	7N4W17-BB-01500	2016	2356	0.23	55,780	122,010	177,790	182,500	Mar-16	14	97
05	00	000	101	144	33	7N4W09-CA-00101	2016	459	0.36	59,610	186,830	246,440	249,000	Jan-16	15	99
05	00	000	101	146	33	7N4W08-CD-02300	2016	2697	0.17	53,950	169,170	223,120	215,000	Apr-16	16	104
05	00	000	101	136	33	7N4W08-AB-01000	2016	10462	0.23	55,900	74,100	130,000	125,000	Nov-16	17	104
05	00	000	101	142	33	7N4W08-BC-03200	2016	9668	0.18	54,100	185,480	239,580	225,000	Nov-16	18	106
05	00	000	101	132	33	7N4W08-CA-01001	2016	5971	0.46	64,320	86,890	151,210	137,200	Jul-16	19	110

COLUMBIA County **2017** Ratio Study

APAR	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	142	33	7N4W08-BC-03600	2016	5467	0.34	58,650	179,270	237,920	212,000	Jun-16	20	112
05	00	000	101	142	33	7N4W08-DA-00700	2016	2532	0.30	57,660	184,160	241,820	200,000	Apr-16	21	121
05	00	000	101	142	33	7N4W08-AD-00400	2016	7276	0.42	61,830	190,400	252,230	200,000	Aug-16	22	126
05	00	000	101	142	33	7N4W09-B0-01900	2016	3817	0.80	75,530	155,910	231,440	177,000	May-16	23	131

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	0				
Population - Number of Accounts	51				
Sales as a percentage of the Population	0.00 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	2,632,980		42.46 %	2,896,278	42.45 %
OSD RMV	816,000		13.16 %	816,000	11.96 %
Residential Improvement RMV	2,596,220		41.86 %	2,933,729	43.00 %
Farm Improvement RMV	156,430		2.52 %	176,766	2.59 %
SelectedRatioFromSales	91				
RMV Adjustment	100				
Before Ratio	91				
Overall Adjustment Factor	110				
Land Adjustment Factor	110				
OSD Adjustment Factor	100				
Residential Adjustment Factor	113				
Farm Improvement Factor	113				
After Ratio	100				

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

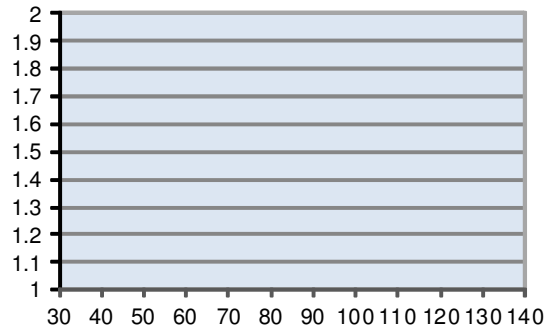
RMV 109: SA 00
Improved property – Manufactured Structures, City of Clatskanie.
There are too few sales for this analysis. Therefore, it was decided to use the Selected Ratio of 91 from the improved property analysis (RMV 101 SA 00).

Performance History

	2017	2016	2015	2014	2013
COD		0.00	12.50	12.14	6.57
PRD		1.00	1.01	1.00	1.00

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

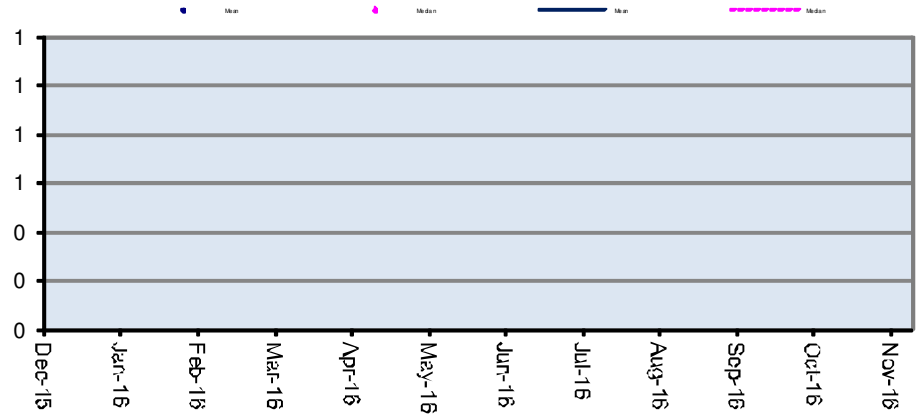
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	05	40	000		0	Clatskanie

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	0			
Population - Number of Accounts	21			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	826,290	25.07 %	908,919	25.12 %
OSD RMV	464,500	14.09 %	464,500	12.84 %
Residential Improvement RMV	1,999,690	60.68 %	2,239,653	61.89 %
Farm Improvement RMV	5,040	0.15 %	5,645	0.16 %

SelectedRatioFromSales	91
RMV Adjustment	100
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	110
OSD Adjustment Factor	100
Residential Adjustment Factor	112
Farm Improvement Factor	112
After Ratio	100

Selected Ratio **91** **2017** **Adjustment** **110**

Explanation

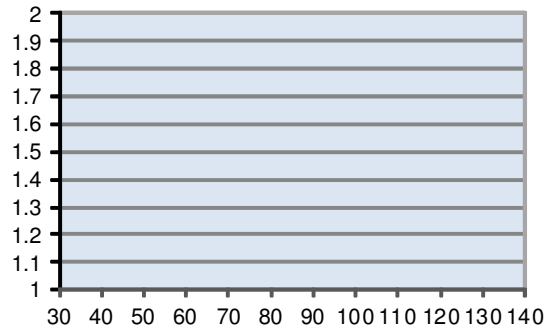
RMV 101: SA 40
Improved land – Duplex/Triplex/Fourplex, City of Clatskanie
The query did not return any sales for this analysis of Duplex/Triplex/Fourplex proprieties. Because of this, it was decided to use the selected ratio of 91 from the single family residential study in the same area and to apply it here.

Performance History

	2017	2016	2015	2014	2013
COD		3.30	-	-	-
PRD		1.00	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

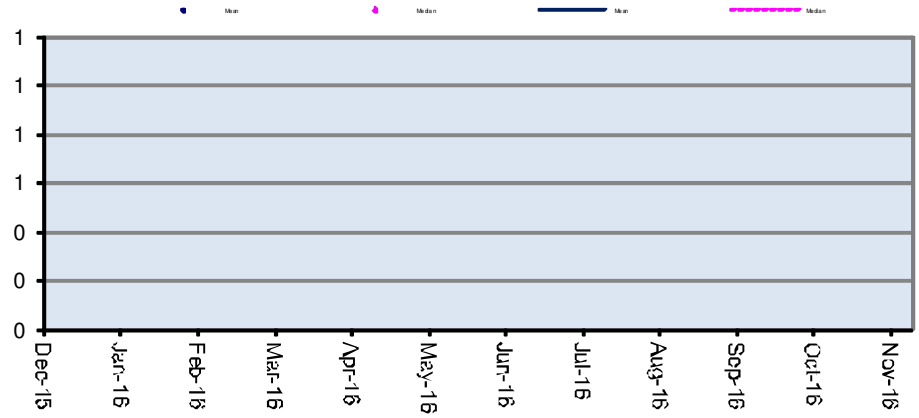
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	05	51	000		5	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	5	**RECALCULATED**		
Population - Number of Accounts	681			
Sales as a percentage of the Population	0.73 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	113,603,920	100.00 %	131,780,547	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	86
RMV Adjustment	100
Before Ratio	86
Overall Adjustment Factor	116
Land Adjustment Factor	116
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **86** **2017** **Adjustment** **116**

Explanation

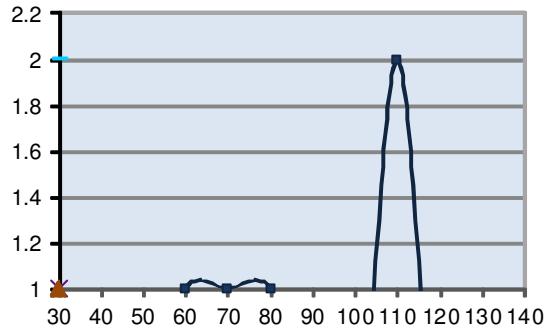
RMV 400: SA 51
Unimproved land, Rural Clatskanie (Value Zone 1)
Due to having too few sales resulting in less the one per cent of the population, the selected ratio of 86 from the improved study in the same area has been applied here.

Performance History

	2017	2016	2015	2014	2013
COD	19.55	12.31	22.57	20.83	0.00
PRD	1.06	1.06	1.03	1.09	1.00

COLUMBIA County **2017** Ratio Study

Frequency



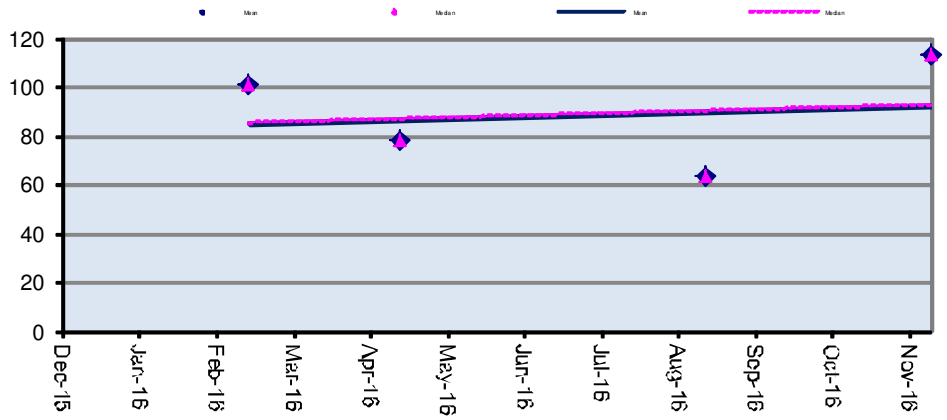
30	0
40	0
50	0
60	1
70	1
80	1
90	0
100	0
110	2
120	0
130	0
140	0

Median	**89**
AD	**17.40**
COD	**19.55**
Mean	**91**
SD	**21.94**
COV	**24.11**

Wtd Mean	**86**
GeoMean	**89**
PRD	**1.06**
95% Confidence	**19.23**

Number Of Sales **5**

Central Tendencies



Month	Mean	Median	Sales
Mar-16	101	101	2
May-16	78	78	1
Sep-16	63	63	1
Dec-16	113	113	1

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
05	51	000	400		33	7N3W31-00-00606	2016	8518	10.04	72,170	0	72,170	115,000	Sep-16	1	63
05	51	000	400		33	7N4W16-BB-00700	2016	3437	3.10	33,460	0	33,460	43,000	May-16	2	78
05	51	000	400		33	7N3W04-C0-01602	2016	2043	4.19	44,690	0	44,690	50,000	Mar-16	3	89
05	51	000	400		33	7N3W04-C0-01600	2016	2044	4.28	45,160	0	45,160	40,000	Mar-16	4	113
05	51	000	400		33	7N3W05-D0-00200	2016	10473	9.70	69,770	0	69,770	62,000	Dec-16	5	113

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	05	51	000		28	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	28	**RECALCULATED**		
Population - Number of Accounts	1,300			
Sales as a percentage of the Population	2.15 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	74,350,660	26.15 %	86,246,766	26.10 %
OSD RMV	54,483,670	19.16 %	54,483,670	16.49 %
Residential Improvement RMV	134,668,520	47.36 %	164,295,594	49.71 %
Farm Improvement RMV	20,867,120	7.34 %	25,457,886	7.70 %

SelectedRatioFromSales	86
RMV Adjustment	100
Before Ratio	86
Overall Adjustment Factor	116
Land Adjustment Factor	116
OSD Adjustment Factor	100
Residential Adjustment Factor	122
Farm Improvement Factor	122
After Ratio	100

Selected Ratio **86** **2017** **Adjustment** **116**

Explanation

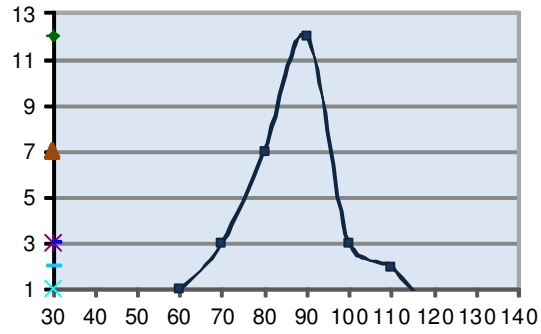
RMV 401: SA 51
Improved property, Rural Clatskanie (Value Zone 1)
For this sales array of improved property within rural Clatskanie, the Mean of 91was selected and the time adjustment of 95 was applied to this indicator which resulted in a Selected Ratio of 86.

Performance History

	2017	2016	2015	2014	2013
COD	9.18	13.04	13.29	14.17	14.40
PRD	1.01	1.00	1.03	1.02	1.01

COLUMBIA County **2017** Ratio Study

Frequency



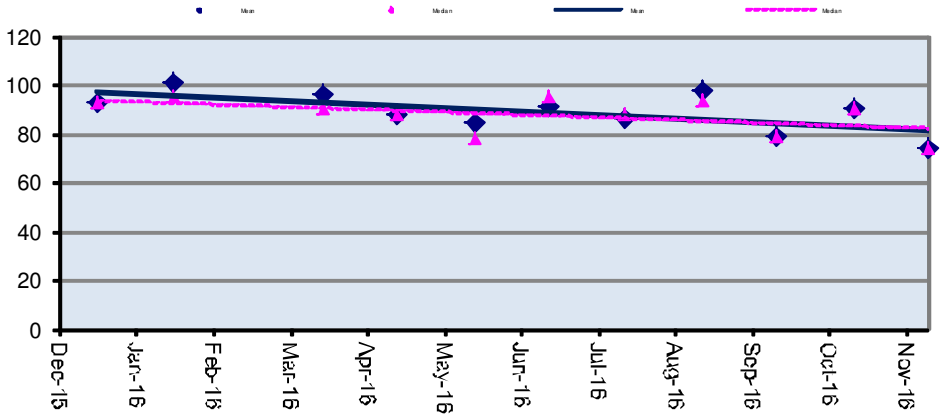
30	0
40	0
50	0
60	1
70	3
80	7
90	12
100	3
110	2
120	0
130	0
140	0

Median	**93**
AD	**8.54**
COD	**9.18**
Mean	**91**
SD	**11.03**
COV	**12.12**

Wtd Mean	**90**
GeoMean	**90**
PRD	**1.01**
95% Confidence	**4.09**

Number Of Sales **28**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	93	93	1
Feb-16	101	95	3
Apr-16	96	90	3
May-16	88	88	2
Jun-16	85	78	3
Jul-16	91	95	4
Aug-16	86	88	5
Sep-16	98	94	4
Oct-16	79	79	1
Nov-16	90	90	1
Dec-16	74	74	1

APAR	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	135	30	7N4W11-00-01200	2016	6810	7.84	106,300	96,930	203,230	296,000	Aug-16	1	69
05	51	000	401	141	33	8N4W34-CC-01100	2016	5684	1.88	74,680	118,660	193,340	277,000	Jun-16	2	70
05	51	000	401	131	33	8N4W34-C0-00400	2016	11003	1.27	69,040	70,020	139,060	187,000	Dec-16	3	74
05	51	000	401	144	33	7N5W01-00-02700	2016	9116	11.23	123,100	223,140	346,240	439,000	Oct-16	4	79
05	51	000	401	141	33	7N4W15-DB-02800	2016	3670	2.15	77,240	182,660	259,900	325,000	May-16	5	80
05	51	000	401	141	33	7N4W15-DB-02400	2016	6640	2.81	76,700	148,170	224,870	281,000	Jul-16	6	80
05	51	000	401	141	33	7N3W04-B0-00700	2016	2684	4.62	95,950	182,240	278,190	339,000	Apr-16	7	82
05	51	000	401	141	33	7N3W18-A0-00800	2016	7069	5.00	94,760	190,680	285,440	339,000	Aug-16	8	84
05	51	000	401	143	30	7N4W18-00-01604	2016	5087	34.43	223,570	137,760	361,330	420,000	Jun-16	9	86
05	51	000	401	144	33	7N3W18-00-01502	2016	6785	4.22	93,850	194,550	288,400	327,000	Aug-16	10	88
05	51	000	401	135	33	8N4W27-DC-00200	2016	911	0.64	65,480	63,970	129,450	145,000	Feb-16	11	89
05	51	000	401	143	30	7N4W27-00-00906	2016	10120	4.86	97,210	209,390	306,600	340,000	Nov-16	12	90
05	51	000	401	154	33	7N4W27-00-00905	2016	8575	9.83	120,350	341,690	462,040	499,900	Sep-16	13	92
05	51	000	401	141	33	7N3W20-00-00602	2016	522	4.63	96,000	168,400	264,400	285,000	Jan-16	14	93
05	51	000	401	136	33	7N4W16-D0-00702	2016	7770	3.44	88,640	134,170	222,810	240,000	Sep-16	15	93
05	51	000	401	131	30	7N3W30-A0-02300	2016	5773	4.80	96,900	101,340	198,240	210,000	Jul-16	16	94
05	51	000	401	151	33	7N3W30-A0-02600	2016	8562	4.70	96,370	229,790	326,160	347,500	Sep-16	17	94
05	51	000	401	141	30	7N3W09-00-00500	2016	6104	4.13	93,370	143,320	236,690	249,000	Jul-16	18	95
05	51	000	401	141	30	7N3W04-C0-00500	2016	7420	5.11	98,690	119,560	218,250	230,000	Aug-16	19	95

COLUMBIA County **2017** Ratio Study

APAR	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	151	33	7N4W15-DC-00702	2016	3797	7.73	112,250	253,360	365,610	380,000	May-16	20	96
05	51	000	401	155	33	7N5W36-B0-00200	2016	6603	5.00	97,950	238,830	336,780	350,000	Jul-16	21	96
05	51	000	401	131	33	8N4W26-C0-01600	2016	7651	4.61	95,900	83,970	179,870	187,500	Aug-16	22	96
05	51	000	401	143	33	8N4W36-A0-01200	2016	2791	4.59	101,260	201,260	302,520	310,000	Apr-16	23	98
05	51	000	401	142	33	7N3W30-A0-00100	2016	1375	5.00	97,950	170,270	268,220	269,500	Feb-16	24	100
05	51	000	401	151	33	7N4W22-00-00220	2016	5463	5.13	98,820	188,230	287,050	288,000	Jun-16	25	100
05	51	000	401	136	33	7N4W04-A0-01900	2016	2682	1.74	73,380	87,210	160,590	149,000	Apr-16	26	108
05	51	000	401	300	33	7N5W10-00-00509	2016	8110	6.11	44,940	7,080	52,020	47,000	Sep-16	27	111
05	51	000	401	152	33	8N3W19-DB-00900	2016	1205	0.54	67,180	179,890	247,070	219,000	Feb-16	28	113

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	05	51	000		2	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	2	**RECALCULATED**		
Population - Number of Accounts	468			
Sales as a percentage of the Population	0.43 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	24,553,750	30.19 %	28,482,350	30.20 %
OSD RMV	21,928,470	26.96 %	21,928,470	23.25 %
Residential Improvement RMV	27,332,900	33.61 %	34,439,454	36.52 %
Farm Improvement RMV	7,509,240	9.23 %	9,461,642	10.03 %

SelectedRatioFromSales	86
RMV Adjustment	100
Before Ratio	86
Overall Adjustment Factor	116
Land Adjustment Factor	116
OSD Adjustment Factor	100
Residential Adjustment Factor	126
Farm Improvement Factor	126
After Ratio	100

Selected Ratio **86** **2017** **Adjustment** **116**

Explanation

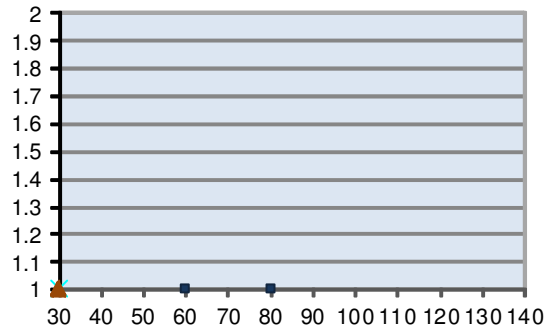
RMV 409: SA 51
Improved property – Manufactured Structure, Rural Clatskanie (Value Zone 1)
Only 2 sales were identified during the sales period resulting in an inadequate sampling. Therefore the conclusion from the improved properties in these areas (Selected Ratio of 86) is recommended.

Performance History

	2017	2016	2015	2014	2013
COD	13.82	10.24	13.29	14.17	14.40
PRD	0.97	1.01	1.03	1.02	1.01

COLUMBIA County **2017** Ratio Study

Frequency



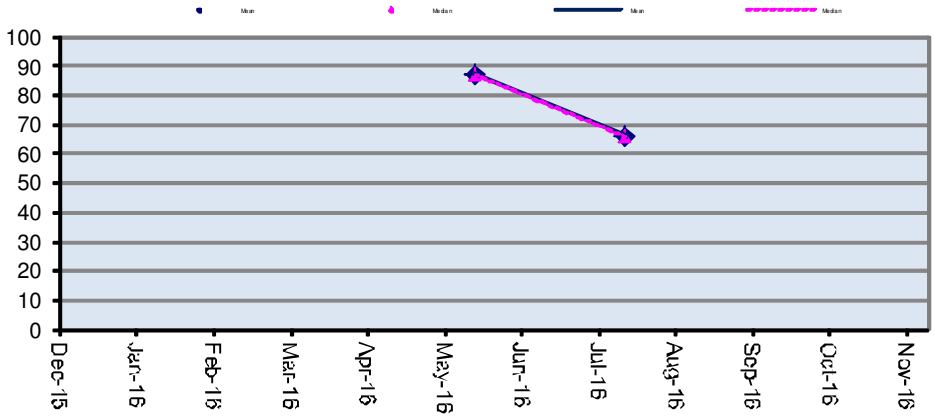
30	0
40	0
50	0
60	1
70	0
80	1
90	0
100	0
110	0
120	0
130	0
140	0

Median	**76**
AD	**10.50**
COD	**13.82**
Mean	**76**
SD	**14.87**
COV	**19.56**

Wtd Mean	**78**
GeoMean	**76**
PRD	**0.97**
95% Confidence	**20.60**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Jun-16	87	87	1
Aug-16	66	66	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	7N4W03-B0-00300	2016	7642	0.17	64,450	40,690	105,140	159,900	Aug-16	1	66
05	51	000	409	452	33	8N4W25-00-01300	2016	5030	9.22	117,660	83,220	200,880	230,000	Jun-16	2	87

COLUMBIA County **2017** Ratio Study

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	118			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	18,334,030	100.00 %	19,800,752	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** **2017** **Adjustment** **108**

Explanation

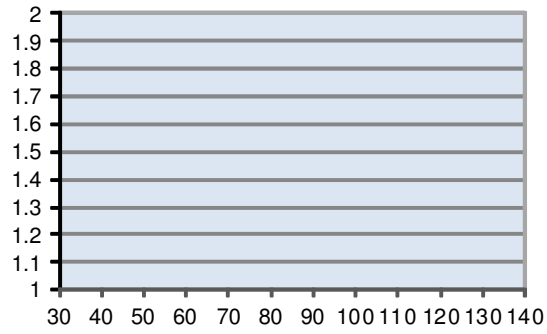
RMV 400: SA 55
Unimproved Land – Dike Land, Rural Clatskanie
There are no sales available for this study. Therefore, the selected ratio of 93 from the improved property analysis located in the same area was applied here.

