

**COLUMBIA COUNTY ASSESSOR'S
CERTIFIED RATIO STUDY
JANUARY 1, 2020**



*“Serving Columbia County through
Engagement, Connection and Innovation”*



Oregon

Kate Brown, Governor

Department of Revenue
Property Tax Division
955 Center St NE
PO Box 14380
Salem, OR 97309-5075
www.oregon.gov/dor

July 28, 2020

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

Columbia County 2020 Assessor's Certified Ratio Study Acceptance

The Department's Mass Appraisal Review team has completed its required review of your *2020 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 and appraisal plan 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 the mass appraisal team at MassAppraisal.Team@oregon.gov

Your appraisal / valuation plan is yet to be received and is due on or before November 1, 2020.

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.

Sincerely,

Roxanne Gillespie, MAI, Manager
Program Assistance
Property Tax Division

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

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Certification and 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
Sue Martin, Assessor

7/6/2020
Date

Joelle Leach, Analyst
Preparer/Contact Person

(503) 397-2240 ext. 8450
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 1. For 2020, this is the relationship between the base set-up real market values for all re-calculated or re-appraised areas.

Furthermore, the Ratio Study's purpose is to document the analysis and to identify adjustment factors that 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 Areas and/or Property Class/RMV Class designations.

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 as defined by Oregon Administrative Rule (OAR) 150-309-0230. Most notably are the "Summary of Ratio Indications" and the "Market Area Conclusions and Adjustments" sections of this study. The remaining sections lend additional support and provide further explanation of the adjustment .

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 that 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 that 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. In addition, there may be other extreme circumstances surrounding the sale that 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 sale 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 factor (shown as a percent) is developed to bring the sales price to the January 1 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 Personal property Manufactured Structures. For Commercial, Industrial, and Floating property sales, no time adjustment study was performed.

For this Ratio Study, the Direct Calculation analysis was deemed as the best technique to adjust the sales price for movement over time. This method was applied to the RMV Class 1XX, 4XX, and 019 properties. The conclusion from the time study is applied to adjust the Sales Price to the January 1st assessment date for this ratio year, then a central tendency (Mean, Median, Weighted Mean or Geometric Mean) is selected as the best indicator for the trend results.

Market Area Conclusions and Adjustments

Following are the essential elements that embody the Ratio Study as outlined. They include the individual ratio study for an area, as well as the supporting sales listings and statistical data.

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.

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 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 each study:

1. Market Identification. This describes the population for which the individual study is done. Typically, this is by the RMV class, Maintenance Area (MA) and Study Area (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.
2. The Adjustment Calculation Summary. This section uses the data from the sales collection year (the certified values plus any roll correction values) and identifies the following:
 - a. The size of the sales sample used.
 - b. The total size of the population in the study, both in terms of absolute numbers and by a percent.
 - c. 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 for the sales collection year. These certified are shown as dollar amounts and as a percentage of the total RMV for each population by category, both before adjustment and after and meet the request of the Department of Revenue.

- i. Pre Trend Values – the total of the certified values by value item (Land RMV, OSD RMV, Improvement RMV and Farm Improvement RMV) from the sales collection year.
 - ii. Post Trend Values – the Pre-Trend Values multiplied by the Adjustment Factor for each value item as determined in the study.
 - d. The “Selected Ratio from Sales” is the chosen Central Tendency after the Time Adjustment conclusion has been applied to the Sales Price to bring the sales price to the Jan 1st assessment date. This ratio is either the Mean, Median, Weighted Mean or Geometric Mean. Ratio selections are based on the following principles:
 - i. 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.
 - ii. 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.
 - iii. If an adjustment is clearly needed then it is applied. Similarly, the adjustment with the greatest support is applied.
 - iv. 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.
 - e. The “Time Trend Adjustment” is conclusion from the time study as an annual adjustment percent.
 - f. The “Before Ratio” is the selected time adjusted central tendency.
 - g. The "Overall Adjustment Factor" is needed to bring the prior year RMV (or the current year re-calculated RMV) to the statutorily required 100% real market value as of the January 1 assessment date. It is calculated by dividing 1 by the Before Ratio. For improved properties, the overall adjustment factor is separated into the following:
 - i. 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 MA and SA. However, the adjustment may be from the analysis of the improved RMV class if an insufficient sales sample of unimproved land is not available.
 - ii. OSD Adjustment Factor: the adjustment factor that 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 as a 100 adjustment.
 - iii. Residential Improvement Factor: the adjustment factor needed to bring the residential and associated improvements to 100% of RMV as part of the overall

adjustment.

- iv. 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.
 - h. The "After Ratio" measures the valuation to be sure it meets 100% real market value requirements as outlined in statute. The After Ratio is calculated by applying the adjustment from the study to the base RMV on a value item basis (Land, OSD, Improvement and Farm Improvement). This value is referred to as the "After RMV". Next, the After RMV is divided by the Time Adjusted Sales Price to return an After Ratio for each sale in the array. Central tendencies are then calculated from the After Ratio's to fulfill the statutory requirements and to "test" the County's ratio study program.
 - i. Explanation: this is a written statement explaining which central tendency was selected in the analysis. If other factors contributed to the conclusion, they may be mentioned here as well.
3. Performance History. The following are historical displays of performance and valuation:
- a. Coefficient of Dispersion (COD). The history of COD 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.
 - b. Price Related Differential (PRD). The PRD history measures vertical equity of the RMV. The measurements of vertical equity are defined as:
 - i. Regressive: a PRD above 1.00 suggests that the high-valued properties are under-appraised and the low-valued properties are over-appraised.
 - ii. Progressive: a PRD less than 1.00 suggests that high-value properties are over-appraised and low-valued properties are under-appraised.
 - iii. An ideal PRD is within the range of .98 to 1.03.
4. Performance Measures. To measure valuation, the following studies are performed:
- a. For most studies, listings are used of sold properties that meet the definition of an arms-length sale. Each sale is identified by MA, SA, Neighborhood and RMV Class. Once identified, then additional details are provided to describe the individual sale properties. Next, a ratio is calculated for each sale then statistical data is calculated for the entire grouping and displayed. The major components are as follows:
 - i. Maintenance Area (MA): one of the seven appraisal areas.
 - ii. Study Area (SA): market identification code.
 - iii. Neighborhood (NH): this identifier is not used at this time and the current designation is "000".
 - iv. Property Class (PRP CLS): a three-digit number identifying the type of property.
 - v. Stat Class (ST CLS): the type of main structure included in the sale (building type).
 - vi. Condition Code (CO CD): Sales are identified by a code illustrating whether a sale is confirmed or not confirmed. The current condition codes used are as follows:

- 01 Change of use
- 02 Deed does not show warranty of title
- 03 Grantee/Grantor is a political subdivision
- 04 Grantee/Grantor is a bank or other financial institution
- 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/Grantor are the same, convenience
- 09 Exchange of properties (Trade
- 10 Short Sale or conveyance to avoid foreclosure
- 11 Grantor is Sheriff, Court Officer, Receiver, Guardian, Trustee
- 12 Contract payoff
- 13 Critical field on Deed or Document left blank
- 14 Prior year sale
- 16 Sale includes personal property not accurately extracted
- 17 Sale includes orchards, crops or other exempt property
- 20 Other errors or omissions
- 21 Property sold not same as assessed
- 22 Sale includes timber value
- 23 Sale of properties that had RMV adjudicated in the past 5 years
- 25 RMV needs updating due to new construction
- 27 Sales review requested
- 30 Unconfirmed and usable
- 33 Confirmed and usable
- 35 Assessment Clerk question
- 50 Special size change code for tracking only
- 80 Segregation

- vii. Map Number (MAP NO.): the Assessor's map and tax lot number (more than one tax lot may be involved in the sale but not displayed).
- viii. Document Number (DOC NUM.): the calendar year in which the title transfer document was recorded and the recording number of the title transfer document.
- ix. Acres (AC): the total land size expressed as acreage.
- x. RMV Land: the base set up land value plus the on-site development value that is analyzed and determined every year during the set-up study.
- xi. RMV Imp: the base value using the current DOR Factor Book. The local cost modifier and depreciation conclusion is then applied. These are determined by the yearly set-up analysis.
- xii. Total RMV: the sum of the base RMV Land and the base RMV Imp.

- xiii. Sale Price: the sale price of the property as of the date of sale.
 - xiv. Sale Date: the month and the year that the property sold.
 - xv. Sale Number (#): the sale data is arrayed in ascending order by ratio.
 - xvi. Ratio (RT): a comparison of the total appraised value to the sale price that is expressed as a percentage without a decimal point ($\text{Total RMV}/\text{Sales Price} = \text{Ratio}$). This is an un-adjusted ratio.
5. Statistical data: As with all statistical analysis, the accuracy of each conclusion depends on a sufficient sample size that properly represents the population of an area. Judgements about grouping properties in order to gain reasonably accurate results are primarily based on creating an adequate sample size of 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:
- a. Statistics of Central Tendency – the center, middle or typical element in a dataset shown in two columns: the “Sales Ratio” and the “Sales After Ratio”. These are generally assumed to 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. The central tendency measurements are comprised of the following:
 - i. The Sales Ratio column: reflects the ratios determined by taking the base RMV divided by the time-adjusted sale price.
 - Median: the middle ratio of an array. It is a positional ratio and if gaps are present near the center of the data set then the Median may be an unreliable measurement.
 - Mean: traditionally referred to as the “average”, the Mean is the sum of all the ratios divided by the number of ratios. Because it uses all the ratios in an array, it is easily distorted by extreme high and low ratios.
 - 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.
 - Geometric Mean: the “Nth” root of the product of the ratios, where “N” is the number of ratios in the array.
 - ii. The “Sales After Ratio” column: these central tendencies depict the adjusted ratios by using the following calculation: the adjusted base RMV divided by the adjusted Sale Price.
 - Median: the middle ratio of an array. It is a positional ratio and if gaps are present near the center of the data set then the Median may be an unreliable measurement.
 - Mean: traditionally referred to as the “average”, the Mean is the sum of all the ratios divided by the number of ratios. Because it uses all the ratios in an array, it is easily distorted by extreme high and low ratios.
 - 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.

- Geometric Mean: the “Nth” root of the product of the ratios, where “N” is the number of ratios in the array.
- iii. The Chart of Central Tendencies: This chart plots the number of using the un-adjusted ratios as calculated from taking the base RMV and dividing it the Sale Price.
- b. Statistics of Distribution: this performance measurement describes how values are distributed within the group; it illustrates how far the 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.
- i. Frequency Distribution –this is a graph and numeric display of the distribution of sales by ratio range. Both the Sales Ratio and After Sales Ratio are plotted.
 - ii. Average Deviation (AD) – the average of the differences between each ratio and the Median for the entire grouping.
 - iii. Coefficient of Dispersion (COD) – measures the uniformity of RMV and is the average deviation from the Median converted to a percentage. The current “working” COD standards are:

Vacant Land RMV Class, 100, 400	20%
Real & Personal Manufactured Structure Urban	25%
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
Floating Property	no standard has been set

- iv. 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 a typical standard appraisal analysis than the COD.
- v. Coefficient of Variance (COV) – the standard deviation from the Mean, converted to a percentage. This is a measure of uniformity.
- vi. Price Related Differential (PRD) – a measure of vertical equity. It is calculated by dividing the Mean by the Weighted Mean.
 - The PRD standard is a range between 98% to 103%

- vii. 95% Confidence Level – a calculation of uniformity used to determine the reliability that the sales 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.

Special 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.

Columbia County Assessor’s Annual Set-Up, Reappraisal and Recalculation:

Set-up

Every year, the Appraisal staff devotes approximately four to five months to analyzing and reviewing recent sales. During this time, land values, OSD values, local cost modifiers, and local market-based depreciation schedules are developed. In addition, class and condition benchmarks are established. These values are referred to as “base values” and are entered into the tables for January 1.

Reappraisal

An area (or property type) is selected each year for a physical reappraisal performed by the Appraisal staff. During this time, every property within the reappraisal area is visited, inspected, and reviewed for any changes such as; class, condition, topography, access, view, or any other factor that will have an influence on the value. Once the reappraisal is complete, the property is calculated electronically using the base values and factors developed in the Set-up study.

Recalculation

The Columbia County Assessor’s recalculation process is established from the base values and factors that are developed during Set-up and the existing inventory in our system. A physical inspection of the properties is not performed. Since the Set-up study is performed annually to develop base values, this recalculation method is a more reliable way to determine market trends rather than solely depending on the ratio study conclusions.

Please refer to Appendix A for further explanation on the Set-up, Reappraisal and Recalculation process and procedure.

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 from those contained in this report.

The Assessor must make those adjustments that 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.

Total Number of Sales County Wide

(Data from sales collection year)

Area	Number of Arm's Length Sales	Sales used in the Ratio Study	Number of Confirmed Sales	Percent Confirmed
MA 1	239	233	215	92%
MA 2	184	176	169	96%
MA 3	124	115	104	90%
MA 4	107	90	77	86%
MA 5	116	91	77	85%
MA 6	141	131	122	93%
MA 7 PPMS	59	53	38	72%
Comm/Ind	24	19	7	37%
Apartment	5	5	5	100%
Floating Property	13	8	5	63%
Totals:	1012	921	819	89%

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

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

(Data from sales collection year)

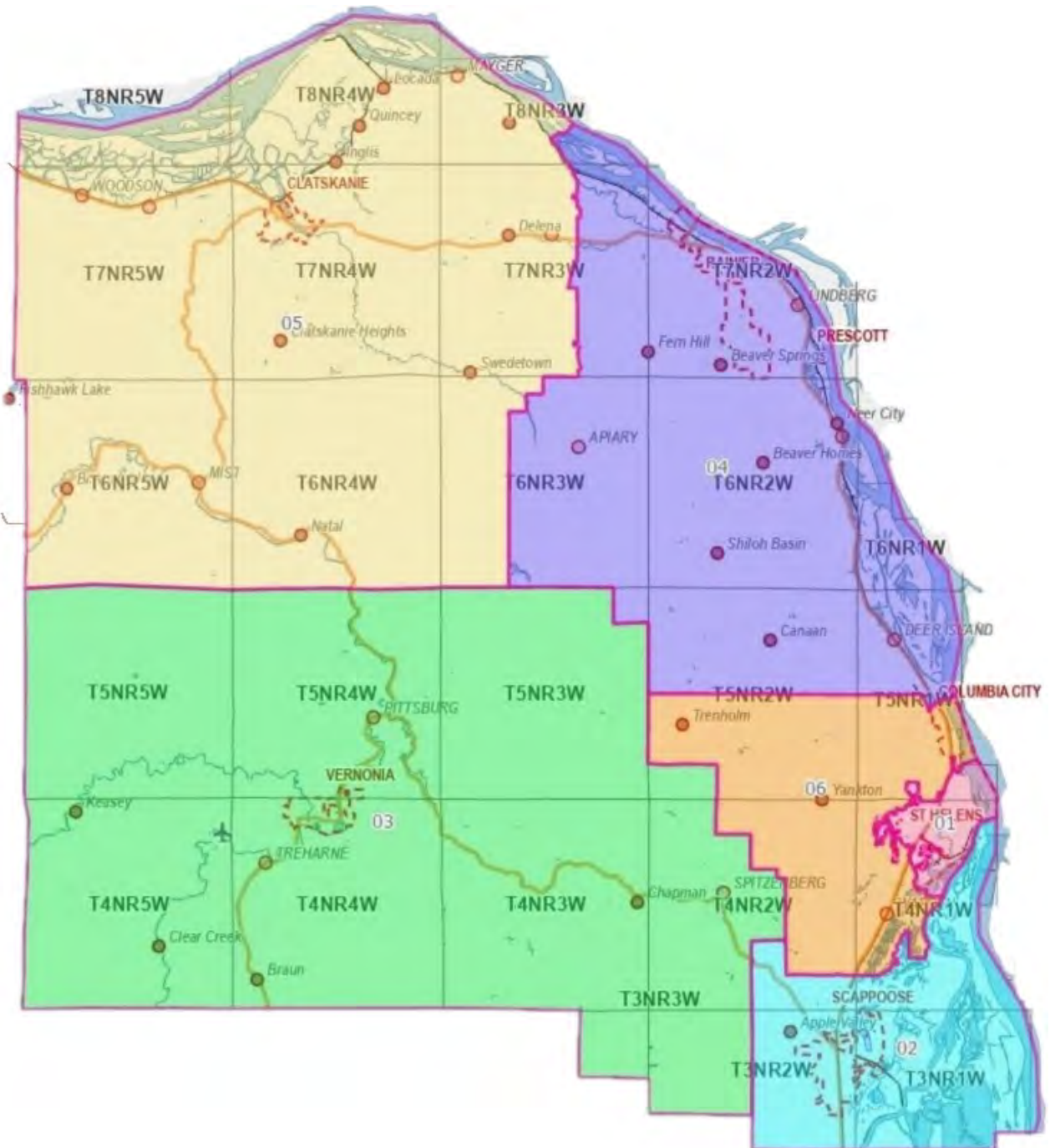
Area	RMV is Equal to AV Count	Account Total per MA	Percent of the Accounts
MA 1	131	5403	2.42%
MA 2	557	4956	11.24%
MA 3	141	3867	3.65%
MA 4	239	4631	5.16%
MA 5	247	4759	5.19%
MA 6	97	4227	2.29%
MA 7	4	1191	0.34%
Total:	1416	29034	5%

*MAINTENANCE AREA
DESCRIPTIONS
AND MAP*

Maintenance Area Descriptions

- Maintenance Area 1: City of St. Helens
- Maintenance Area 2: City of Scappoose
Rural Scappoose
- Maintenance Area 3: City of Vernonia
Rural Vernonia
- Maintenance Area 4: City of Rainier
Rural Rainier
Deer Island
- Maintenance Area 5: City of Clatskanie
Rural Clatskanie
- Maintenance Area 6: Rural St. Helens
City of Columbia City
Warren
- Maintenance Area 7: Personal Property Manufactured Structures, Countywide

Maintenance Area Map



*GROUPING ANALYSIS
AND
STUDY AREA
DESCRIPTIONS*

Grouping Analysis

When performing an analysis, some Study Areas and/or property classes may move within the market in a similar manner. When this is observed, they may have been combined in one individual study. In addition, other study areas and/or property classes may have been combined to improve the sale sample in order to arrive at a more reliable conclusion.

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

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

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

Study Area Descriptions

Maintenance Area 1 – City or St. Helens

00	Undefined	73	Comm. use in Ind. area within Comm. corridor
15	River Front	74	Comm. use in Ind. area outside Comm. corridor
30	Duplex, Triplex, Fourplex	80	Yachts Landing PUE
43	Townhouse, Row House, Common Wall	90	Industrial – County Resp.
60	Island, Columbia River	95	Floating Home & Combinations
71	Comm. Hwy with Light	97	Boathouse & Misc. FP Imp.
72	Comm. Hwy without Light		

Maintenance Area 2 – Scappoose

00	Undefined	71	Comm. Hwy with Light
06	Forest Value Zone, HBU	72	Comm. Hwy without Light
21	Rural Value Zone 1	73	Comm. use in Ind. area within Comm. corridor
25	Scappoose Dike Land	74	Comm. use in Ind. area outside Comm. corridor
28	Duplex, Triplex, Fourplex	77	Scappoose Industrial Air Park
33	Townhouse, Row House, Common Wall	79	Keys Landing, Keys Crest, Keys Orchard
41	Sauvie Island	80	Columbia River View Estates
45	Sauvie Island Dike Land	90	Industrial – County Resp.
60	Island, Columbia River	95	Floating Home & Combinations
62	Freeman Road	97	Boathouse & Misc. FP Imp.
64	Hillcrest, Columbia Acres		

2020: MA 02 SA 25 (Scappoose Dike Land) - accounts that were located in MA 06 SA 65 (Rural Warren Dike Land) moved here.

Maintenance Area 3 – Vernonia

00	Undefined	31	Rural Value Zone 1
03	Flood Zone Properties	40	Duplex, Triplex, Fourplex
06	Forest Value Zone, HBU	73	Comm. use in Ind. area within Comm. corridor

2020: MA 03 SA 38 (Roseview Heights) – moved to MA 03 SA 00

Study Area Descriptions continued:

Maintenance Area 4 – Rainier

00	Undefined	60	Island, Columbia River
06	Forest Value Zone, HBU	71	Comm. Hwy with Light
40	Duplex, Triplex, Fourplex	72	Comm. Hwy without Light
41	Rural Value Zone 1	73	Comm. use in Ind. area within Comm. corridor
42	Rural Value Zone 2	74	Comm. use in Ind. area outside Comm. corridor
44	Prescott	90	Industrial – County Resp.
45	Dike Land	95	Floating Home & Combinations
47	Rainier Riverfront Estates	97	Boathouse & Misc. FP Imp.
56	Deer Island Heights		

Maintenance Area 5 – Clatskanie

00	Undefined	60	Island, Columbia River
06	Forest Value Zone, HBU	71	Comm. Hwy with Light
36	Fishhawk Lake Estates	72	Comm. Hwy without Light
40	Duplex, Triplex, Fourplex	90	Industrial – County Resp.
51	Rural Value Zone 1	95	Floating Home & Combinations
55	Dike Land	97	Boathouse & Misc. FP Imp.

Maintenance Area 6 – City of Columbia City and Rural St. Helens (Warren, Yankton and Deer Island)

00	Undefined	67	Rural Value Zone 1 – South County
01	City of Columbia City	72	Comm. Hwy without Light
06	Forest Value Zone, HBU	73	Comm. use in Ind. area within Comm. corridor
15	River Front (CC)	90	Industrial – County Resp.
31	Duplex, Triplex, Fourplex (CC)	95	Floating Home & Combinations
60	Island, Columbia River	97	Boathouse & Misc. FP Imp.
61	Rural Value Zone 1 – North County		
62	Rural Value Zone 2		

2020: Moved SA 65 (Rural Dike Land) to MA 02 SA 25 (Scappoose Dike Land)

Changed: SA 61 (Rural Value Zone 1) boundary to encompass rural St. Helens & Warren - North County

New: SA 67 (Rural Value Zone 1) to comprise rural St. Helens & Warren – South County

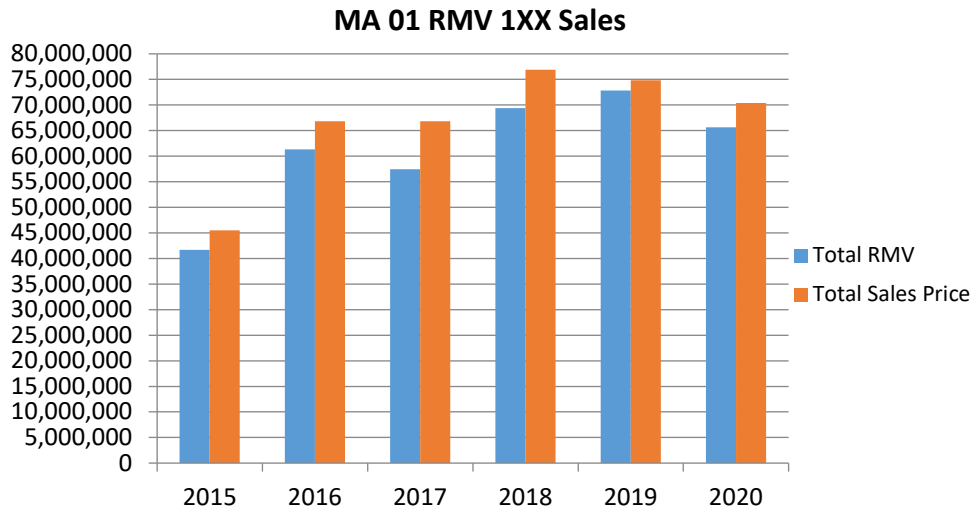
Maintenance Area 7 – Personal Property Manufactured Structure, County wide

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

*RMV CLASS
1XX AND 4XX
Sales Comparisons of
Useable Arm's Length
Transactions*

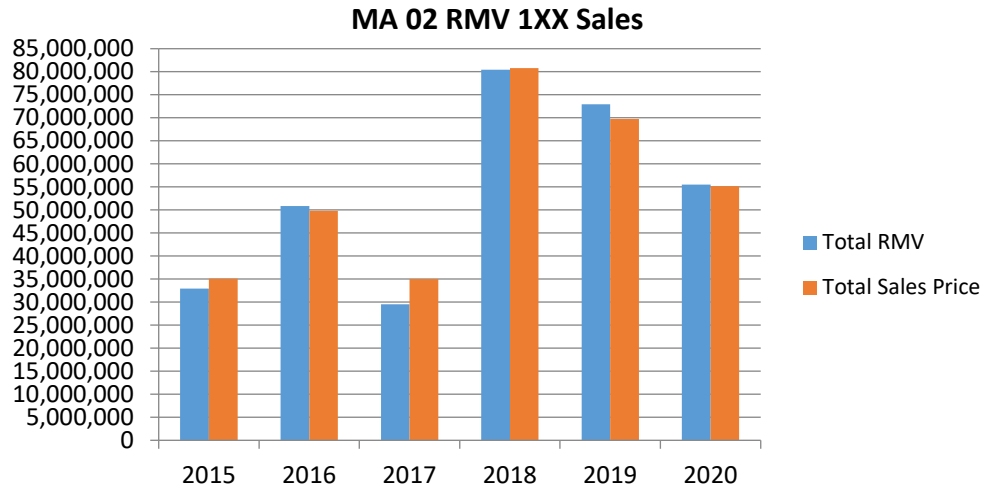
In this next section, data is provided illustrating the percent difference between the January 1st Real Market Value of real property and the Sales Price from the sales collection year. The data is reflecting arms-length transactions with no adjustments made. The scope of the dataset spans 5 years and is used as an illustration of current market trends and for appraisal purposes.

Maintenance Area 1 – City of St. Helens

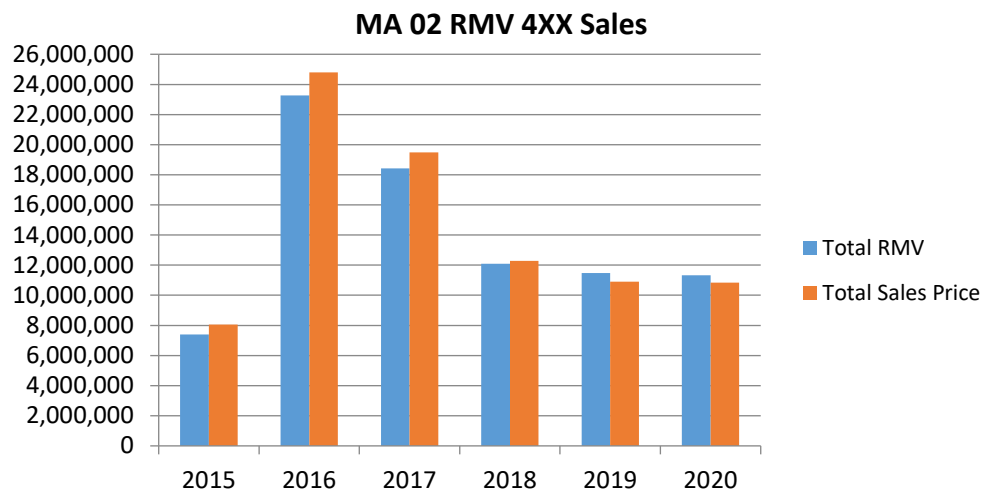


Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	233	41,709,450	45,485,583	3,776,133	9.05%
2016	324	61,344,200	66,808,074	5,463,874	8.91%
2017	282	57,415,130	66,843,594	9,428,464	16.42%
2018	301	69,414,700	76,871,860	7,457,160	10.74%
2019	255	72,806,397	74,816,136	2,009,739	2.76%
2020	233	65,665,940	70,398,176	4,732,236	7.21%

Maintenance Area 2 – Scappoose



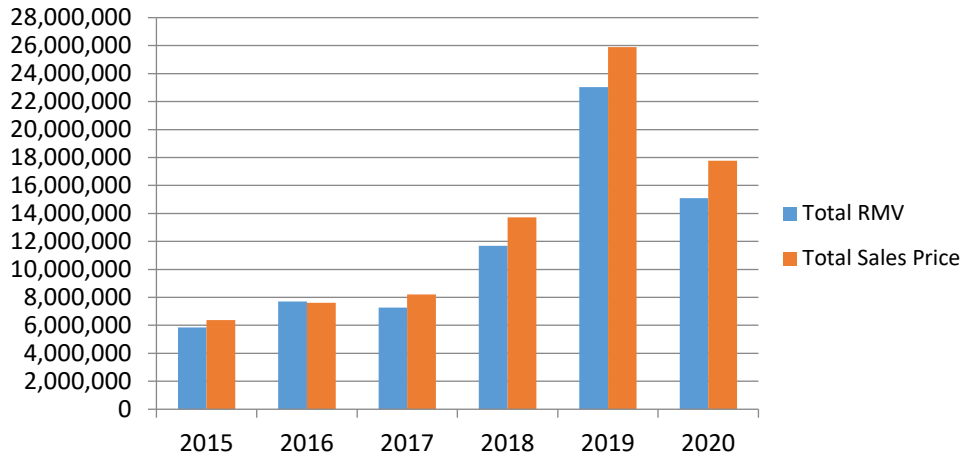
Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	147	32,899,610	35,087,059	2,187,449	6.65%
2016	199	50,856,130	49,776,912	-1,079,218	-2.12%
2017	123	29,496,410	35,017,982	5,521,572	18.72%
2018	246	80,452,400	80,765,394	312,994	0.39%
2019	206	72,907,900	69,742,485	-3,165,415	-4.34%
2020	153	55,514,906	55,149,380	-365,526	-0.66%



Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	28	7,405,220	8,063,472	658,252	8.89%
2016	66	23,277,860	24,799,003	1,521,143	6.53%
2017	44	18,427,320	19,484,298	1,056,978	5.74%
2018	33	12,096,490	12,279,776	183,286	1.52%
2019	24	11,472,980	10,907,274	-565,706	-4.93%
2020	23	11,317,260	10,837,500	-479,760	-4.24%

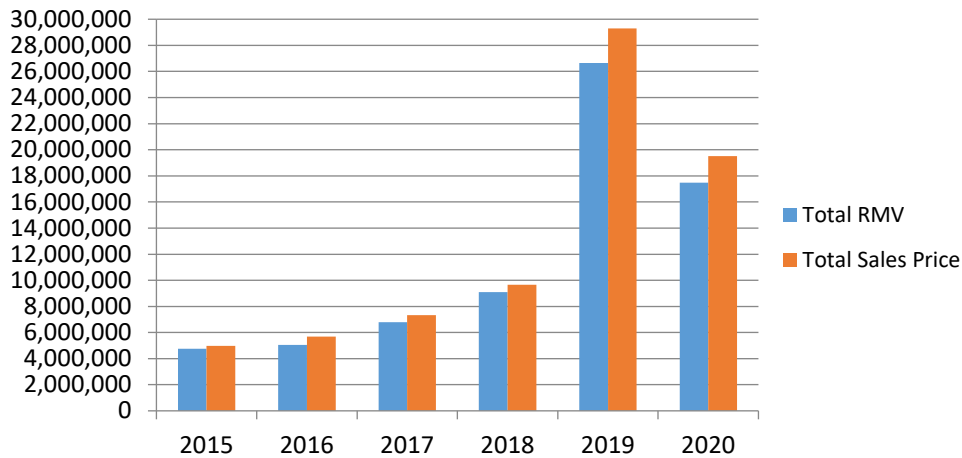
Maintenance Area 3 – Vernonia

MA 03 RMV 1XX Sales



Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	43	5,853,670	6,375,540	521,870	8.92%
2016	50	7,699,470	7,613,203	-86,267	-1.12%
2017	48	7,269,820	8,202,250	932,430	12.83%
2018	69	11,688,780	13,725,520	2,036,740	17.42%
2019	120	23,043,060	25,881,796	2,838,736	12.32%
2020	71	15,099,330	17,779,158	2,679,828	17.75%

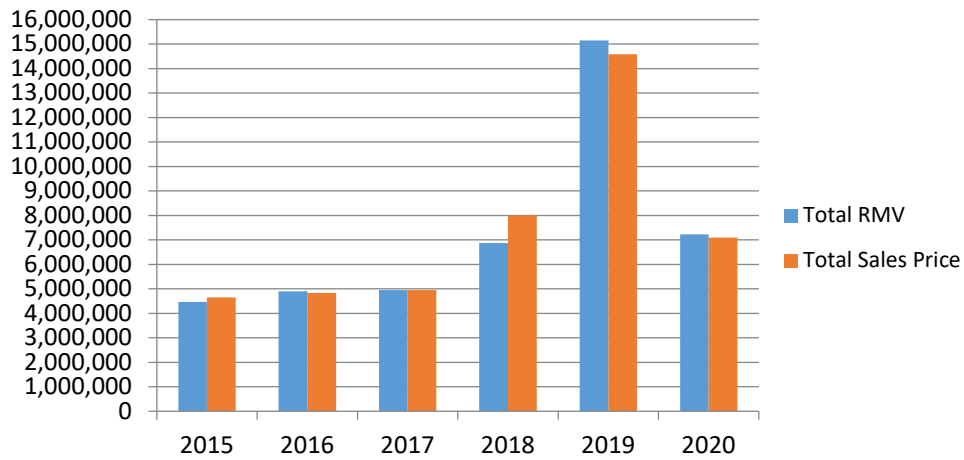
MA 03 RMV 4XX Sales



Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	24	4,747,170	4,966,300	219,130	4.62%
2016	20	5,038,780	5,682,999	644,219	12.79%
2017	29	6,800,120	7,324,630	524,510	7.71%
2018	32	9,087,120	9,655,300	568,180	6.25%
2019	76	26,658,700	29,300,530	2,641,830	9.91%
2020	44	17,473,860	19,523,750	2,049,890	11.73%

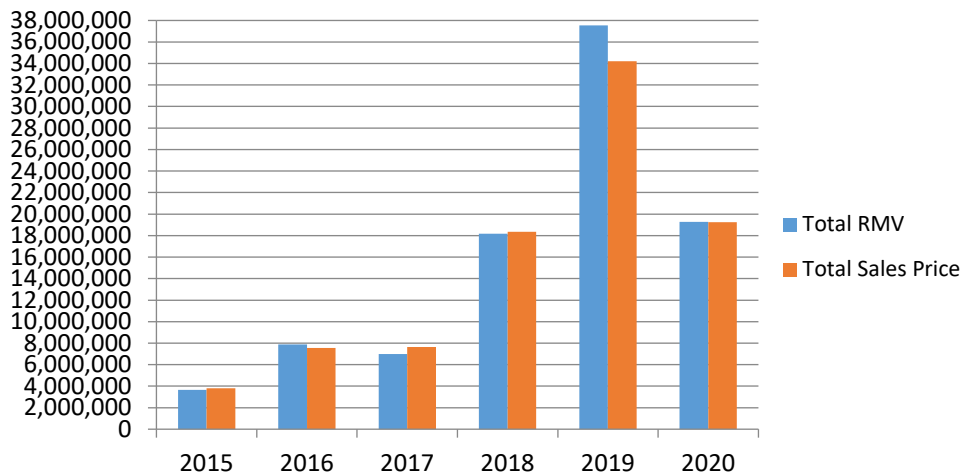
Maintenance Area 4 – Rainier and Deer Island

MA 04 RMV 1XX Sales



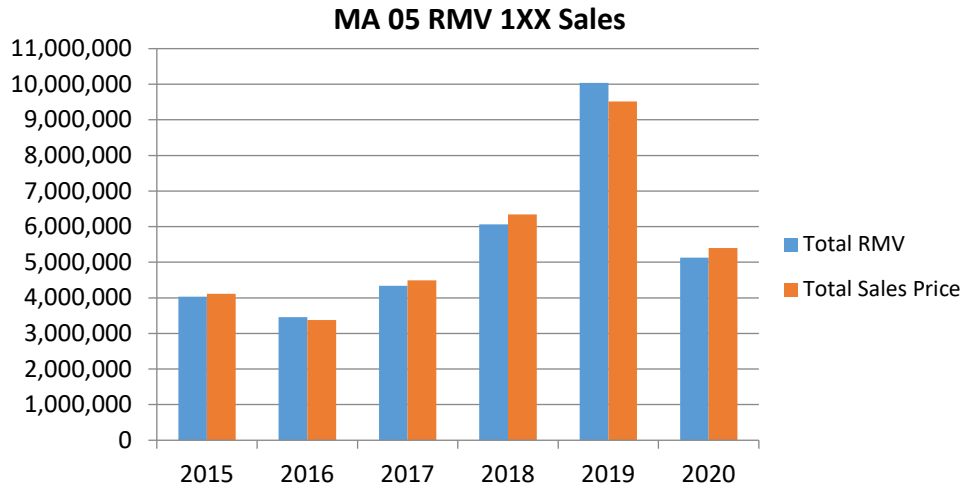
Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	29	4,473,120	4,646,471	173,351	3.88%
2016	30	4,898,080	4,826,900	-71,180	-1.45%
2017	26	4,946,580	4,950,780	4,200	0.08%
2018	42	6,869,280	7,993,514	1,124,234	16.37%
2019	64	15,143,380	14,590,910	-552,470	-3.65%
2020	30	7,229,340	7,099,350	-129,990	-1.80%

MA 04 RMV 4XX Sales

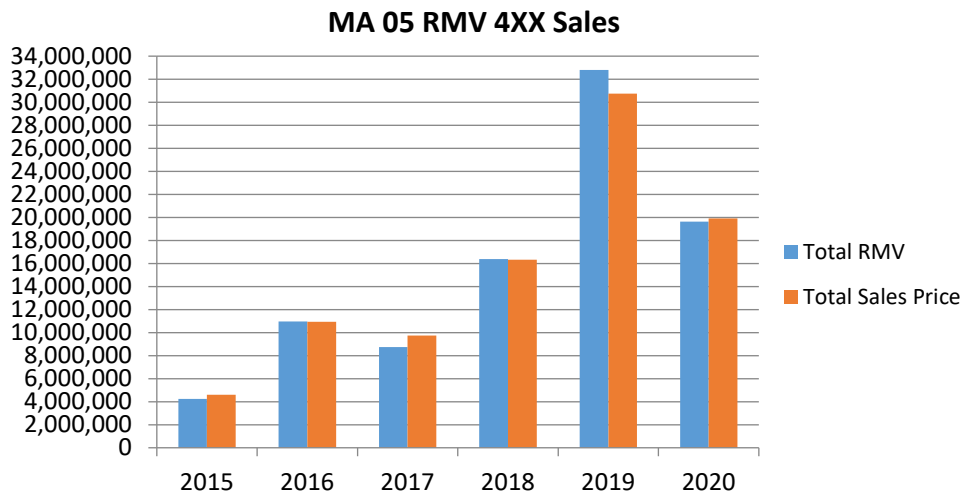


Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	17	3,669,550	3,804,650	135,100	3.68%
2016	32	7,867,040	7,548,862	-318,178	-4.04%
2017	28	7,002,190	7,654,700	652,510	9.32%
2018	69	18,164,370	18,360,619	196,249	1.08%
2019	114	37,536,600	34,223,260	-3,313,340	-8.83%
2020	60	19,260,730	19,255,976	-4,754	-0.02%

Maintenance Area 5 – Clatskanie

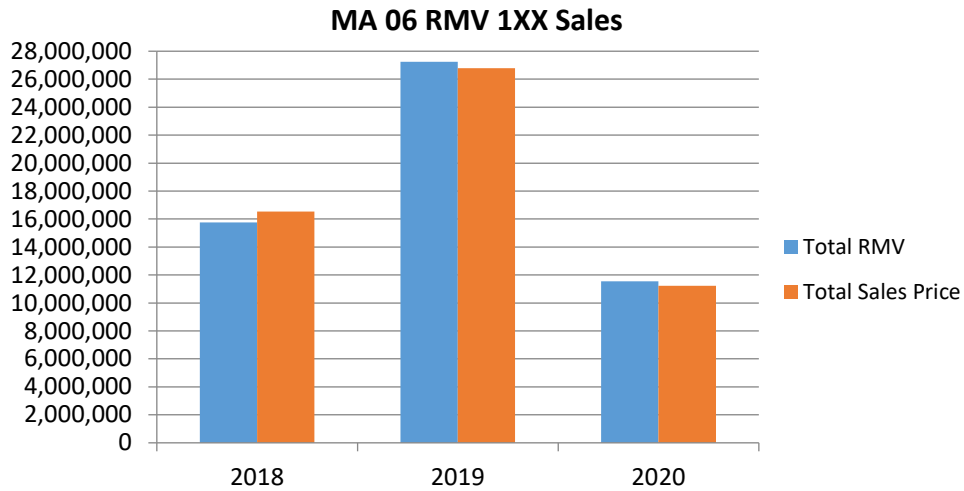


Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	28	4,032,080	4,111,700	79,620	1.97%
2016	23	3,454,120	3,380,200	-73,920	-2.14%
2017	26	4,336,980	4,487,700	150,720	3.48%
2018	34	6,064,040	6,341,157	277,117	4.57%
2019	46	10,035,500	9,515,600	-519,900	-5.18%
2020	24	5,128,960	5,400,055	271,095	5.29%

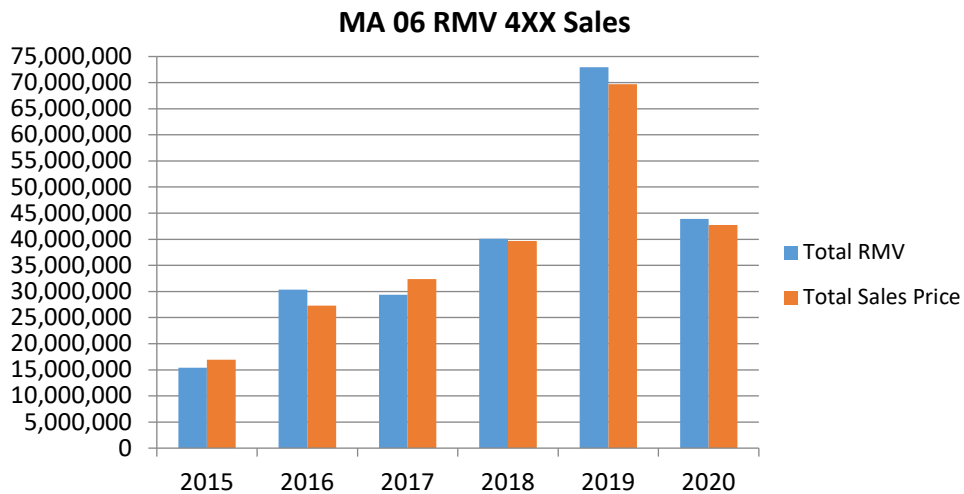


Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	26	4,239,600	4,613,497	373,897	8.82%
2016	52	10,959,730	10,931,450	-28,280	-0.26%
2017	39	8,753,560	9,729,200	975,640	11.15%
2018	58	16,379,080	16,333,722	-45,358	-0.28%
2019	120	32,804,200	30,755,170	-2,049,030	-6.25%
2020	68	19,645,710	19,898,711	253,001	1.29%

Maintenance Area 6 – City of Columbia City, Rural St. Helens, Warren



Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2018	50	15,760,430	16,544,080	783,650	4.97%
2019	88	27,233,280	26,790,200	-443,080	-1.63%
2020	30	11,551,440	11,219,750	-331,690	-2.87%



Year	Total # Sales	Total RMV	Total Sales Price	Difference	% difference from RMV to Sales Price
2015	63	15,425,060	16,908,579	1,483,519	9.62%
2016	97	30,345,300	27,294,325	-3,050,975	-10.05%
2017	85	29,386,950	32,361,666	2,974,716	10.12%
2018	102	40,127,990	39,663,183	-464,807	-1.16%
2019	164	72,972,260	69,686,148	-3,286,112	-4.50%
2020	101	43,903,740	42,736,644	-1,167,096	-2.66%

PROPERTY CLASS
RMV CLASS

DESCRIPTIONS AND
COUNTS

Prop Class	RMV Class	Property Class Description	RMV Class Description	2019 Count	2020 Count	Change from Prior Year
003	003	MISCELLANEOUS, CENTRALLY ASSESSED	Centrally Assessed	119	119	0
008	008	INDUSTRIAL, M&E STATE IPR AND COUNTY RPR PROCESSED	H & B Use Industrial Machinery and Equipment	40	40	0
303	008	INDUSTRIAL B&S STATE IPR PROCESSED	H & B Use Industrial Machinery and Equipment	1	1	0
038	008	ENTERPRISE ZONE, IMPROVED STATE IPR PROCESSED	H & B Use Industrial Machinery and Equipment	1	1	0
960	010	STATE OWNED - VACANT	Odd Lot	1	1	0
010	010	UNBUILDABLE(SIZE,DEQ DENIAL, ETC) ZONED RESIDENTIAL	Odd Lot	112	115	3
940	010	CITY - VACANT	Odd Lot	12	12	0
950	010	COUNTY - VACANT	Odd Lot	17	17	0
019	019	PERSONAL PROPERTY MS	Personal Manufactured Structures	1190	1184	-6
951	019	COUNTY - IMPROVED	Personal Manufactured Structures	1	1	0
200	020	VACANT LAND ZONED COMMERCIAL	Odd Lot-Commercial Zone	1	1	0
990	020	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	Odd Lot-Commercial Zone	4	4	0
020	020	UNBUILDABLE(SIZE, DEQ DENIAL,ETC) ZONED COMMERCIAL	Odd Lot-Commercial Zone	8	8	0
030	030	UNBUILDABLE(SIZE,DEQ DENIAL, ETC) ZONED INDUSTRIAL	Odd Lot	4	4	0
032	030	INDUSTRIAL, MINERALS	Odd Lot	113	113	0
960	030	STATE OWNED - VACANT	Odd Lot	3	3	0
032	032	INDUSTRIAL, MINERALS	Industrial, Minerals	5	5	0
990	040	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	Odd Lot	5	5	0
940	040	CITY - VACANT	Odd Lot	3	4	1
040	040	UNBUILDABLE(SIZE, DEQ DENIAL,ETC) ZONING NOT SIGNIFICANT	Odd Lot	114	113	-1
960	040	STATE OWNED - VACANT	Odd Lot	10	10	0
950	040	COUNTY - VACANT	Odd Lot	19	19	0
991	040	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	Odd Lot	1	1	0
980	100	BENEVOLENT, FRATERNAL OWNERSHIP - VACANT	H & B Use Residential Vacant	1	2	1
580	100	AGRICULTURE, MOSTLY FARM RURAL MULT SPEC ASMTS	H & B Use Residential Vacant	1	1	0
100	100	VACANT LAND, ZONED RESIDENTIAL	H & B Use Residential Vacant	788	813	25
640	100	VACANT H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Residential Vacant	37	37	0
960	100	STATE OWNED - VACANT	H & B Use Residential Vacant	3	3	0
940	100	CITY - VACANT	H & B Use Residential Vacant	55	54	-1
990	100	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	H & B Use Residential Vacant	1	1	0

Prop Class	RMV Class	Property Class Description	RMV Class Description	2019 Count	2020 Count	Change from Prior Year
540	100	VACANT H&B USE FARM, RECEIVING FARM DEF, ZONED NON-EFU	H & B Use Residential Vacant	5	5	0
950	100	COUNTY - VACANT	H & B Use Residential Vacant	17	19	2
951	101	COUNTY - IMPROVED	H & B Use Residential Improved	4	5	1
010	101	UNBUILDABLE(SIZE,DEQ DENIAL, ETC) ZONED RESIDENTIAL	H & B Use Residential Improved	1	1	0
014	101	IMPROVED RESIDENTIAL, HISTORIC	H & B Use Residential Improved	1	1	0
641	101	IMPRVD H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Residential Improved	21	22	1
581	101	AGRICULTURE, W/IMPS-MOSTLY FARM RURAL, MULT SPEC ASMTS	H & B Use Residential Improved	2	2	0
101	101	RESIDENTIAL IMPROVED, ZONED RESIDENTIAL	H & B Use Residential Improved	9402	9446	44
981	101	BENEVOLENT, FRATERNAL OWNERSHIP - IMPROVED	H & B Use Residential Improved	12	12	0
541	101	IMPROVED H&B USE FARM, RCVG FARM DEF, ZONED NON-EFU	H & B Use Residential Improved	12	11	-1
681	101	FOREST LAND, WITHIMPS-MOSTLY FOREST RURAL, MULT SPEC ASMTS	H & B Use Residential Improved	1	1	0
971	101	FEDERALLY OWNED - IMPROVED	H & B Use Residential Improved	1	1	0
941	101	CITY - IMPROVED	H & B Use Residential Improved	9	8	-1
991	101	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	H & B Use Residential Improved	1	1	0
401	101	IMPROVED H&B USE TRACT, ZONING NOT SIGNIFICANT	H & B Use Residential Improved	17	17	0
911	101	CHURCH - IMPROVED	H & B Use Residential Improved	3	3	0
102	102	CONDOMINIUM	H & Best Use Residential Condominium	50	50	0
649	109	M S H&B USE TRACT FOREST/WLO DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Residential MS	5	5	0
109	109	M S IMPROVED, ZONED RESIDENTIAL	H & B Use Residential MS	433	435	2
409	109	M S H&B USE TRACT, ZONING NOT SIGNIFICANT	H & B Use Residential MS	32	32	0
549	109	M S H&B USE FARM, RECEIVING FARM DEF, ZONED NON-EFU	H & B Use Residential MS	2	2	0
111	111	RESIDENTIAL, FLOATING PROPERTY	Residential, Floating PProperty	292	294	2
961	111	STATE OWNED - IMPROVED	Residential, Floating PProperty	1	1	0
991	111	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	Residential, Floating PProperty	1	1	0
970	200	FEDERALLY OWNED - VACANT	H & B Use Commercial Vacant	4	4	0
200	200	VACANT LAND ZONED COMMERCIAL	H & B Use Commercial Vacant	143	138	-5
940	200	CITY - VACANT	H & B Use Commercial Vacant	183	181	-2
950	200	COUNTY - VACANT	H & B Use Commercial Vacant	60	60	0
960	200	STATE OWNED - VACANT	H & B Use Commercial Vacant	55	55	0
980	200	BENEVOLENT, FRATERNAL OWNERSHIP - VACANT	H & B Use Commercial Vacant	8	6	-2

Prop Class	RMV Class	Property Class Description	RMV Class Description	2019 Count	2020 Count	Change from Prior Year
991	200	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	H & B Use Commercial Vacant	1	1	0
930	200	CEMETERY - VACANT	H & B Use Commercial Vacant	18	18	0
920	200	SCHOOL - VACANT	H & B Use Commercial Vacant	6	6	0
990	200	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	H & B Use Commercial Vacant	14	14	0
910	200	CHURCH - VACANT	H & B Use Commercial Vacant	3	3	0
111	201	RESIDENTIAL, FLOATING PROPERTY	H & B Use Commercial Improved	1	1	0
921	201	SCHOOL - IMPROVED	H & B Use Commercial Improved	24	25	1
991	201	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	H & B Use Commercial Improved	55	56	1
982	201	BENEVOLENT, FRATERNAL - PARTIALLY EXEMPT	H & B Use Commercial Improved	15	13	-2
981	201	BENEVOLENT, FRATERNAL OWNERSHIP - IMPROVED	H & B Use Commercial Improved	45	46	1
980	201	BENEVOLENT, FRATERNAL OWNERSHIP - VACANT	H & B Use Commercial Improved	1	1	0
990	201	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	H & B Use Commercial Improved	2	1	-1
206	201	COMMERCIAL, MARINA/MOORAGE	H & B Use Commercial Improved	43	43	0
201	201	COMMERCIAL IMPROVED, ZONED COMMERCIAL	H & B Use Commercial Improved	779	780	1
910	201	CHURCH - VACANT	H & B Use Commercial Improved	1	1	0
208	201	COMMERCIAL, RETIRE/CARE FACILITY	H & B Use Commercial Improved	8	8	0
024	201	IMPROVED COMMERCIAL, HISTORIC ZONED	H & B Use Commercial Improved	4	4	0
995	201	EXEMPT, GOVERNMENT HOUSING AUTHORITIES	H & B Use Commercial Improved	2	2	0
961	201	STATE OWNED - IMPROVED	H & B Use Commercial Improved	8	7	-1
951	201	COUNTY - IMPROVED	H & B Use Commercial Improved	17	16	-1
962	201	STATE - PARTIALLY EXEMPT	H & B Use Commercial Improved	5	5	0
941	201	CITY - IMPROVED	H & B Use Commercial Improved	42	43	1
025	201	OPEN SPACE, GOLF COURSE LAND ZONING NOT SIGNIFICANT	H & B Use Commercial Improved	3	3	0
931	201	CEMETERY - IMPROVED	H & B Use Commercial Improved	4	4	0
641	201	IMPRVD H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Commercial Improved	2	2	0
971	201	FEDERALLY OWNED - IMPROVED	H & B Use Commercial Improved	3	3	0
992	201	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - PARTIALLY EXEMPT	H & B Use Commercial Improved	1	1	0
020	201	UNBUILDABLE(SIZE, DEQ DENIAL,ETC) ZONED COMMERCIAL	H & B Use Commercial Improved	1	1	0
945	201	CITY TEMPORARILY EXEMPT TAXABLE OWNER TO EXEMPT LESSEE	H & B Use Commercial Improved	1	1	0
942	201	CITY - PARTIALLY EXEMPT	H & B Use Commercial Improved	1	1	0

Prop Class	RMV Class	Property Class Description	RMV Class Description	2019 Count	2020 Count	Change from Prior Year
541	201	IMPROVED H&B USE FARM, RCVG FARM DEF, ZONED NON-EFU	H & B Use Commercial Improved	1	1	0
911	201	CHURCH - IMPROVED	H & B Use Commercial Improved	68	68	0
207	207	ALL M S PARKS, REGARDLESS OF ZONE	H & B Use Commercial MS Park improved	36	35	-1
540	300	VACANT H&B USE FARM, RECEIVING FARM DEF, ZONED NON-EFU	H & B Use Industrial Vacant	4	4	0
681	300	FOREST LAND, WITHIMPS-MOSTLY FOREST RURAL, MULT SPEC ASMTS	H & B Use Industrial Vacant	1	1	0
994	300	EXEMPT, PORT: EXEMPT IN LIEU-OF PER ORS 307.120	H & B Use Industrial Vacant	1	1	0
550	300	VACANT H&B USE FARM, RECVNG FARM DEF, ZONED EFU	H & B Use Industrial Vacant	3	5	2
640	300	VACANT H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Industrial Vacant	7	7	0
330	300	INDUSTRIAL, AGGREGATE MINE	H & B Use Industrial Vacant	16	16	0
580	300	AGRICULTURE, MOSTLY FARM RURAL MULT SPEC ASMTS	H & B Use Industrial Vacant	2	2	0
200	300	VACANT LAND ZONED COMMERCIAL	H & B Use Industrial Vacant	1	1	0
960	300	STATE OWNED - VACANT	H & B Use Industrial Vacant	6	6	0
961	300	STATE OWNED - IMPROVED	H & B Use Industrial Vacant	1	1	0
950	300	COUNTY - VACANT	H & B Use Industrial Vacant	2	3	1
300	300	VACANT LAND, ZONED INDUSTRIAL	H & B Use Industrial Vacant	37	36	-1
940	300	CITY - VACANT	H & B Use Industrial Vacant	8	8	0
990	300	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	H & B Use Industrial Vacant	34	34	0
994	301	EXEMPT, PORT: EXEMPT IN LIEU-OF PER ORS 307.120	H & B Use Industrial Improved	1	1	0
961	301	STATE OWNED - IMPROVED	H & B Use Industrial Improved	1	1	0
951	301	COUNTY - IMPROVED	H & B Use Industrial Improved	2	2	0
971	301	FEDERALLY OWNED - IMPROVED	H & B Use Industrial Improved	4	4	0
301	301	INDUSTRIAL IMPROVED, ZONED INDUSTRIAL	H & B Use Industrial Improved	28	28	0
991	301	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	H & B Use Industrial Improved	11	11	0
941	301	CITY - IMPROVED	H & B Use Industrial Improved	7	8	1
201	301	COMMERCIAL IMPROVED, ZONED COMMERCIAL	H & B Use Industrial Improved	11	11	0
990	301	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	H & B Use Industrial Improved	3	3	0
641	303	IMPRVD H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Industrial State Responsibility	1	1	0
333	303	INDUSTRIAL IMPROVED, STATE RESP	H & B Use Industrial State Responsibility	3	3	0
303	303	INDUSTRIAL B&S STATE IPR PROCESSED	H & B Use Industrial State Responsibility	40	40	0
038	303	ENTERPRISE ZONE, IMPROVED STATE IPR PROCESSED	H & B Use Industrial State Responsibility	1	1	0

Prop Class	RMV Class	Property Class Description	RMV Class Description	2019 Count	2020 Count	Change from Prior Year
308	308	INDUSTRIAL B&S COUNTY RPR PROCESSED	H & B Use Industrial Machinery and Equipment	14	14	0
991	308	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	H & B Use Industrial Machinery and Equipment	5	5	0
301	333	INDUSTRIAL IMPROVED, ZONED INDUSTRIAL	H & B Use Industrial State IPR/Aggregate	1	1	0
540	400	VACANT H&B USE FARM, RECEIVING FARM DEF, ZONED NON-EFU	H & B Use Rural Tract Vacant	137	138	1
400	400	VACANT H&B USE TRACT LAND, ZONING NOT SIGNIFICANT	H & B Use Rural Tract Vacant	663	633	-30
550	400	VACANT H&B USE FARM, RECVNG FARM DEF, ZONED EFU	H & B Use Rural Tract Vacant	139	142	3
580	400	AGRICULTURE, MOSTLY FARM RURAL MULT SPEC ASMTS	H & B Use Rural Tract Vacant	14	14	0
930	400	CEMETERY - VACANT	H & B Use Rural Tract Vacant	4	4	0
960	400	STATE OWNED - VACANT	H & B Use Rural Tract Vacant	36	36	0
970	400	FEDERALLY OWNED - VACANT	H & B Use Rural Tract Vacant	10	10	0
680	400	FOREST LAND, LAND ONLY-MOSTLY FOREST RURAL, MULT SPEC ASMTS	H & B Use Rural Tract Vacant	54	53	-1
911	400	CHURCH - IMPROVED	H & B Use Rural Tract Vacant	1	1	0
964	400	EXEMPT, STATE GAME IN-LIEU OF	H & B Use Rural Tract Vacant	19	19	0
920	400	SCHOOL - VACANT	H & B Use Rural Tract Vacant	2	2	0
990	400	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - VACANT	H & B Use Rural Tract Vacant	14	15	1
640	400	VACANT H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Rural Tract Vacant	2050	2043	-7
950	400	COUNTY - VACANT	H & B Use Rural Tract Vacant	35	36	1
991	400	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	H & B Use Rural Tract Vacant	2	2	0
600	400	VACANT H&B USE FOREST, NOT DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Rural Tract Vacant	1	1	0
940	400	CITY - VACANT	H & B Use Rural Tract Vacant	23	23	0
441	401	IMPRVD H&B USE TRACT, FARM DEF, ZONED NON-EFU	H & B Use Rural Tract Improved	1	1	0
581	401	AGRICULTURE, W/IMPS-MOSTLY FARM RURAL, MULT SPEC ASMTS	H & B Use Rural Tract Improved	83	84	1
102	401	CONDOMINIUM	H & B Use Rural Tract Improved	1	1	0
911	401	CHURCH - IMPROVED	H & B Use Rural Tract Improved	6	6	0
801	401	RECREATION, WITH IMPROVEMENTS	H & B Use Rural Tract Improved	1	1	0
961	401	STATE OWNED - IMPROVED	H & B Use Rural Tract Improved	1	1	0
401	401	IMPROVED H&B USE TRACT, ZONING NOT SIGNIFICANT	H & B Use Rural Tract Improved	4729	4726	-3
951	401	COUNTY - IMPROVED	H & B Use Rural Tract Improved	12	11	-1
941	401	CITY - IMPROVED	H & B Use Rural Tract Improved	6	6	0
964	401	EXEMPT, STATE GAME IN-LIEU OF	H & B Use Rural Tract Improved	6	6	0

Prop Class	RMV Class	Property Class Description	RMV Class Description	2019 Count	2020 Count	Change from Prior Year
931	401	CEMETERY - IMPROVED	H & B Use Rural Tract Improved	1	1	0
681	401	FOREST LAND, WITHIMPS-MOSTLY FOREST RURAL, MULT SPEC ASMTS	H & B Use Rural Tract Improved	161	161	0
025	401	OPEN SPACE, GOLF COURSE LAND ZONING NOT SIGNIFICANT	H & B Use Rural Tract Improved	1	1	0
649	401	M S H&B USE TRACT FOREST / WLO, DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Rural Tract Improved	2	2	0
541	401	IMPROVED H&B USE FARM, RCVG FARM DEF, ZONED NON-EFU	H & B Use Rural Tract Improved	425	441	16
641	401	IMPRVD H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Rural Tract Improved	2036	2055	19
981	401	BENEVOLENT, FRATERAL OWNERSHIP - IMPROVED	H & B Use Rural Tract Improved	3	3	0
551	401	IMPROVED H&B USE FARM, RCVG FARM DEF, ZONED EFU	H & B Use Rural Tract Improved	327	327	0
014	401	IMPROVED RESIDENTIAL, HISTORIC	H & B Use Rural Tract Improved	1	1	0
991	401	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	H & B Use Rural Tract Improved	15	16	1
409	401	M S H&B USE TRACT, ZONING NOT SIGNIFICANT	H & B Use Rural Tract Improved	1	1	0
951	409	COUNTY - IMPROVED	H & B Use Rural Tract MS Improved	1	1	0
991	409	PORT PROPERTIES OR OTHER MUNICIPAL PROPERTIES - IMPROVED	H & B Use Rural Tract MS Improved	1	1	0
409	409	M S H&B USE TRACT, ZONING NOT SIGNIFICANT	H & B Use Rural Tract MS Improved	1234	1228	-6
931	409	CEMETERY - IMPROVED	H & B Use Rural Tract MS Improved	1	1	0
589	409	M S H&B USE FARM, MLTPL SP ASMT FARM USE PREDOMINANT, ZN NOT SIGN	H & B Use Rural Tract MS Improved	13	14	1
559	409	M S H&B USE FARM LAND, RCVNG FARM DEF, ZONED EFU	H & B Use Rural Tract MS Improved	33	32	-1
549	409	M S H&B USE FARM, RECEIVNG FARM DEF, ZONED NON-EFU	H & B Use Rural Tract MS Improved	64	62	-2
649	409	M S H&B USE TRACT FOREST / WLO DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Rural Tract MS Improved	618	610	-8
689	409	M S H&B USE FL,MLTPL SP ASMT, FL PREDOMINANT,ZN NOT SIGNIFICANT	H & B Use Rural Tract MS Improved	19	19	0
940	600	CITY - VACANT	H & B Use Timber Vacant	2	2	0
950	600	COUNTY - VACANT	H & B Use Timber Vacant	2	2	0
600	600	VACANT H&B USE FOREST, NOT DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Timber Vacant	556	556	0
640	600	VACANT H&B USE TRACT FOREST/WLO, DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Timber Vacant	1	2	1
960	600	STATE OWNED - VACANT	H & B Use Timber Vacant	22	22	0
970	600	FEDERALLY OWNED - VACANT	H & B Use Timber Vacant	28	28	0
601	601	IMPRVD H&B FOREST LAND,NOT DESIGNATED, ZONING NOT SIGNIFICANT	H & B Use Timber Improved	1	1	0
995	701	EXEMPT, GOVERMENT HOUSING AUTHORITIES	H & B Use Mutli-Family Improved and MS Park Improved	2	2	0
781	701	MULTIPLE HOUSING, LOW INCOME SPECIAL ASMT	H & B Use Mutli-Family Improved and MS Park Improved	6	6	0
996	701	FARM LABOR CAMPS, DAY CARE CENTERS	H & B Use Mutli-Family Improved and MS Park Improved	1	1	0

Prop Class	RMV Class	Property Class Description	RMV Class Description	2019 Count	2020 Count	Change from Prior Year
701	701	IMPROVED 5 OR MORE UNITS, ZONED MULTI-FAMILY AND MS PARK IMPROVED	H & B Use Mutli-Family Improved and MS Park Improved	79	79	0
930	800	CEMETERY - VACANT	Recreation, Land Only	3	3	0
940	800	CITY - VACANT	Recreation, Land Only	7	7	0
960	800	STATE OWNED - VACANT	Recreation, Land Only	7	7	0
970	800	FEDERALLY OWNED - VACANT	Recreation, Land Only	2	2	0
973	800	FEDERALLY OWNED - TAXABLE LEASED-PROPERTY, EXEMPT LESSOR TO TAXABLE LESSEE	Recreation, Land Only	1	1	0
800	800	RECREATION, LAND ONLY	Recreation, Land Only	119	119	0
950	800	COUNTY - VACANT	Recreation, Land Only	5	5	0
951	801	COUNTY - IMPROVED	Recreation, with Improvements	2	2	0
801	801	RECREATION, WITH IMPROVEMENTS	Recreation, with Improvements	1	1	0
941	801	CITY - IMPROVED	Recreation, with Improvements	6	7	1
890	890	RECREATION, HILLCREST/COL ACRES POTENTIAL DEVELOPMENT	Recreational Hillcrest/Columbia Hills	252	247	-5

*TIME
ADJUSTMENT
STUDY*

Property sales occurring within Columbia County from January 1, 2019 through December 31, 2019 were analyzed in order to determine an adjustment for change over time (time adjustment). These sales were separated in to 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: Those properties that are located outside the city limits within each maintenance area.
3. RMV Class 019. This classing of properties is comprised of personal property manufactured structures that are located throughout the County.

Time Adjustment Conclusions

The direct calculation analysis for residential property (RMV Class 1XX) indicates an annual adjustment of 11% is needed for those properties located in the city limits.

For rural property (RMV Class 4XX) located in all maintenance areas, a direct calculation analysis supports an annual adjustment of 9%.

For personal property manufactured structures (RMV Class 019) located in MA 7, an annual overall adjustment of 4.44% was applied to the sales price.

Since there were too few sales of Commercial (RMV Class 200/201) and Industrial properties (RMV Class 300/301) available to specify a reliable change over time, it was decided that no time adjustment would be applied. Floating property (RMV Class 111) also had too few sales for analysis. Therefore, no time adjustment was applied to these properties.

Applying the time adjustment conclusion in the Helion ORCATS Ratio Study program:

1. The annual time adjustment conclusion is entered into the Time Trend Adjustment field. Once this is entered and applied, the central tendencies are adjusted and are then displayed in the “Sales (Ratio)” column.
2. The best indicator of value (central tendency) is selected from the Sales (Ratio) column and then entered into the “Selected Ratio from Sales” field. Once applied, the trend factors are calculated.