Performance History

	2017	2016	2015	2014	2013
COD		-	33.75	20.83	0.00
PRD		-	0.87	1.09	1.00

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

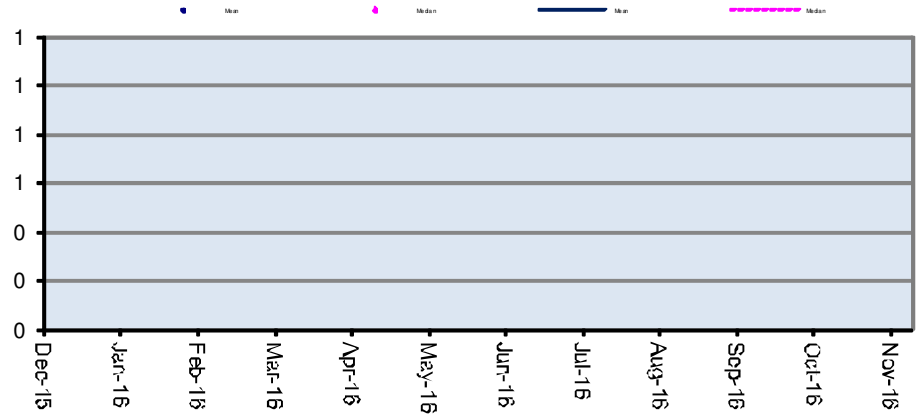
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	05	55	000		4	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	4	**RECALCULATED**		
Population - Number of Accounts	262			
Sales as a percentage of the Population	1.53 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	36,571,550	55.45 %	39,497,274	55.47 %
OSD RMV	8,207,500	12.44 %	8,207,500	11.53 %
Residential Improvement RMV	15,360,630	23.29 %	17,050,299	23.95 %
Farm Improvement RMV	5,811,370	8.81 %	6,450,621	9.06 %

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** **2017** **Adjustment** **108**

Explanation

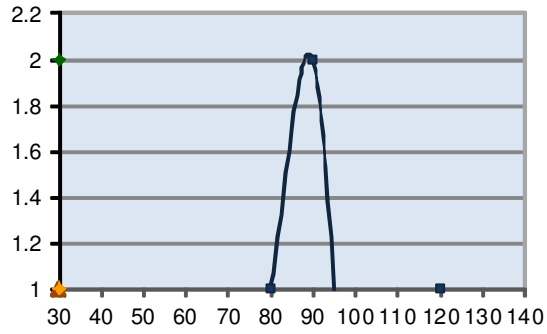
RMV 401: SA 55
Improved Land – Dike Land, Rural Clatskanie
For this analysis of improved properties located in the dike area of Clatskanie, the Median of 98 was deemed appropriate and was then adjusted by the time study conclusion (95). The Selected Ratio is 93.

Performance History

	2017	2016	2015	2014	2013
COD	11.48	11.21	13.13	14.17	14.40
PRD	1.02	0.98	1.00	1.02	1.01

COLUMBIA County **2017** Ratio Study

Frequency



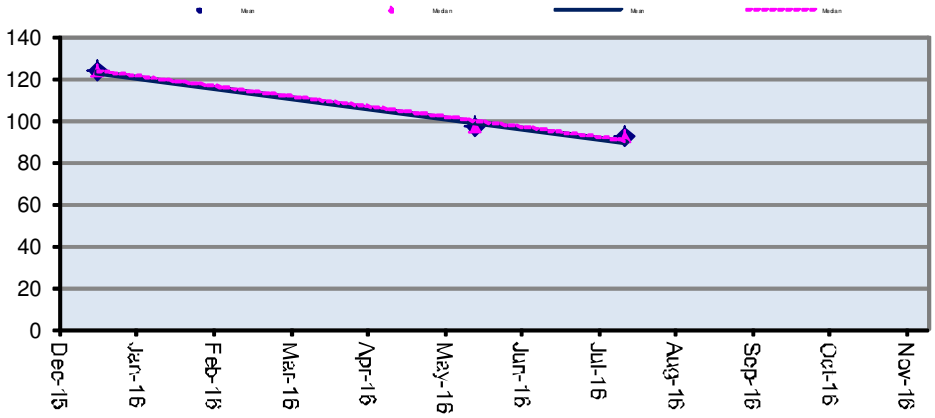
30	0
40	0
50	0
60	0
70	0
80	1
90	2
100	0
110	0
120	1
130	0
140	0

Median	**98**
AD	**11.25**
COD	**11.48**
Mean	**101**
SD	**16.11**
COV	**15.95**

Wtd Mean	**99**
GeoMean	**100**
PRD	**1.02**
95% Confidence	**15.79**

Number Of Sales **4**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	124	124	1
Jun-16	97	97	1
Aug-16	92	92	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	134	33	7N5W04-00-01200	2016	7043	14.13	134,690	139,780	274,470	320,000	Aug-16	1	86
05	55	000	401	146	33	7N5W03-00-01300	2016	4855	5.02	98,090	237,220	335,310	347,000	Jun-16	2	97
05	55	000	401	133	33	7N4W05-00-00600	2016	7256	2.07	76,470	109,630	186,100	190,000	Aug-16	3	98
05	55	000	401	133	33	8N4W23-B0-00900	2016	308	16.35	144,350	97,690	242,040	195,900	Jan-16	4	124

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	05	55	000		0	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	0	**RECALCULATED**		
Population - Number of Accounts	31			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	2,660,480	41.07 %	2,873,318	41.14 %
OSD RMV	1,373,000	21.19 %	1,373,000	19.66 %
Residential Improvement RMV	1,704,490	26.31 %	1,909,029	27.33 %
Farm Improvement RMV	740,290	11.43 %	829,125	11.87 %

SelectedRatioFromSales	93
RMV Adjustment	100
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Residential Adjustment Factor	112
Farm Improvement Factor	112
After Ratio	100

Selected Ratio **93** **2017** **Adjustment** **108**

Explanation

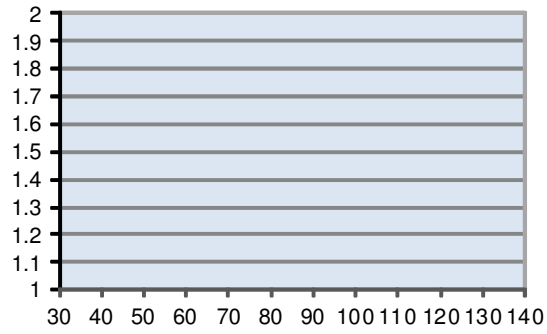
RMV 409: SA 55
Improved Land – Dike Land - Manufactured Structure, Rural Clatskanie
Due to the lack of sales in this data set, the selected ratio of 93 from the RMV 401 SA 55 study was applied here.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	13.13	14.17	14.40
PRD		1.00	1.00	1.02	1.01

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

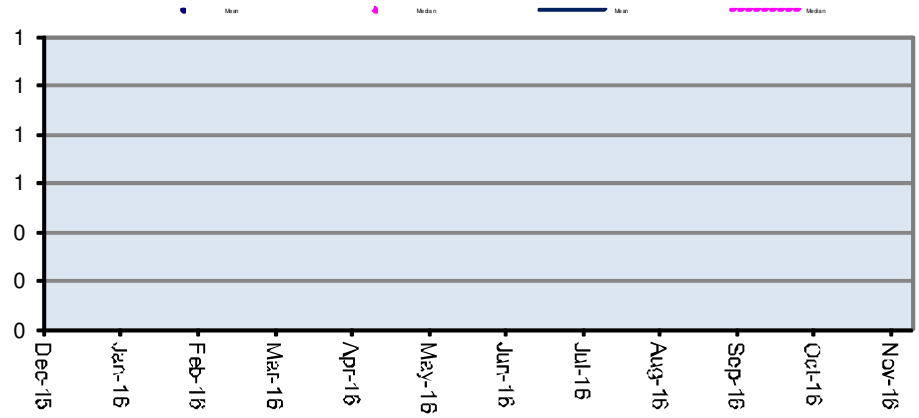
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

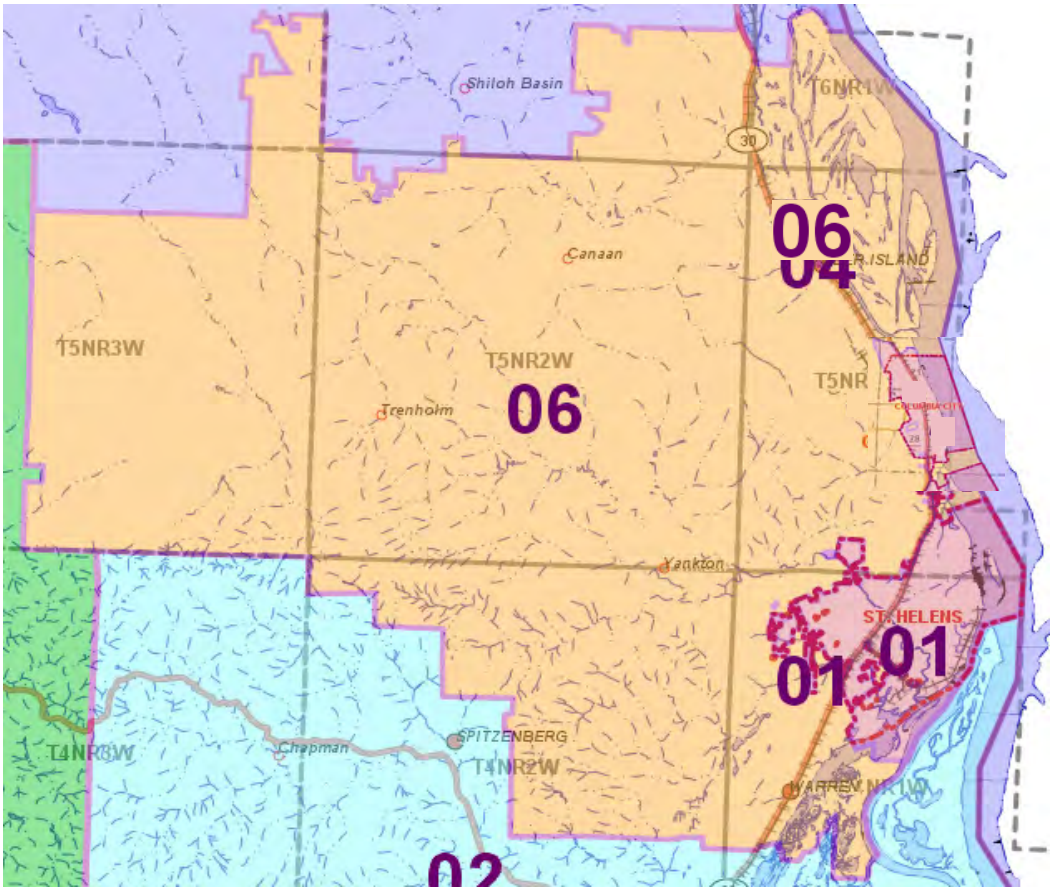
AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	ACCOUNT NO	BOOK	PAGE	AC	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO

MAINTENANCE AREA 6

RURAL ST. HELENS, WARREN & DEER ISLAND

MA 06 – Rural St. Helens, Deer Island and Warren

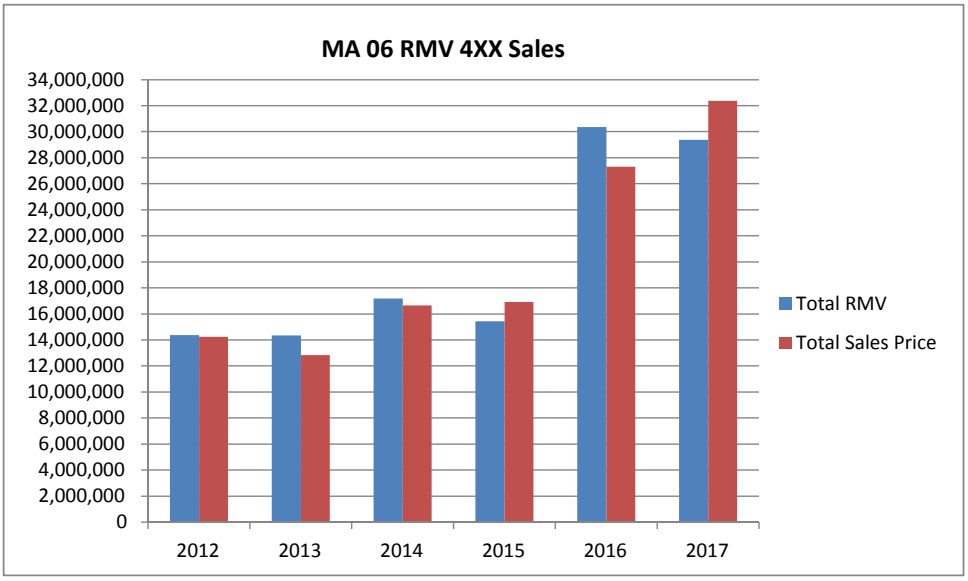
Maintenance Area 06 is comprised of several small unincorporated rural towns that surround the City of St. Helens. This area is approximately 104.78 square miles in size. Two of the most popular small towns are Warren and Deer Island.



Warren is a highly sought after place to live in our County. It provides a rural life style with easy access to Highway 30, lying just 4.8 miles north of Scappoose and 25 miles northwest of Portland. It was established around 1885. This area is comprised mainly of pastureland and has great views of the Columbia River Mt. St. Helens, Mt. Rainier and Mt. Hood.

The Deer Island area lies just 5.8 miles north of St. Helens and 34 miles northwest from the Metropolitan Portland area. Originally named E-lal-lar Island by Indians, in 1805 Lewis and Clark translated it to Deer Island and wrote of the abundance of deer and other wildlife available. The town was established around 1887 and lies west of the island which is one of the few large islands left that has not been developed. There are a lot of sloughs and lakes that lie in the grassy marsh land making it an ideal location for waterfowl, bald eagles and other wildlife. The west side of Deer Island is mainly timber and pastureland, with high elevations that overlook the Columbia River and mountain views.
(Source: www.columbiariverimages.com/Regions/Places/deer island.html)

Rural St. Helens, Warren and Deer Island comparison of usable sales over the past five years:



	Total Sales	Total RMV	Total Sales Price	Difference	Percent DIfference
2012	57	14,357,630	14,234,333	-123,297	-0.87%
2013	52	14,342,050	12,845,838	-1,496,212	-11.65%
2014	63	17,172,520	16,647,834	-524,686	-3.15%
2015	63	15,425,060	16,908,579	1,483,519	8.77%
2016	97	30,345,300	27,294,325	-3,050,975	-11.18%
2017	85	29,386,950	32,361,666	2,974,716	9.19%

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	06	56	000		0	Rural St Helens

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	06	61	000		8	Rural St Helens

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	8			
Population - Number of Accounts	284			
Sales as a percentage of the Population	2.82 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	52,272,910	100.00 %	62,727,492	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	83
RMV Adjustment	100
Before Ratio	83
Overall Adjustment Factor	120
Land Adjustment Factor	120
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **83** **2017** **Adjustment** **120**

Explanation

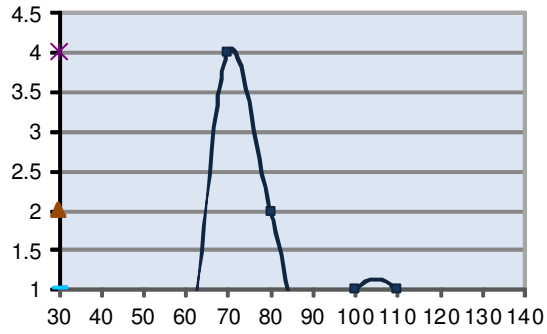
RMV 400: SA 56 61
Unimproved land, Rural St. Helens, Warren, Deer Island
Undeveloped rural properties of Deer Island, Warren and surrounding the City of St. Helens. For this analysis, the Mean of 87 was selected. The mean was further adjusted by the conclusion from the time study which resulted in a Selected Ratio of 83.

Performance History

	2017	2016	2015	2014	2013
COD	14.38	24.84	13.87	20.26	4.05
PRD	1.04	1.02	1.01	1.05	1.00

COLUMBIA County **2017** Ratio Study

Frequency



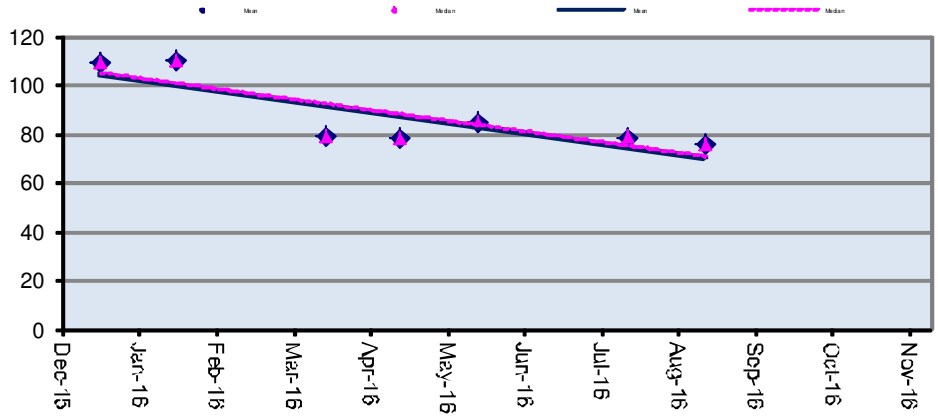
30	0
40	0
50	0
60	0
70	4
80	2
90	0
100	1
110	1
120	0
130	0
140	0

Median	**80**
AD	**11.50**
COD	**14.38**
Mean	**87**
SD	**14.30**
COV	**16.44**

Wtd Mean	**84**
GeoMean	**86**
PRD	**1.04**
95% Confidence	**9.91**

Number Of Sales **8**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	109	109	1
Feb-16	110	110	1
Apr-16	79	79	1
May-16	78	78	1
Jun-16	85	85	1
Aug-16	78	79	2
Sep-16	76	76	1

APPR	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	5N2W36-00-00216	2016	8106	5.99	158,890	0	158,890	210,000	Sep-16	1	76
06	61	000	400		33	4N1W30-B0-00100	2016	7427	11.04	338,240	0	338,240	438,000	Aug-16	2	77
06	61	000	400		33	4N1W07-C0-00301	2016	4386	4.85	165,050	0	165,050	211,400	May-16	3	78
06	61	000	400		33	4N2W01-00-03509	2016	2870	2.04	126,000	0	126,000	160,000	Apr-16	4	79
06	61	000	400		30	4N1W17-CB-03200	2016	6751	1.26	81,990	0	81,990	103,000	Aug-16	5	80
06	61	000	400		33	4N2W23-DB-01100	2016	4887	2.05	126,170	0	126,170	149,000	Jun-16	6	85
06	61	000	400		30	4N1W18-A0-02501	2016	69	2.57	154,040	0	154,040	141,500	Jan-16	7	109
06	61	000	400		30	4N2W13-A0-03002	2016	1016	5.00	165,600	0	165,600	150,000	Feb-16	8	110

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	06	61	000		50	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	50	**RECALCULATED**		
Population - Number of Accounts	1,724			
Sales as a percentage of the Population	2.90 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	209,767,540	37.06 %	251,721,048	38.33 %
OSD RMV	85,237,170	15.06 %	85,237,170	12.98 %
Residential Improvement RMV	241,381,510	42.65 %	284,830,182	43.37 %
Farm Improvement RMV	29,619,820	5.23 %	34,951,388	5.32 %

SelectedRatioFromSales	86
RMV Adjustment	100
Before Ratio	86
Overall Adjustment Factor	116
Land Adjustment Factor	120
OSD Adjustment Factor	100
Residential Adjustment Factor	118
Farm Improvement Factor	118
After Ratio	100

Selected Ratio **86** **2017** **Adjustment** **116**

Explanation

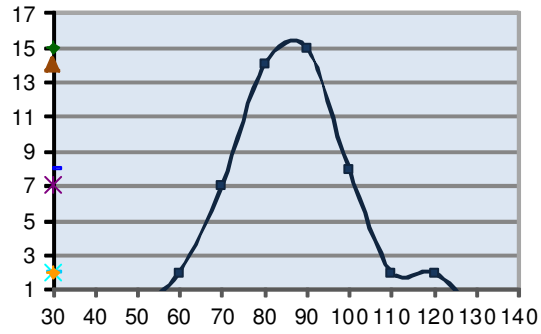
RMV 401: SA 61
Improved land, Rural St. Helens, Warren
For this analysis of site built property located in rural St. Helens and Warren, the Median of 90 was selected and the time adjustment of 95 was applied to this data set. The Selected Ratio of 86 was then applied to the study.

Performance History

	2017	2016	2015	2014	2013
COD	11.22	17.03	12.88	13.58	12.72
PRD	1.01	1.03	1.02	1.02	1.04

COLUMBIA County **2017** Ratio Study

Frequency



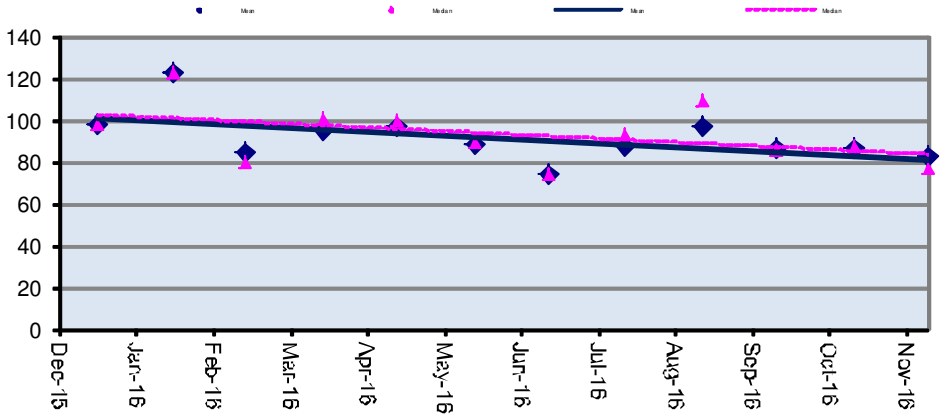
30	0
40	0
50	0
60	2
70	7
80	14
90	15
100	8
110	2
120	2
130	0
140	0

Median	**90**
AD	**10.10**
COD	**11.22**
Mean	**91**
SD	**13.01**
COV	**14.30**

Wtd Mean	**90**
GeoMean	**90**
PRD	**1.01**
95% Confidence	**3.61**

Number Of Sales **50**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	98	98	5
Feb-16	123	123	1
Mar-16	84	80	3
Apr-16	95	101	8
May-16	97	100	6
Jun-16	88	89	9
Jul-16	74	74	2
Aug-16	87	93	4
Sep-16	97	109	4
Oct-16	86	85	3
Nov-16	86	87	2
Dec-16	83	77	3

APAR	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	136	33	4N2W24-C0-00300	2016	10900	1.41	142,210	89,930	232,140	360,000	Dec-16	1	64
06	61	000	401	143	33	4N2W24-C0-01800	2016	6565	1.37	139,710	207,250	346,960	500,000	Jul-16	2	69
06	61	000	401	135	33	4N2W23-B0-00600	2016	2860	1.00	149,680	122,470	272,150	388,000	Apr-16	3	70
06	61	000	401	143	33	4N1W07-DB-01200	2016	7151	1.03	118,440	245,660	364,100	520,000	Aug-16	4	70
06	61	000	401	143	33	4N2W13-D0-00901	2016	8306	5.01	219,750	213,520	433,270	579,000	Sep-16	5	75
06	61	000	401	141	33	4N1W06-A0-00410	2016	1880	1.00	149,680	153,020	302,700	395,000	Mar-16	6	77
06	61	000	401	155	33	4N2W23-DB-00400	2016	3555	2.00	179,120	322,880	502,000	652,500	May-16	7	77
06	61	000	401	143	33	4N1W18-00-00101	2016	6065	5.06	220,300	238,450	458,750	589,000	Jul-16	8	78
06	61	000	401	134	33	4N2W01-00-03301	2016	5069	0.98	149,680	139,310	288,990	365,000	Jun-16	9	79
06	61	000	401	143	33	4N2W12-C0-02100	2016	5494	2.09	180,910	277,430	458,340	575,000	Jun-16	10	80
06	61	000	401	143	33	4N2W01-00-03201	2016	1766	5.93	233,030	286,870	519,900	635,000	Mar-16	11	82
06	61	000	401	141	33	4N1W19-B0-01400	2016	5395	1.91	173,490	217,300	390,790	475,000	Jun-16	12	82
06	61	000	401	131	33	4N1W17-B0-02402	2016	9913	1.51	158,000	84,890	242,890	297,700	Nov-16	13	82
06	61	000	401	141	33	4N1W06-C0-02905	2016	9175	2.02	179,630	138,610	318,240	382,500	Oct-16	14	83
06	61	000	401	141	33	4N2W24-B0-00604	2016	5350	2.00	179,120	168,830	347,950	412,000	Jun-16	15	84
06	61	000	401	153	33	4N1W19-D0-01302	2016	2399	2.06	180,360	310,980	491,340	579,500	Apr-16	16	85
06	61	000	401	141	33	4N1W06-C0-00801	2016	8564	2.64	190,940	125,950	316,890	374,900	Sep-16	17	85
06	61	000	401	141	33	5N2W35-AA-00500	2016	3527	4.44	217,580	146,380	363,960	425,000	May-16	18	86
06	61	000	401	131	33	4N1W08-BB-04300	2016	2911	0.46	138,640	112,150	250,790	287,000	Apr-16	19	87

COLUMBIA County **2017** Ratio Study

APAR	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	152	33	4N1W08-BD-01100	2016	9157	2.18	182,550	210,550	393,100	450,000	Oct-16	20	87
06	61	000	401	142	33	4N2W12-C0-02600	2016	9404	2.10	187,440	186,440	373,880	431,000	Oct-16	21	87
06	61	000	401	141	33	4N1W18-D0-00401	2016	5486	2.10	181,090	219,590	400,680	450,000	Jun-16	22	89
06	61	000	401	146	33	4N1W07-C0-00302	2016	11270	3.63	209,140	150,970	360,110	403,000	Dec-16	23	89
06	61	000	401	141	33	4N1W08-BB-02900	2016	3066	0.56	138,640	149,740	288,380	320,000	Apr-16	24	90
06	61	000	401	153	33	4N2W24-C0-01002	2016	5631	2.01	179,450	262,210	441,660	489,000	Jun-16	25	90
06	61	000	401	141	33	4N1W19-AA-00500	2016	7520	1.19	131,610	111,560	243,170	270,000	Aug-16	26	90
06	61	000	401	143	33	4N1W08-CC-00101	2016	5598	1.00	149,680	212,880	362,560	399,500	Jun-16	27	91
06	61	000	401	131	33	4N1W08-BD-04200	2016	9907	2.98	182,830	103,570	286,400	315,000	Nov-16	28	91
06	61	000	401	141	33	4N2W13-A0-02201	2016	2121	2.00	179,120	166,020	345,140	375,000	Mar-16	29	92
06	61	000	401	152	33	4N2W01-00-03503	2016	7178	2.05	186,530	355,250	541,780	583,000	Aug-16	30	93
06	61	000	401	151	33	4N1W07-BA-00505	2016	425	1.00	149,680	206,990	356,670	380,000	Jan-16	31	94
06	61	000	401	153	33	4N2W12-D0-00400	2016	3577	2.00	179,120	415,520	594,640	635,000	May-16	32	94
06	61	000	401	142	33	4N2W13-A0-01600	2016	7123	3.35	185,880	147,630	333,510	356,000	Aug-16	33	94
06	61	000	401	154	33	5N2W36-00-00212	2016	4717	10.00	274,800	405,620	680,420	710,000	Jun-16	34	96
06	61	000	401	151	33	4N1W19-C0-00210	2016	11031	2.01	179,450	340,100	519,550	535,000	Dec-16	35	97
06	61	000	401	136	30	4N1W19-AA-02400	2016	730	2.12	181,460	125,890	307,350	314,900	Jan-16	36	98
06	61	000	401	131	33	4N1W08-BD-03600	2016	612	0.25	138,640	96,160	234,800	239,900	Jan-16	37	98
06	61	000	401	136	33	4N2W24-C0-00100	2016	5149	2.00	179,120	91,750	270,870	275,000	Jun-16	38	98
06	61	000	401	143	30	4N1W19-D0-01705	2016	250	2.60	190,220	184,840	375,060	370,000	Jan-16	39	101
06	61	000	401	141	33	4N2W12-DD-00202	2016	609	1.36	139,080	177,100	316,180	311,759	Jan-16	40	101
06	61	000	401	132	33	4N1W08-BC-01300	2016	2491	0.84	149,680	113,580	263,260	261,000	Apr-16	41	101
06	61	000	401	156	33	4N1W18-D0-00400	2016	2833	2.67	191,500	571,890	763,390	735,000	Apr-16	42	104
06	61	000	401	135	33	4N1W07-AD-00600	2016	2479	0.84	149,680	128,960	278,640	265,000	Apr-16	43	105
06	61	000	401	142	33	4N1W08-BC-02000	2016	4390	0.93	149,680	238,120	387,800	370,000	May-16	44	105
06	61	000	401	154	33	4N1W19-CA-03900	2016	3440	0.89	149,680	309,410	459,090	429,900	May-16	45	107
06	61	000	401	162	33	4N2W23-DB-01300	2016	8419	2.13	168,880	569,890	738,770	679,000	Sep-16	46	109
06	61	000	401	146	33	4N2W01-00-02600	2016	3750	0.75	140,480	164,820	305,300	270,000	May-16	47	113
06	61	000	401	131	33	4N1W08-CA-02200	2016	2654	0.40	138,640	79,830	218,470	189,700	Apr-16	48	115
06	61	000	401	135	33	4N2W12-DA-00700	2016	8446	2.00	179,120	107,740	286,860	240,000	Sep-16	49	120
06	61	000	401	163	33	5N1W31-00-01800	2016	1294	4.77	218,770	429,950	648,720	529,300	Feb-16	50	123

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	06	56	000		0	Rural St Helens

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	06	61	000		1	Rural St Helens

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	1				
Population - Number of Accounts	183				
Sales as a percentage of the Population	0.55 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	22,137,790		44.55 %	26,565,348	46.10 %
OSD RMV	9,990,000		20.11 %	9,990,000	17.34 %
Residential Improvement RMV	13,991,970		28.16 %	16,790,364	29.14 %
Farm Improvement RMV	3,567,570		7.18 %	4,281,084	7.43 %

SelectedRatioFromSales	86
RMV Adjustment	100
Before Ratio	86
Overall Adjustment Factor	116
Land Adjustment Factor	120
OSD Adjustment Factor	100
Residential Adjustment Factor	120
Farm Improvement Factor	120
After Ratio	100

Selected Ratio **86** **2017** **Adjustment** **116**

Explanation

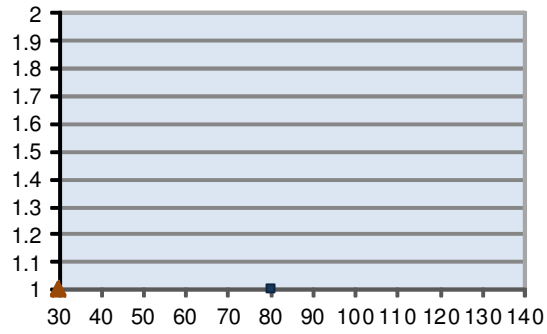
RMV 409: SA 56 61
Improved land - Manufactured Structure - Rural St. Helens, Warren, Deer Island
A single sale was identified in this study period, a sample that is too small to use as a determination of the current market. Therefore it is recommended that the conclusion from the improved properties in these study areas be applied: 90 Median, 95 time adjustment resulting in a Selected Ratio of 86.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	14.52	12.88	13.58	12.72
PRD	1.00	1.04	1.02	1.02	1.04

COLUMBIA County **2017** Ratio Study

Frequency



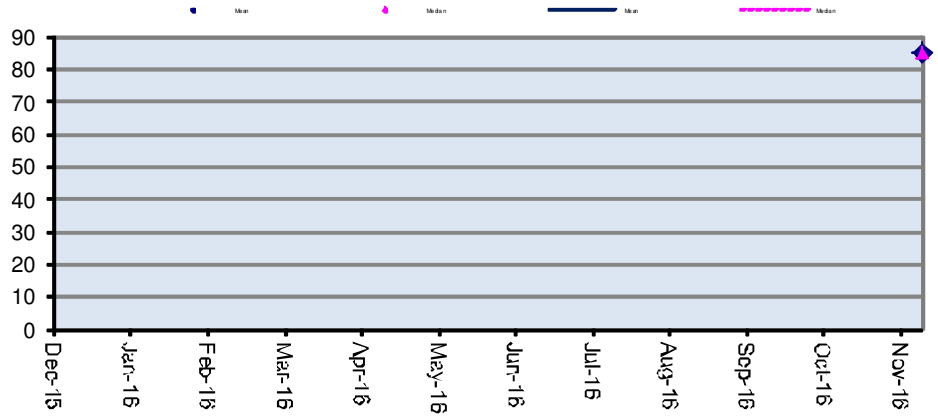
30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	0
120	0
130	0
140	0

Median	**85**
AD	**0.00**
COD	**0.00**
Mean	**85**
SD	**1.00**
COV	**1.18**

Wtd Mean	**85**
GeoMean	**85**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Dec-16	85	85	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	409	452	33	4N2W24-D0-00800	2016	10843	2.84	194,600	103,590	298,190	349,000	Dec-16	1	85

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	06	62	000		1	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	1	**RECALCULATED**		
Population - Number of Accounts	127			
Sales as a percentage of the Population	0.79 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	46,722,580	100.00 %	53,730,967	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** **2017** **Adjustment** **115**

Explanation

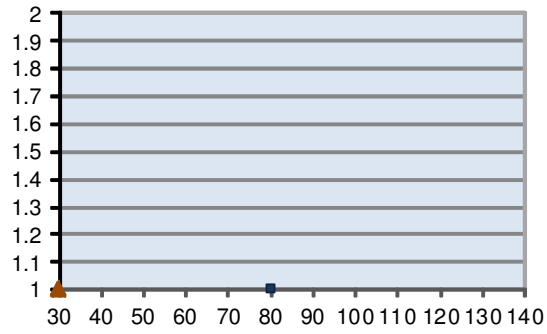
RMV 400: SA 62
Unimproved land, Rural St. Helens, Warren, Deer Island (Value Zone 2)
The sales date is insufficient for analysis. Therefore, it was decided to apply the Selected Ratio of 87 from the improved study in the same area here.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	24.84	13.87	20.26	4.05
PRD	1.00	1.02	1.01	1.05	1.00

COLUMBIA County **2017** Ratio Study

Frequency



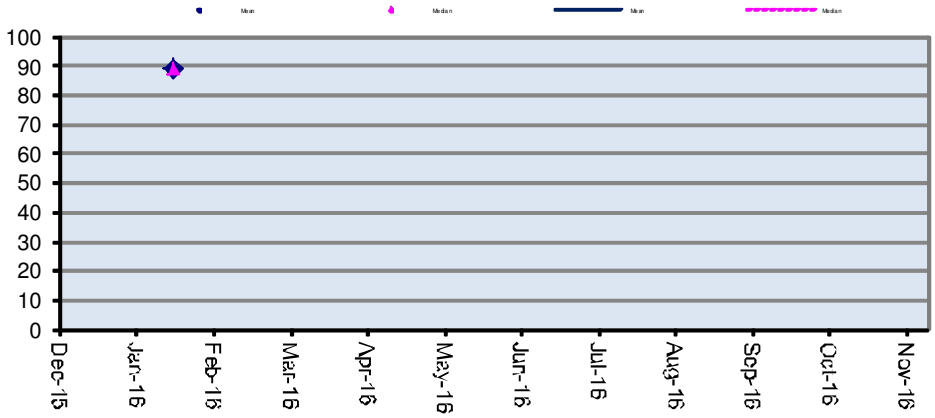
30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	0
120	0
130	0
140	0

Median	**89**
AD	**0.00**
COD	**0.00**
Mean	**89**
SD	**1.00**
COV	**1.12**

Wtd Mean	**89**
GeoMean	**89**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Feb-16	89	89	1

APAR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
06	62	000	400		33	5N1W30-00-02506	2016	728	5.00	124,200	0	124,200	140,000	Feb-16	1	89

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	06	62	000		13	Rural St Helens

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	13				
Population - Number of Accounts	320				
Sales as a percentage of the Population	4.06 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	42,098,510		38.82 %	48,413,287	38.88 %
OSD RMV	14,918,940		13.76 %	14,918,940	11.98 %
Residential Improvement RMV	45,009,640		41.51 %	53,561,472	43.02 %
Farm Improvement RMV	6,405,860		5.91 %	7,622,973	6.12 %
SelectedRatioFromSales	87				
RMV Adjustment	100				
Before Ratio	87				
Overall Adjustment Factor	115				
Land Adjustment Factor	115				
OSD Adjustment Factor	100				
Residential Adjustment Factor	119				
Farm Improvement Factor	119				
After Ratio	100				

Selected Ratio **87** **2017** **Adjustment** **115**

Explanation

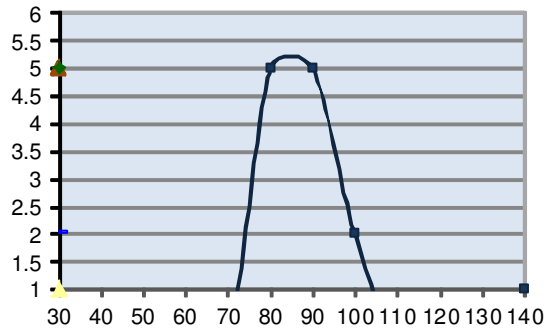
RMV 401: SA 62
Improved land, Rural St. Helens, Warren, Deer Island (Value Zone 2)
Improved site built properties located in Rural Value Zone 2. For this sales array, the Median of 92 was deemed the best indicator of the market. This ratio was then adjusted by the conclusion from the time study for rural property. The Selected Ratio from this adjustment is 87.

Performance History

	2017	2016	2015	2014	2013
COD	10.20	17.03	12.88	13.58	12.72
PRD	1.03	1.03	1.02	1.02	1.04

COLUMBIA County **2017** Ratio Study

Frequency



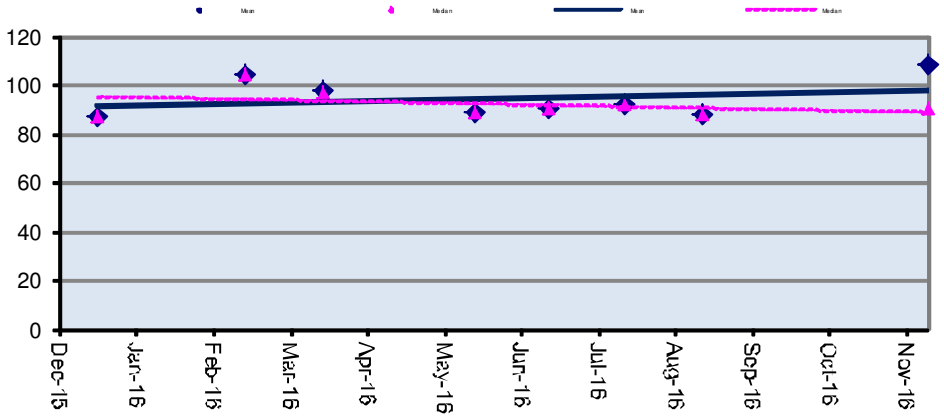
30	0
40	0
50	0
60	0
70	0
80	5
90	5
100	2
110	0
120	0
130	0
140	1

Median	**92**
AD	**9.38**
COD	**10.20**
Mean	**97**
SD	**15.48**
COV	**15.96**

Wtd Mean	**94**
GeoMean	**96**
PRD	**1.03**
95% Confidence	**8.42**

Number Of Sales **13**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	87	87	1
Mar-16	104	104	1
Apr-16	98	97	3
Jun-16	89	89	1
Jul-16	90	90	2
Aug-16	92	92	1
Sep-16	88	88	1
Dec-16	108	90	3

APAR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
06	62	000	401	142	33	4N2W11-00-00905	2016	10591	5.00	181,360	206,710	388,070	465,000	Dec-16	1	83
06	62	000	401	142	33	4N2W11-00-00902	2016	447	10.17	224,180	240,890	465,070	535,000	Jan-16	2	87
06	62	000	401	141	33	5N2W35-AB-00400	2016	6126	3.06	162,520	145,800	308,320	356,000	Jul-16	3	87
06	62	000	401	131	33	5N2W35-AD-00200	2016	7694	0.69	118,860	68,030	186,890	212,000	Sep-16	4	88
06	62	000	401	154	33	5N2W25-D0-01200	2016	5077	4.88	177,870	468,780	646,650	725,000	Jun-16	5	89
06	62	000	401	151	33	5N1W30-00-02503	2016	6726	5.00	178,200	371,460	549,660	597,000	Jul-16	6	92
06	62	000	401	142	33	5N2W25-D0-00800	2016	6787	2.32	152,330	150,620	302,950	330,000	Aug-16	7	92
06	62	000	401	142	33	5N2W24-00-00302	2016	2726	3.30	165,820	168,890	334,710	347,500	Apr-16	8	96
06	62	000	401	132	33	5N1W19-00-01102	2017	26	4.33	176,400	106,190	282,590	293,000	Dec-16	9	96
06	62	000	401	143	33	4N2W02-00-01803	2016	2862	2.00	147,840	230,580	378,420	392,000	Apr-16	10	97
06	62	000	401	154	33	5N2W35-AA-01200	2016	2796	2.52	156,570	439,230	595,800	585,000	Apr-16	11	102
06	62	000	401	141	33	5N2W26-D0-01100	2016	2118	8.49	211,950	308,580	520,530	500,000	Mar-16	12	104
06	62	000	401	300	33	5N2W24-00-00902	2016	11008	6.90	143,660	36,380	180,040	125,000	Dec-16	13	144

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	06	62	000		0	Rural St Helens

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	0				
Population - Number of Accounts	91				
Sales as a percentage of the Population	0.00 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	12,234,100		50.05 %	14,069,215	50.04 %
OSD RMV	4,543,480		18.59 %	4,543,480	16.16 %
Residential Improvement RMV	5,838,370		23.89 %	7,239,579	25.75 %
Farm Improvement RMV	1,826,590		7.47 %	2,264,972	8.06 %
SelectedRatioFromSales	87				
RMV Adjustment	100				
Before Ratio	87				
Overall Adjustment Factor	115				
Land Adjustment Factor	115				
OSD Adjustment Factor	100				
Residential Adjustment Factor	124				
Farm Improvement Factor	124				
After Ratio	100				

Selected Ratio **87** **2017** **Adjustment** **115**

Explanation

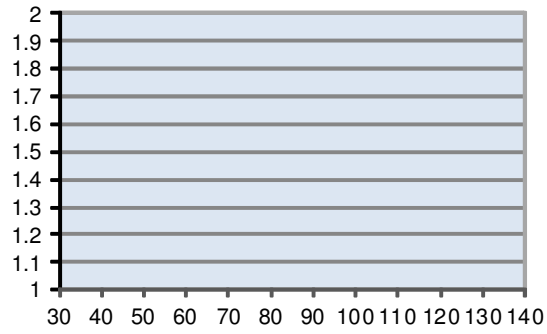
RMV 409: SA 62
Improved land - Manufactured Structure - Rural St. Helens, Warren, Deer Island (Value Zone 2)
No “good” sales were available for this study of improved property with manufactured structures. Therefore it was decided to use the conclusion from the site built study in the same area (ratio 92, time adjustment 95, selected ratio 87).

Performance History

	2017	2016	2015	2014	2013
COD		14.52	12.88	13.58	12.72
PRD		1.04	1.02	1.02	1.04

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

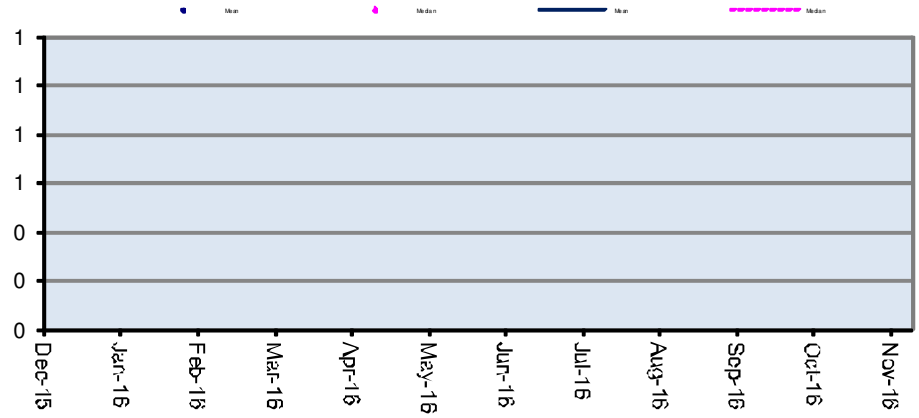
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	06	63	000		2	Rural St Helens

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	06	64	000		0	Rural St Helens

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	2				
Population - Number of Accounts	272				
Sales as a percentage of the Population	0.74 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	133,658,330		100.00 %	157,716,829	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	85
RMV Adjustment	100
Before Ratio	85
Overall Adjustment Factor	118
Land Adjustment Factor	118
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **85** **2017** **Adjustment** **118**

Explanation

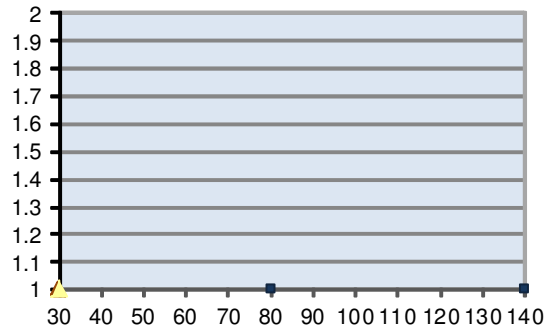
RMV 400: SA 63 & SA 64
Unimproved land, Rural St. Helens, Warren, Deer Island (Value Zone 3 and Value Zone 4)
Because the sales data is small in comparison to the population, it was decided to use the improved rural property study conclusion of the same areas. (Selected Ratio of 85).