Historical Time Adjustment Conclusions

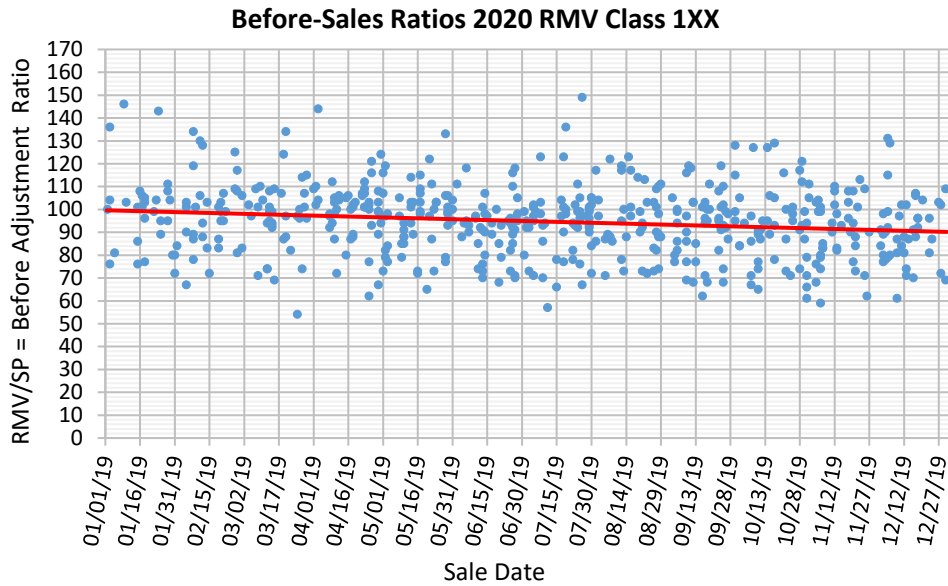
Using the Mid-Point method for time adjustment:

<u>Year</u>	<u>RMV 1XX</u>	<u>RMV 4XX</u>
2015	104%	97%
2016	99%	101%
2017	96%	95%
2018	103%	104%
2019	103%	104%

Using the Direct Calculation method for time adjustment:

<u>Year</u>	<u>RMV 1XX</u>	<u>RMV 4XX</u>
2020	11% per annum	9% per annum

Time Study for RMV Class 1XX



Direct Calculation (Linear Regression) Analysis adjusting the sales price on an annual basis:

Y axis intersect from beginning of trend line to end of trend line:

01/01/19	100%
01/01/20	90%

Number of days in the year: 365

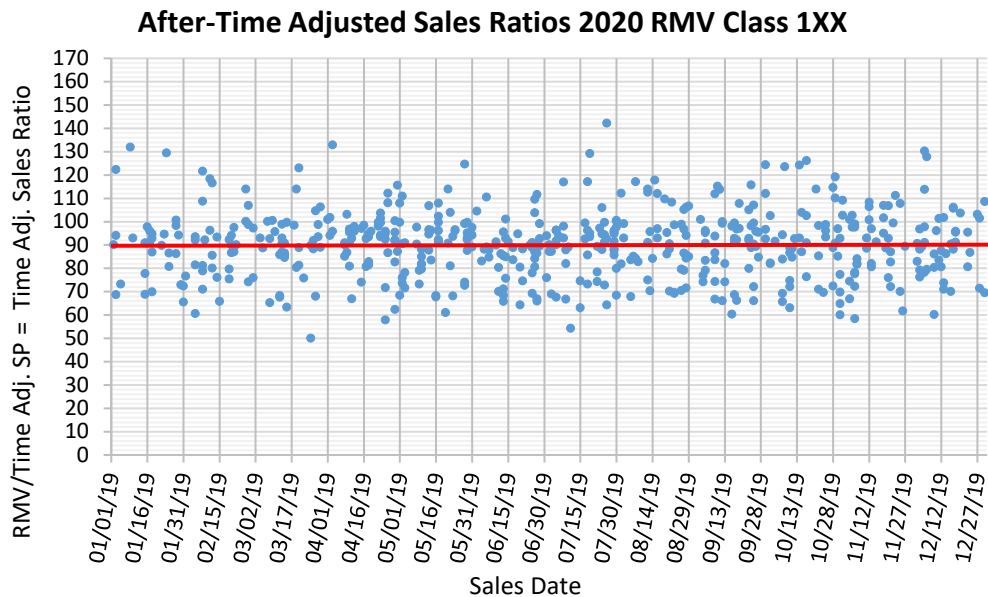
Amount of change: 10%

Annual change factor: 90%

Annual adjustment factor: 111%

Overall Annual Adjustment: 11%

Intermediate adj factor: 0.0304%



#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
3	01	00	101	101	143	33	11514	4N1W05-AB-01029	2019	54	319,660	319,500	01/02/19	100	35,403	354,903	90
5	02	00	101	101	143	33	4664	3N2W13-BA-05800	2019	95	353,130	260,000	01/03/19	136	28,731	288,731	122
6	01	00	101	101	143	33	12457	4N1W05-DB-02101	2019	119	359,250	344,000	01/03/19	104	38,013	382,013	94
7	03	00	101	101	131	33	23199	4N4W05-AC-03901	2019	90	174,590	229,000	01/03/19	76	25,305	254,305	69
10	03	03	101	101	131	33	429669	4N4W04-BC-01301	2019	137	192,620	237,000	01/05/19	81	26,045	263,045	73
12	01	00	101	101	132	33	10131	4N1W04-AC-09200	2019	253	188,520	128,915	01/09/19	146	14,010	142,925	132
14	02	00	101	101	143	33	2801	3N1W07-CA-00152	2019	351	412,050	400,000	01/10/19	103	43,349	443,349	93
21	03	00	100	100		30	23207	4N4W05-AC-04400	2019	397	30,450	40,000	01/15/19	76	4,274	44,274	69
19	02	33	101	101	143	33	434076	3N1W07-CC-01011	2019	332	299,180	297,500	01/15/19	101	31,788	329,288	91
20	03	00	101	101	141	33	22493	4N4W03-BC-10303	2019	345	235,870	274,000	01/15/19	86	29,277	303,277	78
22	02	00	101	101	143	33	433081	3N2W12-DC-00158	2019	355	317,000	293,000	01/16/19	108	31,218	324,218	98
24	02	00	101	101	142	33	3548	3N2W12-BB-03300	2019	369	416,940	393,000	01/17/19	106	41,753	434,753	96
25	02	00	101	101	143	33	3294	3N2W12-AB-00203	2019	393	301,270	298,750	01/17/19	101	31,739	330,489	91
26	01	00	101	101	143	33	11569	4N1W05-AB-04207	2019	439	361,170	345,000	01/18/19	105	36,548	381,548	95
27	06	01	101	101	143	33	14064	5N1W21-CA-01700	2019	385	327,550	319,000	01/18/19	103	33,794	352,794	93
28	05	00	101	101	141	33	26023	7N4W08-CD-09100	2019	471	225,850	235,000	01/18/19	96	24,895	259,895	87
31	02	00	101	101	143	33	437133	3N2W12-DC-02302	2019	478	297,350	300,000	01/22/19	99	31,416	331,416	90
33	03	00	100	100		30	22579	4N4W04-AB-01500	2019	504	36,540	35,000	01/23/19	104	3,654	38,654	95
34	03	03	101	101	132	33	22564	4N4W03-CA-02000	2019	583	246,540	172,500	01/24/19	143	17,959	190,459	129
35	02	00	101	101	143	33	433515	3N2W13-CD-03100	2019	536	327,300	343,000	01/25/19	95	35,605	378,605	86
36	02	00	101	101	141	33	438509	3N2W13-CB-00118	2019	542	325,270	365,000	01/25/19	89	37,889	402,889	81
37	03	00	101	101	142	33	22752	4N4W04-BA-03100	2019	898	275,230	247,950	01/28/19	111	25,512	273,462	101
38	05	00	101	101	142	33	25650	7N4W08-AD-00600	2019	633	369,970	341,505	01/28/19	108	35,138	376,643	98
39	03	00	101	101	141	33	22691	4N4W04-AD-01801	2019	721	240,250	252,500	01/28/19	95	25,980	278,480	86
40	01	00	101	101	141	33	12040	4N1W05-CA-01500	2019	613	295,750	285,000	01/29/19	104	29,237	314,237	94
42	01	00	101	101	132	33	433926	4N1W04-AC-06701	2019	638	221,180	275,000	01/30/19	80	28,128	303,128	73
45	01	00	101	101	131	33	10662	4N1W04-CA-11700	2019	708	200,090	251,000	01/31/19	80	25,597	276,597	72
46	01	00	101	101	131	33	13443	5N1W33-DC-02300	2019	696	156,580	217,000	01/31/19	72	22,129	239,129	65
47	01	00	101	101	136	33	12420	4N1W05-DA-04000	2019	775	254,280	301,000	02/01/19	84	30,604	331,604	77

#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
50	03	00	101	101	142	33	22680	4N4W04-AD-00800	2019	814	262,440	255,000	02/05/19	103	25,616	280,616	94
51	01	00	101	101	141	33	11980	4N1W05-BD-07200	2019	852	302,180	298,000	02/05/19	101	29,936	327,936	92
52	03	00	101	101	141	33	23107	4N4W04-DA-02300	2019	910	259,810	290,000	02/05/19	90	29,132	319,132	81
54	03	00	101	101	131	33	23355	4N4W05-AD-13001	2019	1504	153,210	230,000	02/05/19	67	23,105	253,105	61
56	01	00	101	101	145	33	13588	5N1W33-DD-03900	2019	1015	320,890	240,000	02/08/19	134	23,890	263,890	122
57	01	00	101	101	141	33	11680	4N1W05-AD-00400	2019	1085	330,640	276,700	02/08/19	119	27,544	304,244	109
59	06	01	101	101	131	33	14490	5N1W28-BA-00900	2019	928	211,720	237,500	02/08/19	89	23,642	261,142	81
60	04	00	101	101	132	33	21017	7N2W16-DC-07800	2019	1037	132,510	153,000	02/08/19	87	15,230	168,230	79
62	01	00	101	101	133	33	9858	4N1W03-CB-05300	2019	1005	199,930	256,000	02/08/19	78	25,483	281,483	71
63	02	00	101	101	143	33	4239	3N2W12-DC-00137	2019	1052	336,250	331,900	02/09/19	101	32,937	364,837	92
64	02	00	101	101	141	33	3270	3N2W11-DD-01801	2019	1117	492,700	379,000	02/11/19	130	37,381	416,381	118
65	01	00	101	101	141	33	9839	4N1W03-CB-04000	2019	979	315,890	298,900	02/11/19	106	29,481	328,381	96
67	04	00	101	101	142	33	18014	7N2W16-CB-01800	2019	1099	288,050	225,000	02/12/19	128	22,123	247,123	117
71	03	00	101	101	131	33	23297	4N4W05-AD-07400	2019	1082	186,900	199,000	02/12/19	94	19,567	218,567	86
72	01	00	101	101	141	33	429124	4N1W05-CD-02102	2019	1119	325,300	370,000	02/12/19	88	36,381	406,381	80
77	01	00	101	101	143	33	11479	4N1W05-AD-15500	2019	1164	363,920	355,000	02/14/19	103	34,689	389,689	93
78	01	00	101	101	131	33	12562	4N1W05-CD-04100	2019	1151	239,470	287,000	02/14/19	83	28,045	315,045	76
80	01	00	101	101	131	33	13786	5N1W34-CB-02100	2019	1214	187,590	259,900	02/15/19	72	25,318	285,218	66
82	01	00	101	101	143	33	11850	4N1W05-CB-10100	2019	1325	353,870	350,000	02/19/19	101	33,668	383,668	92
83	01	43	101	101	143	33	9475	4N1W03-BB-00700	2019	1263	241,380	276,500	02/19/19	87	26,598	303,098	80
84	06	01	101	101	131	33	14136	5N1W21-CB-02600	2019	1415	247,870	299,900	02/19/19	83	28,849	328,749	75
86	05	00	101	101	143	33	432372	7N4W09-CA-00105	2019	1241	348,130	337,750	02/20/19	103	32,387	370,137	94
87	01	00	101	101	143	33	13005	4N1W07-AB-03141	2019	1285	295,490	299,900	02/20/19	99	28,758	328,658	90
88	05	00	101	101	141	33	25771	7N4W08-CA-00601	2019	1246	256,130	270,000	02/20/19	95	25,890	295,890	87
89	03	00	101	101	190	33	29600	4N4W05-AC-03000	2019	1250	395,120	370,000	02/21/19	107	35,367	405,367	97
90	01	00	101	101	143	33	12114	4N1W05-CB-00151	2019	1290	381,530	399,900	02/21/19	95	38,225	438,125	87
92	01	00	101	101	141	33	12273	4N1W05-CC-01820	2019	1293	278,880	282,900	02/22/19	99	26,955	309,855	90
95	06	01	101	101	143	33	14765	5N1W28-DD-01400	2019	1419	367,790	295,000	02/26/19	125	27,749	322,749	114
96	02	00	101	101	141	33	3511	3N2W12-BB-00100	2019	1454	391,770	357,800	02/26/19	109	33,656	391,456	100

#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
98	01	00	101	101	141	33	433446	5N1W32-DB-01300	2019	1434	427,010	365,000	02/27/19	117	34,222	399,222	107
99	02	00	101	101	143	33	4711	3N2W13-BC-01200	2019	1443	343,240	318,000	02/27/19	108	29,816	347,816	99
100	01	00	101	101	131	33	12552	4N1W05-CD-03500	2019	1421	223,660	276,000	02/27/19	81	25,878	301,878	74
101	01	00	101	101	143	33	11865	4N1W05-BC-04000	2019	1593	313,190	294,650	03/01/19	106	27,447	322,097	97
102	01	00	101	101	135	33	11256	4N1W04-DD-02100	2019	1531	229,840	277,000	03/01/19	83	25,803	302,803	76
103	01	00	101	101	141	33	11960	4N1W05-BD-05200	2019	1574	274,110	270,000	03/04/19	102	24,904	294,904	93
104	02	00	101	101	143	33	3286	3N2W12-AB-00114	2019	1578	329,170	340,000	03/05/19	97	31,257	371,257	89
108	02	00	101	101	142	33	3159	3N2W11-AD-01500	2019	1803	458,520	420,000	03/07/19	109	38,356	458,356	100
109	01	00	101	101	143	33	429800	4N1W05-DC-08202	2019	1641	313,390	310,000	03/08/19	101	28,216	338,216	93
112	04	00	109	109	442	33	18083	7N2W16-CC-00809	2019	1625	117,450	165,000	03/08/19	71	15,018	180,018	65
113	01	00	101	101	141	33	12234	4N1W05-CC-01103	2019	1647	306,820	280,000	03/09/19	110	25,400	305,400	100
114	02	00	101	101	142	33	3525	3N2W12-BB-01000	2019	1816	408,230	391,000	03/10/19	104	35,351	426,351	96
115	04	00	101	101	131	30	18157	7N2W16-DA-04000	2019	1877	135,660	145,000	03/12/19	94	13,021	158,021	86
116	01	00	101	101	131	33	10185	4N1W04-AD-03405	2019	1778	190,700	259,000	03/12/19	74	23,259	282,259	68
117	01	30	101	101	232	33	9481	4N1W03-BB-01300	2019	1879	193,200	260,000	03/12/19	74	23,349	283,349	68
118	01	00	101	101	143	33	13778	5N1W34-CB-01607	2019	1789	315,390	293,000	03/13/19	108	26,223	319,223	99
119	02	00	101	101	143	33	31238	3N1W07-CC-04400	2019	1761	364,790	360,000	03/13/19	101	32,219	392,219	93
120	01	00	101	101	143	33	431946	4N1W05-BA-03937	2019	1740	325,870	329,900	03/13/19	99	29,525	359,425	91
121	03	00	101	101	142	33	23461	4N4W05-DA-08400	2019	1834	329,270	348,000	03/13/19	95	31,145	379,145	87
122	01	00	101	101	143	33	12990	4N1W07-AB-03126	2019	1850	370,340	374,900	03/14/19	99	33,439	408,339	91
123	02	00	101	101	143	33	429877	3N1W07-CC-01412	2019	1801	396,700	420,800	03/14/19	94	37,533	458,333	87
124	05	00	101	101	141	33	25950	7N4W08-CD-01700	2019	1785	195,640	210,000	03/14/19	93	18,731	228,731	86
125	01	00	101	101	131	33	11228	4N1W04-DD-00200	2019	1805	214,050	232,504	03/14/19	92	20,738	253,242	85
127	02	33	101	101	143	33	433108	3N2W12-DC-02507	2019	1840	293,160	270,000	03/15/19	109	24,000	294,000	100
128	03	00	101	101	131	30	23435	4N4W05-DA-05900	2019	1844	137,190	199,000	03/15/19	69	17,689	216,689	63
130	02	00	101	101	143	33	431963	3N2W13-BA-04705	2019	1887	341,230	318,500	03/18/19	107	28,020	346,520	98
131	01	00	101	101	135	33	13323	5N1W33-AA-00101	2019	1929	402,690	325,000	03/19/19	124	28,493	353,493	114
133	01	43	101	101	133	33	9519	4N1W03-BB-05003	2019	1976	192,160	220,000	03/19/19	87	19,288	239,288	80
134	04	00	101	101	152	33	18593	7N2W17-DB-01200	2019	1939	528,240	395,000	03/20/19	134	34,510	429,510	123

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135	03	00	101	101	142	33	22741	4N4W04-BA-01602	2019	2024	362,110	374,900	03/20/19	97	32,754	407,654	89
136	01	00	101	101	131	33	433541	4N1W05-BD-01502	2019	1942	238,720	269,900	03/20/19	88	23,580	293,480	81
140	01	00	101	101	131	33	11729	4N1W05-AD-05200	2019	2013	172,860	210,000	03/22/19	82	18,219	228,219	76
141	06	01	101	101	141	33	14162	5N1W21-CB-05200	2019	2679	298,860	306,750	03/25/19	97	26,333	333,083	90
142	03	00	109	109	452	33	22864	4N4W04-BC-05800	2019	2109	101,900	187,500	03/25/19	54	16,096	203,596	50
144	02	33	101	101	143	33	434077	3N1W07-CC-01012	2019	2115	299,200	300,000	03/26/19	100	25,662	325,662	92
145	02	00	101	101	143	33	436522	3N2W13-CD-06500	2019	2119	366,400	382,500	03/26/19	96	32,719	415,219	88
146	02	00	101	101	142	33	4600	3N2W13-BA-00619	2019	2285	399,740	352,000	03/27/19	114	30,003	382,003	105
149	03	00	101	101	135	33	22647	4N4W04-AC-03900	2019	2207	221,410	299,900	03/27/19	74	25,562	325,462	68
151	02	33	101	101	143	33	429764	3N2W13-AA-04407	2019	2153	303,220	283,000	03/28/19	107	24,036	307,036	99
152	01	00	101	101	143	30	11970	4N1W05-BD-06200	2019	2370	275,050	271,000	03/28/19	101	23,016	294,016	94
155	01	00	101	101	141	33	10700	4N1W04-CA-15800	2019	2185	324,960	282,000	03/29/19	115	23,865	305,865	106
156	01	00	101	101	146	33	9496	4N1W03-BB-02901	2019	2248	264,200	274,000	03/29/19	96	23,188	297,188	89
158	04	00	101	101	142	33	18281	7N2W16-DC-02000	2019	2555	315,780	289,000	04/01/19	109	24,193	313,193	101
159	01	00	101	101	143	30	13201	4N1W08-BC-05000	2019	2355	369,340	335,000	04/02/19	110	27,942	362,942	102
160	02	00	101	101	143	33	31213	3N1W18-BB-02500	2019	2305	402,230	395,000	04/02/19	102	32,947	427,947	94
161	01	00	101	101	142	33	10790	4N1W04-CB-02900	2019	3781	302,260	210,000	04/03/19	144	17,452	227,452	133
162	01	00	101	101	143	33	11992	4N1W05-CA-00104	2019	2315	313,380	302,000	04/03/19	104	25,098	327,098	96
164	01	00	101	101	143	33	12166	4N1W05-CB-05600	2019	2563	390,470	397,500	04/08/19	98	32,429	429,929	91
165	02	00	101	101	141	33	3262	3N2W11-DD-01100	2019	2453	406,510	417,500	04/08/19	97	34,061	451,561	90
166	01	00	101	101	143	33	437297	4N1W03-BC-07402	2019	2622	257,930	280,000	04/08/19	92	22,843	302,843	85
167	02	00	101	101	142	33	4864	3N2W13-C0-05800	2019	2480	468,330	420,000	04/09/19	112	34,137	454,137	103
168	02	00	101	101	143	33	28533	3N2W12-AD-06539	2019	2655	384,510	410,000	04/09/19	94	33,324	443,324	87
169	03	00	101	101	142	33	23154	4N4W05-AA-01100	2019	2551	405,070	387,000	04/10/19	105	31,337	418,337	97
170	02	00	101	101	141	33	4378	3N2W13-AA-03400	2019	2723	288,810	280,000	04/10/19	103	22,673	302,673	95
171	02	00	101	101	141	33	4309	3N2W12-DD-03700	2019	2531	329,060	335,000	04/10/19	98	27,126	362,126	91
172	01	00	101	101	142	33	9480	4N1W03-BB-01100	2019	2568	301,580	345,000	04/10/19	87	27,936	372,936	81
177	04	00	100	100		33	21116	7N2W21-B0-01201	2019	2542	43,350	60,000	04/11/19	72	4,840	64,840	67
175	02	00	101	101	143	33	31245	3N1W07-CC-04800	2019	2672	409,890	409,000	04/11/19	100	32,994	441,994	93

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178	02	33	101	101	143	33	433067	3N2W12-DC-00148	2019	2659	304,380	288,000	04/12/19	106	23,145	311,145	98
179	01	00	101	101	142	33	13272	5N1W32-DC-01700	2019	2641	323,210	312,000	04/12/19	104	25,074	337,074	96
183	06	01	101	101	142	33	14753	5N1W28-DB-06200	2019	2670	483,670	462,000	04/15/19	105	36,707	498,707	97
186	06	01	101	101	131	33	14454	5N1W28-AD-03400	2019	2626	211,670	265,000	04/15/19	80	21,055	286,055	74
187	01	43	101	101	143	33	12182	4N1W05-CB-06700	2019	2653	242,070	228,000	04/16/19	106	18,046	246,046	98
191	02	00	101	101	143	33	438472	3N2W13-CA-03928	2019	2766	329,670	330,000	04/17/19	100	26,018	356,018	93
192	01	00	101	101	142	33	12728	4N1W06-DA-01700	2019	2677	339,640	389,900	04/17/19	87	30,741	420,641	81
196	03	00	100	100		30	435698	4N4W04-AB-00304	2019	3434	35,730	40,000	04/18/19	89	3,142	43,142	83
194	02	00	101	101	143	33	4787	3N2W13-BD-05900	2019	2735	399,270	390,000	04/18/19	102	30,630	420,630	95
195	01	00	101	101	143	33	431934	4N1W05-BA-03925	2019	2795	333,010	330,400	04/18/19	101	25,949	356,349	93
197	03	00	101	101	141	33	433339	4N4W05-AC-03605	2019	2733	281,000	320,000	04/18/19	88	25,132	345,132	81
198	02	00	101	101	142	33	4558	3N2W13-AD-09400	2019	2968	334,430	323,900	04/19/19	103	25,340	349,240	96
199	02	33	101	101	143	33	433102	3N2W12-DC-02502	2019	2966	305,560	284,620	04/22/19	107	22,007	306,627	100
200	02	00	101	101	141	33	2848	3N1W07-CA-03000	2019	2799	348,680	330,000	04/22/19	106	25,516	355,516	98
202	01	15	101	101	163	33	13740	5N1W34-CB-00301	2019	3162	585,660	525,000	04/23/19	112	40,434	565,434	104
203	06	01	101	101	132	33	14638	5N1W28-DA-04100	2019	2970	325,370	298,000	04/23/19	109	22,951	320,951	101
204	06	01	101	101	142	30	14621	5N1W28-DA-02800	2019	3154	359,090	335,000	04/23/19	107	25,801	360,801	100
205	01	00	101	101	143	33	11512	4N1W05-AB-01027	2019	2998	332,370	330,000	04/23/19	101	25,416	355,416	94
206	01	00	101	101	144	33	12277	4N1W05-CC-02404	2019	3075	283,870	280,000	04/23/19	101	21,565	301,565	94
207	04	00	101	101	134	33	17874	7N2W16-BC-00900	2019	3077	203,190	197,000	04/25/19	103	15,052	212,052	96
208	01	00	101	101	143	33	13255	5N1W32-DB-00200	2019	3516	354,880	347,350	04/25/19	102	26,540	373,890	95
209	01	00	101	101	143	33	12073	4N1W05-CB-00105	2019	3123	374,130	376,000	04/25/19	100	28,729	404,729	92
211	01	00	101	101	131	33	10671	4N1W04-CA-12700	2019	3327	215,110	278,900	04/25/19	77	21,310	300,210	72
212	03	00	101	101	131	33	23475	4N4W05-DA-09700	2019	3152	129,470	208,000	04/25/19	62	15,893	223,893	58
213	04	00	100	100		33	435668	7N2W21-AB-00108	2019	3308	60,240	49,900	04/26/19	121	3,798	53,698	112
214	01	00	101	101	141	33	9391	4N1W03-BA-02401	2019	3404	337,120	290,000	04/26/19	116	22,070	312,070	108
215	01	00	101	101	141	33	439735	4N1W04-DA-09901	2019	3305	270,230	289,900	04/26/19	93	22,062	311,962	87
218	01	00	101	101	143	33	12904	4N1W06-DD-03200	2019	3448	388,290	360,000	04/29/19	108	27,068	387,068	100
219	01	00	101	101	143	33	12905	4N1W06-DD-03300	2019	3316	324,040	315,897	04/29/19	103	23,752	339,649	95

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220	01	00	101	101	141	33	13844	5N1W34-CB-07500	2019	3182	326,870	330,000	04/29/19	99	24,813	354,813	92
221	01	00	101	101	141	33	12146	4N1W05-CB-03600	2019	3325	289,110	293,000	04/29/19	99	22,031	315,031	92
222	03	00	101	101	142	33	433337	4N4W05-AC-03603	2019	3382	280,030	315,000	04/29/19	89	23,685	338,685	83
223	03	00	109	109	462	33	23478	4N4W05-DA-10000	2019	3366	149,600	223,000	04/29/19	67	16,767	239,767	62
224	04	00	101	101	142	33	18622	7N2W17-DC-00102	2019	3392	590,980	476,000	04/30/19	124	35,646	511,646	116
225	02	00	101	101	131	33	3430	3N2W12-AD-03200	2019	3357	275,310	294,000	04/30/19	94	22,016	316,016	87
226	02	00	101	101	141	33	2999	3N2W02-DD-00608	2019	3436	365,380	315,000	05/01/19	116	23,493	338,493	108
227	01	00	101	101	131	33	13583	5N1W33-DA-03600	2019	3481	192,850	180,000	05/01/19	107	13,425	193,425	100
228	01	00	101	101	131	33	10986	4N1W04-DB-02400	2019	3521	162,690	221,500	05/01/19	73	16,520	238,020	68
230	04	00	101	101	141	33	17975	7N2W16-CA-07800	2019	3506	285,830	240,000	05/02/19	119	17,826	257,826	111
232	02	00	101	101	143	33	4666	3N2W13-BA-06000	2019	3489	349,900	360,000	05/02/19	97	26,740	386,740	90
234	01	00	101	101	131	33	13429	5N1W33-DC-01200	2019	3456	236,630	290,000	05/02/19	82	21,540	311,540	76
235	03	00	101	101	141	33	22726	4N4W04-BA-00201	2019	3501	266,790	337,500	05/02/19	79	25,068	362,568	74
237	01	00	101	101	141	33	12737	4N1W06-DA-02600	2019	3536	321,150	329,000	05/03/19	98	24,337	353,337	91
239	01	00	101	101	121	33	10620	4N1W04-CB-10800	2019	3498	218,300	260,000	05/03/19	84	19,233	279,233	78
240	06	01	101	101	131	33	14482	5N1W28-BA-00200	2019	3491	200,940	261,700	05/03/19	77	19,359	281,059	71
245	01	00	101	101	143	33	12991	4N1W07-AB-03127	2019	3549	361,330	345,000	05/08/19	105	24,995	369,995	98
246	02	00	101	101	143	33	4735	3N2W13-BD-01100	2019	3936	323,160	333,650	05/08/19	97	24,173	357,823	90
248	02	00	101	101	141	33	3064	3N2W11-AA-00125	2019	3665	326,270	385,000	05/09/19	85	27,776	412,776	79
249	01	00	101	101	121	33	13668	5N1W33-DD-09900	2019	3608	137,340	174,900	05/09/19	79	12,618	187,518	73
252	01	00	101	101	143	33	13268	5N1W32-DC-01300	2019	3697	306,870	325,000	05/10/19	94	23,349	348,349	88
253	02	00	101	101	131	33	3305	3N2W12-AB-00400	2019	3708	289,030	317,500	05/10/19	91	22,810	340,310	85
254	02	00	101	101	141	33	438523	3N2W13-CB-00132	2019	3706	319,430	364,500	05/10/19	88	26,186	390,686	82
255	03	00	101	101	142	33	433336	4N4W05-AC-03602	2019	3772	280,020	319,900	05/10/19	88	22,982	342,882	82
256	01	00	101	101	136	33	10962	4N1W04-AD-10600	2019	3823	251,800	294,900	05/10/19	85	21,186	316,086	80
259	04	00	101	101	141	33	18452	7N2W17-AC-02000	2019	3693	257,220	225,000	05/13/19	114	15,959	240,959	107
260	01	00	101	101	141	33	12720	4N1W06-DA-00900	2019	3681	319,080	308,900	05/13/19	103	21,910	330,810	96
261	01	00	101	101	143	33	13275	5N1W32-DC-02501	2019	4211	413,410	408,000	05/13/19	101	28,939	436,939	95
262	01	00	101	101	141	30	12119	4N1W05-CB-00400	2019	3794	361,430	385,000	05/13/19	94	27,307	412,307	88

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263	01	00	101	101	143	33	11580	4N1W05-AB-04218	2019	3870	355,390	345,000	05/14/19	103	24,365	369,365	96
265	01	43	101	101	143	33	9474	4N1W03-BB-00600	2019	3819	245,210	274,500	05/14/19	89	19,386	293,886	83
267	03	03	101	101	452	33	439774	4N4W04-CB-04001	2019	4063	124,080	170,000	05/16/19	73	11,903	181,903	68
268	01	00	101	101	131	33	9576	4N1W03-BC-00404	2019	3974	197,290	272,500	05/16/19	72	19,079	291,579	68
270	02	80	101	101	152	33	3586	3N2W12-BC-00220	2019	4081	529,750	459,000	05/17/19	115	31,997	490,997	108
271	05	00	101	101	141	33	25707	7N4W08-BC-01400	2019	4049	308,310	282,000	05/17/19	109	19,658	301,658	102
272	06	01	101	101	141	33	31157	5N1W21-BC-03400	2019	3984	361,240	339,000	05/17/19	107	23,632	362,632	100
273	05	00	101	101	145	33	432375	7N4W09-CA-00108	2019	4586	287,670	280,000	05/17/19	103	19,519	299,519	96
274	01	00	101	101	136	33	9392	4N1W03-BA-02500	2019	4002	322,840	327,000	05/17/19	99	22,795	349,795	92
275	02	00	101	101	141	33	4746	3N2W13-BD-02300	2019	3938	327,350	335,000	05/17/19	98	23,353	358,353	91
278	01	00	101	101	131	33	13421	5N1W33-DC-00500	2019	4046	152,640	234,000	05/20/19	65	16,099	250,099	61
279	06	01	101	101	142	33	14705	5N1W28-DB-03304	2019	4017	409,180	336,000	05/21/19	122	23,014	359,014	114
280	02	28	101	101	242	33	3873	3N2W12-CC-01210	2019	3991	426,790	440,000	05/21/19	97	30,137	470,137	91
281	02	00	101	101	143	33	28507	3N2W12-AD-06513	2019	4144	532,980	480,000	05/22/19	111	32,731	512,731	104
285	04	00	101	101	131	30	18319	7N2W16-DC-05400	2019	4075	169,950	196,250	05/22/19	87	13,382	209,632	81
287	01	00	101	101	141	30	11498	4N1W05-AC-06500	2019	4137	300,130	300,000	05/23/19	100	20,365	320,365	94
289	01	00	101	101	131	33	11079	4N1W04-DB-11800	2019	4054	179,380	246,500	05/23/19	73	16,733	263,233	68
290	01	00	101	101	143	33	11852	4N1W05-BC-02700	2019	4149	390,580	381,000	05/24/19	103	25,748	406,748	96
292	02	00	101	101	143	33	31211	3N1W18-BB-02300	2019	4246	396,670	385,000	05/24/19	103	26,018	411,018	97
295	04	47	101	101	143	30	22028	7N2W16-BB-00100	2019	4348	272,550	205,000	05/28/19	133	13,604	218,604	125
296	02	00	101	101	141	33	4343	3N2W12-DD-07200	2019	4234	332,830	315,000	05/28/19	106	20,904	335,904	99
299	01	00	101	101	131	33	12392	4N1W05-DA-02402	2019	4165	161,930	205,000	05/28/19	79	13,604	218,604	74
300	03	03	101	101	131	30	22474	4N4W03-BC-08300	2019	4139	162,620	210,000	05/28/19	77	13,936	223,936	73
302	02	00	101	101	143	33	4804	3N2W13-BD-07800	2019	4213	432,520	407,000	05/29/19	106	26,886	433,886	100
304	01	00	101	101	141	30	11518	4N1W05-AB-01033	2019	4434	283,780	286,500	05/29/19	99	18,926	305,426	93
305	01	00	101	101	141	33	12745	4N1W06-DA-03202	2019	4217	316,840	322,000	05/29/19	98	21,271	343,271	92
306	01	00	101	101	141	33	10226	4N1W04-DA-09900	2019	4169	270,740	289,900	05/29/19	93	19,150	309,050	88
303	02	00	102	102	143	33	434333	3N2W12-CC-92001	2019	4222	248,540	245,000	05/29/19	101	16,184	261,184	95
310	01	00	101	101	143	33	10358	4N1W04-BC-05800	2019	4307	311,520	299,900	05/31/19	104	19,628	319,528	97

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311	02	00	101	101	143	33	429890	3N1W07-CC-01425	2019	4327	424,030	422,800	05/31/19	100	27,672	450,472	94
312	04	00	101	101	132	33	17935	7N2W16-BC-06600	2019	4325	151,780	160,000	05/31/19	95	10,472	170,472	89
313	04	00	101	101	134	33	17921	7N2W16-BC-05300	2019	4918	353,610	318,000	06/02/19	111	20,619	338,619	104
317	05	00	101	101	141	33	25863	7N4W08-CB-00704	2019	4353	230,030	260,400	06/04/19	88	16,726	277,126	83
321	02	00	101	101	141	33	4736	3N2W13-BD-01200	2019	4447	318,830	339,900	06/05/19	94	21,729	361,629	88
323	06	01	101	101	154	33	14782	5N1W28-DD-03200	2019	4473	633,640	539,000	06/06/19	118	34,293	573,293	111
326	02	00	101	101	143	33	433509	3N2W13-CD-02500	2019	4481	370,440	391,000	06/06/19	95	24,876	415,876	89
327	02	00	101	101	143	33	4399	3N2W13-AA-05600	2019	4451	357,750	380,000	06/06/19	94	24,177	404,177	89
329	01	00	101	101	141	33	11604	4N1W05-AC-02400	2019	4499	268,860	288,000	06/07/19	93	18,236	306,236	88
330	01	00	101	101	141	33	438878	4N1W04-DA-12200	2019	4511	243,310	270,000	06/07/19	90	17,096	287,096	85
331	01	00	101	101	143	33	11315	4N1W04-DA-13800	2019	4616	272,520	281,000	06/10/19	97	17,536	298,536	91
332	02	00	101	101	143	33	28479	3N2W12-AA-00800	2019	4542	404,370	423,150	06/10/19	96	26,407	449,557	90
334	03	00	101	101	141	33	22480	4N4W03-BC-09301	2019	4679	217,380	255,000	06/11/19	85	15,836	270,836	80
335	05	00	101	101	131	33	25896	7N4W08-CB-04000	2019	4687	167,480	225,000	06/11/19	74	13,973	238,973	70
339	01	00	101	101	141	33	13040	4N1W07-AB-03176	2019	4818	315,960	345,000	06/12/19	92	21,320	366,320	86
342	01	00	101	101	143	33	13274	5N1W32-DC-02500	2019	4986	405,390	399,900	06/13/19	101	24,591	424,491	96
346	01	00	101	101	131	33	11794	4N1W05-AD-11900	2019	4621	166,830	230,000	06/13/19	73	14,143	244,143	68
343	04	00	102	102	143	33	22163	7N2W16-DB-80001	2019	4681	266,610	294,000	06/13/19	91	18,079	312,079	85
345	03	38	109	109	463	33	23133	4N4W05-AA-00313	2019	4754	190,560	252,150	06/13/19	76	15,505	267,655	71
347	03	03	109	109	462	33	23510	5N4W34-CC-00705	2019	4702	180,930	258,900	06/13/19	70	15,920	274,820	66
349	05	00	101	101	136	33	25622	7N4W08-AC-00500	2019	4668	273,210	255,000	06/14/19	107	15,603	270,603	101
350	02	00	101	101	141	33	4624	3N2W13-BA-02600	2019	4858	294,306	299,000	06/14/19	98	18,295	317,295	93
351	01	00	101	101	131	33	11072	4N1W04-DB-11200	2019	4862	175,710	195,000	06/14/19	90	11,932	206,932	85
352	01	00	101	101	131	33	12405	4N1W05-DA-03002	2019	4684	247,300	308,000	06/14/19	80	18,846	326,846	76
353	02	00	101	101	141	33	4747	3N2W13-BD-02400	2019	4822	339,160	349,625	06/15/19	97	21,286	370,911	91
354	06	01	101	101	143	33	14507	5N1W28-BA-01904	2019	4768	333,550	354,000	06/17/19	94	21,337	375,337	89
355	01	00	101	101	141	30	434058	5N1W33-DB-01024	2019	4739	237,400	268,000	06/17/19	89	16,153	284,153	84
356	03	00	101	101	142	33	22907	4N4W04-BD-01600	2019	6691	281,070	279,950	06/19/19	100	16,703	296,653	95
359	01	00	101	101	135	33	13699	5N1W33-DD-12300	2019	4916	176,730	259,500	06/20/19	68	15,404	274,904	64

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358	05	00	109	109	452	33	434151	7N4W09-CB-00602	2019	4820	138,140	162,000	06/20/19	85	9,616	171,616	80
361	02	00	101	101	141	33	4077	3N2W12-DB-02901	2019	4883	326,930	349,900	06/21/19	93	20,664	370,564	88
363	02	00	101	101	135	33	3389	3N2W12-AC-03901	2019	5568	228,830	289,900	06/21/19	79	17,120	307,020	75
365	01	00	101	101	136	33	10597	4N1W04-CA-05500	2019	5135	308,900	324,650	06/24/19	95	18,876	343,526	90
366	02	00	101	101	143	33	433526	3N2W13-CD-04200	2019	5038	370,710	385,000	06/25/19	96	22,268	407,268	91
367	01	00	101	101	143	33	13019	4N1W07-AB-03155	2019	5087	298,050	317,000	06/25/19	94	18,335	335,335	89
368	03	00	101	101	141	33	23144	4N4W05-AA-00400	2019	5068	288,540	350,000	06/25/19	82	20,244	370,244	78
370	01	00	101	101	131	33	9566	4N1W03-BB-10101	2019	5303	190,450	260,000	06/25/19	73	15,038	275,038	69
371	01	00	101	101	152	33	12949	4N1W06-DD-07900	2019	5081	424,900	367,000	06/26/19	116	21,115	388,115	109
373	01	00	101	101	143	30	10376	4N1W04-BC-07600	2019	5070	372,790	339,750	06/26/19	110	19,547	359,297	104
377	02	00	101	101	143	33	4224	3N2W12-DC-00122	2019	5043	323,070	351,000	06/26/19	92	20,195	371,195	87
379	02	00	101	101	141	33	2876	3N1W07-CC-02600	2019	5112	329,290	369,900	06/26/19	89	21,282	391,182	84
380	01	00	101	101	131	33	13896	5N1W34-CC-04700	2019	5163	183,390	215,000	06/26/19	85	12,370	227,370	81
385	01	43	101	101	143	33	12208	4N1W05-CB-09400	2019	5131	241,800	205,000	06/27/19	118	11,732	216,732	112
386	01	00	101	101	136	33	9950	4N1W04-AA-06000	2019	5125	252,880	265,000	06/27/19	95	15,166	280,166	90
387	03	00	101	101	143	33	22296	4N4W03-BA-01000	2019	5089	320,070	350,000	06/27/19	91	20,030	370,030	86
390	01	00	101	101	131	33	10639	4N1W04-CA-09600	2019	5076	169,820	243,500	06/27/19	70	13,935	257,435	66
389	03	38	109	109	452	33	23122	4N4W05-AA-00301	2019	5203	171,310	242,500	06/27/19	71	13,878	256,378	67
391	02	00	101	101	143	33	433086	3N2W12-DC-00163	2019	5118	298,370	285,000	06/28/19	105	16,224	301,224	99
392	04	00	101	101	141	33	18513	7N2W17-AD-05300	2019	5165	249,820	255,000	06/28/19	98	14,516	269,516	93
393	01	00	101	101	141	33	12236	4N1W05-CC-01105	2019	5097	299,390	316,500	06/28/19	95	18,017	334,517	89
395	02	00	100	100		30	5712	3N2W12-DD-00500	2019	5196	411,220	415,000	07/01/19	99	23,245	438,245	94
396	03	03	101	101	136	33	23505	5N4W34-CC-00500	2019	5299	228,360	285,000	07/01/19	80	15,963	300,963	76
398	02	00	101	101	143	33	436532	3N2W13-CD-07500	2019	5266	367,920	386,900	07/02/19	95	21,553	408,453	90
399	02	00	101	101	143	30	4237	3N2W12-DC-00135	2019	5281	337,870	367,000	07/02/19	92	20,445	387,445	87
401	01	00	101	101	143	33	10155	4N1W04-AD-01800	2019	5314	248,550	270,000	07/03/19	92	14,959	284,959	87
403	03	00	101	101		33	23207	4N4W05-AC-04400	2019	5372	192,100	264,000	07/03/19	73	14,626	278,626	69
406	01	00	101	101	143	33	12776	4N1W06-DA-06500	2019	5411	340,450	335,000	07/05/19	102	18,356	353,356	96
407	01	00	101	101	143	33	12703	4N1W06-AD-03600	2019	5418	398,230	393,000	07/05/19	101	21,534	414,534	96

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408	06	01	101	101	143	33	14080	5N1W21-CA-03600	2019	5476	314,460	325,000	07/05/19	97	17,808	342,808	92
409	05	00	101	101	132	30	25929	7N4W08-CB-07300	2019	5322	213,860	225,000	07/05/19	95	12,329	237,329	90
412	01	00	101	101	131	33	9583	4N1W03-BC-00411	2019	5406	196,050	275,000	07/05/19	71	15,068	290,068	68
413	02	00	101	101	144	33	2946	3N2W01-CC-00112	2019	5374	377,940	382,000	07/06/19	99	20,815	402,815	94
414	02	00	101	101	142	33	3068	3N2W11-AA-00129	2019	5378	447,500	363,000	07/08/19	123	19,559	382,559	117
415	01	00	101	101	141	33	12579	4N1W05-DC-03400	2019	5539	325,270	315,000	07/08/19	103	16,973	331,973	98
416	01	00	101	101	141	33	11973	4N1W05-BD-06500	2019	5386	273,990	279,900	07/08/19	98	15,081	294,981	93
417	01	00	101	101	143	33	12532	4N1W05-DB-05600	2019	5474	346,440	374,000	07/09/19	93	20,038	394,038	88
418	01	43	101	101	143	33	433917	4N1W03-BB-00702	2019	5441	235,850	272,900	07/09/19	86	14,621	287,521	82
419	01	00	101	101	131	33	11326	4N1W04-DD-07400	2019	5462	186,210	265,000	07/09/19	70	14,198	279,198	67
422	01	00	101	101	141	33	12129	4N1W05-CB-01401	2019	5448	281,400	300,000	07/10/19	94	15,982	315,982	89
425	03	00	101	101	121	33	23240	4N4W05-AD-01700	2019	5580	117,590	206,000	07/11/19	57	10,911	216,911	54
430	01	00	101	101	132	33	10211	4N1W04-AD-04610	2019	5573	211,550	269,900	07/15/19	78	13,967	283,867	75
433	02	00	101	101	142	33	3103	3N2W11-AA-01004	2019	5935	365,520	350,000	07/17/19	104	17,900	367,900	99
434	05	00	101	101	141	33	25812	7N4W08-CA-03600	2019	5839	236,890	243,500	07/17/19	97	12,453	255,953	93
437	03	03	101	101	131	33	23079	4N4W04-CB-06500	2019	5735	166,020	135,000	07/18/19	123	6,863	141,863	117
438	01	00	101	101	151	33	11709	4N1W05-AD-03300	2019	5738	413,080	408,255	07/18/19	101	20,755	429,010	96
439	04	00	101	101	136	33	17999	7N2W16-CB-00200	2019	5961	189,080	210,000	07/18/19	90	10,676	220,676	86
441	01	00	101	101	132	33	10451	4N1W04-BD-03600	2019	5667	176,970	230,000	07/18/19	77	11,693	241,693	73
442	01	00	101	101	153	33	11837	4N1W05-BC-01100	2019	5730	563,240	415,000	07/19/19	136	20,971	435,971	129
443	01	00	101	101	143	33	13146	4N1W08-BB-05900	2019	5702	324,490	325,000	07/19/19	100	16,423	341,423	95
444	03	00	101	101	141	33	433341	4N4W05-AC-03607	2019	6040	330,930	337,000	07/19/19	98	17,030	354,030	93
446	02	00	101	101	141	33	4525	3N2W13-AD-06100	2019	5835	334,170	356,000	07/22/19	94	17,665	373,665	89
448	04	00	101	101	141	33	21074	7N2W21-A0-00300	2019	5736	254,170	309,000	07/22/19	82	15,332	324,332	78
449	04	00	101	101	143	33	18492	7N2W17-AD-03500	2019	5980	233,740	300,000	07/22/19	78	14,886	314,886	74
450	01	43	101	101	143	33	29001	4N1W08-BA-01608	2019	5899	253,890	249,000	07/23/19	102	12,279	261,279	97
451	02	00	101	101	143	33	31168	3N1W07-CC-05200	2019	5800	396,540	424,900	07/23/19	93	20,954	445,854	89
454	02	00	101	101	143	33	433097	3N2W12-DC-00174	2019	5872	304,000	273,300	07/24/19	111	13,395	286,695	106
456	01	00	101	101	143	33	13267	5N1W32-DC-01200	2019	5855	316,810	319,000	07/24/19	99	15,634	334,634	95

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457	02	00	101	101	143	33	3877	3N2W12-CC-01214	2019	5975	323,260	350,000	07/24/19	92	17,154	367,154	88
459	01	00	101	101	141	33	12590	4N1W05-DC-04500	2019	5869	322,930	309,000	07/25/19	105	15,050	324,050	100
460	02	00	101	101	143	33	429892	3N1W07-CC-01427	2019	6037	407,890	412,400	07/25/19	99	20,086	432,486	94
461	01	00	101	101	143	33	13269	5N1W32-DC-01400	2019	5901	315,050	329,000	07/25/19	96	16,024	345,024	91
465	01	00	101	101	131	30	10908	4N1W04-DA-03200	2019	6182	186,910	245,000	07/25/19	76	11,933	256,933	73
466	03	00	100	100		33	23111	4N4W04-DA-02700	2019	5958	48,440	32,500	07/26/19	149	1,573	34,073	142
467	01	00	101	101	141	33	11939	4N1W05-BD-02800	2019	5892	310,250	320,006	07/26/19	97	15,489	335,495	92
468	05	00	101	101	131	33	26174	7N4W08-DC-04100	2019	5867	150,580	223,300	07/26/19	67	10,808	234,108	64
469	06	01	101	101	153	33	14519	5N1W28-BA-01916	2019	6007	450,090	447,000	07/29/19	101	21,227	468,227	96
470	02	00	101	101	142	33	3138	3N2W11-AA-01300	2019	6033	375,000	375,000	07/29/19	100	17,808	392,808	95
471	02	00	101	101	143	33	2812	3N1W07-CA-00500	2019	6438	380,630	383,000	07/29/19	99	18,188	401,188	95
472	02	00	101	101	143	33	4520	3N2W13-AD-05600	2019	6029	368,850	385,000	07/29/19	96	18,283	403,283	91
474	03	00	101	101	121	33	23272	4N4W05-AD-04800	2019	6345	111,930	121,000	07/29/19	93	5,746	126,746	88
476	01	00	101	101	132	33	13802	5N1W34-CB-03700	2019	6024	160,600	179,000	07/29/19	90	8,500	187,500	86
475	01	00	102	102	134	33	10497	4N1W04-BD-90400	2019	6014	160,520	175,000	07/29/19	92	8,311	183,311	88
477	01	00	100	100		30	439903	5N1W32-DB-00129	2019	5992	377,920	360,000	07/30/19	105	16,986	376,986	100
478	02	00	101	101	131	33	3368	3N2W12-AC-02300	2019	6015	236,910	225,000	07/30/19	105	10,616	235,616	101
479	01	00	101	101	141	33	12602	4N1W05-DC-05800	2019	6042	306,750	300,000	07/30/19	102	14,155	314,155	98
482	01	00	101	101	141	33	12504	4N1W05-DB-03200	2019	6336	292,500	349,500	07/30/19	84	16,491	365,991	80
484	01	00	101	101	135	33	10279	4N1W04-BA-01502	2019	6053	216,360	302,400	07/30/19	72	14,268	316,668	68
489	02	00	101	101	143	33	4102	3N2W12-DB-05000	2019	6184	372,500	317,250	08/01/19	117	14,776	332,026	112
491	01	00	101	101	133	33	11760	4N1W05-AD-08400	2019	6309	249,370	291,137	08/01/19	86	13,560	304,697	82
494	01	00	101	101	143	33	13778	5N1W34-CB-01607	2019	6236	315,390	304,000	08/02/19	104	14,066	318,066	99
495	01	00	101	101	143	33	433440	5N1W32-DB-00700	2019	6279	365,540	376,100	08/02/19	97	17,402	393,502	93
499	01	00	101	101		33	439643	4N1W05-BD-09111	2019	6855	327,550	374,950	08/05/19	87	17,007	391,957	84
500	01	00	101	101	131	33	13465	5N1W33-DC-04000	2019	6286	180,890	255,000	08/05/19	71	11,566	266,566	68
501	01	00	101	101	143	33	12314	4N1W05-CD-00903	2019	6496	280,320	315,000	08/06/19	89	14,192	329,192	85
503	06	01	101	101	142	33	14571	5N1W28-CA-01900	2019	6418	497,920	407,000	08/07/19	122	18,213	425,213	117
505	01	00	101	101	131	30	13531	5N1W33-DC-09800	2019	6318	186,130	212,000	08/07/19	88	9,487	221,487	84

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506	01	00	101	101	141	33	11016	4N1W04-DB-05101	2019	6446	241,790	275,000	08/07/19	88	12,306	287,306	84
507	01	00	101	101	141	33	11742	4N1W05-AD-06500	2019	6384	255,170	295,000	08/08/19	86	13,111	308,111	83
509	06	01	101	101	152	33	14522	5N1W28-BD-00601	2019	6541	555,430	467,500	08/12/19	119	20,209	487,709	114
510	04	00	101	101	131	33	18453	7N2W17-AC-02200	2019	6458	193,700	165,000	08/12/19	117	7,132	172,132	113
511	02	80	101	101	153	33	3572	3N2W12-BC-00206	2019	6512	500,730	527,500	08/12/19	95	22,802	550,302	91
512	03	00	101	101	143	33	23523	5N4W34-CD-00600	2019	6476	297,240	379,750	08/12/19	78	16,415	396,165	75
513	01	00	101	101	143	33	12824	4N1W06-DC-02300	2019	6467	327,100	328,000	08/13/19	100	14,079	342,079	96
515	01	00	101	101	131	33	10878	4N1W04-DA-00500	2019	6529	190,540	260,000	08/13/19	73	11,160	271,160	70
517	01	00	101	101	133	33	438773	5N1W33-DD-05201	2019	6526	224,610	256,000	08/14/19	88	10,910	266,910	84
518	02	79	101	101	162	33	431994	3N2W11-DB-02100	2019	6651	640,970	522,000	08/15/19	123	22,088	544,088	118
522	03	00	100	100		33	22672	4N4W04-AD-00200	2019	6648	67,790	70,000	08/16/19	97	2,941	72,941	93
519	01	00	101	101	132	33	437177	4N1W04-AC-06502	2019	6624	180,930	155,000	08/16/19	117	6,511	161,511	112
521	02	00	101	101	143	33	3422	3N2W12-AD-02423	2019	6628	336,420	333,000	08/16/19	101	13,989	346,989	97
524	01	00	101	101	142	33	11043	4N1W04-DB-07900	2019	6694	338,980	297,000	08/19/19	114	12,205	309,205	110
527	02	00	101	101	131	33	3841	3N2W12-CC-00304	2019	6696	219,150	221,000	08/20/19	99	9,015	230,015	95
528	02	00	101	101	141	33	438432	3N1W18-BB-01137	2019	6772	384,190	429,000	08/20/19	90	17,500	446,500	86
532	02	00	101	101	143	33	438397	3N1W18-BB-01102	2019	6782	432,310	459,000	08/21/19	94	18,584	477,584	91
533	02	00	101	101	131	33	3738	3N2W12-CA-04800	2019	6733	282,520	307,500	08/21/19	92	12,450	319,950	88
534	01	00	101	101	131	33	10916	4N1W04-DA-04000	2019	6946	197,280	270,000	08/21/19	73	10,932	280,932	70
536	01	00	101	101	142	33	12721	4N1W06-DA-01000	2019	6867	416,510	369,900	08/22/19	113	14,864	384,764	108
537	01	00	101	101	143	33	12083	4N1W05-CB-00116	2019	6900	384,600	375,200	08/23/19	103	14,962	390,162	99
538	01	00	101	101	132	33	10594	4N1W04-CA-05000	2019	6801	147,620	205,000	08/23/19	72	8,175	213,175	69
539	03	03	101	101	131	33	22379	4N4W03-BC-11500	2019	6850	177,470	245,000	08/23/19	72	9,770	254,770	70
541	01	00	100	100		30	439871	5N1W32-DC-00904	2019	6936	238,280	288,000	08/26/19	83	11,222	299,222	80
540	01	00	101	101	141	33	433461	5N1W32-DB-02800	2019	6822	338,710	330,000	08/26/19	103	12,858	342,858	99
542	01	00	101	101	131	33	13381	5N1W33-DB-00602	2019	6865	208,400	285,000	08/26/19	73	11,105	296,105	70
544	01	43	101	101	143	33	11904	4N1W05-BD-01108	2019	6891	256,500	235,000	08/27/19	109	9,085	244,085	105
545	02	00	101	101	141	33	4404	3N2W13-AA-06100	2019	7072	300,750	299,000	08/27/19	101	11,560	310,560	97
546	02	28	101	101	242	30	3506	3N2W12-BA-03100	2019	6863	323,510	360,000	08/27/19	90	13,918	373,918	87

#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
547	06	01	101	101	141	33	14305	5N1W28-AA-02800	2019	6919	328,310	400,000	08/27/19	82	15,464	415,464	79
548	02	00	101	101	142	33	4040	3N2W12-DD-07800	2019	7137	496,070	450,000	08/28/19	110	17,260	467,260	106
551	02	00	101	101	143	33	429880	3N1W07-CC-01415	2019	6934	385,690	395,000	08/28/19	98	15,151	410,151	94
552	01	00	101	101	143	33	12569	4N1W05-DC-03000	2019	6909	403,720	454,200	08/28/19	89	17,421	471,621	86
553	02	00	101	101		33	438408	3N1W18-BB-01113	2019	7004	383,510	438,000	08/28/19	88	16,800	454,800	84
555	01	00	101	101	131	33	9704	4N1W03-BC-10800	2019	6998	189,500	255,000	08/28/19	74	9,781	264,781	72
557	02	00	101	101	141	30	4318	3N2W12-DD-04600	2019	7159	313,450	283,000	08/29/19	111	10,769	293,769	107
562	01	00	101	101	141	33	433451	5N1W32-DB-01800	2019	7221	342,750	388,500	08/29/19	88	14,783	403,283	85
567	02	00	101	101	141	33	4008	3N2W12-DD-08000	2019	7081	397,180	379,960	09/03/19	105	13,880	393,840	101
569	02	00	101	101		33	438409	3N1W18-BB-01114	2019	7439	350,710	440,000	09/04/19	80	15,939	455,939	77
570	01	00	101	101	132	33	9773	4N1W03-BD-04800	2019	7150	211,480	275,000	09/04/19	77	9,962	284,962	74
572	05	00	100	100		33	432382	7N4W09-CA-00115	2019	7392	49,680	49,900	09/05/19	100	1,792	51,692	96
573	05	00	100	100		33	432373	7N4W09-CA-00106	2019	7226	49,280	49,900	09/05/19	99	1,792	51,692	95
574	02	00	101	101	142	33	3168	3N2W11-DB-00800	2019	7218	529,010	562,500	09/05/19	94	20,205	582,705	91
575	03	00	101	101	141	33	22739	4N4W04-BA-01600	2019	7345	280,860	325,500	09/05/19	86	11,692	337,192	83
576	06	01	101	101	131	33	14190	5N1W21-CD-01201	2019	7224	225,140	275,000	09/05/19	82	9,878	284,878	79
578	02	79	101	101	162	33	431993	3N2W11-DB-02000	2019	7448	744,990	644,000	09/09/19	116	22,349	666,349	112
579	01	00	101	101	143	33	12859	4N1W06-DC-05800	2019	7343	336,650	347,000	09/09/19	97	12,042	359,042	94
581	01	00	101	101		33	439644	4N1W05-BD-09112	2019	8092	358,470	399,950	09/09/19	90	13,880	413,830	87
582	04	00	101	101	136	33	17899	7N2W16-BC-03100	2019	7441	250,710	290,000	09/09/19	86	10,064	300,064	84
583	03	03	101	101	131	33	22377	4N4W03-BC-11300	2019	7904	143,710	187,000	09/09/19	77	6,489	193,489	74
584	03	00	109	109	462	33	22545	4N4W03-CA-00201	2019	7334	199,360	288,500	09/09/19	69	10,012	298,512	67
586	02	00	101	101	143	33	4648	3N2W13-BA-04400	2019	7414	369,140	310,000	09/10/19	119	10,664	320,664	115
590	02	79	101	101	154	33	3228	3N2W11-DA-02607	2019	7487	617,390	525,000	09/11/19	118	17,900	542,900	114
592	02	00	101	101	141	30	3080	3N2W11-AA-00141	2019	7518	420,720	410,000	09/12/19	103	13,854	423,854	99
593	01	00	101	101	142	33	11575	4N1W05-AB-04213	2019	8281	377,110	365,000	09/12/19	103	12,333	377,333	100
596	01	00	101	101	135	33	9747	4N1W03-BD-02700	2019	7568	174,080	255,000	09/12/19	68	8,616	263,616	66
597	05	00	101	101	143	33	434293	7N4W09-CA-00125	2019	7566	250,240	295,500	09/13/19	85	9,895	305,395	82
598	01	00	101	101	135	33	12496	4N1W05-DB-02603	2019	7640	213,290	278,500	09/13/19	77	9,326	287,826	74

#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
599	02	00	101	101	143	33	4523	3N2W13-AD-05900	2019	7687	364,310	360,000	09/16/19	101	11,726	371,726	98
602	05	00	109	109	452	33	25674	7N4W08-AD-03000	2019	7751	115,230	185,000	09/16/19	62	6,026	191,026	60
604	02	00	101	101	141	33	4312	3N2W12-DD-04000	2019	7666	307,820	300,000	09/17/19	103	9,680	309,680	99
605	02	00	101	101	141	33	4072	3N2W12-DB-02502	2019	7660	320,710	335,000	09/17/19	96	10,810	345,810	93
606	01	00	101	101	143	33	12931	4N1W06-DD-06100	2019	7654	290,520	308,000	09/17/19	94	9,939	317,939	91
608	01	00	101	101	135	33	10171	4N1W04-AD-02905	2019	7663	183,490	259,000	09/17/19	71	8,357	267,357	69
610	02	00	101	101	143	33	4721	3N2W13-BC-02300	2019	7689	346,600	347,000	09/18/19	100	11,091	358,091	97
611	02	00	101	101	143	33	438457	3N2W13-CA-03913	2019	7648	303,370	319,000	09/18/19	95	10,196	329,196	92
612	03	00	109	109	452	33	23148	4N4W05-AA-00700	2019	7758	145,570	213,000	09/18/19	68	6,808	219,808	66
613	06	01	101	101	152	33	15642	5N1W28-BD-00201	2019	7814	544,810	490,000	09/19/19	111	15,513	505,513	108
614	02	00	101	101	143	33	28503	3N2W12-AD-06509	2019	7911	464,990	464,500	09/19/19	100	14,706	479,206	97
617	06	01	101	101	141	33	14018	5N1W21-BD-00400	2019	7976	385,980	356,500	09/23/19	108	10,852	367,352	105
618	01	00	101	101	154	33	13857	5N1W34-CB-09000	2019	7973	525,780	549,900	09/23/19	96	16,740	566,640	93
619	01	00	101	101	143	33	12530	4N1W05-DB-05400	2019	7935	358,760	378,900	09/23/19	95	11,534	390,434	92
620	02	00	109	109	452	33	2977	3N2W01-CC-03000	2019	7891	209,320	254,000	09/23/19	82	7,732	261,732	80
621	02	00	101	101	142	33	4297	3N2W12-DD-02600	2019	8128	452,920	380,000	09/24/19	119	11,452	391,452	116
624	02	00	101	101	141	33	3932	3N2W12-CD-02001	2019	7971	283,250	280,000	09/24/19	101	8,438	288,438	98
625	02	00	101	101	141	33	4448	3N2W13-AC-03304	2019	7956	302,630	328,000	09/24/19	92	9,885	337,885	90
626	02	00	101	101	141	33	434765	3N1W07-CB-01908	2019	7885	347,530	379,900	09/24/19	91	11,449	391,349	89
629	02	00	101	101	143	33	4869	3N2W13-CA-00500	2019	7999	342,000	310,000	09/25/19	110	9,248	319,248	107
631	06	01	101	101	141	33	31145	5N1W21-BC-02200	2019	7996	347,900	340,000	09/25/19	102	10,143	350,143	99
633	02	00	101	101	131	33	3507	3N2W12-BA-03200	2019	8010	246,620	265,000	09/25/19	93	7,906	272,906	90
634	05	00	101	101	131	30	25920	7N4W08-CB-06400	2019	7969	169,920	229,000	09/25/19	74	6,832	235,832	72
635	01	00	101	101	131	33	13577	5N1W33-DD-03100	2019	7952	191,720	282,000	09/25/19	68	8,413	290,413	66
637	01	00	101	101	143	33	12791	4N1W06-DA-08000	2019	8636	339,390	344,000	09/26/19	99	10,158	354,158	96
638	01	00	101	101	141	33	11394	4N1W05-AA-01900	2019	8284	242,390	263,500	09/26/19	92	7,781	271,281	89
644	01	00	101	101	133	33	10427	4N1W04-BD-01703	2019	8166	206,200	210,000	09/27/19	98	6,137	216,137	95
647	03	00	101	101	132	30	23345	4N4W05-AD-12000	2019	8271	183,000	209,750	09/27/19	87	6,130	215,880	85
650	01	00	100	100		30	439928	5N1W32-DB-00154	2019	8178	276,280	216,000	09/30/19	128	6,115	222,115	124

#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
651	05	00	101	101	142	33	25705	7N4W08-BC-01200	2019	8286	311,040	270,000	09/30/19	115	7,644	277,644	112
652	02	00	101	101	143	33	438612	3N2W13-CC-00132	2019	8147	417,080	419,900	09/30/19	99	11,888	431,788	97
653	01	00	101	101	121	33	10820	4N1W05-DA-10300	2019	8135	195,090	205,000	09/30/19	95	5,804	210,804	93
656	02	33	101	101	143	33	429769	3N2W13-AA-04412	2019	8415	300,070	284,650	10/02/19	105	7,885	292,535	103
658	01	00	101	101	131	33	11140	4N1W04-DC-00100	2019	8277	184,610	219,000	10/02/19	84	6,067	225,067	82
659	03	00	101	101	141	33	22304	4N4W03-BA-01010	2019	8290	239,950	284,000	10/02/19	84	7,867	291,867	82
661	06	01	101	101	162	33	436946	5N1W28-DA-04301	2019	8408	624,770	664,000	10/04/19	94	17,990	681,990	92
663	01	00	101	101	132	33	11313	4N1W04-DD-06400	2019	8338	290,410	300,000	10/07/19	97	7,854	307,854	94
664	01	15	101	101	153	33	13721	5N1W34-BC-01100	2019	8418	761,650	885,000	10/07/19	86	23,169	908,169	84
665	03	00	101	101	131	33	23348	4N4W05-AD-12400	2019	8400	174,160	245,000	10/07/19	71	6,414	251,414	69
666	03	00	101	101	131	33	23087	4N4W04-DA-00300	2019	8651	158,250	235,000	10/07/19	67	6,152	241,152	66
669	03	00	101	101	153	33	22595	4N4W04-AC-00300	2019	8519	468,670	369,900	10/08/19	127	9,571	379,471	124
674	02	00	101	101	141	33	432016	3N2W13-AD-04503	2019	8617	318,620	350,000	10/10/19	91	8,843	358,843	89
675	02	00	101	101		33	438407	3N1W18-BB-01112	2019	8510	381,660	429,900	10/10/19	89	10,862	440,762	87
677	01	00	101	101	132	33	13475	5N1W33-DC-04900	2019	8505	176,530	239,000	10/10/19	74	6,039	245,039	72
678	03	00	101	101	131	33	23090	4N4W04-DA-00600	2019	8517	153,910	238,000	10/10/19	65	6,013	244,013	63
676	01	00	109	109	452	33	13407	5N1W33-DB-01007	2019	8646	149,530	195,400	10/10/19	77	4,937	200,337	75
680	02	00	101	101	143	33	433505	3N2W13-CD-02100	2019	8679	317,870	350,000	10/11/19	91	8,737	358,737	89
681	03	00	101	101	145	33	429814	4N4W05-AA-00402	2019	8703	322,980	371,833	10/11/19	87	9,282	381,115	85
683	02	00	101	101	143	33	436543	3N2W13-CD-08600	2019	8641	369,230	389,000	10/12/19	95	9,592	398,592	93
684	02	00	101	101	142	33	3810	3N2W12-CB-01500	2019	8608	426,350	335,000	10/14/19	127	8,056	343,056	124
686	02	00	101	101	141	33	3302	3N2W12-AB-00211	2019	8610	284,940	299,305	10/14/19	95	7,198	306,503	93
688	02	33	101	101	143	33	429766	3N2W13-AA-04409	2019	8628	303,070	285,000	10/15/19	106	6,767	291,767	104
690	01	00	101	101	136	33	11628	4N1W05-BD-08400	2019	8625	285,300	320,000	10/15/19	89	7,598	327,598	87
692	06	01	101	101	142	33	14590	5N1W28-CA-03800	2019	8820	503,100	390,000	10/17/19	129	9,023	399,023	126
693	02	00	101	101	147	33	438463	3N2W13-CA-03919	2019	8688	340,800	325,000	10/17/19	105	7,519	332,519	102
694	02	00	101	101	141	33	4465	3N2W13-AC-03321	2019	8692	302,060	325,000	10/17/19	93	7,519	332,519	91
697	01	00	101	101	131	33	11375	4N1W05-AA-00802	2019	9129	211,070	270,000	10/17/19	78	6,247	276,247	76
700	03	03	101	101	155	33	22779	4N4W04-BB-00107	2019	8988	483,210	415,000	10/21/19	116	9,096	424,096	114

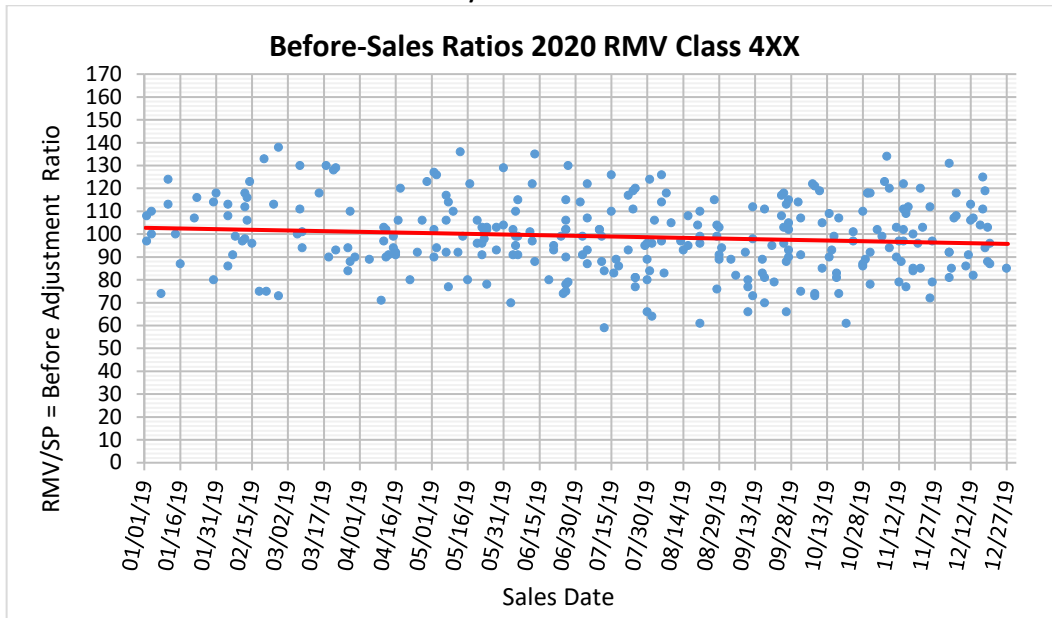
#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
702	02	00	101	101	143	33	437288	3N2W12-AD-06005	2019	8842	376,790	375,000	10/22/19	100	8,105	383,105	98
703	04	00	101	101	141	33	21069	7N2W17-DB-02302	2019	8844	296,260	340,000	10/22/19	87	7,349	347,349	85
704	03	03	101	101	141	33	22403	4N4W03-BB-07400	2019	9482	190,200	262,000	10/22/19	73	5,663	267,663	71
708	01	00	101	101	143	33	433481	5N1W32-DC-00120	2019	9088	356,600	354,000	10/25/19	101	7,328	361,328	99
709	02	00	101	101	143	33	2959	3N2W01-CC-02002	2019	9188	335,900	342,500	10/25/19	98	7,090	349,590	96
710	06	01	101	101	141	33	14053	5N1W21-CA-00600	2019	9209	328,710	345,000	10/25/19	95	7,142	352,142	93
711	02	79	101	101	162	33	431997	3N2W11-DB-02400	2019	9001	637,150	545,000	10/28/19	117	10,784	555,784	115
713	06	01	101	101	143	33	14082	5N1W21-CA-03800	2019	9093	299,090	330,000	10/28/19	91	6,530	336,530	89
716	01	00	101	101	131	33	11224	4N1W03-CB-06600	2019	9120	191,750	259,900	10/28/19	74	5,143	265,043	72
717	01	00	101	101	153	33	12088	4N1W05-CB-00122	2019	9134	461,190	379,900	10/29/19	121	7,401	387,301	119
718	02	00	101	101	143	33	4763	3N2W13-BD-03605	2019	9127	347,000	309,000	10/29/19	112	6,020	315,020	110
719	02	00	101	101	143	33	433519	3N2W13-CD-03500	2019	9072	370,130	399,900	10/29/19	93	7,791	407,691	91
723	02	00	101	101	141	33	4022	3N2W12-DA-04113	2019	9147	320,790	324,900	10/30/19	99	6,231	331,131	97
724	01	00	101	101	131	33	12490	4N1W05-DB-02508	2019	9580	260,280	299,900	10/30/19	87	5,752	305,652	85
726	02	00	101	101	143	33	433491	3N2W13-CD-00700	2019	9251	325,980	345,000	10/31/19	94	6,511	351,511	93
728	01	00	101	101	131	30	12432	4N1W05-DA-05200	2019	9224	212,150	269,500	10/31/19	79	5,086	274,586	77
730	03	00	101	101	131	33	22685	4N4W04-AD-01300	2019	9572	142,210	200,000	10/31/19	71	3,775	203,775	70
731	01	00	101	101	131	33	10752	4N1W04-CA-20000	2019	9190	171,150	259,000	10/31/19	66	4,888	263,888	65
732	01	00	101	101	121	30	13829	5N1W34-CB-06200	2019	9139	143,610	235,000	10/31/19	61	4,435	239,435	60
733	02	80	101	101	154	33	3579	3N2W12-BC-00213	2019	9564	600,380	539,900	11/01/19	111	10,026	549,926	109
734	02	00	101	101	143	33	4738	3N2W13-BD-01400	2019	9258	381,510	364,900	11/01/19	105	6,776	371,676	103
736	02	00	101	101	143	33	433105	3N2W12-DC-02504	2019	9318	292,730	285,000	11/04/19	103	5,032	290,032	101
737	01	00	101	101	131	33	11241	4N1W04-DA-11800	2019	9287	189,250	250,000	11/04/19	76	4,414	254,414	74
738	01	00	101	101	131	33	9546	5N1W34-CC-14200	2019	9265	190,390	280,000	11/04/19	68	4,944	284,944	67
739	01	00	101	101	143	33	13164	4N1W08-BB-07700	2019	9291	348,240	333,500	11/05/19	104	5,787	339,287	103
741	02	00	101	101	143	33	438606	3N2W13-CC-00126	2019	9477	383,600	386,500	11/05/19	99	6,706	393,206	98
743	02	33	101	101	143	33	429908	3N2W12-AD-03111	2019	9302	303,990	302,000	11/06/19	101	5,148	307,148	99
744	01	00	101	101	142	30	13987	4N1W06-AD-02300	2019	9323	488,480	492,000	11/06/19	99	8,387	500,387	98
745	01	00	101	101	141	33	439589	4N1W05-BC-07501	2019	10021	282,410	355,000	11/06/19	80	6,052	361,052	78

#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
746	03	00	101	101	141	33	435696	4N4W04-AB-00302	2019	9354	299,660	379,900	11/06/19	79	6,476	386,376	78
747	01	00	109	109	452	33	11635	4N1W05-AC-03103	2019	9576	142,630	194,000	11/06/19	74	3,307	197,307	72
748	04	00	109	109		33	18474	7N2W17-AD-01900	2019	9406	137,910	232,500	11/06/19	59	3,963	236,463	58
750	02	00	101	101	141	33	438523	3N2W13-CB-00132	2019	9305	319,430	374,000	11/07/19	85	6,262	380,262	84
751	01	00	101	101	131	33	13796	5N1W34-CC-15100	2019	9370	187,400	224,750	11/07/19	83	3,763	228,513	82
752	03	00	101	101	131	33	23099	4N4W04-DA-01500	2019	9419	154,560	186,000	11/07/19	83	3,114	189,114	82
757	02	00	101	101	143	33	438503	3N2W13-CB-00112	2019	9466	374,150	416,000	11/11/19	90	6,458	422,458	89
756	02	00	109	109	143	33	3039	3N2W11-AA-00100	2019	9570	367,880	390,000	11/11/19	94	6,055	396,055	93
759	01	00	101	101	143	33	12820	4N1W06-DC-01900	2019	9507	375,060	341,000	11/12/19	110	5,190	346,190	108
760	01	00	101	101	143	33	10365	4N1W04-BC-06500	2019	9480	356,100	329,900	11/12/19	108	5,021	334,921	106
761	01	00	101	101	141	30	11962	4N1W05-BD-05400	2019	9754	288,400	282,000	11/12/19	102	4,292	286,292	101
764	02	00	101	101	145	33	2832	3N1W07-CA-01400	2019	9527	377,060	383,500	11/13/19	98	5,720	389,220	97
766	01	00	101	101	146	33	13889	5N1W34-CC-04000	2019	9492	300,890	362,000	11/13/19	83	5,400	367,400	82
767	03	03	101	101	141	33	23026	4N4W04-BD-13300	2019	9525	202,550	247,500	11/13/19	82	3,692	251,192	81
773	02	00	101	101	141	33	4190	3N2W12-DC-01000	2019	9613	320,240	346,000	11/15/19	93	4,950	350,950	91
776	06	01	101	101	152	33	14636	5N1W28-DA-03904	2019	9761	715,300	660,000	11/18/19	108	8,840	668,840	107
777	04	00	101	101	144	33	17877	7N2W16-BC-01200	2019	10228	247,630	240,500	11/18/19	103	3,221	243,721	102
779	03	00	101	101	143	33	29601	4N4W05-AC-03600	2019	9785	279,370	290,000	11/18/19	96	3,884	293,884	95
782	01	00	101	101	141	33	13047	4N1W07-AB-03183	2019	9817	292,010	325,000	11/19/19	90	4,254	329,254	89
783	06	01	101	101	142	33	14732	5N1W28-DB-04000	2019	9871	367,830	339,900	11/20/19	108	4,346	344,246	107
785	02	00	101	101	143	33	4719	3N2W13-BC-02100	2019	10001	333,080	354,320	11/20/19	94	4,530	358,850	93
786	01	00	101	101	131	33	11334	4N1W04-DD-08100	2019	9944	199,250	259,000	11/20/19	77	3,311	262,311	76
788	01	00	101	101	132	33	13851	5N1W34-CB-08200	2019	9863	262,730	298,000	11/21/19	88	3,719	301,719	87
790	01	00	101	101	131	33	10658	4N1W04-CA-11300	2019	9825	233,590	279,000	11/21/19	84	3,482	282,482	83
791	01	00	101	101	131	33	9860	4N1W03-CB-05302	2019	9940	187,560	256,900	11/21/19	73	3,206	260,106	72
793	04	47	101	101	143	33	22045	7N2W16-BB-01800	2019	9915	231,840	230,500	11/22/19	101	2,807	233,307	99
794	02	00	101	101	143	33	433118	3N2W12-DC-02516	2019	9933	303,760	270,000	11/23/19	113	3,205	273,205	111
796	01	30	101	101		33	435151	4N1W04-AD-02003	2019	10013	397,950	365,000	11/25/19	109	4,111	369,111	108
798	03	03	101	101	131	33	22369	4N4W03-BC-12300	2019	10665	134,470	190,000	11/25/19	71	2,140	192,140	70