Performance History

	2017	2016	2015	2014	2013
COD	29.02	24.84	13.87	20.26	4.05
PRD	1.03	1.02	1.01	1.05	1.00

COLUMBIA County **2017** Ratio Study

Frequency



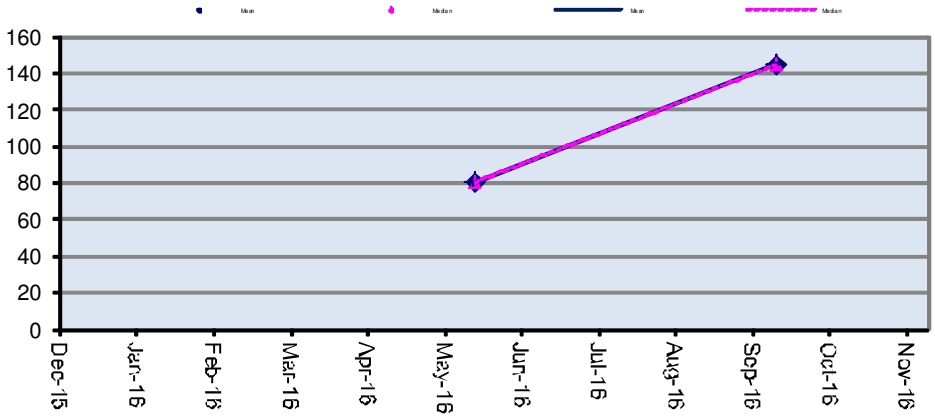
30	0
40	0
50	0
60	0
70	0
80	1
90	0
100	0
110	0
120	0
130	0
140	1

Median	**112**
AD	**32.50**
COD	**29.02**
Mean	**112**
SD	**45.97**
COV	**41.04**

Wtd Mean	**109**
GeoMean	**108**
PRD	**1.03**
95% Confidence	**63.71**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Jun-16	80	80	1
Oct-16	145	145	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	63	000	400		33	5N2W02-00-00600	2016	5725	14.10	100,610	0	100,610	125,000	Jun-16	1	80
06	63	000	400		33	5N2W03-00-01004	2016	9255	10.00	143,500	0	143,500	98,707	Oct-16	2	145

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	06	63	000		7	Rural St Helens

RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	06	64	000		2	Rural St Helens

Adjustment Calculation Summary

			RECALCULATED		
Sample - Number of Sales	9				
Population - Number of Accounts	464				
Sales as a percentage of the Population	1.94 %		**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values					
Land RMV	68,181,540		45.78 %	80,454,217	45.69 %
OSD RMV	21,276,880		14.28 %	21,276,880	12.08 %
Residential Improvement RMV	49,396,090		33.16 %	61,745,113	35.06 %
Farm Improvement RMV	10,092,000		6.78 %	12,615,000	7.16 %

SelectedRatioFromSales	85
RMV Adjustment	100
Before Ratio	85
Overall Adjustment Factor	118
Land Adjustment Factor	118
OSD Adjustment Factor	100
Residential Adjustment Factor	125
Farm Improvement Factor	125
After Ratio	100

Selected Ratio **85** **2017** **Adjustment** **118**

Explanation

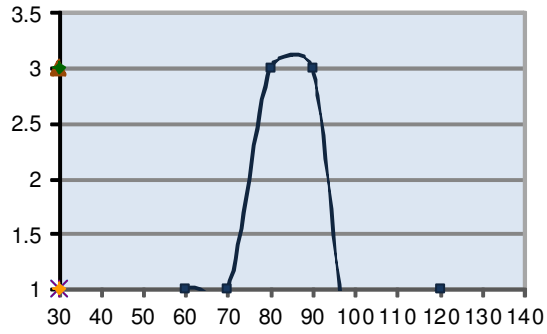
RMV 401: SA 63 & SA 64
Improved land, Rural St. Helens, Warren, Deer Island (Value Zone 3 and Value Zone 4)
The Median of 89 was selected as the best indicator for this grouping of rural site built properties. After the time adjustment of 95 was applied to the selected central tendency, the resulting Selected Ratio is 85.

Performance History

	2017	2016	2015	2014	2013
COD	11.74	17.03	12.88	13.58	12.72
PRD	1.02	1.03	1.02	1.02	1.04

COLUMBIA County **2017** Ratio Study

Frequency



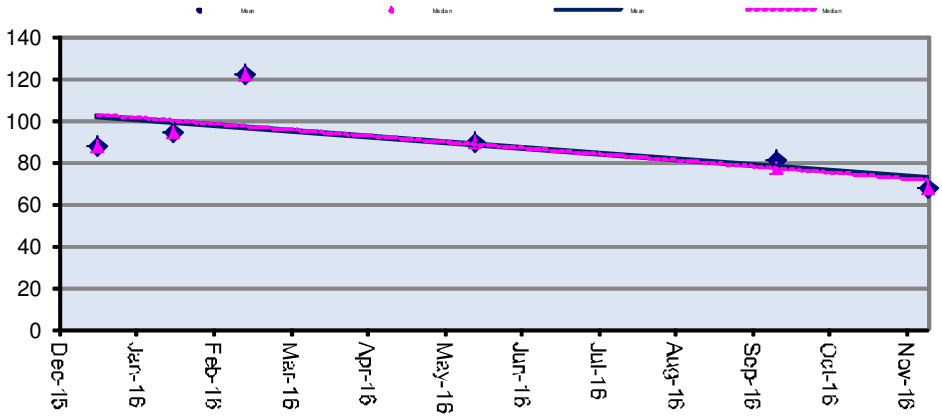
30	0
40	0
50	0
60	1
70	1
80	3
90	3
100	0
110	0
120	1
130	0
140	0

Median	**89**
AD	**10.44**
COD	**11.74**
Mean	**88**
SD	**15.88**
COV	**18.05**

Wtd Mean	**86**
GeoMean	**87**
PRD	**1.02**
95% Confidence	**10.38**

Number Of Sales **9**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	87	87	1
Feb-16	94	94	2
Mar-16	122	122	1
Jun-16	89	89	1
Oct-16	81	77	3
Dec-16	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
06	63	000	401	136	33	5N2W12-00-02500	2016	11214	0.72	110,210	97,180	207,390	310,000	Dec-16	1	67
06	63	000	401	144	30	5N2W11-00-00700	2016	8685	8.50	190,940	201,930	392,870	560,000	Oct-16	2	70
06	63	000	401	300	33	5N2W12-00-00705	2016	9506	5.64	112,260	33,180	145,440	175,000	Oct-16	3	83
06	63	000	401	131	33	5N1W07-B0-00900	2016	248	3.65	155,080	72,080	227,160	260,000	Jan-16	4	87
06	63	000	401	141	33	5N2W10-A0-00307	2016	5136	5.01	161,760	152,980	314,740	354,000	Jun-16	5	89
06	64	000	401	143	33	5N2W27-B0-01800	2016	9408	4.25	159,870	181,800	341,670	375,000	Oct-16	6	91
06	64	000	401	141	33	5N3W01-A0-01900	2016	1409	3.18	149,490	129,400	278,890	299,000	Feb-16	7	93
06	63	000	401	143	33	5N2W11-00-01003	2016	842	2.63	142,900	166,910	309,810	328,000	Feb-16	8	94
06	63	000	401	141	33	5N2W12-A0-00401	2016	1542	6.00	168,840	101,480	270,320	221,000	Mar-16	9	122

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	06	63	000		0	Rural St Helens

RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	06	64	000		1	Rural St Helens

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	1			
Population - Number of Accounts	198			
Sales as a percentage of the Population	0.51 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	22,566,590	46.40 %	26,628,576	46.39 %
OSD RMV	9,873,530	20.30 %	9,873,530	17.20 %
Residential Improvement RMV	12,522,830	25.75 %	16,154,451	28.14 %
Farm Improvement RMV	3,677,160	7.56 %	4,743,536	8.26 %

SelectedRatioFromSales	85
RMV Adjustment	100
Before Ratio	85
Overall Adjustment Factor	118
Land Adjustment Factor	118
OSD Adjustment Factor	100
Residential Adjustment Factor	129
Farm Improvement Factor	129
After Ratio	100

Selected Ratio **85** **2017** **Adjustment** **118**

Explanation

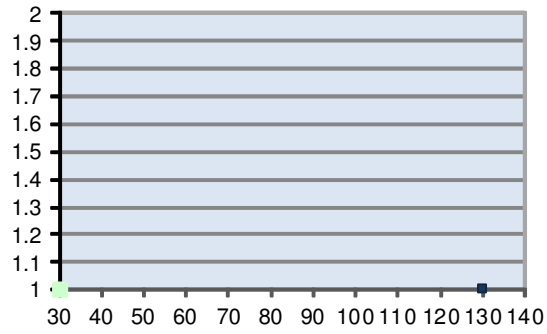
RMV 409: SA 63 & SA 64
Improved land - Manufactured Structure - Rural St. Helens, Warren, Deer Island (Value Zone 3and Value Zone 4)
A single sale was identified in this study period which provides a sample too small to use as a determination of the current market. Therefore, it is recommended that the conclusion from the improved site built properties in these study areas to be applied here (85 selected ratio).

Performance History

	2017	2016	2015	2014	2013
COD	0.00	14.52	12.88	13.58	12.72
PRD	1.00	1.04	1.02	1.02	1.04

COLUMBIA County **2017** Ratio Study

Frequency



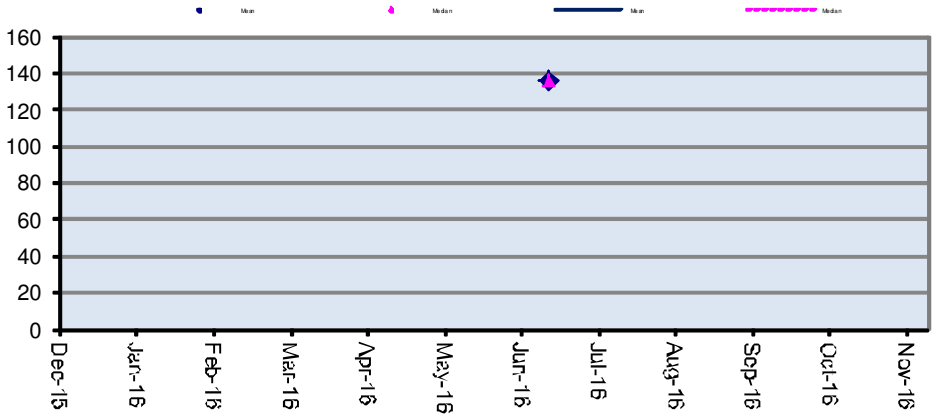
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	0
110	0
120	0
130	1
140	0

Median	**136**
AD	**0.00**
COD	**0.00**
Mean	**136**
SD	**1.00**
COV	**0.74**

Wtd Mean	**136**
GeoMean	**136**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
Jul-16	136	136	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	64	000	409	462	33	5N2W30-00-00400	2016	6254	83.57	414,810	83,310	498,120	367,500	Jul-16	1	136

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	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	8			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	4,249,250	100.00 %	5,099,100	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	83
RMV Adjustment	100
Before Ratio	83
Overall Adjustment Factor	120
Land Adjustment Factor	120
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **83** **2017** **Adjustment** **120**

Explanation

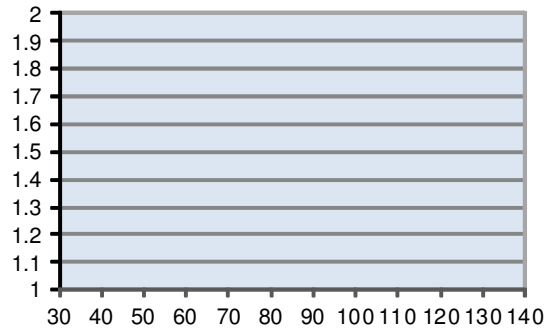
RMV 400: SA 65
Unimproved Land – Dike Land - Rural St. Helens, Warren, Deer Island
For this population of 8 accounts no sales data is available. Therefore it was decided to use the Selected Ratio of 83 from the undeveloped land study for SA 61 for this analysis.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	-	20.26	4.05
PRD		1.00	-	1.05	1.00

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

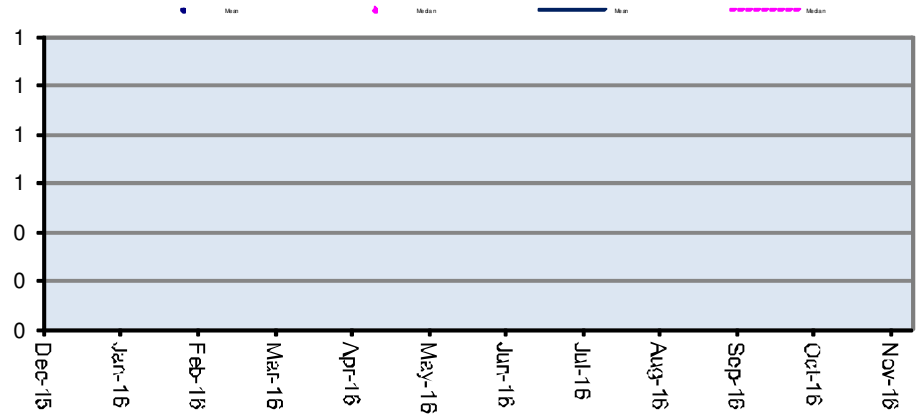
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	0			
Population - Number of Accounts	29			
Sales as a percentage of the Population	0.00 %	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Prior Year Population Values				
Land RMV	45,577,930	92.91 %	54,693,516	92.90 %
OSD RMV	683,620	1.39 %	683,620	1.16 %
Residential Improvement RMV	1,914,000	3.90 %	2,392,500	4.06 %
Farm Improvement RMV	882,540	1.80 %	1,103,175	1.87 %

SelectedRatioFromSales	83
RMV Adjustment	100
Before Ratio	83
Overall Adjustment Factor	120
Land Adjustment Factor	120
OSD Adjustment Factor	100
Residential Adjustment Factor	125
Farm Improvement Factor	125
After Ratio	100

Selected Ratio **83** **2017** **Adjustment** **120**

Explanation

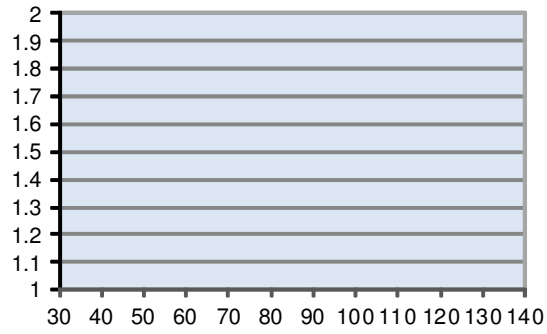
RMV 401: SA 65
Improved Land – Dike Land - Rural St. Helens, Warren, Deer Island
Having no sales data available, it was decided to apply the selected ratio of 83 from the improved study in SA 61.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	13.58	12.72
PRD		-	-	1.02	1.04

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

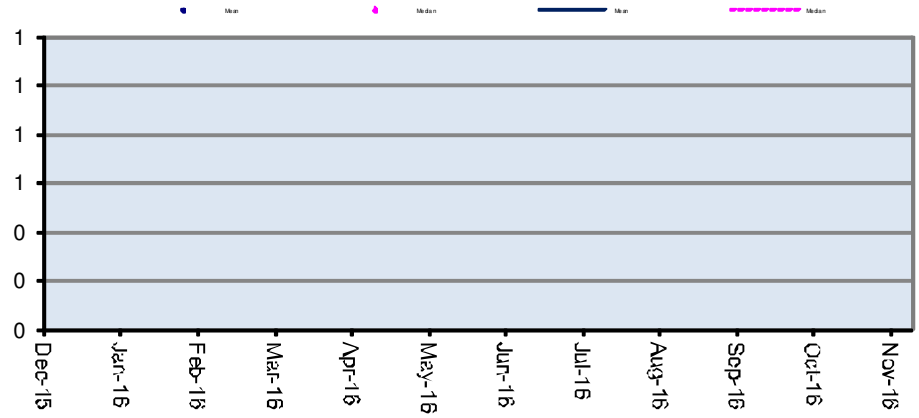
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

COLUMBIA County **2017** Ratio Study

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

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	0			
Population - Number of Accounts	1			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	256,130	45.69 %	307,356	45.80 %
OSD RMV	22,440	4.00 %	22,440	3.34 %
Residential Improvement RMV	206,550	36.84 %	249,926	37.24 %
Farm Improvement RMV	75,480	13.46 %	91,331	13.61 %

SelectedRatioFromSales	83
RMV Adjustment	100
Before Ratio	83
Overall Adjustment Factor	120
Land Adjustment Factor	120
OSD Adjustment Factor	100
Residential Adjustment Factor	121
Farm Improvement Factor	121
After Ratio	100

Selected Ratio **83** **2017** **Adjustment** **120**

Explanation

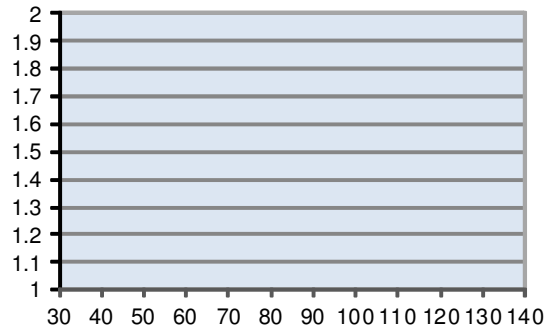
RMV 409: SA 65
Improved Land – Dike Land, Manufactured Structures - Rural St. Helens, Warren, Deer Island
For this study, there are no sales available to review. Therefore, the Mean of 87 from the RMV 409 SA 61 study was used located in the same maintenance area. The time study conclusion of 95 was then applied to the Mean ratio.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	13.58	12.72
PRD		-	-	1.02	1.04

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

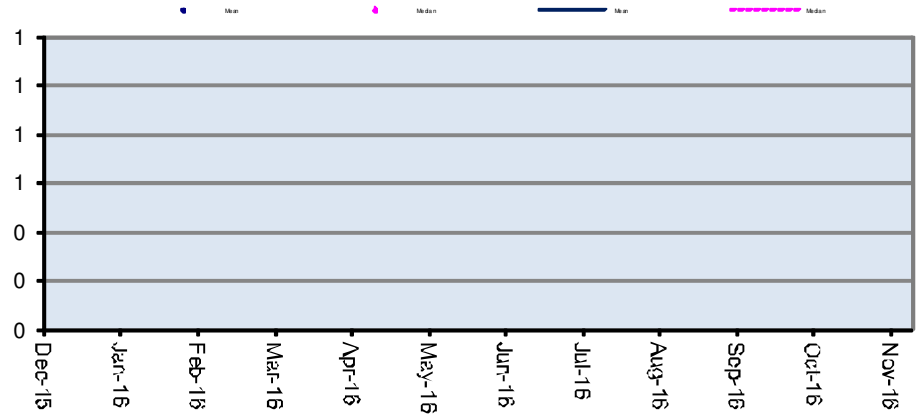
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 7

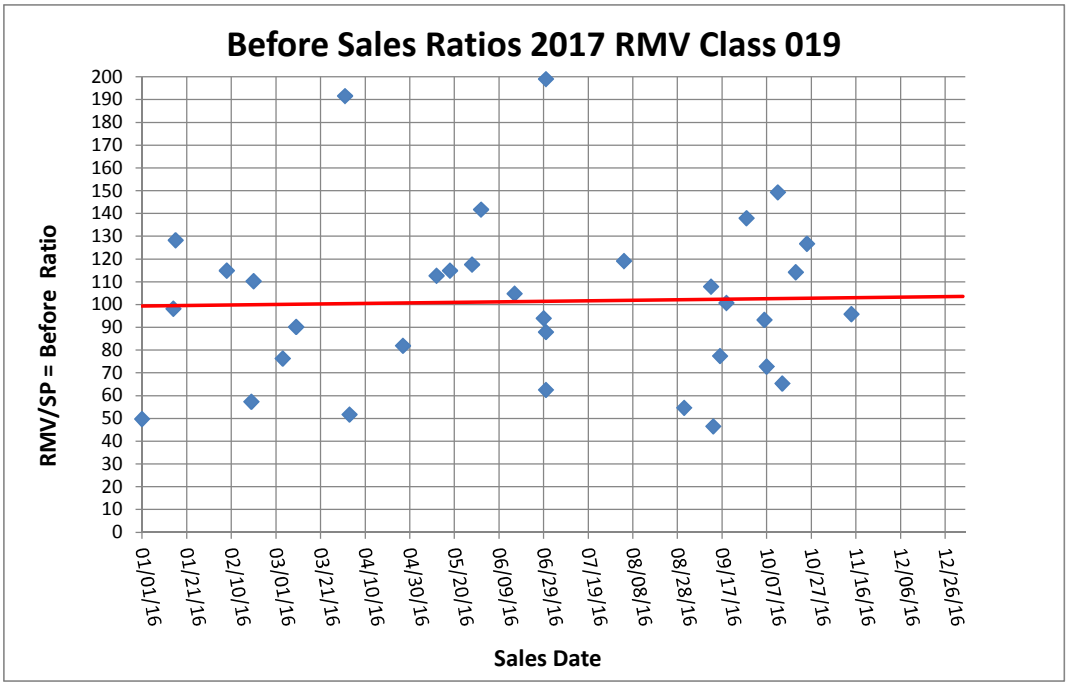
PERSONAL PROPERTY MANUFACTURED STUCTURES

MA 07 – Personal Property Manufactured Structures

Because of the unique way these properties move within the market, we developed MA 07 in 2012 to better identify and track these properties. This maintenance area consists of manufactured structures which are considered personal property (RMV Class 019) and are located throughout Columbia County either in a manufactured home park or where the land is not owned by the same titled owner of the manufactured structure.

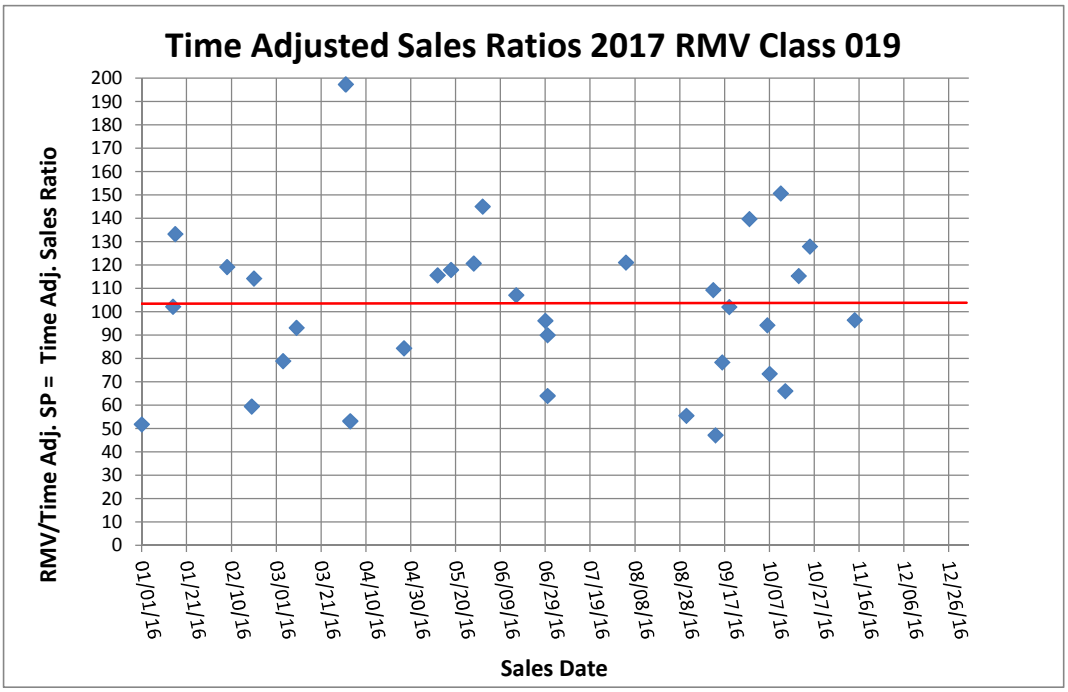
Area or MH Park	Population
MA 01	1
MA 02	63
MA 03	13
MA 04	50
MA 05	82
MA 06	45
Boulder Ridge	7
Cedar Tree	23
Clover Hill	4
Columbia City Estates	42
Country Villa	29
Crestwood Village	118
Crown Park	22
Deer Island Heights	52
Deer Pointe	34
Drakes J/M	28
Fernview	25
Goss Manuf. Home Park	14
Green Meadows	35
Maple Terrace	23
Mountain View	12
Rainier Heights	9
Riverbend	28
Rivers Edge	15
Riverside Meadows	21
Riverwood	27
Rose Manor	30
Rudds	25
Springlake Park	144
Sunview	5
Swedetown Village	24
Tamarack	39
Wallers	2
Western Hills	82
Westwind	5
Total	1178

2017 RMV Class 019
Direct Calculation Time Study



Direct Calculation (Linear Regression) Analysis adjusting the sales price on an annual basis:

1. Y axis intersect:
   01/01/16 99%
   12/31/16 103%
2. Amount of change: -4%
3. Annual change factor: 104%
4. Annual adj. factor: 96%
5. Overall adjustment: -4%
6. Intermediate adj factor: -0.3%



2017 RMV Class 019
Direct Calculation Time Study

Sale No	Acct	MA	SA	RJ Code	Sale Date	Sales Price	2017 Base RMV	Before Ratio	Total Adj. Factor	Total Adj	Time Adj. Sales Price	Time Adj. Ratio
1	1385	7	6	33	01/01/16	$12,000	$5,970	50	-4%	-$462	$11,538	52
2	429795	7	30	33	01/15/16	$69,000	$67,740	98	-4%	-$2,654	$66,346	102
3	436944	7	5	33	01/16/16	$12,000	$15,380	128	-4%	-$462	$11,538	133
4	1475	7	2	30	02/08/16	$4,500	$5,170	115	-4%	-$159	$4,341	119
5	118	7	30	33	02/19/16	$61,500	$35,240	57	-4%	-$2,168	$59,332	59
6	437269	7	6	30	02/20/16	$46,309	51,050	110	-4%	-$1,633	$44,676	114
7	195	7	30	30	03/04/16	$82,500	$62,930	76	-3%	-$2,644	$79,856	79
8	1084	7	27	30	03/10/16	$59,500	$53,640	90	-3%	-$1,907	$57,593	93
9	2526	7	5	30	04/01/16	$20,000	$38,320	192	-3%	-$577	$19,423	197
10	368	7	2	30	04/03/16	$8,000	$4,130	52	-3%	-$231	$7,769	53
11	175	7	30	30	04/27/16	$63,900	$52,340	82	-3%	-$1,843	$62,057	84
12	164	7	31	33	05/12/16	$48,000	$54,080	113	-3%	-$1,231	$46,769	116
13	1109	7	27	33	05/18/16	$44,000	$50,570	115	-3%	-$1,128	$42,872	118
14	1529	7	6	33	05/28/16	$12,500	$14,700	118	-3%	-$321	$12,179	121
15	1810	7	4	30	06/01/16	$26,500	$37,550	142	-2%	-$595	$25,905	145
16	1122	7	27	33	06/16/16	$50,000	$52,350	105	-2%	-$1,122	$48,878	107
17	433876	7	6	30	06/29/16	$53,000	$49,770	94	-2%	-$1,189	$51,811	96
20	2535	7	5	33	06/30/16	$33,000	$65,690	199	-2%	-$740	$32,260	204
18	117	7	30	33	06/30/16	$94,000	$58,690	62	-2%	-$2,109	$91,891	64
19	139	7	30	33	06/30/16	$114,000	$100,240	88	-2%	-$2,558	$111,442	90
21	432952	7	27	33	08/04/16	$30,180	$35,950	119	-2%	-$484	$29,696	121
22	186	7	30	33	08/31/16	$114,000	$62,190	55	-2%	-$1,827	$112,173	55
23	437267	7	27	30	09/12/16	$75,000	80,910	108	-1%	-$962	$74,038	109
24	111	7	30	30	09/13/16	$104,000	$48,300	46	-1%	-$1,333	$102,667	47
25	437268	7	4	30	09/16/16	$15,000	11,600	77	-1%	-$192	$14,808	78
26	437266	7	27	30	09/19/16	$77,000	77,520	101	-1%	-$987	$76,013	102
27	2342	7	35	30	09/28/16	$20,000	$27,580	138	-1%	-$256	$19,744	140
29	208	7	31	30	10/06/16	$70,000	$65,280	93	-1%	-$673	$69,327	94
31	119	7	30	33	10/07/16	$79,000	$57,440	73	-1%	-$760	$78,240	73
32	2496	7	5	33	10/12/16	$11,500	$17,160	149	-1%	-$111	$11,389	151
33	1541	7	6	33	10/14/16	$17,000	$11,100	65	-1%	-$163	$16,837	66
34	397	7	2	30	10/20/16	$27,500	$31,410	114	-1%	-$264	$27,236	115
35	30265	7	6	33	10/25/16	$42,000	$53,180	127	-1%	-$404	$41,596	128
36	437265	7	27	30	11/14/16	$80,896	77,520	96	-1%	-$519	$80,377	96

Total Sales 34

Personal Property Manufactured Structures

RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	01	000		0	St. Helens
019	07	02	000		3	Scappoose
019	07	06	000		6	Maintenance Area 6
019	07	28	000		0	Columbia City Estates
019	07	31	000		2	Crown Park

Adjustment Calculation Summary

RECALCULATED

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	11			
Population - Number of Accounts	478			
Sales as a percentage of the Population	2.30 %			
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	13,532,530	100.00 %	13,126,550	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	103
RMV Adjustment	100
Before Ratio	103
Overall Adjustment Factor	97
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	97
Farm Improvement Factor	97
After Ratio	100

Selected Ratio **103** **2017** **Adjustment** **97**

Explanation

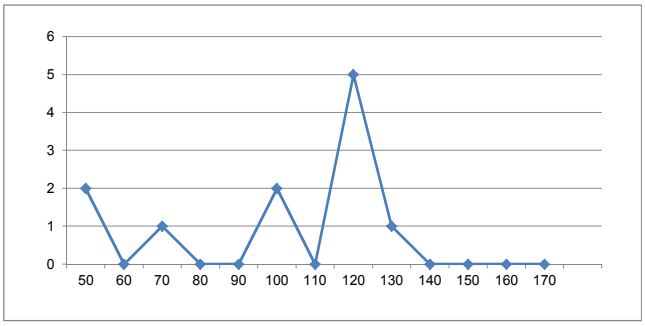
RMV 019: MA 07 SA 01, SA 02, SA 06, SA 27, SA 31
Personal Property Manufactured Structures - South Columbia County
This analysis is comprised of personal property manufactured structures (PPMS) located through out South Columbia County. Due to similar movement within the market, Columbia City Estates (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 478 and there were a total of 11 usable sales. The sales as a percentage is 2.30% and the Weighted Mean of 103 was selected for this grouping.

Performance History

	2017	2016	2015	2014	2013
COD	18.90	18	-	-	-
PRD	0.95	0.99	-	-	-

Personal Property Manufactured Structures

Frequency

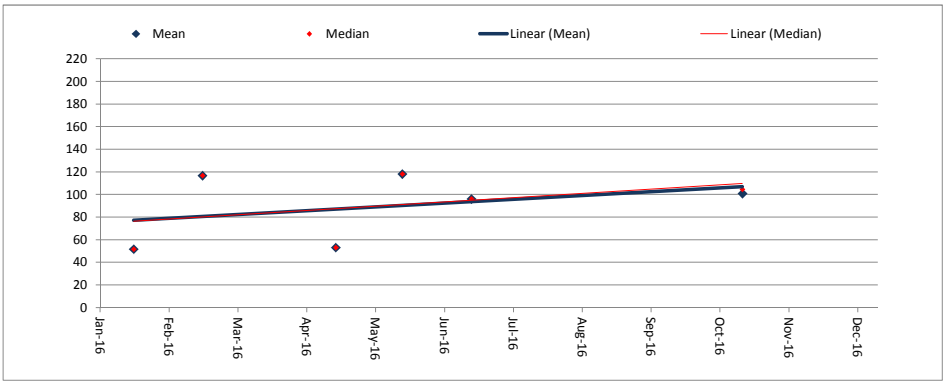


50	2
60	0
70	1
80	0
90	0
100	2
110	0
120	5
130	1
140	0
150	0
160	0
170	0

Median	**114**	**Wtd. Mean**	**103**
AAD	**22**	**GeoMean**	**93**
COD	**18.90**	**PRD**	**95**
Mean	**98**		
SD	**27**		
COV	**27**		

Number of Sales: **11**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	52	52	1
Feb-16	117	117	2
Apr-16	53	53	1
May-16	118	118	2
Jun-16	96	96	1
Oct-16	101	105	4

AP AR	SA	NH	Prop Class	RJ Code	Acct #	Home ID	Sale Date	Sales Price	2017 Base RMV	Time Adj. Sales Price	Time Adj. Ratio
07	6	000	019	33	1385	201795	01/01/16	$12,000	$5,970	$11,528	52
07	2	000	019	30	1475	366309	02/08/16	$4,500	$5,170	$4,341	119
07	6	000	019	30	437269	391544	02/20/16	$46,309	51,050	$44,676	114
07	2	000	019	30	368	200368	04/03/16	$8,000	$4,130	$7,769	53
07	31	000	019	33	164	282903	05/12/16	$48,000	$54,080	$46,769	116
07	6	000	019	33	1529	154835	05/28/16	$12,500	$14,700	$12,179	121
07	6	000	019	30	433876	336244	06/29/16	$53,000	$49,770	$51,811	96
07	31	000	019	30	208	293131	10/06/16	$70,000	$65,280	$69,327	94
07	6	000	019	33	1541	169300	10/14/16	$17,000	$11,100	$16,837	66
07	2	000	019	30	397	222321	10/20/16	$27,500	$31,410	$27,236	115
07	6	000	019	33	30265	372394	10/25/16	$42,000	$53,180	$41,596	128

Personal Property Manufactured Structures

RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	03	000		0	Vernonia
019	07	04	000		2	Rainier
019	07	05	000		4	Clatskanie
019	07	35	000		1	Riverside Meadows

Adjustment Calculation Summary

RECALCULATED

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	7			
Population - Number of Accounts	438			
Sales as a percentage of the Population	1.60 %			
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	10,135,720	100.00 %	6,993,650	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	145
RMV Adjustment	100
Before Ratio	145
Overall Adjustment Factor	69
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	69
Farm Improvement Factor	69
After Ratio	100

Selected Ratio **145** **2017** **Adjustment** **69**

Explanation

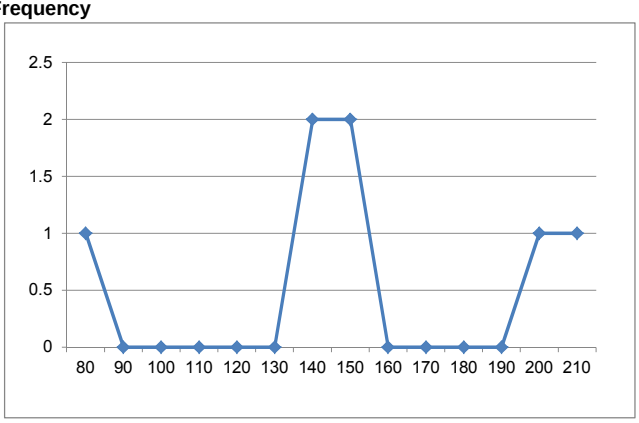
RMV 019: MA 07 SA 03, SA 04, SA 05, SA 35
Personal Property Manufactured Structures - North Columbia County
This analysis is comprised of personal property manufactured structures (PPMS) located through out North Columbia County in the MA 07 General Areas of SA 03 (Vernonia), SA 04 (Rainier) and SA 05 (Clatskanie). Also included in this analysis is SA 35 (Riverside Meadows) which is located in the City of Vernonia flood way. Because these properties are located farther North in the County, these personal property manufactured homes sell quite differently than those located closer to the County seat and Portland area. The total population of North MA 07 is 438 and the percent of useable sales is 1.60%. The Median of 145 was deemed the most reliable of the ratio averages and is supported by the GeoMean (144) and the Mean (150).

Performance History

	2017	2016	2015	2014	2013
COD	19.74	7	-	-	-
PRD	0.95	1.00	-	-	-

Personal Property Manufactured Structures

Frequency

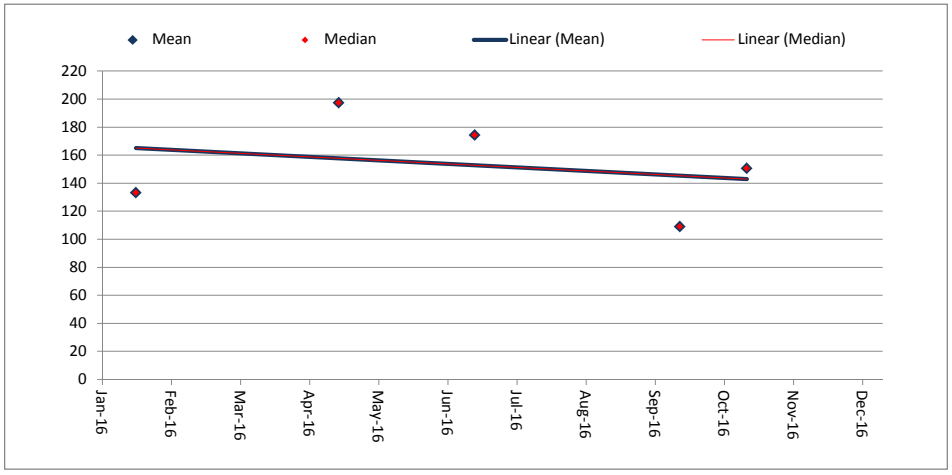


80	1
90	0
100	0
110	0
120	0
130	0
140	2
150	2
160	0
170	0
180	0
190	0
200	1
210	1

Median	**145**	**Wtd. Mean**	**158**
AAD	**28**	**GeoMean**	**144**
COD	**19.74**	**PRD**	**95**
Mean	**150**		
SD	**39**		
COV	**26**		

Number of Sales: **7**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	133	133	1
Apr-16	197	197	1
Jun-16	174	174	2
Sep-16	109	109	2
Oct-16	151	151	1

AP AR	SA	NH	Prop Class	RJ Code	Acct #	Home ID	Sale Date	Sales Price	2017 Base RMV	Time Adj. Sales Price	Time Adj. Ratio
07	05	000	019	33	436944	228368	01/16/16	$12,000	$15,380	$11,538	133
07	05	000	019	30	2526	268362	04/01/16	$20,000	$38,320	$19,423	197
07	04	000	019	30	1810	240196	06/01/16	$26,500	$37,550	$25,905	145
07	05	000	019	33	2535	284770	06/30/16	$33,000	$65,690	$32,260	204
07	04	000	019	30	437268	164825	09/16/16	$15,000	$11,600	$14,808	78
07	35	000	019	30	2342	270912	09/28/16	$20,000	$27,580	$19,744	140
07	05	000	019	33	2496	238198	10/12/16	$11,500	$17,160	$11,389	151

Personal Property Manufactured Structures

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	27	000		7	Crestwood Village							

Adjustment Calculation Summary

RECALCULATED

			Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	7				
Population - Number of Accounts	118				
Sales as a percentage of the Population	5.93	%			
Prior Year Population Values					
Land RMV	0		0.00	% 0	0.00 %
OSD RMV	0		0.00	% 0	0.00 %
Residential Improvement RMV	6,334,410		100.00	% 5,891,000	100.00 %
Farm Improvement RMV	0		0.00	% 0	0.00 %

SelectedRatioFromSales	107
RMV Adjustment	100
Before Ratio	107
Overall Adjustment Factor	93
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	93
Farm Improvement Factor	93
After Ratio	100

Selected Ratio **107** **2017** **Adjustment** **93**

Explanation

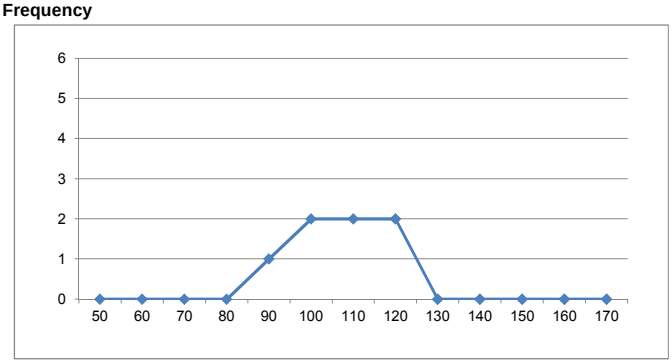
RMV 019: MA 07 SA 27
Personal Property Manufactured Structures - Crestwood Village, City of St. Helens
For this grouping, the Median and Mean both returned a ratio of 107. The Median(107) was selected as the best indicator of the market for Crestwood Village (SA 27).

Performance History

	2017	2016	2015	2014	2013
COD	7.57	-	-	-	-
PRD	1.08	-	-	-	-

Personal Property Manufactured Structures

Frequency

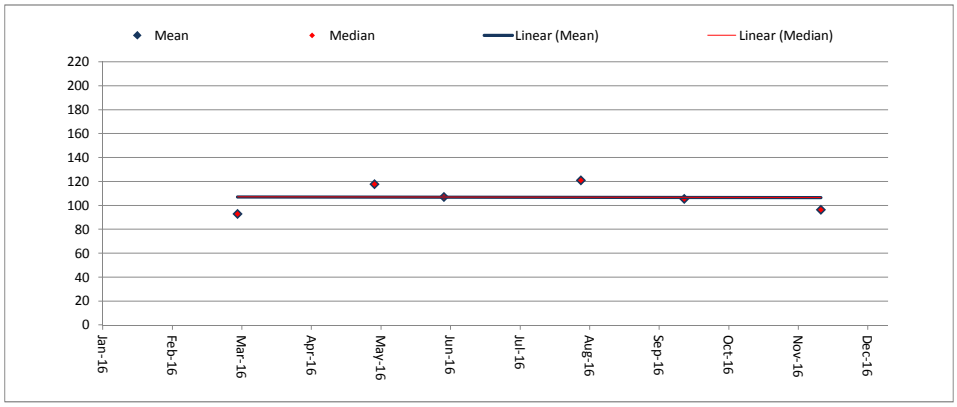


50	0
60	0
70	0
80	0
90	1
100	2
110	2
120	2
130	0
140	0
150	0
160	0
170	0

Median	**107**	**Wtd. Mean**	**99**
AAD	**8**	**GeoMean**	**106**
COD	**7.57**	**PRD**	**108**
Mean	**107**		
SD	**10**		
COV	**9**		

Number of Sales: **7**

Central Tendencies



Month	Mean	Median	Sales
Mar-16	93	93	1
May-16	118	118	1
Jun-16	107	107	1
Aug-16	121	121	1
Sep-16	106	106	2
Nov-16	96	96	1

AP AR	SA	NH	Prop Class	RJ Code	Acct #	Home ID	Sale Date	Sales Price	2017 Base RMV	Time Adj. Sales Price	Time Adj. Ratio
07	27	000	019	30	1084	286183	03/10/16	$59,500	$53,640	$57,593	93
07	27	000	019	33	1109	289473	05/18/16	$44,000	$50,570	$42,872	118
07	27	000	019	33	1122	29109	06/16/16	$50,000	$52,350	$48,878	107
07	27	000	019	33	432952	272921	08/04/16	$30,180	$35,950	$29,696	121
07	27	000	019	30	437267	391836	09/12/16	$75,000	$80,910	$74,038	109
07	27	000	019	30	437266	391839	09/19/16	$77,000	$77,520	$76,013	102
07	27	000	019	30	437265	391838	11/14/16	$80,896	$77,520	$80,377	96

Personal Property Manufactured Structures

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	30	000		9	Springlake Park							

Adjustment Calculation Summary

RECALCULATED

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	9			
Population - Number of Accounts	144			
Sales as a percentage of the Population	6.25 %			
Prior Year Population Values				
Land RMV	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	11,123,680	100.00 %	15,239,440	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	73
RMV Adjustment	100
Before Ratio	73
Overall Adjustment Factor	137
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	137
Farm Improvement Factor	137
After Ratio	100

Selected Ratio **73** **2017** **Adjustment** **137**

Explanation

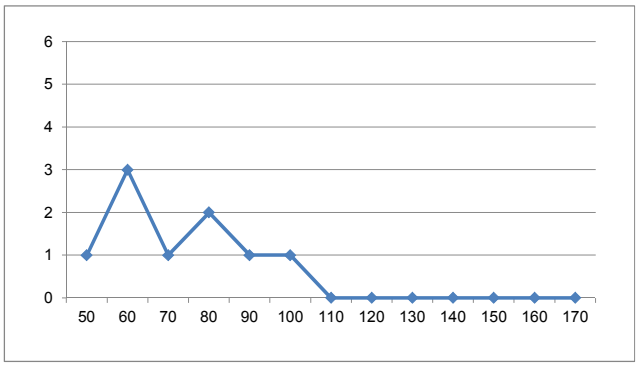
RMV 019: MA 07 SA 30
Personal Property Manufactured Structures – Springlake Park, City of Scappoose
This study is comprised of the personal manufactured structures located in Springlake Park in the City of Scappoose. This community is for those who are age 55 and older. It has a large lake set in the center of the park and is close to the Portland Metropolitan area. The Mean and the Median returned ratios of 73, therefore the Median was selected.