#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
801	01	30	101	101	232	33	11647	4N1W05-AC-03300	2019	9953	170,030	272,500	11/26/19	62	2,986	275,486	62
802	01	00	101	101	143	33	12687	4N1W06-AD-01000	2019	10007	301,800	333,950	11/27/19	90	3,558	337,508	89
804	03	00	100	100		30	440041	4N4W05-AC-04204	2020	290	29,300	35,000	12/02/19	84	320	35,320	83
803	02	00	101	101	143	33	438528	3N2W13-CB-00137	2019	10251	356,340	390,000	12/02/19	91	3,562	393,562	91
806	01	00	101	101	141	33	13130	4N1W08-BB-01901	2019	10249	285,590	292,500	12/03/19	98	2,582	295,082	97
809	01	00	101	101	143	33	439664	4N1W05-BD-09132	2019	11008	376,230	423,180	12/03/19	89	3,736	426,916	88
811	01	00	101	101	143	33	439642	4N1W05-BD-09110	2019	10933	316,550	395,959	12/03/19	80	3,496	399,455	79
812	01	00	101	101	133	33	9871	4N1W04-AA-00100	2019	10154	226,530	294,750	12/03/19	77	2,602	297,352	76
813	02	00	101	101	143	33	4811	3N2W13-BD-08600	2019	10191	321,560	357,500	12/04/19	90	3,047	360,547	89
815	03	00	101	101		33	440039	4N4W05-AA-00902	2019	10684	313,670	400,000	12/04/19	78	3,409	403,409	78
816	02	00	101	101	141	33	3837	3N2W12-CC-00300	2019	10255	339,810	258,800	12/05/19	131	2,127	260,927	130
817	01	00	101	101	151	33	13728	5N1W34-BC-01303	2019	10465	482,000	420,000	12/05/19	115	3,452	423,452	114
819	01	00	101	101	141	30	13783	5N1W34-CB-01801	2019	10246	246,490	250,000	12/05/19	99	2,055	252,055	98
820	02	00	101	101	143	33	433518	3N2W13-CD-03400	2019	10468	363,330	396,000	12/05/19	92	3,255	399,255	91
821	01	00	101	101	132	33	13908	5N1W34-CC-05900	2019	10244	219,500	278,000	12/05/19	79	2,285	280,285	78
825	01	00	100	100		33	440022	4N1W06-DA-07009	2019	10376	603,050	752,500	12/06/19	80	5,956	758,456	80
822	04	00	101	101	136	33	18245	7N2W16-DB-12700	2019	10316	308,980	239,900	12/06/19	129	1,899	241,799	128
826	06	01	101	101	141	33	14074	5N1W21-CA-03000	2019	10349	290,460	335,000	12/09/19	87	2,346	337,346	86
827	05	00	101	101	143	33	25976	7N4W08-CD-04200	2019	10481	195,820	242,000	12/09/19	81	1,694	243,694	80
828	03	00	109	109	452	33	22690	4N4W04-AD-01800	2019	10935	163,090	269,000	12/09/19	61	1,883	270,883	60
829	02	00	101	101	141	33	436542	3N2W13-CD-08500	2019	10385	346,110	358,000	12/10/19	97	2,398	360,398	96
831	02	33	101	101	143	33	429909	3N2W12-AD-03112	2019	10392	303,570	297,700	12/11/19	102	1,903	299,603	101
833	01	00	101	101	141	33	11584	4N1W05-AC-00400	2019	10372	259,700	308,900	12/11/19	84	1,975	310,875	84
836	01	00	101	101	141	33	11602	4N1W05-AC-02200	2019	10487	295,040	335,000	12/12/19	88	2,040	337,040	88
837	05	00	101	101	131	33	25874	7N4W08-CB-01800	2019	10483	176,320	217,300	12/12/19	81	1,323	218,623	81
839	01	00	101	101	141	30	12710	4N1W06-AD-04400	2019	10530	291,840	285,120	12/13/19	102	1,649	286,769	102
841	01	00	101	101	131	33	10745	4N1W04-CA-19400	2019	10477	200,050	269,900	12/13/19	74	1,561	271,461	74
842	01	00	101	101	131	33	13583	5N1W33-DA-03600	2019	10528	192,850	270,000	12/13/19	71	1,562	271,562	71
843	01	00	101	101	135	33	11763	4N1W05-AD-08700	2019	10524	251,370	289,900	12/14/19	87	1,588	291,488	86

#	MA	SA	RMV CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
847	01	00	100	100		33	440031	4N1W06-DA-07018	2019	10539	83,110	118,000	12/16/19	70	575	118,575	70
846	01	00	101	101	143	33	13013	4N1W07-AB-03149	2019	10722	298,890	329,500	12/16/19	91	1,605	331,105	90
851	01	00	100	100		33	438868	4N1W04-AA-00600	2019	10714	168,780	159,000	12/17/19	106	726	159,726	106
850	02	33	101	101	143	33	433103	3N2W12-DC-02503	2019	10773	303,980	285,000	12/17/19	107	1,301	286,301	106
852	03	03	101	101	132	30	22391	4N4W03-BB-06300	2019	11006	227,450	250,000	12/17/19	91	1,142	251,142	91
853	01	00	101	101	141	33	9530	4N1W03-BB-06100	2019	10718	264,550	299,000	12/17/19	88	1,365	300,365	88
855	01	00	101	101	143	33	12191	4N1W05-CB-07600	2019	10984	367,230	383,153	12/18/19	96	1,633	384,786	95
856	03	00	101	101	142	33	22320	4N4W03-BA-01026	2019	11001	258,210	268,375	12/18/19	96	1,144	269,519	96
858	02	00	101	101	143	33	433498	3N2W13-CD-01400	2019	10771	315,910	345,000	12/18/19	92	1,470	346,470	91
861	05	00	109	109	452	33	25748	7N4W08-BD-01600	2019	10779	119,640	115,000	12/20/19	104	420	115,420	104
864	02	00	101	101	143	33	4715	3N2W13-BC-01600	2019	10767	355,660	372,000	12/23/19	96	1,019	373,019	95
865	04	00	101	101	123	33	18406	7N2W16-DD-04300	2019	10905	151,570	187,500	12/23/19	81	514	188,014	81
866	01	00	101	101	133	33	9891	4N1W04-AA-01500	2019	10795	208,870	240,000	12/24/19	87	584	240,584	87
867	01	00	101	101	143	33	12460	4N1W05-DB-02104	2019	10941	330,600	320,000	12/27/19	103	487	320,487	103
869	04	00	101	101	142	33	18533	7N2W17-DA-00100	2019	10897	310,930	306,300	12/28/19	102	373	306,673	101
870	03	00	101	101	135	33	23482	4N4W05-DA-10400	2020	90	238,640	333,500	12/28/19	72	406	333,906	71
871	01	00	101	101	142	33	9649	4N1W03-BC-05900	2019	10999	296,230	272,500	12/30/19	109	166	272,666	109
872	03	00	101	101	131	33	23341	4N4W05-AD-11701	2020	197	173,740	250,000	12/30/19	69	152	250,152	69

Time Study for RMV Class 4XX



Direct Calculation (Linear Regression) Analysis adjusting the sales price on an annual basis:

Y axis intersect from beginning of trend line to end of trend line:

01/01/19	104%
01/01/20	96%

Number of days in the year: 365

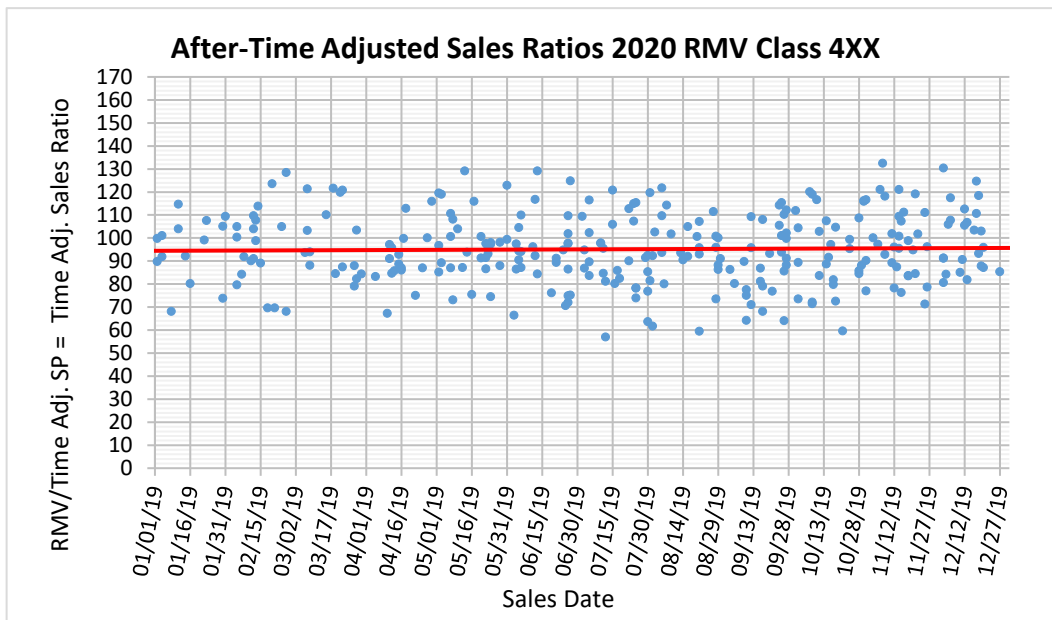
Amount of change: 8%

Annual change factor: 92%

Annual adjustment factor: 109%

Overall Annual Adjustment: 9%

Intermediate adj factor: 0.0238%



#	MA	SA	CL	Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
2	05	51	401	641	131	33	26938	7N4W07-00-01701	2019	826	270,990	250,000	01/02/19	108	21,680	271,680	100
4	05	51	401	401	133	33	26904	7N4W05-DC-01100	2019	47	239,350	245,500	01/02/19	97	21,289	266,789	90
8	06	67	401	401	151	33	9040	4N2W23-DB-00200	2019	121	658,550	600,000	01/04/19	110	51,745	651,745	101
9	05	51	409	689	462	30	28192	8N4W26-CO-02200	2019	124	269,160	269,600	01/04/19	100	23,251	292,851	92
11	05	51	409	409	462	30	25010	6N4W28-00-01900	2019	445	202,980	275,000	01/08/19	74	23,454	298,454	68
16	04	42	400	400		30	17619	5N3W01-AO-00200	2019	259	90,190	80,000	01/11/19	113	6,766	86,766	104
15	06	61	401	401	142	33	16994	4N1W08-BC-02000	2019	291	534,730	430,000	01/11/19	124	36,367	466,367	115
18	04	41	409	649	463	33	21242	6N2W15-AC-01000	2019	353	304,360	305,000	01/14/19	100	25,577	330,577	92
23	06	67	400	400		33	8596	4N1W18-BO-02301	2019	390	184,070	212,000	01/16/19	87	17,677	229,677	80
30	05	51	401	401	121	33	26934	7N4W07-00-01400	2019	465	181,290	169,000	01/22/19	107	13,850	182,850	99
32	05	51	401	401	126	33	26899	7N4W05-DC-00400	2019	519	238,540	205,000	01/23/19	116	16,752	221,752	108
41	04	41	401	401	141	33	19960	7N2W28-BB-00200	2019	643	374,550	330,000	01/30/19	114	26,416	356,416	105
43	03	31	401	641	141	33	28724	4N2W17-00-02203	2019	796	411,710	516,400	01/30/19	80	41,337	557,737	74
44	03	31	401	541	155	33	24291	4N5W12-00-01000	2019	1031	632,140	535,000	01/31/19	118	42,698	577,698	109
53	06	62	400	640		33	434974	5N2W24-BO-00201	2019	816	183,730	214,119	02/05/19	86	16,834	230,953	80
48	06	67	401	401	151	33	7990	4N2W25-BO-01908	2019	849	622,170	549,900	02/05/19	113	43,232	593,132	105
49	06	61	401	401	142	33	16565	4N1W06-AD-00500	2019	864	486,780	450,000	02/05/19	108	35,378	485,378	100
55	06	61	409	409	452	33	16831	4N1W07-BB-00501	2019	1126	322,490	355,000	02/07/19	91	27,740	382,740	84
58	06	61	401	401	143	33	17062	4N1W08-CC-00101	2019	932	474,000	479,000	02/08/19	99	37,316	516,316	92
66	05	55	401	551	134	33	26865	7N4W05-00-01000	2019	1079	402,070	414,500	02/11/19	97	31,995	446,495	90
68	06	61	401	401	154	33	14894	4N1W05-BA-02700	2019	1243	696,700	590,000	02/12/19	118	45,401	635,401	110
69	06	61	401	401	151	33	17237	4N1W17-BO-12000	2019	1049	629,400	562,500	02/12/19	112	43,285	605,785	104
70	05	55	401	401	132	33	27674	8N5W36-DO-00400	2019	1091	318,530	325,000	02/12/19	98	25,009	350,009	91
73	06	61	401	641	152	33	15339	4N2W11-00-00902	2019	1043	655,380	565,000	02/13/19	116	43,342	608,342	108
75	06	61	401	401	161	33	429117	5N2W36-CO-00204	2019	1982	728,940	685,000	02/13/19	106	52,548	737,548	99
76	05	51	401	401	143	30	27037	7N4W09-BA-01000	2019	1110	343,020	280,000	02/14/19	123	21,413	301,413	114
79	03	31	401	641	134	33	7588	4N2W16-00-02500	2019	1260	359,570	375,000	02/15/19	96	28,588	403,588	89
81	06	61	400	400		33	439487	4N1W07-AC-00604	2019	1200	112,200	150,000	02/18/19	75	11,328	161,328	70

#	M	A	S	A	CL	CL	CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
85	04	41	401	401	136	33	19137	6N2W04-D0-00100	2019	1225	325,530	245,000	02/20/19	133	18,386	263,386	124		
91	05	55	409	409	452	33	27679	8N5W36-D0-01000	2019	1249	145,930	195,000	02/21/19	75	14,587	209,587	70		
93	04	41	401	401	132	33	20192	7N3W11-D0-00900	2019	1438	420,250	373,000	02/24/19	113	27,636	400,636	105		
94	04	41	400	400		33	19464	7N2W16-CC-00400	2019	1577	80,000	58,000	02/26/19	138	4,270	62,270	128		
97	03	31	409	409	453	33	24796	5N5W34-00-00400	2019	1436	237,530	324,900	02/26/19	73	23,918	348,818	68		
105	06	67	401	401	155	33	8080	4N2W25-D0-01609	2019	1627	597,770	595,900	03/06/19	100	42,732	638,632	94		
106	06	61	400	400		33	439216	4N2W01-00-00501	2019	1643	175,440	135,000	03/07/19	130	9,649	144,649	121		
107	05	51	401	681	141	33	26420	6N3W05-00-00102	2019	1839	625,130	565,000	03/07/19	111	40,381	605,381	103		
110	06	61	400	400		33	432440	5N2W36-C0-00206	2019	1687	176,170	175,000	03/08/19	101	12,466	187,466	94		
111	06	61	401	401	151	33	17173	4N1W17-B0-10000	2019	1792	546,270	579,000	03/08/19	94	41,244	620,244	88		
126	05	51	401	401	141	33	27496	7N5W10-AA-02900	2019	1961	315,360	268,000	03/15/19	118	18,643	286,643	110		
129	03	31	400	640		33	24624	5N4W33-00-01400	2019	1907	133,740	102,900	03/18/19	130	7,085	109,985	122		
132	04	41	401	401	131	33	15556	5N1W08-CB-00701	2019	1927	225,510	249,950	03/19/19	90	17,150	267,100	84		
137	04	42	401	641	154	33	17738	5N2W06-00-00801	2019	1993	645,970	505,000	03/21/19	128	34,409	539,409	120		
138	02	21	401	401	166	33	5647	3N2W11-AC-00500	2019	2167	1,221,540	947,500	03/22/19	129	64,333	1,011,833	121		
139	06	61	401	401	141	33	15422	4N2W12-DD-00406	2019	2163	700,080	749,900	03/22/19	93	50,916	800,816	87		
147	06	61	400	640		33	435177	4N2W12-C0-00600	2019	2186	204,010	217,500	03/27/19	94	14,509	232,009	88		
148	04	41	409	409	452	33	16400	6N2W25-00-01301	2019	2220	280,390	332,500	03/27/19	84	22,180	354,680	79		
150	06	62	401	401	143	33	17812	5N2W29-00-00400	2019	2196	470,660	427,000	03/28/19	110	28,382	455,382	103		
153	05	51	401	641	141	33	26624	7N4W22-00-00220	2019	2183	337,610	385,000	03/28/19	88	25,590	410,590	82		
157	02	21	401	641	145	33	435973	3N2W11-AD-00103	2019	2713	377,820	420,000	03/30/19	90	27,716	447,716	84		
163	05	51	401	581	144	33	20535	7N3W08-00-00502	2019	2503	620,010	700,000	04/05/19	89	45,194	745,194	83		
173	03	31	400	640		33	7567	4N2W16-00-01201	2019	2801	111,100	155,500	04/10/19	71	9,854	165,354	67		
174	06	61	401	401	152	33	17000	4N1W08-BD-01100	2019	2552	559,790	542,000	04/11/19	103	34,218	576,218	97		
176	06	61	401	401	121	33	17073	4N1W08-CC-01000	2019	2644	291,260	301,000	04/11/19	97	19,003	320,003	91		
180	06	61	401	401	152	33	17215	4N1W18-A0-01901	2019	2558	761,000	747,500	04/12/19	102	47,014	794,514	96		
181	04	42	401	401	121	30	17710	6N3W36-00-01900	2019	2712	269,630	300,000	04/12/19	90	18,868	318,868	85		
182	02	64	401	401	144	33	7319	3N2W24-BD-00300	2019	2865	533,020	585,000	04/13/19	91	36,654	621,654	86		
185	06	62	401	641	143	33	16286	5N2W27-B0-01800	2019	2690	494,330	525,000	04/15/19	94	32,644	557,644	89		

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184	04	41	409	649	473	33	19039	6N2W02-00-01206	2019	4012	364,950	370,000	04/15/19	99	23,007	393,007	93		
188	04	41	401	401	133	33	16090	5N2W12-A0-00600	2019	2695	329,100	356,000	04/16/19	92	22,051	378,051	87		
189	06	67	401	401	141	33	9121	4N2W24-AD-01006	2019	2702	493,040	540,000	04/16/19	91	33,448	573,448	86		
190	04	41	401	401	131	33	19570	7N2W18-D0-01300	2019	2752	197,040	186,000	04/17/19	106	11,477	197,477	100		
193	06	62	409	649	452	33	16149	5N2W23-00-00702	2019	2707	292,430	244,000	04/18/19	120	14,997	258,997	113		
201	06	61	400	400		33	15412	4N2W12-DD-00204	2019	3148	155,280	195,000	04/22/19	80	11,800	206,800	75		
210	02	64	401	401	152	33	6546	3N2W22-CA-00300	2019	3165	737,030	800,000	04/25/19	92	47,838	847,838	87		
216	06	61	401	401	143	30	31160	4N1W07-BA-00508	2019	3469	550,280	519,000	04/27/19	106	30,788	549,788	100		
217	02	21	401	401	144	33	8428	4N2W35-D0-00900	2019	3329	705,470	575,000	04/29/19	123	33,836	608,836	116		
229	06	67	401	641	154	33	8135	4N2W26-00-02000	2019	3478	695,850	550,000	05/02/19	127	31,971	581,971	120		
231	04	41	401	401	133	30	19743	7N2W21-A0-02400	2019	3441	230,110	225,000	05/02/19	102	13,079	238,079	97		
233	05	51	401	401	141	33	20827	7N3W16-C0-01900	2019	3462	292,920	325,000	05/02/19	90	18,892	343,892	85		
236	05	51	401	401	143	33	26584	7N4W21-00-01301	2019	3513	360,690	286,500	05/03/19	126	16,586	303,086	119		
238	03	31	401	641	142	33	8956	4N2W15-00-00201	2019	3602	528,150	560,000	05/03/19	94	32,419	592,419	89		
241	05	51	401	401	135	30	25354	6N5W13-CC-00500	2019	3581	133,220	114,000	05/07/19	117	6,491	120,491	111		
242	04	41	401	641	136	33	16395	6N2W25-00-01100	2019	3646	416,580	392,000	05/07/19	106	22,320	414,320	101		
243	04	41	409	649	463	33	31205	6N2W15-00-00301	2019	3637	363,050	395,000	05/07/19	92	22,491	417,491	87		
247	06	61	400	400		33	17595	5N2W36-C0-00703	2019	3653	231,560	299,900	05/08/19	77	17,004	316,904	73		
244	06	61	401	401	143	30	16853	4N1W07-BC-00701	2019	3797	642,430	562,000	05/08/19	114	31,866	593,866	108		
251	04	41	401	541	141	33	21622	6N2W33-00-01200	2019	3774	483,050	440,000	05/10/19	110	24,739	464,739	104		
257	05	51	401	401	142	33	28126	8N4W24-00-01700	2019	3839	266,780	290,000	05/12/19	92	16,167	306,167	87		
258	02	25	401	551	131	33	5304	3N1W08-00-01100	2019	3659	449,900	330,000	05/13/19	136	18,318	348,318	129		
264	03	31	401	641	141	30	5075	4N3W24-00-01901	2019	3815	430,580	435,000	05/14/19	99	24,043	459,043	94		
266	04	41	409	409	452	33	19048	6N2W03-00-00801	2019	3891	244,570	307,600	05/16/19	80	16,855	324,455	75		
269	04	41	401	681	156	33	19028	6N2W02-00-00600	2019	4010	763,640	625,000	05/17/19	122	34,098	659,098	116		
276	06	61	401	401	153	33	16902	4N1W07-C0-01600	2019	4079	782,490	738,500	05/20/19	106	39,762	778,262	101		
277	05	51	401	401	143	33	20813	7N3W16-C0-00500	2019	3951	417,480	433,900	05/20/19	96	23,362	457,262	91		
284	05	51	400	640		33	20466	7N3W04-D0-00500	2019	4124	33,740	37,000	05/22/19	91	1,975	38,975	87		
282	05	51	401	401	143	33	26591	7N4W21-BA-00102	2019	4107	379,280	369,000	05/22/19	103	19,692	388,692	98		

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283	05	51	401	641	131	33	21763	7N3W22-C0-00200	2019	4065	250,270	260,000	05/22/19	96	13,875	273,875	91		
286	04	41	401	401	143	33	20249	7N3W13-00-01200	2019	4109	490,560	487,500	05/23/19	101	25,899	513,399	96		
288	02	21	401	401	131	33	8393	4N2W35-CB-00800	2019	4104	227,830	232,200	05/23/19	98	12,336	244,536	93		
291	06	61	401	401	141	33	17413	4N2W13-A0-00400	2019	4219	386,920	375,000	05/24/19	103	19,833	394,833	98		
293	05	51	401	401	136	33	27792	7N4W04-A0-00901	2019	4215	220,230	215,000	05/24/19	102	11,371	226,371	97		
294	04	42	401	541	141	33	15910	5N2W09-00-00405	2019	4114	403,450	515,000	05/24/19	78	27,238	542,238	74		
297	06	62	401	401	141	33	16263	5N2W26-D0-01100	2019	4151	639,600	620,000	05/28/19	103	32,200	652,200	98		
298	03	31	401	641	152	33	5062	4N3W24-00-00600	2019	4175	510,590	551,500	05/28/19	93	28,643	580,143	88		
309	04	41	400	640		33	20058	7N2W30-00-01900	2019	4249	104,480	100,000	05/31/19	104	5,122	105,122	99		
308	06	61	401	401	151	33	16673	4N1W06-C0-02907	2019	4311	548,980	425,000	05/31/19	129	21,769	446,769	123		
314	03	31	409	649	452	33	8246	4N2W33-A0-00600	2019	4355	264,450	379,000	06/03/19	70	19,142	398,142	66		
315	06	61	401	401	141	33	17429	4N2W13-A0-02100	2019	4449	363,140	355,000	06/04/19	102	17,845	372,845	97		
316	03	31	401	581	141	33	24675	5N4W34-00-00400	2019	4409	567,060	625,000	06/04/19	91	31,418	656,418	86		
318	06	67	401	401	131	33	8582	4N1W18-00-00300	2019	4427	349,340	318,500	06/05/19	110	15,934	334,434	104		
319	04	41	401	401	131	33	21415	6N2W21-A0-01300	2019	4415	279,790	282,500	06/05/19	99	14,133	296,633	94		
320	06	61	401	401	142	33	17001	4N1W08-BD-01200	2019	4437	528,920	557,000	06/05/19	95	27,867	584,867	90		
324	06	61	401	401	151	33	16515	4N1W05-BB-00904	2019	4501	748,920	649,000	06/06/19	115	32,315	681,315	110		
325	03	31	401	401	142	33	5004	4N3W14-00-00201	2019	4457	287,200	291,000	06/06/19	99	14,489	305,489	94		
328	02	21	401	401	143	33	5243	3N1W07-CB-00400	2019	4453	320,010	350,000	06/06/19	91	17,427	367,427	87		
333	04	41	401	641	136	33	20099	7N2W32-A0-00800	2019	4692	390,620	387,326	06/11/19	101	18,824	406,150	96		
337	05	51	401	641	142	33	20456	7N3W04-C0-01601	2019	4643	404,540	330,500	06/12/19	122	15,984	346,484	117		
338	02	21	401	401	162	33	5648	3N2W11-AC-00600	2019	4652	938,970	970,000	06/12/19	97	46,911	1,016,911	92		
344	06	67	400	400		33	8886	4N1W30-B0-00100	2019	4666	230,000	260,000	06/13/19	88	12,512	272,512	84		
341	06	67	401	401	142	33	8644	4N1W19-AA-00400	2019	4676	422,280	312,000	06/13/19	135	15,015	327,015	129		
357	03	31	401	401	135	33	24226	4N4W30-00-00202	2019	4892	293,950	369,000	06/19/19	80	17,230	386,230	76		
360	06	67	401	401	131	33	7924	4N2W25-A0-03500	2019	4920	267,120	279,900	06/21/19	95	12,936	292,836	91		
362	06	67	401	401	143	33	8599	4N1W18-B0-02600	2019	4890	506,700	542,000	06/21/19	93	25,050	567,050	89		
364	03	31	401	641	131	30	24191	4N4W20-00-00500	2019	4949	327,030	330,000	06/24/19	99	15,016	345,016	95		
369	05	55	409	409	462	33	27676	8N5W36-D0-00600	2019	5129	341,640	463,000	06/25/19	74	20,958	483,958	71		

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372	05	36	401	401	142	33	25260	6N5W06-BC-02900	2019	5073	311,110	271,500	06/26/19	115	12,225	283,725	110		
374	04	41	401	401	125	30	21433	6N2W22-00-00200	2019	5127	303,450	285,000	06/26/19	106	12,833	297,833	102		
375	06	61	401	551	143	33	17557	5N2W36-00-00210	2019	5062	792,250	776,500	06/26/19	102	34,963	811,463	98		
376	06	61	401	401	141	33	16805	4N1W07-AD-01301	2019	5065	367,230	360,000	06/26/19	102	16,210	376,210	98		
378	06	67	401	541	155	30	8743	4N1W19-B0-01500	2019	5262	721,650	799,000	06/26/19	90	35,976	834,976	86		
381	03	31	401	401	141	33	5125	4N3W13-C0-00600	2019	5133	473,410	605,000	06/26/19	78	27,241	632,241	75		
382	04	41	409	409	452	33	19884	7N2W23-CA-02003	2019	5138	226,300	301,000	06/26/19	75	13,553	314,553	72		
388	06	61	400	400		33	17374	4N2W12-DA-01100	2019	5054	179,060	228,000	06/27/19	79	10,212	238,212	75		
383	04	41	401	401	142	33	19866	7N2W23-CA-00600	2019	5055	386,920	296,900	06/27/19	130	13,298	310,198	125		
397	02	21	401	641	132	33	5536	3N2W02-00-04500	2019	5308	451,840	396,000	07/02/19	114	17,265	413,265	109		
400	06	61	401	401	142	33	16943	4N1W07-DB-01800	2019	5435	489,780	495,000	07/03/19	99	21,463	516,463	95		
402	06	67	401	401	141	33	8819	4N1W19-CA-01800	2019	5324	377,130	416,000	07/03/19	91	18,037	434,037	87		
404	06	61	401	401	152	33	14875	4N1W05-BA-00400	2019	5478	756,960	623,000	07/05/19	122	26,716	649,716	117		
405	06	61	401	401	143	30	16639	4N1W06-C0-01400	2019	5341	501,170	470,000	07/05/19	107	20,155	490,155	102		
411	05	51	401	581	143	33	20355	7N3W03-00-00902	2019	5350	425,780	488,000	07/05/19	87	20,927	508,927	84		
410	06	67	409	409	463	33	9128	4N2W24-B0-00501	2019	5403	411,140	440,000	07/05/19	93	18,868	458,868	90		
420	06	61	401	401	141	33	17538	5N2W35-AD-00501	2019	5472	426,220	419,000	07/10/19	102	17,469	436,469	98		
421	05	36	401	401	141	33	25259	6N5W06-BC-02800	2019	5542	173,290	170,000	07/10/19	102	7,088	177,088	98		
423	04	41	400	640		33	16494	6N2W36-00-00300	2019	5506	170,000	171,000	07/11/19	99	7,089	178,089	95		
424	04	41	401	401	131	33	15518	5N1W07-B0-00900	2019	5487	289,880	329,000	07/11/19	88	13,638	342,638	85		
427	05	51	400	640		33	26513	7N3W31-00-00601	2019	5547	97,820	165,000	07/12/19	59	6,800	171,800	57		
426	03	31	409	649	463	30	24231	4N4W31-00-00102	2019	5508	295,690	350,000	07/12/19	84	14,425	364,425	81		
428	06	61	400	400		33	16535	4N1W06-A0-00307	2019	5519	113,080	90,000	07/15/19	126	3,645	93,645	121		
429	02	21	401	401	135	33	5923	3N2W15-D0-01000	2019	5566	507,050	460,000	07/15/19	110	18,630	478,630	106		
432	04	41	401	641	375	30	15861	5N2W02-00-00600	2019	5671	116,850	140,000	07/16/19	83	5,637	145,637	80		
436	04	41	409	409	442	33	19702	7N2W20-C0-00206	2019	5613	220,700	247,000	07/17/19	89	9,886	256,886	86		
440	06	67	401	641	151	33	433233	4N2W24-BA-00306	2019	6261	676,830	789,900	07/18/19	86	31,427	821,327	82		
445	05	36	401	401	151	33	25248	6N5W06-BC-01700	2019	5828	325,340	278,000	07/22/19	117	10,795	288,795	113		
447	06	61	401	401	131	33	15016	4N1W08-BB-03400	2019	5756	293,520	314,000	07/22/19	93	12,193	326,193	90		

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453	02	64	400	400			33	6613	3N2W22-CA-07000	2019	7153	175,350	147,000	07/24/19	119	5,638	152,638	115	
455	05	51	401	401	136		30	28274	8N4W27-DC-01600	2019	6047	215,000	193,000	07/24/19	111	7,403	200,403	107	
462	05	51	400	640			33	20470	7N3W04-D0-00900	2019	5897	36,570	45,000	07/25/19	81	1,715	46,715	78	
464	05	51	400	640			33	20469	7N3W04-D0-00800	2019	5898	34,500	45,000	07/25/19	77	1,715	46,715	74	
458	05	55	401	551	136		30	27375	7N5W05-00-00300	2019	6031	359,410	300,000	07/25/19	120	11,435	311,435	115	
463	04	41	409	409	452		33	21394	6N2W21-00-00201	2019	6178	261,660	322,000	07/25/19	81	12,274	334,274	78	
473	03	31	401	401	155		33	23987	4N4W07-C0-01300	2019	6022	559,450	590,000	07/29/19	95	21,927	611,927	91	
481	03	31	401	641	143		33	433915	4N2W33-A0-00403	2019	6174	444,830	502,500	07/30/19	89	18,556	521,056	85	
485	03	31	401	641	133		33	7715	4N2W17-C0-01300	2019	6065	321,250	487,000	07/30/19	66	17,983	504,983	64	
480	04	41	409	649	463		33	21270	6N2W16-A0-00500	2019	6061	391,930	409,000	07/30/19	96	15,103	424,103	92	
483	04	45	409	409	451		33	20210	7N3W12-A0-00100	2019	6005	135,560	170,000	07/30/19	80	6,278	176,278	77	
487	05	55	401	551	134		33	27346	7N5W03-00-01100	2019	6096	327,590	264,000	07/31/19	124	9,686	273,686	120	
488	03	31	409	649	132		33	5160	4N3W13-D0-02101	2019	6059	309,530	367,000	07/31/19	84	13,465	380,465	81	
490	05	51	401	401	131		33	26604	7N4W21-BA-01100	2019	6099	277,220	290,000	08/01/19	96	10,571	300,571	92	
492	05	51	409	409	462		33	20473	7N3W04-D0-01200	2019	6171	206,670	323,600	08/01/19	64	11,795	335,395	62	
493	05	51	401	401	143		33	20824	7N3W16-C0-01600	2019	6217	356,040	335,000	08/02/19	106	12,131	347,131	103	
496	06	62	401	401			33	17836	5N2W30-00-00405	2019	6299	242,420	192,385	08/05/19	126	6,829	199,214	122	
497	06	61	401	401	141		33	17546	5N2W35-AD-01101	2019	6269	425,840	375,000	08/05/19	114	13,311	388,311	110	
498	04	41	401	541	142		33	18977	7N3W36-00-00601	2019	6238	470,500	485,000	08/05/19	97	17,216	502,216	94	
502	05	51	401	401	131		30	26729	7N4W27-00-01200	2019	6277	194,780	235,000	08/06/19	83	8,286	243,286	80	
504	06	61	401	401	131		33	17225	4N1W17-B0-11100	2019	6310	398,670	337,000	08/07/19	118	11,802	348,802	114	
508	02	21	409	649	132		33	8322	4N2W34-B0-02800	2019	6413	625,790	595,000	08/09/19	105	20,554	615,554	102	
514	02	21	401	681	154		33	8358	4N2W35-00-00303	2019	6473	749,290	775,000	08/13/19	97	26,033	801,033	94	
516	06	67	401	401	146		33	8894	4N2W13-B0-02100	2019	6523	593,570	635,000	08/14/19	93	21,179	656,179	90	
523	02	21	401	401	142		33	7123	3N2W13-C0-06200	2019	6618	491,020	516,800	08/16/19	95	16,991	533,791	92	
520	06	62	409	649	452		33	16287	5N2W27-B0-01700	2019	6575	325,130	300,000	08/16/19	108	9,863	309,863	105	
526	06	61	401	401	133		33	15220	4N2W02-00-03002	2019	6670	470,170	453,000	08/20/19	104	14,461	467,461	101	
530	06	61	400	640			33	439041	4N2W12-C0-00602	2019	7006	204,590	207,000	08/21/19	99	6,559	213,559	96	
531	06	61	400	640			33	439040	4N2W12-C0-00601	2019	6764	204,270	213,000	08/21/19	96	6,749	219,749	93	

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535	03	31	400	640		33	7582	4N2W16-00-02000	2019	7047	169,720	276,450	08/21/19	61	8,759	285,209	60		
529	02	21	401	401	152	33	8481	4N2W36-C0-01700	2019	7157	688,260	623,000	08/21/19	110	19,740	642,740	107		
543	06	61	401	401	141	33	16630	4N1W06-C0-00700	2019	7052	439,800	383,000	08/27/19	115	11,588	394,588	111		
550	04	41	400	400		33	433592	6N2W21-A0-01402	2019	7079	120,570	122,000	08/28/19	99	3,662	125,662	96		
549	06	61	401	401	143	33	16574	4N1W06-AD-03400	2019	6929	467,140	450,000	08/28/19	104	13,508	463,508	101		
554	04	42	401	641	141	33	15935	5N2W09-00-02100	2019	6921	444,630	587,500	08/28/19	76	17,635	605,135	73		
560	03	31	400	640		33	7584	4N2W16-00-02200	2019	7173	153,530	169,000	08/29/19	91	5,033	174,033	88		
558	06	67	401	401	151	33	7482	4N1W30-B0-01800	2019	7002	559,840	543,000	08/29/19	103	16,170	559,170	100		
561	06	61	401	401	135	33	15802	5N1W33-A0-01200	2019	7231	302,320	340,000	08/29/19	89	10,125	350,125	86		
566	04	41	401	401	132	33	15456	5N1W06-00-00800	2019	7025	330,580	352,800	08/30/19	94	10,422	363,222	91		
568	03	31	409	409	473	33	5100	3N2W18-00-00800	2019	7090	430,420	485,000	09/03/19	89	13,865	498,865	86		
577	05	51	400	640		30	439246	7N3W10-B0-00905	2019	7229	80,340	97,500	09/05/19	82	2,741	100,241	80		
580	06	61	401	401	131	33	17179	4N1W17-CB-01100	2019	7291	322,820	349,900	09/09/19	92	9,503	359,403	90		
588	06	61	400	400		30	17373	4N2W12-DA-01000	2019	7337	174,810	227,000	09/10/19	77	6,111	233,111	75		
587	03	31	401	641	142	33	7855	4N2W21-A0-00800	2019	7464	437,750	550,000	09/10/19	80	14,806	564,806	78		
589	04	42	401	401	134	33	17622	5N3W01-A0-00400	2019	7923	241,880	367,000	09/10/19	66	9,880	376,880	64		
591	05	51	401	641	143	33	20801	7N3W16-00-01701	2019	7446	401,000	357,500	09/12/19	112	9,454	366,954	109		
594	05	51	401	401	141	33	27932	8N3W19-D0-00200	2019	7573	359,640	366,000	09/12/19	98	9,679	375,679	96		
595	03	31	401	401	145	33	24453	5N4W23-BC-01000	2019	7492	291,310	400,000	09/12/19	73	10,578	410,578	71		
601	02	21	401	401	141	33	5435	3N2W01-CC-01300	2019	7700	312,070	375,000	09/16/19	83	9,559	384,559	81		
600	03	31	409	649	463	33	5592	3N2W09-00-00701	2019	7606	432,030	485,000	09/16/19	89	12,363	497,363	87		
609	05	51	400	400		33	20468	7N3W04-D0-00700	2019	7745	34,870	50,000	09/17/19	70	1,263	51,263	68		
603	03	31	401	401	141	33	5154	4N3W13-D0-01600	2019	7652	525,550	475,000	09/17/19	111	11,995	486,995	108		
607	03	31	409	409	451	33	23982	4N4W07-C0-00800	2019	7598	182,390	224,900	09/17/19	81	5,679	230,579	79		
615	06	61	401	401	141	33	16725	4N1W07-AA-01500	2019	7747	310,280	325,000	09/20/19	95	7,975	332,975	93		
616	03	31	401	641	133	33	24520	5N4W28-00-00901	2019	7950	330,300	420,000	09/21/19	79	10,206	430,206	77		
622	03	31	401	401	144	33	24829	5N4W03-00-00700	2019	8164	514,330	440,000	09/24/19	117	10,378	450,378	114		
623	05	51	401	401	145	33	28177	8N4W26-C0-00400	2019	7872	312,510	289,500	09/24/19	108	6,828	296,328	105		
628	02	21	400	640		33	5644	3N2W11-AC-00200	2019	7993	236,000	200,000	09/25/19	118	4,669	204,669	115		

#	M	A	S	A	CL	CL	CL	Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
630	03	31	401	641	131	33	5044	4N3W14-D0-01800	2019	7944	402,990	390,000	09/25/19	103	9,105	399,105	101		
632	06	61	401	401	136	33	17301	4N2W01-00-02500	2019	7958	316,770	329,900	09/25/19	96	7,702	337,602	94		
636	04	41	401	401	142	33	20302	7N3W14-A0-00200	2019	7984	360,710	320,000	09/26/19	113	7,395	327,395	110		
639	02	21	409	409	442	30	8312	4N2W34-B0-01700	2019	7946	249,450	285,000	09/26/19	88	6,586	291,586	86		
640	03	31	409	409	473	33	24101	4N4W09-00-00101	2019	7961	262,030	400,000	09/26/19	66	9,244	409,244	64		
641	06	67	401	541	315	33	8144	4N2W26-A0-00800	2019	8111	252,290	220,000	09/27/19	115	5,032	225,032	112		
642	06	61	401	401	142	33	17186	4N1W17-CB-02300	2019	8279	443,660	424,500	09/27/19	105	9,709	434,209	102		
645	06	61	401	401	131	33	15034	4N1W08-BC-00900	2019	8130	284,350	305,000	09/27/19	93	6,976	311,976	91		
646	06	62	401	401	131	33	16302	5N2W27-A0-01600	2019	8168	265,620	294,500	09/27/19	90	6,735	301,235	88		
643	05	51	409	409	472	33	25378	6N5W14-00-00500	2019	8150	245,510	240,711	09/27/19	102	5,505	246,216	100		
654	06	61	401	401	142	33	16647	4N1W06-C0-01902	2019	8230	508,420	444,500	10/01/19	114	9,742	454,242	112		
660	04	41	400	400		33	439730	5N2W12-A0-00601	2019	8202	120,180	160,000	10/02/19	75	3,469	163,469	74		
655	06	61	401	401	142	33	15141	4N1W17-B0-02400	2019	8205	374,760	351,500	10/02/19	107	7,620	359,120	104		
657	05	55	401	551	133	33	28223	8N4W27-00-01400	2019	8226	374,310	410,000	10/02/19	91	8,889	418,889	89		
662	06	67	401	401	153	33	9136	4N2W24-B0-00607	2019	8406	666,550	544,240	10/07/19	122	11,151	555,391	120		
670	04	41	401	641	152	33	20181	7N3W11-B0-00700	2019	8441	697,950	575,000	10/08/19	121	11,644	586,644	119		
671	04	41	409	409	452	33	18862	7N3W24-00-00403	2019	8439	231,570	315,000	10/08/19	74	6,379	321,379	72		
672	03	31	409	649	442	33	7888	4N2W21-D0-00101	2019	8458	282,040	387,400	10/08/19	73	7,845	395,245	71		
673	04	41	401	401	142	33	19879	7N2W23-CA-01700	2019	8544	439,860	370,000	10/10/19	119	7,316	377,316	117		
679	06	61	401	401	146	33	17264	4N2W01-00-00100	2019	8659	471,680	450,000	10/11/19	105	8,791	458,791	103		
682	05	51	401	641	135	33	27729	7N4W03-A0-01000	2019	8515	305,500	358,000	10/11/19	85	6,994	364,994	84		
685	05	51	401	401	142	33	26770	7N4W35-00-00201	2019	8656	503,240	460,000	10/14/19	109	8,658	468,658	107		
687	05	51	401	641	142	33	26585	7N4W21-00-01400	2019	8605	446,930	495,000	10/14/19	90	9,316	504,316	89		
689	05	51	401	401	135	30	20731	7N3W10-CC-01100	2019	8654	237,840	255,000	10/15/19	93	4,739	259,739	92		
691	05	51	401	401	141	33	27035	7N4W09-BA-00800	2019	8684	276,800	280,000	10/16/19	99	5,136	285,136	97		
696	03	31	401	641	143	33	7600	4N2W16-00-03200	2019	8800	394,060	484,900	10/17/19	81	8,780	493,680	80		
695	04	42	409	409	452	33	21585	6N2W31-00-00705	2019	8750	244,590	293,500	10/17/19	83	5,314	298,814	82		
699	05	51	400	400		33	437166	7N4W09-B0-02402	2019	8733	66,450	90,000	10/18/19	74	1,608	91,608	73		
698	05	51	401	401	132	33	28233	8N4W27-A0-00900	2019	8709	184,300	173,000	10/18/19	107	3,091	176,091	105		

#	M	A	S	A	CL	CL	CL	Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
701	03	31	400	640		33	7585	4N2W16-00-02300	2019	10793	166,570	275,000	10/21/19	61	4,717	279,717	60		
705	06	61	401	401	152	33	15781	5N1W32-CD-00300	2019	8937	504,400	499,500	10/24/19	101	8,211	507,711	99		
706	06	67	401	401	143	33	9210	4N2W24-D0-00100	2019	8888	533,150	550,000	10/24/19	97	9,041	559,041	95		
712	04	41	401	401	142	33	19633	7N2W19-AA-00300	2019	9018	408,110	370,000	10/28/19	110	5,730	375,730	109		
714	04	41	401	401	141	33	434127	5N2W10-A0-00307	2019	9105	374,630	430,000	10/28/19	87	6,659	436,659	86		
715	05	51	401	401	141	33	26617	7N4W22-00-00212	2019	9007	222,970	260,000	10/28/19	86	4,026	264,026	84		
720	06	67	401	401	142	33	7476	4N1W30-B0-01200	2019	9081	460,740	515,000	10/29/19	89	7,852	522,852	88		
721	06	61	401	401		33	17118	4N1W08-D0-02300	2019	9131	176,910	150,000	10/30/19	118	2,251	152,251	116		
722	06	61	401	401	143	33	16546	4N1W06-A0-00401	2019	9154	541,450	460,000	10/30/19	118	6,904	466,904	116		
725	05	51	401	401	143	30	27037	7N4W09-BA-01000	2019	9193	343,020	290,000	10/31/19	118	4,284	294,284	117		
727	03	31	401	641	143	33	24544	5N4W31-00-00500	2019	9254	507,860	555,000	10/31/19	92	8,198	563,198	90		
729	03	31	409	649	462	33	24102	4N4W09-00-00200	2019	9142	265,790	340,000	10/31/19	78	5,022	345,022	77		
735	03	31	401	641	153	33	8535	4N2W19-00-00803	2019	9341	761,420	750,000	11/03/19	102	10,542	760,542	100		
740	06	67	401	541	146	33	8682	4N1W19-D0-02600	2019	9345	502,560	510,000	11/05/19	99	6,926	516,926	97		
742	05	51	401	681	142	30	20803	7N3W16-00-01900	2019	9321	638,080	520,000	11/06/19	123	6,937	526,937	121		
749	04	44	400	400		30	18653	7N2W35-AD-02501	2019	9379	55,000	41,000	11/07/19	134	537	41,537	132		
753	06	61	400	400		33	15789	5N1W32-DC-02300	2019	9807	89,760	75,000	11/08/19	120	965	75,965	118		
754	04	44	401	401	141	33	18643	7N2W35-AD-01400	2019	9574	272,610	290,000	11/08/19	94	3,731	293,731	93		
755	06	61	401	401	152	33	16910	4N1W07-C0-02301	2019	9562	669,730	650,000	11/11/19	103	7,898	657,898	102		
758	05	51	401	641	141	33	436189	8N4W34-A0-00101	2019	9548	329,810	365,000	11/11/19	90	4,435	369,435	89		
762	06	61	409	409	463	30	17127	4N1W17-A0-00400	2019	9450	319,760	329,000	11/12/19	97	3,919	332,919	96		
763	04	41	409	409	452	33	19640	7N2W19-AA-01001	2019	9751	181,170	228,900	11/12/19	79	2,727	231,627	78		
765	06	61	401	401	131	33	16964	4N1W07-DD-00500	2019	9518	309,650	350,000	11/13/19	88	4,086	354,086	87		
768	04	41	401	641	134	33	20138	7N2W34-00-00800	2019	9553	428,000	349,500	11/14/19	122	3,997	353,497	121		
769	04	42	401	401	136	33	19181	6N2W06-00-01900	2019	9690	348,600	315,000	11/14/19	111	3,602	318,602	109		
770	05	51	401	641	133	30	21779	7N3W22-C0-01700	2019	9615	560,260	550,000	11/14/19	102	6,289	556,289	101		
771	03	31	401	641	142	33	5079	4N3W24-00-02200	2019	9610	434,700	449,900	11/14/19	97	5,145	455,045	96		
772	04	42	401	641	155	33	15917	5N2W09-00-00800	2019	9951	705,270	650,000	11/15/19	109	7,278	657,278	107		
774	06	67	409	409	452	33	9153	4N2W24-BA-00303	2019	9937	339,300	440,000	11/15/19	77	4,927	444,927	76		

#	M	A	S	A	CL	CL	CL	Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
775	02	21	401	401	155	30	7121	3N2W24-B0-01500	2019	9603	618,060	550,000	11/16/19	112	6,027	556,027	111		
778	04	41	401	641	143	33	19296	6N2W11-00-00700	2019	9685	389,430	390,000	11/18/19	100	4,088	394,088	99		
780	04	42	409	409	452	33	18811	6N3W12-00-00201	2019	9747	230,030	272,000	11/18/19	85	2,851	274,851	84		
781	06	62	409	409	442	33	17513	5N2W26-D0-02300	2019	9660	252,960	299,700	11/18/19	84	3,142	302,842	84		
784	06	67	401	401	136	33	8852	4N1W19-D0-00600	2019	9873	311,190	325,000	11/20/19	96	3,252	328,252	95		
787	02	21	401	401	131	33	5282	3N1W07-CC-00800	2019	9868	385,060	320,000	11/21/19	120	3,126	323,126	119		
789	03	31	401	401	135	33	24339	4N5W13-00-02101	2019	9990	297,860	349,000	11/21/19	85	3,409	352,409	85		
792	06	61	401	401	153	33	429115	5N2W36-C0-00102	2019	9902	734,480	715,000	11/22/19	103	6,814	721,814	102		
797	02	21	400	400		33	5562	3N2W02-D0-02000	2019	9899	68,330	95,000	11/25/19	72	837	95,837	71		
795	06	67	401	401	142	33	8657	4N1W19-AA-01800	2019	10532	503,220	449,000	11/25/19	112	3,958	452,958	111		
799	05	51	400	400		33	25561	7N5W32-00-01000	2019	9935	77,560	80,000	11/26/19	97	686	80,686	96		
800	05	51	409	409	462	33	27403	7N5W05-00-01913	2019	10084	134,820	170,000	11/26/19	79	1,458	171,458	79		
807	03	31	401	401	141	33	24055	4N4W08-AA-00600	2019	10264	386,350	420,000	12/03/19	92	2,902	422,902	91		
808	05	51	401	401	141	33	28164	8N4W26-00-00300	2020	120	479,410	522,000	12/03/19	92	3,606	525,606	91		
810	03	31	401	401	142	33	24613	5N4W33-00-00700	2019	10268	706,770	870,500	12/03/19	81	6,014	876,514	81		
805	04	42	409	409	190	30	18797	6N3W11-00-01301	2019	10232	270,290	206,000	12/03/19	131	1,423	207,423	130		
814	05	51	401	401	131	33	28338	8N4W34-A0-02000	2019	10300	173,690	205,000	12/04/19	85	1,367	206,367	84		
818	06	61	401	401	135	33	16795	4N1W07-AD-00600	2019	10247	339,090	318,000	12/05/19	107	2,046	320,046	106		
824	06	61	401	401	142	33	16590	4N1W06-B0-00800	2019	10490	423,980	391,000	12/06/19	108	2,422	393,422	108		
823	05	51	409	649	441	33	26573	7N4W21-00-00400	2019	10329	200,900	170,000	12/06/19	118	1,053	171,053	117		
830	02	21	401	401	131	33	8388	4N2W35-CB-00501	2019	10364	248,100	290,000	12/10/19	86	1,520	291,520	85		
832	06	67	400	400		33	439734	4N1W30-B0-00101	2019	10352	230,000	252,500	12/11/19	91	1,263	253,763	91		
834	04	41	401	641	131	33	20111	7N2W32-B0-00400	2019	10472	410,190	362,500	12/12/19	113	1,727	364,227	113		
835	06	61	401	401	135	30	16924	4N1W07-DA-01700	2019	10485	254,330	240,000	12/12/19	106	1,144	241,144	105		
838	04	41	401	641	136	30	19033	6N2W02-00-01100	2019	10479	450,250	420,000	12/13/19	107	1,901	421,901	107		
840	05	51	401	641	141	33	20472	7N3W04-D0-01100	2019	10496	320,690	389,900	12/13/19	82	1,765	391,665	82		
845	05	51	409	409	452	33	25438	6N5W20-00-00801	2019	10587	199,200	192,000	12/16/19	104	732	192,732	103		
848	03	31	401	641	174	33	23877	4N4W03-00-00800	2019	10631	1,157,830	925,000	12/17/19	125	3,306	928,306	125		
849	05	51	401	641	151	33	26517	7N3W31-00-00900	2019	10679	527,510	475,000	12/17/19	111	1,697	476,697	111		

#	MA	SA	CL	RMV Prop CL	Stat CL	Cond Code	Acct No	Map #	Book	Page	Total RMV	Final Price	Sales Date	Before Adj Ratio	Total Adj	Time Adj. Sales Price	Time Adj Ratio
854	06	61	401	401	154	33	16514	4N1W05-BB-00903	2019	10645	769,040	647,000	12/18/19	119	2,158	649,158	118
857	05	55	401	541	136	33	27290	7N5W01-00-00500	2019	10776	373,240	399,000	12/18/19	94	1,331	400,331	93
860	04	41	400	400		30	432044	5N2W11-B0-00102	2019	10697	101,280	115,000	12/19/19	88	356	115,356	88
859	04	42	401	401	131	30	21969	6N3W23-00-01102	2019	10700	361,450	350,000	12/19/19	103	1,084	351,084	103
862	05	51	401	641	142	33	27963	8N3W19-DB-01900	2020	418	302,900	315,000	12/20/19	96	901	315,901	96
863	03	31	401	401	144	33	7546	4N2W16-A0-00700	2019	10758	480,250	550,000	12/20/19	87	1,572	551,572	87
868	06	61	401	401	131	30	17258	4N1W18-D0-00100	2019	10943	407,550	477,000	12/27/19	85	568	477,568	85

*SUPPLEMENTAL
NOTES*

Areas of Reappraisal

For this Ratio year, all areas have undergone a recalculation. No physical re-appraisals were performed due to limited staffing and an increase in new construction site visits.

Areas of Recalculation

Maintenance Area 1	City of St. Helens
Maintenance Area 2	Scappoose
Maintenance Area 3	Vernonia
Maintenance Area 4	Rainier
Maintenance Area 5	Clatskanie
Maintenance Area 6	Rural St. Helens, City of Columbia City, Warren and Deer Island
Maintenance Area 7	Personal Property Manufactured Structures; Countywide
Floating Property	Personal Property Floating Homes, Boathouses and Combinations; Countywide

Changed Study Areas

MA 03 SA 38: This area is a small subdivision of vacant and improved lots located in the City of Vernonia. Market indicators have illustrated that this area moves similarly to those properties located in the general area (SA 00) within the city. Since market perception and indicators no longer view this area as unique, it has been combined with MA 03 SA 00.

MA 06 SA 67: This is a new study area that was created for the 2020 year. This area is comprised of developed and undeveloped rural properties located in Warren and surrounding the City of St. Helens. These unique properties are found around the Columbia Slough and the Columbia River Highway and have been shown to move differently on the market than those properties located in MA 06 SA 61. However, due to this area not existing for the 2019 sales collection year, both MA 06 SA 61 and SA 67 were analyzed together. For the next ratio year, these studies will be ran individually.

*SUMMARY OF RATIO
INDICATIONS*

YEAR	RMV CL	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC	LOCATION
2020	003	01	00	000	100	100	100	100			X	St. Helens
2020	003	02	00	000	100	100	100	100			X	Scappoose
2020	003	03	00	000	100	100	100	100			X	Vernonia
2020	003	04	00	000	100	100	100	100			X	Rainier
2020	003	04	41	000	100	100	100	100			X	Rainier
2020	003	05	00	000	100	100	100	100			X	Clatskanie
2020	003	06	00	000	100	100	100	100			X	Rural St. Helens/Warren
2020	008	01	01	000	100	100	100	100			X	St. Helens
2020	008	01	90	000	100	100	100	100			X	St. Helens
2020	008	02	00	000	100	100	100	100			X	Scappoose
2020	008	02	90	000	100	100	100	100			X	Scappoose
2020	008	04	00	000	100	100	100	100			X	Rainier
2020	008	05	00	000	100	100	100	100			X	Clatskanie
2020	008	06	90	000	100	100	100	100			X	Rural St. Helens/Warren
2020	010	01	02	000	100	100	100	100			X	St. Helens
2020	010	02	00	000	100	100	100	100			X	Scappoose
2020	010	03	00	000	100	100	100	100			X	Vernonia
2020	010	03	03	000	100	100	100	100			X	Vernonia
2020	010	04	00	000	100	100	100	100			X	Rainier
2020	010	05	00	000	100	100	100	100			X	Clatskanie
2020	010	06	00	000	100	100	100	100			X	Rural St. Helens/Warren
2020	019	07	01	000	100	100	100	100			X	St. Helens
2020	019	07	02	000	100	100	100	100			X	Scappoose
2020	019	07	03	000	100	100	103	103			X	Vernonia
2020	019	07	04	000	100	100	103	103			X	Rainier
2020	019	07	05	000	100	100	103	103			X	Clatskanie
2020	019	07	06	000	100	100	100	100			X	Rural St. Helens/Warren
2020	019	07	27	000	100	100	141	141			X	Crestwood Village
2020	019	07	28	000	100	100	141	141			X	Columbia City Estates
2020	019	07	30	000	100	100	152	152			X	Springlake Meadows
2020	019	07	31	000	100	100	100	100			X	Crown Point
2020	019	07	35	000	100	100	95	95			X	Riverside Meadows St.
2020	020	01	03	000	100	100	100	100			X	Helens
2020	020	02	00	000	100	100	100	100			X	Scappoose
2020	020	03	00	000	100	100	100	100			X	Vernonia
2020	020	04	00	000	100	100	100	100			X	Rainier
2020	020	05	00	000	100	100	100	100			X	Clatskanie
2020	030	01	04	000	100	100	100	100			X	St. Helens
2020	030	03	00	000	100	100	100	100			X	Vernonia
2020	030	04	00	000	100	100	100	100			X	Rainier
2020	030	05	00	000	100	100	100	100			X	Clatskanie
2020	030	06	00	000	100	100	100	100			X	Rural St. Helens/Warren
2020	032	03	00	000	100	100	100	100			X	Vernonia
2020	032	05	00	000	100	100	100	100			X	Clatskanie
2020	040	02	00	000	100	100	100	100			X	Scappoose
2020	040	02	21	000	100	100	100	100			X	Scappoose
2020	040	03	00	000	100	100	100	100			X	Vernonia
2020	040	03	31	000	100	100	100	100			X	Vernonia
2020	040	04	00	000	100	100	100	100			X	Rainier
2020	040	04	41	000	100	100	100	100			X	Rainier

YEAR	RMV CL	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC	LOCATION
2020	040	04	42	000	100	100	100	100			X	Rainier
2020	040	05	00	000	100	100	100	100			X	Clatskanie
2020	040	06	00	000	100	100	100	100			X	Rural St. Helens/Warren
2020	040	06	61	000	100	100	100	100			X	Rural St. Helens/Warren
2020	040	06	62	000	100	100	100	100			X	Rural St. Helens/Warren
2020	100	01	00	000	111	100	100	111	18.52	1.03	X	St. Helens
2020	100	01	15	000	106	100	100	106			X	St. Helens
2020	100	02	00	000	105	100	100	105		1.00	X	Scappoose
2020	100	02	79	000	87	100	100	87			X	Scappoose
2020	100	03	00	000	108	100	100	108	17.99	1.02	X	Vernonia
2020	100	03	03	000	108	100	100	108	17.99	1.02	X	Vernonia
2020	100	04	00	000	104	100	100	104	25.39	1.02	X	Rainier
2020	100	05	00	000	104	100	100	104	0.52	1.00	X	Clatskanie
2020	100	06	01	000	103	100	100	103			X	Columbia City Columbia
2020	100	06	15	000	103	100	100	103			X	City
2020	101	01	06	000	111	100	115	112	11.66	0.99	X	St. Helens
2020	101	01	15	000	106	100	107	106	10.64	1.03	X	St. Helens
2020	101	01	30	000	111	100	115	112	22.55	0.97	X	St. Helens
2020	101	01	43	000	111	100	112	110	12.08	1.01	X	St. Helens
2020	101	01	80	000	111	100	115	112			X	St. Helens
2020	101	02	00	000	105	100	106	105	6.84	1.00	X	Scappoose
2020	101	02	28	000	105	100	119	112	2.25	1.00	X	Scappoose
2020	101	02	33	000	105	100	99	100	3.18	1.00	X	Scappoose
2020	101	02	79	000	87	100	86	87	1.53	1.00	X	Scappoose
2020	101	02	80	000	97	100	97	97	5.56	1.00	X	Scappoose
2020	101	03	00	000	108	100	132	123	14.01	0.99	X	Vernonia
2020	101	03	03	000	108	100	132	123	14.01	0.99	X	Vernonia
2020	101	03	40	000	108	100	132	123			X	Vernonia
2020	101	04	00	000	104	100	105	104	12.86	0.98	X	Rainier
2020	101	04	40	000	104	100	105	104			X	Rainier
2020	101	04	47	000	89	100	88	89	11.61	1.00	X	Rainier
2020	101	05	00	000	104	100	118	114	10.73	0.99	X	Clatskanie
2020	101	05	40	000	104	100	118	114			X	Clatskanie
2020	101	06	01	000	103	100	104	103	11.74	0.99	X	Columbia City
2020	101	06	15	000	103	100	104	103			X	Columbia City
2020	101	06	31	000	103	100	104	103			X	Columbia City
2020	102	01	07	000	100	100	114	112		1.00	X	St. Helens
2020	102	02	00	000	100	100	105	105		1.00	X	Scappoose
2020	102	02	21	000	100	100	105	105			X	Scappoose
2020	102	04	00	000	100	100	118	118		0.99	X	Rainier
2020	109	01	08	000	111	100	115	112	1.99	1.00	X	St. Helens
2020	109	02	00	000	105	100	130	115	7.51	0.99	X	Scappoose
2020	109	03	00	000	108	100	197	161	7.03	0.99	X	Vernonia
2020	109	03	03	000	108	100	197	161	7.03	0.99	X	Vernonia
2020	109	03	38	000	108	100	169	145	2.90	1.00	X	Vernonia
2020	109	04	00	000	104	100	105	104	9.23	1.01	X	Rainier
2020	109	05	00	000	104	100	137	122	18.11	1.05	X	Clatskanie
2020	109	06	01	000	103	100	104	103			X	Columbia City
2020	109	06	15	000	103	100	104	103			X	Columbia City

YEAR	RMV	CL	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE	CALC	LOCATION
2020	111	01	95	000	100	100	135	135				X		St. Helens
2020	111	01	97	000	100	100	100	100				X		St. Helens
2020	111	02	95	000	100	100	135	135				X		Scappoose
2020	111	02	97	000	100	100	100	100				X		Scappoose
2020	111	04	95	000	100	100	100	100				X		Rainier
2020	111	04	97	000	100	100	100	100				X		Rainier
2020	111	05	95	000	100	100	100	100				X		Clatskanie
2020	111	05	97	000	100	100	100	100				X		Clatskanie
2020	111	06	95	000	100	100	135	135				X		Rural St. Helens/Warren
2020	111	06	97	000	100	100	100	100				X		Rural St. Helens/Warren
2020	200	01	09	000	120	100	100	120				X		St. Helens
2020	200	01	72	000	125	100	100	125	30.50	1.36		X		St. Helens
2020	200	01	73	000	125	100	100	125		1.00		X		St. Helens
2020	200	02	00	000	120	100	100	120				X		Scappoose
2020	200	02	71	000	125	100	100	125	30.50	1.36		X		Scappoose
2020	200	02	72	000	125	100	100	125	30.50	1.36		X		Scappoose
2020	200	02	73	000	125	100	100	125		1.00		X		Scappoose
2020	200	03	00	000	116	100	100	116				X		Vernonia
2020	200	03	73	000	111	100	100	111				X		Vernonia
2020	200	04	00	000	116	100	100	116				X		Rainier
2020	200	04	71	000	111	100	100	111	35.48	1.09		X		Rainier
2020	200	04	72	000	111	100	100	111	35.48	1.09		X		Rainier
2020	200	04	73	000	111	100	100	111				X		Rainier
2020	200	05	00	000	116	100	100	116				X		Clatskanie
2020	200	05	72	000	111	100	100	111	35.48	1.09		X		Clatskanie
2020	200	06	00	000	120	100	100	120				X		Rural St. Helens/Warren
2020	200	06	72	000	125	100	100	125	30.50	1.36		X		Rural St. Helens/Warren
2020	201	01	10	000	120	100	100	120	21.13	1.01		X		St. Helens
2020	201	01	71	000	125	100	100	125	30.50	1.36		X		St. Helens
2020	201	01	72	000	125	100	100	125	30.50	1.36		X		St. Helens
2020	201	01	73	000	125	100	100	125		1.00		X		St. Helens
2020	201	02	00	000	120	100	100	120	21.13	1.01		X		Scappoose
2020	201	02	71	000	125	100	100	125	30.50	1.36		X		Scappoose
2020	201	02	72	000	125	100	100	125	30.50	1.36		X		Scappoose
2020	201	02	73	000	125	100	100	125		1.00		X		Scappoose
2020	201	03	00	000	116	100	100	116	36.32	1.09		X		Vernonia
2020	201	03	73	000	111	100	100	111				X		Vernonia
2020	201	04	00	000	116	100	100	116	36.32	1.09		X		Rainier
2020	201	04	71	000	111	100	100	111	35.48	1.09		X		Rainier
2020	201	04	72	000	111	100	100	111	35.48	1.09		X		Rainier
2020	201	05	00	000	116	100	100	116	36.32	1.09		X		Clatskanie
2020	201	05	71	000	111	100	100	111	35.48	1.09		X		Clatskanie
2020	201	05	72	000	111	100	100	111	35.48	1.09		X		Clatskanie
2020	201	06	00	000	120	100	100	120	21.13	1.01		X		Rural St. Helens/Warren
2020	201	06	72	000	125	100	100	125	30.50	1.36		X		Rural St. Helens/Warren
2020	201	06	73	000	125	100	100	125		1.00		X		Rural St. Helens/Warren
2020	207	01	11	000	100	100	100	100	1.82	1.00		X		St. Helens
2020	207	02	00	000	100	100	100	100	1.82	1.00		X		Scappoose
2020	207	03	00	000	100	100	100	100	1.82	1.00		X		Vernonia
2020	207	04	00	000	100	100	100	100	1.82	1.00		X		Rainier

YEAR	RMV	CL	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE	CALC	LOCATION
2020	207	05	00	000	100	100	100	100	100	1.82	1.00	X		Clatskanie
2020	207	06	00	000	100	100	100	100	100	1.82	1.00	X		Rural St. Helens/Warren
2020	300	01	12	000	100	100	100	100	100			X		St. Helens
2020	300	02	00	000	100	100	100	100	100			X		Scappoose
2020	300	02	74	000	100	100	100	100	100			X		Scappoose
2020	300	02	77	000	100	100	100	100	100			X		Scappoose
2020	300	03	00	000	100	100	100	100	100			X		Vernonia
2020	300	04	00	000	100	100	100	100	100			X		Rainier
2020	300	05	00	000	100	100	100	100	100			X		Clatskanie
2020	300	06	00	000	100	100	100	100	100			X		Rural St. Helens/Warren
2020	301	01	13	000	100	100	100	100	100			X		St. Helens
2020	301	02	00	000	100	100	100	100	100			X		Scappoose
2020	301	02	74	000	100	100	100	100	100			X		Scappoose
2020	301	02	77	000	100	100	100	100	100			X		Scappoose
2020	301	03	00	000	100	100	100	100	100			X		Vernonia
2020	301	04	00	000	100	100	100	100	100			X		Rainier
2020	301	04	74	000	100	100	100	100	100			X		Rainier
2020	301	05	00	000	100	100	100	100	100			X		Clatskanie
2020	301	06	00	000	100	100	100	100	100			X		Rural St. Helens/Warren
2020	303	01	14	000	100	100	100	100	100			X		St. Helens
2020	303	02	00	000	100	100	100	100	100			X		Scappoose
2020	303	02	77	000	100	100	100	100	100			X		Scappoose
2020	303	04	00	000	100	100	100	100	100			X		Rainier
2020	303	05	00	000	100	100	100	100	100			X		Clatskanie
2020	308	01	90	000	100	100	100	100	100		1.00	X		St. Helens
2020	308	02	90	000	100	100	100	100	100		1.00	X		Scappoose
2020	308	04	90	000	100	100	100	100	100		1.00	X		Rainier
2020	308	06	00	000	100	100	100	100	100		1.00	X		Rural St. Helens/Warren
2020	333	02	00	000	100	100	100	100	100			X		Scappoose
2020	400	02	21	000	108	100	100	108	108	24.21	0.92	X		Scappoose
2020	400	02	25	000	108	100	100	108	108			X		Scappoose
2020	400	02	45	000	100	100	100	100	100			X		Sauvie Island
2020	400	02	60	000	100	100	100	100	100			X		Scappoose
2020	400	02	62	000	108	100	100	108	108			X		Scappoose
2020	400	02	64	000	108	100	100	108	108	31.49	1.01	X		Scappoose
2020	400	03	31	000	112	100	100	112	112	27.89	1.10	X		Vernonia
2020	400	04	41	000	105	100	100	105	105	11.73	1.05	X		Rainier
2020	400	04	42	000	109	100	100	109	109		1.00	X		Rainier
2020	400	04	44	000	105	100	100	105	105	11.73	1.05	X		Rainier
2020	400	04	45	000	105	100	100	105	105			X		Rainier
2020	400	04	56	000	105	100	100	105	105			X		Rainier
2020	400	05	36	000	93	100	100	93	93			X		Clatskanie
2020	400	05	51	000	103	100	100	103	103	11.02	1.03	X		Clatskanie
2020	400	05	55	000	102	100	100	102	102			X		Clatskanie
2020	400	05	60	000	100	100	100	100	100			X		Clatskanie
2020	400	06	61	000	114	100	100	114	114	15.38	1.04	X		Rural St. Helens/Warren
2020	400	06	62	000	102	100	100	102	102		1.00	X		Rural St. Helens/Warren
2020	400	06	67	000	114	100	100	114	114	15.38	1.04	X		Rural St. Helens/Warren
2020	401	02	21	000	108	100	109	108	108	11.29	1.00	X		Scappoose
2020	401	02	25	000	108	100	109	108	108		1.00	X		Scappoose

YEAR	RMV	CL	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE	CALC	LOCATION
2020	401	02	41	000	100	100	100	100	100				X	Sauvie Island
2020	401	02	45	000	100	100	100	100	100				X	Sauvie Island
2020	401	02	62	000	108	100	109	108	108				X	Scappoose
2020	401	02	64	000	108	100	109	108	108	0.55	1.00		X	Scappoose
2020	401	03	31	000	112	100	115	112	112	11.27	0.99		X	Vernonia
2020	401	04	41	000	105	100	96	100	100	10.21	0.99		X	Rainier
2020	401	04	42	000	109	100	111	109	109	19.12	0.99		X	Rainier
2020	401	04	44	000	105	100	96	100	100	10.21	0.99		X	Rainier
2020	401	04	45	000	105	100	96	100	100				X	Rainier
2020	401	05	36	000	93	100	92	93	93	4.59	0.99		X	Clatskanie
2020	401	05	51	000	103	100	104	103	103	10.04	1.01		X	Clatskanie
2020	401	05	55	000	102	100	103	102	102	10.51	1.02		X	Clatskanie
2020	401	06	61	000	114	100	90	100	100	8.33	1.00		X	Rural St. Helens/Warren
2020	401	06	62	000	102	100	103	102	102	10.00	1.02		X	Rural St. Helens/Warren
2020	401	06	67	000	114	100	90	100	100	8.33	1.00		X	Rural St. Helens/Warren
2020	409	02	21	000	108	100	109	108	108	11.56	0.96		X	Scappoose
2020	409	02	25	000	108	100	109	108	108				X	Scappoose
2020	409	02	41	000	100	100	100	100	100				X	Sauvie Island
2020	409	02	45	000	100	100	100	100	100				X	Sauvie Island
2020	409	02	62	000	108	100	109	108	108				X	Scappoose
2020	409	02	64	000	108	100	109	108	108				X	Scappoose
2020	409	03	31	000	112	100	153	128	128	8.33	0.99		X	Vernonia
2020	409	04	41	000	105	100	148	120	120	8.63	0.99		X	Rainier
2020	409	04	42	000	105	100	115	108	108	16.57	1.01		X	Rainier
2020	409	04	44	000	105	100	148	120	120	8.63	0.99		X	Rainier
2020	409	04	45	000	105	100	115	108	108	16.57	1.01		X	Rainier
2020	409	04	56	000	105	100	148	120	120				X	Rainier
2020	409	05	51	000	103	100	129	112	112	17.24	1.04		X	Clatskanie
2020	409	05	55	000	102	100	129	112	112	0.72	0.99		X	Clatskanie
2020	409	06	61	000	114	100	123	115	115	7.23	1.00		X	Rural St. Helens/Warren
2020	409	06	62	000	102	100	95	99	99	9.21	1.01		X	Rural St. Helens/Warren
2020	409	06	67	000	114	100	123	115	115	7.23	1.00		X	Rural St. Helens/Warren
2020	600	03	06	000	100	100	100	100	100				X	Vernonia
2020	600	04	06	000	100	100	100	100	100				X	Rainier
2020	600	05	06	000	100	100	100	100	100				X	Clatskanie
2020	601	04	06	000	100	100	100	100	100				X	Rainier
2020	701	01	15	000	172	100	100	172	172	16.55	1.17		X	St. Helens
2020	701	02	00	000	172	100	100	172	172	16.55	1.17		X	Scappoose
2020	701	03	00	000	172	100	100	172	172	16.55	1.17		X	Vernonia
2020	701	04	00	000	172	100	100	172	172	16.55	1.17		X	Rainier
2020	701	05	00	000	172	100	100	172	172	16.55	1.17		X	Clatskanie
2020	701	06	00	000	172	100	100	172	172	16.55	1.17		X	Rural St. Helens/Warren
2020	800	01	15	000	100	100	100	100	100				X	St. Helens
2020	800	01	16	000	100	100	100	100	100				X	St. Helens
2020	800	02	00	000	100	100	100	100	100				X	Scappoose
2020	800	02	60	000	100	100	100	100	100				X	Scappoose
2020	800	02	64	000	100	100	100	100	100				X	Scappoose
2020	800	02	72	000	100	100	100	100	100				X	Scappoose
2020	800	02	73	000	100	100	100	100	100				X	Scappoose
2020	800	04	00	000	100	100	100	100	100				X	Rainier

YEAR	RMV CL	MA	SA	NH	LAND%	OSD%	IMPR%	OVERALL%	COD	PRD	RE CALC	LOCATION
2020	800	04	44	000	100	100	100	100			X	Rainier
2020	800	04	60	000	100	100	100	100			X	Rainier
2020	800	05	00	000	100	100	100	100			X	Clatskanie
2020	800	05	51	000	100	100	100	100			X	Clatskanie
2020	800	05	55	000	100	100	100	100			X	Clatskanie
2020	800	05	60	000	100	100	100	100			X	Clatskanie
2020	800	06	61	000	100	100	100	100			X	Rural St. Helens/Warren
2020	801	01	17	000	100	100	100	100			X	St. Helens
2020	801	02	00	000	100	100	100	100			X	Scappoose
2020	801	03	31	000	100	100	100	100			X	Vernonia
2020	801	04	00	000	100	100	100	100			X	Rainier
2020	801	05	36	000	100	100	100	100			X	Clatskanie
2020	890	02	64	000	100	100	100	100			X	Scappoose

MARKET AREA ANALYSIS

*ADJUSTMENTS &
CONCLUSIONS*

RESIDENTIAL PROPERTY

MAINTENANCE AREA 1

CITY OF ST. HELENS

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	01	00	000	2020	6	St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	6			
Population - Number of Accounts	301			
Sales as a percentage of the Population	1.99%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		23,735,367	100.00%	26,346,257 100.00%
OSD RMV		0	0.00%	0 0.00%
Improvement RMV		0	0.00%	0 0.00%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		90		
Time Trend Adjustment		11		
Before Ratio		90		
Overall Adjustment Factor		111		
Land Adjustment Factor		111		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		100		
Farm Improvement Factor		100		
After Ratio		100		

Explanation

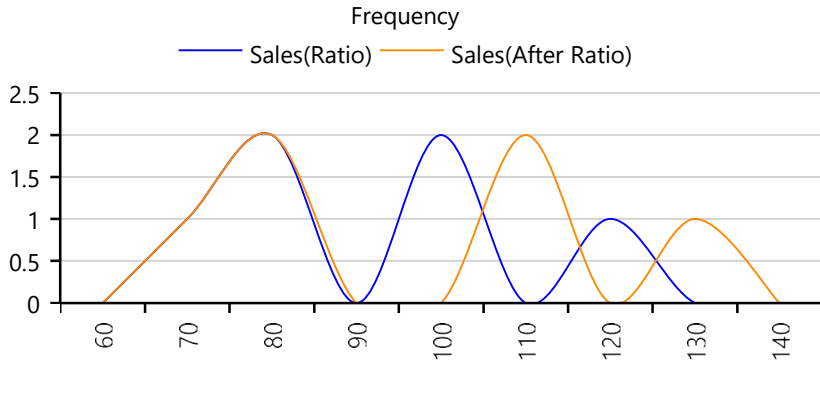
RMV 100, SA 00
Unimproved land, City of St. Helens

The sales array of vacant land for the City of St. Helens returned 6 sales which represents 1.99% of the population. The Median of 90 was selected as the best ratio indicator and is supported by the Weighted Mean. This resulted in a Land Adjustment Factor of 111.