Performance History

	2017	2016	2015	2014	2013
COD	19.59	16	-	-	-
PRD	1.10	1.05	-	-	-

Personal Property Manufactured Structures

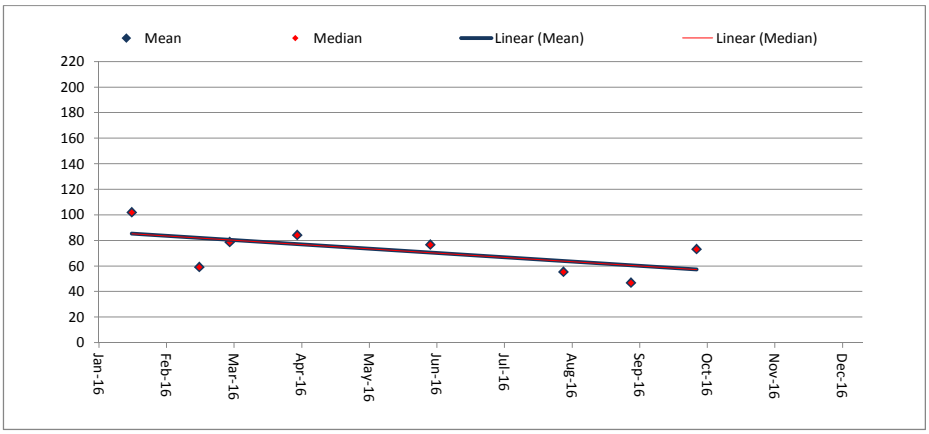
Frequency



50	1	**Median**	**73**	**Wtd. Mean**	**66**
60	3				
70	1	**AAD**	**14**	**GeoMean**	**71**
80	2				
90	1	**COD**	**20**	**PRD**	**110**
100	1				
110	0	**Mean**	**73**		
120	0				
130	0	**SD**	**17**		
140	0				
150	0	**COV**	**23**		
160	0				
170	0				

Number of Sales: **9**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	102	102	1
Feb-16	59	59	1
Mar-16	79	79	1
Apr-16	84	84	1
Jun-16	77	77	2
Aug-16	55	55	1
Sep-16	47	47	1
Oct-16	73	73	1

AP AR	SA	NH	Prop Class	RJ Code	Acct #	Home ID	Sale Date	Sales Price	2017 Base RMV	Time Adj. Sales Price	Time Adj. Ratio
07	30	000	019	33	429795	314626	01/15/16	$69,000	$67,740	$66,346	102
07	30	000	019	33	118	260626	02/19/16	$61,500	$35,240	$59,332	59
07	30	000	019	30	195	290004	03/04/16	$82,500	62,930	$79,856	79
07	30	000	019	30	175	285232	04/27/16	$63,900	$52,340	$62,057	84
07	30	000	019	33	117	260290	06/30/16	$94,000	$58,690	$91,891	64
07	30	000	019	33	139	275131	06/30/16	$114,000	$100,240	$111,442	90
07	30	000	019	33	186	288056	08/31/16	$114,000	$62,190	$112,173	55
07	30	000	019	30	111	258510	09/13/16	$104,000	$48,300	$102,667	47
07	30	000	019	33	119	261339	10/07/16	$79,000	$57,440	$78,240	73

ALL MAINTENANCE AREAS

RMV CLASS 111

PERSONAL PROPERTY FLOATING HOMES BOATHOUSES COMBINATIONS

RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	02	95	000		5	Scappoose

RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	02	97	000		0	Scappoose

Adjustment Calculation Summary

		RECALCULATED		
Sample - Number of Sales	5			
Population - Number of Accounts	169			
Sales as a percentage of the Population	2.96 %	**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	13,077,320	100.00 %	20,792,940	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	63
RMV Adjustment	100
Before Ratio	63
Overall Adjustment Factor	159
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	159
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **63** **2017** **Adjustment** **159**

Explanation

Watercraft properties - Scappoose
This analysis is comprised of floating homes, combination homes and boathouses which are located along the Multnomah Channel in Scappoose (MA 02). This channel connects both the Columbia River and the Willamette River and because of its proximity to the Portland area it is a highly sought after locale. This area is known for its calm waters, affordable housing and peaceful country setting. Due to these factors and the sales data available, it was decided to analyze MA 02 separately form the rest of the County because of how these properties move on the open market.

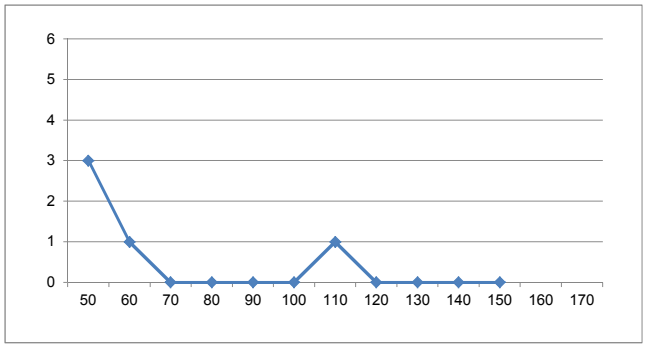
The population count of these properties is 158 with a total of 5 useable sales available. The sales as a percentage is 3.16%. Most of the floating homes located here are primary residences inter-mixed with vacation homes and boat storage structures. No adjustment was made for the change over time. Based on the sales analysis performed above, the Mean of 63 was selected. This central tendency is supported by the Weighted Mean (58) and the Geo Mean (60).

Performance History

	2017	2016	2015	2014	2013
COD	32.00	-	-	-	-
PRD	110.00	-	-	-	-

Columbia County 2017 Ratio Study

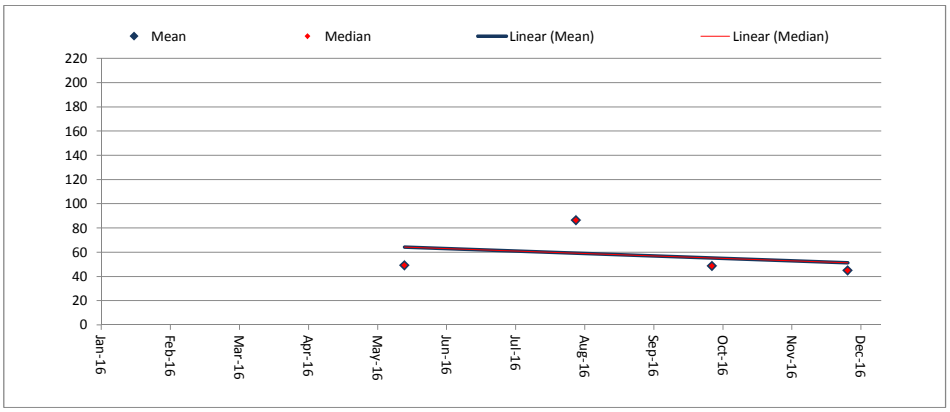
Frequency



50	3	**Median**	**49**	**Wtd. Mean**	**58**
60	1				
70	0	**AAD**	**16**	**GeoMean**	**60**
80	0				
90	0	**COD**	**32**	**PRD**	**110**
100	0				
110	1	**Mean**	**63**		
120	0				
130	0	**SD**	**25**		
140	0				
150	0	**COV**	**39**		

Number of Sales: **5**

Central Tendencies



Month	Mean	Median	Sales
May-16	49	49	1
Aug-16	87	87	2
Oct-16	49	49	1
Dec-16	45	45	1

AP AR	SA	NH	Prop Class	RJ Code	WC Acct #	Tax ID	Sale Date	Sales Price	2017 Base RMV	Ratio
02	95	000	111	33	3444	433292	05/20/16	$150,000	74,110	49
02	95	000	111	33	3361	432198	08/12/16	$80,000	$89,200	112
02	95	000	111	33	3220	432135	08/15/16	$220,000	$136,280	62
02	95	000	111	33	3412	432106	10/13/16	$148,060	$72,170	49
02	95	000	111	33	3352	432213	12/14/16	$210,000	$94,930	45

RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	01	95	000		3	St. Helens
111	06	95	000		0	Rural St Helens

RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	01	97	000		0	St. Helens
111	06	97	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	3	**RECALCULATED**		
Population - Number of Accounts				
Sales as a percentage of the Population	3.80 %	**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	4,404,000	100.00 %	6,209,640	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	71
RMV Adjustment	100
Before Ratio	71
Overall Adjustment Factor	141
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	141
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **71** **2017** **Adjustment** **141**

Explanation

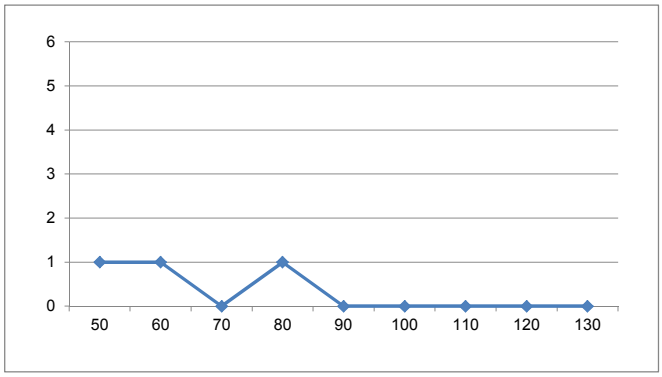
Watercraft properties - St. Helens and Rural St. Helens (Warren, Deer Island)
This analysis is comprised of personal property watercraft (Floating Homes, Combinations and Boathouses) that are located along the Columbia River. The areas of the City of St. Helens and Rural St. Helens comprise this study. The Columbia River is a fast moving, large body of water in which the moorages and marinas are situated north of Scappoose and the Portland area. Access from land to these properties is via Highway 30. The total population is 79 and the percent of sales is 3.80%. A time adjustment was deemed not appropriate to apply to this sample of sales at this time. Therefore, the Mean of 71 was selected as the central tendency.

Performance History

	2017	2016	2015	2014	2013
COD	15.00	-	-	-	-
PRD	102.00	-	-	-	-

Columbia County 2017 Ratio Study

Frequency

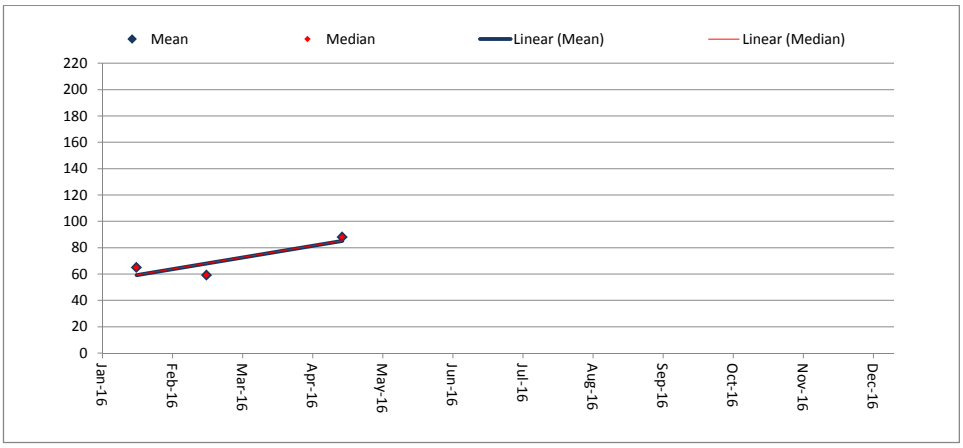


60	1
70	1
80	0
90	1
100	0
110	0
120	0
130	0
140	0

Median	**65**	**Wtd. Mean**	**69**
AAD	**10**	**GeoMean**	**70**
COD	**15**	**PRD**	**102**
Mean	**71**		
SD	**13**		
COV	**18**		

Number of Sales: **3**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	65	65	1
Feb-16	59	59	1
Apr-16	88	88	1

AP AR	SA	NH	Prop Class	RJ Code	Acct #	Tax ID	Sale Date	Sales Price	2017 Base RMV	Ratio
01	95	000	111	21	3144	432160	01/15/16	$35,000	$22,800	65
01	95	000	111	20	3192	432153	02/17/16	$42,000	$24,910	59
01	95	000	111	33	3231	432149	12/13/16	$30,000	$26,480	88

RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	04	95	000		0	Rainier
111	05	95	000		0	Clatskanie

RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	04	97	000		0	Rainier
111	05	97	000		0	Clatskanie

Adjustment Calculation Summary

		RECALCULATED		
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	0	0.00 %	0	0.00 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	1,569,420	100.00 %	1,569,420	100.00 %
Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	100
RMV Adjustment	100
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Residential Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Selected Ratio **100** **2017** **Adjustment** **100**

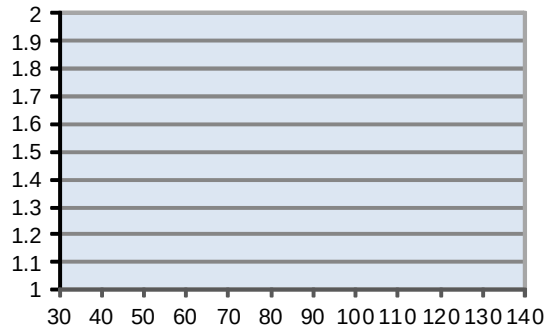
Explanation

Watercraft properties - Rainier and Clatskanie
This study is of personal property watercraft (Floating Homes, Combinations and Boathouses) located farther North on the Columbia River located in the areas of Rainier and Clatskanie. Due to having no sales data available for analysis, it is recommended to apply no trend to this population of accounts for this ratio year.

Performance History

	2017	2016	2015	2014	2013
COD	-	-	-	-	-
PRD	-	-	-	-	-

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

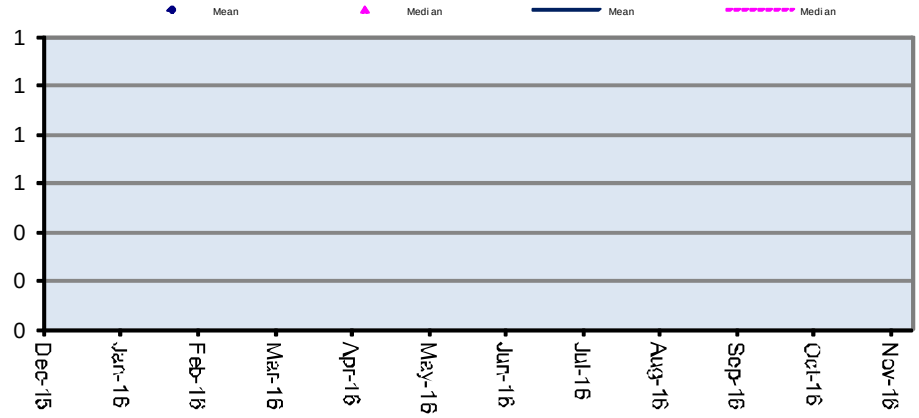
PRD

95% Confidence

Number Of Sales **0**

Central Tendencies

Month	Mean	Median	Sales



AP	AR	SA	NH	Prop Class	RJ Code	Acct #	Tax ID	Sale Date	Sales Price	2017 Base RMV	Ratio

ALL MAINTENANCE AREAS

RMV CLASSES 2XX COMMERCIAL PROPERTY

COMMERCIAL PROPERTIES

Commercial properties located throughout Columbia County have experienced little movement on the market over the last decade. The areas which have had “heavier” commercial activity over other areas of the County are Scappoose and St. Helens. This is partly due to their close proximity to the Portland Metropolitan area.

New construction of commercial type properties located in Scappoose and St. Helens has been at a moderate pace over the past 5 years. Discount store type properties such as: Bi-Mart, Goodwill and two O'Reilly's have been developed. Additionally, one restaurant, various storage facilities and three new banks have been constructed.

Along with newly built commercial properties, many properties have undergone extensive and substantial remodeling such as Taco Bell, McDonald's and Wauna Federal Credit Union. However, for the “Mom and Pop” type properties, the market has remained stagnant with no significant changes occurring.

RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	01	72	000		0	St Helens/Col City
200	01	01	000		0	Columbia City
200	01	00	000		2	St Helens
200	01	73	000		0	St Helens/Col City
200	02	72	000		0	Scappoose
200	02	71	000		0	Scappoose
200	02	00	000		0	Scappoose
200	02	73	000		0	Scappoose
200	06	72	000		0	Rural St Helens
200	06	00	000		0	Rural St Helens

Adjustment Calculation Summary

		RECALCULATED		
Sample - Number of Sales	2			
Population - Number of Accounts	250			
Sales as a percentage of the Population	0.80 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	17,998,730	100.00 %	17,998,730	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** **2017** **Adjustment** **100**

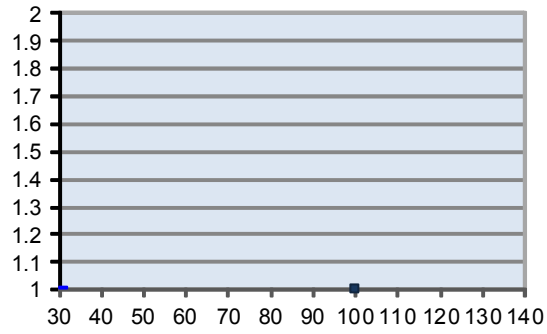
Explanation

RMV 200: MA 01, MA 02 and MA 06; Study Areas 00, 01,71, 72, 73 & 74
Unimproved land – Commercial, Countywide
There were only two usable sales available for undeveloped commercial land located in St. Helens, Scappoose and Warren. These sales did not provide a significant sampling or a clear indication of the market for these properties. Therefore it was decided to use 100 as the Selected Ratio. No time adjustment was applied to this study.

Performance History

	2017	2016	2015	2014	2013
COD	26.47	118.47	9.65	0.00	0.00
PRD	1.11	1.58	1.01	1.00	1.00

Frequency



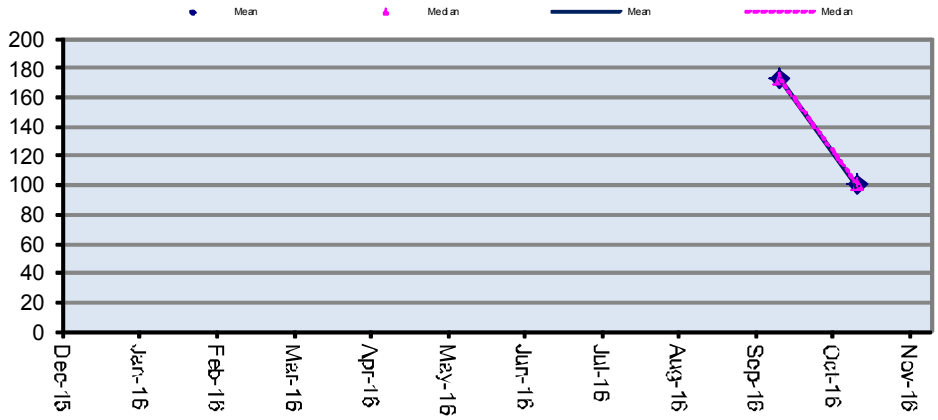
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	1
110	0
120	0
130	0
140	0

Median	**136**
AD	**36.00**
COD	**26.47**
Mean	**136**
SD	**50.91**
COV	**37.44**

Wtd Mean	**122**
GeoMean	**131**
PRD	**1.11**
95% Confidence	**70.56**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Oct-16	172	172	1
Nov-16	100	100	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	200		33	4N1W09-AB-01200	2016	10125	0.77	105,000	0	105,000	105,000	Nov-16	1	100
01	00	000	200		33	4N1W04-AC-00305	2016	9505	0.23	82,350	0	82,350	48,000	Oct-16	2	172

RMV Class	MA	SA	NH	App Year	# of Sales	Location
201	01	72	000		0	St Helens/Col City
201	01	01	000		0	Columbia City
201	01	71	000		0	St Helens/Col City
201	01	00	000		1	St Helens
201	01	73	000		0	St Helens/Col City
201	02	72	000		2	Scappoose
201	02	95	000		0	Scappoose
201	02	71	000		0	Scappoose
201	02	00	000		1	Scappoose
201	02	73	000		0	Scappoose
201	02	97	000		0	Scappoose
201	06	72	000		0	Rural St Helens
201	06	00	000		0	Rural St Helens
201	06	73	000		0	Rural St Helens

Adjustment Calculation Summary

Sample - Number of Sales	4	**RECALCULATED**		
Population - Number of Accounts	632			
Sales as a percentage of the Population	0.63 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	103,685,790	36.27 %	103,685,790	36.27 %
OSD RMV	25,500	0.01 %	25,500	0.01 %
Residential Improvement RMV	182,063,420	63.68 %	182,063,420	63.68 %
Farm Improvement RMV	125,070	0.04 %	125,070	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** **2017** **Adjustment** **100**

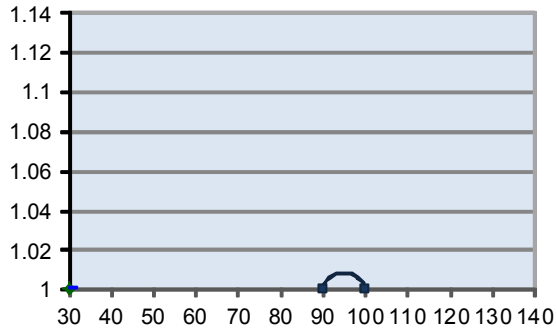
Explanation

RMV 201: MA 01, MA 02 and MA 06; Study Areas 00, 01,71, 72, 73 & 74
Improved land – Commercial, Countywide
There are 4 sales available for this analysis of improved commercial property located in St. Helens, Scappoose and Warren. 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

	2017	2016	2015	2014	2013
COD	22.85	25.63	21.23	15.07	10.91
PRD	1.12	0.93	1.15	1.02	0.99

Frequency



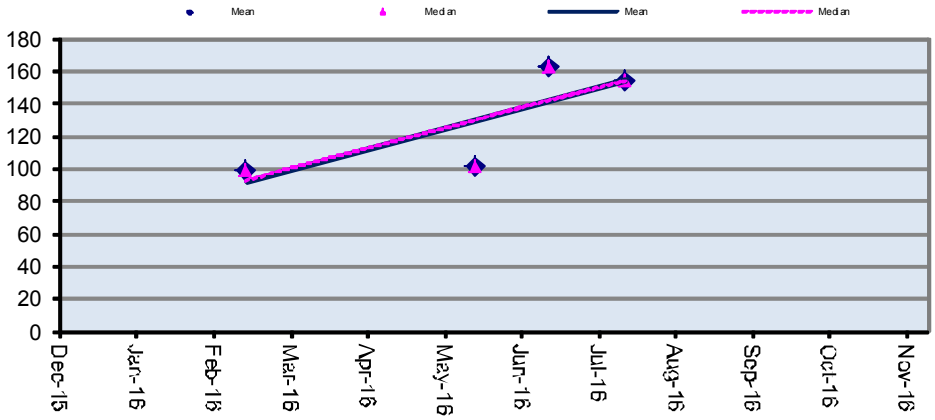
30	0
40	0
50	0
60	0
70	0
80	0
90	1
100	1
110	0
120	0
130	0
140	0

Median	**128**
AD	**29.25**
COD	**22.85**
Mean	**129**
SD	**33.99**
COV	**26.35**

Wtd Mean	**115**
GeoMean	**126**
PRD	**1.12**
95% Confidence	**33.31**

Number Of Sales **4**

Central Tendencies



Month	Mean	Median	Sales
Mar-16	99	99	1
Jun-16	101	101	1
Jul-16	163	163	1
Aug-16	154	154	1

APPR	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	572	33	4N1W04-CA-00200	2016	1933	0.23	90,620	287,220	377,840	380,000	Mar-16	1	99
02	00	000	201	572	33	3N2W12-AC-04500	2016	5595	0.96	295,970	776,500	1,072,470	1,065,000	Jun-16	2	101
02	72	000	201	594	33	3N2W01-A0-01200	2016	6970	1.65	472,950	64,620	537,570	350,000	Aug-16	3	154
02	72	000	201	576	33	3N2W24-C0-00302	2016	6563	0.40	212,270	40,590	252,860	155,000	Jul-16	4	163

RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	03	00	000		0	Vernonia
200	03	73	000		0	Vernonia
200	04	72	000		0	Rainier
200	04	71	000		1	Rainier
200	04	00	000		0	Rainier
200	04	73	000		0	Rainier
200	05	00	000		0	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	1	**RECALCULATED**		
Population - Number of Accounts	274			
Sales as a percentage of the Population	0.36 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	8,068,830	100.00 %	8,068,830	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** **2017** **Adjustment** **100**

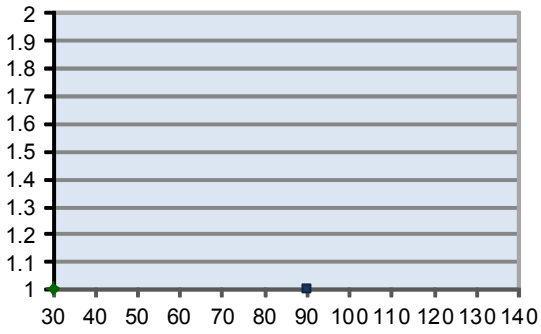
Explanation

RMV 200: MA 03, MA 04 and MA 05; Study Areas 00,71, 72, 73 & 74
Unimproved land – Commercial, Countywide
A single sale was identified in this study period for unimproved land located in Vernonia, Rainier and Clatskanie. This sample is too small to use as a determination of the current market. Therefore, it is recommended to use 100 as the selected ratio. No time adjustment was applied to this study.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	118.47	9.65	0.00	0.00
PRD	1.00	1.58	1.01	1.00	1.00

Frequency



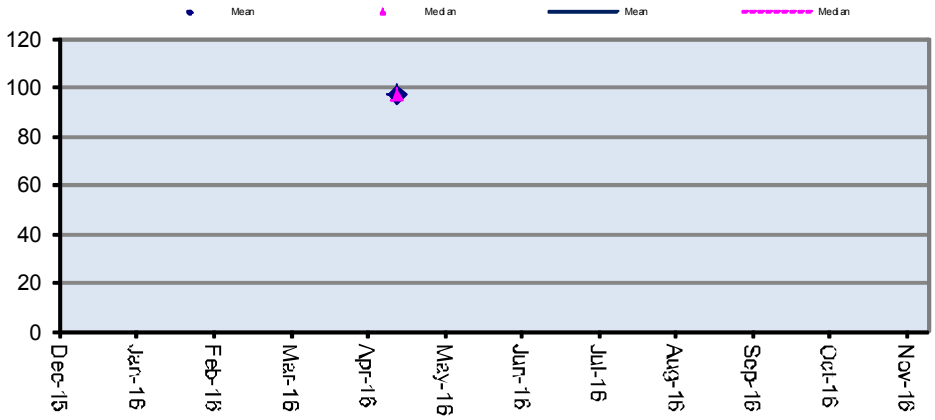
30	0
40	0
50	0
60	0
70	0
80	0
90	1
100	0
110	0
120	0
130	0
140	0

Median	**97**
AD	**0.00**
COD	**0.00**
Mean	**97**
SD	**1.00**
COV	**1.03**

Wtd Mean	**97**
GeoMean	**97**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
May-16	97	97	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	71	000	200		33	7N2W17-BB-00100	2016	3243	20.92	580,600	0	580,600	600,000	May-16	1	97

RMV Class	MA	SA	NH	App Year	# of Sales	Location
201	03	00	000		1	Vernonia
201	03	73	000		0	Vernonia
201	04	72	000		0	Rainier
201	04	71	000		0	Rainier
201	04	00	000		1	Rainier
201	05	72	000		0	Clatskanie
201	05	71	000		0	Clatskanie
201	05	00	000		0	Clatskanie

Adjustment Calculation Summary

RECALCULATED

		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Sample - Number of Sales	2			
Population - Number of Accounts	452			
Sales as a percentage of the Population	0.44 %			
Prior Year Population Values				
Land RMV	22,054,020	29.35 %	22,054,020	29.35 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	52,903,220	70.41 %	52,903,220	70.41 %
Farm Improvement RMV	176,210	0.23 %	176,210	0.23 %

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** **2017** **Adjustment** **100**

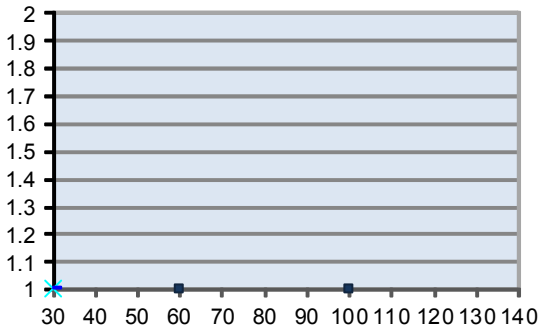
Explanation

RMV 200: MA 03, MA 04 and MA 05; Study Areas 00,71, 72, 73 & 74
Improved land – Commercial, Countywide
For the analysis of improved commercial property located in Vernonia, Rainier and Clatskanie, only two sales were returned in the sales array. Because of the sack of usable sales data, it was deemed appropriate to apply 100 as the selected ratio and to apply no adjustment for time.

Performance History

	2017	2016	2015	2014	2013
COD	25.29	25.63	21.23	15.07	10.91
PRD	1.07	0.93	1.15	1.02	0.99

Frequency



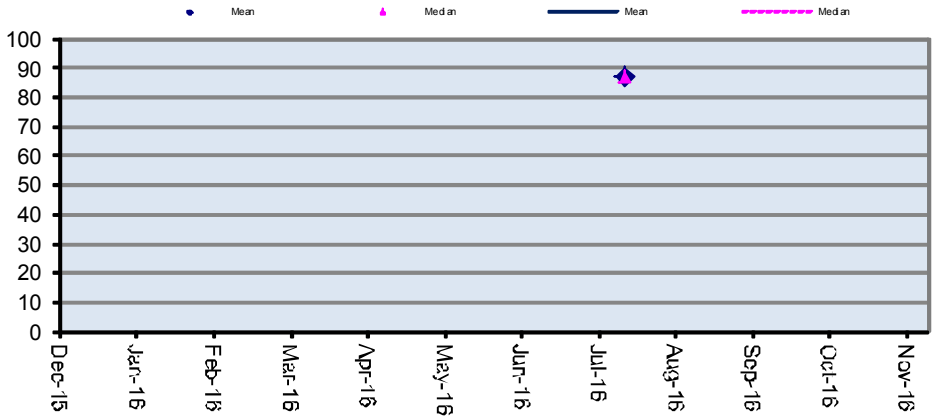
30	0
40	0
50	0
60	1
70	0
80	0
90	0
100	1
110	0
120	0
130	0
140	0

Median	87
AD	22.00
COD	25.29
Mean	87
SD	31.11
COV	35.76

Wtd Mean	81
GeoMean	84
PRD	1.07
95% Confidence	43.12

Number Of Sales 2

Central Tendencies



Month	Mean	Median	Sales
Aug-16	87	87	2

AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE NO	RATIO
03	00	000	201	574	33	4N4W04-BC-05000	2016	6769	0.09	19,200	62,390	81,590	125,000	Aug-16	1	65
04	00	000	201	131	33	7N2W16-DA-00200	2016	7601	0.15	32,630	43,530	76,160	70,000	Aug-16	2	109

RMV Class	MA	SA	NH	App Year	# of Sales	Location
207	01	00	000		0	St Helens
207	01	01	000		0	Columbia City
207	02	00	000		0	Scappoose
207	03	00	000		0	Vernonia
207	04	00	000		0	Rainier
207	05	00	000		0	Clatskanie
207	06	00	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	36			
Sales as a percentage of the Population	0.00 %			
Prior Year Population Values				
Land RMV	17,427,489	44.47 %	17,427,489	44.47 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	21,743,880	55.49 %	21,743,880	55.49 %
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** **2017** **Adjustment** **100**

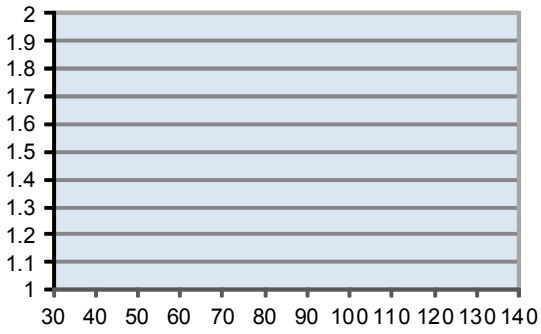
Explanation

RMV 207
Improved land – Manufactured Home Parks, Countywide
These properties are appraised based on income. Because of this, no adjustment has been applied.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	-
PRD		-	-	-	-

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

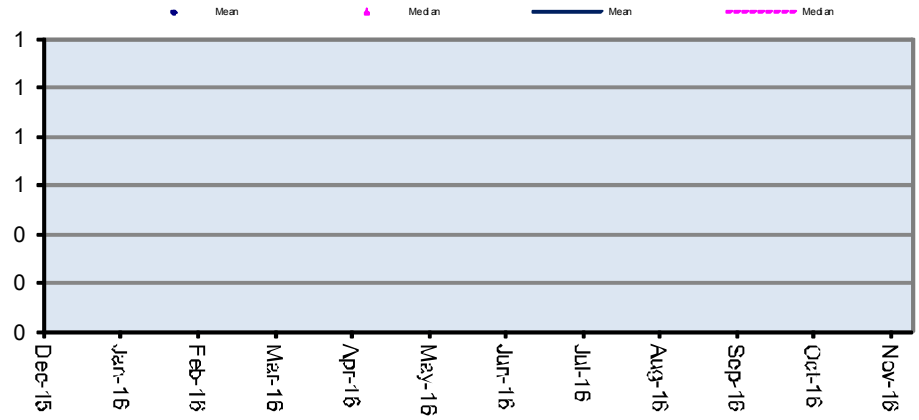
PRD

95% Confidence

Number Of Sales **0**

Central Tendencies

Month	Mean	Median	Sales



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

ALL MAINTENANCE AREAS

RMV CLASS 3XX

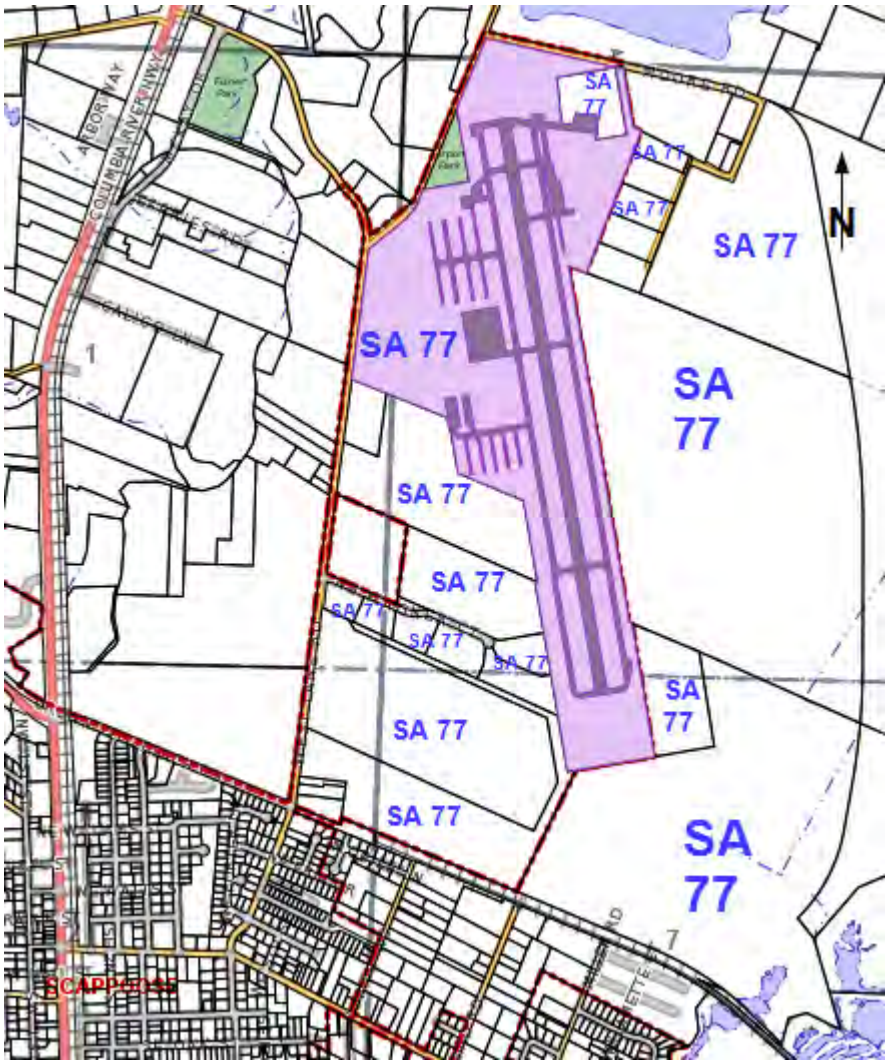
INDUSTRIAL PROPERTY

INDUSTRIAL PROPERTIES

Small Industrial properties located throughout Columbia County have experienced a minimal amount of expansion over the years. There are some industries that have grown slowly, but overall it has been limited.

However, there is one area in the County that is the exception to the above statement; this is the area located around the Scappoose Airport. A new Study Area (77) was created this year to measure the movement of these properties on the market. The development potential surrounding the airport has increased, partially due to Oregon Manufacturing Innovation District. This district has opened the doors for industries such as: Oregon Institute of Technology, Portland Community College and Boeing Company. Also, the location of Scappoose to the Portland area as well as easy access to the Columbia River Highway (Highway 30) and the Columbia River also provide great incentive for developers.

The type of use found in this area is light industrial and recent demand of this location has stimulated great interest by developers.



COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
300	01	00	000		0	St Helens
300	02	00	000		0	Scappoose
300	02	74	000		0	Scappoose
300	02	77	000		1	Scappoose
300	03	00	000		0	Vernonia
300	04	00	000		0	Rainier
300	05	00	000		0	Clatskanie
300	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	124				
Sales as a percentage of the Population	0.81	%			
Prior Year Population Values					
Land RMV	63,964,610		100.00	% 63,964,610	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** **2017** **Adjustment** **100**

Explanation

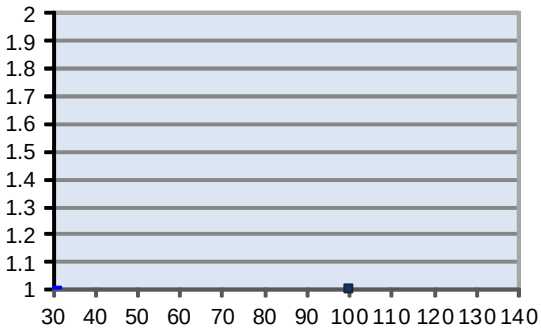
RMV 300: MA 01 SA 00, 01,74; MA 02 SA 00, 74 and 77; MA 03 SA 00, 74; MA 04 SA 00, 74; MA 05 SA 00, 74; MA 06 SA 00, 74 Unimproved land – Industrial, Countywide
This study has only one usable sale available for industrial unimproved land located throughout the County. Because this sales sample is too small to use as an indicator of the market, it was decided to apply 100 as the Selected Ratio with no adjustment for time.

Performance History

	2017	2016	2015	2014	2013
COD	0.00	0.00	0.00	-	0.00
PRD	1.00	1.00	1.00	-	1.00

COLUMBIA County **2017** Ratio Study

Frequency



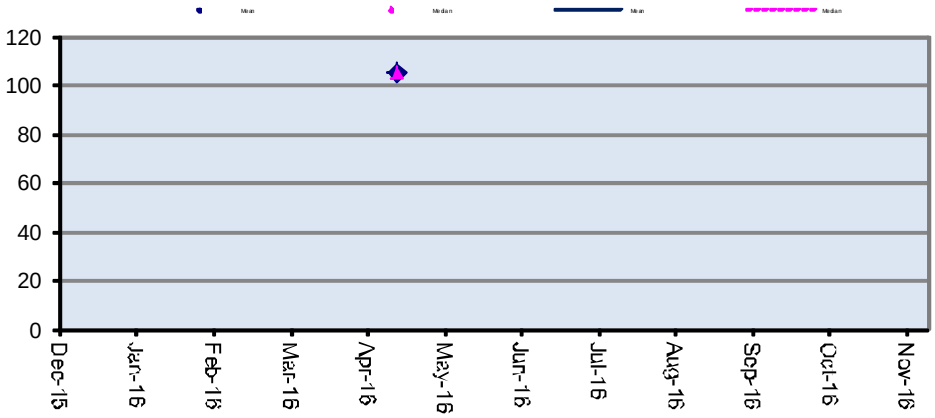
30	0
40	0
50	0
60	0
70	0
80	0
90	0
100	1
110	0
120	0
130	0
140	0

Median	**105**
AD	**0.00**
COD	**0.00**
Mean	**105**
SD	**1.00**
COV	**0.95**

Wtd Mean	**105**
GeoMean	**105**
PRD	**1.00**
95% Confidence	**1.96**

Number Of Sales **1**

Central Tendencies



Month	Mean	Median	Sales
May-16	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	77	000	300		33	3N1W07-00-00100	2016	4241	49.56	8,425,200	0	8,425,200	8,013,788	May-16	1	105

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
301	01	00	000		0	St Helens
301	02	00	000		0	Scappoose
301	02	74	000		0	Scappoose
301	02	77	000		0	Scappoose
301	03	00	000		0	Vernonia
301	04	00	000		0	Rainier
301	04	74	000		0	Rainier
301	05	00	000		0	Clatskanie
301	06	00	000		0	Rural St Helens

Adjustment Calculation Summary

			RECALCULATED	
Sample - Number of Sales	0			
Population - Number of Accounts	58			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	12,094,680	58.19 %	12,094,680	58.19 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	8,663,210	41.68 %	8,663,210	41.68 %
Farm Improvement RMV	25,490	0.12 %	25,490	0.12 %

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** **2017** **Adjustment** **100**

Explanation

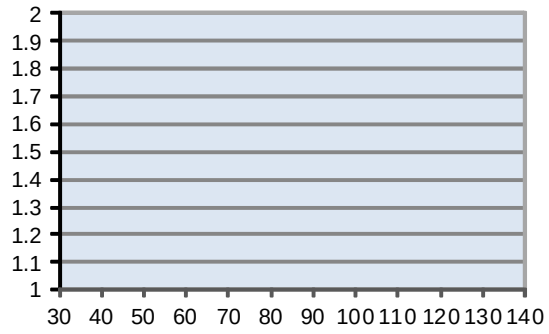
RMV 301: MA 01 SA 00, 01,74; MA 02 SA 00, 74 and 77; MA 03 SA 00, 74; MA 04 SA 00, 74; MA 05 SA 00, 74; MA 06 SA 00, 74 Improved Land – Industrial, Countywide
For this study of improved industrial property no sales data was returned. Therefore the Selected Ratio of 100 was applied here and no adjustment for time was made.

Performance History

	2017	2016	2015	2014	2013
COD		0.00	0.00	-	-
PRD		1.00	1.00	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

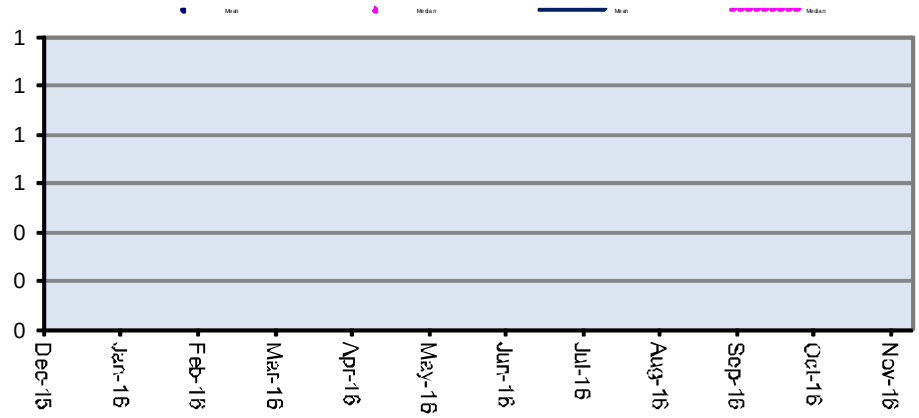
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

ALL MAINTENANCE AREAS

RMV CLASS 701

MULTI FAMILY (5 PLUS UNITS)

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
701	01	00	000		0	St Helens
701	02	00	000		0	Scappoose
701	03	00	000		1	Vernonia
701	04	00	000		1	Rainier
701	05	00	000		0	Clatskanie
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		2			
Population - Number of Accounts		89			
Sales as a percentage of the Population		2.25 %			
Prior Year Population Values					
	Land RMV	11,869,310	23.51 %	13,768,400	23.52 %
	OSD RMV	17,000	0.03 %	17,000	0.03 %
	Residential Improvement RMV	38,590,450	76.45 %	44,764,922	76.46 %
	Farm Improvement RMV	0	0.00 %	0	0.00 %

SelectedRatioFromSales	86
RMV Adjustment	100
Before Ratio	86
Overall Adjustment Factor	116
Land Adjustment Factor	116
OSD Adjustment Factor	100
Residential Adjustment Factor	116
Farm Improvement Factor	116
After Ratio	100

Selected Ratio **86** **2017** **Adjustment** **116**

Explanation

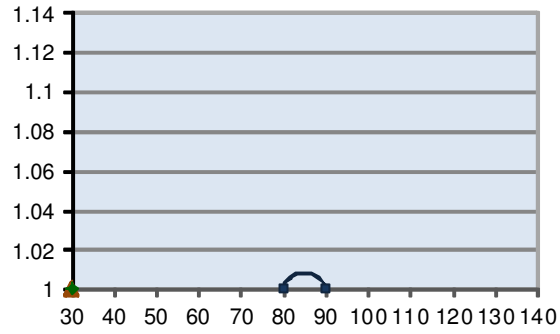
RMV 701
Improved Land – Apartments, Countywide
All improved apartment type properties located in all areas of Columbia County. For this analysis, the Median and the Mean both returned a ratio of 90. This indicator of has been selected as the best fit for this study and has been adjusted for time from the conclusion of the residential time study (96). Therefore, the Selected Ratio is 86.