Performance History

	2020	2019	2018	2017	2016
COD	18.52	18.78	16.54	20.98	30.99
PRD	1.03	1.10	1.01	0.99	0.82

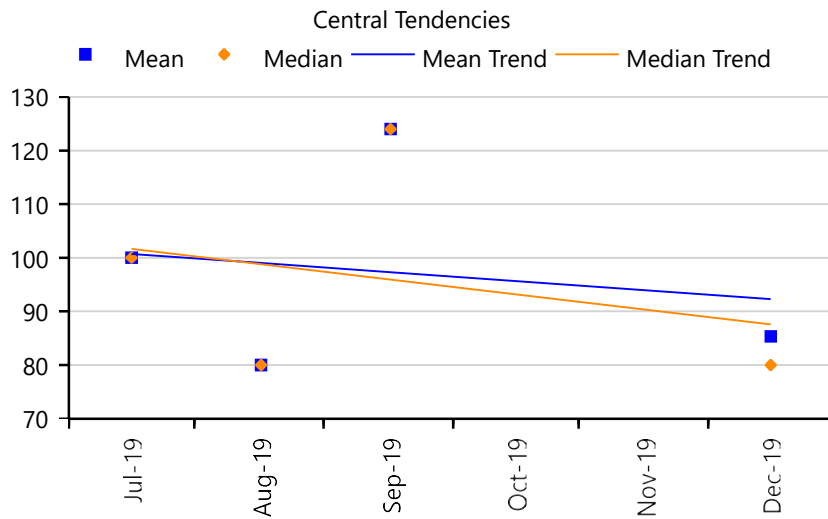
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
60	0	0
70	1	1
80	2	2
90	0	0
100	2	0
110	0	2
120	1	0
130	0	1
140	0	0

Median	90	100
AD	16.67	18.67
COD	18.52	18.76
Mean	93	103
SD	20.23	22.62
COV	21.67	21.89
Wtd Mean	90	100
GeoMean	92	101
PRD	1.03	1.03
95% Confidence	16.18	18.10

Number Of Sales 6



Month	Mean	Median	Sales
Jul-19	100	100	1
Aug-19	80	80	1
Sep-19	124	124	1
Dec-19	85	80	3

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	100		33	4N1W06D A 07018	2019-10539	0.16	83,110	0	83,110	118,566	Dec-19	1	70
01	00	000	100		30	5N1W32D C 00904	2019-6936	0.67	238,280	0	238,280	299,117	Aug-19	2	80
01	00	000	100		33	4N1W06D A 07009	2019-10376	1.19	603,050	0	603,050	758,370	Dec-19	3	80
01	00	000	100		30	5N1W32D B 00129	2019-5992	1.12	377,920	0	377,920	376,812	Jul-19	4	100
01	00	000	100		33	4N1W04A A 00600	2019-10714	0.40	168,780	0	168,780	159,716	Dec-19	5	106
01	00	000	100		30	5N1W32D B 00154	2019-8178	0.58	276,280	0	276,280	222,048	Sep-19	6	124

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	00	000	2020	211	St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	211			
Population - Number of Accounts	3834			
Sales as a percentage of the Population	5.50%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		279,194,480	28.09%	309,905,873 27.78%
OSD RMV		109,771,010	11.04%	109,771,010 9.84%
Improvement RMV		601,220,140	60.48%	691,403,161 61.98%
Farm Improvement RMV		3,849,980	0.39%	4,427,477 0.40%
Selected Ratio From Sales		89		
Time Trend Adjustment		11		
Before Ratio		89		
Overall Adjustment Factor		112		
Land Adjustment Factor		111		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		115		
Farm Improvement Factor		115		
After Ratio		100		

Explanation

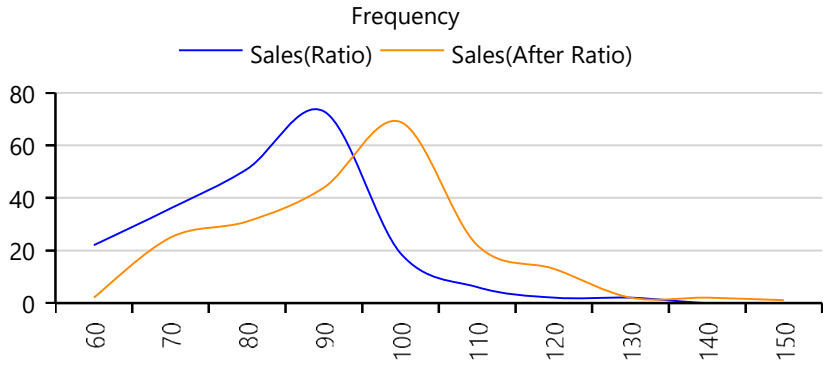
RMV 101: SA 00
Improved property, City of St. Helens

For this analysis, the Median and Weighted Mean returned the same ratio of 89. This is further supported by the Mean of 88. Therefore, the Median (89) was selected and applied to this grouping of residential properties located in the City of St. Helens.

Performance History

	2020	2019	2018	2017	2016
COD	11.66	11.65	10.50	8.65	11.23
PRD	0.99	1.00	0.99	0.99	1.01

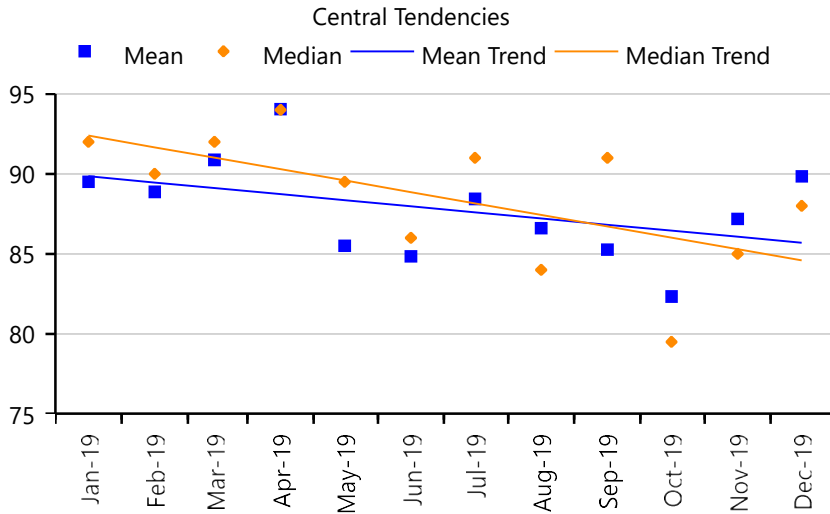
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
60	22	2
70	36	25
80	51	31
90	73	44
100	19	69
110	6	22
120	2	13
130	2	2
140	0	2
150	0	1

Median	89	100
AD	10.37	11.90
COD	11.66	11.90
Mean	88	99
SD	13.30	15.22
COV	15.14	15.44
Wtd Mean	89	100
GeoMean	87	97
PRD	.99	.99
95% Confidence	1.79	2.05

Number Of Sales 211



Month	Mean	Median	Sales
Jan-19	90	92	8
Feb-19	89	90	16
Mar-19	91	92	16
Apr-19	94	94	20
May-19	86	90	24
Jun-19	85	86	19
Jul-19	88	91	23
Aug-19	87	84	23
Sep-19	85	91	15
Oct-19	82	80	12
Nov-19	87	85	16
Dec-19	90	88	19

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	101		30	5N1W34CB 06200	2019-9139	0.13	82,480	61,130	143,610	239,395	Oct-19	1	60
01	00	000	101		33	5N1W33D C 00500	2019-4046	0.11	78,740	73,900	152,640	249,935	May-19	2	61
01	00	000	101		33	5N1W33D D 12300	2019-4916	0.13	82,480	94,250	176,730	274,759	Jun-19	3	64
01	00	000	101		33	4N1W04C A 20000	2019-9190	0.11	78,510	92,640	171,150	263,843	Oct-19	4	65

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	101	131	33	5N1W33D C 02300	2019-696	0.11	78,740	77,840	156,580	238,917	Jan-19	5	66
01	00	000	101	131	33	5N1W34CB 02100	2019-1214	0.13	82,480	105,110	187,590	284,954	Feb-19	6	66
01	00	000	101		33	4N1W04C A 09600	2019-5076	0.11	78,740	91,080	169,820	257,306	Jun-19	7	66
01	00	000	101		33	4N1W03B D 02700	2019-7568	0.09	72,290	101,790	174,080	263,543	Sep-19	8	66
01	00	000	101		33	5N1W33D D 03100	2019-7952	0.13	82,480	109,240	191,720	290,319	Sep-19	9	66
01	00	000	101		33	4N1W04D D 07400	2019-5462	0.13	82,480	103,730	186,210	279,045	Jul-19	10	67
01	00	000	101		33	5N1W34CC 14200	2019-9265	0.13	82,480	107,910	190,390	284,900	Nov-19	11	67
01	00	000	101	442	33	4N1W04A D 03405	2019-1778	0.13	82,480	108,220	190,700	282,025	Mar-19	12	68
01	00	000	101	131	33	4N1W04D B 02400	2019-3521	0.13	82,480	80,210	162,690	237,847	May-19	13	68
01	00	000	101		33	4N1W03BC 00404	2019-3974	0.11	78,740	118,550	197,290	291,384	May-19	14	68
01	00	000	101		33	4N1W04D B 11800	2019-4054	0.13	82,480	96,900	179,380	263,065	May-19	15	68
01	00	000	101		33	4N1W05A D 11900	2019-4621	0.13	81,220	85,610	166,830	244,007	Jun-19	16	68
01	00	000	101		33	4N1W03BC 00411	2019-5406	0.11	78,740	117,310	196,050	289,905	Jul-19	17	68
01	00	000	101		33	4N1W04BA 01502	2019-6053	0.13	82,480	133,880	216,360	316,522	Jul-19	18	68
01	00	000	101		33	5N1W33D C 04000	2019-6286	0.11	78,740	102,150	180,890	266,450	Aug-19	19	68
01	00	000	101		33	4N1W03BB 10101	2019-5303	0.13	82,480	107,970	190,450	274,898	Jun-19	20	69
01	00	000	101		33	4N1W04C A 05000	2019-6801	0.10	73,830	73,790	147,620	213,098	Aug-19	21	69
01	00	000	101	142	33	4N1W04A D 02905	2019-7663	0.16	87,960	95,530	183,490	267,262	Sep-19	22	69
01	00	000	101		33	4N1W04D A 00500	2019-6529	0.13	82,480	108,060	190,540	271,050	Aug-19	23	70
01	00	000	101		33	4N1W04D A 04000	2019-6946	0.18	90,770	106,510	197,280	280,827	Aug-19	24	70
01	00	000	101		33	5N1W33D B 00602	2019-6865	0.15	85,680	122,720	208,400	296,001	Aug-19	25	70
01	00	000	101	133	33	4N1W03CB 05300	2019-1005	0.13	82,480	117,450	199,930	281,216	Feb-19	26	71
01	00	000	101		33	5N1W33D A 03600	2019-10528	0.14	84,820	108,030	192,850	271,539	Dec-19	27	71
01	00	000	101	131	33	4N1W04C A 11700	2019-708	0.12	80,140	119,950	200,090	276,351	Jan-19	28	72
01	00	000	101	131	33	4N1W04C A 12700	2019-3327	0.14	82,860	132,250	215,110	299,985	Apr-19	29	72
01	00	000	101		33	4N1W03BC 10800	2019-6998	0.13	82,020	107,480	189,500	264,690	Aug-19	30	72

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	101		33	5N1W33D C 04900	2019-8505	0.11	78,740	97,790	176,530	244,975	Oct-19	31	72
01	00	000	101		33	4N1W03CB 06600	2019-9120	0.13	82,480	109,270	191,750	264,994	Oct-19	32	72
01	00	000	101		33	4N1W03CB 05302	2019-9940	0.13	82,480	105,080	187,560	260,086	Nov-19	33	72
01	00	000	101	132	33	4N1W04A C 06701	2019-638	0.12	78,790	142,390	221,180	302,858	Jan-19	34	73
01	00	000	101	121	33	5N1W33D D 09900	2019-3608	0.13	82,480	54,860	137,340	187,388	May-19	35	73
01	00	000	101		33	4N1W04B D 03600	2019-5667	0.11	78,740	98,230	176,970	241,569	Jul-19	36	73
01	00	000	101		30	4N1W04D A 03200	2019-6182	0.13	82,480	104,430	186,910	256,809	Jul-19	37	73
01	00	000	101	131	33	4N1W05C D 03500	2019-1421	0.19	92,190	131,470	223,660	301,613	Feb-19	38	74
01	00	000	101		33	4N1W05D A 02402	2019-4165	0.15	86,180	75,750	161,930	218,469	May-19	39	74
01	00	000	101		33	4N1W03B D 04800	2019-7150	0.15	86,420	125,060	211,480	284,873	Sep-19	40	74
01	00	000	101		33	4N1W05D B 02603	2019-7640	0.15	86,080	127,210	213,290	287,746	Sep-19	41	74
01	00	000	101		33	4N1W04D A 11800	2019-9287	0.16	86,920	102,330	189,250	254,375	Nov-19	42	74
01	00	000	101		33	4N1W04C A 19400	2019-10477	0.11	78,760	121,290	200,050	271,438	Dec-19	43	74
01	00	000	101		33	4N1W04A D 04610	2019-5573	0.13	82,480	129,070	211,550	283,719	Jul-19	44	75
01	00	000	101	131	33	4N1W05C D 04100	2019-1151	0.33	114,400	125,070	239,470	314,753	Feb-19	45	76
01	00	000	101	135	33	4N1W04D D 02100	2019-1531	0.13	82,480	147,360	229,840	302,539	Mar-19	46	76
01	00	000	101	131	33	4N1W05A D 05200	2019-2013	0.11	78,740	94,120	172,860	228,039	Mar-19	47	76
01	00	000	101	131	33	5N1W33D C 01200	2019-3456	0.12	80,460	156,170	236,630	311,315	May-19	48	76
01	00	000	101		33	4N1W05D A 03002	2019-4684	0.16	113,280	134,020	247,300	326,665	Jun-19	49	76
01	00	000	101		33	4N1W05A A 00802	2019-9129	0.23	99,620	111,450	211,070	276,183	Oct-19	50	76
01	00	000	101		33	4N1W04D D 08100	2019-9944	0.13	82,480	116,770	199,250	262,289	Nov-19	51	76
01	00	000	101		33	4N1W04A A 00100	2019-10154	0.13	82,480	144,050	226,530	297,314	Dec-19	52	76
01	00	000	101	136	33	4N1W05D A 04000	2019-775	0.18	90,550	163,730	254,280	331,311	Feb-19	53	77
01	00	000	101		30	4N1W05D A 05200	2019-9224	0.20	94,340	117,810	212,150	274,540	Oct-19	54	77
01	00	000	101	121	33	4N1W04CB 10800	2019-3498	0.29	110,450	107,850	218,300	279,032	May-19	55	78
01	00	000	101		33	4N1W05BC 07501	2019-10021	0.12	100,110	182,300	282,410	361,000	Nov-19	56	78

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	101		33	5N1W34CC 05900	2019-10244	0.13	82,480	137,020	219,500	280,252	Dec-19	57	78
01	00	000	101		33	4N1W05B D 09110	2019-10933	0.12	100,300	216,250	316,550	399,404	Dec-19	58	79
01	00	000	101	141	33	4N1W05C D 02102	2019-1119	0.24	102,890	222,410	325,300	406,001	Feb-19	59	80
01	00	000	101	136	33	4N1W04A D 10600	2019-3823	0.13	82,480	169,320	251,800	315,867	May-19	60	80
01	00	000	101		33	4N1W05D B 03200	2019-6336	0.35	115,940	176,560	292,500	365,822	Jul-19	61	80
01	00	000	101	131	33	4N1W05B D 01502	2019-1942	0.23	100,990	137,730	238,720	293,246	Mar-19	62	81
01	00	000	101	142	33	4N1W03BB 01100	2019-2568	0.13	82,480	219,100	301,580	372,669	Apr-19	63	81
01	00	000	101	142	33	4N1W06D A 01700	2019-2677	0.17	114,710	224,930	339,640	420,351	Apr-19	64	81
01	00	000	101		33	5N1W34CC 04700	2019-5163	0.13	82,480	100,910	183,390	227,255	Jun-19	65	81
01	00	000	101		33	4N1W05A D 08400	2019-6309	0.26	105,670	143,700	249,370	304,558	Aug-19	66	82
01	00	000	101		33	4N1W04D C 00100	2019-8277	0.13	82,480	102,130	184,610	225,001	Oct-19	67	82
01	00	000	101		33	5N1W34CC 15100	2019-9370	0.13	82,480	104,920	187,400	228,481	Nov-19	68	82
01	00	000	101		33	5N1W34CC 04000	2019-9492	0.13	82,480	218,410	300,890	367,358	Nov-19	69	82
01	00	000	101		33	4N1W05A D 06500	2019-6384	0.11	78,740	176,430	255,170	307,980	Aug-19	70	83
01	00	000	101		33	4N1W04C A 11300	2019-9825	0.24	102,560	131,030	233,590	282,460	Nov-19	71	83
01	00	000	101		30	5N1W33D B 01024	2019-4739	0.15	85,400	152,000	237,400	284,000	Jun-19	72	84
01	00	000	101		33	4N1W05B D 09111	2019-6855	0.12	102,260	225,290	327,550	391,785	Aug-19	73	84
01	00	000	101		33	4N1W04D B 05101	2019-6446	0.13	82,480	159,310	241,790	287,183	Aug-19	74	84
01	00	000	101		30	5N1W33D C 09800	2019-6318	0.11	78,740	107,390	186,130	221,392	Aug-19	75	84
01	00	000	101		33	5N1W33D D 05201	2019-6526	0.13	82,480	142,130	224,610	266,803	Aug-19	76	84
01	00	000	101		33	4N1W05A C 00400	2019-10372	0.18	90,690	169,010	259,700	310,846	Dec-19	77	84
01	00	000	101	131	33	4N1W04D D 00200	2019-1805	0.13	82,480	131,570	214,050	253,034	Mar-19	78	85
01	00	000	101	143	33	4N1W03BC 07402	2019-2622	0.13	77,190	180,740	257,930	302,624	Apr-19	79	85
01	00	000	101		33	4N1W04D A 12200	2019-4511	0.15	86,540	156,770	243,310	286,929	Jun-19	80	85
01	00	000	101		33	4N1W04D B 11200	2019-4862	0.13	82,480	93,230	175,710	206,817	Jun-19	81	85
01	00	000	101		33	4N1W05C D 00903	2019-6496	0.16	87,700	192,620	280,320	329,049	Aug-19	82	85

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	101		33	5N1W32D B 01800	2019-7221	0.17	114,280	228,470	342,750	403,146	Aug-19	83	85
01	00	000	101		33	4N1W05D B 02508	2019-9580	0.24	132,700	127,580	260,280	305,598	Oct-19	84	85
01	00	000	101		33	4N1W07AB 03176	2019-4818	0.15	111,000	204,960	315,960	366,114	Jun-19	85	86
01	00	000	101		33	5N1W34CB 03700	2019-6024	0.13	82,480	78,120	160,600	187,413	Jul-19	86	86
01	00	000	101		33	4N1W05D C 03000	2019-6909	0.36	116,610	287,110	403,720	471,460	Aug-19	87	86
01	00	000	101		33	4N1W05A D 08700	2019-10524	0.35	115,750	135,620	251,370	291,465	Dec-19	88	86
01	00	000	101	143	33	4N1W05CB 00151	2019-1290	0.18	116,660	264,870	381,530	437,731	Feb-19	89	87
01	00	000	101		33	4N1W04D A 09901	2019-3305	0.13	82,480	187,750	270,230	311,729	Apr-19	90	87
01	00	000	101	143	33	4N1W04A D 01800	2019-5314	0.11	78,740	169,810	248,550	284,796	Jul-19	91	87
01	00	000	101		33	4N1W05B D 09112	2019-8092	0.11	99,910	258,560	358,470	413,708	Sep-19	92	87
01	00	000	101		33	4N1W05B D 08400	2019-8625	0.31	112,610	172,690	285,300	327,520	Oct-19	93	87
01	00	000	101		33	5N1W34CB 08200	2019-9863	0.26	105,920	156,810	262,730	301,695	Nov-19	94	87
01	00	000	101		33	4N1W04A A 01500	2019-10795	0.15	86,150	122,720	208,870	240,576	Dec-19	95	87
01	00	000	101	143	33	5N1W32D C 01300	2019-3697	0.14	106,560	200,310	306,870	348,108	May-19	96	88
01	00	000	101	141	30	4N1W05CB 00400	2019-3794	0.83	127,990	233,440	361,430	412,027	May-19	97	88
01	00	000	101	132	33	4N1W04D A 09900	2019-4169	0.13	82,480	188,260	270,740	308,859	May-19	98	88
01	00	000	101		33	4N1W05A C 02400	2019-4499	0.20	94,280	174,580	268,860	306,058	Jun-19	99	88
01	00	000	101		33	4N1W05D B 05600	2019-5474	0.13	103,230	243,210	346,440	393,822	Jul-19	100	88
01	00	000	101		33	4N1W05B D 09132	2019-11008	0.15	110,880	265,350	376,230	426,862	Dec-19	101	88
01	00	000	101		33	4N1W05A C 02200	2019-10487	0.26	105,640	189,400	295,040	337,010	Dec-19	102	88
01	00	000	101		33	4N1W03BB 06100	2019-10718	0.13	82,480	182,070	264,550	300,346	Dec-19	103	88
01	00	000	101	146	33	4N1W03BB 02901	2019-2248	0.11	78,740	185,460	264,200	296,961	Mar-19	104	89
01	00	000	101		33	4N1W07AB 03155	2019-5087	0.11	100,410	197,640	298,050	335,164	Jun-19	105	89
01	00	000	101		33	4N1W05CB 01401	2019-5448	0.13	105,280	176,120	281,400	315,810	Jul-19	106	89
01	00	000	101		33	4N1W05A A 01900	2019-8284	0.17	89,640	152,750	242,390	271,194	Sep-19	107	89
01	00	000	101		33	4N1W07AB 03183	2019-9817	0.13	106,130	185,880	292,010	329,225	Nov-19	108	89

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	101		33	4N1W06A D 01000	2019-10007	0.18	90,140	211,660	301,800	337,456	Nov-19	109	89
01	00	000	101	143	33	4N1W05AB 01029	2019-54	0.17	113,940	205,720	319,660	354,549	Jan-19	110	90
01	00	000	101	143	33	4N1W07AB 03141	2019-1285	0.12	100,600	194,890	295,490	328,361	Feb-19	111	90
01	00	000	101	141	33	4N1W05CC 01820	2019-1293	0.16	113,350	165,530	278,880	309,577	Feb-19	112	90
01	00	000	101		33	4N1W04C A 05500	2019-5135	0.28	109,120	199,780	308,900	343,350	Jun-19	113	90
01	00	000	101		33	4N1W04A A 06000	2019-5125	0.40	112,510	140,370	252,880	280,026	Jun-19	114	90
01	00	000	101		33	4N1W05CC 01105	2019-5097	0.18	118,220	181,170	299,390	334,351	Jun-19	115	90
01	00	000	101		33	4N1W07AB 03149	2019-10722	0.12	100,430	198,460	298,890	331,082	Dec-19	116	90
01	00	000	101	143	33	4N1W05BA 03937	2019-1740	0.13	104,260	221,610	325,870	359,129	Mar-19	117	91
01	00	000	101	143	33	4N1W07AB 03126	2019-1850	0.16	113,330	257,010	370,340	408,004	Mar-19	118	91
01	00	000	101	143	33	4N1W05CB 05600	2019-2563	0.28	144,770	245,700	390,470	429,618	Apr-19	119	91
01	00	000	101	141	33	4N1W06D A 02600	2019-3536	0.24	132,670	188,480	321,150	353,083	May-19	120	91
01	00	000	101		33	4N1W04D A 13800	2019-4616	0.13	82,480	190,040	272,520	298,366	Jun-19	121	91
01	00	000	101		33	5N1W32D C 01400	2019-5901	0.14	106,560	208,490	315,050	344,858	Jul-19	122	91
01	00	000	101		33	4N1W06D D 06100	2019-7654	0.12	101,400	189,120	290,520	317,825	Sep-19	123	91
01	00	000	101	141	33	4N1W05B D 07200	2019-852	0.15	111,470	190,710	302,180	327,651	Feb-19	124	92
01	00	000	101	143	33	4N1W05CB 10100	2019-1325	0.12	102,770	251,100	353,870	383,320	Feb-19	125	92
01	00	000	101	141	33	4N1W05CB 03600	2019-3325	0.15	109,940	179,170	289,110	314,799	Apr-19	126	92
01	00	000	101	141	33	5N1W34CB 07500	2019-3182	0.27	108,280	218,590	326,870	354,552	Apr-19	127	92
01	00	000	101		33	4N1W03BA 02500	2019-4002	0.13	172,480	150,360	322,840	349,563	May-19	128	92
01	00	000	101		33	4N1W06D A 03202	2019-4217	0.20	94,520	222,320	316,840	343,059	May-19	129	92
01	00	000	101		33	4N1W05D B 05400	2019-7935	0.13	103,220	255,540	358,760	390,305	Sep-19	130	92
01	00	000	101	143	33	4N1W05A D 15500	2019-1164	0.16	113,000	250,920	363,920	389,329	Feb-19	131	93
01	00	000	101	141	33	4N1W05B D 05200	2019-1574	0.12	101,530	172,580	274,110	294,651	Mar-19	132	93
01	00	000	101	143	33	4N1W05D C 08202	2019-1641	0.32	101,980	211,410	313,390	337,931	Mar-19	133	93
01	00	000	101	143	33	4N1W05CB 00105	2019-3123	0.15	109,950	264,180	374,130	404,426	Apr-19	134	93

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	101		30	4N1W05AB 01033	2019-4434	0.13	105,460	178,320	283,780	305,237	May-19	135	93
01	00	000	101		33	4N1W05B D 06500	2019-5386	0.12	101,410	172,580	273,990	294,819	Jul-19	136	93
01	00	000	101		33	4N1W05B D 02800	2019-5892	0.20	122,880	187,370	310,250	335,334	Jul-19	137	93
01	00	000	101		33	5N1W32D B 00700	2019-6279	0.19	119,270	246,270	365,540	393,325	Aug-19	138	93
01	00	000	101		33	5N1W34CB 09000	2019-7973	0.21	186,340	339,440	525,780	566,452	Sep-19	139	93
01	00	000	101		33	4N1W05D A 10300	2019-8135	0.12	89,710	105,380	195,090	210,740	Sep-19	140	93
01	00	000	101	143	33	4N1W05D B 02101	2019-119	0.12	102,470	256,780	359,250	381,634	Jan-19	141	94
01	00	000	101	141	33	4N1W05C A 01500	2019-613	0.28	108,810	186,940	295,750	313,956	Jan-19	142	94
01	00	000	101	143	30	4N1W05B D 06200	2019-2370	0.12	102,440	172,610	275,050	293,791	Mar-19	143	94
01	00	000	101	143	33	4N1W05BA 03925	2019-2795	0.15	110,240	222,770	333,010	356,105	Apr-19	144	94
01	00	000	101	144	33	4N1W05CC 02404	2019-3075	0.17	89,500	194,370	283,870	301,336	Apr-19	145	94
01	00	000	101	143	33	4N1W05AB 01027	2019-2998	0.21	126,650	205,720	332,370	355,146	Apr-19	146	94
01	00	000	101		30	4N1W05A C 06500	2019-4137	0.16	112,700	187,430	300,130	320,160	May-19	147	94
01	00	000	101		33	4N1W06D C 05800	2019-7343	0.13	103,520	233,130	336,650	358,937	Sep-19	148	94
01	00	000	101		33	4N1W04D D 06400	2019-8338	0.13	82,480	207,930	290,410	307,770	Oct-19	149	94
01	00	000	101	143	33	4N1W05AB 04207	2019-439	0.16	113,600	247,570	361,170	381,191	Jan-19	150	95
01	00	000	101	143	33	5N1W32D B 00200	2019-3516	0.22	128,840	226,040	354,880	373,610	Apr-19	151	95
01	00	000	101	143	33	4N1W06D D 03300	2019-3316	0.16	112,000	212,040	324,040	339,400	Apr-19	152	95
01	00	000	101		33	5N1W32D C 02501	2019-4211	0.40	156,710	256,700	413,410	436,642	May-19	153	95
01	00	000	101		33	4N1W08BB 05900	2019-5702	0.18	116,540	207,950	324,490	341,250	Jul-19	154	95
01	00	000	101		33	5N1W32D C 01200	2019-5855	0.14	106,580	210,230	316,810	334,472	Jul-19	155	95
01	00	000	101		33	4N1W04B D 01703	2019-8166	0.13	81,120	125,080	206,200	216,069	Sep-19	156	95
01	00	000	101		33	4N1W05CB 07600	2019-10984	0.12	102,470	264,760	367,230	384,762	Dec-19	157	95
01	00	000	101	141	33	4N1W03CB 04000	2019-979	0.27	106,920	208,970	315,890	328,073	Feb-19	158	96
01	00	000	101	143	33	4N1W05C A 00104	2019-2315	0.13	103,750	209,630	313,380	326,855	Apr-19	159	96
01	00	000	101	142	33	5N1W32D C 01700	2019-2641	0.14	107,060	216,150	323,210	336,835	Apr-19	160	96

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	101	143	33	4N1W05AB 04218	2019-3870	0.25	135,420	219,970	355,390	369,116	May-19	161	96
01	00	000	101		33	4N1W05BC 02700	2019-4149	0.19	119,630	270,950	390,580	406,489	May-19	162	96
01	00	000	101		33	5N1W32D C 02500	2019-4986	0.40	156,410	248,980	405,390	424,254	Jun-19	163	96
01	00	000	101		33	4N1W06A D 03600	2019-5418	0.24	134,060	264,170	398,230	414,301	Jul-19	164	96
01	00	000	101		33	4N1W06D A 06500	2019-5411	0.16	87,850	252,600	340,450	353,157	Jul-19	165	96
01	00	000	101		33	4N1W05A D 03300	2019-5738	0.55	122,150	290,930	413,080	428,790	Jul-19	166	96
01	00	000	101		33	4N1W06D C 02300	2019-6467	0.19	120,660	206,440	327,100	341,940	Aug-19	167	96
01	00	000	101		33	4N1W06D A 08000	2019-8636	0.17	113,800	225,590	339,390	354,045	Sep-19	168	96
01	00	000	101	143	33	4N1W05BC 04000	2019-1593	0.21	124,670	188,520	313,190	321,817	Mar-19	169	97
01	00	000	101	141	33	4N1W06D A 00900	2019-3681	0.23	132,130	186,950	319,080	330,585	May-19	170	97
01	00	000	101		33	4N1W08BB 01901	2019-10249	0.13	105,080	180,510	285,590	295,045	Dec-19	171	97
01	00	000	101	143	33	4N1W07AB 03127	2019-3549	0.14	108,160	253,170	361,330	369,737	May-19	172	98
01	00	000	101		33	4N1W04BC 05800	2019-4307	0.16	113,630	197,890	311,520	319,334	May-19	173	98
01	00	000	101		33	4N1W05D C 03400	2019-5539	0.23	101,020	224,250	325,270	331,790	Jul-19	174	98
01	00	000	101		33	4N1W05D C 05800	2019-6042	0.30	111,840	194,910	306,750	314,010	Jul-19	175	98
01	00	000	101		30	4N1W06A D 02300	2019-9323	1.00	131,530	356,950	488,480	500,315	Nov-19	176	98
01	00	000	101		30	5N1W34CB 01801	2019-10246	0.12	80,420	166,070	246,490	252,025	Dec-19	177	98
01	00	000	101	143	33	5N1W34CB 01607	2019-1789	0.16	112,680	202,710	315,390	318,960	Mar-19	178	99
01	00	000	101		33	5N1W34CB 01607	2019-6236	0.16	112,680	202,710	315,390	317,923	Aug-19	179	99
01	00	000	101		33	4N1W05CB 00116	2019-6900	0.16	113,350	271,250	384,600	390,020	Aug-19	180	99
01	00	000	101		33	5N1W32D B 02800	2019-6822	0.24	133,270	205,440	338,710	342,738	Aug-19	181	99
01	00	000	101		33	5N1W32D C 00120	2019-9088	0.19	119,990	236,610	356,600	361,257	Oct-19	182	99
01	00	000	101	143	33	4N1W06D D 03200	2019-3448	0.16	112,780	275,510	388,290	386,784	Apr-19	183	100
01	00	000	101	131	33	5N1W33D A 03600	2019-3481	0.14	84,820	108,030	192,850	193,284	May-19	184	100
01	00	000	101		33	4N1W05D C 04500	2019-5869	0.24	103,030	219,900	322,930	323,894	Jul-19	185	100
01	00	000	101		33	4N1W05AB 04213	2019-8281	0.18	116,500	260,610	377,110	377,228	Sep-19	186	100

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	101	141	33	4N1W05CC 01103	2019-1647	0.18	118,220	188,600	306,820	305,144	Mar-19	187	101
01	00	000	101		30	4N1W05B D 05400	2019-9754	0.17	115,000	173,400	288,400	286,258	Nov-19	188	101
01	00	000	101	143	30	4N1W08BC 05000	2019-2355	0.16	113,560	255,780	369,340	362,671	Apr-19	189	102
01	00	000	101		30	4N1W06A D 04400	2019-10530	0.16	112,740	179,100	291,840	286,745	Dec-19	190	102
01	00	000	101		33	4N1W08BB 07700	2019-9291	0.16	112,750	235,490	348,240	339,236	Nov-19	191	103
01	00	000	101		33	4N1W05D B 02104	2019-10941	0.12	100,300	230,300	330,600	320,480	Dec-19	192	103
01	00	000	101		30	4N1W04BC 07600	2019-5070	0.17	116,170	256,620	372,790	359,116	Jun-19	193	104
01	00	000	101	141	33	4N1W04C A 15800	2019-2185	0.39	118,200	206,760	324,960	305,632	Mar-19	194	106
01	00	000	101		33	4N1W04BC 06500	2019-9480	0.16	113,310	242,790	356,100	334,881	Nov-19	195	106
01	00	000	101	141	33	5N1W32D B 01300	2019-1434	0.32	209,690	217,320	427,010	398,872	Feb-19	196	107
01	00	000	101	141	33	4N1W03BA 02401	2019-3404	0.13	172,480	164,640	337,120	311,837	Apr-19	197	108
01	00	000	101		33	4N1W06D A 01000	2019-6867	0.21	126,640	289,870	416,510	384,622	Aug-19	198	108
01	00	000	101		33	4N1W06D C 01900	2019-9507	0.21	126,800	248,260	375,060	346,149	Nov-19	199	108
01	00	000	101	141	33	4N1W05A D 00400	2019-1085	0.42	119,250	211,390	330,640	303,955	Feb-19	200	109
01	00	000	101		33	4N1W03BC 05900	2019-10999	0.26	106,190	190,040	296,230	272,664	Dec-19	201	109
01	00	000	101		33	4N1W06D D 07900	2019-5081	0.13	104,750	320,150	424,900	387,919	Jun-19	202	110
01	00	000	101		33	4N1W04D B 07900	2019-6694	0.13	82,480	256,500	338,980	309,088	Aug-19	203	110
01	00	000	101		33	4N1W04A C 06502	2019-6624	0.13	82,480	98,450	180,930	161,448	Aug-19	204	112
01	00	000	101		33	5N1W33A A 00101	2019-1929	0.68	275,520	127,170	402,690	353,210	Mar-19	205	114
01	00	000	101		33	5N1W34BC 01303	2019-10465	0.72	125,920	356,080	482,000	423,402	Dec-19	206	114
01	00	000	101		33	4N1W05CB 00122	2019-9134	0.13	104,900	356,290	461,190	387,232	Oct-19	207	119
01	00	000	101	145	33	5N1W33D D 03900	2019-1015	0.27	106,920	213,970	320,890	263,640	Feb-19	208	122
01	00	000	101		33	4N1W05BC 01100	2019-5730	0.16	113,180	450,060	563,240	435,750	Jul-19	209	129
01	00	000	101	143	33	4N1W04A C 09200	2019-253	0.13	82,020	106,500	188,520	142,786	Jan-19	210	132
01	00	000	101	142	33	4N1W04CB 02900	2019-3781	0.24	102,890	199,370	302,260	227,283	Apr-19	211	133

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
102	01	00	000	2020	1	St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	1
Population - Number of Accounts	27
Sales as a percentage of the Population	3.70%
<i>Prior Year Population Values</i>	
Land Rmv	0
OSD RMV	0
Improvement RMV	5,719,280
Farm Improvement RMV	0
Selected Ratio From Sales	89
Time Trend Adjustment	0
Before Ratio	89
Overall Adjustment Factor	112
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	115
Farm Improvement Factor	115
After Ratio	100

Explanation

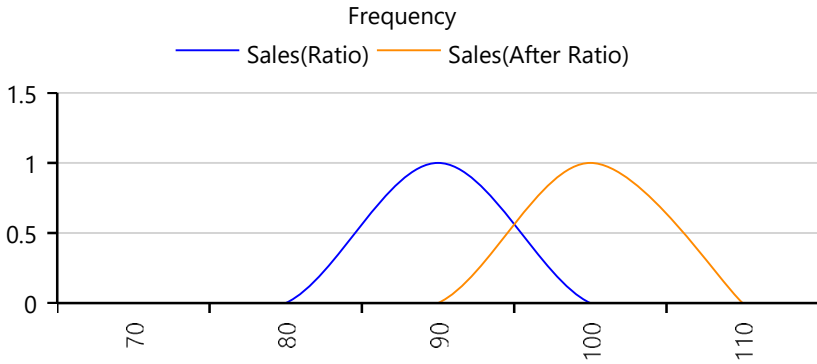
RMV 102: SA 00
Improved property - Condominium, City of St. Helens

A single sale was identified in this study period, which is a sample too small to use as a determination of the current market for Condominiums located in the City of St. Helens. Therefore, it is recommended that the conclusion from the MA 01 SA 00 for improved property study be applied here (Selected Ratio of 89).

Performance History

	2020	2019	2018	2017	2016
COD	-	4.10	5.39	11.11	2.88
PRD	1.00	1.00	0.98	1.02	0.99

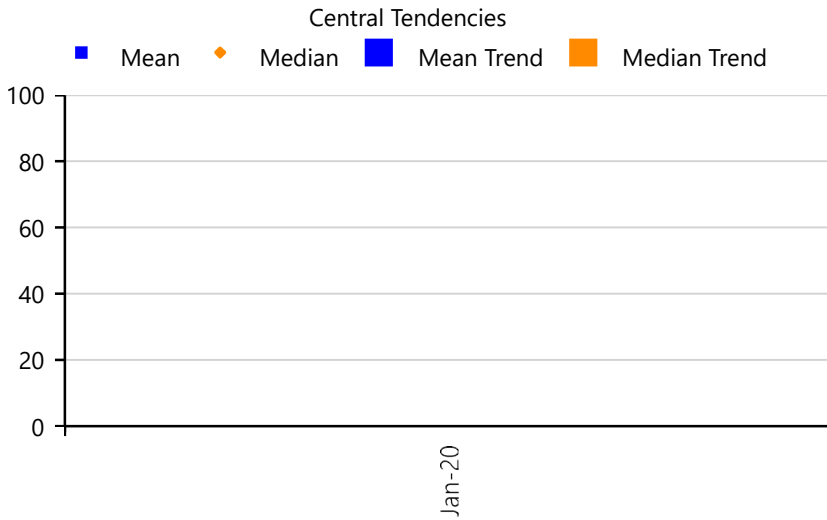
COLUMBIA County 2020 Ratio Study



70	0	0
80	0	0
90	1	0
100	0	1
110	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	92	105
AD		
COD		
Mean	92	105
SD	1.00	1.00
COV	1.09	.95
Wtd Mean	92	105
GeoMean	92	105
PRD	1.00	1.00
95% Confidence	1.96	1.96

Number Of Sales 1



Month	Mean	Median	Sales
Jul-19	92	92	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	102		33	4N1W04B D 90400	2019-6014		0	160,520	160,520	175,000	Jul-19	1	92

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	01	00	000	2020	2	St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2			
Population - Number of Accounts	91			
Sales as a percentage of the Population	2.20%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		6,091,630	39.06%	6,761,709 39.10%
OSD RMV		2,644,900	16.96%	2,644,900 15.29%
Improvement RMV		6,652,920	42.66%	7,650,858 44.24%
Farm Improvement RMV		206,570	1.32%	237,556 1.37%
Selected Ratio From Sales		89		
Time Trend Adjustment		0		
Before Ratio		89		
Overall Adjustment Factor		112		
Land Adjustment Factor		111		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		115		
Farm Improvement Factor		115		
After Ratio		100		

Explanation

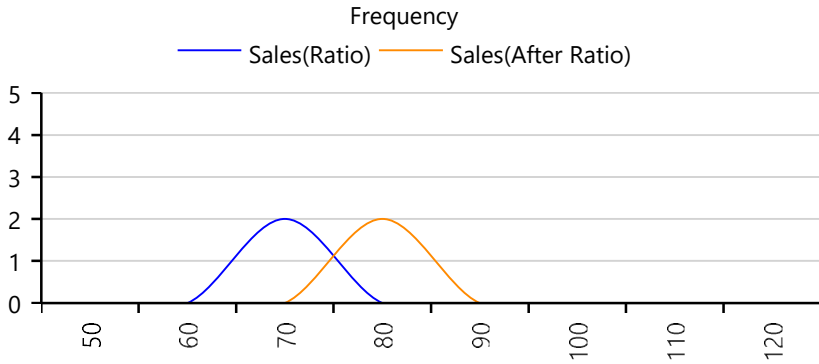
RMV 109: SA 00
 Improved property - Manufactured Structure, City of St. Helens

After reviewing the sales array, it was deemed the two sales are insufficient and do not present a clear indication of how the market is moving within this classification of property. Therefore, it was deemed appropriate to apply the conclusion of 89 from the RMV class 101 study located in the same area.

Performance History

	2020	2019	2018	2017	2016
COD	1.99	14.17	11.59	29.17	14.29
PRD	1.00	1.00	1.01	1.06	1.01

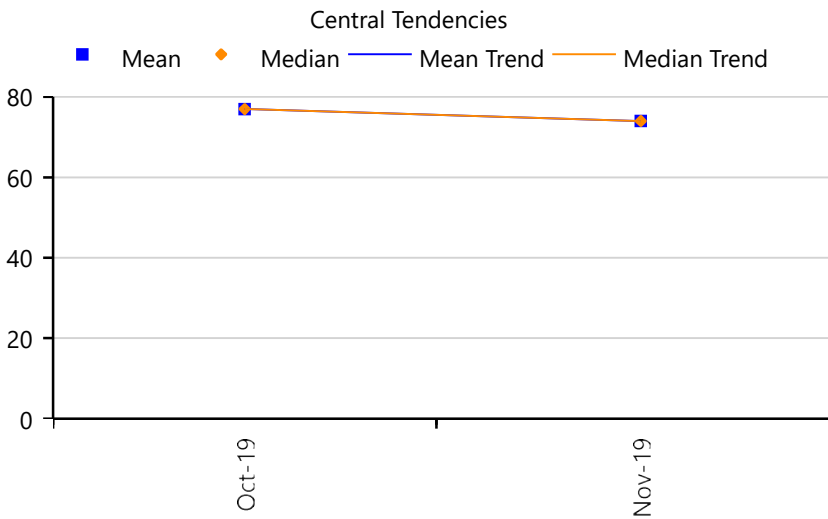
COLUMBIA County 2020 Ratio Study



50	0	0
60	0	0
70	2	0
80	0	2
90	0	0
100	0	0
110	0	0
120	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	76	84
AD	1.50	1.50
COD	1.99	1.80
Mean	76	84
SD	2.12	2.12
COV	2.81	2.54
Wtd Mean	75	83
GeoMean	75	83
PRD	1.00	1.00
95% Confidence	2.94	2.94

Number Of Sales 2



Month	Mean	Median	Sales
Oct-19	77	77	1
Nov-19	74	74	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	109	452	33	4N1W05A C 03103	2019-9576	0.16	87,700	54,930	142,630	192,000	Nov-19	1	74
01	00	000	109	452	33	5N1W33D B 01007	2019-8646	0.09	69,860	79,670	149,530	195,400	Oct-19	2	77

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	01	15	000	2020		St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	3
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	774,320
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	94
Time Trend Adjustment	0
Before Ratio	94
Overall Adjustment Factor	106
Land Adjustment Factor	106
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

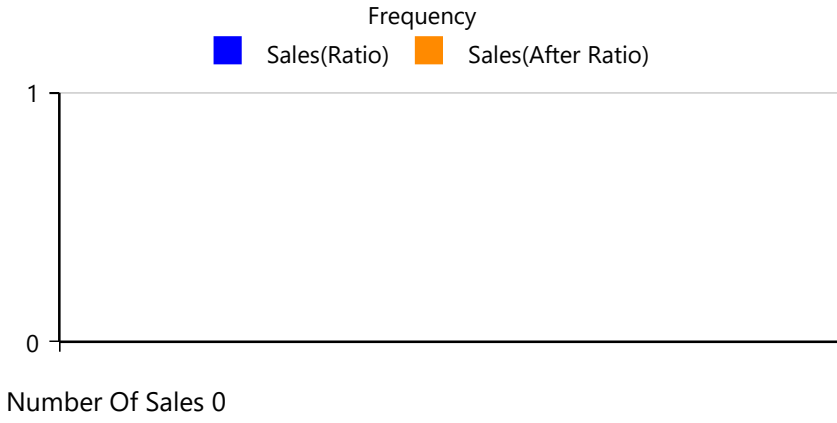
RMV 100: SA 15
Unimproved land, Riverfront property in the City of St. Helens

With having no sales available for this analysis of vacant land Riverfront properties, it was decided to use the Selected Median of 94 from the conclusion of the RMV class 101 improved study located in the same MA and SA area.

Performance History

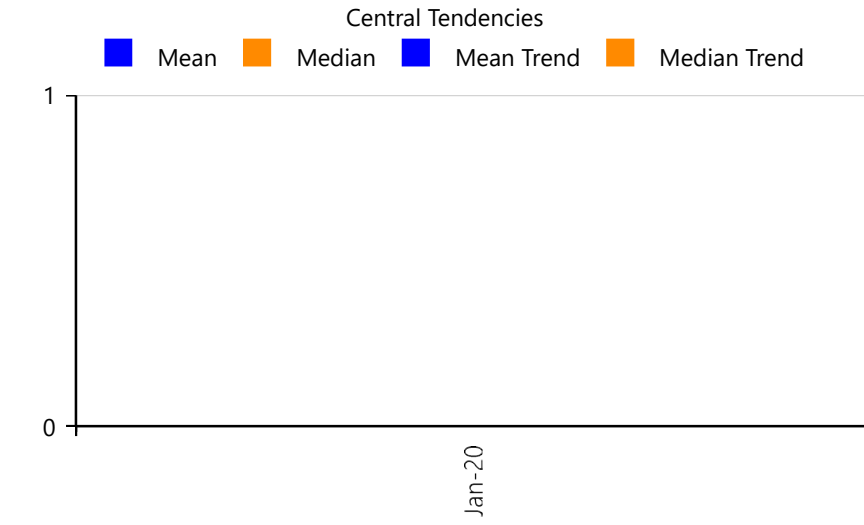
	2020	2018
COD	-	16.54
PRD	-	1.01

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	15	000	2020	2	St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	24
Sales as a percentage of the Population	8.33%
<i>Prior Year Population Values</i>	
Land Rmv	5,295,700
OSD RMV	562,400
Improvement RMV	8,345,620
Farm Improvement RMV	39,870
Selected Ratio From Sales	94
Time Trend Adjustment	11
Before Ratio	94
Overall Adjustment Factor	106
Land Adjustment Factor	106
OSD Adjustment Factor	100
Improvement Adjustment Factor	107
Farm Improvement Factor	107
After Ratio	100

Explanation

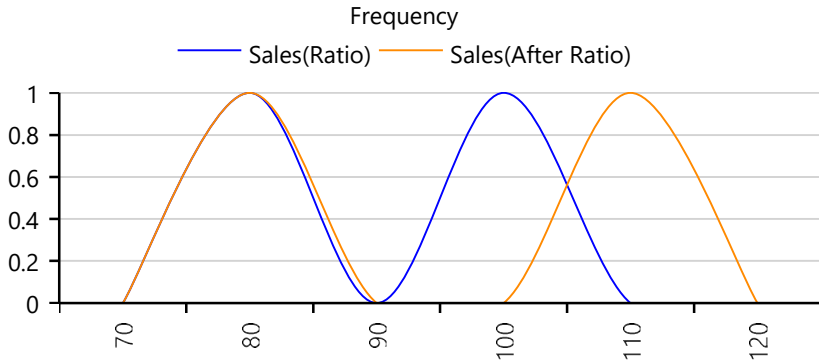
RMV 101: SA 15
Improved land, Riverfront property in the City of St. Helens

There were 2 sales within this Study Area during the Sales Year for this population of accounts. After applying the time adjustment of 11%, the Median and Mean returned a ratio of 94. The Median was selected and applied resulting in an Overall Adjustment of 106.

Performance History

	2020	2018
COD	10.64	10.50
PRD	1.03	0.99

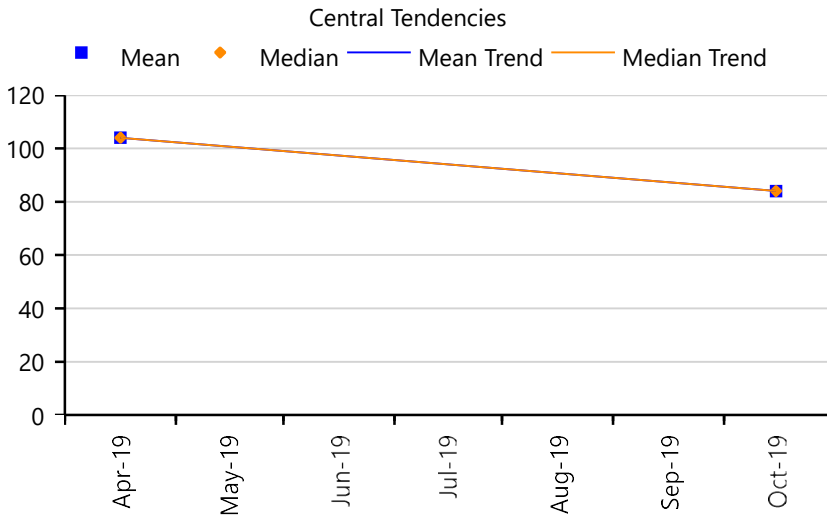
COLUMBIA County 2020 Ratio Study



70	0	0
80	1	1
90	0	0
100	1	0
110	0	1
120	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	94	100
AD	10.00	10.50
COD	10.64	10.55
Mean	94	100
SD	14.14	14.85
COV	15.04	14.92
Wtd Mean	91	97
GeoMean	93	99
PRD	1.03	1.02
95% Confidence	19.60	20.58

Number Of Sales 2



Month	Mean	Median	Sales
Apr-19	104	104	1
Oct-19	84	84	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	15	000	101		33	5N1W34BC 01100	2019-8418	1.88	269,840	491,810	761,650	907,922	Oct-19	1	84
01	15	000	101	163	33	5N1W34CB 00301	2019-3162	0.50	209,690	375,970	585,660	565,005	Apr-19	2	104

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	30	000	2020	3	St Helens							

Adjustment Calculation Summary

Sample - Number of Sales	3
Population - Number of Accounts	223
Sales as a percentage of the Population	1.35%
<i>Prior Year Population Values</i>	
Land Rmv	14,700,980
OSD RMV	9,746,600
Improvement RMV	36,514,240
Farm Improvement RMV	30,240
	Pre-Trend Brkdwn
	24.10%
	Post Trend Values
	16,318,088
	Post Trend Brkdwn
	23.97%
	14.31%
	61.67%
	0.05%
Selected Ratio From Sales	89
Time Trend Adjustment	11
Before Ratio	89
Overall Adjustment Factor	112
Land Adjustment Factor	111
OSD Adjustment Factor	100
Improvement Adjustment Factor	115
Farm Improvement Factor	115
After Ratio	100

Explanation

RMV 101: SA 30

Improved land – Duplex/Triplex/Fourplex, City of St. Helens

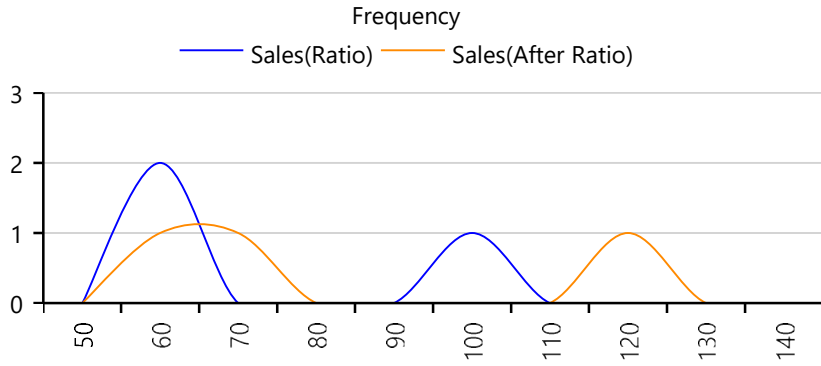
Selected Ratio before applying time adjustment to sales price: NA

The population of this study is 223 and there are 3 sales available for analysis. - a sample too small to draw an acceptable conclusion. Therefore, it is recommended to apply the Selected Ratio of 89 from the MA 01, SA 00 RMV Class 101 study to this classification of properties.

Performance History

	2020	2019	2018	2017	2016
COD	22.55	9.72	4.67	15.00	14.68
PRD	0.97	1.01	1.00	1.03	1.01

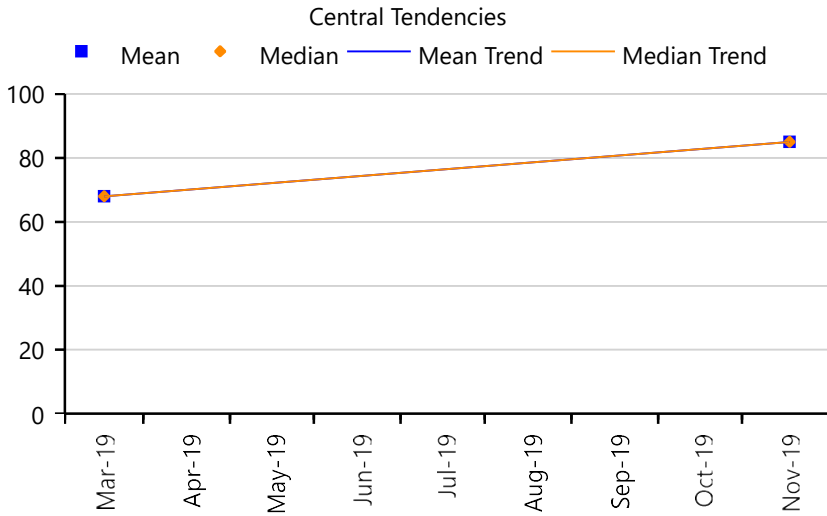
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
50	0	0
60	2	1
70	0	1
80	0	0
90	0	0
100	1	0
110	0	0
120	0	1
130	0	0
140	0	0

Median	68	76
AD	15.33	18.00
COD	22.55	23.68
Mean	79	89
SD	25.01	29.14
COV	31.52	32.87
Wtd Mean	82	92
GeoMean	77	86
PRD	.97	.97
95% Confidence	28.30	32.98

Number Of Sales 3



Month	Mean	Median	Sales
Mar-19	68	68	1
Nov-19	85	85	2

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	30	000	101		33	4N1W05A C 03300	2019-9953	0.17	99,770	70,260	170,030	275,443	Nov-19	1	62
01	30	000	101	232	33	4N1W03BB 01300	2019-1879	0.12	89,750	103,450	193,200	283,114	Mar-19	2	68
01	30	000	101		33	4N1W04A D 02003	2019-10013	0.13	92,980	304,970	397,950	369,088	Nov-19	3	108

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	43	000	2020	8	St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	8
Population - Number of Accounts	108
Sales as a percentage of the Population	7.41%
<i>Prior Year Population Values</i>	
Land Rmv	4,457,920
OSD RMV	3,196,800
Improvement RMV	15,693,540
Farm Improvement RMV	0
Selected Ratio From Sales	91
Time Trend Adjustment	11
Before Ratio	91
Overall Adjustment Factor	110
Land Adjustment Factor	111
OSD Adjustment Factor	100
Improvement Adjustment Factor	112
Farm Improvement Factor	112
After Ratio	100

Explanation

RMV 101: SA 43

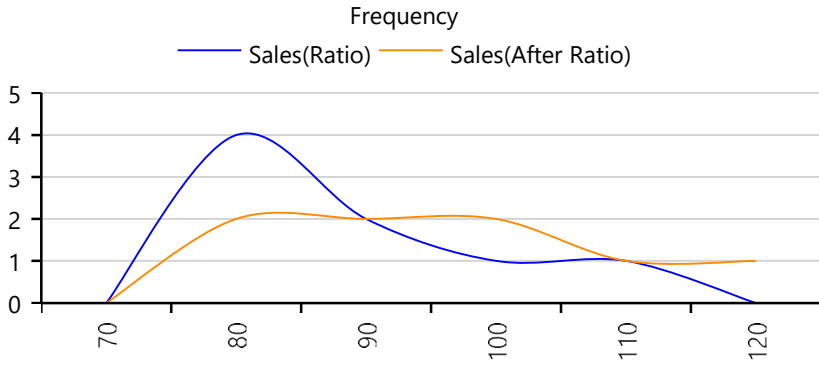
Improved land - Town house/Row house, City of St. Helens

For this grouping of properties, the Weighted Mean and Geometric Mean both returned a ratio of 91. These ratio indicators were further supported by the Median (90) and the Mean (92). Therefore, the Weighted Mean of 91 was selected resulting in an Overall Adjustment Factor of 110.

Performance History

	2020	2019	2018	2017	2016
COD	12.08	12.26	8.45	13.47	14.68
PRD	1.01	1.01	1.01	1.03	1.01

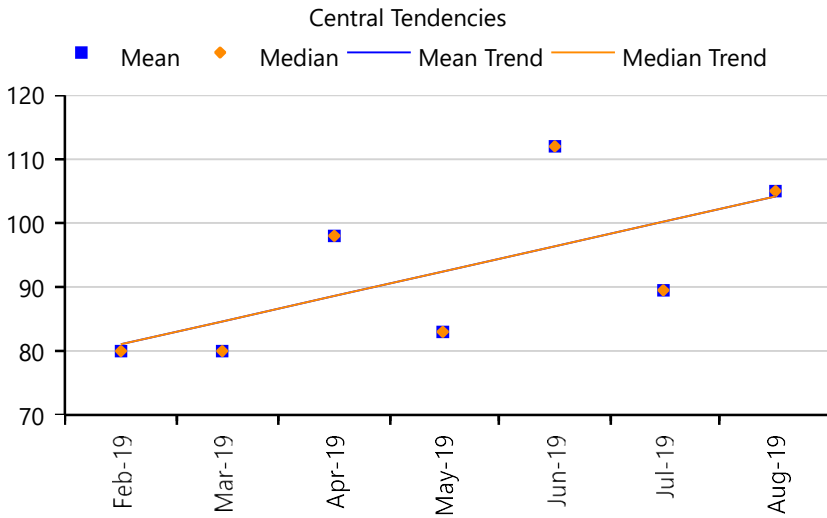
COLUMBIA County 2020 Ratio Study



70	0	0
80	4	2
90	2	2
100	1	2
110	1	1
120	0	1

	Sales (Ratio)	Sales (After Ratio)
Median	90	100
AD	10.88	12.00
COD	12.08	12.06
Mean	92	102
SD	12.53	13.75
COV	13.60	13.51
Wtd Mean	91	101
GeoMean	91	101
PRD	1.01	1.01
95% Confidence	8.68	9.53

Number Of Sales 8



Month	Mean	Median	Sales
Feb-19	80	80	1
Mar-19	80	80	1
Apr-19	98	98	1
May-19	83	83	1
Jun-19	112	112	1
Jul-19	90	90	2
Aug-19	105	105	1

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	43	000	101	143	33	4N1W03BB 00700	2019-1263	0.06	55,940	185,440	241,380	302,823	Feb-19	1	80
01	43	000	101	133	33	4N1W03BB 05003	2019-1976	0.07	59,990	132,170	192,160	239,096	Mar-19	2	80
01	43	000	101		33	4N1W03BB 00702	2019-5441	0.07	59,770	176,080	235,850	287,364	Jul-19	3	82
01	43	000	101	143	33	4N1W03BB 00600	2019-3819	0.07	59,770	185,440	245,210	293,688	May-19	4	83
01	43	000	101		33	4N1W08BA 01608	2019-5899	0.06	58,080	195,810	253,890	261,151	Jul-19	5	97
01	43	000	101	143	33	4N1W05CB 06700	2019-2653	0.08	82,600	159,470	242,070	245,875	Apr-19	6	98
01	43	000	101		33	4N1W05B D 01108	2019-6891	0.08	85,140	171,360	256,500	244,001	Aug-19	7	105
01	43	000	101		33	4N1W05CB 09400	2019-5131	0.07	75,930	165,870	241,800	216,624	Jun-19	8	112

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	01	80	000	2020		St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	14
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	1,382,090
OSD RMV	414,400
Improvement RMV	4,053,350
Farm Improvement RMV	0
Selected Ratio From Sales	89
Time Trend Adjustment	0
Before Ratio	89
Overall Adjustment Factor	112
Land Adjustment Factor	111
OSD Adjustment Factor	100
Improvement Adjustment Factor	115
Farm Improvement Factor	115
After Ratio	100

Explanation

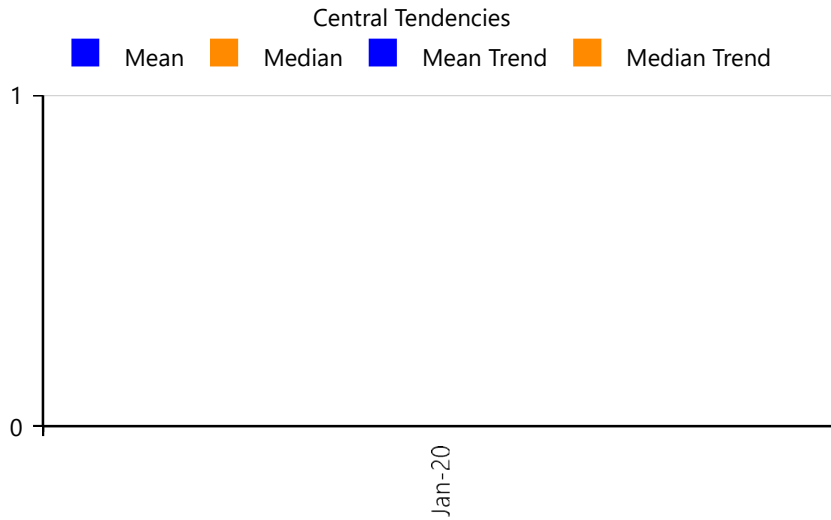
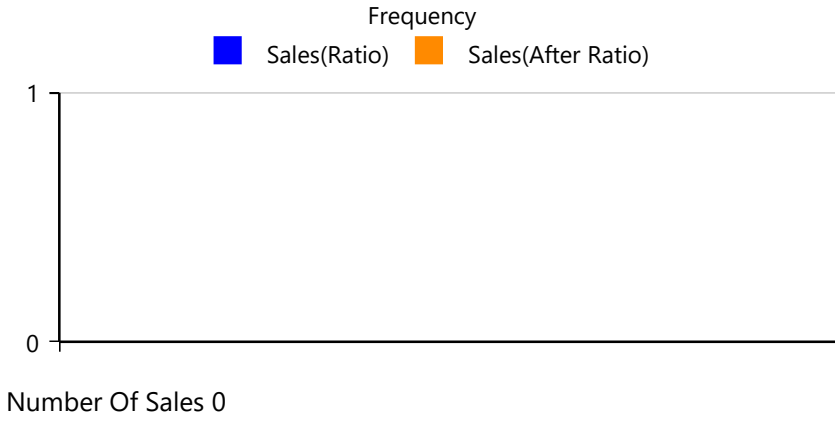
RMV 101: SA 80
Improved land - Yachts Landing-PUD, City of St. Helens

The Yachts Landing study area is a planned unit development consisting of a hybrid of townhouses/attached housing with shared common areas. This area is located along the Columbia River, next to the County Courthouse. Due to having no sales data available for this analysis, the Median of 89 from the MA 1, SA 00, RMV Class 101 study was applied here.

Performance History

	2020	2017
COD	-	0.00
PRD	-	1.00

COLUMBIA County 2020 Ratio Study



Sales (Ratio) Sales (After Ratio)

- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Month Mean Median Sales

MAINTENANCE AREA 2

SCAPPOOSE

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	02	00	000	2020	1	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	1			
Population - Number of Accounts	75			
Sales as a percentage of the Population	1.33%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		13,323,640	100.00%	13,989,822 100.00%
OSD RMV		0	0.00%	0 0.00%
Improvement RMV		0	0.00%	0 0.00%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		95		
Time Trend Adjustment		0		
Before Ratio		95		
Overall Adjustment Factor		105		
Land Adjustment Factor		105		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		100		
Farm Improvement Factor		100		
After Ratio		100		

Explanation

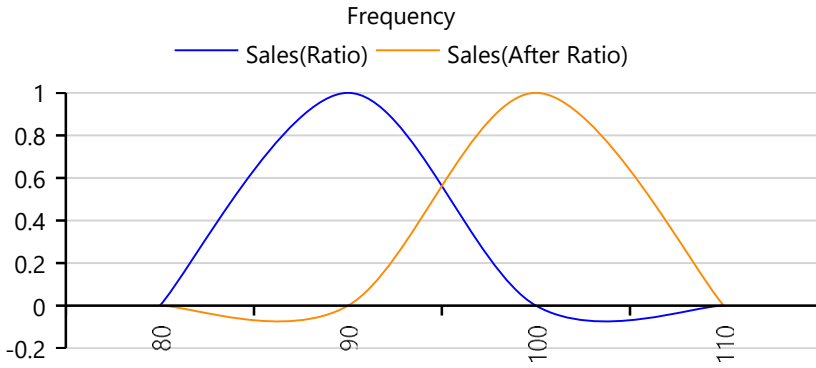
RMV 100: SA 00
Undeveloped land, City of Scappoose

For this analysis of vacant land in the City of Scappoose, only one sale was found which is comprised of city acreage. Although it is a valid sale, it does not represent the current market for a base city lot that is ready for development. Therefore, it was decided to use the Mean of 95 from the improved study located in the same maintenance and study area (RMV 101 MA 02, SA 00).

Performance History

	2020	2019	2018
COD	-	9.60	8.41
PRD	1.00	1.15	1.01

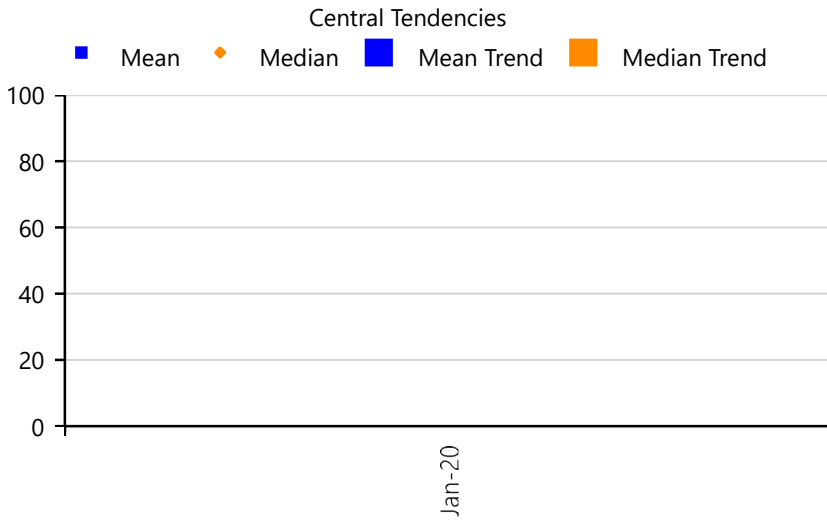
COLUMBIA County 2020 Ratio Study



Number Of Sales 1

	Sales (Ratio)	Sales (After Ratio)
80	0	0
90	1	0
100	0	1
110	0	0

Median	99	104
AD		
COD		
Mean	99	104
SD	1.00	1.00
COV	1.01	.96
Wtd Mean	99	104
GeoMean	99	104
PRD	1.00	1.00
95% Confidence	1.96	1.96



Month	Mean	Median	Sales
Jul-19	99	99	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	00	000	100		30	3N2W12D D 00500	2019-5196	3.44	411,220	0	411,220	415,000	Jul-19	1	99

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	00	000	2020	129	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	129			
Population - Number of Accounts	2175			
Sales as a percentage of the Population	5.93%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		209,676,199	29.77%	220,160,009 29.73%
OSD RMV		65,036,500	9.24%	65,036,500 8.78%
Improvement RMV		427,003,586	60.63%	452,623,801 61.13%
Farm Improvement RMV		2,507,940	0.36%	2,658,416 0.36%
Selected Ratio From Sales		95		
Time Trend Adjustment		11		
Before Ratio		95		
Overall Adjustment Factor		105		
Land Adjustment Factor		105		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		106		
Farm Improvement Factor		106		
After Ratio		100		

Explanation

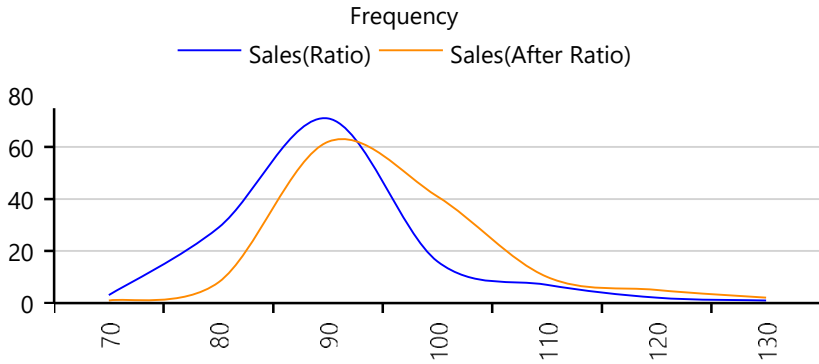
RMV 101: SA 00
Improved property of Single Family dwellings, City of Scappoose.

After applying the conclusion from time adjustment study to all the sales in this array, the Mean, Weighted Mean and Geometric Mean returned an indicator of 95. For this analysis, the Mean of 95 was selected and resulted in an Overall Adjustment Factor of 105.

Performance History

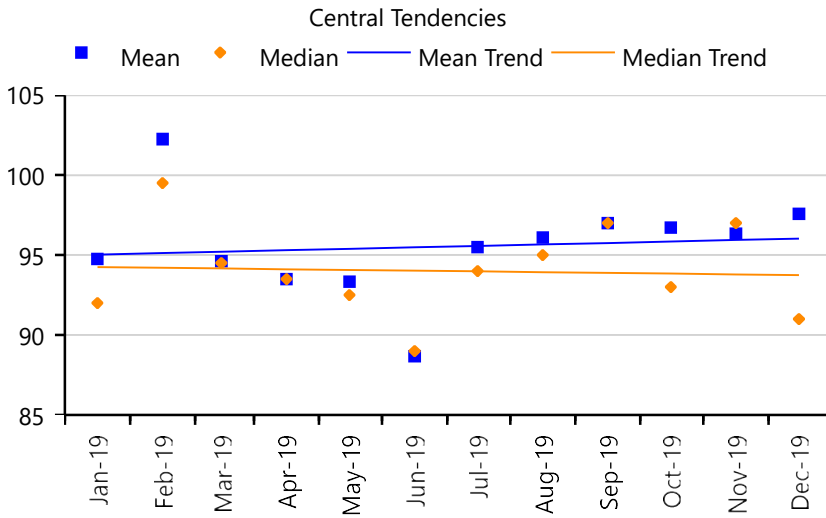
	2020	2019	2018	2017	2016
COD	6.84	7.72	6.67	7.69	7.90
PRD	1.00	1.00	1.00	1.00	1.01

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)		Sales (Ratio)	Sales (After Ratio)
70	3	1	Median	93	98
80	29	8	AD	6.36	6.74
90	71	62	COD	6.84	6.87
100	16	41	Mean	95	100
110	7	10	SD	8.97	9.50
120	2	5	COV	9.42	9.50
130	1	2	Wtd Mean	95	100
			GeoMean	95	100
			PRD	1.00	1.00
			95% Confidence	1.55	1.64

Number Of Sales 129



Month	Mean	Median	Sales
Jan-19	95	92	8
Feb-19	102	100	4
Mar-19	95	95	8
Apr-19	94	94	12
May-19	93	93	12
Jun-19	89	89	12
Jul-19	96	94	14
Aug-19	96	95	11
Sep-19	97	97	18
Oct-19	97	93	14
Nov-19	96	97	9
Dec-19	98	91	7

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	00	000	101		33	3N2W12A C 03901	2019-5568	0.11	123,860	104,970	228,830	306,859	Jun-19	1	75
02	00	000	101		33	3N1W18BB 01114	2019-7439	0.17	141,260	209,450	350,710	455,796	Sep-19	2	77
02	00	000	101	141	33	3N2W11A A 00125	2019-3665	0.19	144,030	182,240	326,270	412,489	May-19	3	79
02	00	000	101	141	33	3N2W13CB 00118	2019-542	0.14	130,890	194,380	325,270	402,522	Jan-19	4	81
02	00	000	101	141	33	3N2W13CB 00132	2019-3706	0.12	125,050	194,380	319,430	390,416	May-19	5	82
02	00	000	101		33	3N1W07CC 02600	2019-5112	0.17	140,130	189,160	329,290	390,984	Jun-19	6	84

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	00	000	101		33	3N1W18BB 01113	2019-7004	0.17	140,650	242,860	383,510	454,644	Aug-19	7	84
02	00	000	101		33	3N2W13CB 00132	2019-9305	0.12	125,050	194,380	319,430	380,208	Nov-19	8	84
02	00	000	101	131	33	3N2W12AB 00400	2019-3708	0.50	187,240	101,790	289,030	340,074	May-19	9	85
02	00	000	101		33	3N1W18BB 01137	2019-6772	0.17	140,630	243,560	384,190	446,332	Aug-19	10	86
02	00	000	101	143	33	3N2W13C D 03100	2019-536	0.14	131,410	195,890	327,300	378,260	Jan-19	11	87
02	00	000	101	143	33	3N1W07CC 01412	2019-1801	0.14	130,510	266,190	396,700	457,957	Mar-19	12	87
02	00	000	101	143	33	3N2W12A D 06539	2019-2655	0.14	130,370	254,140	384,510	443,005	Apr-19	13	87
02	00	000	101	131	33	3N2W12A D 03200	2019-3357	0.18	143,380	131,930	275,310	315,785	Apr-19	14	87
02	00	000	101		33	3N2W12D C 00122	2019-5043	0.14	131,230	191,840	323,070	371,007	Jun-19	15	87
02	00	000	101		30	3N2W12D C 00135	2019-5281	0.14	130,470	207,400	337,870	387,258	Jul-19	16	87
02	00	000	101		33	3N1W18BB 01112	2019-8510	0.18	143,400	238,260	381,660	440,648	Oct-19	17	87
02	00	000	101	143	33	3N2W13C D 06500	2019-2119	0.14	131,110	235,290	366,400	414,898	Mar-19	18	88
02	00	000	101		33	3N2W13B D 01200	2019-4447	0.14	130,470	188,360	318,830	361,416	Jun-19	19	88
02	00	000	101		33	3N2W12D B 02901	2019-4883	0.17	139,480	187,450	326,930	370,369	Jun-19	20	88
02	00	000	101		33	3N2W12CC 01214	2019-5975	0.17	139,410	183,850	323,260	366,975	Jul-19	21	88
02	00	000	101		33	3N2W12C A 04800	2019-6733	0.14	151,620	130,900	282,520	319,831	Aug-19	22	88
02	00	000	101	143	33	3N2W12AB 00114	2019-1578	0.14	131,740	197,430	329,170	370,940	Mar-19	23	89
02	00	000	101		33	3N2W13C D 02500	2019-4481	0.17	138,320	232,120	370,440	415,633	Jun-19	24	89
02	00	000	101		33	3N2W13A A 05600	2019-4451	0.15	134,040	223,710	357,750	403,940	Jun-19	25	89
02	00	000	101		33	3N2W13A D 06100	2019-5835	0.16	135,360	198,810	334,170	373,480	Jul-19	26	89
02	00	000	101		33	3N1W07CC 05200	2019-5800	0.14	130,390	266,150	396,540	445,635	Jul-19	27	89
02	00	000	101		33	3N1W07CB 01908	2019-7885	0.18	142,420	205,110	347,530	391,221	Sep-19	28	89
02	00	000	101		33	3N2W13A D 04503	2019-8617	0.15	133,010	185,610	318,620	358,750	Oct-19	29	89
02	00	000	101		33	3N2W13C D 02100	2019-8679	0.14	130,500	187,370	317,870	358,645	Oct-19	30	89
02	00	000	101		33	3N2W13CB 00112	2019-9466	0.13	127,540	246,610	374,150	422,406	Nov-19	31	89
02	00	000	101		33	3N2W13B D 08600	2019-10191	0.16	136,880	184,680	321,560	360,503	Dec-19	32	89

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	00	000	101	143	33	3N2W12D C 02302	2019-478	0.08	108,710	188,640	297,350	331,110	Jan-19	33	90
02	00	000	101	141	33	3N2W11D D 01100	2019-2453	0.54	190,060	216,450	406,510	451,234	Apr-19	34	90
02	00	000	101	143	33	3N2W13B D 01100	2019-3936	0.14	130,470	192,690	323,160	357,573	May-19	35	90
02	00	000	101		33	3N2W12A A 00800	2019-4542	0.14	132,280	272,090	404,370	449,301	Jun-19	36	90
02	00	000	101		33	3N2W13C D 07500	2019-5266	0.14	130,970	236,950	367,920	408,257	Jul-19	37	90
02	00	000	101		33	3N2W13A C 03304	2019-7956	0.14	130,660	171,970	302,630	337,774	Sep-19	38	90
02	00	000	101		33	3N2W12BA 03200	2019-8010	0.15	134,280	112,340	246,620	272,818	Sep-19	39	90
02	00	000	101	143	33	3N2W12AB 00203	2019-393	0.14	130,370	170,900	301,270	330,179	Jan-19	40	91
02	00	000	101	141	33	3N2W12D D 03700	2019-2531	0.19	145,910	183,150	329,060	361,867	Apr-19	41	91
02	00	000	101	143	33	3N2W13BA 06000	2019-3489	0.14	130,560	219,340	349,900	386,460	May-19	42	91
02	00	000	101	141	33	3N2W13B D 02300	2019-3938	0.14	131,960	195,390	327,350	358,115	May-19	43	91
02	00	000	101		33	3N2W13B D 02400	2019-4822	0.14	131,860	207,300	339,160	370,707	Jun-19	44	91
02	00	000	101		33	3N2W13C D 04200	2019-5038	0.14	130,370	240,340	370,710	407,061	Jun-19	45	91
02	00	000	101		33	3N1W18BB 01102	2019-6782	0.17	140,980	291,330	432,310	477,406	Aug-19	46	91
02	00	000	101		33	3N2W11D B 00800	2019-7218	0.54	190,070	338,940	529,010	582,525	Sep-19	47	91
02	00	000	101		33	3N2W13A C 03321	2019-8692	0.14	130,430	171,630	302,060	332,443	Oct-19	48	91
02	00	000	101		33	3N2W13C D 03500	2019-9072	0.14	131,660	238,470	370,130	407,618	Oct-19	49	91
02	00	000	101		33	3N2W12D C 01000	2019-9613	0.19	144,940	175,300	320,240	350,913	Nov-19	50	91
02	00	000	101		33	3N2W13CB 00137	2019-10251	0.10	120,080	236,260	356,340	393,510	Dec-19	51	91
02	00	000	101		33	3N2W13C D 03400	2019-10468	0.14	131,210	232,120	363,330	399,208	Dec-19	52	91
02	00	000	101		33	3N2W13C D 01400	2019-10771	0.14	131,060	184,850	315,910	346,449	Dec-19	53	91
02	00	000	101	143	33	3N2W12D C 00137	2019-1052	0.14	130,690	205,560	336,250	364,493	Feb-19	54	92
02	00	000	101		33	3N2W13A D 05600	2019-6029	0.14	131,000	237,850	368,850	403,095	Jul-19	55	92
02	00	000	101		33	3N2W13C A 03913	2019-7648	0.06	101,780	201,590	303,370	329,080	Sep-19	56	92
02	00	000	101	143	33	3N1W07C A 00152	2019-351	0.18	142,430	269,620	412,050	442,920	Jan-19	57	93
02	00	000	101	143	33	3N1W07CC 04400	2019-1761	0.14	130,370	234,420	364,790	391,896	Mar-19	58	93

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	00	000	101	143	33	3N1W07CC 04800	2019-2672	0.14	130,370	279,520	409,890	441,679	Apr-19	59	93
02	00	000	101	143	33	3N2W13C A 03928	2019-2766	0.09	115,440	214,230	329,670	355,773	Apr-19	60	93
02	00	000	101		33	3N2W13BA 02600	2019-4858	0.22	149,770	144,536	294,306	317,119	Jun-19	61	93
02	00	000	101		33	3N2W12D B 02502	2019-7660	0.44	150,430	170,280	320,710	345,687	Sep-19	62	93
02	00	000	101		33	3N2W13C D 08600	2019-8641	0.15	132,970	236,260	369,230	398,492	Oct-19	63	93
02	00	000	101		33	3N2W12AB 00211	2019-8610	0.14	131,150	153,790	284,940	306,428	Oct-19	64	93
02	00	000	101		33	3N2W13C D 00700	2019-9251	0.14	130,370	195,610	325,980	351,452	Oct-19	65	93
02	00	000	101		33	3N2W13BC 02100	2019-10001	0.16	137,190	195,890	333,080	358,820	Nov-19	66	93
02	00	000	101	143	33	3N1W18BB 02500	2019-2305	0.14	130,370	271,860	402,230	427,627	Apr-19	67	94
02	00	000	101		33	3N1W07CC 01425	2019-4327	0.14	130,860	293,170	424,030	450,197	May-19	68	94
02	00	000	101		33	3N2W01CC 00112	2019-5374	0.19	144,860	233,080	377,940	402,590	Jul-19	69	94
02	00	000	101		33	3N1W07CC 01427	2019-6037	0.14	130,380	277,510	407,890	432,278	Jul-19	70	94
02	00	000	101		33	3N1W07CC 01415	2019-6934	0.14	130,480	255,210	385,690	410,010	Aug-19	71	94
02	00	000	101	141	33	3N2W13A A 03400	2019-2723	0.17	140,760	148,050	288,810	302,456	Apr-19	72	95
02	00	000	101	143	33	3N2W13B D 05900	2019-2735	0.23	152,270	247,000	399,270	420,342	Apr-19	73	95
02	00	000	101		33	3N1W07C A 00500	2019-6438	0.19	144,660	235,970	380,630	401,001	Jul-19	74	95
02	00	000	101		33	3N2W12CC 00304	2019-6696	0.10	118,760	100,390	219,150	229,928	Aug-19	75	95
02	00	000	101		33	3N2W13BC 01600	2019-10767	0.16	136,980	218,680	355,660	373,004	Dec-19	76	95
02	00	000	101	142	33	3N2W12BB 03300	2019-369	0.28	160,580	256,360	416,940	434,344	Jan-19	77	96
02	00	000	101	142	33	3N2W12BB 01000	2019-1816	0.29	162,230	246,000	408,230	425,995	Mar-19	78	96
02	00	000	101	142	33	3N2W13A D 09400	2019-2968	0.14	131,640	202,790	334,430	349,002	Apr-19	79	96
02	00	000	101		33	3N2W11A A 01300	2019-6033	0.18	143,380	231,620	375,000	392,625	Jul-19	80	96
02	00	000	101		33	3N2W01CC 02002	2019-9188	0.14	131,700	204,200	335,900	349,521	Oct-19	81	96
02	00	000	101		33	3N2W13C D 08500	2019-10385	0.15	132,970	213,140	346,110	360,363	Dec-19	82	96
02	00	000	101		33	3N1W18BB 02300	2019-4246	0.14	130,380	266,290	396,670	410,757	May-19	83	97
02	00	000	101		33	3N2W12A D 02423	2019-6628	0.18	141,550	194,870	336,420	346,853	Aug-19	84	97

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	00	000	101		33	3N2W13A A 06100	2019-7072	0.15	134,040	166,710	300,750	310,452	Aug-19	85	97
02	00	000	101		33	3N2W13BC 02300	2019-7689	0.16	136,880	209,720	346,600	357,965	Sep-19	86	97
02	00	000	101		33	3N2W12A D 06509	2019-7911	0.19	144,070	320,920	464,990	479,039	Sep-19	87	97
02	00	000	101		33	3N2W13CC 00132	2019-8147	0.23	152,060	265,020	417,080	431,657	Sep-19	88	97
02	00	000	101		33	3N2W12D A 04113	2019-9147	0.18	142,340	178,450	320,790	331,073	Oct-19	89	97
02	00	000	101		33	3N1W07C A 01400	2019-9527	0.31	164,620	212,440	377,060	389,176	Nov-19	90	97
02	00	000	101	143	33	3N2W12D C 00158	2019-355	0.08	110,800	206,200	317,000	323,912	Jan-19	91	98
02	00	000	101	141	33	3N1W07C A 03000	2019-2799	0.27	158,700	189,980	348,680	355,245	Apr-19	92	98
02	00	000	101		33	3N2W13A D 05900	2019-7687	0.14	131,020	233,290	364,310	371,592	Sep-19	93	98
02	00	000	101		33	3N2W12C D 02001	2019-7971	0.18	142,340	140,910	283,250	288,344	Sep-19	94	98
02	00	000	101		33	3N2W12A D 06005	2019-8842	0.17	141,310	235,480	376,790	383,025	Oct-19	95	98
02	00	000	101		33	3N2W13CC 00126	2019-9477	0.14	130,880	252,720	383,600	393,148	Nov-19	96	98
02	00	000	101	143	33	3N2W13BC 01200	2019-1443	0.19	146,110	197,130	343,240	347,510	Feb-19	97	99
02	00	000	101	143	33	3N2W13BA 04705	2019-1887	0.14	130,480	210,750	341,230	346,241	Mar-19	98	99
02	00	000	101		33	3N2W12D D 07200	2019-4234	0.20	147,950	184,880	332,830	335,696	May-19	99	99
02	00	000	101		33	3N2W12D C 00163	2019-5118	0.06	98,780	199,590	298,370	301,074	Jun-19	100	99
02	00	000	101		33	3N2W11A A 01004	2019-5935	0.21	148,840	216,680	365,520	367,710	Jul-19	101	99
02	00	000	101		30	3N2W11A A 00141	2019-7518	0.35	170,490	250,230	420,720	423,735	Sep-19	102	99
02	00	000	101		33	3N2W12D D 04000	2019-7666	0.18	143,180	164,640	307,820	309,570	Sep-19	103	99
02	00	000	101	141	33	3N2W12BB 00100	2019-1454	0.39	176,560	215,210	391,770	391,111	Feb-19	104	100
02	00	000	101	142	33	3N2W11A D 01500	2019-1803	0.40	177,670	280,850	458,520	457,968	Mar-19	105	100
02	00	000	101		33	3N2W13B D 07800	2019-4213	0.21	149,210	283,310	432,520	433,618	May-19	106	100
02	00	000	101		33	3N2W12A C 02300	2019-6015	0.23	152,430	84,480	236,910	235,508	Jul-19	107	101
02	00	000	101		33	3N2W12D D 08000	2019-7081	0.38	175,560	221,620	397,180	393,715	Sep-19	108	101
02	00	000	101		33	3N2W12D C 02504	2019-9318	0.05	85,350	207,380	292,730	289,988	Nov-19	109	101
02	00	000	101	142	33	3N2W13C0 05800	2019-2480	1.23	177,630	290,700	468,330	453,810	Apr-19	110	103

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	00	000	101		33	3N2W13C A 03919	2019-8688	0.06	103,250	237,550	340,800	332,443	Oct-19	111	103
02	00	000	101		33	3N2W13B D 01400	2019-9258	0.14	130,530	250,980	381,510	371,614	Nov-19	112	103
02	00	000	101		33	3N2W12A D 06513	2019-4144	0.17	138,340	394,640	532,980	512,400	May-19	113	104
02	00	000	101	142	33	3N2W13BA 00619	2019-2285	0.19	145,170	254,570	399,740	381,709	Mar-19	114	105
02	00	000	101		33	3N2W12D C 00174	2019-5872	0.06	100,130	203,870	304,000	286,555	Jul-19	115	106
02	00	000	101		33	3N2W12D D 07800	2019-7137	0.49	186,040	310,030	496,070	467,100	Aug-19	116	106
02	00	000	101		30	3N2W12D D 04600	2019-7159	0.18	143,180	170,270	313,450	293,669	Aug-19	117	107
02	00	000	101		33	3N2W13C A 00500	2019-7999	0.16	136,880	205,120	342,000	319,145	Sep-19	118	107
02	00	000	101	141	33	3N2W02D D 00608	2019-3436	0.59	187,130	178,250	365,380	338,247	May-19	119	108
02	00	000	101		33	3N2W13B D 03605	2019-9127	0.14	130,380	216,620	347,000	314,964	Oct-19	120	110
02	00	000	101		33	3N2W12D C 02516	2019-9933	0.06	100,760	203,000	303,760	273,186	Nov-19	121	111
02	00	000	101		33	3N2W12D B 05000	2019-6184	0.20	147,810	224,690	372,500	331,875	Aug-19	122	112
02	00	000	101		33	3N2W13BA 04400	2019-7414	0.20	147,030	222,110	369,140	320,571	Sep-19	123	115
02	00	000	101		33	3N2W12D D 02600	2019-8128	0.20	147,480	305,440	452,920	391,324	Sep-19	124	116
02	00	000	101		33	3N2W11A A 00129	2019-5378	0.25	214,210	233,290	447,500	382,348	Jul-19	125	117
02	00	000	101	141	33	3N2W11D D 01801	2019-1117	0.64	213,110	279,590	492,700	415,990	Feb-19	126	118
02	00	000	101	143	33	3N2W13BA 05800	2019-95	0.14	131,370	221,760	353,130	288,444	Jan-19	127	122
02	00	000	101		33	3N2W12CB 01500	2019-8608	0.25	155,090	271,260	426,350	342,973	Oct-19	128	124
02	00	000	101		33	3N2W12CC 00300	2019-10255	0.26	156,220	183,590	339,810	260,896	Dec-19	129	130

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
102	02	00	000	2020	1	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	1			
Population - Number of Accounts	8			
Sales as a percentage of the Population	12.50%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv	0	0	0.00%	0 0.00%
OSD RMV	0	0	0.00%	0 0.00%
Improvement RMV	1,688,590	1,688,590	100.00%	1,773,020 100.00%
Farm Improvement RMV	0	0	0.00%	0 0.00%
Selected Ratio From Sales	95			
Time Trend Adjustment	11			
Before Ratio	95			
Overall Adjustment Factor	105			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Improvement Adjustment Factor	105			
Farm Improvement Factor	105			
After Ratio	100			

Explanation

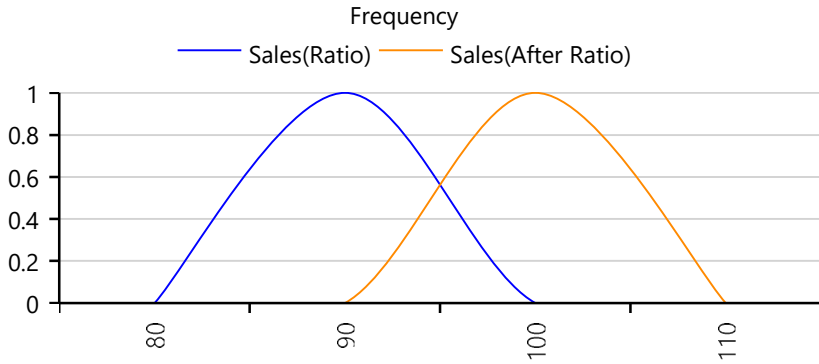
RMV 102: SA 00
 Improved property- Condominium, City of Scappoose

For this grouping of condominiums located in the City of Scappoose the population is 8 and the sales as a percentage is 12.50%. 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 Mean of 95 was selected for this select group of properties.

Performance History

	2020	2019	2017
COD	-	0.11	8.83
PRD	1.00	1.00	1.02

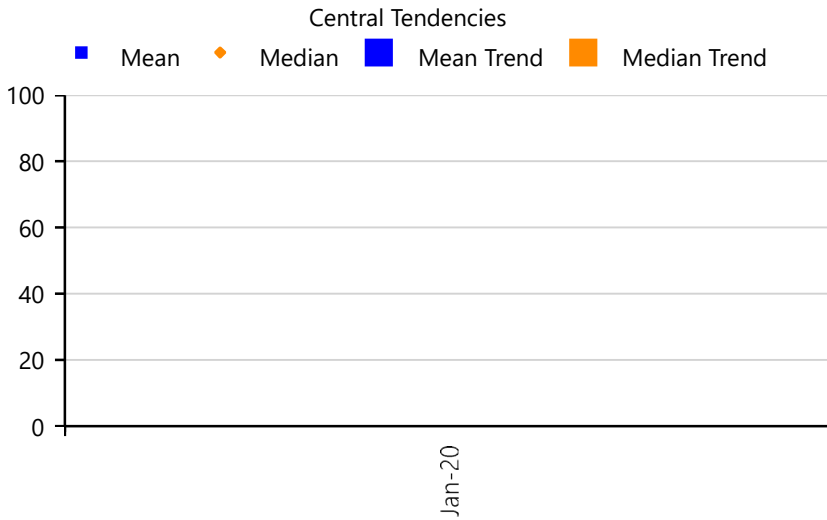
COLUMBIA County 2020 Ratio Study



80	0	0
90	1	0
100	0	1
110	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	95	100
AD		
COD		
Mean	95	100
SD	1.00	1.00
COV	1.05	1.00
Wtd Mean	95	100
GeoMean	95	100
PRD	1.00	1.00
95% Confidence	1.96	1.96

Number Of Sales 1



Month	Mean	Median	Sales
May-19	95	95	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	00	000	102		33	3N2W12CC 92001	2019-4222	0.20	0	248,540	248,540	261,023	May-19	1	95

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	02	00	000	2020	2	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	64
Sales as a percentage of the Population	3.13%
<i>Prior Year Population Values</i>	
Land Rmv	5,628,877
OSD RMV	1,560,600
Improvement RMV	4,956,150
Farm Improvement RMV	356,590
Selected Ratio From Sales	87
Time Trend Adjustment	11
Before Ratio	87
Overall Adjustment Factor	115
Land Adjustment Factor	105
OSD Adjustment Factor	100
Improvement Adjustment Factor	130
Farm Improvement Factor	130
After Ratio	100

Explanation

RMV 109: SA 00

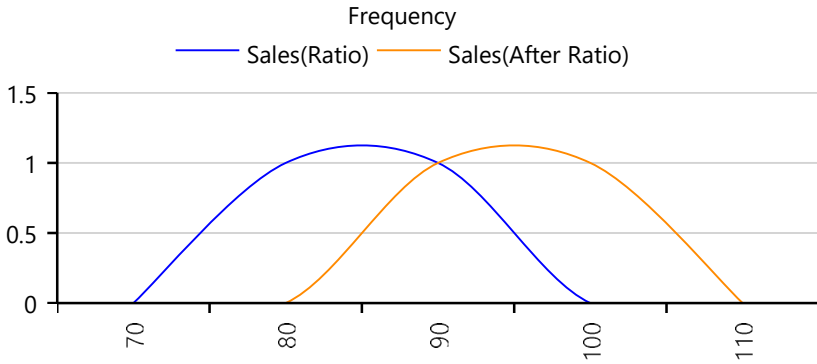
Improved property - Manufactured Structure, City of Scappoose

The Median and Mean with ratio indications of 87 are the best indicators for this grouping of properties. The Median was selected and an Overall Adjustment Factor of 115 is indicated and is recommended.

Performance History

	2020	2019	2018	2017
COD	7.51	6.00	0.00	6.25
PRD	0.99	1.00	1.00	1.00

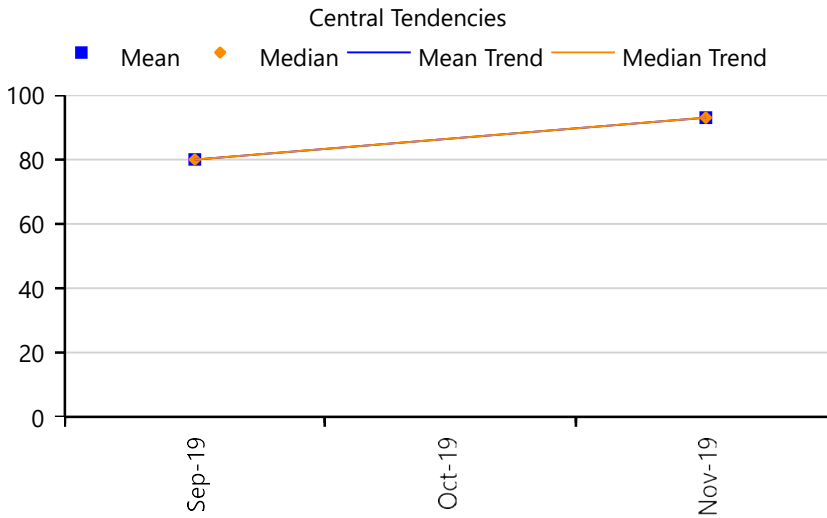
COLUMBIA County 2020 Ratio Study



70	0	0
80	1	0
90	1	1
100	0	1
110	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	87	100
AD	6.50	8.50
COD	7.51	8.54
Mean	87	100
SD	9.19	12.02
COV	10.63	12.08
Wtd Mean	88	101
GeoMean	86	99
PRD	.99	.98
95% Confidence	12.74	16.66

Number Of Sales 2



Month	Mean	Median	Sales
Sep-19	80	80	1
Nov-19	93	93	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	00	000	109		33	3N2W01CC 03000	2019-7891	0.14	130,370	78,950	209,320	261,645	Sep-19	1	80
02	00	000	109		33	3N2W11A A 00100	2019-9570	0.58	193,530	174,350	367,880	396,006	Nov-19	2	93

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
102	02	21	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	4
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	0
OSD RMV	0
Improvement RMV	739,740
Farm Improvement RMV	0
Selected Ratio From Sales	95
Time Trend Adjustment	11
Before Ratio	95
Overall Adjustment Factor	105
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	105
Farm Improvement Factor	105
After Ratio	100

Explanation

RMV 102, SA 21

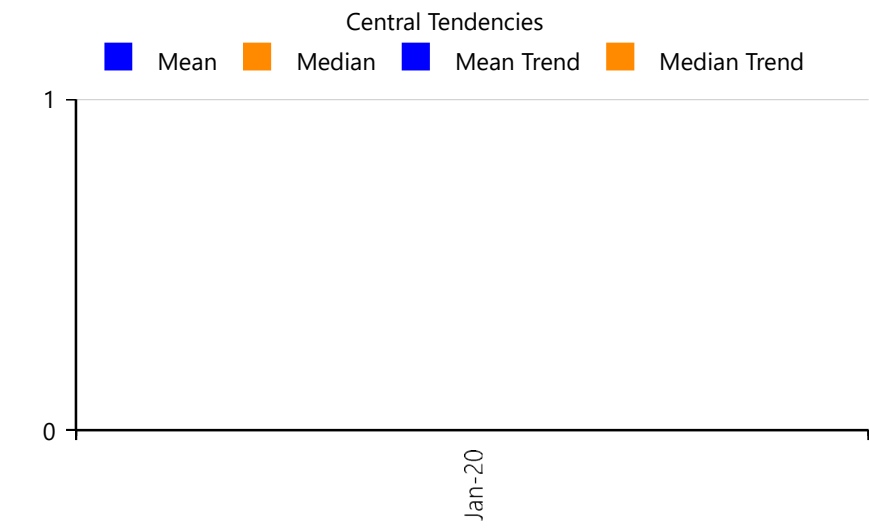
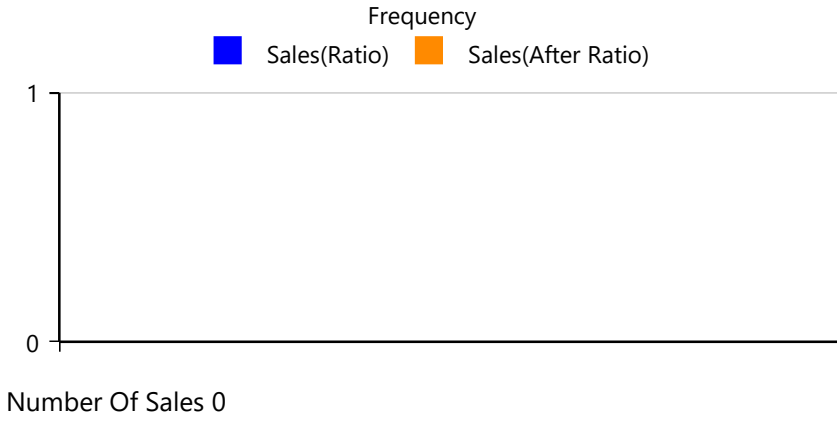
Improved land – Condominium, Rural Value Zone 1, Rural Scappoose

No sales were identified for this study of Condominium properties located in the rural areas of Scappoose (SA 21, Value Zone 1), just beyond the city limits of Scappoose. Therefore, the Selected Ratio (95) from the analysis of properties located in MA02 SA 00 RMV Class 102 was applied here.

Performance History

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	28	000	2020	2	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	51
Sales as a percentage of the Population	3.92%
<i>Prior Year Population Values</i>	
Land Rmv	5,133,360
OSD RMV	2,666,200
Improvement RMV	10,308,320
Farm Improvement RMV	56,270
Selected Ratio From Sales	89
Time Trend Adjustment	11
Before Ratio	89
Overall Adjustment Factor	112
Land Adjustment Factor	105
OSD Adjustment Factor	100
Improvement Adjustment Factor	119
Farm Improvement Factor	119
After Ratio	100

Explanation

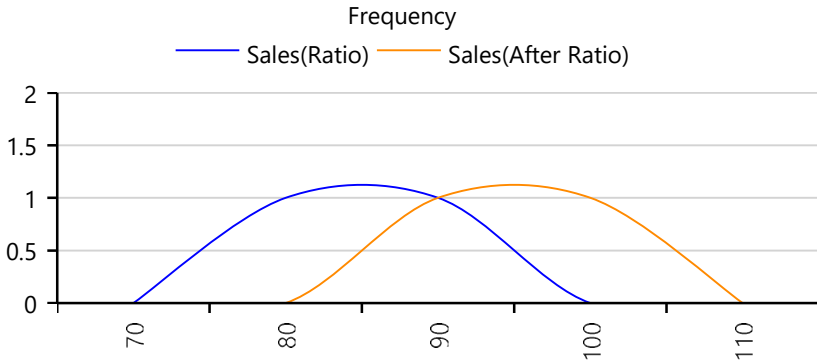
RMV 101: SA 28
Duplex/Triplex/Fourplex, City of Scappoose

The Mean, Median, Weighted Mean and Geometric Mean have resulted in the same conclusion of 89 for Duplex/Triplex/Fourplex properties located in the City of Scappoose. The resulting Overall Adjustment Factor is 112.

Performance History

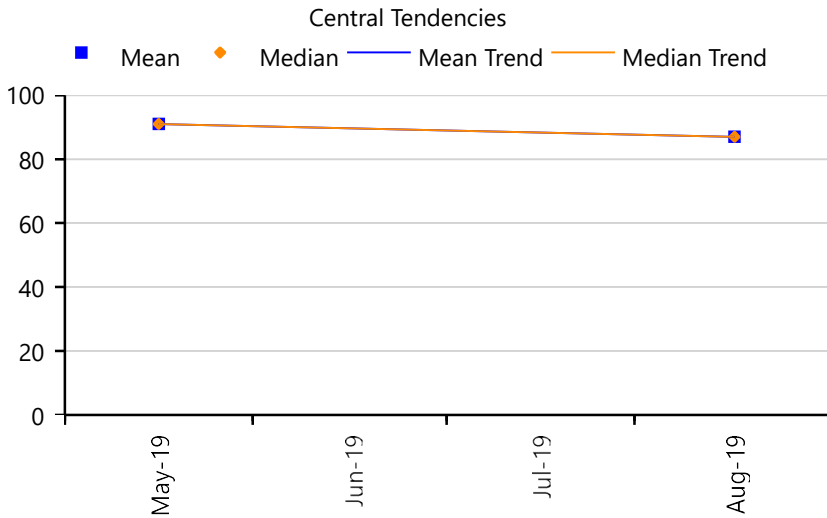
	2020	2019	2017	2016
COD	2.25	7.76	3.92	11.23
PRD	1.00	0.97	1.01	1.02

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	89	99
AD	2.00	4.00
COD	2.25	4.04
Mean	89	99
SD	2.83	5.66
COV	3.18	5.71
Wtd Mean	89	99
GeoMean	89	99
PRD	1.00	1.00
95% Confidence	3.92	7.84

Number Of Sales 2



Month	Mean	Median	Sales
May-19	91	91	1
Aug-19	87	87	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	28	000	101		30	3N2W12BA 03100	2019-6863	0.38	189,510	134,000	323,510	373,788	Aug-19	1	87
02	28	000	101		33	3N2W12CC 01210	2019-3991	0.21	162,620	264,170	426,790	469,832	May-19	2	91

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	33	000	2020	11	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	11			
Population - Number of Accounts	105			
Sales as a percentage of the Population	10.48%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		6,911,130	25.36%	7,256,687 26.46%
OSD RMV		3,227,200	11.84%	3,227,200 11.77%
Improvement RMV		17,106,850	62.77%	16,935,782 61.75%
Farm Improvement RMV		8,490	0.03%	8,405 0.03%
Selected Ratio From Sales		100		
Time Trend Adjustment		11		
Before Ratio		100		
Overall Adjustment Factor		100		
Land Adjustment Factor		105		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		99		
Farm Improvement Factor		99		
After Ratio		100		

Explanation

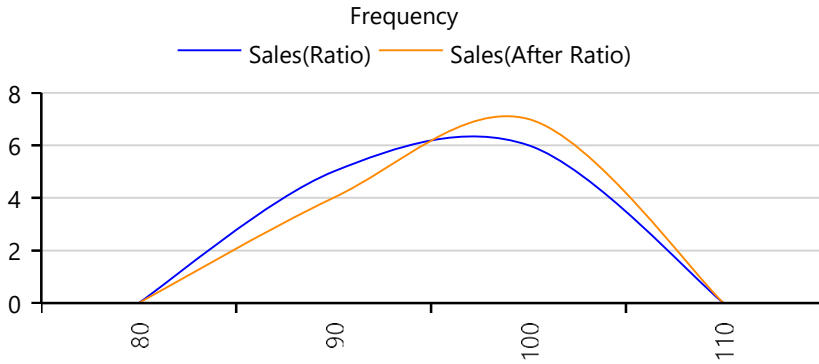
RMV 101: SA 33
Town house/Row house/Common wall, City of Scappoose

This study consists of town houses, row houses and/or those dwellings that share a common wall. There are 11 sales for the analysis which comprise 10.48% of the total population of accounts. The Median of 100 was selected from this sales array, which is supported by the Mean and Weighted Mean (99) respectively.

Performance History

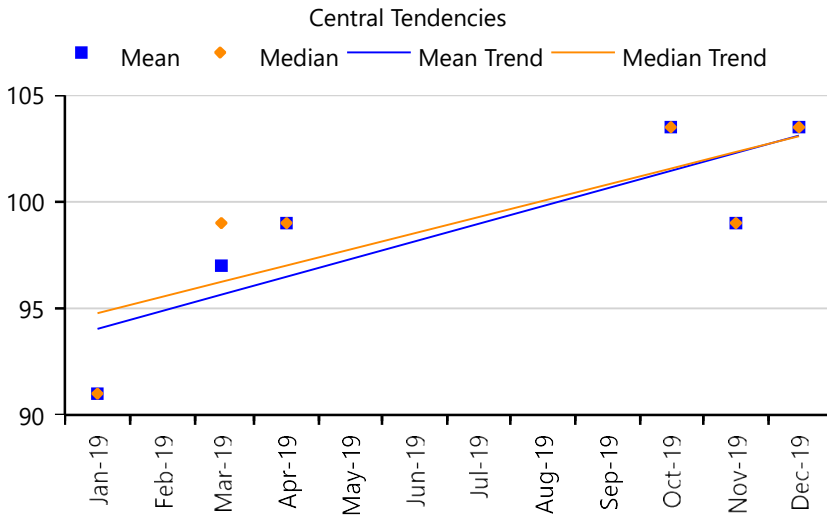
	2020	2019	2018	2017	2016
COD	3.18	3.64	2.58	3.92	11.23
PRD	1.00	1.00	1.00	1.01	1.02

COLUMBIA County 2020 Ratio Study



Number Of Sales 11

	Sales (Ratio)	Sales (After Ratio)		Sales (Ratio)	Sales (After Ratio)
80	0	0	Median	100	100
90	5	4	AD	3.18	3.18
100	6	7	COD	3.18	3.18
110	0	0	Mean	99	100
			SD	4.57	4.53
			COV	4.60	4.53
			Wtd Mean	99	100
			GeoMean	99	100
			PRD	1.00	1.00
			95% Confidence	2.70	2.68



Month	Mean	Median	Sales
Jan-19	91	91	1
Mar-19	97	99	3
Apr-19	99	99	2
Oct-19	104	104	2
Nov-19	99	99	1
Dec-19	104	104	2

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	33	000	101	143	33	3N1W07CC 01011	2019-332	0.08	110,970	188,210	299,180	328,976	Jan-19	1	91
02	33	000	101	143	33	3N1W07CC 01012	2019-2115	0.08	110,990	188,210	299,200	325,410	Mar-19	2	92
02	33	000	101	143	33	3N2W12D C 00148	2019-2659	0.06	100,760	203,620	304,380	310,925	Apr-19	3	98
02	33	000	101	143	33	3N2W13A A 04407	2019-2153	0.07	107,620	195,600	303,220	306,800	Mar-19	4	99
02	33	000	101		33	3N2W12A D 03111	2019-9302	0.09	115,900	188,090	303,990	307,104	Nov-19	5	99
02	33	000	101	143	33	3N2W12D C 02507	2019-1840	0.05	85,350	207,810	293,160	293,760	Mar-19	6	100
02	33	000	101	143	33	3N2W12D C 02502	2019-2966	0.06	97,680	207,880	305,560	306,393	Apr-19	7	100
02	33	000	101		33	3N2W12A D 03112	2019-10392	0.08	111,530	192,040	303,570	299,576	Dec-19	8	101
02	33	000	101		33	3N2W13A A 04412	2019-8415	0.08	107,630	192,440	300,070	292,449	Oct-19	9	103
02	33	000	101		33	3N2W13A A 04409	2019-8628	0.08	107,630	195,440	303,070	291,698	Oct-19	10	104
02	33	000	101		33	3N2W12D C 02503	2019-10773	0.06	97,680	206,300	303,980	286,283	Dec-19	11	106

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	02	79	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0			
Population - Number of Accounts	3			
Sales as a percentage of the Population	0.00%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		356,770	100.00%	310,390 100.00%
OSD RMV		0	0.00%	0 0.00%
Improvement RMV		0	0.00%	0 0.00%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		115		
Time Trend Adjustment		11		
Before Ratio		115		
Overall Adjustment Factor		87		
Land Adjustment Factor		87		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		100		
Farm Improvement Factor		100		
After Ratio		100		

Explanation

RMV 100: SA 79

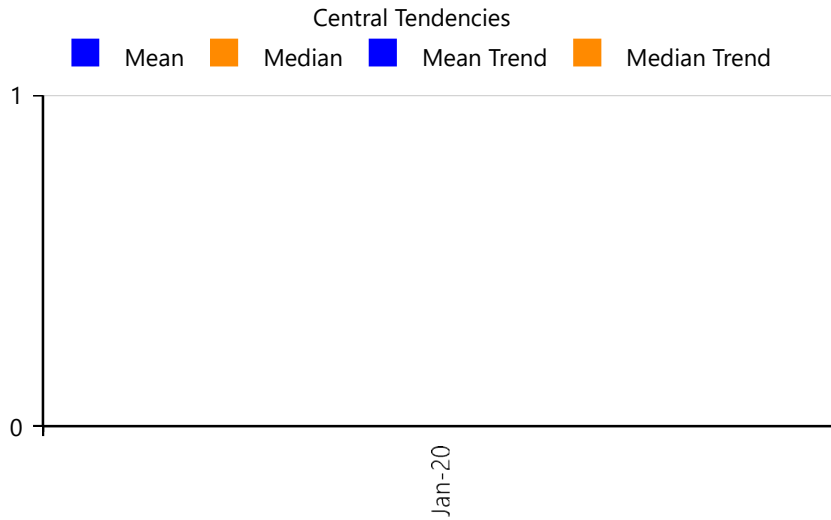
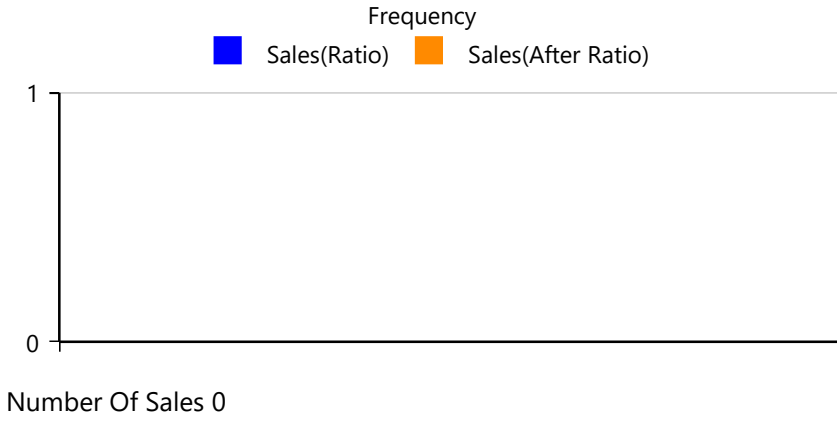
Unimproved land – Keys Landing, Keys Crest and Keys Orchard, City of Scappoose

No sales are available for this study area of undeveloped properties. Therefore, the Selected Ratio (115) from the improved properties located in the same study area have been applied here.

Performance History

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)	
Median			
AD			
COD			
Mean			
SD			
COV			
Wtd Mean			
GeoMean			
PRD			
95% Confidence			
Month	Mean	Median	Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	79	000	2020	4	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	4
Population - Number of Accounts	53
Sales as a percentage of the Population	7.55%
<i>Prior Year Population Values</i>	
Land Rmv	6,222,640
OSD RMV	1,621,800
Improvement RMV	17,444,230
Farm Improvement RMV	0
Selected Ratio From Sales	115
Time Trend Adjustment	11
Before Ratio	115
Overall Adjustment Factor	87
Land Adjustment Factor	87
OSD Adjustment Factor	100
Improvement Adjustment Factor	86
Farm Improvement Factor	86
After Ratio	100

Explanation

RMV 101: SA 79

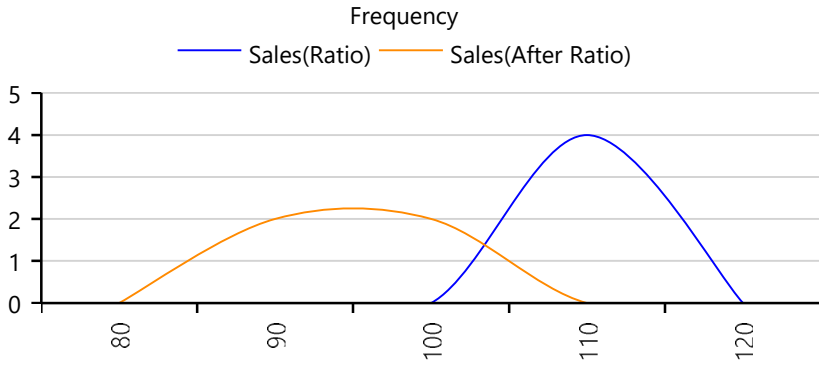
Improved land – Keys Landing, Keys Crest and Keys Orchard, City of Scappoose

For this study, the Median (115) was selected which is further supported by the Mean (115). This selected central tendency is a good indicator of how the market is moving in this area of smaller subdivisions improved with Class 5 and Class 6 dwellings and is deemed appropriate.

Performance History

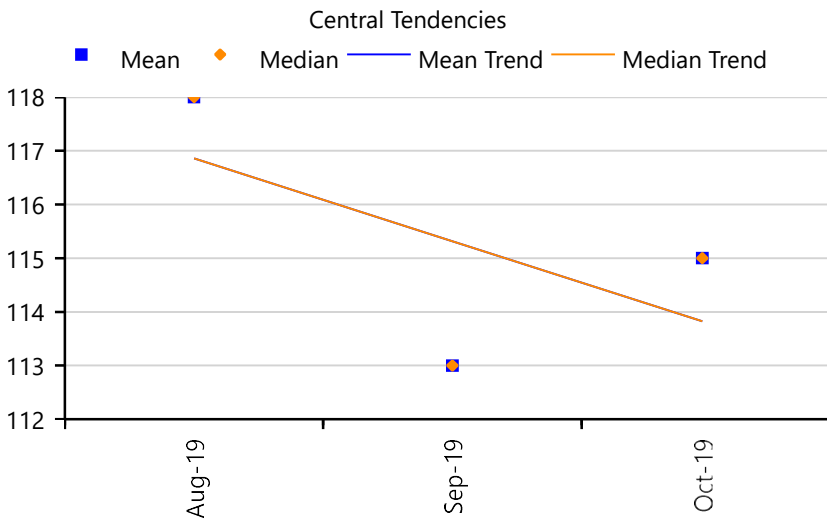
	2020	2019	2018	2017	2016
COD	1.53	6.17	6.79	15.75	7.16
PRD	1.00	1.00	0.99	1.00	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	115	100
AD	1.75	1.50
COD	1.53	1.51
Mean	115	100
SD	2.50	2.08
COV	2.18	2.09
Wtd Mean	114	99
GeoMean	115	99
PRD	1.00	1.00
95% Confidence	2.45	2.04

Number Of Sales 4



Month	Mean	Median	Sales
Aug-19	118	118	1
Sep-19	113	113	2
Oct-19	115	115	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	79	000	101		33	3N2W11D B 02000	2019-7448	0.72	223,510	521,480	744,990	666,154	Sep-19	1	112
02	79	000	101		33	3N2W11D A 02607	2019-7487	0.45	198,190	419,200	617,390	542,745	Sep-19	2	114
02	79	000	101		33	3N2W11D B 02400	2019-9001	0.17	151,080	486,070	637,150	555,682	Oct-19	3	115
02	79	000	101		33	3N2W11D B 02100	2019-6651	0.18	154,900	486,070	640,970	543,872	Aug-19	4	118

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	02	80	000	2020	3	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	3
Population - Number of Accounts	45
Sales as a percentage of the Population	6.67%
<i>Prior Year Population Values</i>	
Land Rmv	5,080,780
OSD RMV	1,377,000
Improvement RMV	14,883,340
Farm Improvement RMV	0
Selected Ratio From Sales	103
Time Trend Adjustment	11
Before Ratio	103
Overall Adjustment Factor	97
Land Adjustment Factor	97
OSD Adjustment Factor	100
Improvement Adjustment Factor	97
Farm Improvement Factor	97
After Ratio	100

Explanation

RMV 101: SA 80

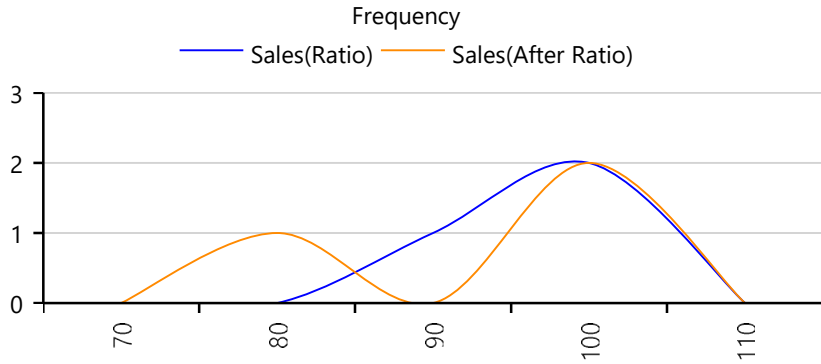
Improved land – Columbia River View Estates, City of Scappoose

Columbia River View Estates is a homogeneous subdivision located northwest of Highway 30. Analysis of the sales array shows that the Mean and Weighted Mean with ratio indicators of 103 are the best indicators for this grouping. Therefore, the Mean was applied returning an Overall Adjustment Factor of 97.

Performance History

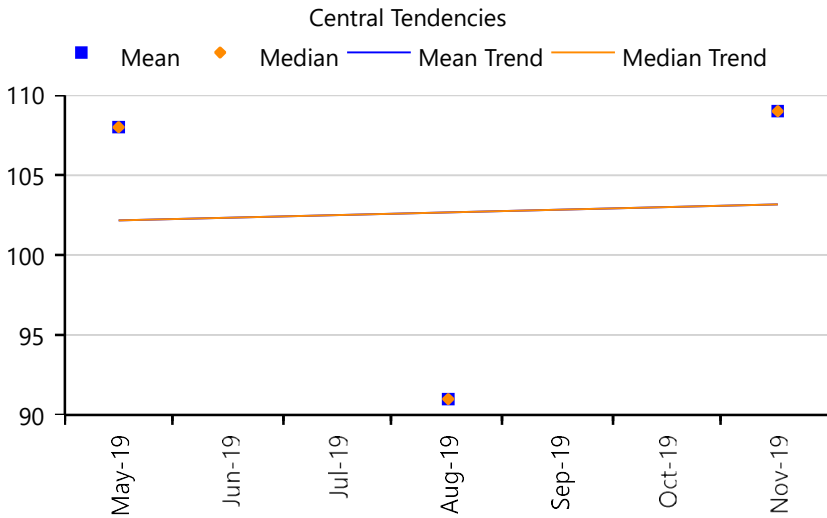
	2020	2019	2018	2017	2016
COD	5.56	3.50	3.77	7.81	4.08
PRD	1.00	1.00	1.01	1.01	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
70	0	0
80	0	1
90	1	0
100	2	2
110	0	0
Median	108	105
AD	6.00	6.00
COD	5.56	5.71
Mean	103	100
SD	10.12	10.12
COV	9.85	10.15
Wtd Mean	103	100
GeoMean	102	99
PRD	1.00	1.00
95% Confidence	11.45	11.45

Number Of Sales 3



Month	Mean	Median	Sales
May-19	108	108	1
Aug-19	91	91	1
Nov-19	109	109	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	80	000	101		33	3N2W12BC 00206	2019-6512	0.23	164,380	336,350	500,730	550,077	Aug-19	1	91
02	80	000	101		33	3N2W12BC 00220	2019-4081	0.21	160,330	369,420	529,750	490,671	May-19	2	108
02	80	000	101		33	3N2W12BC 00213	2019-9564	0.21	160,700	439,680	600,380	549,834	Nov-19	3	109

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	21	000	2020	2	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	162
Sales as a percentage of the Population	1.23%
<i>Prior Year Population Values</i>	
Land Rmv	27,601,610
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

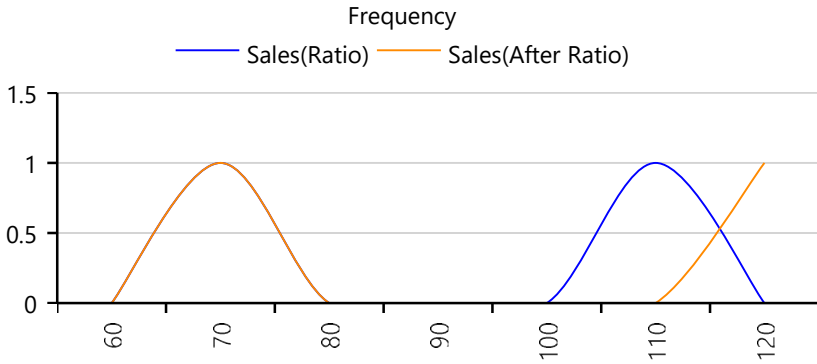
RMV 400, SA 21
Unimproved land – Value Zone 1 in Rural Scappoose.

There were only two usable sales available for undeveloped land located in rural Scappoose. These sales did not provide a significant sampling or a clear indication of the market for these properties. Therefore, the Selected Ratio of 93 from the improved rural properties study located in MA 02, SA 21 was applied here.

Performance History

	2020	2019	2018	2017	2016
COD	24.21	32.76	20.06	11.39	0.00
PRD	0.92	1.39	1.07	1.01	1.00

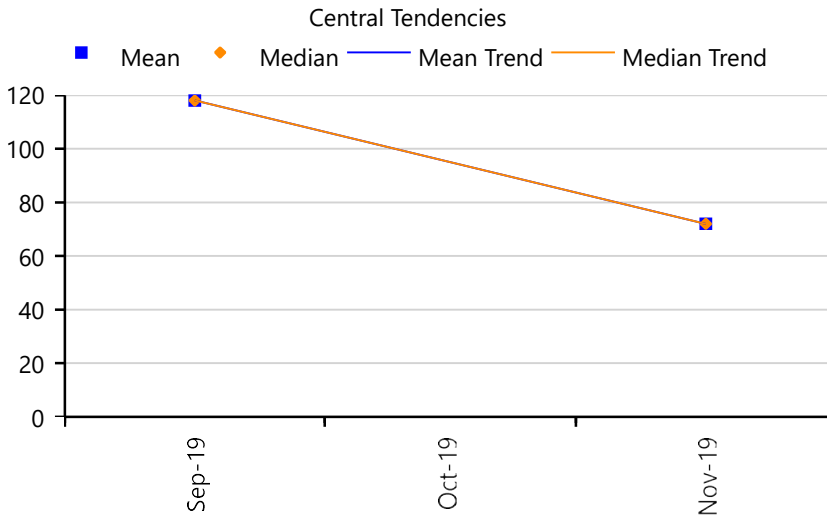
COLUMBIA County 2020 Ratio Study



60	0	0
70	1	1
80	0	0
90	0	0
100	0	0
110	1	0
120	0	1

	Sales (Ratio)	Sales (After Ratio)
Median	95	103
AD	23.00	24.50
COD	24.21	23.90
Mean	95	103
SD	32.53	34.65
COV	34.24	33.80
Wtd Mean	103	111
GeoMean	92	100
PRD	.92	.92
95% Confidence	45.08	48.02

Number Of Sales 2



Month	Mean	Median	Sales
Sep-19	118	118	1
Nov-19	72	72	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	21	000	400		33	3N2W02D 0 02000	2019-9899	1.29	68,330	0	68,330	95,000	Nov-19	1	72
02	21	000	640		33	3N2W11A C 00200	2019-7993	5.00	236,000	0	236,000	200,000	Sep-19	2	118

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	21	000	2020	14	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	14			
Population - Number of Accounts	752			
Sales as a percentage of the Population	1.86%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		106,097,229	33.60%	114,585,007 33.73%
OSD RMV		37,039,510	11.73%	37,039,510 10.90%
Improvement RMV		154,670,710	48.99%	168,591,074 49.62%
Farm Improvement RMV		17,918,810	5.68%	19,531,503 5.75%
Selected Ratio From Sales		93		
Time Trend Adjustment		9		
Before Ratio		93		
Overall Adjustment Factor		108		
Land Adjustment Factor		108		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		109		
Farm Improvement Factor		109		
After Ratio		100		

Explanation

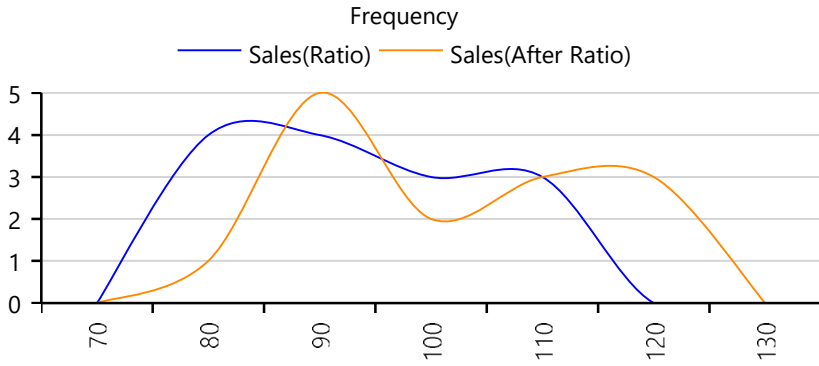
RMV 401, SA 21
Improved land – Value Zone 1, in Rural Scappoose.

For this analysis of improved rural properties located in Scappoose, the Median of 93 was selected as the best ratio indicator for this grouping of properties. Thus, the Overall Adjustment Factor is 108.

Performance History

	2020	2019	2018	2017	2016
COD	11.29	15.88	9.43	9.96	13.44
PRD	1.00	1.01	1.00	1.00	1.02

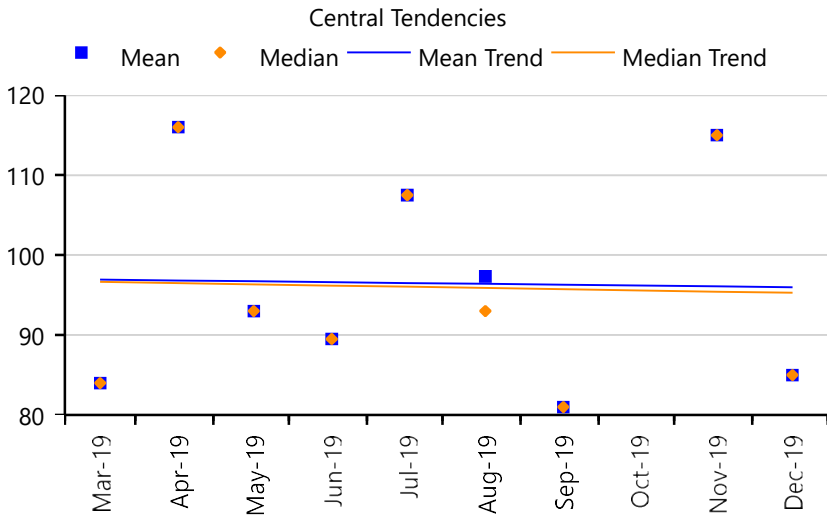
COLUMBIA County 2020 Ratio Study



70	0	0
80	4	1
90	4	5
100	3	2
110	3	3
120	0	3
130	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	93	101
AD	10.50	11.43
COD	11.29	11.37
Mean	98	106
SD	12.70	13.68
COV	12.93	12.95
Wtd Mean	99	106
GeoMean	97	105
PRD	1.00	.99
95% Confidence	6.65	7.16

Number Of Sales 14



Month	Mean	Median	Sales
Mar-19	84	84	1
Apr-19	116	116	1
May-19	93	93	1
Jun-19	90	90	2
Jul-19	108	108	2
Aug-19	97	93	3
Sep-19	81	81	1
Nov-19	115	115	2
Dec-19	85	85	1

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	21	000	401	141	33	3N2W01CC 01300	2019-7700	0.89	137,600	174,470	312,070	384,900	Sep-19	1	81
02	21	000	641	145	33	3N2W11A D 00103	2019-2713	6.27	187,230	190,590	377,820	448,686	Mar-19	2	84
02	21	000	401	131	33	4N2W35CB 00501	2019-10364	0.97	137,600	110,500	248,100	291,566	Dec-19	3	85
02	21	000	401	143	33	3N1W07CB 00400	2019-4453	0.30	132,600	187,410	320,010	368,025	Jun-19	4	87
02	21	000	401	162	33	3N2W11A C 00600	2019-4652	2.22	285,710	653,260	938,970	1,018,597	Jun-19	5	92
02	21	000	401	142	33	3N2W13C0 06200	2019-6618	0.91	197,600	293,420	491,020	534,371	Aug-19	6	92
02	21	000	401	131	33	4N2W35CB 00800	2019-4104	0.38	132,600	95,230	227,830	244,971	May-19	7	93
02	21	000	681	154	33	4N2W3500 00303	2019-6473	9.04	305,650	443,640	749,290	801,970	Aug-19	8	93
02	21	000	401	135	33	3N2W15D 0 01000	2019-5566	6.68	242,750	264,300	507,050	479,274	Jul-19	9	106
02	21	000	401	152	33	4N2W36C0 01700	2019-7157	2.08	257,580	430,680	688,260	643,434	Aug-19	10	107
02	21	000	641	132	33	3N2W0200 04500	2019-5308	4.84	239,030	212,810	451,840	413,860	Jul-19	11	109
02	21	000	401	155	30	3N2W24B0 01500	2019-9603	1.60	156,910	461,150	618,060	556,215	Nov-19	12	111
02	21	000	401	144	33	4N2W35D 0 00900	2019-3329	5.00	329,100	376,370	705,470	610,018	Apr-19	13	116
02	21	000	401	131	33	3N1W07CC 00800	2019-9868	1.94	219,490	165,570	385,060	323,232	Nov-19	14	119

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	21	000	2020	2	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	146
Sales as a percentage of the Population	1.37%
<i>Prior Year Population Values</i>	
Land Rmv	18,341,080
OSD RMV	7,810,800
Improvement RMV	9,504,510
Farm Improvement RMV	2,748,390
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	109
Farm Improvement Factor	109
After Ratio	100

Explanation

RMV 409: SA 21

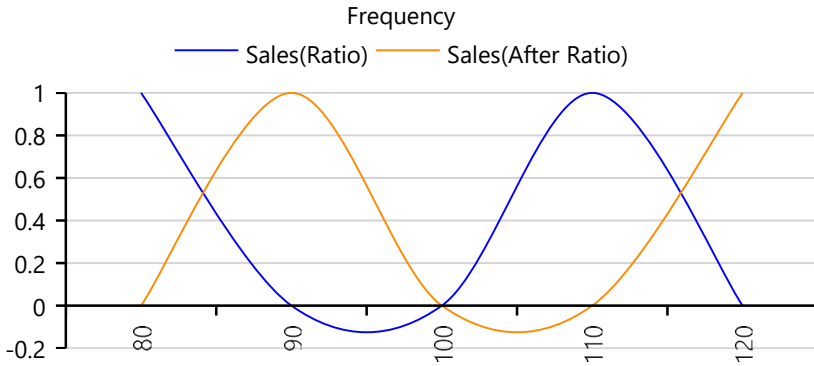
Improved land - Manufactured Structure - Value Zone 1 in Rural Scappoose

The two sales returned in the dataset did not provide a sufficient sampling for this analysis. The dates of sale for these properties occurred a little more than a month apart and the acreage sizes are too dissimilar to determine an accurate conclusion for the 2020 Ratio Year for the entire population of 146 accounts. Therefore, the conclusion from the improved properties RMV Class 401 in MA 02 SA 21 is recommended, with a Selected Ratio of 93.

Performance History

	2020	2018	2017	2016
COD	11.56	6.33	0.00	5.56
PRD	0.96	1.00	1.00	1.00

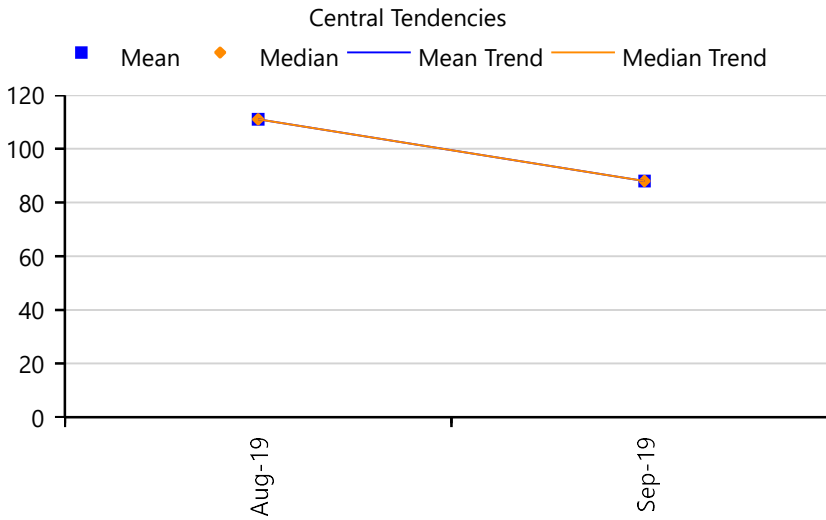
COLUMBIA County 2020 Ratio Study



Number Of Sales 2

	Sales (Ratio)	Sales (After Ratio)
80	1	0
90	0	1
100	0	0
110	1	0
120	0	1

Median	100	107
AD	11.50	13.50
COD	11.56	12.68
Mean	100	107
SD	16.26	19.09
COV	16.35	17.93
Wtd Mean	104	111
GeoMean	99	106
PRD	.96	.96
95% Confidence	22.54	26.46



Month	Mean	Median	Sales
Aug-19	111	111	1
Sep-19	88	88	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	21	000	409	442	30	4N2W34B0 01700	2019-7946	1.47	164,450	85,000	249,450	285,000	Sep-19	1	88
02	21	000	649	132	33	4N2W34B0 02800	2019-6413	7.60	243,880	417,540	661,420	595,000	Aug-19	2	111

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	25	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	36
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	9,014,500
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

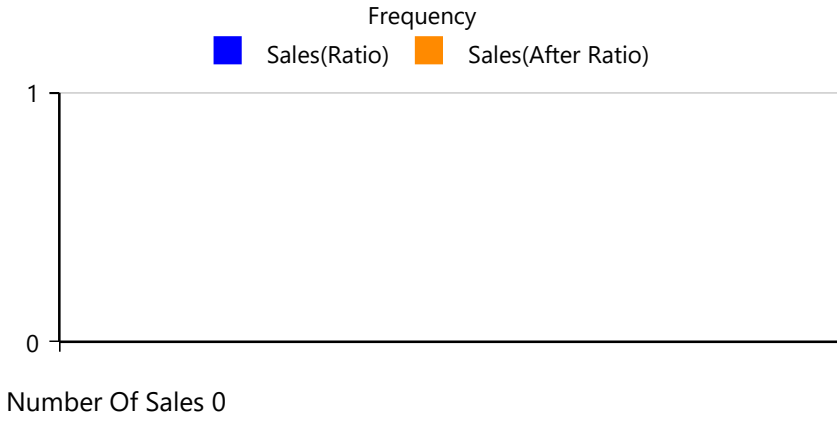
RMV 400: SA 25
Unimproved land – Dike land in Scappoose

No sales information was available for this study. Therefore, the selected ratio of 93 from the undeveloped land study for MA 02 SA 21 analysis was applied here.