Performance History

	2017	2016	2015	2014	2013
COD	5.00	0.00	0.00	-	-
PRD	1.05	1.00	1.00	-	-

COLUMBIA County **2017** Ratio Study

Frequency



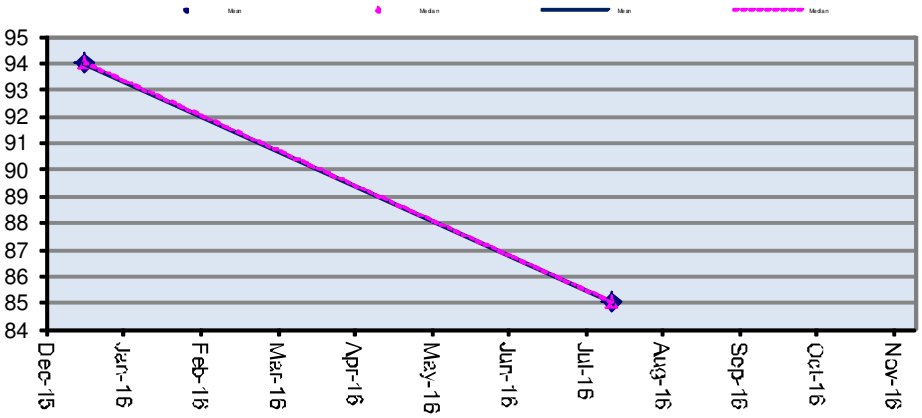
30	0
40	0
50	0
60	0
70	0
80	1
90	1
100	0
110	0
120	0
130	0
140	0

Median	**90**
AD	**4.50**
COD	**5.00**
Mean	**90**
SD	**6.40**
COV	**7.11**

Wtd Mean	**86**
GeoMean	**89**
PRD	**1.05**
95% Confidence	**8.87**

Number Of Sales **2**

Central Tendencies



Month	Mean	Median	Sales
Jan-16	94	94	1
Aug-16	85	85	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	701	763	33	7N2W16-CA-04000	2016	7640	0.38	81,610	811,080	892,690	1,050,000	Aug-16	1	85
03	00	000	701	761	30	4N4W04-BC-05903	2016	242	0.23	49,920	142,960	192,880	205,900	Jan-16	2	94

ALL MAINTENANCE AREAS

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

COLUMBIA County **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
010	01	00	000		0	St Helens
010	01	01	000		0	Columbia City
010	01	15	000		0	St Helens
010	02	00	000		0	Scappoose
010	03	00	000		0	Vernonia
010	03	03	000		0	Vernonia
010	04	00	000		0	Rainier
010	05	00	000		0	Clatskanie

Adjustment Calculation Summary

Sample - Number of Sales	0			
Population - Number of Accounts	143			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	121,030	94.52 %	121,030	94.52 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	7,020	5.48 %	7,020	5.48 %
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** **2017** **Adjustment** **100**

Explanation

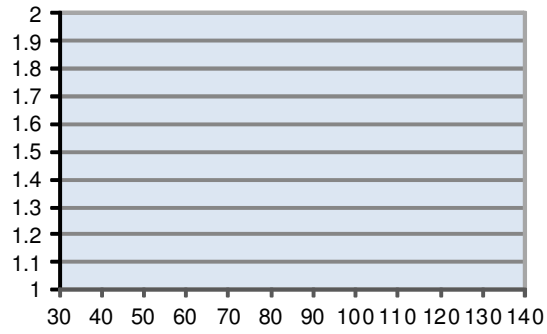
RMV 010
Odd Lot – Unbuildable, Zoned Residential
This study is comprised of odd lots which are not buildable due to size, DEQ denial, etc and are located in the incorporated areas of Columbia County. They have been identified as having minimal value for assessment reasons. The improvement value displayed on this report represents paving and is considered to be of little value. Therefore, it was deemed no adjustment was warranted at this time. Note: At the time this Study is being prepared the properties in MA 01 (City of St. Helens) are in the process of a cycle re-appraisal. All the sales referenced in this portion of the study have been re-appraised.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	-
PRD		-	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

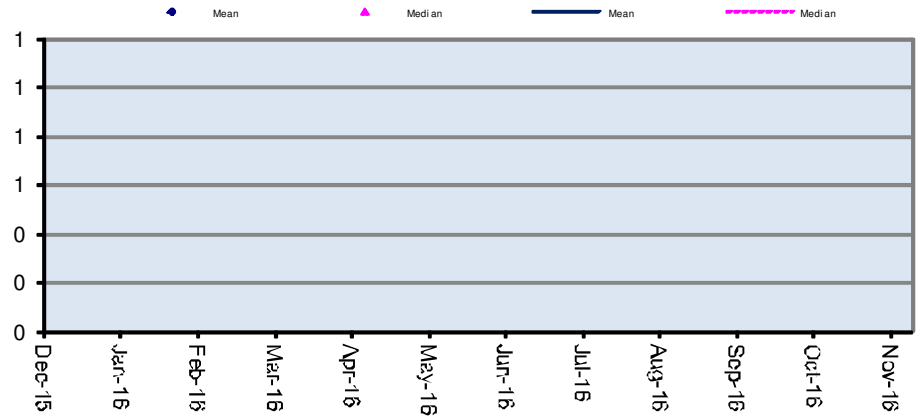
PRD

95% Confidence

Number Of Sales **0**

Central Tendencies

Month	**Mean**	**Median**	**Sales**



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

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

Adjustment Calculation Summary

		RECALCULATED		
Sample - Number of Sales	0			
Population - Number of Accounts	11			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	11,630	51.23 %	11,630	51.23 %
OSD RMV	0	0.00 %	0	0.00 %
Residential Improvement RMV	11,070	48.77 %	11,070	48.77 %
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** **2017** **Adjustment** **100**

Explanation

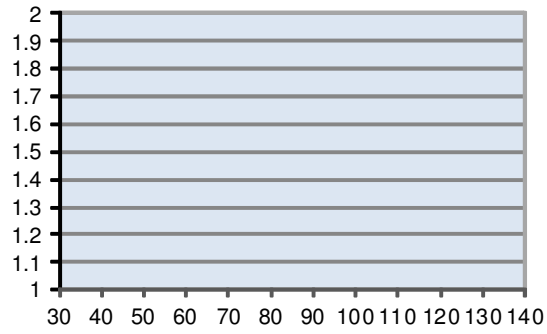
RMV 020
Odd Lot – Unbuildable, Zoned Commercial
These properties are zoned commercial and are located throughout Columbia County. Because of their size, shape and/or location they are considered as odd lots and have been given minimal value. It is recommended that no adjustment be made to these properties for the current year.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	-
PRD		-	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

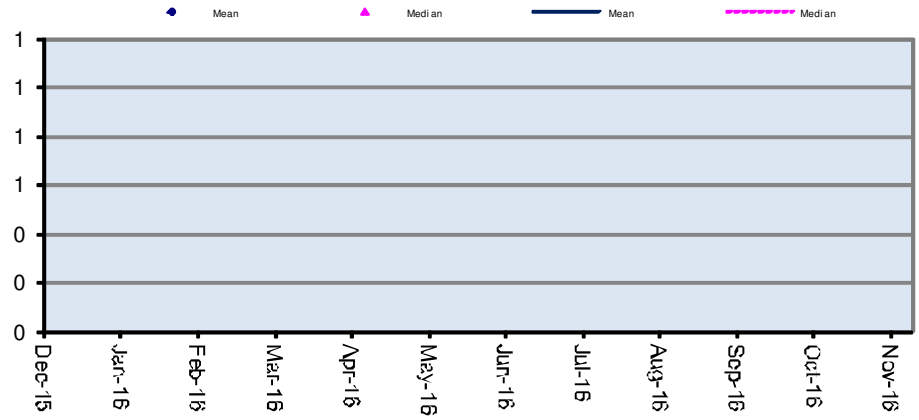
PRD

95% Confidence

Number Of Sales **0**

Central Tendencies

Month	**Mean**	**Median**	**Sales**



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

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

Adjustment Calculation Summary

		RECALCULATED		
Sample - Number of Sales	0			
Population - Number of Accounts	122			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
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** **2017** **Adjustment** **100**

Explanation

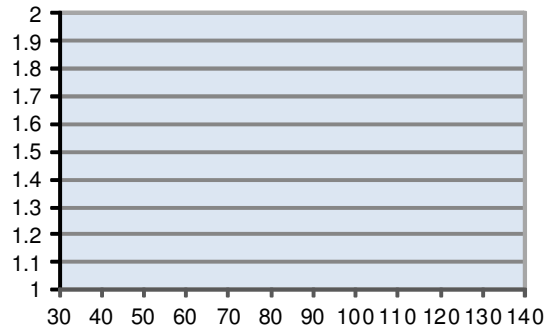
RMV 030
Odd Lot – Unbuildable, Zoned Industrial
This analysis is for odd lots which are zoned industrial. They are of insufficient size for development but may provide access to other sites. These properties are given a minimal value and no adjustment is recommended.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	-
PRD		-	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

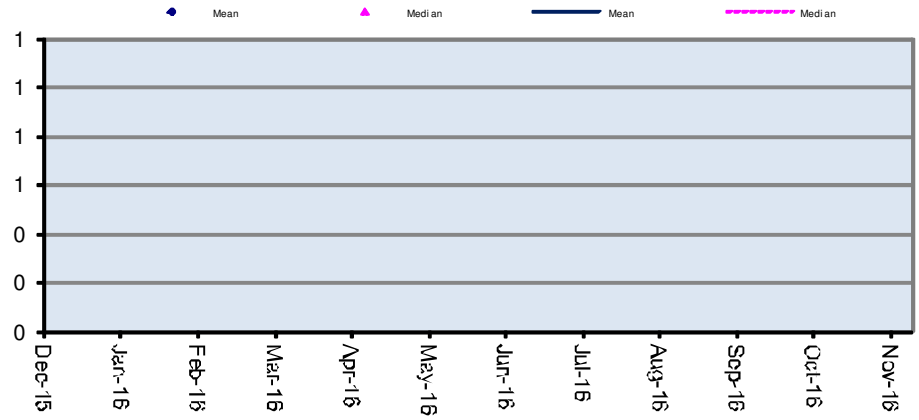
PRD

95% Confidence

Number Of Sales **0**

Central Tendencies

Month	**Mean**	**Median**	**Sales**



AP AR	SA	NH	PRP CLS	BLD CLS	RJ CD	MAP NO.	BOOK	PAGE	ACRES	RMV LAND	RMV IMP	TOTAL VALUE	SALES PRICE	SALE DATE	SALE 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 **2017** Ratio Study

RMV Class	MA	SA	NH	App Year	# of Sales	Location
040	02	00	000		0	Scappoose
040	02	21	000		0	Scappoose
040	03	00	000		0	Vernonia
040	03	03	000		0	Vernonia
040	04	00	000		0	Rainier
040	04	41	000		0	Rainier
040	04	42	000		0	Rainier
040	04	44	000		0	Rainier
040	05	00	000		0	Clatskanie
040	06	00	000		0	Rural St Helens
040	06	61	000		0	Rural St Helens
040	06	62	000		0	Rural St Helens

Adjustment Calculation Summary

		RECALCULATED		
Sample - Number of Sales	0			
Population - Number of Accounts	162			
Sales as a percentage of the Population	0.00 %	**Pre-Trend Brkdwn**	**Post Trend Values**	**Post Trend Brkdwn**
Prior Year Population Values				
Land RMV	217,940	100.00 %	217,940	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** **2017** **Adjustment** **100**

Explanation

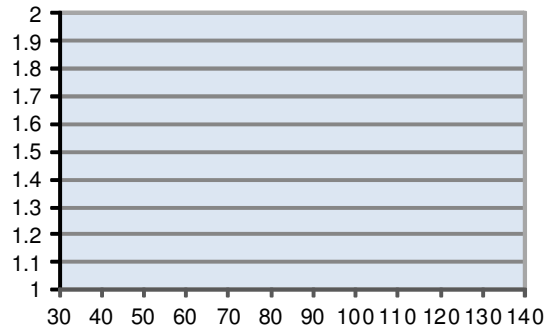
RMV 040
Odd Lot – Unbuildable, zoning not significant
These lots are properties located within rural Columbia County. Due to their size, shape and/or location they are considered to have minimal value. Therefore, no adjustment is to be applied for the current year.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	-
PRD		-	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

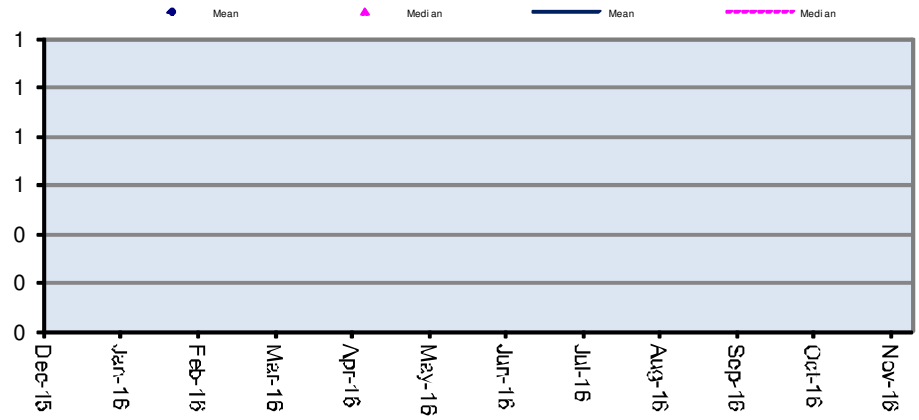
PRD

95% Confidence

Number Of Sales **0**

Central Tendencies

Month	**Mean**	**Median**	**Sales**



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

ALL MAINTENANCE AREAS

STUDY AREA 60

ISLANDS

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

Adjustment Calculation Summary

Sample - Number of Sales	0	**RECALCULATED**		
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	345,670	100.00 %	345,670	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** **2017** **Adjustment** **100**

Explanation

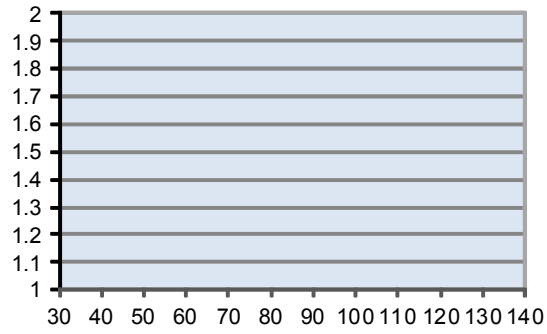
RMV 400 and 800, located in MA 02 and MA 05, SA 60
Islands
This analysis comprises those properties located on the Columbia River (Islands). They have very little marketability due to access and development limitations. Therefore it is recommended that no adjustment be applied.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	-
PRD		-	-	-	-

COLUMBIA County **2017** Ratio Study

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

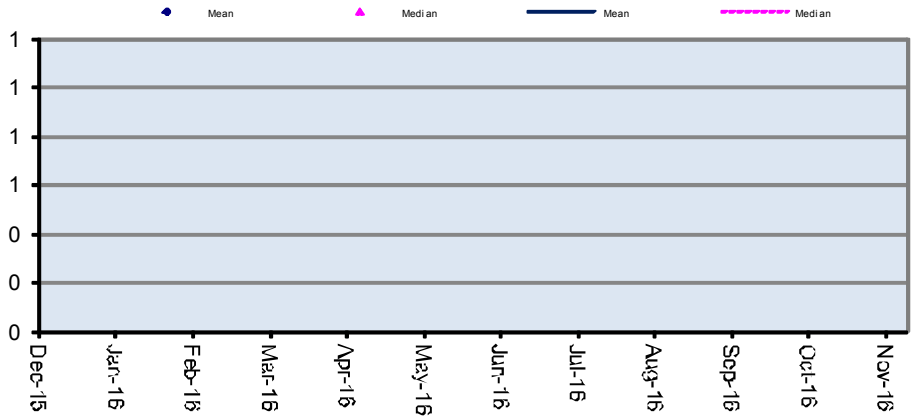
GeoMean

PRD

95% Confidence

Number Of Sales **0**

Central Tendencies



Month	Mean	Median	Sales

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

ALL MAINTENANCE AREAS

RMV CLASS 600

STUDY AREA 06 HIGHEST AND BEST USE FOREST LANDS

RMV Class	MA	SA	NH	App Year	# of Sales	Location
600	04	06	000		0	Rainier
600	03	06	000		0	Vernonia
600	02	06	000		0	Scappoose
600	05	06	000		0	Clatskanie
600	06	06	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		595			
Sales as a percentage of the Population		0.00 %			
Prior Year Population Values					
	Land RMV	98,066,670	100.00 %	98,066,670	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** **2017** **Adjustment** **100**

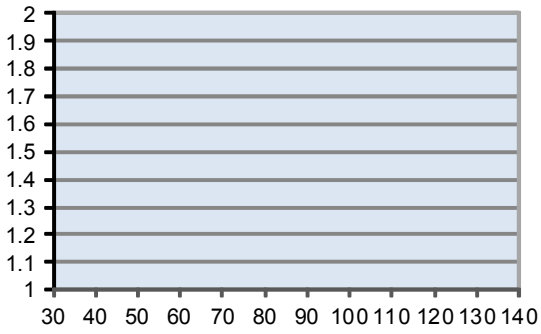
Explanation

RMV 600: SA 06
Highest & Best Use Forestland
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 the use of the property. The Real Market Values that are applied each assessment year to H&BU properties are determined by the Department of Revenue. Therefore, no adjustment was applied.

Performance History

	2017	2016	2015	2014	2013
COD		-	-	-	-
PRD		-	-	-	-

Frequency



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

Median

AD

COD

Mean

SD

COV

Wtd Mean

GeoMean

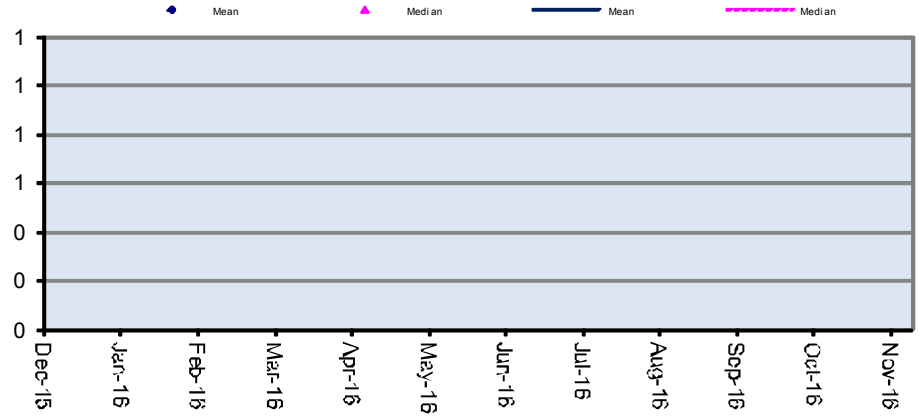
PRD

95% Confidence

Number Of Sales **0**

Central Tendencies

Month	Mean	Median	Sales



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

AREAS OF CONCERN

COEFFICIENT OF DISPERSION & PRICE RELATED DIFFERENTIAL

Coefficient of Dispersion

Following are the Coefficients of Dispersion by Maintenance Area, Study Area and RMV Class from the sales date of January 1, 2016 through December 31, 2016. This is the sales study period used in the 2017 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

NOTE: There are no current COD standards designated for Watercraft/Floating properties at this time.

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
01	00	100	209	20.98	30.99	17.93	-	-
02	79	101	51	15.75	7.16	5.29	10.14	4.04
03	00	100	148	22.59	8.91	11.01	0.00	0.00
03	03	101	291	17.78	8.87	15.71	12.81	31.21
03	00	109	81	18.00	2.46	15.86	9.67	17.73
03	37	401	16	15.87	-	-	0.00	-
Un-improved Commercial MA 1, MA 2 & MA 6			250	26.47	118.47	9.55	0.00	0.00
Improved Commercial MA 1, MA 2 & MA 6			632	22.85	25.63	21.23	15.07	10.91
Improved Commercial MA 3, MA 4 & MA 5			452	25.29	25.63	21.23	15.07	10.91

Explanation:

MA 01 SA 00: this area is vacant land located in the City of St. Helens. There were 8 sales available with similar characteristics. This current COD is just above the standard of 20. However, it is an indication that during set-up a review of land sales will need to be performed.

MA 02 SA 79: made up of homogeneous properties, this study area is comprised of Class 5 and Class 6 homes. This area does sell quite differently than the general area of the City of Scappoose as indicated by the sales prices seen on the analysis of this area. Moving forward, this area will be reviewed during set-up to check for any other indications that the market is showing.

MA 03 All Areas: this area is Vernonia. Because of the inconsistent COD's over the past few years and the way the market is currently moving, a re-appraisal will be performed for the 2018 assessment year in this maintenance area.

All Commercial Property: the COD's are greatly improved from the prior year (2016) and are anticipated to improve for the 2018 ratio year.

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, 2016 through December 31, 2016 and has been used in the 2017 Ratio Report.

MA	SA	RMV Class	PRD	Under .98	Over 1.03
03	03	101	1.04		X
06	56, 61	400	1.04		X
Un-improved Commercial MA 1, MA 2 & MA 6		200	1.11		X
Improved Commercial MA 1, MA 2 & MA 6		201	1.12		X
Improved Commercial MA 3, MA 4 & MA 5		201	1.07		X
Multi-family, All maintenance areas		701	1.05		X
PP MS MA 7 - SA 1, SA 2, SA 6, SA 28 & SA 31		019	0.95	X	
PP MS MA 7 - SA 3, SA 4, SA 5 & SA 35		019	0.95	X	
PP MS MA 7 - SA 27		019	1.08		X
PP MS MA 7 - SA 30		019	1.10		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.