Performance History

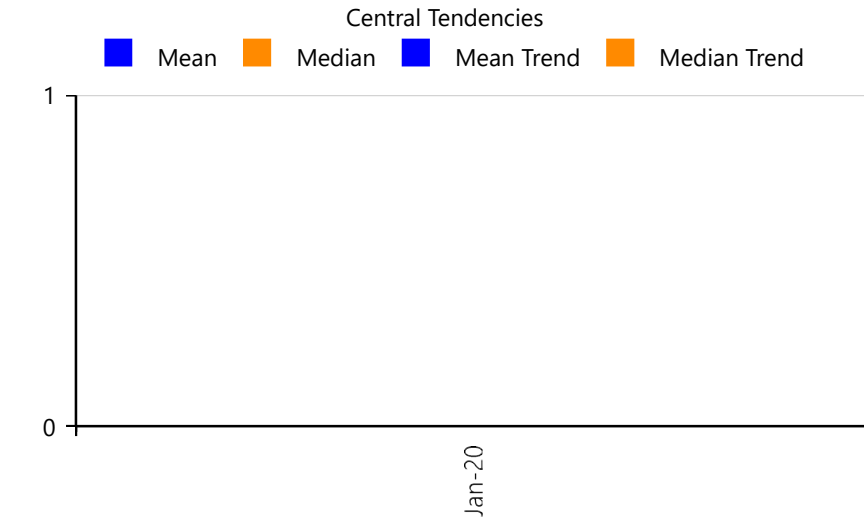
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



Sales (Ratio) Sales (After Ratio)

- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	25	000	2020	1	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	1
Population - Number of Accounts	46
Sales as a percentage of the Population	2.17%
<i>Prior Year Population Values</i>	
Land Rmv	12,492,265
OSD RMV	1,622,160
Improvement RMV	7,695,400
Farm Improvement RMV	4,937,610
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	109
Farm Improvement Factor	109
After Ratio	100

Explanation

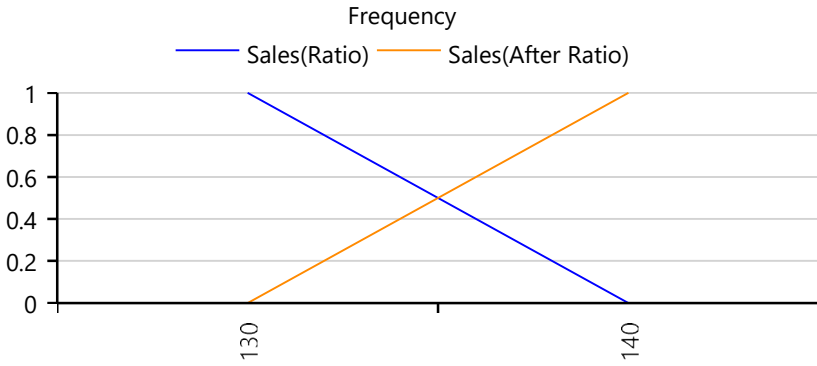
RMV 401: SA 25
Improved land – Dike land in Scappoose

The dataset for analysis is inadequate due to having only one sale available for this study. Therefore, the conclusion from the improved properties in the MA 02 SA 21 analysis is recommended, with a Selected Ratio indicator of 93.

Performance History

	2020	2018	2016
COD	-	0.00	0.00
PRD	1.00	1.00	1.00

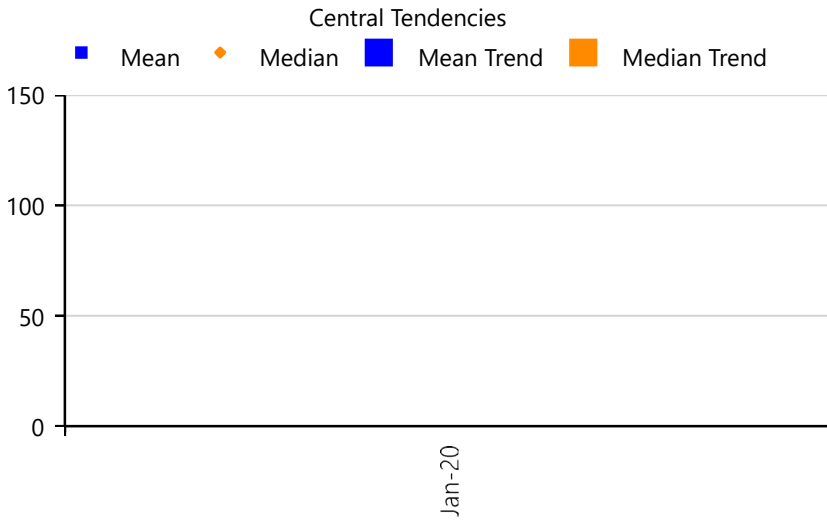
COLUMBIA County 2020 Ratio Study



130	1	0
140	0	1

	Sales (Ratio)	Sales (After Ratio)
Median	136	146
AD		
COD		
Mean	136	146
SD	1.00	1.00
COV	.74	.68
Wtd Mean	136	146
GeoMean	136	146
PRD	1.00	1.00
95% Confidence	1.96	1.96

Number Of Sales 1



Month	Mean	Median	Sales
May-19	136	136	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	25	000	551	131	33	3N1W0800 01100	2019-3659	6.36	242,700	207,200	449,900	330,000	May-19	1	136

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	25	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	5
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	2,162,180
OSD RMV	226,400
Improvement RMV	36,390
Farm Improvement RMV	155,830
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	109
Farm Improvement Factor	109
After Ratio	100

Explanation

RMV 409: SA 25

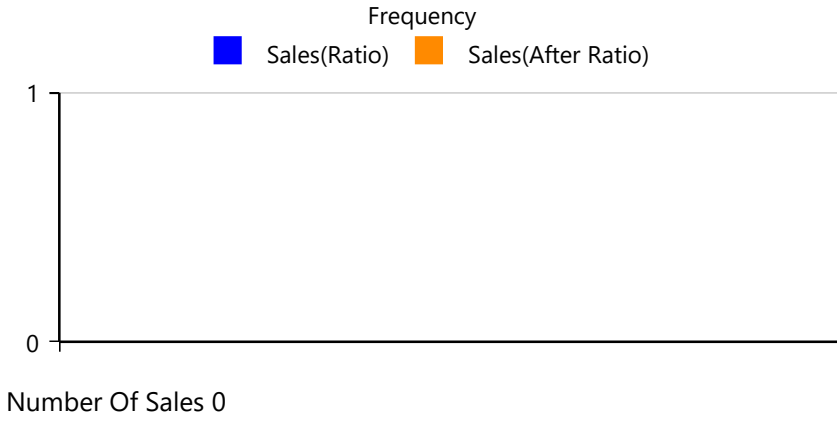
Improved land – Manufactured Structure – Dike land in Scappoose

Due to having no sales available for this study area with a population of 5 accounts, it was decided to implement the conclusion from the MA 02 SA 21 RMV Class 401 analysis, applying the Selected Ratio adjustment of 93.

Performance History

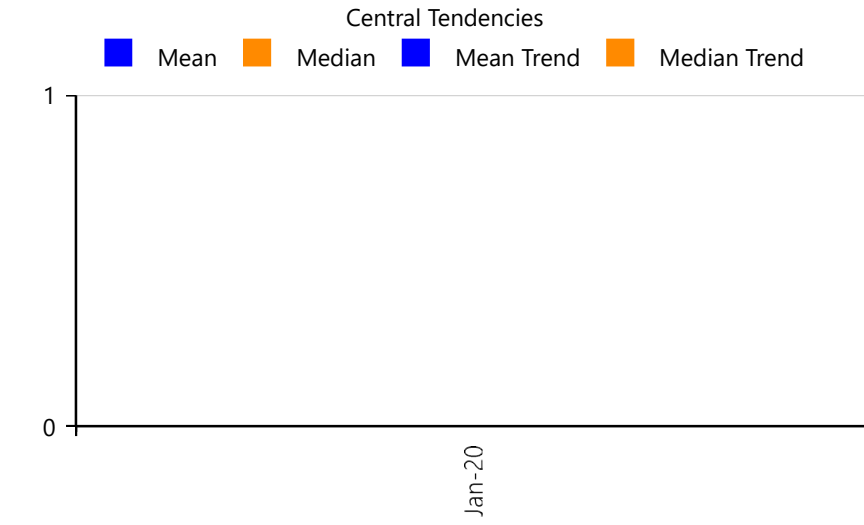
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	41	000	2020		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%
<i>Prior Year Population Values</i>	
Land Rmv	2,219,720
OSD RMV	339,600
Improvement RMV	2,663,460
Farm Improvement RMV	67,300
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

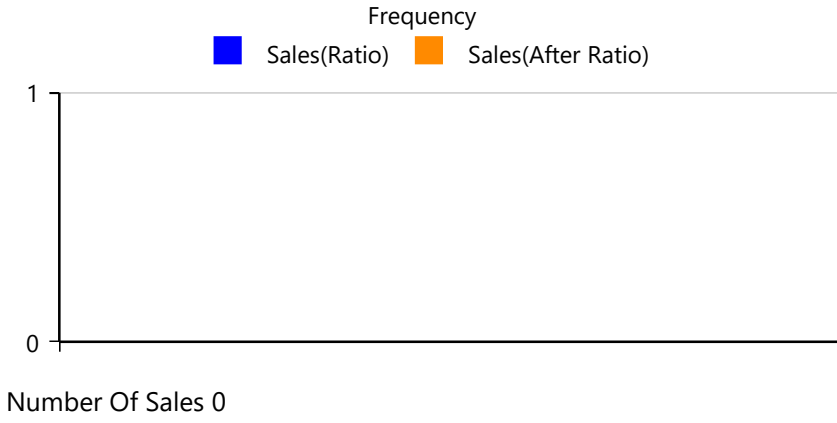
RMV 401, SA 41
Sauvies Island in Rural Scappoose.

With having no sales available for this analysis of rural properties in SA 41, it was decided to apply no adjustment to this small group of properties for this ratio year.

Performance History

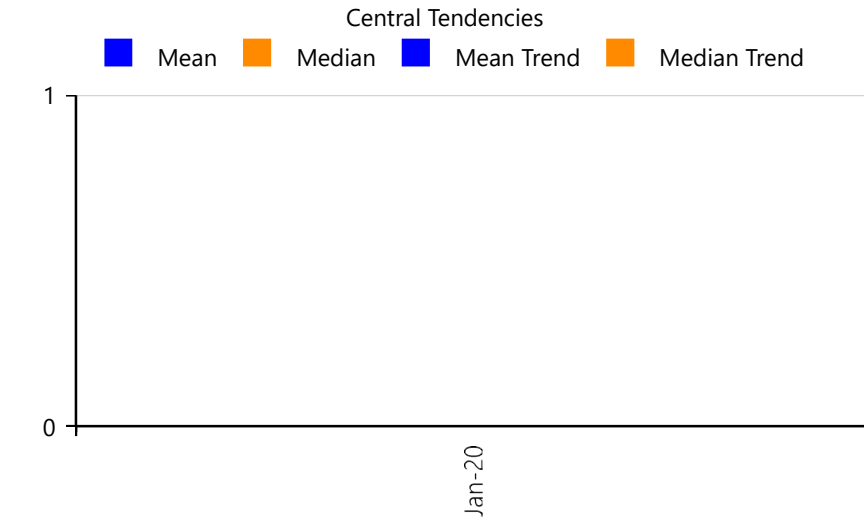
	2020	2018	2017	2016
COD	-	9.43	9.96	13.44
PRD	-	1.00	1.00	1.02

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	41	000	2020		Sauvie Island							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	2
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	516,460
OSD RMV	56,600
Improvement RMV	6,870
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

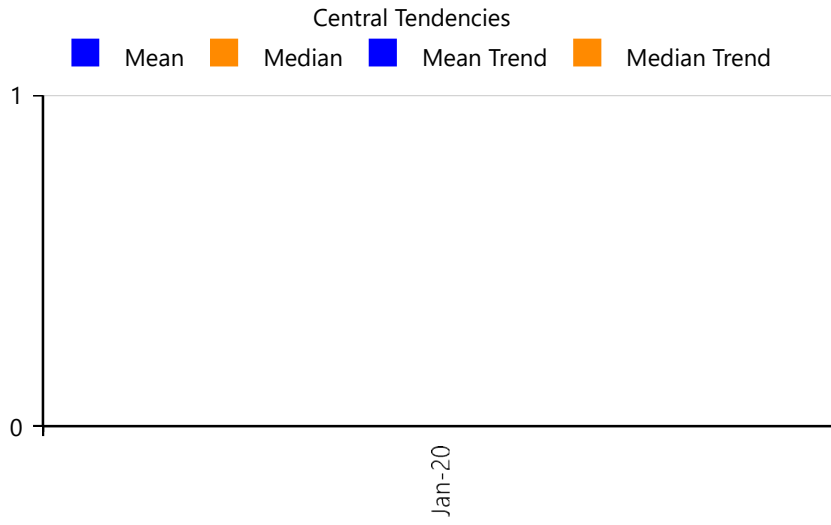
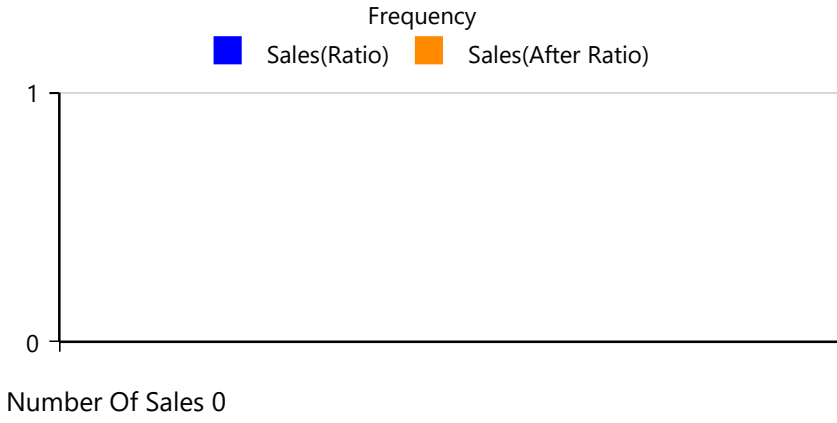
RMV 409: SA 41
Improved land - Manufactured Structure - Sauvies Island in Rural Scappoose

No sales were identified in this area with a population of 2 accounts for the study period. Due to not having enough data to warrant applying an adjustment, it was decided to leave the Selected Ratio at 100.

Performance History

	2020	2018	2017	2016
COD	-	6.33	0.00	5.56
PRD	-	1.00	1.00	1.00

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	45	000	2020		Sauvie Island							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	24
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	23,452,180
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

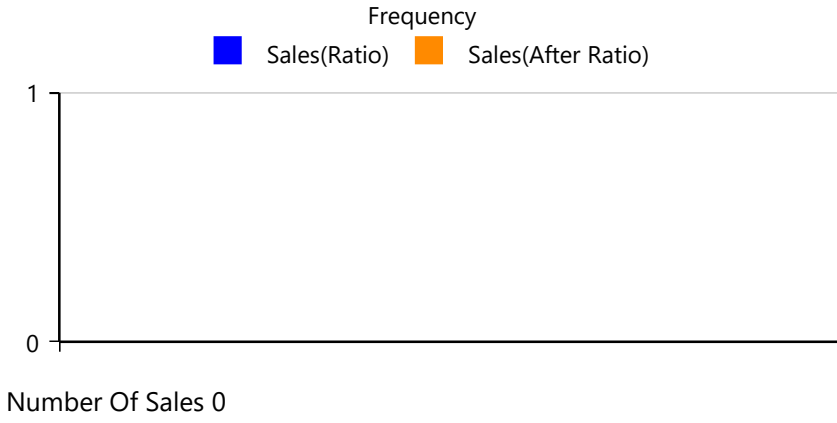
RMV 400: SA 45
Unimproved land – Sauvies Island (45)

Due to having no sales available for this study, it was decided to make no adjustment to this select group of un-improved properties located on the Northern portion of Sauvies Island.

Performance History

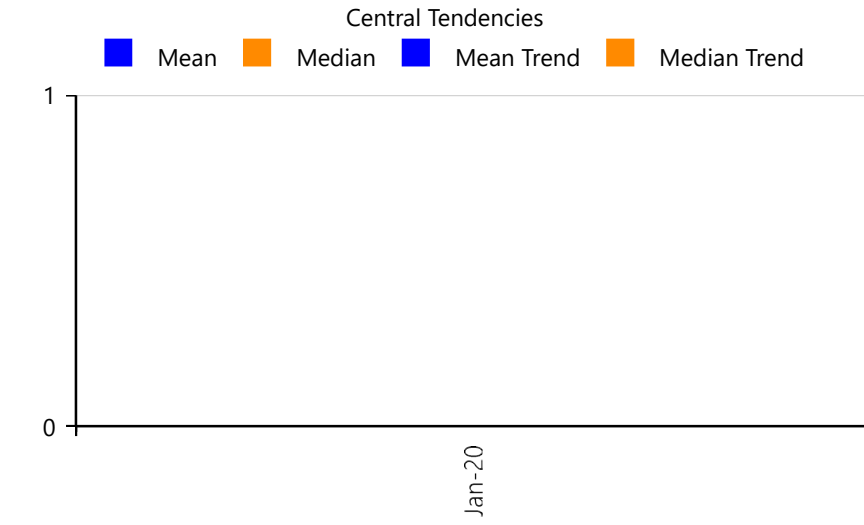
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	45	000	2020		Sauvie Island							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	13
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	47,521,955
OSD RMV	594,300
Improvement RMV	1,830,840
Farm Improvement RMV	545,500
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

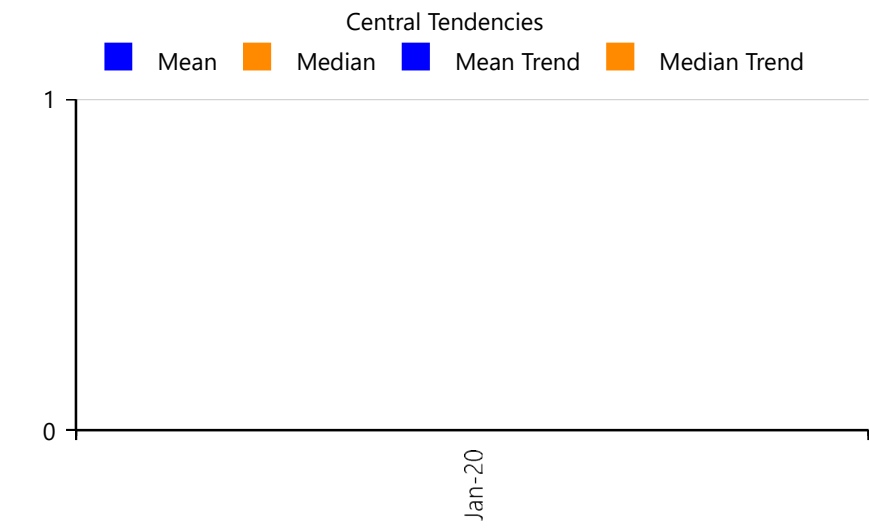
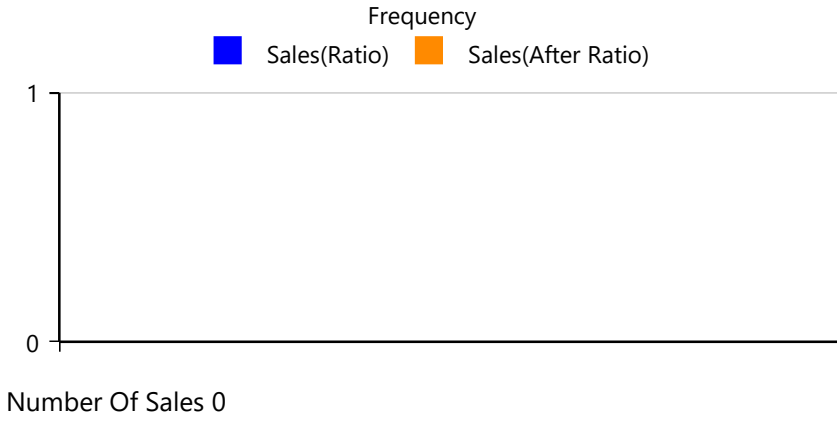
RMV 401: SA 45
Improved land – Sauvies Island

No adjustment was made to this population of 13 accounts due to having insufficient sales data available for this this analysis.

Performance History

	2020	2018	2016
COD	-	0.00	0.00
PRD	-	1.00	1.00

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	45	000	2020		Sauvie Island							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	1
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
	Pre-Trend Values Pre-Trend Brkdwn Post Trend Values Post Trend Brkdwn
Land Rmv	1,498,920 94.40% 1,498,920 94.40%
OSD RMV	56,600 3.56% 56,600 3.56%
Improvement RMV	32,390 2.04% 32,390 2.04%
Farm Improvement RMV	0 0.00% 0 0.00%
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

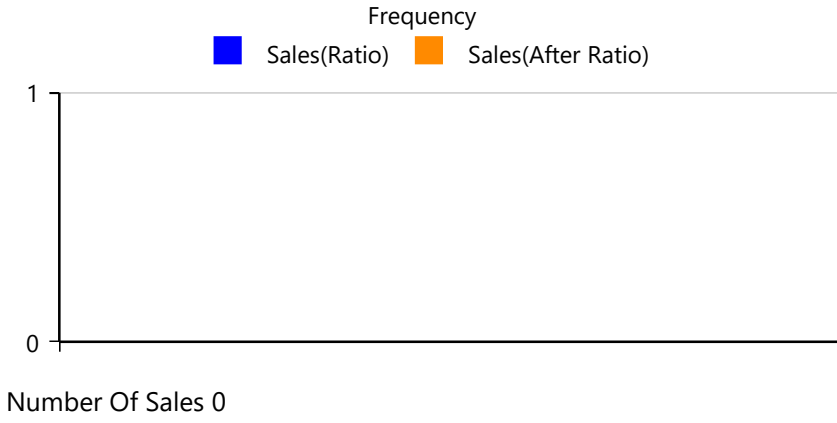
RMV 409: SA 45
Improved land – Manufactured Structure –Sauvies Island

There is only 1 account in this study and no sales data is available. Due to this, no adjustment has been applied to the land or improvement(s).

Performance History

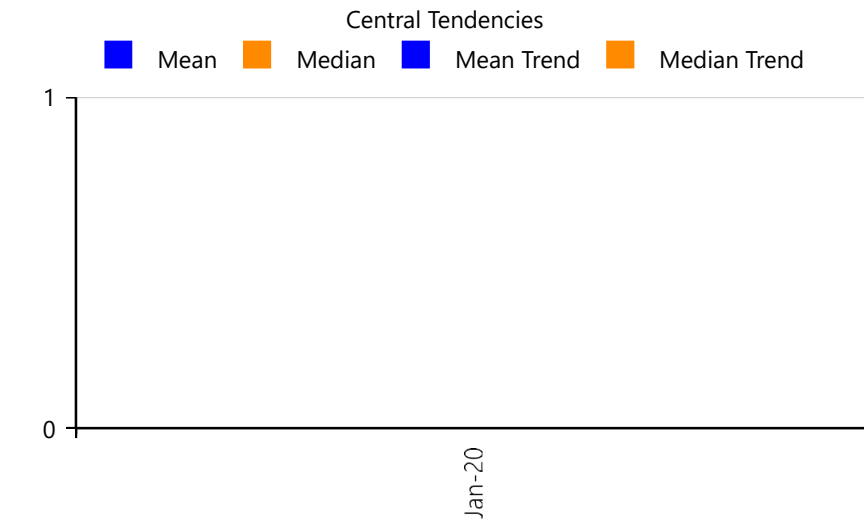
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	62	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	3
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	651,610
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

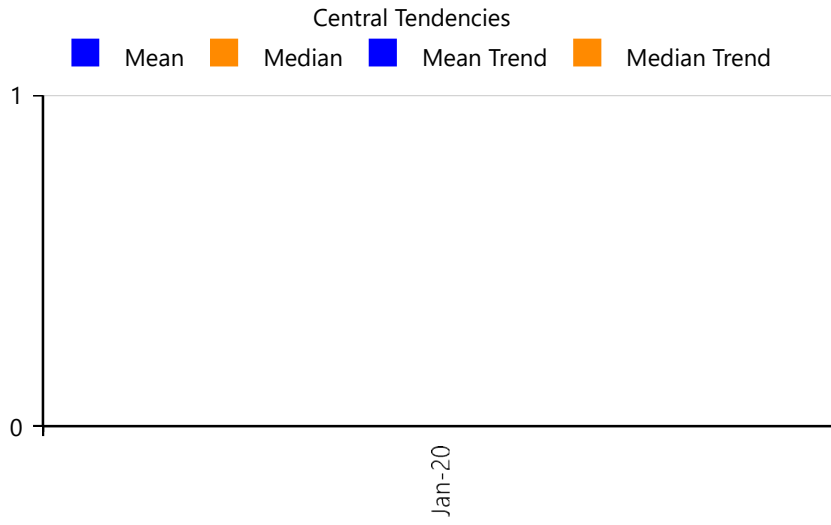
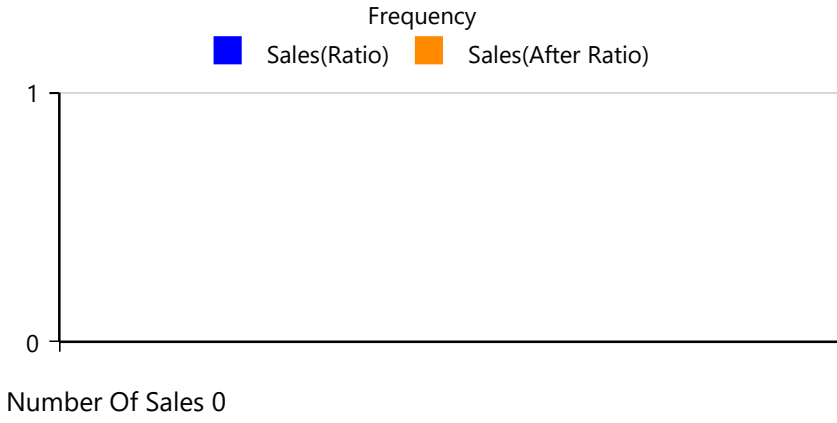
RMV 400, SA 62
Unimproved land – Freeman Road in Rural Scappoose

With having no sales available for this analysis of rural properties, it was decided to use the Selected Ratio of 93 from the conclusion of the RMV 400 SA 21 analysis located in the same maintenance area.

Performance History

	2020	2018	2017	2016
COD	-	20.06	11.39	0.00
PRD	-	1.07	1.01	1.00

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	62	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	17
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	2,081,900
OSD RMV	962,200
Improvement RMV	2,127,110
Farm Improvement RMV	349,610
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	109
Farm Improvement Factor	109
After Ratio	100

Explanation

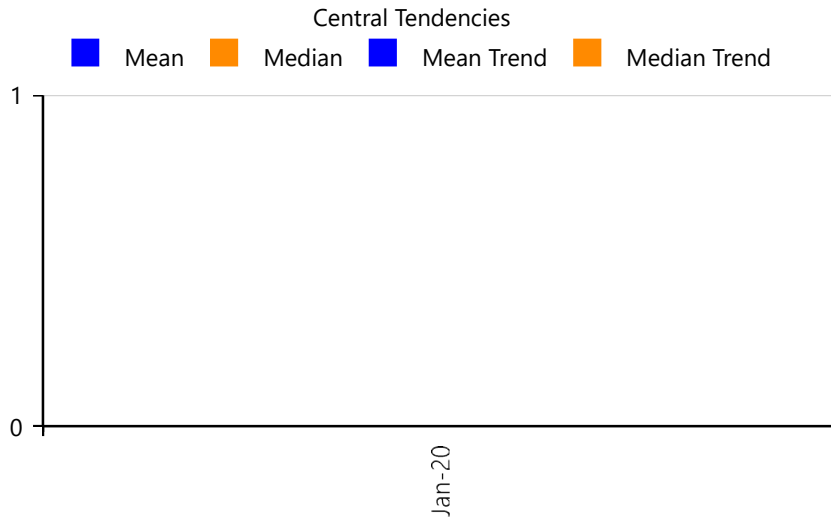
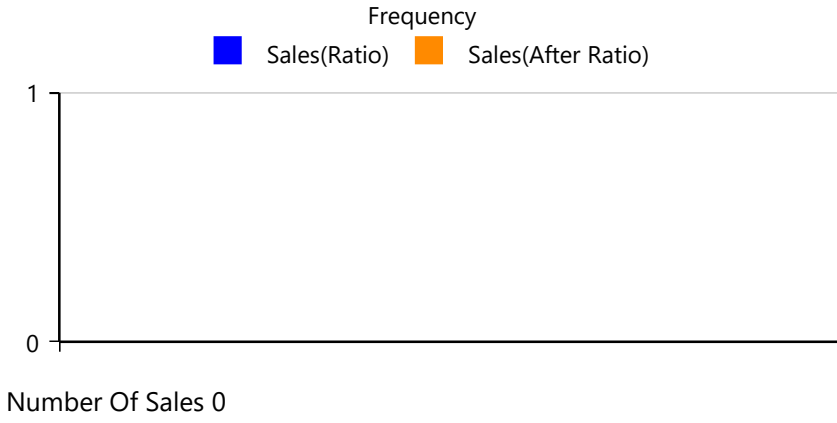
RMV 401, SA 62
Improved land - Freeman Road in Rural Scappoose

This location is next to the Scappoose Airport and also surrounded by properties located in Study Area 21. Due to having no sales data available, the Selected Ratio (93) from the improved sales analysis for RMV Class 401 MA 02, SA 21 has been applied to this area.

Performance History

	2020	2018	2017	2016
COD	-	9.43	9.96	13.44
PRD	-	1.00	1.00	1.02

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	62	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	6
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	426,970
OSD RMV	169,800
Improvement RMV	125,560
Farm Improvement RMV	60,780
	Pre-Trend Brkdwn
	54.52%
	Post Trend Values
	461,128
	Post Trend Brkdwn
	55.29%
	20.36%
	16.41%
	7.94%
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	109
Farm Improvement Factor	109
After Ratio	100

Explanation

RMV 409: SA 62

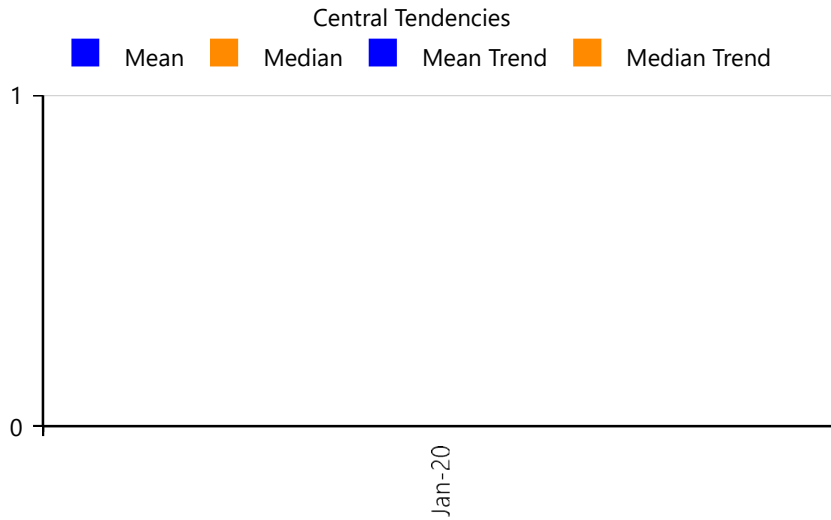
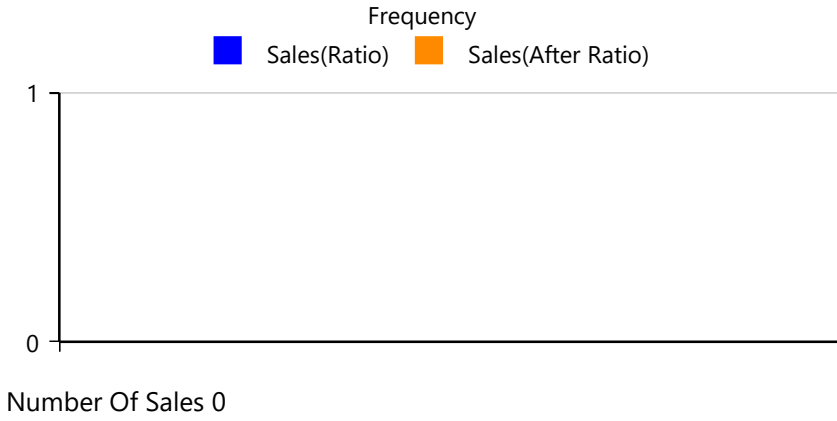
Improved land - Manufactured Structure - Freeman Road in Rural Scappoose

There are no sales available for this analysis of manufactured structures located along the Freeman Road area. Therefore, the Selected Ratio (93) from the improved sales analysis (RMV 401) within MA 02 SA 21 has been applied here.

Performance History

	2020	2018	2017	2016
COD	-	6.33	0.00	5.56
PRD	-	1.00	1.00	1.00

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	64	000	2020	2	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2			
Population - Number of Accounts	14			
Sales as a percentage of the Population	14.29%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		862,950	100.00%	931,986 100.00%
OSD RMV		0	0.00%	0 0.00%
Improvement RMV		0	0.00%	0 0.00%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		93		
Time Trend Adjustment		0		
Before Ratio		93		
Overall Adjustment Factor		108		
Land Adjustment Factor		108		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		100		
Farm Improvement Factor		100		
After Ratio		100		

Explanation

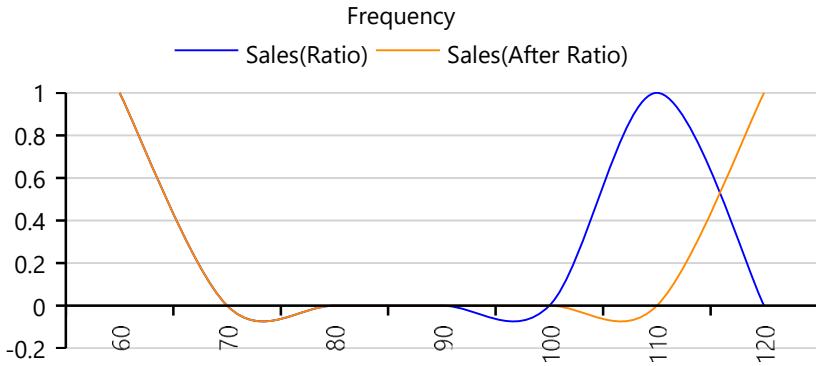
RMV 400: SA 64
 Undeveloped land – Columbia Acres & Hillcrest, Rural Scappoose

There are only two sales identified in this study which is too small of a sample to be used as a determination of the current market. Therefore it is recommended to apply the conclusion of 93 from the MA 02 SA 21 RMV 400 study here.

Performance History

	2020	2019	2018	2016
COD	31.49	0.00	8.91	0.00
PRD	1.01	1.00	1.02	1.00

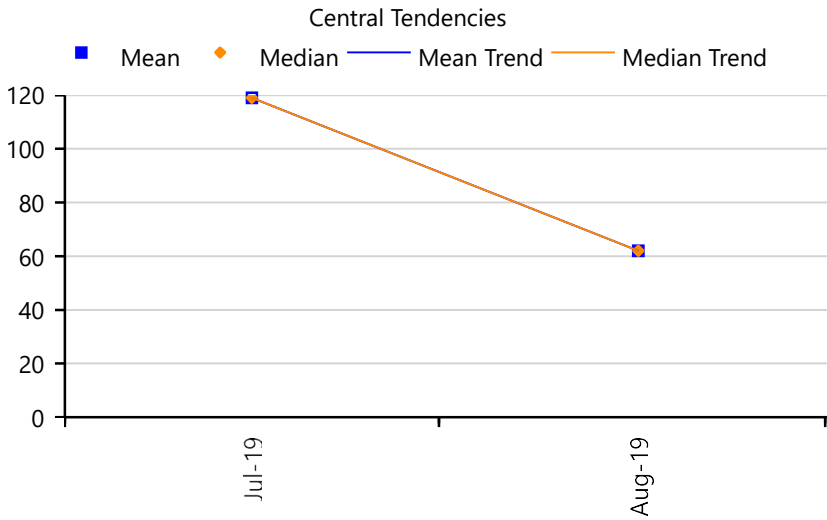
COLUMBIA County 2020 Ratio Study



60	1	1
70	0	0
80	0	0
90	0	0
100	0	0
110	1	0
120	0	1

	Sales (Ratio)	Sales (After Ratio)
Median	91	97
AD	28.50	29.50
COD	31.49	30.57
Mean	91	97
SD	40.31	41.72
COV	44.54	43.23
Wtd Mean	90	95
GeoMean	86	92
PRD	1.01	1.01
95% Confidence	55.86	57.82

Number Of Sales 2



Month	Mean	Median	Sales
Jul-19	119	119	1
Aug-19	62	62	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	64	000	400		33	3N2W22C A 05700	2019-6879	0.55	99,750	0	99,750	159,900	Aug-19	1	62
02	64	000	400		33	3N2W22C A 07000	2019-7153	0.82	175,350	0	175,350	147,000	Jul-19	2	119

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	02	64	000	2020	2	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	96
Sales as a percentage of the Population	2.08%
<i>Prior Year Population Values</i>	
	Pre-Trend Values Pre-Trend Brkdwn Post Trend Values Post Trend Brkdwn
Land Rmv	9,441,850 21.49% 10,197,198 21.52%
OSD RMV	4,717,780 10.74% 4,717,780 9.96%
Improvement RMV	29,330,060 66.75% 31,969,765 67.48%
Farm Improvement RMV	451,490 1.03% 492,124 1.04%
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	109
Farm Improvement Factor	109
After Ratio	100

Explanation

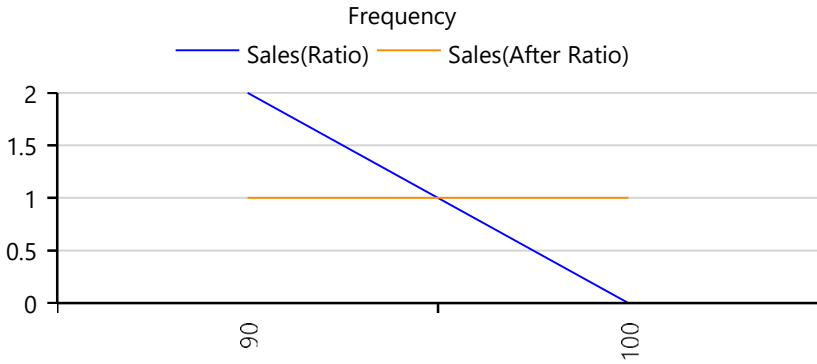
RMV 401: SA 64
Improved land – Columbia Acres & Hillcrest, Rural Scappoose

The properties in this study area are in a highly desirable location since they are located south of the City of Scappoose, have easy access to Highway 30 and are in close proximity to Portland. A rural setting of mountain and territorial views with upscale homes makes this area unique. However, for this analysis there were only two ‘good’ sales which occurred during the month April. This sales array is too few and inadequate to determine a reasonable trend for this classification of properties. Therefore it was decided to apply 93 as the Selected Ratio which is the conclusion from the improved property analysis located in MA 02, SA 21.

Performance History

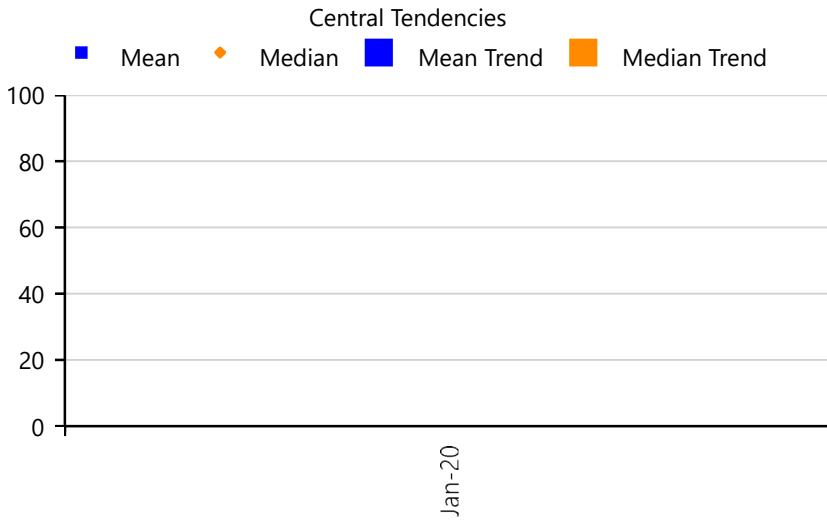
	2020	2019	2017	2016
COD	0.55	13.93	6.33	13.44
PRD	1.00	1.02	0.98	1.02

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	92	99
AD	.50	1.00
COD	.55	1.01
Mean	92	99
SD	.71	1.41
COV	.77	1.43
Wtd Mean	92	99
GeoMean	91	99
PRD	1.00	1.00
95% Confidence	.98	1.96

Number Of Sales 2



Month	Mean	Median	Sales
Apr-19	92	92	2

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	64	000	401	144	33	3N2W24B D 00300	2019-2865	0.79	165,850	367,170	533,020	585,000	Apr-19	1	91
02	64	000	401	152	33	3N2W22C A 00300	2019-3165	1.91	224,660	512,370	737,030	800,000	Apr-19	2	92

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	02	64	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	1
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	100,510
OSD RMV	56,600
Improvement RMV	89,660
Farm Improvement RMV	0
Selected Ratio From Sales	93
Time Trend Adjustment	0
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	109
Farm Improvement Factor	109
After Ratio	100

Explanation

RMV 409: SA 64

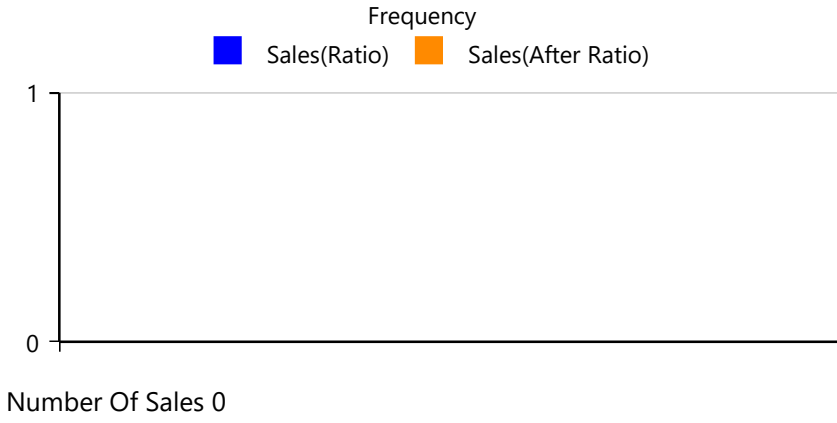
Improved land - Manufactured Structure - Columbia Acres & Hillcrest in Rural Scappoose

Having no sales data available for this study with a population of 1 account, it was decided to implement the conclusion from the MA 02 SA 21 RMV Class 409 analysis, applying the Selected Ratio adjustment of 93.

Performance History

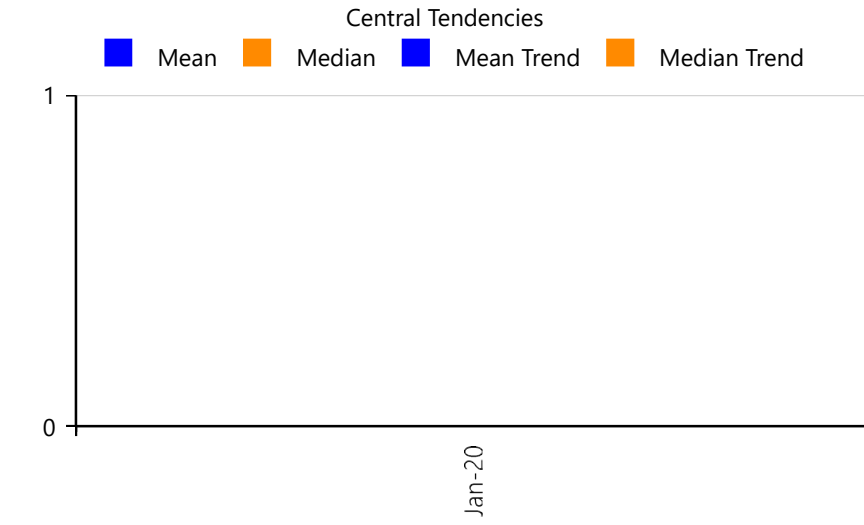
	2020	2016
COD	-	5.56
PRD	-	1.00

COLUMBIA County 2020 Ratio Study



Sales (Ratio) Sales (After Ratio)

- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV				App	# of			RMV				App	# of	
Class	MA	SA	NH	Year	Sales	Location		Class	MA	SA	NH	Year	Sales	Location
800	02	64	000	2020		Scappoose		890	02	64	000	2020		Scappoose

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	365
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	429,250
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	100
RMV Adjustment	100
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 800 & RMV 890: SA 64

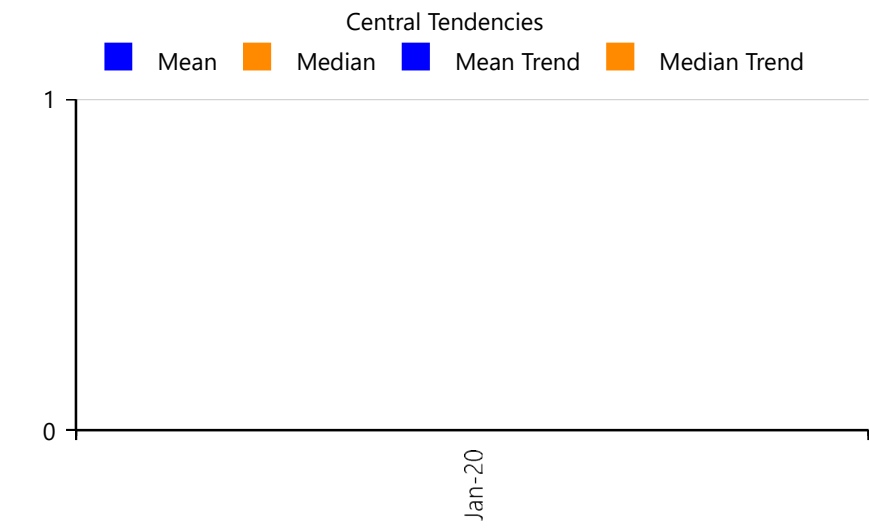
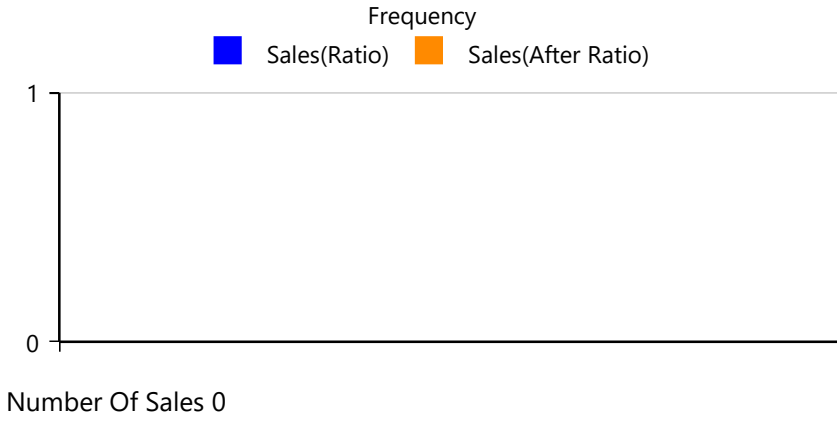
Undeveloped land - Columbia Acres & Hillcrest, Rural Scappoose

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

	2020	2016
COD	-	0.00
PRD	-	1.00

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

MAINTENANCE AREA 3

VERNONIA

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	03	00	000	2020	6	Vernonia	100	03	03	000	2020		Vernonia

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	6
Population - Number of Accounts	231
Sales as a percentage of the Population	2.60%
<i>Prior Year Population Values</i>	
Land Rmv	11,629,860
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	93
Time Trend Adjustment	11
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 100: SA 00

RMV 100: SA 03

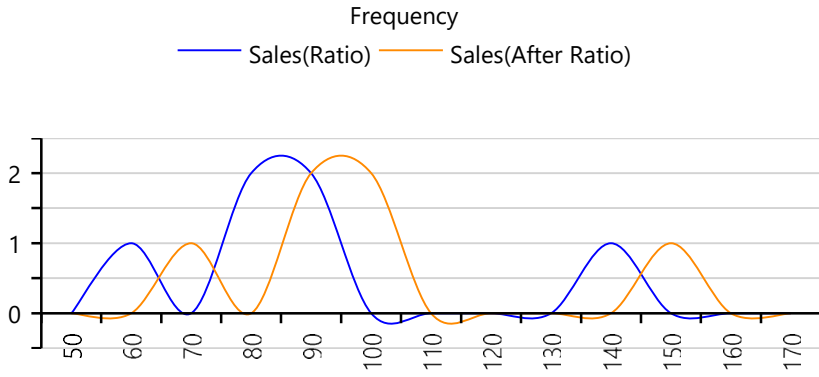
Undeveloped land – located in the City of Vernonia and in the Floodway

This study is comprised of undeveloped land located within the City of Vernonia and within the Fema Floodway. (The small location of Roseview Heights (SA 38) was combined with SA 00 due to having had similar market indicators over the previous years). The Weighted Mean of 93 was selected which is bracketed by the Mean (94) and the Geometric Mean (92). The resulting Overall Adjustment Factor is 108.

Performance History

	2020	2019	2018	2017	2016
COD	17.99	12.98	7.41	22.59	8.91
PRD	1.02	1.05	1.01	1.03	1.01

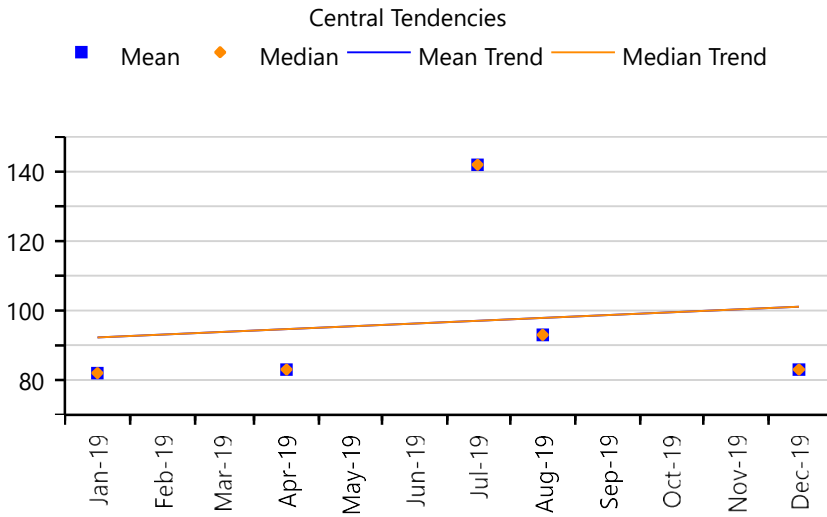
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
50	0	0
60	1	0
70	0	1
80	2	0
90	2	2
100	0	2
110	0	0
120	0	0
130	0	0
140	1	0
150	0	1
160	0	0
170	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	88	95
AD	15.83	17.00
COD	17.99	17.89
Mean	94	102
SD	25.19	27.49
COV	26.75	27.04
Wtd Mean	93	100
GeoMean	92	99
PRD	1.02	1.02
95% Confidence	20.16	22.00

Number Of Sales 6



Month	Mean	Median	Sales
Jan-19	82	82	2
Apr-19	83	83	1
Jul-19	142	142	1
Aug-19	93	93	1
Dec-19	83	83	1

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	00	000	100		30	4N4W05A C 04400	2019-397	0.13	30,450	0	30,450	44,232	Jan-19	1	69
03	00	000	100		30	4N4W04AB 00304	2019-3434	0.22	35,730	0	35,730	43,112	Apr-19	2	83
03	00	000	100		30	4N4W05A C 04204	2020-290	0.11	29,300	0	29,300	35,315	Dec-19	3	83
03	00	000	100		33	4N4W04A D 00200	2019-6648	0.96	67,790	0	67,790	72,912	Aug-19	4	93
03	00	000	100		30	4N4W04AB 01500	2019-504	0.23	36,540	0	36,540	38,619	Jan-19	5	95
03	00	000	100		33	4N4W04D A 02700	2019-5958	0.50	48,440	0	48,440	34,057	Jul-19	6	142

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	03	00	000	2020	44	Vernonia	101	03	03	000	2020	13	Vernonia

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	57			
Population - Number of Accounts	794			
Sales as a percentage of the Population	7.18%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		31,595,930	20.04%	34,123,604 17.56%
OSD RMV		19,305,750	12.24%	19,305,750 9.93%
Improvement RMV		104,382,270	66.20%	137,784,596 70.89%
Farm Improvement RMV		2,384,400	1.51%	3,147,408 1.62%
Selected Ratio From Sales		81		
Time Trend Adjustment		11		
Before Ratio		81		
Overall Adjustment Factor		123		
Land Adjustment Factor		108		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		132		
Farm Improvement Factor		132		
After Ratio		100		

Explanation

RMV 101: SA 00

RMV 101: SA 03

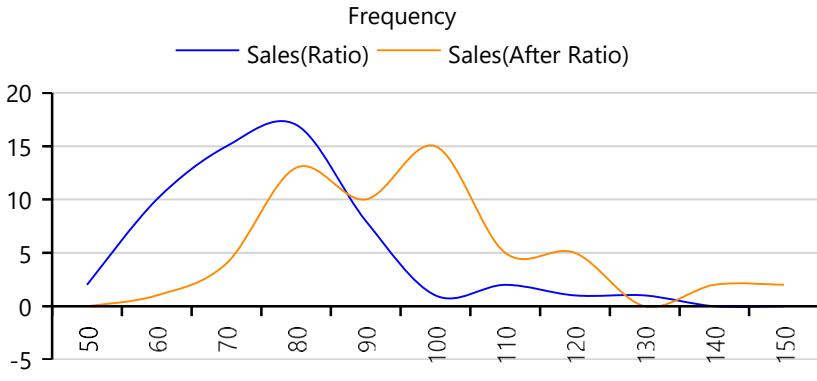
Improved land, City of Vernonia and improved land located in the Floodway

There are 57 sales returned in this array of residential properties which is 7.18% of the population. As a clear indication of the market, the Median of 81 was selected and applied here. This indicator is further supported by the Mean (82) and Weighted Mean (83).

Performance History

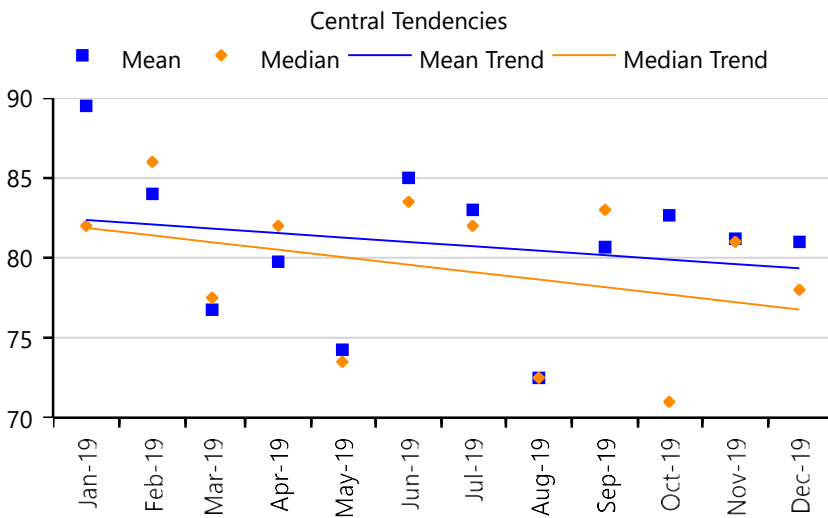
	2020	2019	2018	2017	2016
COD	14.01	12.47	-	-	-
PRD	0.99	1.00	-	-	-

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)		Sales (Ratio)	Sales (After Ratio)
50	2	0	Median	81	100
60	10	1	AD	11.35	14.63
70	15	4	COD	14.01	14.63
80	17	13	Mean	82	101
90	8	10	SD	15.36	19.47
100	1	15	COV	18.79	19.25
110	2	5	Wtd Mean	83	103
120	1	5	GeoMean	80	99
130	1	0	PRD	.99	.99
140	0	2	95% Confidence	3.99	5.05
150	0	2			

Number Of Sales 57



Month	Mean	Median	Sales
Jan-19	90	82	6
Feb-19	84	86	5
Mar-19	77	78	4
Apr-19	80	82	4
May-19	74	74	4
Jun-19	85	84	4
Jul-19	83	82	6
Aug-19	73	73	2
Sep-19	81	83	3
Oct-19	83	71	9
Nov-19	81	81	5
Dec-19	81	78	5

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	00	000	101		33	4N4W05A D 01700	2019-5580	0.11	56,300	61,290	117,590	216,794	Jul-19	1	54
03	00	000	101	131	33	4N4W05D A 09700	2019-3152	0.10	54,160	75,310	129,470	223,725	Apr-19	2	58
03	00	000	101	131	33	4N4W05A D 13001	2019-1504	0.15	58,640	94,570	153,210	252,885	Feb-19	3	61
03	00	000	101	131	30	4N4W05D A 05900	2019-1844	0.06	43,620	93,570	137,190	216,512	Mar-19	4	63

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	00	000	101		33	4N4W04D A 00600	2019-8517	0.14	58,090	95,820	153,910	243,950	Oct-19	5	63
03	00	000	101		33	4N4W04D A 00300	2019-8651	0.14	58,130	100,120	158,250	241,087	Oct-19	6	66
03	00	000	101	135	33	4N4W04A C 03900	2019-2207	0.31	67,990	153,420	221,410	325,212	Mar-19	7	68
03	03	000	101		33	4N4W04CB 04001	2019-4063	0.14	58,090	65,990	124,080	181,781	May-19	8	68
03	00	000	101	131	33	4N4W05A C 03901	2019-90	0.11	56,300	118,290	174,590	254,053	Jan-19	9	69
03	00	000	101		33	4N4W05A C 04400	2019-5372	0.13	57,450	134,650	192,100	278,467	Jul-19	10	69
03	00	000	101		33	4N4W05A D 12400	2019-8400	0.23	63,540	110,620	174,160	251,346	Oct-19	11	69
03	00	000	101		33	4N4W05A D 11701	2020-197	0.17	59,790	113,950	173,740	250,150	Dec-19	12	69
03	03	000	101		33	4N4W03BC 11500	2019-6850	0.15	58,900	118,570	177,470	254,678	Aug-19	13	70
03	00	000	101		33	4N4W04A D 01300	2019-9572	0.15	58,900	83,310	142,210	203,740	Oct-19	14	70
03	03	000	101		33	4N4W03BC 12300	2019-10665	0.23	63,540	70,930	134,470	192,128	Nov-19	15	70
03	03	000	101		33	4N4W03BB 07400	2019-9482	0.22	63,200	127,000	190,200	267,607	Oct-19	16	71
03	00	000	101		33	4N4W05D A 10400	2020-90	0.40	71,820	166,820	238,640	333,900	Dec-19	17	71
03	03	000	101	131	33	4N4W04BC 01301	2019-137	0.11	56,300	136,320	192,620	262,786	Jan-19	18	73
03	03	000	101		30	4N4W03BC 08300	2019-4139	0.15	58,680	103,940	162,620	223,797	May-19	19	73
03	00	000	101	141	33	4N4W04BA 00201	2019-3501	0.78	77,280	189,510	266,790	362,306	May-19	20	74
03	03	000	101		33	4N4W03BC 11300	2019-7904	0.17	59,980	83,730	143,710	193,433	Sep-19	21	74
03	00	000	101		33	5N4W34C D 00600	2019-6476	0.42	72,970	224,270	297,240	396,003	Aug-19	22	75
03	03	000	101		33	5N4W34CC 00500	2019-5299	0.84	77,330	151,030	228,360	300,818	Jul-19	23	76
03	00	000	101		33	4N4W03BC 10303	2019-345	0.20	61,400	174,470	235,870	302,989	Jan-19	24	78
03	00	000	101		33	4N4W05A A 00400	2019-5068	0.20	61,850	226,690	288,540	370,055	Jun-19	25	78
03	00	000	101		33	4N4W04AB 00302	2019-9354	0.17	59,870	239,790	299,660	386,320	Nov-19	26	78
03	00	000	101		33	4N4W05A A 00902	2019-10684	0.15	58,980	254,690	313,670	403,360	Dec-19	27	78
03	00	000	101		33	4N4W03BC 09301	2019-4679	0.19	61,140	156,240	217,380	270,683	Jun-19	28	80
03	00	000	101	141	33	4N4W04D A 02300	2019-910	0.34	69,400	190,410	259,810	318,855	Feb-19	29	81
03	00	000	101	141	33	4N4W05A C 03605	2019-2733	0.15	59,040	221,960	281,000	344,896	Apr-19	30	81

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	03	000	101		33	4N4W04B D 13300	2019-9525	0.23	63,540	139,010	202,550	251,163	Nov-19	31	81
03	00	000	101	142	33	4N4W05A C 03602	2019-3772	0.14	58,340	221,680	280,020	342,645	May-19	32	82
03	00	000	101		33	4N4W03BA 01010	2019-8290	0.21	62,070	177,880	239,950	291,782	Oct-19	33	82
03	00	000	101		33	4N4W04D A 01500	2019-9419	0.13	57,750	96,810	154,560	189,088	Nov-19	34	82
03	00	000	101	142	33	4N4W05A C 03603	2019-3382	0.14	58,350	221,680	280,030	338,436	Apr-19	35	83
03	00	000	101		33	4N4W04BA 01600	2019-7345	0.34	69,520	211,340	280,860	337,088	Sep-19	36	83
03	00	000	101		30	4N4W05A D 12000	2019-8271	0.23	85,600	97,400	183,000	215,812	Sep-19	37	85
03	00	000	101		33	4N4W05A A 00402	2019-8703	0.18	60,260	262,720	322,980	381,017	Oct-19	38	85
03	00	000	101	141	33	4N4W04A D 01801	2019-721	0.21	61,990	178,260	240,250	278,230	Jan-19	39	86
03	00	000	101	131	33	4N4W05A D 07400	2019-1082	0.11	56,300	130,600	186,900	218,363	Feb-19	40	86
03	00	000	101	142	33	4N4W05D A 08400	2019-1834	0.46	74,500	254,770	329,270	378,833	Mar-19	41	87
03	00	000	101		33	4N4W03BA 01000	2019-5089	0.46	74,530	245,540	320,070	369,845	Jun-19	42	87
03	00	000	101		33	4N4W05A D 04800	2019-6345	0.11	56,300	55,630	111,930	126,687	Jul-19	43	88
03	00	000	101	142	33	4N4W04BA 01602	2019-2024	0.17	59,790	302,320	362,110	407,329	Mar-19	44	89
03	03	000	101		30	4N4W03BB 06300	2019-11006	0.26	65,460	161,990	227,450	251,125	Dec-19	45	91
03	00	000	101	142	33	4N4W04A D 00800	2019-814	0.20	61,530	200,910	262,440	280,373	Feb-19	46	94
03	00	000	101		33	4N4W05A C 03607	2019-6040	0.30	76,810	254,120	330,930	353,850	Jul-19	47	94
03	00	000	101		33	4N4W04B D 01600	2019-6691	0.18	60,720	220,350	281,070	296,495	Jun-19	48	95
03	00	000	101		33	4N4W05A C 03600	2019-9785	0.14	58,290	221,080	279,370	293,857	Nov-19	49	95
03	00	000	101		33	4N4W03BA 01026	2019-11001	0.19	61,060	197,150	258,210	269,502	Dec-19	50	96
03	00	000	101	142	33	4N4W05A A 01100	2019-2551	0.87	77,360	327,710	405,070	418,037	Apr-19	51	97
03	00	000	101	190	33	4N4W05A C 03000	2019-1250	1.14	112,160	282,960	395,120	405,002	Feb-19	52	98
03	00	000	101	142	33	4N4W04BA 03100	2019-898	0.34	69,660	205,570	275,230	273,216	Jan-19	53	101
03	03	000	101		33	4N4W04BB 00107	2019-8988	0.59	76,700	406,510	483,210	424,006	Oct-19	54	114
03	03	000	101		33	4N4W04CB 06500	2019-5735	0.26	65,710	100,310	166,020	141,791	Jul-19	55	117
03	00	000	101		33	4N4W04A C 00300	2019-8519	0.57	76,610	392,060	468,670	379,369	Oct-19	56	124

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	03	000	101	132	33	4N4W03C A 02000	2019-583	2.15	147,440	99,100	246,540	190,285	Jan-19	57	130

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	03	00	000	2020	7	Vernonia	109	03	03	000	2020	1	Vernonia

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	8
Population - Number of Accounts	130
Sales as a percentage of the Population	6.15%
<i>Prior Year Population Values</i>	
Land Rmv	5,339,900
OSD RMV	3,186,000
Improvement RMV	12,464,180
Farm Improvement RMV	1,012,150
Selected Ratio From Sales	64
Time Trend Adjustment	11
Before Ratio	64
Overall Adjustment Factor	156
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	189
Farm Improvement Factor	189
After Ratio	100

Explanation

RMV 109: SA 00

RMV 109: SA 03

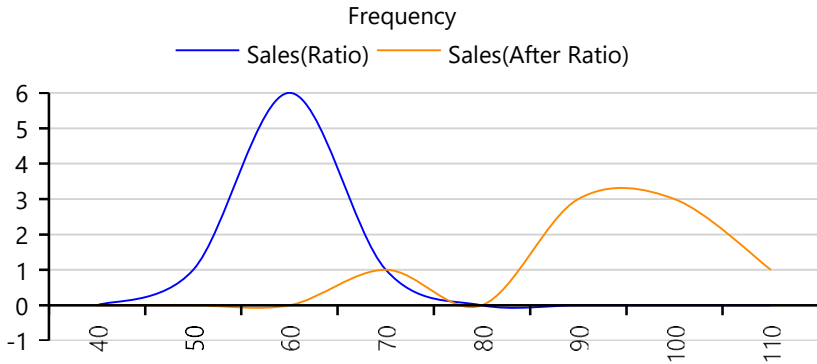
Improved Land – Manufactured Structure, City of Vernonia and in the Fema floodway

It has been noted that Roseview Heights (formerly SA 38) moves within the market similarly to the properties located in MA 03 SA 00 and SA 03. Therefore, it was decided to combine the Roseview Heights properties into Study Area 00 for the 2020 year. For this analysis, there are 6 valid sales available of manufactured structures located in the City of Vernonia and the Fema Floodway. After selecting the Mean of 64, the Overall Adjustment Factor that is returned is 156.

Performance History

	2020	2019	2018	2017	2016
COD	6.25	14.12	-	18.00	-
PRD	0.99	1.01	-	1.03	-

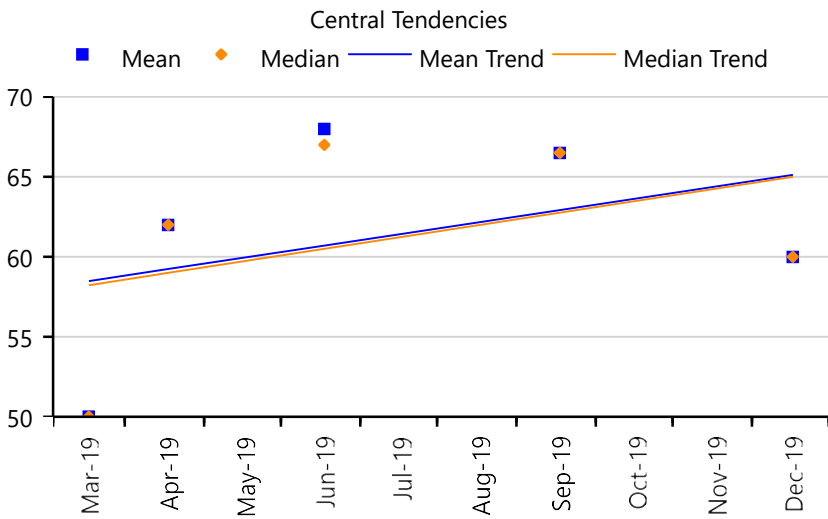
COLUMBIA County 2020 Ratio Study



40	0	0
50	1	0
60	6	0
70	1	1
80	0	0
90	0	0
95	0	3
100	0	3
110	0	1

	Sales (Ratio)	Sales (After Ratio)
Median	66	100
AD	4.13	7.38
COD	6.25	7.41
Mean	64	97
SD	6.44	11.83
COV	10.11	12.18
Wtd Mean	64	98
GeoMean	63	96
PRD	.99	.99
95% Confidence	4.46	8.19

Number Of Sales 8



Month	Mean	Median	Sales
Mar-19	50	50	1
Apr-19	62	62	1
Jun-19	68	67	3
Sep-19	67	67	2
Dec-19	60	60	1

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	00	000	109	452	33	4N4W04BC 05800	2019-2109	0.13	57,580	44,320	101,900	203,438	Mar-19	1	50
03	00	000	109	452	33	4N4W04A D 01800	2019-10935	0.23	63,860	99,230	163,090	270,856	Dec-19	2	60
03	00	000	109	462	33	4N4W05D A 10000	2019-3366	0.14	58,000	91,600	149,600	239,591	Apr-19	3	62
03	03	000	109	462	33	5N4W34CC 00705	2019-4702	1.15	76,600	104,330	180,930	274,667	Jun-19	4	66
03	00	000	109	452	33	4N4W05A A 00700	2019-7758	1.18	77,890	67,680	145,570	219,731	Sep-19	5	66
03	00	000	109	452	33	4N4W05A A 00301	2019-5203	0.55	76,420	94,890	171,310	256,250	Jun-19	6	67
03	00	000	109	462	33	4N4W03C A 00201	2019-7334	0.67	77,160	122,200	199,360	298,424	Sep-19	7	67
03	00	000	109	463	33	4N4W05A A 00313	2019-4754	0.49	75,320	115,240	190,560	267,506	Jun-19	8	71

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	03	40	000	2020		Vernonia							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	10
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	316,520
OSD RMV	399,000
Improvement RMV	1,377,800
Farm Improvement RMV	4,400
Selected Ratio From Sales	81
Time Trend Adjustment	0
Before Ratio	81
Overall Adjustment Factor	123
Land Adjustment Factor	108
OSD Adjustment Factor	100
Improvement Adjustment Factor	132
Farm Improvement Factor	132
After Ratio	100

Explanation

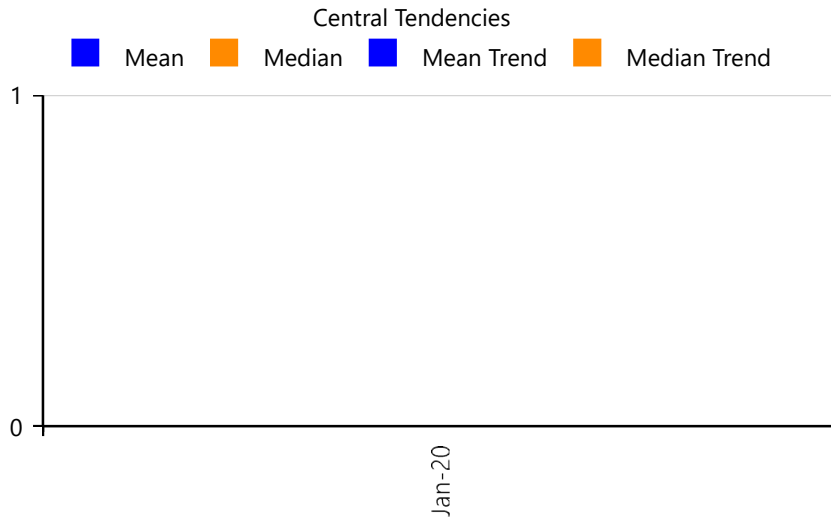
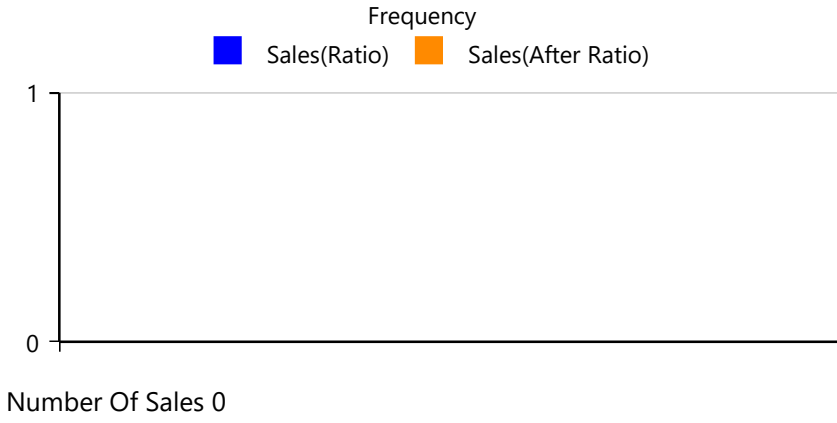
RMV 101: SA 40
 Improved land – Duplex/Triplex/Fourplex, City of Vernonia

With having no sales data available for this study, the Selected Ratio of 81 from the analysis of improved properties in the general area of the City of Vernonia was deemed appropriate to apply here.

Performance History

	2020	2016
COD	-	0.00
PRD	-	1.00

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	03	31	000	2020	5	Vernonia							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	5
Population - Number of Accounts	717
Sales as a percentage of the Population	0.70%
<i>Prior Year Population Values</i>	
Land Rmv	173,474,444
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	89
Time Trend Adjustment	0
Before Ratio	89
Overall Adjustment Factor	112
Land Adjustment Factor	112
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

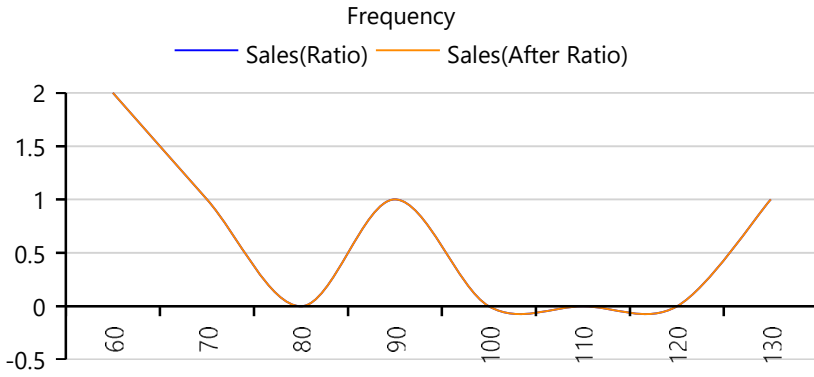
RMV 400: SA 31
 Undeveloped land – Value Zone 1 (31) in Rural Vernonia

Due to having too few sales which resulted in a .70% of the population, the Selected Ratio (89) from the RMV 401 MA 03 SA 31 study was deemed appropriate and has been applied here.

Performance History

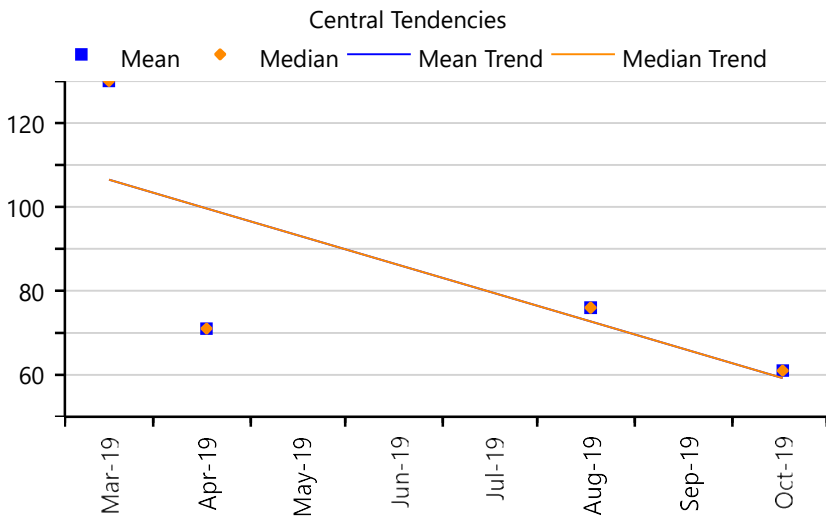
	2020	2019	2018	2017	2016
COD	27.89	14.18	9.11	25.00	8.93
PRD	1.10	1.02	1.04	0.87	1.02

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
60	2	2
70	1	1
80	0	0
90	1	1
100	0	0
110	0	0
120	0	0
130	1	1
Median	71	71
AD	19.80	19.80
COD	27.89	27.89
Mean	83	83
SD	29.09	29.09
COV	35.13	35.13
Wtd Mean	75	75
GeoMean	79	79
PRD	1.10	1.10
95% Confidence	25.50	25.50

Number Of Sales 5



Month	Mean	Median	Sales
Mar-19	130	130	1
Apr-19	71	71	1
Aug-19	76	76	2
Oct-19	61	61	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	31	000	640		33	4N2W1600 02000	2019-7047	61.24	169,720	0	169,720	276,450	Aug-19	1	61
03	31	000	640		33	4N2W1600 02300	2019-10793	20.61	166,570	0	166,570	275,000	Oct-19	2	61
03	31	000	640		33	4N2W1600 01201	2019-2801	4.79	111,100	0	111,100	155,500	Apr-19	3	71
03	31	000	640		33	4N2W1600 02200	2019-7173	30.97	153,530	0	153,530	169,000	Aug-19	4	91
03	31	000	640		33	5N4W3300 01400	2019-1907	7.19	133,740	0	133,740	102,900	Mar-19	5	130

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	03	31	000	2020	29	Vernonia							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	29
Population - Number of Accounts	961
Sales as a percentage of the Population	3.02%
<i>Prior Year Population Values</i>	
Land Rmv	103,583,830
OSD RMV	42,679,010
Improvement RMV	171,493,634
Farm Improvement RMV	19,912,964
	Pre-Trend Brkdwn
	Post Trend Values
	Post Trend Brkdwn
	30.68%
	116,013,890
	30.63%
	12.64%
	42,679,010
	11.27%
	50.79%
	197,217,679
	52.06%
	5.90%
	22,899,909
	6.05%
Selected Ratio From Sales	89
Time Trend Adjustment	9
Before Ratio	89
Overall Adjustment Factor	112
Land Adjustment Factor	112
OSD Adjustment Factor	100
Improvement Adjustment Factor	115
Farm Improvement Factor	115
After Ratio	100

Explanation

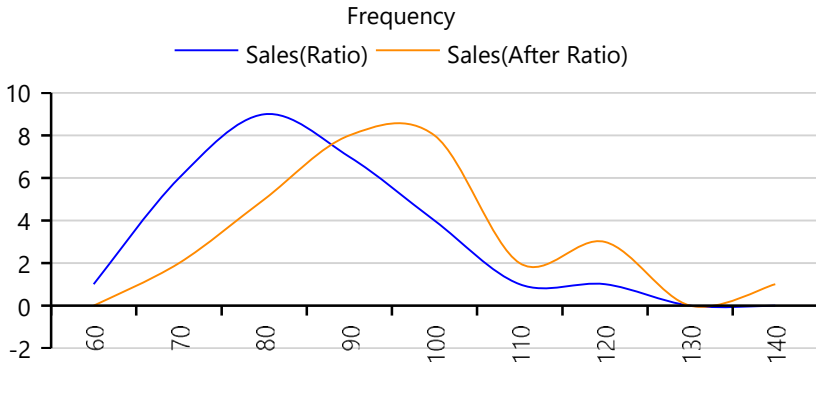
RMV 401: SA 31
Improved land – Value Zone 1 (31) in Rural Vernonia

For this study of developed property located throughout Rural Vernonia, 29 sales are available which are deemed adequate and sufficient for this analysis. The Mean returned an indicator of 89 and is supported by the Median (89) and the Weighted Mean (90).

Performance History

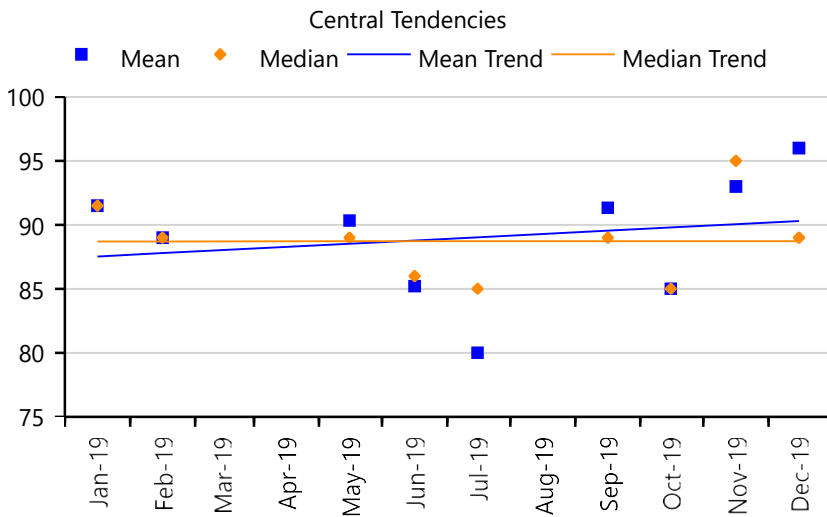
	2020	2019	2018	2017	2016
COD	11.27	10.21	11.72	12.73	7.16
PRD	0.99	1.01	1.00	1.01	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)		Sales (Ratio)	Sales (After Ratio)
60	1	0	Median	89	99
70	6	2	AD	10.03	11.41
80	9	5	COD	11.27	11.53
90	7	8	Mean	89	100
100	4	8	SD	13.50	15.54
110	1	2	COV	15.11	15.52
120	1	3	Wtd Mean	90	101
130	0	0	GeoMean	88	99
140	0	1	PRD	.99	.99
			95% Confidence	4.91	5.66

Number Of Sales 29



Month	Mean	Median	Sales
Jan-19	92	92	2
Feb-19	89	89	1
May-19	90	89	3
Jun-19	85	86	5
Jul-19	80	85	3
Sep-19	91	89	6
Oct-19	85	85	2
Nov-19	93	95	3
Dec-19	96	89	4

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	31	000	641		33	4N2W17C0 01300	2019-6065	9.48	180,980	140,270	321,250	505,603	Jul-19	1	64
03	31	000	401		33	5N4W23BC 01000	2019-7492	1.31	106,730	184,580	291,310	410,960	Sep-19	2	71
03	31	000	641	141	33	4N2W1700 02203	2019-796	10.09	195,030	216,680	411,710	559,158	Jan-19	3	74
03	31	000	401		33	4N3W13C0 00600	2019-5133	4.49	164,580	308,830	473,410	633,193	Jun-19	4	75
03	31	000	401		33	4N4W3000 00202	2019-4892	3.93	157,890	136,060	293,950	386,823	Jun-19	5	76
03	31	000	641		33	4N2W21A0 00800	2019-7464	9.79	181,000	256,750	437,750	565,345	Sep-19	6	77

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	31	000	641		33	5N4W2800 00901	2019-7950	3.44	151,310	178,990	330,300	430,584	Sep-19	7	77
03	31	000	641		33	4N2W1600 03200	2019-8800	3.60	134,170	259,890	394,060	493,968	Oct-19	8	80
03	31	000	401		33	5N4W3300 00700	2019-10268	44.60	287,440	419,330	706,770	876,768	Dec-19	9	81
03	31	000	401		33	4N5W1300 02101	2019-9990	4.24	161,680	136,180	297,860	352,525	Nov-19	10	84
03	31	000	641		33	4N2W33A0 00403	2019-6174	5.01	230,690	214,140	444,830	521,696	Jul-19	11	85
03	31	000	581		33	5N4W3400 00400	2019-4409	72.00	326,040	241,020	567,060	657,500	Jun-19	12	86
03	31	000	401		33	4N2W16A0 00700	2019-10758	2.33	132,660	347,590	480,250	551,650	Dec-19	13	87
03	31	000	641		33	4N3W2400 00600	2019-4175	6.12	183,330	327,260	510,590	581,171	May-19	14	88
03	31	000	641	134	33	4N2W1600 02500	2019-1260	5.11	160,380	199,190	359,570	404,588	Feb-19	15	89
03	31	000	641	142	33	4N2W1500 00201	2019-3602	6.73	187,950	340,200	528,150	593,544	May-19	16	89
03	31	000	641		33	5N4W3100 00500	2019-9254	5.50	176,480	331,380	507,860	563,492	Oct-19	17	90
03	31	000	401		33	4N4W07C0 01300	2019-6022	5.06	171,280	388,170	559,450	612,715	Jul-19	18	91
03	31	000	401		33	4N4W08A A 00600	2019-10264	3.01	145,540	240,810	386,350	423,024	Dec-19	19	91
03	31	000	641	141	30	4N3W2400 01901	2019-3815	10.60	196,240	234,340	430,580	459,882	May-19	20	94
03	31	000	401		33	4N3W1400 00201	2019-4457	1.85	122,100	165,100	287,200	305,987	Jun-19	21	94
03	31	000	641		30	4N4W2000 00500	2019-4949	8.14	193,940	133,090	327,030	345,543	Jun-19	22	95
03	31	000	641		33	4N3W2400 02200	2019-9610	5.01	170,690	264,010	434,700	455,209	Nov-19	23	95
03	31	000	641		33	4N2W1900 00803	2019-9341	15.21	211,390	550,030	761,420	760,875	Nov-19	24	100
03	31	000	641		33	4N3W14D 0 01800	2019-7944	14.09	308,040	94,950	402,990	399,438	Sep-19	25	101
03	31	000	401		33	4N3W13D 0 01600	2019-7652	5.41	203,920	321,630	525,550	487,398	Sep-19	26	108
03	31	000	541	155	33	4N5W1200 01000	2019-1031	7.92	193,490	438,650	632,140	579,191	Jan-19	27	109
03	31	000	401		33	5N4W0300 00700	2019-8164	3.32	149,690	364,640	514,330	450,736	Sep-19	28	114
03	31	000	641		33	4N4W0300 00800	2019-10631	34.51	279,620	878,210	1,157,830	928,423	Dec-19	29	125

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	03	31	000	2020	10	Vernonia							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	10
Population - Number of Accounts	311
Sales as a percentage of the Population	3.22%
<i>Prior Year Population Values</i>	
Land Rmv	32,967,350
OSD RMV	16,681,620
Improvement RMV	31,808,842
Farm Improvement RMV	9,461,420
Selected Ratio From Sales	78
Time Trend Adjustment	9
Before Ratio	78
Overall Adjustment Factor	128
Land Adjustment Factor	112
OSD Adjustment Factor	100
Improvement Adjustment Factor	153
Farm Improvement Factor	153
After Ratio	100

Explanation

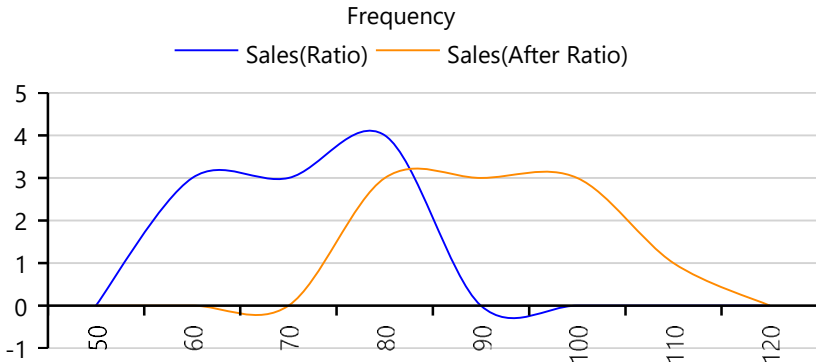
RMV 409: SA 31
Improved land – Manufactured Structure in Rural Vernonia

This grouping of properties consists of those improved with manufactured structures located in the rural areas of Vernonia. For this study, the Median of 78 was selected as the best indicator for this dataset. The resulting Overall Adjustment Factor is 128.

Performance History

	2020	2019	2018	2017	2016
COD	8.33	9.82	14.55	10.88	14.21
PRD	0.99	0.98	1.01	1.02	0.98

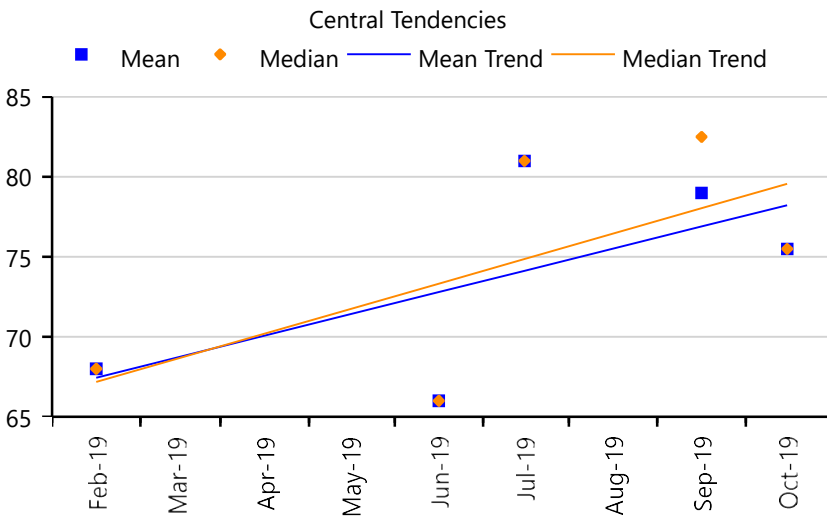
COLUMBIA County 2020 Ratio Study



50	0	0
60	3	0
70	3	0
80	4	3
90	0	3
100	0	3
110	0	1
120	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	78	95
AD	6.50	8.60
COD	8.33	9.05
Mean	76	95
SD	8.11	10.33
COV	10.63	10.83
Wtd Mean	77	96
GeoMean	76	95
PRD	.99	.99
95% Confidence	5.03	6.40

Number Of Sales 10



Month	Mean	Median	Sales
Feb-19	68	68	1
Jun-19	66	66	1
Jul-19	81	81	2
Sep-19	79	83	4
Oct-19	76	76	2

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	31	000	409	473	33	4N4W0900 00101	2019-7961	1.99	126,070	135,960	262,030	409,560	Sep-19	1	64
03	31	000	649	452	33	4N2W33A0 00600	2019-4355	7.33	191,270	73,180	264,450	398,822	Jun-19	2	66
03	31	000	409	453	33	5N5W3400 00400	2019-1436	2.67	139,100	98,430	237,530	349,657	Feb-19	3	68
03	31	000	649	442	33	4N2W21D 0 00101	2019-8458	8.71	194,450	96,640	291,090	395,535	Oct-19	4	74
03	31	000	649	462	33	4N4W0900 00200	2019-9142	8.21	194,010	71,780	265,790	345,202	Oct-19	5	77
03	31	000	409	451	33	4N4W07C0 00800	2019-7598	1.63	115,830	66,560	182,390	230,770	Sep-19	6	79
03	31	000	649	463	30	4N4W3100 00102	2019-5508	6.45	185,820	109,870	295,690	364,945	Jul-19	7	81
03	31	000	649	132	33	4N3W13D 0 02101	2019-6059	5.00	170,550	138,980	309,530	380,946	Jul-19	8	81
03	31	000	409	473	33	3N2W1800 00800	2019-7090	9.00	254,710	175,710	430,420	499,356	Sep-19	9	86
03	31	000	649	463	33	3N2W0900 00701	2019-7606	40.00	281,400	150,630	432,030	497,804	Sep-19	10	87

MAINTENANCE AREA 4

RAINIER & DEER ISLAND

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	04	00	000	2020	2	Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2			
Population - Number of Accounts	168			
Sales as a percentage of the Population	1.19%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		10,414,872	100.00%	10,831,467 100.00%
OSD RMV		0	0.00%	0 0.00%
Improvement RMV		0	0.00%	0 0.00%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		96		
Time Trend Adjustment		0		
Before Ratio		96		
Overall Adjustment Factor		104		
Land Adjustment Factor		104		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		100		
Farm Improvement Factor		100		
After Ratio		100		

Explanation

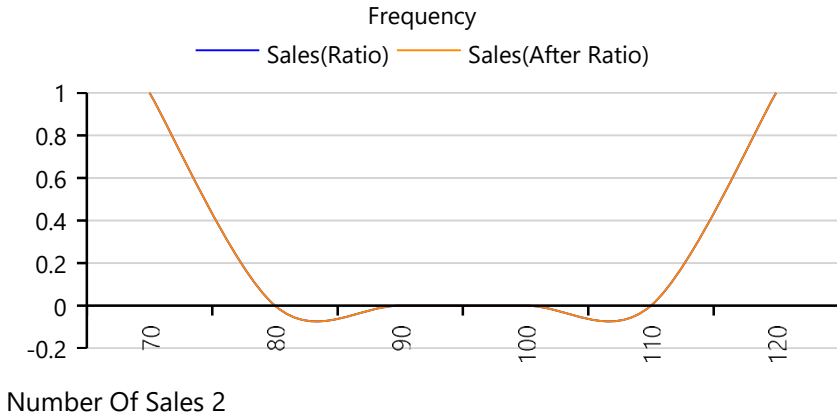
RMV 100: SA 00
Undeveloped land, City of Rainier

Only 2 sales were identified during the sales period, one of which is city acreage resulting in sales data that is an inadequate sampling to apply to this study.. Therefore, the conclusion from the Improved Properties located in the same study area (Median of 96) is recommended.

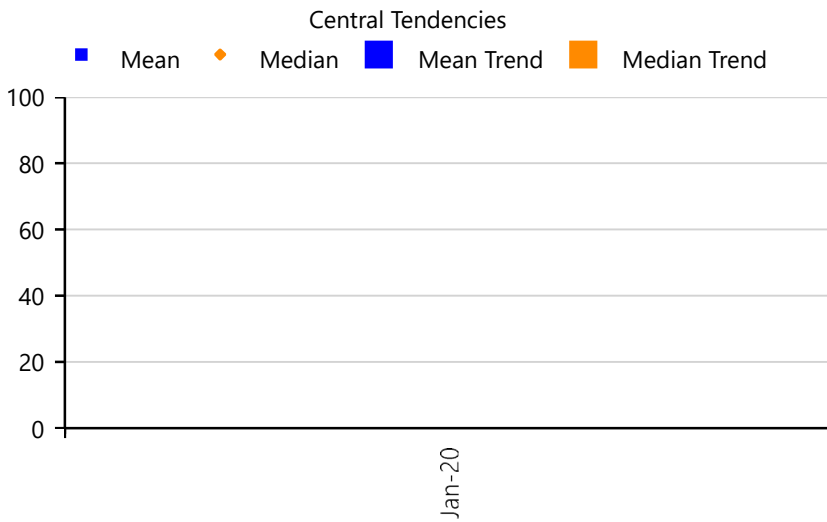
Performance History

	2020	2019	2018	2017	2016
COD	25.39	6.33	20.24	32.31	0.00
PRD	1.02	0.99	1.03	1.05	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
70	1	1
80	0	0
90	0	0
100	0	0
110	0	0
120	1	1
Median	97	101
AD	24.50	25.50
COD	25.39	25.37
Mean	97	101
SD	34.65	36.06
COV	35.90	35.88
Wtd Mean	94	98
GeoMean	93	97
PRD	1.02	1.03
95% Confidence	48.02	49.98



Month	Mean	Median	Sales
Apr-19	97	97	2

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	00	000	100		33	7N2W21B0 01201	2019-2542	1.57	43,350	0	43,350	60,000	Apr-19	1	72
04	00	000	100		33	7N2W21AB 00108	2019-3308	0.42	60,240	0	60,240	49,900	Apr-19	2	121

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	04	00	000	2020	23	Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	23
Population - Number of Accounts	656
Sales as a percentage of the Population	3.51%
<i>Prior Year Population Values</i>	
Land Rmv	30,468,480
OSD RMV	8,691,400
Improvement RMV	93,194,041
Farm Improvement RMV	750,350
	Pre-Trend Brkdwn
	22.89%
	Post Trend Values
	31,687,219
	22.79%
	6.25%
	70.02%
	97,853,743
	70.39%
	0.56%
	787,868
	0.57%
Selected Ratio From Sales	96
Time Trend Adjustment	11
Before Ratio	96
Overall Adjustment Factor	104
Land Adjustment Factor	104
OSD Adjustment Factor	100
Improvement Adjustment Factor	105
Farm Improvement Factor	105
After Ratio	100

Explanation

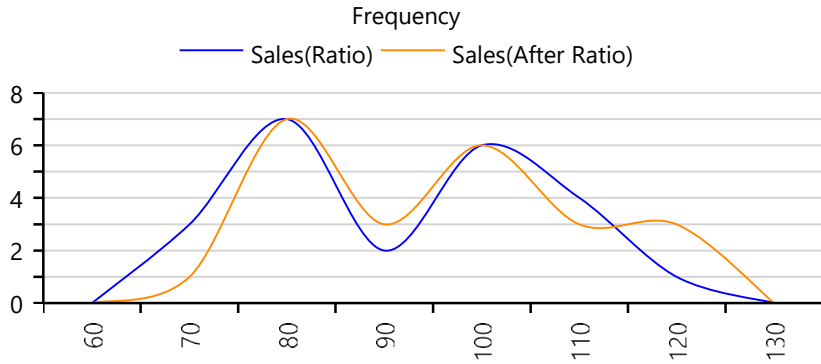
RMV 101: SA 00
Improved property, City of Rainier

Improved residential properties located within the City of Rainier. The Median of 96 was selected as the most appropriate ratio indicator for the market for this classification of properties. The result is an Overall Adjustment Factor of 104.

Performance History

	2020	2019	2018	2017	2016
COD	12.86	10.56	17.52	8.78	15.48
PRD	0.98	1.00	1.00	0.99	1.05

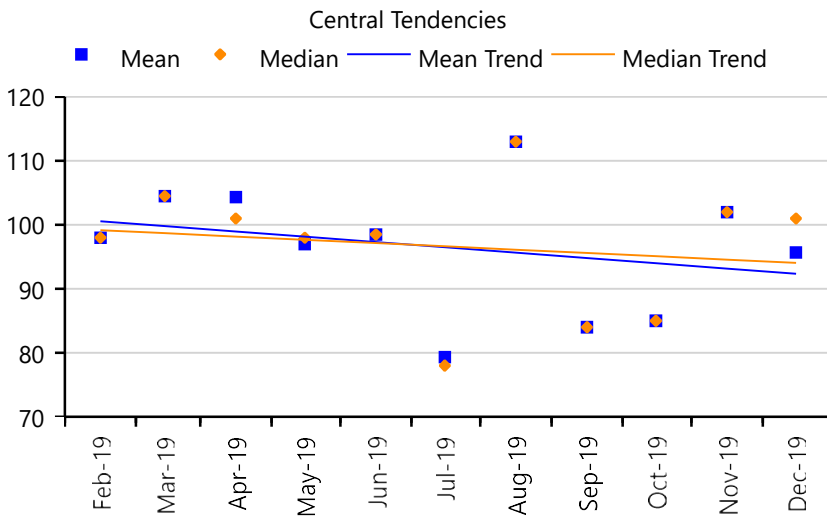
COLUMBIA County 2020 Ratio Study



60	0	0
70	3	1
80	7	7
90	2	3
100	6	6
110	4	3
120	1	3
130	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	96	100
AD	12.35	12.91
COD	12.86	12.91
Mean	96	100
SD	14.31	14.93
COV	14.88	14.87
Wtd Mean	98	102
GeoMean	95	99
PRD	.98	.98
95% Confidence	5.85	6.10

Number Of Sales 23



Month	Mean	Median	Sales
Feb-19	98	98	2
Mar-19	105	105	2
Apr-19	104	101	3
May-19	97	98	4
Jun-19	99	99	2
Jul-19	79	78	3
Aug-19	113	113	1
Sep-19	84	84	1
Oct-19	85	85	1
Nov-19	102	102	1
Dec-19	96	101	3

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	00	000	101		33	7N2W17A D 03500	2019-5980	0.16	49,050	184,690	233,740	314,730	Jul-19	1	74
04	00	000	101		33	7N2W21A0 00300	2019-5736	0.99	74,770	179,400	254,170	324,172	Jul-19	2	78
04	00	000	101	122	33	7N2W16D C 07800	2019-1037	0.08	34,940	97,570	132,510	168,071	Feb-19	3	79
04	00	000	101		30	7N2W16D C 05400	2019-4075	0.28	53,880	116,070	169,950	209,497	May-19	4	81
04	00	000	101		33	7N2W16D D 04300	2019-10905	0.19	52,230	99,340	151,570	188,006	Dec-19	5	81
04	00	000	101		33	7N2W16BC 03100	2019-7441	0.23	56,410	194,300	250,710	299,976	Sep-19	6	84
04	00	000	101		33	7N2W17D B 02302	2019-8844	0.50	68,350	227,910	296,260	347,276	Oct-19	7	85
04	00	000	101	131	30	7N2W16D A 04000	2019-1877	0.15	72,800	62,860	135,660	157,891	Mar-19	8	86
04	00	000	101		33	7N2W16CB 00200	2019-5961	0.45	51,820	137,260	189,080	220,563	Jul-19	9	86
04	00	000	101		33	7N2W16BC 06600	2019-4325	0.14	46,620	105,160	151,780	170,368	May-19	10	89
04	00	000	101		33	7N2W17A D 05300	2019-5165	0.18	51,540	198,280	249,820	269,382	Jun-19	11	93
04	00	000	101	134	33	7N2W16BC 00900	2019-3077	0.11	68,380	134,810	203,190	211,893	Apr-19	12	96
04	00	000	101	132	33	7N2W16D C 02000	2019-2555	0.30	63,630	252,150	315,780	312,958	Apr-19	13	101
04	00	000	101		33	7N2W17D A 00100	2019-10897	1.11	95,110	215,820	310,930	306,668	Dec-19	14	101
04	00	000	101		33	7N2W16BC 01200	2019-10228	0.08	61,100	186,530	247,630	243,699	Nov-19	15	102
04	00	000	101		33	7N2W16BC 05300	2019-4918	0.25	83,500	270,110	353,610	338,416	Jun-19	16	104
04	00	000	101		33	7N2W16D B 12700	2019-10316	0.64	59,670	193,470	253,140	241,771	Dec-19	17	105
04	00	000	101	141	33	7N2W17A C 02000	2019-3693	0.29	62,430	194,790	257,220	240,795	May-19	18	107
04	00	000	101	141	33	7N2W16C A 07800	2019-3506	0.22	135,210	150,620	285,830	257,640	May-19	19	111
04	00	000	101		33	7N2W17A C 02200	2019-6458	0.31	63,800	129,900	193,700	172,062	Aug-19	20	113
04	00	000	101	142	33	7N2W17D C 00102	2019-3392	2.57	156,990	433,990	590,980	511,272	Apr-19	21	116
04	00	000	101	142	33	7N2W16CB 01800	2019-1099	0.19	77,570	210,480	288,050	246,893	Feb-19	22	117
04	00	000	101	152	33	7N2W17D B 01200	2019-1939	0.92	153,340	374,900	528,240	429,168	Mar-19	23	123

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
102	04	00	000	2020	1	Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	1			
Population - Number of Accounts	4			
Sales as a percentage of the Population	25.00%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv	0	0	0.00%	0 0.00%
OSD RMV	0	0	0.00%	0 0.00%
Improvement RMV	976,480	1,152,246	100.00%	1,152,246 100.00%
Farm Improvement RMV	0	0	0.00%	0 0.00%
Selected Ratio From Sales	85			
Time Trend Adjustment	11			
Before Ratio	85			
Overall Adjustment Factor	118			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Improvement Adjustment Factor	118			
Farm Improvement Factor	118			
After Ratio	100			

Explanation

RMV 102: SA 00

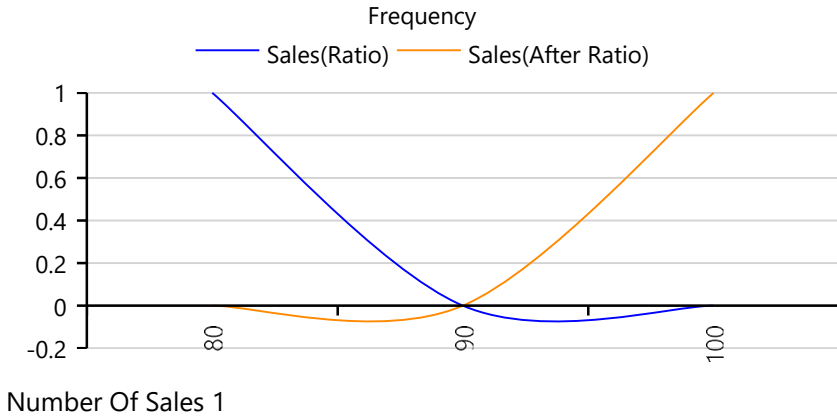
Improved land – Condominium, City of Rainier

This analysis is comprised of condominiums located within the City of Rainier. Although the sales array resulted in one sale, it is deemed sufficient to apply to this unique group of properties. Therefore, the Selected Ratio of 85 was applied.

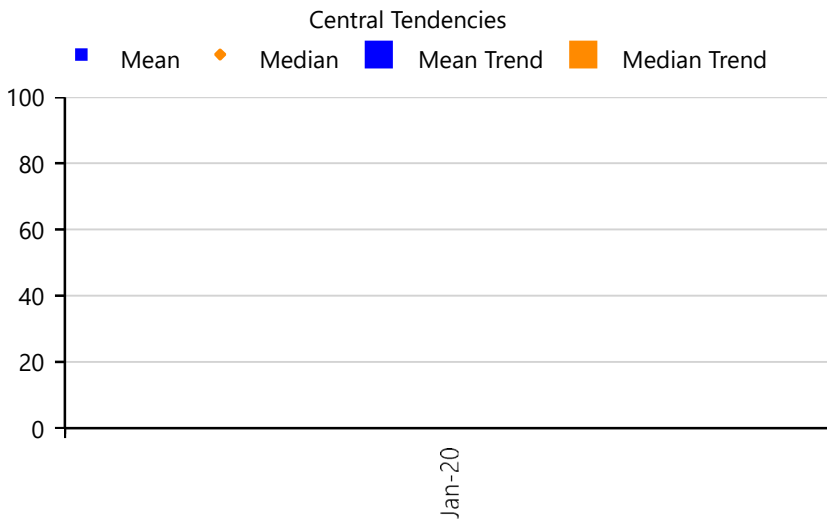
Performance History

	2020
COD	-
PRD	0.99

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	85	101
AD		
COD		
Mean	85	101
SD	1.00	1.00
COV	1.18	.99
Wtd Mean	85	101
GeoMean	85	101
PRD	.99	1.00
95% Confidence	1.96	1.96



Month	Mean	Median	Sales
Jun-19	85	85	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	00	000	102		33	7N2W16D B 80001	2019-4681	0.00	0	266,610	266,610	311,905	Jun-19	1	85

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	04	00	000	2020	2	Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	93
Sales as a percentage of the Population	2.15%
<i>Prior Year Population Values</i>	
Land Rmv	3,741,350
OSD RMV	1,229,400
Improvement RMV	6,281,920
Farm Improvement RMV	288,860
Selected Ratio From Sales	96
Time Trend Adjustment	0
Before Ratio	96
Overall Adjustment Factor	104
Land Adjustment Factor	104
OSD Adjustment Factor	100
Improvement Adjustment Factor	105
Farm Improvement Factor	105
After Ratio	100

Explanation

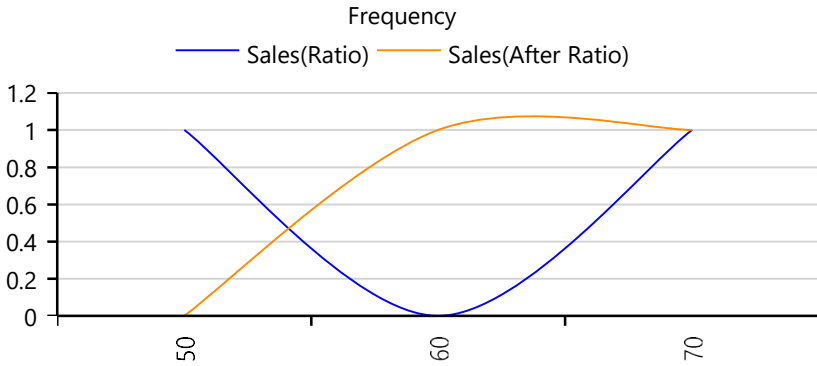
RMV 109: SA 00
Improved land – Manufactured Structure, City of Rainier

This sales array returned 2 sales to analyze for this study of manufactured structures located on real property in the City of Rainier. This is a sampling that is too small to indicate current market movement and trends. Therefore, the conclusion from MA 04, SA 00 RMV Class 401 was deemed appropriate and applied here.

Performance History

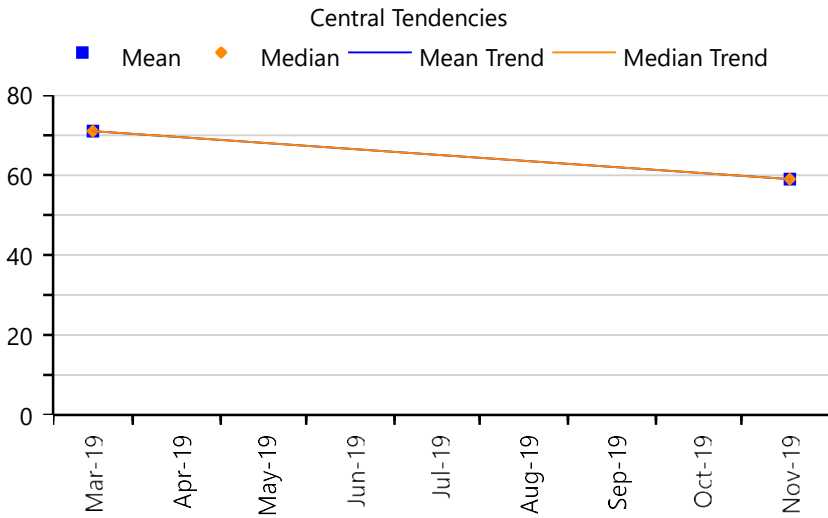
	2020	2018	2017	2016
COD	9.23	11.11	0.00	8.05
PRD	1.01	1.00	1.00	0.99

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
50	1	0
60	0	1
70	1	1
Median	65	68
AD	6.00	6.00
COD	9.23	8.82
Mean	65	68
SD	8.49	8.49
COV	13.05	12.48
Wtd Mean	64	67
GeoMean	65	68
PRD	1.01	1.02
95% Confidence	11.76	11.76

Number Of Sales 2



Month	Mean	Median	Sales
Mar-19	71	71	1
Nov-19	59	59	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	00	000	109		33	7N2W17A D 01900	2019-9406	0.14	46,330	91,580	137,910	232,500	Nov-19	1	59
04	00	000	109	442	33	7N2W16CC 00809	2019-1625	0.41	66,790	50,660	117,450	165,000	Mar-19	2	71

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	04	40	000	2020		Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	24
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	1,163,480
OSD RMV	480,600
Improvement RMV	4,723,660
Farm Improvement RMV	30,850
Selected Ratio From Sales	96
Time Trend Adjustment	0
Before Ratio	96
Overall Adjustment Factor	104
Land Adjustment Factor	104
OSD Adjustment Factor	100
Improvement Adjustment Factor	105
Farm Improvement Factor	105
After Ratio	100

Explanation

RMV 101: SA 40

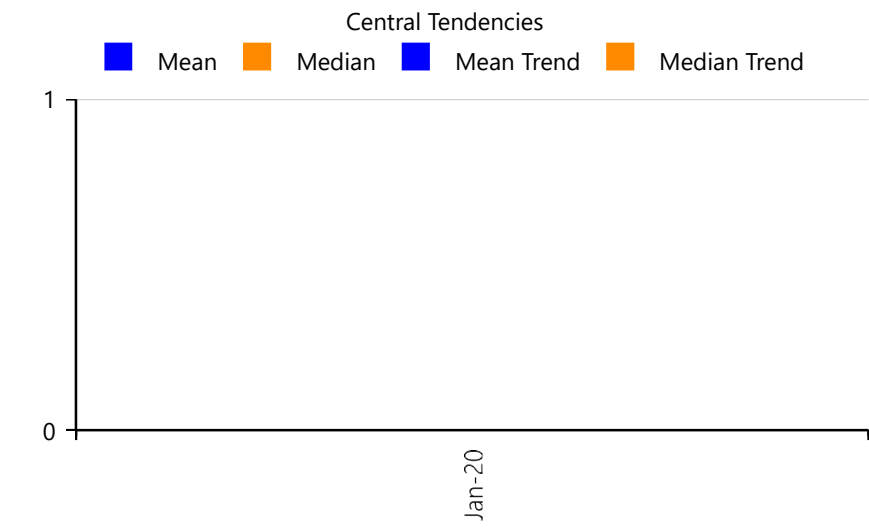
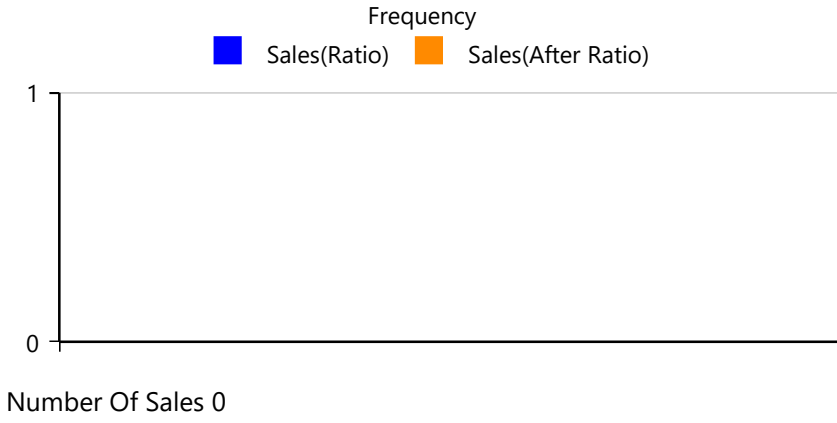
Improved land – Duplex/Triplex/Fourplex, City of Rainier

There are no sales available to study for this population of 24 accounts. Therefore it was deemed appropriate to apply the selected ratio of 96 from the RMV Class 101 study located in MA 04, SA 00 to this grouping of properties.

Performance History

	2020	2019	2018	2016
COD	-	0.00	0.00	0.00
PRD	-	1.00	1.00	1.00

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	04	47	000	2020	2	Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	49
Sales as a percentage of the Population	4.08%
<i>Prior Year Population Values</i>	
Land Rmv	2,311,340
OSD RMV	749,700
Improvement RMV	8,563,250
Farm Improvement RMV	0
Selected Ratio From Sales	112
Time Trend Adjustment	11
Before Ratio	112
Overall Adjustment Factor	89
Land Adjustment Factor	89
OSD Adjustment Factor	100
Improvement Adjustment Factor	88
Farm Improvement Factor	88
After Ratio	100

Explanation

RMV 101: SA 47

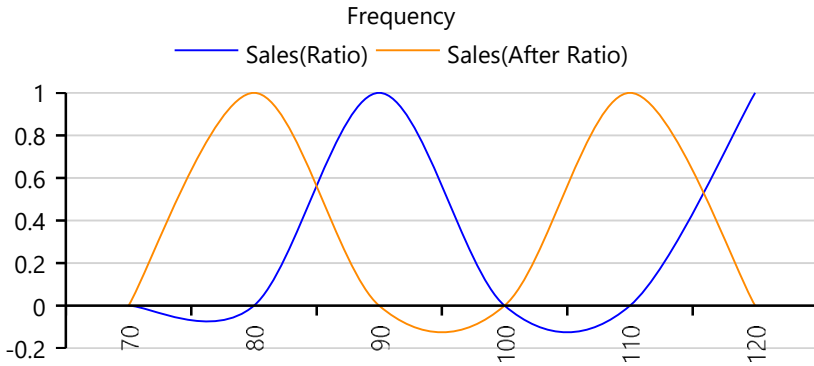
Improved land – Rainier Riverfront Estates, City of Rainier

Rainier Riverfront Estates is a small subdivision located on the Columbia River. Two sales were found for this unique classification of properties. Upon review, it is recommended that the Median (112) be applied here.

Performance History

	2020	2019	2018	2017	2016
COD	11.61	0.00	2.48	2.25	1.61
PRD	1.00	1.00	1.01	1.00	1.00

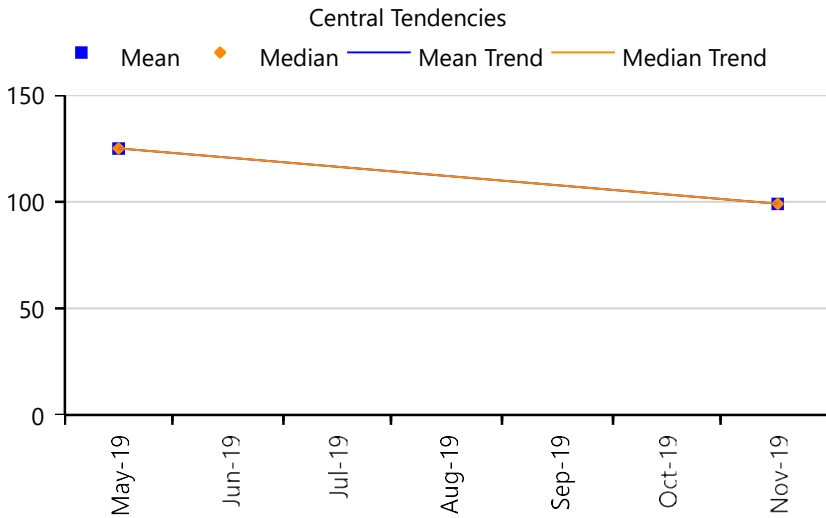
COLUMBIA County 2020 Ratio Study



Number Of Sales 2

	Sales (Ratio)	Sales (After Ratio)
70	0	0
80	0	1
90	1	0
100	0	0
110	0	1
120	1	0

Median	112	100
AD	13.00	11.50
COD	11.61	11.56
Mean	112	100
SD	18.38	16.26
COV	16.42	16.35
Wtd Mean	112	99
GeoMean	111	99
PRD	1.00	1.00
95% Confidence	25.48	22.54



Month	Mean	Median	Sales
May-19	125	125	1
Nov-19	99	99	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	47	000	101		33	7N2W16BB 01800	2019-9915	0.06	32,800	199,040	231,840	233,289	Nov-19	1	99
04	47	000	101		30	7N2W16BB 00100	2019-4348	0.10	86,800	185,750	272,550	218,469	May-19	2	125

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	04	41	000	2020	6	Rainier	400	04	44	000	2020	1	Rainier

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	7
Population - Number of Accounts	575
Sales as a percentage of the Population	1.22%
<i>Prior Year Population Values</i>	
Land Rmv	83,071,243
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	95
Time Trend Adjustment	9
Before Ratio	95
Overall Adjustment Factor	105
Land Adjustment Factor	105
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 400: SA 41

RMV 400: SA 44

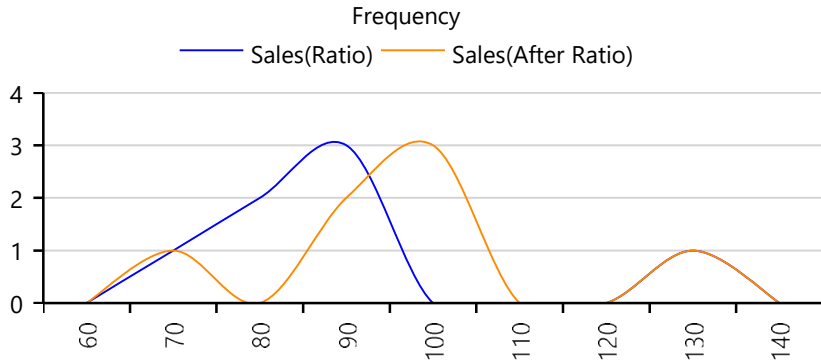
Unimproved land – Rural Rainier (Value Zone 1) and Prescott

For this data set, the sales array returned 7 sales for this classification of property. Once adjusted for time and reviewed, it was decided to apply the Median of 95 to this study. This returned an Overall Adjustment Factor of 105 for un-developed land in SA 41 (Rural Rainier – Value Zone 1) and SA 44 (Prescott).

Performance History

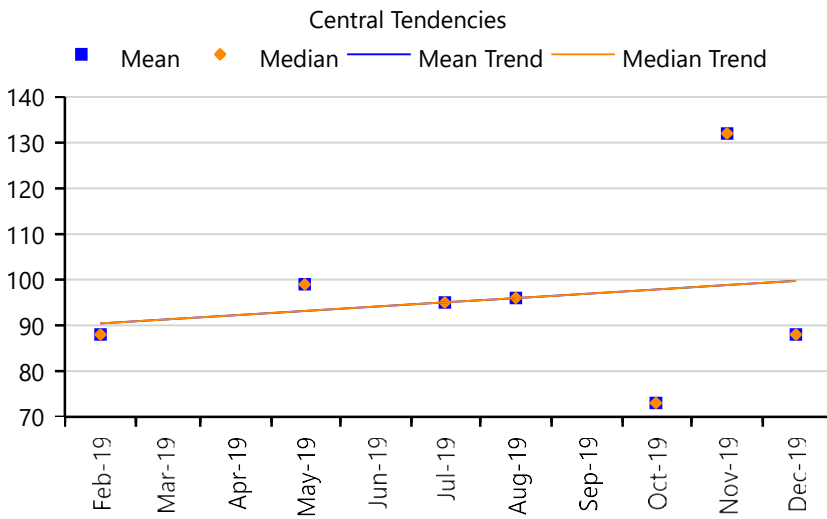
	2020	2019	2018	2017	2016
COD	11.73	14.91	15.40	0.00	-
PRD	1.05	1.04	0.91	1.00	-

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)		Sales (Ratio)	Sales (After Ratio)
60	0	0	Median	95	100
70	1	1	AD	11.14	11.71
80	2	0	COD	11.73	11.71
90	3	2	Mean	96	101
100	0	3	SD	18.09	19.04
110	0	0	COV	18.87	18.88
120	0	0	Wtd Mean	92	96
130	1	1	GeoMean	95	99
140	0	0	PRD	1.05	1.05
			95% Confidence	13.40	14.10

Number Of Sales 7



Month	Mean	Median	Sales
Feb-19	88	88	1
May-19	99	99	1
Jul-19	95	95	1
Aug-19	96	96	1
Oct-19	73	73	1
Nov-19	132	132	1
Dec-19	88	88	1

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	41	000	400		33	5N2W12A0 00601	2019-8202	5.05	120,180	0	120,180	163,584	Oct-19	1	73
04	41	000	400		33	7N2W16CC 00400	2019-1577	1.00	55,000	0	55,000	62,420	Feb-19	2	88
04	41	000	400		30	5N2W11B0 00102	2019-10697	5.00	101,280	0	101,280	115,368	Dec-19	3	88
04	41	000	640		33	6N2W3600 00300	2019-5506	20.00	170,000	0	170,000	178,336	Jul-19	4	95
04	41	000	400		33	6N2W21A0 01402	2019-7079	5.18	120,570	0	120,570	125,794	Aug-19	5	96
04	41	000	640		33	7N2W3000 01900	2019-4249	13.05	104,480	0	104,480	105,300	May-19	6	99
04	44	000	400		30	7N2W35A D 02501	2019-9379	0.97	55,000	0	55,000	41,558	Nov-19	7	132

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	04	41	000	2020	28	Rainier	401	04	44	000	2020	1	Rainier

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	29
Population - Number of Accounts	1299
Sales as a percentage of the Population	2.23%
<i>Prior Year Population Values</i>	
Land Rmv	132,921,917
OSD RMV	56,109,990
Improvement RMV	165,090,486
Farm Improvement RMV	19,923,423
Selected Ratio From Sales	100
Time Trend Adjustment	9
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	105
OSD Adjustment Factor	100
Improvement Adjustment Factor	96
Farm Improvement Factor	96
After Ratio	100

Explanation

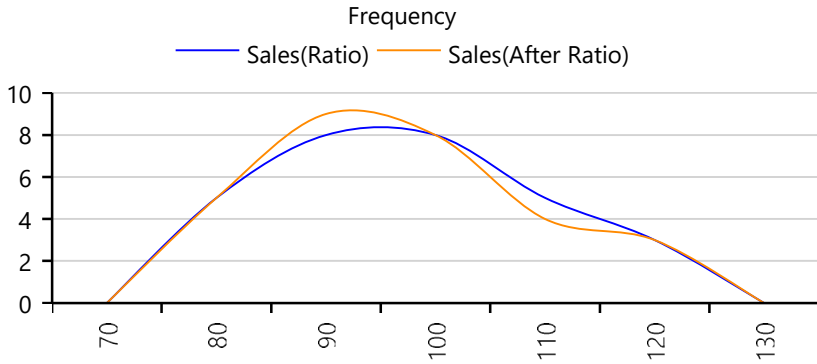
RMV 401: SA 41
 RMV 401: SA 44
 Improved land – Rural Rainier (Value Zone 1) and City of Prescott

For this analysis, the SA 41 (Rural Rainier-Value Zone I) and SA 44 (Prescott) have been analyzed together due to the similar way that they move on the market. Prescott, a former mill-town community, resembles a small subdivision located on the Columbia River in South Rural Rainier. For this analysis the Median returned a ratio indicator of 100. This ratio was selected and applied.

Performance History

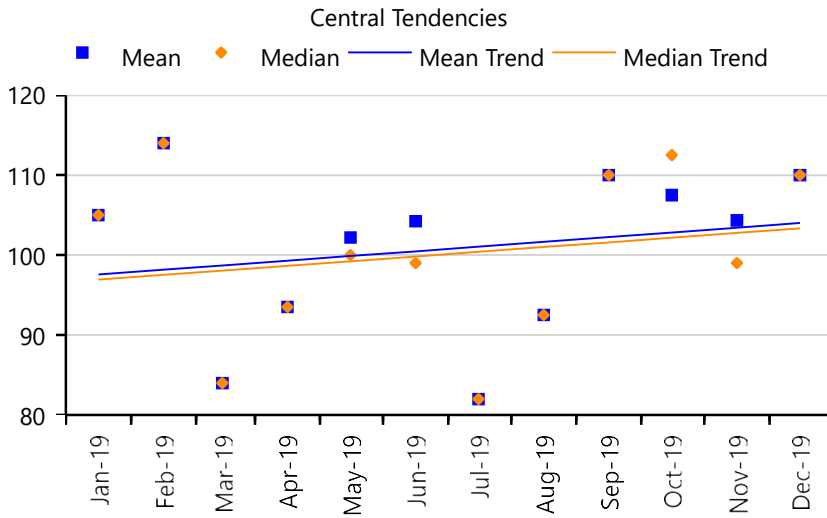
	2020	2019	2018	2017	2016
COD	10.21	-	17.73	5.78	13.27
PRD	0.99	-	1.01	1.01	0.98

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	100	100
AD	10.21	9.83
COD	10.21	9.83
Mean	102	101
SD	12.50	12.01
COV	12.27	11.87
Wtd Mean	103	102
GeoMean	101	101
PRD	.99	.99
95% Confidence	4.55	4.37

Number Of Sales 29



Month	Mean	Median	Sales
Jan-19	105	105	1
Feb-19	114	114	2
Mar-19	84	84	1
Apr-19	94	94	2
May-19	102	100	5
Jun-19	104	99	4
Jul-19	82	82	2
Aug-19	93	93	2
Sep-19	110	110	1
Oct-19	108	113	4
Nov-19	104	99	3
Dec-19	110	110	2

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	41	000	641		30	5N2W020000600	2019-5671	14.10	107,860	8,990	116,850	145,838	Jul-19	1	80
04	41	000	401	131	33	5N1W08CB00701	2019-1927	1.01	109,870	115,640	225,510	267,696	Mar-19	2	84
04	41	000	401		33	5N1W07B000900	2019-5487	3.65	169,970	119,910	289,880	343,114	Jul-19	3	84
04	41	000	401		33	5N2W10A000307	2019-9105	5.01	174,470	200,160	374,630	436,880	Oct-19	4	86
04	41	000	401	133	33	5N2W12A000600	2019-2695	1.55	130,890	198,210	329,100	378,820	Apr-19	5	87
04	41	000	401		33	5N1W060000800	2019-7025	1.64	134,380	196,200	330,580	363,596	Aug-19	6	91

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	44	000	401		33	7N2W35A D 01400	2019-9574	0.45	86,400	186,210	272,610	293,857	Nov-19	7	93
04	41	000	401		33	6N2W21A0 01300	2019-4415	4.68	173,780	106,010	279,790	297,134	Jun-19	8	94
04	41	000	541		33	7N3W3600 00601	2019-6238	20.13	224,540	245,960	470,500	502,800	Aug-19	9	94
04	41	000	401		33	7N3W1300 01200	2019-4109	5.00	174,400	316,160	490,560	514,313	May-19	10	95
04	41	000	401	133	30	7N2W21A0 02400	2019-3441	1.54	115,290	114,820	230,110	238,545	May-19	11	96
04	41	000	641		33	7N2W32A0 00800	2019-4692	16.57	180,110	210,510	390,620	406,808	Jun-19	12	96
04	41	000	641		33	6N2W1100 00700	2019-9685	5.02	174,500	214,930	389,430	394,212	Nov-19	13	99
04	41	000	401	121	33	7N2W18D 0 01300	2019-2752	0.34	104,400	92,640	197,040	197,885	Apr-19	14	100
04	41	000	641	136	33	6N2W2500 01100	2019-3646	15.38	200,580	216,000	416,580	415,089	May-19	15	100
04	41	000	401		30	6N2W2200 00200	2019-5127	34.36	234,640	68,810	303,450	298,281	Jun-19	16	102
04	41	000	541	141	33	6N2W3300 01200	2019-3774	16.21	210,320	272,730	483,050	465,608	May-19	17	104
04	41	000	401	141	33	7N2W28BB 00200	2019-643	0.94	109,400	265,150	374,550	357,324	Jan-19	18	105
04	41	000	401	132	33	7N3W11D 0 00900	2019-1438	5.10	174,730	245,520	420,250	401,609	Feb-19	19	105
04	41	000	641		30	6N2W0200 01100	2019-10479	10.17	190,180	260,070	450,250	421,974	Dec-19	20	107
04	41	000	401		33	7N2W19A A 00300	2019-9018	0.94	109,400	298,710	408,110	375,920	Oct-19	21	109
04	41	000	401		33	7N3W14A0 00200	2019-7984	0.68	106,900	253,810	360,710	327,648	Sep-19	22	110
04	41	000	641		33	7N2W32B0 00400	2019-10472	10.31	190,810	219,380	410,190	364,276	Dec-19	23	113
04	41	000	681		33	6N2W0200 00600	2019-4010	20.12	304,540	459,100	763,640	660,313	May-19	24	116
04	41	000	401		33	7N2W23C A 01700	2019-8544	1.02	135,260	304,600	439,860	377,585	Oct-19	25	116
04	41	000	641		33	7N3W11B0 00700	2019-8441	15.55	209,330	488,620	697,950	587,075	Oct-19	26	119
04	41	000	641		33	7N2W3400 00800	2019-9553	19.74	235,780	192,220	428,000	353,624	Nov-19	27	121
04	41	000	401	136	33	6N2W04D 0 00100	2019-1225	2.51	157,120	168,410	325,530	264,037	Feb-19	28	123
04	41	000	401		33	7N2W23C A 00600	2019-5055	0.18	184,400	202,520	386,920	310,676	Jun-19	29	125

COLUMBIA County 2020 Ratio Study

Study Definition

RMV					App	# of		RMV					App	# of	
Class	MA	SA	NH	Year	Sales	Location		Class	MA	SA	NH	Year	Sales	Location	
409	04	41	000	2020	11	Rainier		409	04	44	000	2020		Rainier	

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	11				
Population - Number of Accounts	413				
Sales as a percentage of the Population	2.66%				
<i>Prior Year Population Values</i>	Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn	
Land Rmv	40,169,200	41.18%	42,177,660	35.94%	
OSD RMV	20,297,500	20.81%	20,297,500	17.30%	
Improvement RMV	29,010,380	29.74%	42,935,362	36.58%	
Farm Improvement RMV	8,073,137	8.28%	11,948,243	10.18%	
Selected Ratio From Sales	83				
Time Trend Adjustment	9				
Before Ratio	83				
Overall Adjustment Factor	120				
Land Adjustment Factor	105				
OSD Adjustment Factor	100				
Improvement Adjustment Factor	148				
Farm Improvement Factor	148				
After Ratio	100				

Explanation

RMV 409: SA 41

RMV 409: S4 44

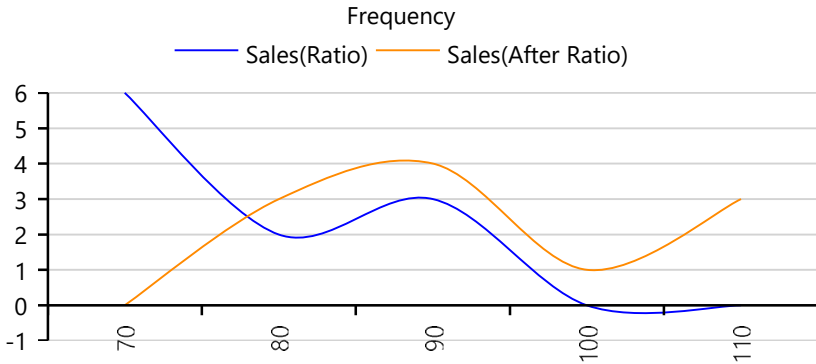
Improved land – Manufactured Structure, Rural Rainier (Value Zone 1) and Prescott

The sales returned for this analysis were adjusted by 9%, the conclusion from the time adjustment study. Next, the Weighted Mean returned a ratio of 83 for manufactured structures located in Rural Rainier, SA 41 and SA 44. Once applied, the Overall Adjustment Factor of 120 was returned and deemed appropriate for this classification of property.

Performance History

	2020	2019	2018	2017	2016
COD	8.63	6.25	15.69	0.00	3.58
PRD	0.99	1.00	1.01	1.00	1.00

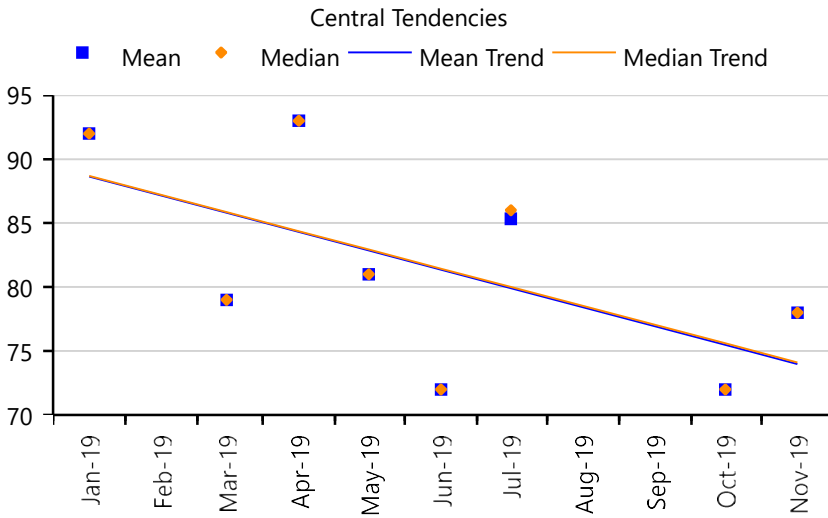
COLUMBIA County 2020 Ratio Study



70	6	0
80	2	3
90	3	4
100	0	1
110	0	3

	Sales (Ratio)	Sales (After Ratio)
Median	79	96
AD	6.82	9.55
COD	8.63	9.94
Mean	82	98
SD	8.07	11.70
COV	9.82	11.88
Wtd Mean	83	100
GeoMean	82	98
PRD	.99	.99
95% Confidence	4.77	6.91

Number Of Sales 11



Month	Mean	Median	Sales
Jan-19	92	92	1
Mar-19	79	79	1
Apr-19	93	93	1
May-19	81	81	2
Jun-19	72	72	1
Jul-19	85	86	3
Oct-19	72	72	1
Nov-19	78	78	1

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	41	000	409	452	33	7N2W23C A 02003	2019-5138	1.59	132,440	93,860	226,300	315,027	Jun-19	1	72
04	41	000	409	452	33	7N3W2400 00403	2019-8439	2.49	156,780	74,790	231,570	321,615	Oct-19	2	72
04	41	000	409	452	33	6N2W0300 00801	2019-3891	6.96	180,290	64,280	244,570	325,041	May-19	3	75
04	41	000	409	452	33	6N2W2100 00201	2019-6178	5.00	174,400	87,260	261,660	334,719	Jul-19	4	78
04	41	000	409	452	33	7N2W19A A 01001	2019-9751	1.62	133,620	47,550	181,170	231,715	Nov-19	5	78
04	41	000	409	452	33	6N2W2500 01301	2019-2220	5.60	165,780	114,610	280,390	355,443	Mar-19	6	79
04	41	000	409	442	33	7N2W20C0 00206	2019-5613	5.26	175,210	45,490	220,700	257,226	Jul-19	7	86
04	41	000	649	463	33	6N2W1500 00301	2019-3637	12.40	200,400	162,650	363,050	418,266	May-19	8	87
04	41	000	649	463	33	6N2W15A C 01000	2019-353	3.80	171,020	133,340	304,360	331,474	Jan-19	9	92
04	41	000	649	463	33	6N2W16A0 00500	2019-6061	20.47	224,880	167,050	391,930	424,624	Jul-19	10	92
04	41	000	649	473	33	6N2W0200 01206	2019-4012	10.20	190,320	174,630	364,950	393,828	Apr-19	11	93

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	04	42	000	2020	1	Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	1
Population - Number of Accounts	235
Sales as a percentage of the Population	0.43%
<i>Prior Year Population Values</i>	
Land Rmv	59,549,450
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	92
Time Trend Adjustment	9
Before Ratio	92
Overall Adjustment Factor	109
Land Adjustment Factor	109
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

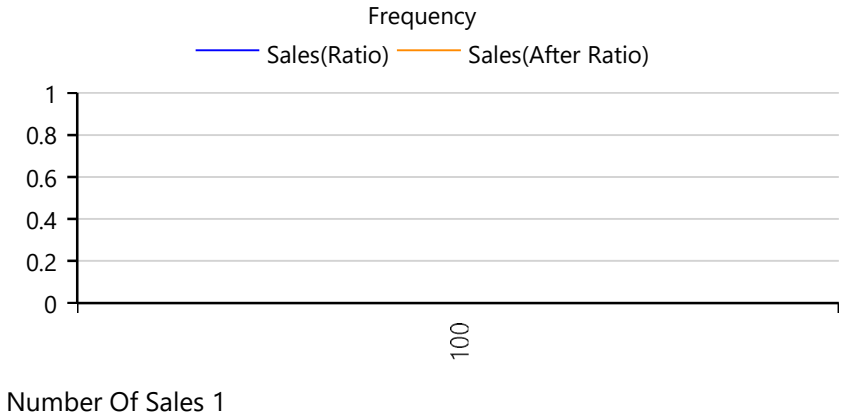
RMV 400: SA 42
Unimproved land – Rural Rainier (Value Zone 2)

A single sale was identified in this study period, which is a sample too small to use as a determination of the current market. Therefore, it is recommended that the conclusion from the RMV 401-Improved Property conclusion that is located in the same study area be applied here (Selected Ratio of 92).

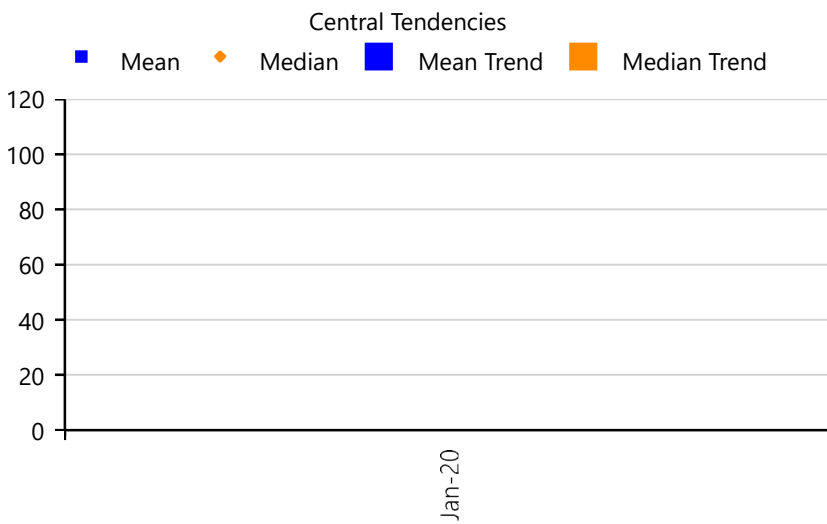
Performance History

	2020	2019	2018	2017	2016
COD	-	14.91	17.22	22.92	11.76
PRD	1.00	1.04	0.99	1.11	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
100	1	1
Median	104	104
AD		
COD		
Mean	104	104
SD	1.00	1.00
COV	.96	.96
Wtd Mean	104	104
GeoMean	104	104
PRD	1.00	1.00
95% Confidence	1.96	1.96



Month	Mean	Median	Sales
Jan-19	104	104	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	42	000	400		30	5N3W01A0 00200	2019-259	2.71	90,190	0	90,190	87,000	Jan-19	1	104

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	04	42	000	2020	8	Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	8
Population - Number of Accounts	319
Sales as a percentage of the Population	2.51%
<i>Prior Year Population Values</i>	
Land Rmv	35,886,370
OSD RMV	15,004,250
Improvement RMV	40,757,800
Farm Improvement RMV	5,215,560
Selected Ratio From Sales	92
Time Trend Adjustment	9
Before Ratio	92
Overall Adjustment Factor	109
Land Adjustment Factor	109
OSD Adjustment Factor	100
Improvement Adjustment Factor	111
Farm Improvement Factor	111
After Ratio	100

Explanation

RMV 401: SA 42

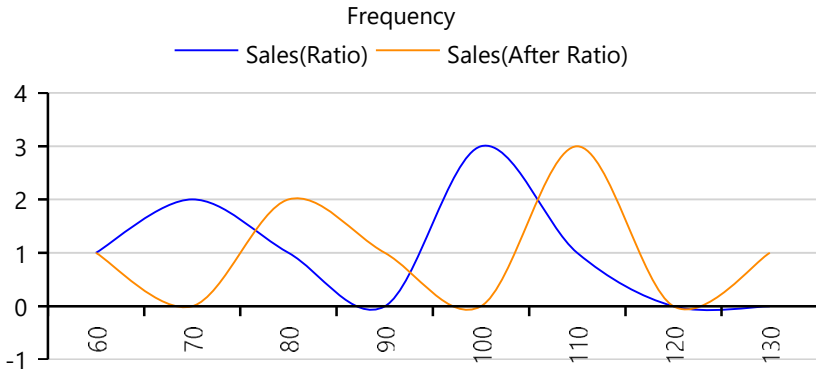
Improved land – Rural Rainier (Value Zone 2)

This grouping of improved rural residential sales contains a sampling of 8 to study. After some review, the Mean of 92 was selected as the most appropriate indicator resulting in an Overall Adjustment Factor of 109.

Performance History

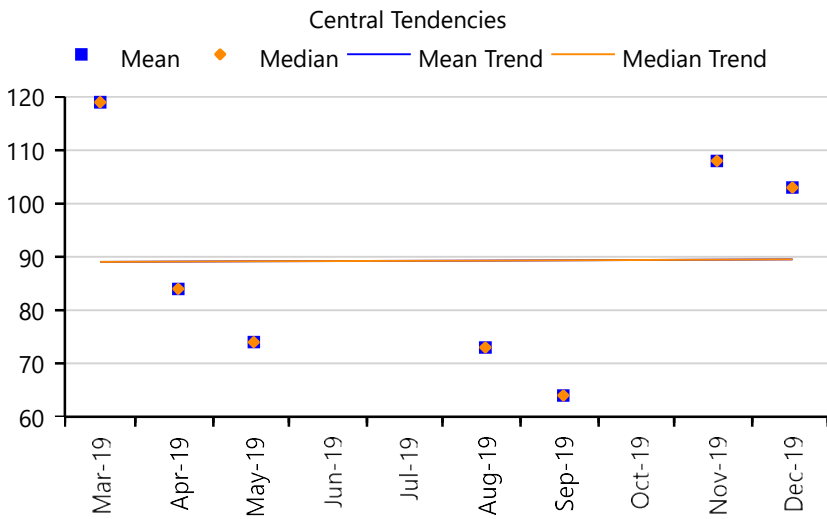
	2020	2019	2018	2017	2016
COD	19.12	11.29	9.58	14.89	13.27
PRD	0.99	1.00	1.00	1.02	0.98

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	94	101
AD	17.88	20.00
COD	19.12	19.80
Mean	92	100
SD	20.34	22.72
COV	22.20	22.72
Wtd Mean	92	100
GeoMean	90	98
PRD	.99	1.00
95% Confidence	14.09	15.74

Number Of Sales 8



Month	Mean	Median	Sales
Mar-19	119	119	1
Apr-19	84	84	1
May-19	74	74	1
Aug-19	73	73	1
Sep-19	64	64	1
Nov-19	108	108	2
Dec-19	103	103	1

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	42	000	401		33	5N3W01A0 00400	2019-7923	2.15	136,540	105,340	241,880	377,239	Sep-19	1	64
04	42	000	641		33	5N2W0900 02100	2019-6921	5.28	157,140	287,490	444,630	605,771	Aug-19	2	73
04	42	000	541		33	5N2W0900 00405	2019-4114	5.69	158,190	245,260	403,450	543,171	May-19	3	74
04	42	000	401	121	30	6N3W3600 01900	2019-2712	13.14	266,350	3,280	269,630	319,530	Apr-19	4	84
04	42	000	401		30	6N3W2300 01102	2019-10700	5.83	158,540	202,910	361,450	351,120	Dec-19	5	103
04	42	000	641		33	5N2W0900 00800	2019-9951	5.00	181,400	523,870	705,270	657,540	Nov-19	6	107
04	42	000	401		33	6N2W0600 01900	2019-9690	20.00	199,000	149,600	348,600	318,717	Nov-19	7	109
04	42	000	641	154	33	5N2W0600 00801	2019-1993	4.84	156,140	489,830	645,970	540,603	Mar-19	8	119

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	04	42	000	2020	3	Rainier	409	04	45	000	2020	1	Rainier

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	4
Population - Number of Accounts	154
Sales as a percentage of the Population	2.60%
<i>Prior Year Population Values</i>	
Land Rmv	12,931,090
OSD RMV	7,787,900
Improvement RMV	9,531,260
Farm Improvement RMV	2,900,110
	Pre-Trend Brkdwn
	39.01%
	Post Trend Values
	13,577,645
	Post Trend Brkdwn
	38.07%
	21.84%
	30.74%
	9.35%
Selected Ratio From Sales	93
Time Trend Adjustment	9
Before Ratio	93
Overall Adjustment Factor	108
Land Adjustment Factor	105
OSD Adjustment Factor	100
Improvement Adjustment Factor	115
Farm Improvement Factor	115
After Ratio	100

Explanation

RMV 409: SA 42

RMV 409: SA 45

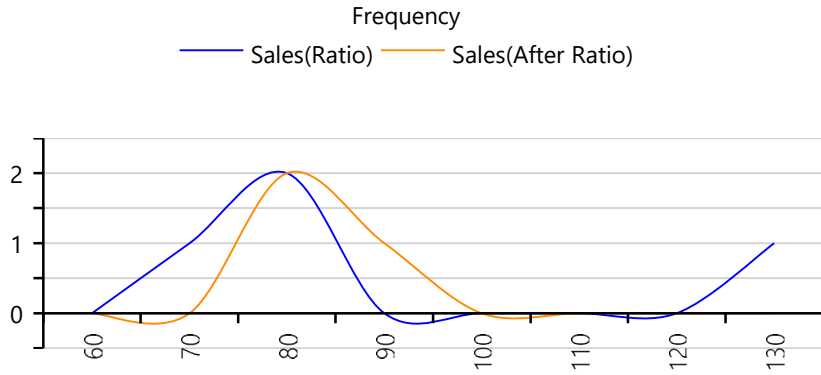
Improved land – Improved land – Manufactured Structure, Rural Rainier (Value Zone 2) and Dike Land

The Mean of 93 was selected as the best indicator for this grouping of properties. This selected central tendency is further supported by the Weighted Mean (92) and the GeoMean (91). The resulting Overall Adjustment Factor is 108 for this classification.

Performance History

	2020	2019	2018	2017	2016
COD	16.57	6.25	13.19	6.77	3.58
PRD	1.01	1.00	0.99	0.99	1.00

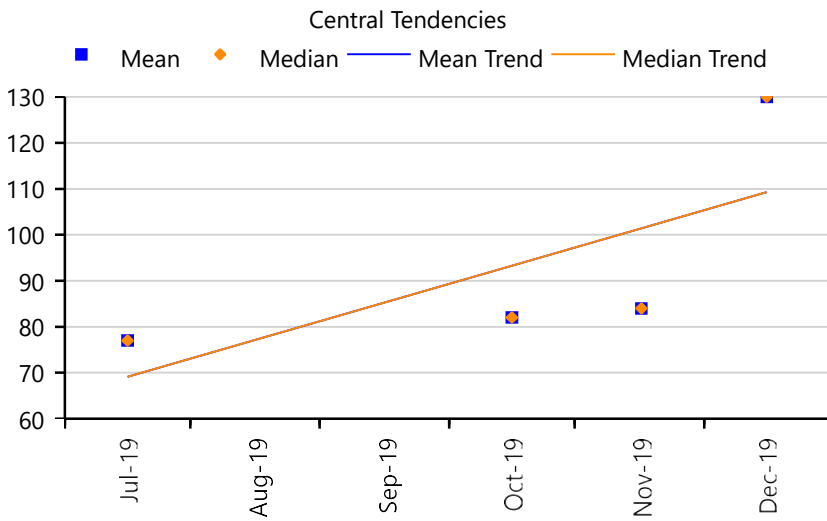
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
60	0	0
70	1	0
80	2	2
90	0	1
100	0	0
110	0	0
120	0	0
130	1	0

Median	83	90
AD	13.75	15.25
COD	16.57	17.04
Mean	93	100
SD	24.68	27.46
COV	26.46	27.40
Wtd Mean	92	99
GeoMean	91	98
PRD	1.01	1.01
95% Confidence	24.18	26.91

Number Of Sales 4



Month	Mean	Median	Sales
Jul-19	77	77	1
Oct-19	82	82	1
Nov-19	84	84	1
Dec-19	130	130	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	45	000	409	451	33	7N3W12A00100	2019-6005	1.38	103,310	32,250	135,560	176,494	Jul-19	1	77
04	42	000	409	452	33	6N2W310000705	2019-8750	2.08	135,540	109,050	244,590	298,988	Oct-19	2	82
04	42	000	409	452	33	6N3W120000201	2019-9747	5.00	156,400	73,630	230,030	274,938	Nov-19	3	84
04	42	000	409	190	30	6N3W110001301	2019-10232	5.60	157,960	112,330	270,290	207,483	Dec-19	4	130

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	04	45	000	2020		Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	21
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	1,628,700
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	95
Time Trend Adjustment	0
Before Ratio	95
Overall Adjustment Factor	105
Land Adjustment Factor	105
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

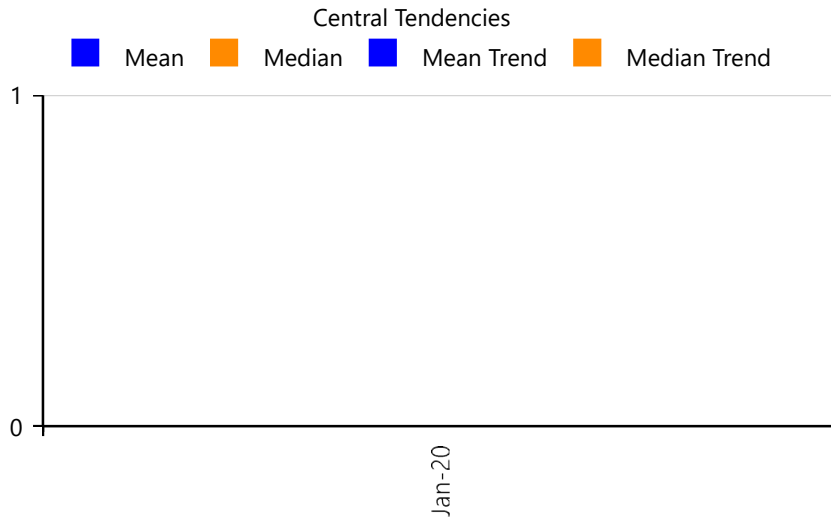
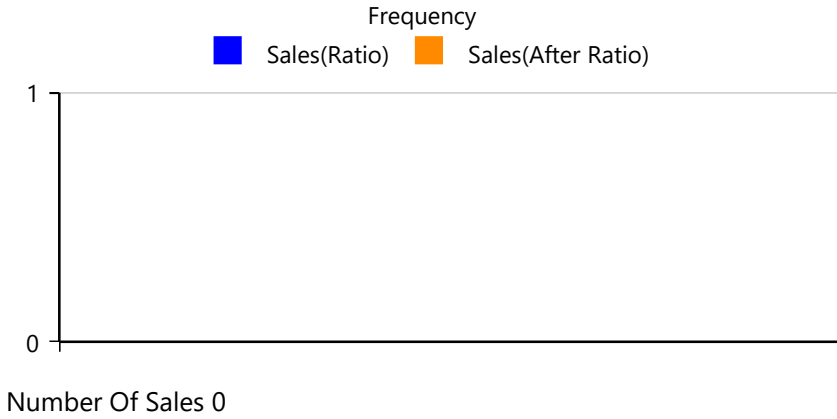
RMV 400: SA 45
Unimproved land – Dike Land, Rural Rainier

No sales are available. Therefore, the RMV Class 400 analysis located in Study Area 41 and 44 was applied here (Selected Ratio of 95).

Performance History

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	04	45	000	2020		Rainier							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	96
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	15,022,600
OSD RMV	3,129,000
Improvement RMV	8,044,880
Farm Improvement RMV	1,989,340
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	105
OSD Adjustment Factor	100
Improvement Adjustment Factor	96
Farm Improvement Factor	96
After Ratio	100

Explanation

RMV 401: SA 45

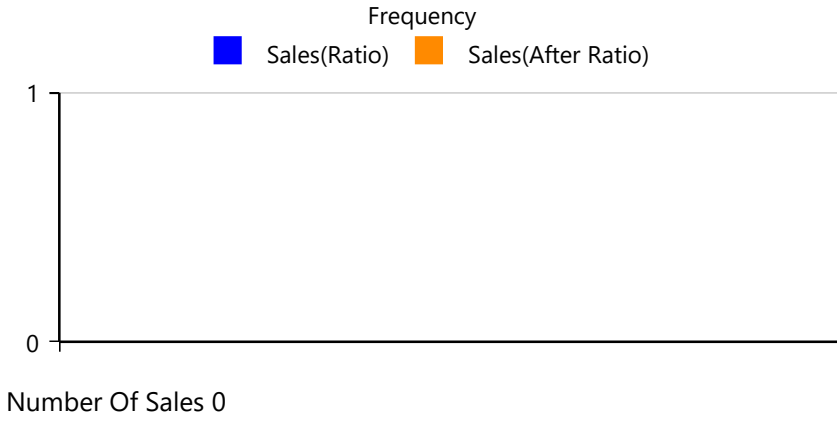
Improved land – Dike Land, Rural Rainier

No sales were identified for this classification of properties for the study period. Therefore, the improved properties conclusion from SA 41 and SA 44 is recommended and has been applied here (Selected Ratio of 100).

Performance History

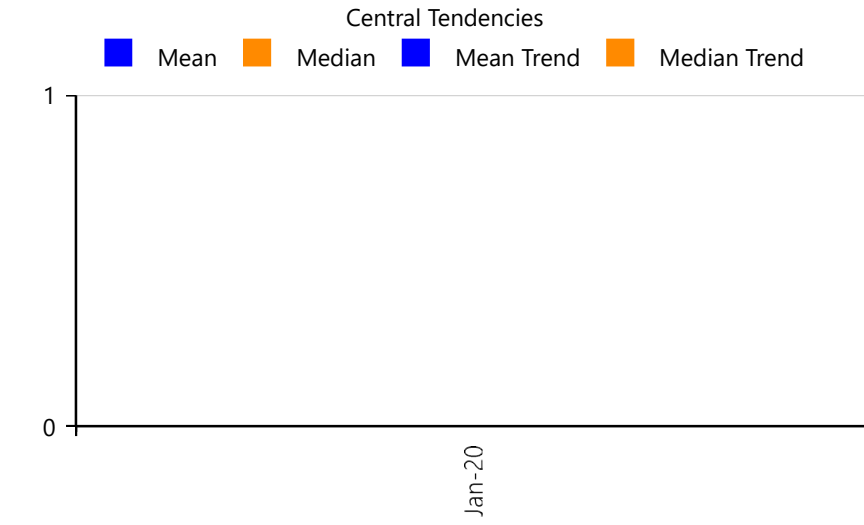
	2020	2019	2016
COD	-	3.77	22.48
PRD	-	1.00	1.01

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	04	56	000	2020		Deer Island							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0			
Population - Number of Accounts	1			
Sales as a percentage of the Population	0.00%			
<i>Prior Year Population Values</i>		Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Land Rmv	43,000	100.00%	45,150	100.00%
OSD RMV	0	0.00%	0	0.00%
Improvement RMV	0	0.00%	0	0.00%
Farm Improvement RMV	0	0.00%	0	0.00%
Selected Ratio From Sales	95			
Time Trend Adjustment	0			
Before Ratio	95			
Overall Adjustment Factor	105			
Land Adjustment Factor	105			
OSD Adjustment Factor	100			
Improvement Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Explanation

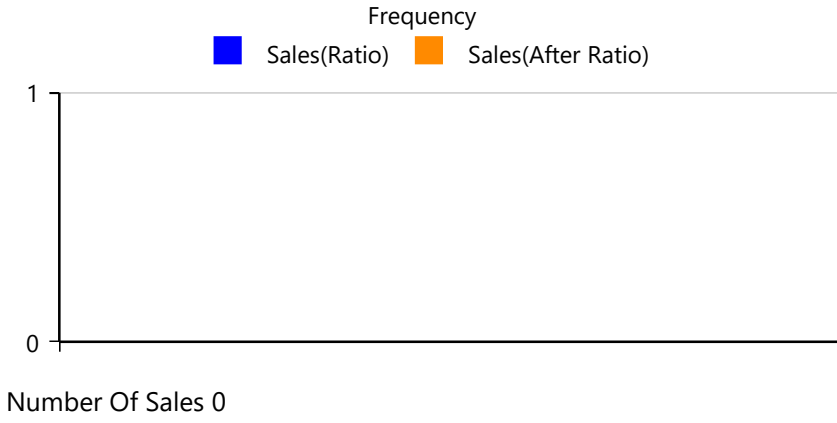
RMV 400: SA 56
Unimproved land, Deer Island

There is only one undeveloped lot located in this study area of properties. Due to having no sales available for this analysis, the Selected Ratio (95) from the RMV Class 400 MA 04 SA 41 and SA 44 analysis was applied here.

Performance History

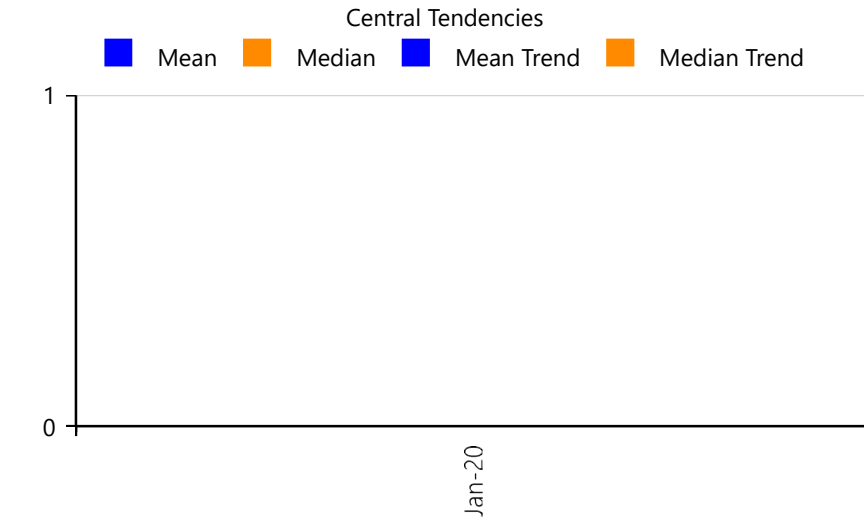
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	04	56	000	2020		Deer Island							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0																				
Population - Number of Accounts	18																				
Sales as a percentage of the Population	0.00%																				
<i>Prior Year Population Values</i>																					
Land Rmv	778,300																				
OSD RMV	979,200																				
Improvement RMV	1,445,770																				
Farm Improvement RMV	154,200																				
	<table border="1"> <thead> <tr> <th>Pre-Trend Values</th> <th>Pre-Trend Brkdwn</th> <th>Post Trend Values</th> <th>Post Trend Brkdwn</th> </tr> </thead> <tbody> <tr> <td style="text-align: right;">778,300</td> <td style="text-align: right;">23.18%</td> <td style="text-align: right;">817,215</td> <td style="text-align: right;">19.62%</td> </tr> <tr> <td style="text-align: right;">979,200</td> <td style="text-align: right;">29.16%</td> <td style="text-align: right;">979,200</td> <td style="text-align: right;">23.51%</td> </tr> <tr> <td style="text-align: right;">1,445,770</td> <td style="text-align: right;">43.06%</td> <td style="text-align: right;">2,139,740</td> <td style="text-align: right;">51.38%</td> </tr> <tr> <td style="text-align: right;">154,200</td> <td style="text-align: right;">4.59%</td> <td style="text-align: right;">228,216</td> <td style="text-align: right;">5.48%</td> </tr> </tbody> </table>	Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn	778,300	23.18%	817,215	19.62%	979,200	29.16%	979,200	23.51%	1,445,770	43.06%	2,139,740	51.38%	154,200	4.59%	228,216	5.48%
Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn																		
778,300	23.18%	817,215	19.62%																		
979,200	29.16%	979,200	23.51%																		
1,445,770	43.06%	2,139,740	51.38%																		
154,200	4.59%	228,216	5.48%																		
Selected Ratio From Sales	83																				
Time Trend Adjustment	0																				
Before Ratio	83																				
Overall Adjustment Factor	120																				
Land Adjustment Factor	105																				
OSD Adjustment Factor	100																				
Improvement Adjustment Factor	148																				
Farm Improvement Factor	148																				
After Ratio	100																				

Explanation

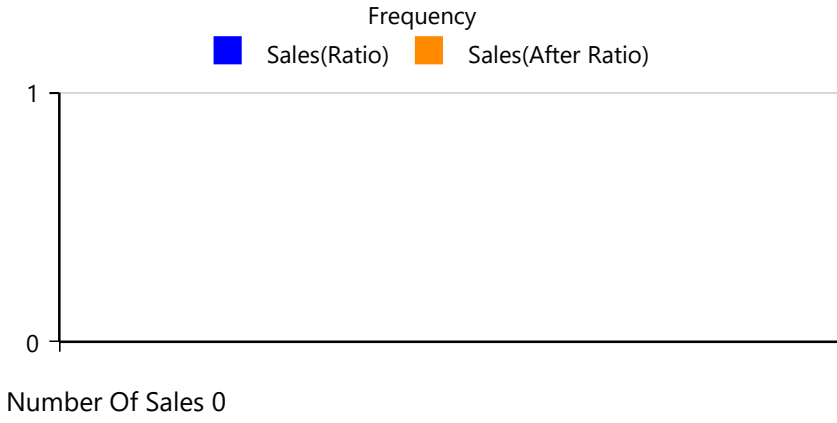
RMV 409: SA 56
Improved land – Manufactured Structure, Deer Island

This is an exclusive area comprised of manufactured structures located in Deer Island and not far from the Columbia River Highway. Due to having no sales available for this analysis, the Selected Ratio of 83 from MA 04 SA 41 and SA 44, RMV 409 analysis was applied here.

Performance History

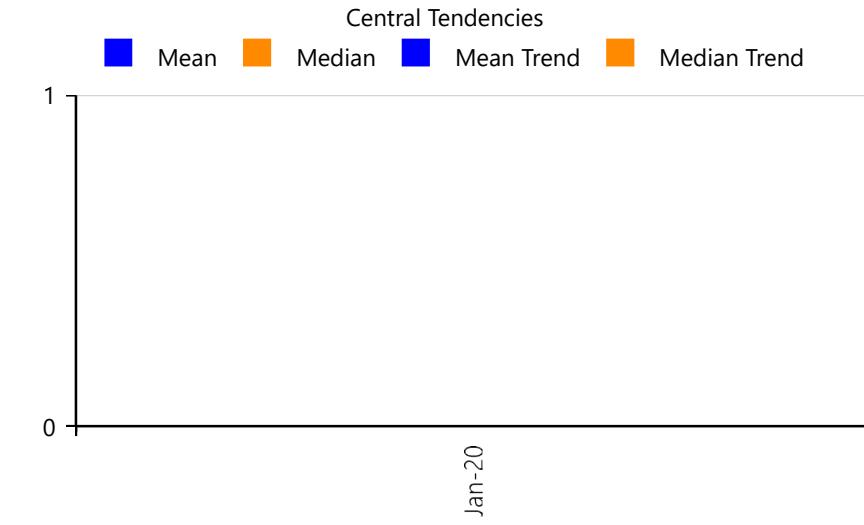
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

MAINTENANCE AREA 5

CLATSKANIE

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	05	00	000	2020	2	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2			
Population - Number of Accounts	81			
Sales as a percentage of the Population	2.47%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		7,814,480	100.00%	8,127,059 100.00%
OSD RMV		0	0.00%	0 0.00%
Improvement RMV		0	0.00%	0 0.00%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		96		
Time Trend Adjustment		11		
Before Ratio		96		
Overall Adjustment Factor		104		
Land Adjustment Factor		104		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		100		
Farm Improvement Factor		100		
After Ratio		100		

Explanation

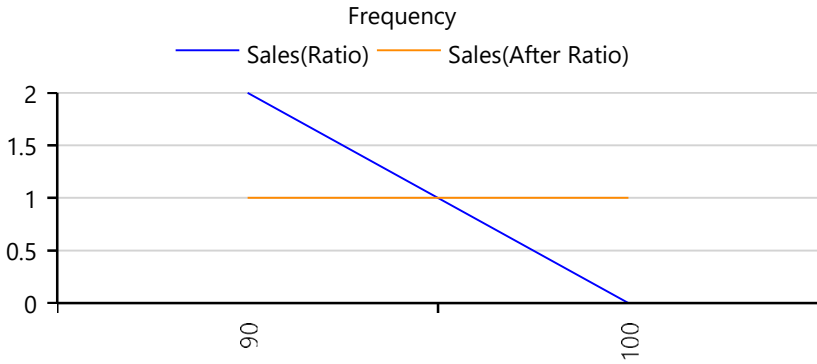
RMV 100: SA 00
Unimproved land, City of Clatskanie

For this study of undeveloped land in the City of Clatskanie, the Mean, Median and Weighted Mean have resulted in the same indicator of 96. The Median was selected and applied. The resulting Overall Adjustment Factor that is returned is 104 which is a reasonable indicator of the current market of vacant city lots in Clatskanie.

Performance History

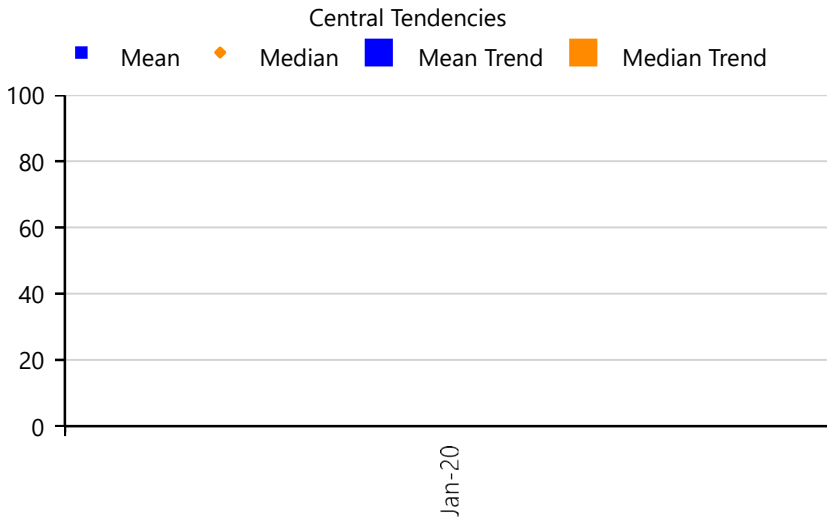
	2020	2019	2018	2017	2016
COD	0.52	0.49	7.27	18.49	0.00
PRD	1.00	1.00	1.01	1.09	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	96	100
AD	.50	.50
COD	.52	.50
Mean	96	100
SD	.71	.71
COV	.74	.71
Wtd Mean	96	100
GeoMean	95	99
PRD	1.00	1.00
95% Confidence	.98	.98

Number Of Sales 2



Month	Mean	Median	Sales
Sep-19	96	96	2

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	00	000	100		33	7N4W09C A 00106	2019-7226	0.24	49,280	0	49,280	51,676	Sep-19	1	95
05	00	000	100		33	7N4W09C A 00115	2019-7392	0.25	49,680	0	49,680	51,676	Sep-19	2	96

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	05	00	000	2020	18	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	18
Population - Number of Accounts	523
Sales as a percentage of the Population	3.44%
<i>Prior Year Population Values</i>	
Land Rmv	25,167,200
OSD RMV	6,609,450
Improvement RMV	75,004,020
Farm Improvement RMV	690,180
Selected Ratio From Sales	88
Time Trend Adjustment	11
Before Ratio	88
Overall Adjustment Factor	114
Land Adjustment Factor	104
OSD Adjustment Factor	100
Improvement Adjustment Factor	118
Farm Improvement Factor	118
After Ratio	100

Explanation

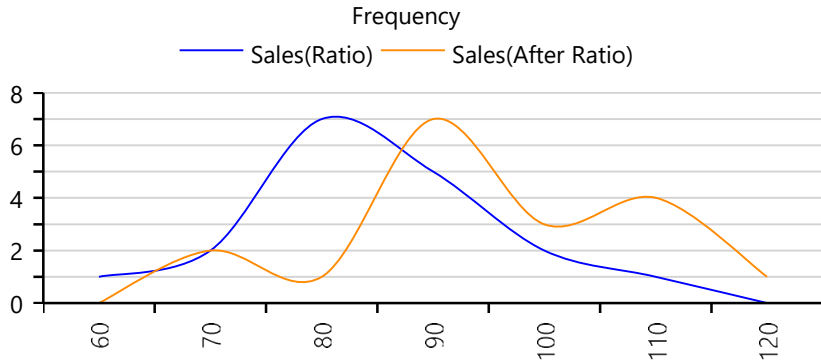
RMV 101: SA 00
Improved property, City of Clatskanie

All single-family site built residential properties located in the City of Clatskanie. The time adjustment of 11% was applied to the sales array. The ratios returned after adjustment were the Median (87), Mean (88), Weighted Mean (89), and the Geometric Mean (87). The Mean was selected as the best indicator and applied here.

Performance History

	2020	2019	2018	2017	2016
COD	10.73	11.18	12.28	13.32	9.39
PRD	0.99	0.99	1.00	1.01	1.01

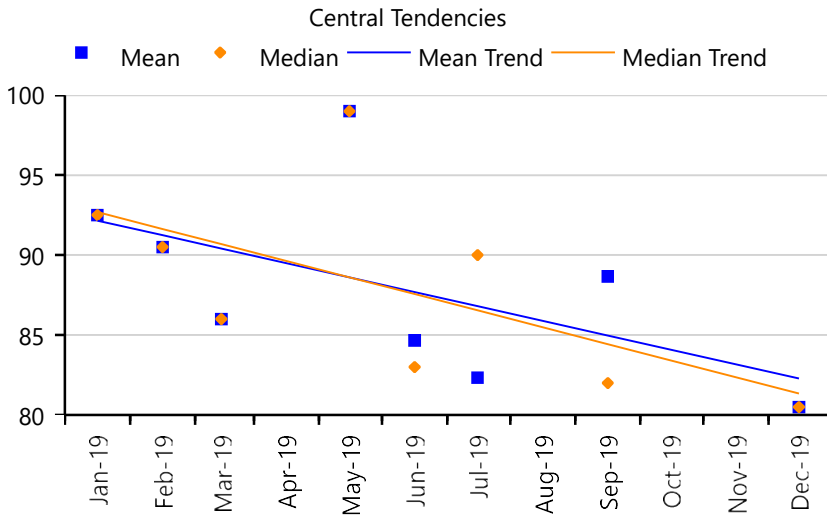
COLUMBIA County 2020 Ratio Study



60	1	0
70	2	2
80	7	1
90	5	7
100	2	3
110	1	4
120	0	1

	Sales (Ratio)	Sales (After Ratio)
Median	87	99
AD	9.33	11.28
COD	10.73	11.39
Mean	88	100
SD	12.14	14.63
COV	13.84	14.61
Wtd Mean	89	101
GeoMean	87	99
PRD	.99	.99
95% Confidence	5.61	6.76

Number Of Sales 18



Month	Mean	Median	Sales
Jan-19	93	93	2
Feb-19	91	91	2
Mar-19	86	86	1
May-19	99	99	2
Jun-19	85	83	3
Jul-19	82	90	3
Sep-19	89	82	3
Dec-19	81	81	2

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	00	000	101		33	7N4W08D C 04100	2019-5867	0.20	61,080	89,500	150,580	233,996	Jul-19	1	64
05	00	000	101		33	7N4W08CB 04000	2019-4687	0.17	60,290	107,190	167,480	238,838	Jun-19	2	70
05	00	000	101		30	7N4W08CB 06400	2019-7969	0.31	65,070	104,850	169,920	235,756	Sep-19	3	72
05	00	000	101		33	7N4W08C D 04200	2019-10481	0.09	53,230	142,590	195,820	243,670	Dec-19	4	80
05	00	000	101		33	7N4W08CB 01800	2019-10483	0.36	66,850	109,470	176,320	218,604	Dec-19	5	81
05	00	000	101		33	7N4W09C A 00125	2019-7566	0.15	59,740	190,500	250,240	305,311	Sep-19	6	82
05	00	000	101		33	7N4W08CB 00704	2019-4353	0.29	64,490	165,540	230,030	276,961	Jun-19	7	83
05	00	000	101	141	33	7N4W08C D 01700	2019-1785	0.11	57,850	137,790	195,640	228,543	Mar-19	8	86
05	00	000	101	141	33	7N4W08C D 09100	2019-471	0.13	58,810	167,040	225,850	259,652	Jan-19	9	87
05	00	000	101	141	33	7N4W08C A 00601	2019-1246	0.27	64,080	192,050	256,130	295,623	Feb-19	10	87
05	00	000	101		30	7N4W08CB 07300	2019-5322	0.23	62,480	151,380	213,860	237,195	Jul-19	11	90
05	00	000	101		33	7N4W08C A 03600	2019-5839	0.11	57,810	179,080	236,890	255,821	Jul-19	12	93
05	00	000	101	143	33	7N4W09C A 00105	2019-1241	0.25	63,500	284,630	348,130	369,802	Feb-19	13	94
05	00	000	101		33	7N4W09C A 00108	2019-4586	0.24	63,180	224,490	287,670	299,320	May-19	14	96
05	00	000	101	142	33	7N4W08A D 00600	2019-633	0.24	63,290	306,680	369,970	376,304	Jan-19	15	98
05	00	000	101		33	7N4W08A C 00500	2019-4668	0.17	60,210	213,000	273,210	270,453	Jun-19	16	101
05	00	000	101		33	7N4W08BC 01400	2019-4049	0.26	63,760	244,550	308,310	301,458	May-19	17	102
05	00	000	101		33	7N4W08BC 01200	2019-8286	0.23	62,650	248,390	311,040	277,560	Sep-19	18	112

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	05	00	000	2020	3	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	3
Population - Number of Accounts	53
Sales as a percentage of the Population	5.66%
<i>Prior Year Population Values</i>	
Land Rmv	3,328,140
OSD RMV	695,000
Improvement RMV	4,697,540
Farm Improvement RMV	235,290
Selected Ratio From Sales	82
Time Trend Adjustment	11
Before Ratio	82
Overall Adjustment Factor	122
Land Adjustment Factor	104
OSD Adjustment Factor	100
Improvement Adjustment Factor	137
Farm Improvement Factor	137
After Ratio	100

Explanation

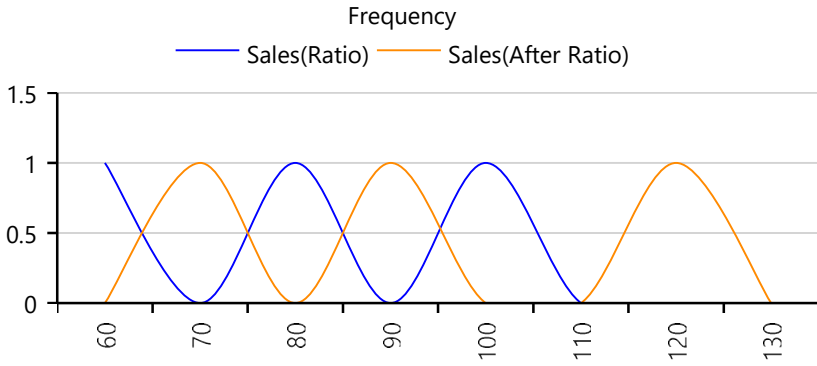
RMV 109: SA 00
Improved property – Manufactured Structures, City of Clatskanie

The Mean with a ratio of 82 has been selected as the best indicator for this grouping of properties that have manufactured structures as the main residence. The Mean is closely supported by the Median (81) and the Geo Mean (80). After applying the Mean, the Overall Adjustment Factor returned a ratio of 122.

Performance History

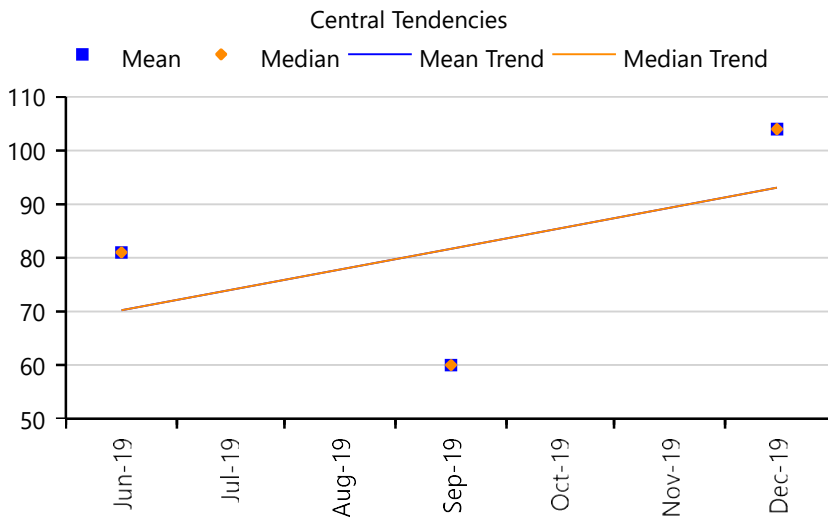
	2020	2019	2018	2016
COD	18.11	16.02	0.00	0.00
PRD	1.05	0.99	1.00	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
60	1	0
70	0	1
80	1	0
90	0	1
100	1	0
110	0	0
120	0	1
130	0	0
Median	81	98
AD	14.67	17.00
COD	18.11	17.35
Mean	82	98
SD	22.01	25.50
COV	26.95	26.11
Wtd Mean	78	94
GeoMean	80	95
PRD	1.05	1.04
95% Confidence	24.90	28.86

Number Of Sales 3



Month	Mean	Median	Sales
Jun-19	81	81	1
Sep-19	60	60	1
Dec-19	104	104	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	00	000	109		33	7N4W08A D 03000	2019-7751	0.12	59,050	56,180	115,230	190,957	Sep-19	1	60
05	00	000	109		33	7N4W09CB 00602	2019-4820	0.31	64,930	73,210	138,140	171,526	Jun-19	2	81
05	00	000	109		33	7N4W08B D 01600	2019-10779	0.30	64,760	54,880	119,640	115,414	Dec-19	3	104

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	05	40	000	2020		Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	20
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	968,940
OSD RMV	379,800
Improvement RMV	2,944,920
Farm Improvement RMV	4,770
	Pre-Trend Brkdwn
	22.54%
	Post Trend Values
	1,007,698
	Post Trend Brkdwn
	20.70%
	7.80%
	71.38%
	0.12%
Selected Ratio From Sales	88
Time Trend Adjustment	0
Before Ratio	88
Overall Adjustment Factor	114
Land Adjustment Factor	104
OSD Adjustment Factor	100
Improvement Adjustment Factor	118
Farm Improvement Factor	118
After Ratio	100

Explanation

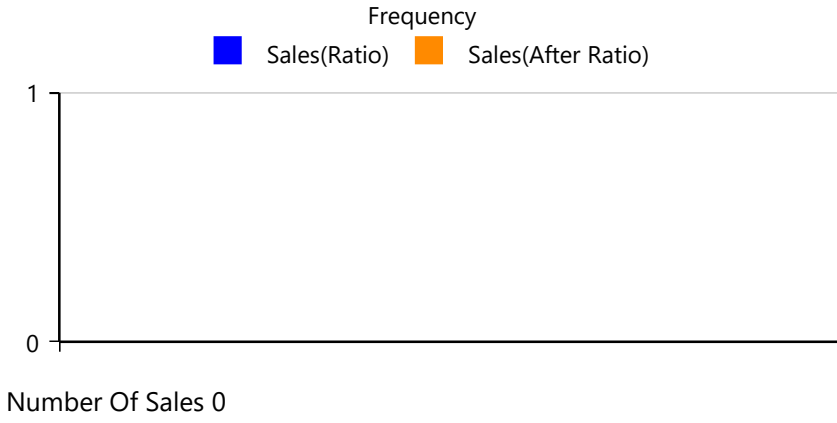
RMV 101: SA 40
 Improved land – Duplex/Triplex/Fourplex, City of Clatskanie

The query did not return any sales for this analysis of Duplex/Triplex/Fourplex properties. Because of this, it was decided to use the Selected Ratio of 88 from the single-family residential study in the same area and to apply it here.

Performance History

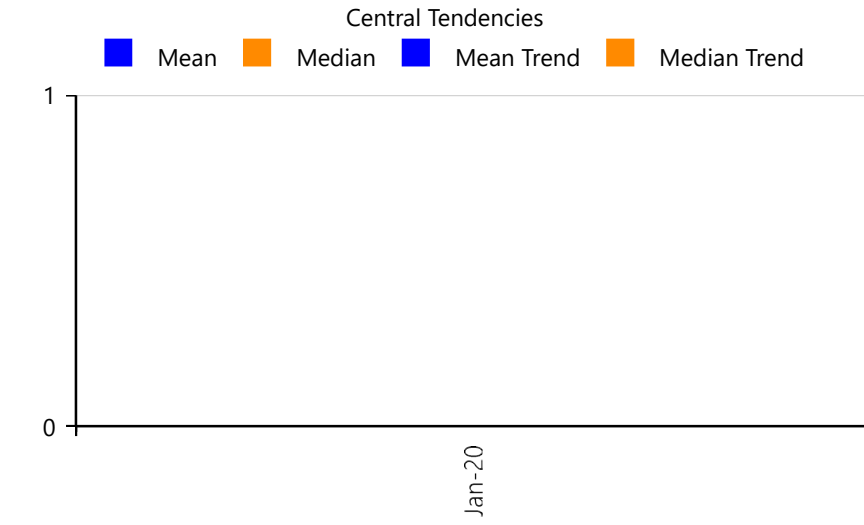
	2020	2016
COD	-	3.30
PRD	-	1.00

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	05	36	000	2020		Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	27
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	940,400
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	107
Time Trend Adjustment	0
Before Ratio	107
Overall Adjustment Factor	93
Land Adjustment Factor	93
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

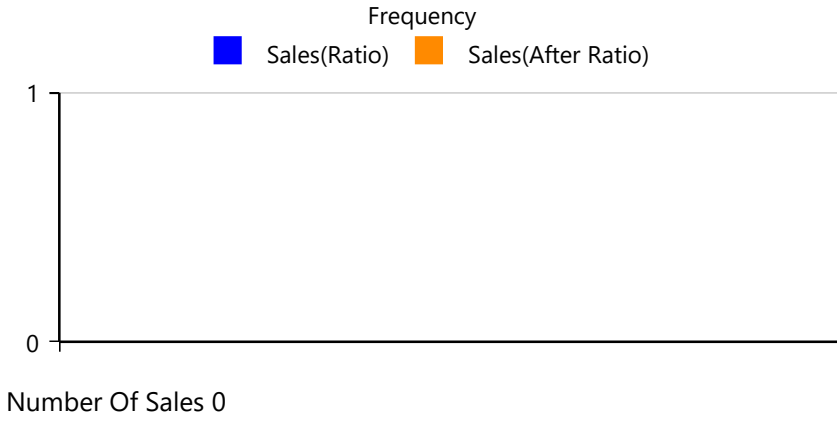
RMV 400: SA 36
Unimproved land – Fishhawk Lake in Rural Clatskanie

For this area, no sales data was returned. Therefore, it was decided to apply the Mean of 107 from the RMV 401 analysis located in MA 05 SA 36.

Performance History

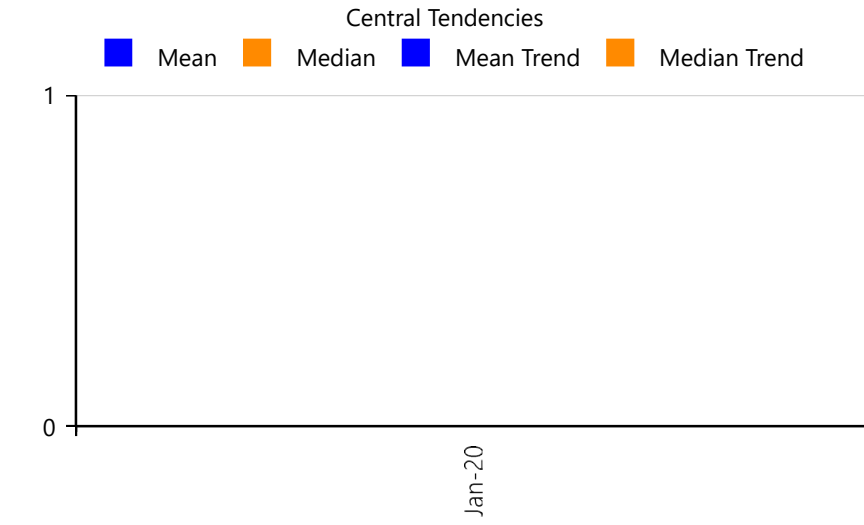
	2020	2019
COD	-	5.33
PRD	-	0.98

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	05	36	000	2020	3	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	3
Population - Number of Accounts	59
Sales as a percentage of the Population	5.08%
<i>Prior Year Population Values</i>	
Land Rmv	2,751,760
OSD RMV	1,653,000
Improvement RMV	7,724,020
Farm Improvement RMV	45,280
Selected Ratio From Sales	107
Time Trend Adjustment	9
Before Ratio	107
Overall Adjustment Factor	93
Land Adjustment Factor	93
OSD Adjustment Factor	100
Improvement Adjustment Factor	92
Farm Improvement Factor	92
After Ratio	100

Explanation

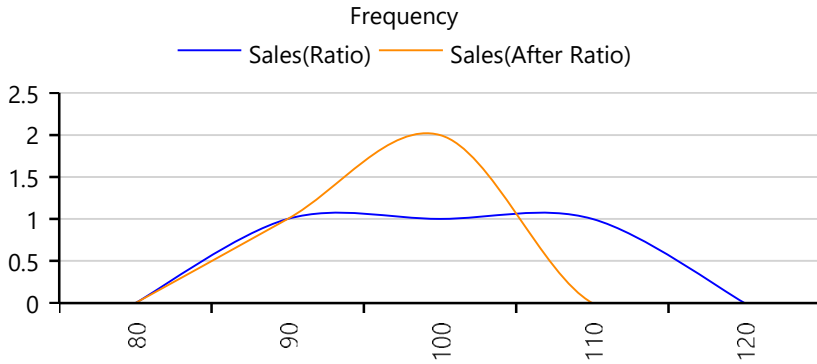
RMV 401: SA 36
Improved land – Fishhawk Lake in Rural Clatskanie

This study is comprised of properties located in Fishhawk Lake Estates area. This location is a private community that surrounds a 100-acre man-made lake. It is distinctive due to the nature of the market it encompasses: recreational lake, vacation get-a-way and second home type properties. For this analysis, the Selected Ratio of 107 (Mean) was applied as the best indicator for this population of accounts.

Performance History

	2020	2019	2018
COD	4.59	8.98	14.77
PRD	0.99	0.98	1.01

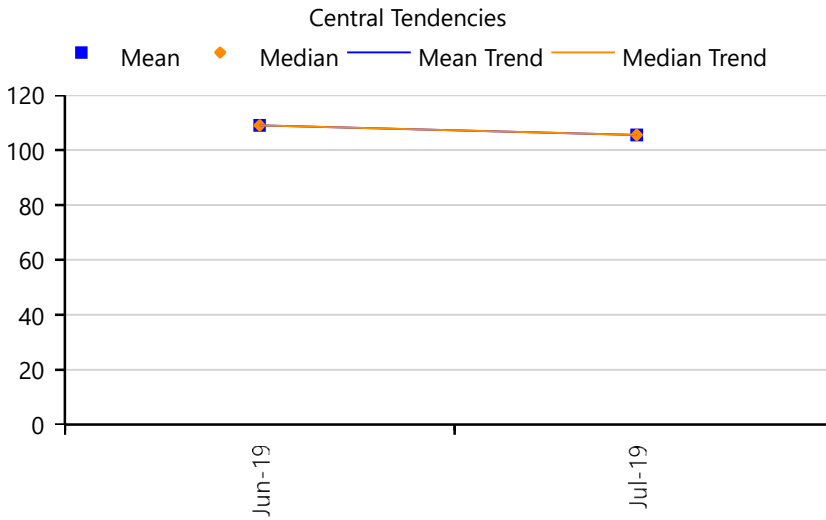
COLUMBIA County 2020 Ratio Study



80	0	0
90	1	1
100	1	2
110	1	0
120	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	109	102
AD	5.00	4.33
COD	4.59	4.25
Mean	107	99
SD	7.77	7.00
COV	7.28	7.07
Wtd Mean	108	100
GeoMean	106	99
PRD	.99	.99
95% Confidence	8.79	7.92

Number Of Sales 3



Month	Mean	Median	Sales
Jun-19	109	109	1
Jul-19	106	106	2

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	36	000	401		33	6N5W06BC 02800	2019-5542	0.22	51,500	121,790	173,290	177,344	Jul-19	1	98
05	36	000	401		33	6N5W06BC 02900	2019-5073	0.22	51,500	259,610	311,110	284,152	Jun-19	2	109
05	36	000	401		33	6N5W06BC 01700	2019-5828	0.34	65,250	260,090	325,340	289,176	Jul-19	3	113

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	05	51	000	2020	8	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	8
Population - Number of Accounts	814
Sales as a percentage of the Population	0.98%
<i>Prior Year Population Values</i>	
Land Rmv	182,958,820
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	97
Time Trend Adjustment	9
Before Ratio	97
Overall Adjustment Factor	103
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

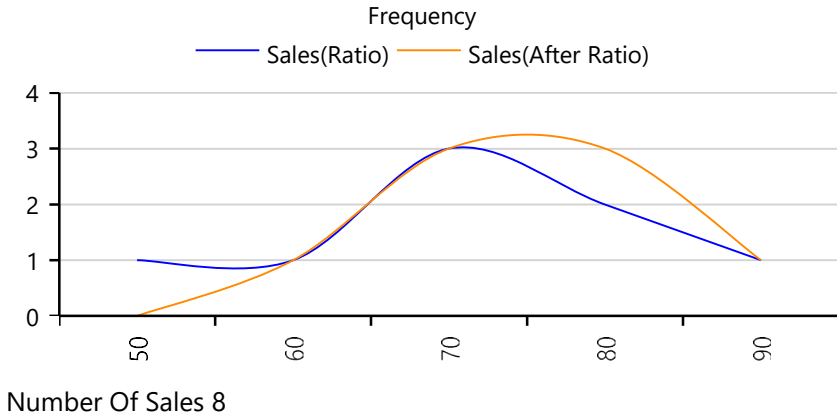
RMV 400: SA 51
Unimproved land, Rural Clatskanie (Value Zone 1)

This dataset is too small to perform a thorough analysis with having only 8 sales available out of a population of 814 accounts (.98% of the population). Therefore it was decided to use the Selected Ratio of 97 from the improved properties (RMV 401) located in the same maintenance and study area.

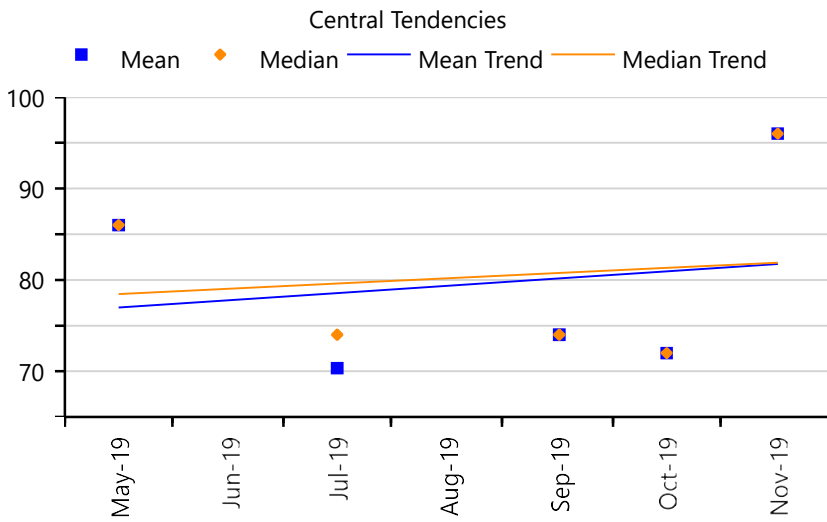
Performance History

	2020	2019	2018	2017	2016
COD	11.02	11.83	16.00	19.55	12.31
PRD	1.03	1.05	1.01	1.06	1.06

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	76	79
AD	8.38	8.63
COD	11.02	10.99
Mean	77	79
SD	11.28	11.61
COV	14.71	14.67
Wtd Mean	74	76
GeoMean	76	78
PRD	1.03	1.04
95% Confidence	7.81	8.04



Month	Mean	Median	Sales
May-19	86	86	1
Jul-19	70	74	3
Sep-19	74	74	2
Oct-19	72	72	1
Nov-19	96	96	1

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	51	000	640		33	7N3W3100 00601	2019-5547	10.55	97,820	0	97,820	165,999	Jul-19	1	59
05	51	000	400		33	7N3W04D 0 00700	2019-7745	1.51	34,870	0	34,870	51,305	Sep-19	2	68
05	51	000	400		33	7N4W09B0 02402	2019-8733	7.32	66,450	0	66,450	91,665	Oct-19	3	72
05	51	000	640		33	7N3W04D 0 00800	2019-5898	3.08	34,500	0	34,500	46,778	Jul-19	4	74
05	51	000	640		33	7N3W04D 0 00900	2019-5897	1.60	36,570	0	36,570	46,778	Jul-19	5	78
05	51	000	640		30	7N3W10B0 00905	2019-7229	4.95	80,340	0	80,340	100,337	Sep-19	6	80
05	51	000	640		33	7N3W04D 0 00500	2019-4124	1.45	33,740	0	33,740	39,042	May-19	7	86
05	51	000	400		33	7N5W3200 01000	2019-9935	4.68	77,560	0	77,560	80,712	Nov-19	8	96

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	05	51	000	2020	42	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	42
Population - Number of Accounts	1467
Sales as a percentage of the Population	2.86%
<i>Prior Year Population Values</i>	
Land Rmv	116,357,040
OSD RMV	62,001,210
Improvement RMV	219,414,390
Farm Improvement RMV	25,754,820
	Pre-Trend Brkdwn
	27.47%
	Post Trend Values
	119,847,751
	27.44%
	14.64%
	62,001,210
	14.19%
	51.81%
	228,190,966
	52.24%
	6.08%
	26,785,013
	6.13%
Selected Ratio From Sales	97
Time Trend Adjustment	9
Before Ratio	97
Overall Adjustment Factor	103
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	104
Farm Improvement Factor	104
After Ratio	100

Explanation

RMV 401: SA 51

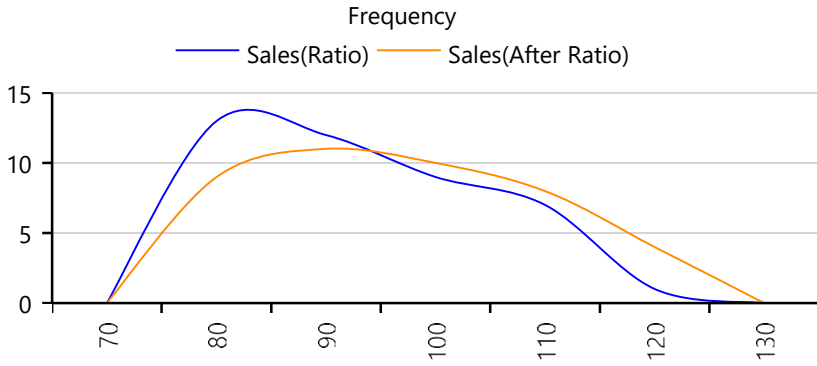
Improved property, Rural Clatskanie (Value Zone 1)

For this sales array of improved property within rural Clatskanie, the Median, Weighted Mean and Geometric Mean returned a ratio of 97. The Median was selected and applied to the analysis. The result is an Overall Adjustment Factor of 103.

Performance History

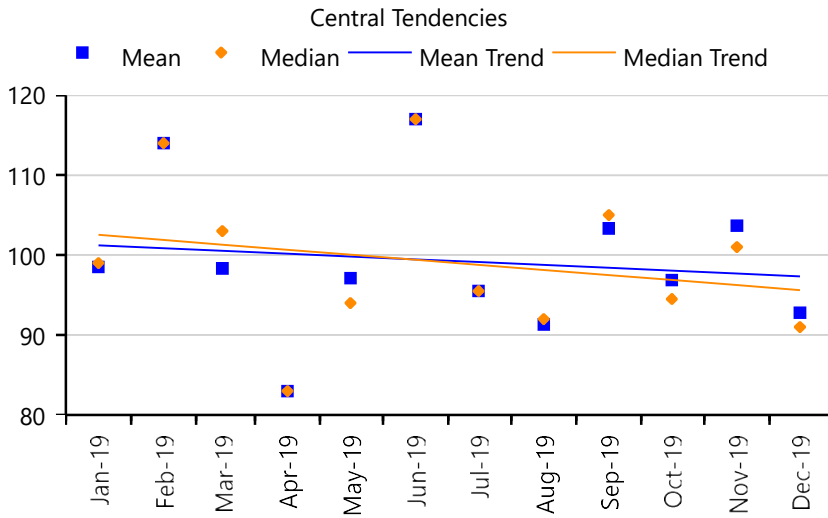
	2020	2019	2018	2017	2016
COD	10.04	15.65	10.08	9.18	13.04
PRD	1.01	1.03	1.00	1.01	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)		Sales (Ratio)	Sales (After Ratio)
70	0	0	Median	97	100
80	13	9	AD	9.74	10.07
90	12	11	COD	10.04	10.07
100	9	10	Mean	98	101
110	7	8	SD	11.61	11.96
120	1	4	COV	11.88	11.87
130	0	0	Wtd Mean	97	100
			GeoMean	97	100
			PRD	1.01	1.00
			95% Confidence	3.51	3.62

Number Of Sales 42



Month	Mean	Median	Sales
Jan-19	99	99	4
Feb-19	114	114	1
Mar-19	98	103	3
Apr-19	83	83	1
May-19	97	94	8
Jun-19	117	117	1
Jul-19	96	96	2
Aug-19	91	92	3
Sep-19	103	105	3
Oct-19	97	95	8
Nov-19	104	101	3
Dec-19	93	91	5

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	51	000	401		30	7N4W2700 01200	2019-6277	1.72	89,020	105,760	194,780	243,578	Aug-19	1	80
05	51	000	641	151	33	7N4W2200 00220	2019-2183	5.13	132,020	205,590	337,610	411,488	Mar-19	2	82
05	51	000	641		33	7N3W04D 0 01100	2019-10496	2.79	105,920	214,770	320,690	391,733	Dec-19	3	82
05	51	000	581	144	33	7N3W0800 00502	2019-2503	20.98	182,670	437,340	620,010	746,760	Apr-19	4	83
05	51	000	581		33	7N3W0300 00902	2019-5350	9.80	147,030	278,750	425,780	509,667	Jul-19	5	84
05	51	000	641		33	7N4W03A0 01000	2019-8515	20.21	178,690	126,810	305,500	365,232	Oct-19	6	84

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	51	000	401		33	7N4W2200 00212	2019-9007	2.13	96,230	126,740	222,970	264,160	Oct-19	7	84
05	51	000	401		33	8N4W34A0 02000	2019-10300	0.21	79,110	94,580	173,690	206,415	Dec-19	8	84
05	51	000	401	141	33	7N3W16C0 01900	2019-3462	2.30	98,730	194,190	292,920	344,565	May-19	9	85
05	51	000	401	142	33	8N4W2400 01700	2019-3839	0.44	73,330	193,450	266,780	306,733	May-19	10	87
05	51	000	401	133	33	7N4W05D C 01100	2019-47	1.87	91,850	147,500	239,350	267,546	Jan-19	11	89
05	51	000	641		33	7N4W2100 01400	2019-8605	4.63	127,250	319,680	446,930	504,653	Oct-19	12	89
05	51	000	641		33	8N4W34A0 00101	2019-9548	7.38	145,220	184,590	329,810	369,599	Nov-19	13	89
05	51	000	401	143	33	7N3W16C0 00500	2019-3951	5.02	131,210	286,270	417,480	458,068	May-19	14	91
05	51	000	641		33	7N3W22C0 00200	2019-4065	12.82	150,220	100,050	250,270	274,352	May-19	15	91
05	51	000	401		33	8N4W2600 00300	2020-120	8.68	138,390	341,020	479,410	525,758	Dec-19	16	91
05	51	000	401		33	7N4W21BA 01100	2019-6099	3.68	117,000	160,220	277,220	300,933	Aug-19	17	92
05	51	000	401		30	7N3W10CC 01100	2019-8654	0.43	79,110	158,730	237,840	259,896	Oct-19	18	92
05	51	000	401		33	8N3W19D 0 00200	2019-7573	2.07	120,350	239,290	359,640	376,028	Sep-19	19	96
05	51	000	641		33	8N3W19D B 01900	2020-418	4.96	130,640	172,260	302,900	315,945	Dec-19	20	96
05	51	000	401		33	7N4W21BA 00102	2019-4107	4.99	130,950	248,330	379,280	389,369	May-19	21	97
05	51	000	401		33	7N4W04A0 00901	2019-4215	1.56	86,020	134,210	220,230	226,761	May-19	22	97
05	51	000	401		33	7N4W09BA 00800	2019-8684	0.34	79,110	197,690	276,800	285,320	Oct-19	23	97
05	51	000	641	131	33	7N4W0700 01701	2019-826	3.23	111,720	159,270	270,990	272,450	Jan-19	24	99
05	51	000	401	121	33	7N4W0700 01400	2019-465	0.65	75,930	105,360	181,290	183,331	Jan-19	25	99
05	51	000	641		30	7N3W22C0 01700	2019-9615	24.83	202,570	357,690	560,260	556,490	Nov-19	26	101
05	51	000	401		33	7N3W16C0 01600	2019-6217	2.30	98,730	257,310	356,040	347,563	Aug-19	27	102
05	51	000	681	141	33	6N3W0500 00102	2019-1839	20.13	177,210	447,920	625,130	606,810	Mar-19	28	103
05	51	000	401		33	8N4W26C0 00400	2019-7872	2.43	100,640	211,870	312,510	296,564	Sep-19	29	105
05	51	000	401		33	8N4W27A0 00900	2019-8709	0.33	79,110	105,190	184,300	176,201	Oct-19	30	105
05	51	000	401	126	33	7N4W05D C 00400	2019-519	0.87	75,440	163,100	238,540	222,343	Jan-19	31	107
05	51	000	401		30	8N4W27D C 01600	2019-6047	0.66	75,930	139,070	215,000	200,662	Jul-19	32	107

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	51	000	401		33	7N4W3500 00201	2019-8656	6.76	143,080	360,160	503,240	468,970	Oct-19	33	107
05	51	000	641		33	7N3W1600 01701	2019-7446	4.80	128,990	272,010	401,000	367,296	Sep-19	34	109
05	51	000	401	131	33	7N5W10A A 02900	2019-1961	0.39	79,110	236,250	315,360	287,296	Mar-19	35	110
05	51	000	401	135	30	6N5W13CC 00500	2019-3581	0.32	73,330	59,890	133,220	120,715	May-19	36	110
05	51	000	641		33	7N3W3100 00900	2019-10679	17.74	168,030	359,480	527,510	476,758	Dec-19	37	111
05	51	000	401	143	30	7N4W09BA 01000	2019-1110	0.36	79,110	263,910	343,020	302,176	Feb-19	38	114
05	51	000	641		33	7N3W04C0 01601	2019-4643	5.08	131,650	272,890	404,540	347,058	Jun-19	39	117
05	51	000	401		30	7N4W09BA 01000	2019-9193	0.36	79,110	263,910	343,020	294,437	Oct-19	40	117
05	51	000	401		33	7N4W2100 01301	2019-3513	4.29	123,760	236,930	360,690	303,661	May-19	41	119
05	51	000	681		30	7N3W1600 01900	2019-9321	38.19	259,210	378,870	638,080	527,176	Nov-19	42	121

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	05	51	000	2020	7	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	7
Population - Number of Accounts	504
Sales as a percentage of the Population	1.39%
<i>Prior Year Population Values</i>	
Land Rmv	36,281,460
OSD RMV	23,746,600
Improvement RMV	29,503,133
Farm Improvement RMV	8,650,290
Selected Ratio From Sales	89
Time Trend Adjustment	9
Before Ratio	89
Overall Adjustment Factor	112
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	129
Farm Improvement Factor	129
After Ratio	100

Explanation

RMV 409: SA 51

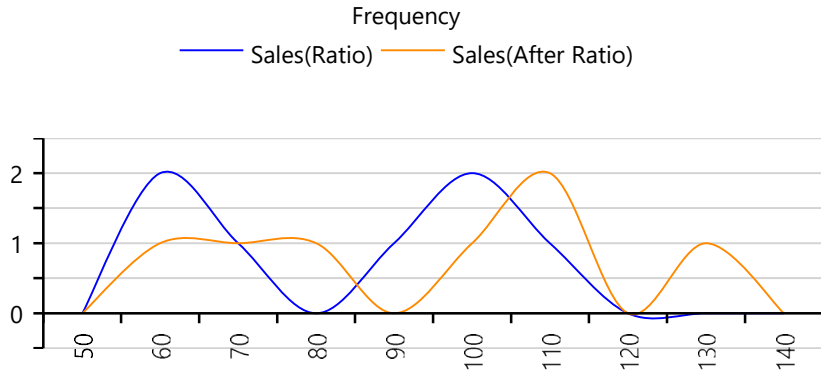
Improved property – Manufactured Structure, Rural Clatskanie (Value Zone 1)

For this grouping of rural Clatskanie properties improved with manufactured structures, the sales array returned a sample of 7 sales. After applying the time adjustment of 9%, the Mean (89) was selected and applied as the best indicator for this classification of properties.

Performance History

	2020	2019	2018	2017	2016
COD	17.24	25.92	13.92	13.82	10.24
PRD	1.04	0.97	1.01	0.97	1.01

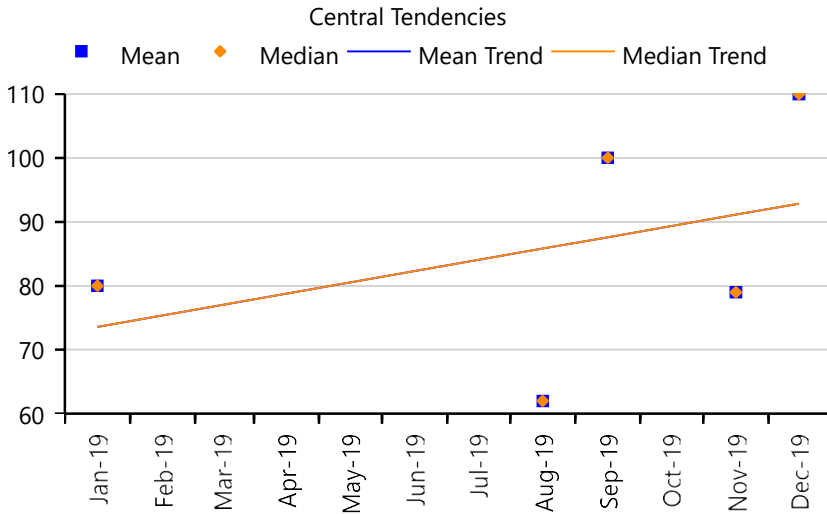
COLUMBIA County 2020 Ratio Study



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

	Sales (Ratio)	Sales (After Ratio)
Median	92	105
AD	15.86	18.00
COD	17.24	17.14
Mean	89	100
SD	19.91	22.53
COV	22.45	22.63
Wtd Mean	85	96
GeoMean	87	97
PRD	1.04	1.03
95% Confidence	14.75	16.69

Number Of Sales 7



Month	Mean	Median	Sales
Jan-19	80	80	2
Aug-19	62	62	1
Sep-19	100	100	1
Nov-19	79	79	1
Dec-19	110	110	2

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	51	000	409		33	7N3W04D 0 01200	2019-6171	6.11	139,080	67,590	206,670	335,800	Aug-19	1	62
05	51	000	409	462	30	6N4W2800 01900	2019-445	4.84	113,570	89,410	202,980	299,283	Jan-19	2	68
05	51	000	409		33	7N5W0500 01913	2019-10084	1.29	80,930	53,890	134,820	171,513	Nov-19	3	79
05	51	000	689	462	30	8N4W26C0 02200	2019-124	6.05	138,710	130,450	269,160	293,675	Jan-19	4	92
05	51	000	409		33	6N5W1400 00500	2019-8150	15.58	137,250	108,260	245,510	246,416	Sep-19	5	100
05	51	000	409		33	6N5W2000 00801	2019-10587	4.00	120,760	78,440	199,200	192,749	Dec-19	6	103
05	51	000	649		33	7N4W2100 00400	2019-10329	5.67	135,980	64,920	200,900	171,088	Dec-19	7	117

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	05	55	000	2020		Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	120
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	7,568,860
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	98
Time Trend Adjustment	0
Before Ratio	98
Overall Adjustment Factor	102
Land Adjustment Factor	102
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

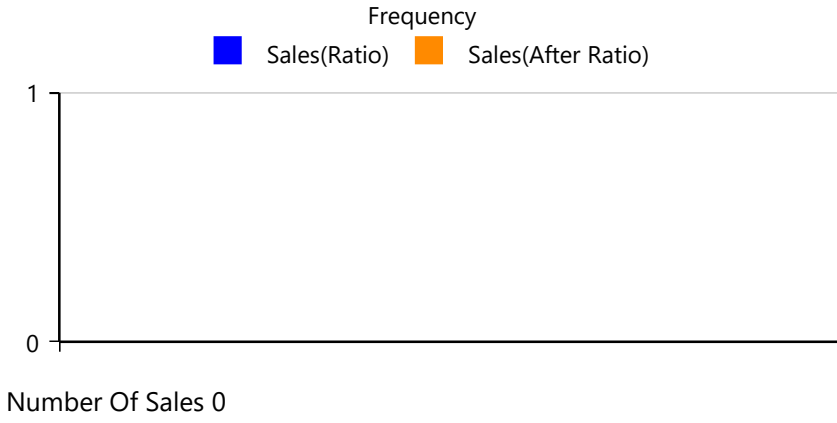
RMV 400: SA 55
Unimproved Land – Dike Land, Rural Clatskanie

There are no sales available for this study. Therefore, the selected ratio of 98 from MA 05 SA 55 RMV 401 property analysis was applied here.

Performance History

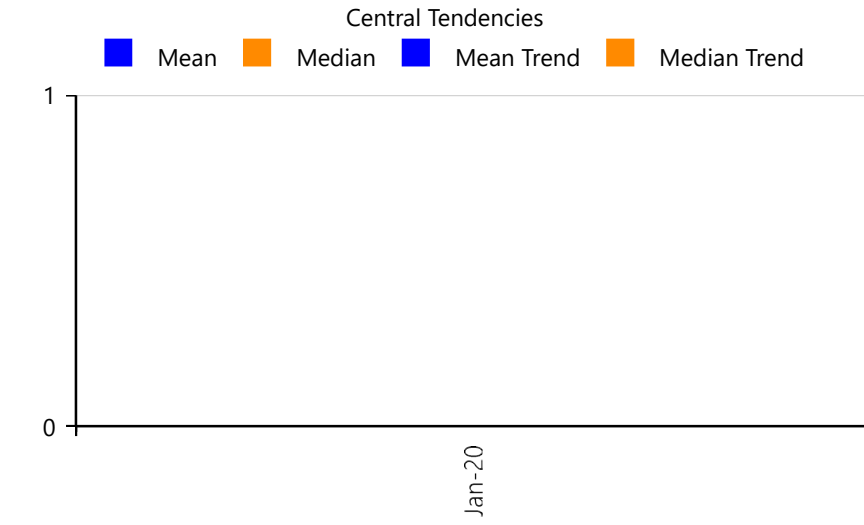
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	05	55	000	2020	6	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	6
Population - Number of Accounts	266
Sales as a percentage of the Population	2.26%
<i>Prior Year Population Values</i>	
	Pre-Trend Values Pre-Trend Brkdwn Post Trend Values Post Trend Brkdwn
Land Rmv	18,635,930 32.97% 19,008,649 32.89%
OSD RMV	8,123,370 14.37% 8,123,370 14.06%
Improvement RMV	23,822,090 42.15% 24,536,753 42.46%
Farm Improvement RMV	5,941,698 10.51% 6,119,949 10.59%
Selected Ratio From Sales	98
Time Trend Adjustment	9
Before Ratio	98
Overall Adjustment Factor	102
Land Adjustment Factor	102
OSD Adjustment Factor	100
Improvement Adjustment Factor	103
Farm Improvement Factor	103
After Ratio	100

Explanation

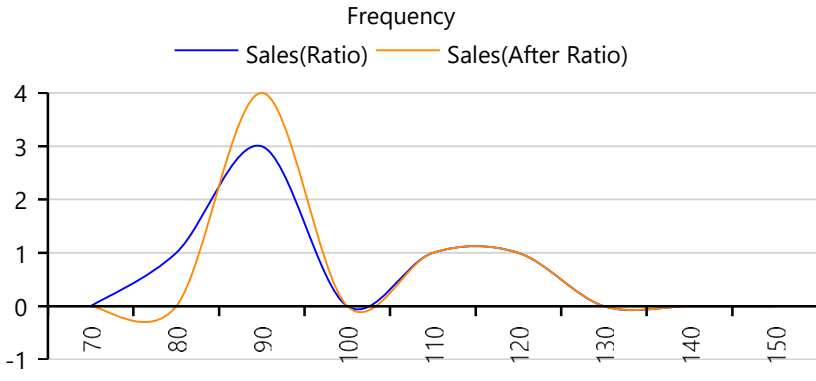
RMV 401: SA 55
Improved Land – Dike Land, Rural Clatskanie

For this grouping of improved properties located in the Clatskanie dike area, the Weighted Mean of 98 was selected. This selected central tendency is further supported by the Mean (100) and the Geometric Mean (99). Once applied, the Overall Adjustment Factor returned a ratio of 102 which is a reasonable indicator of how the current market is moving in this rural area.

Performance History

	2020	2019	2018	2017	2016
COD	10.51	8.34	8.47	11.48	11.21
PRD	1.02	1.02	1.00	1.02	0.98

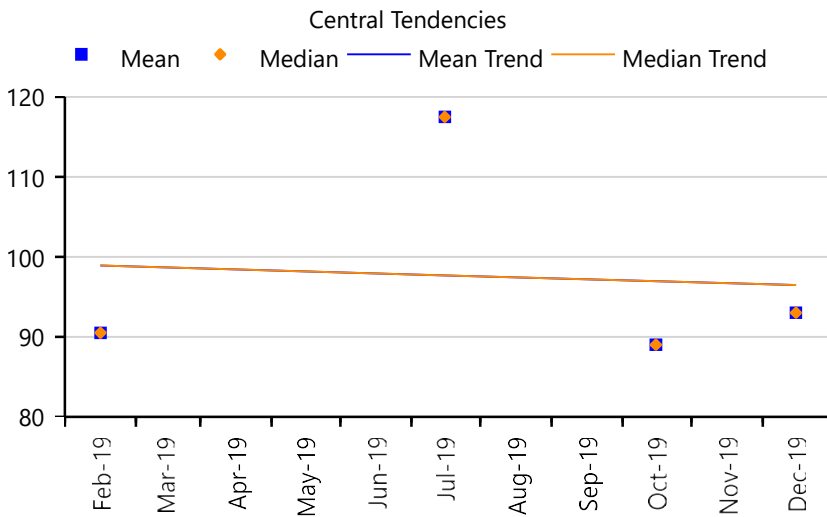
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
70	0	0
80	1	0
90	3	4
100	0	0
110	1	1
120	1	1
130	0	0
140	0	0
150	0	0

Median	92	94
AD	9.67	9.83
COD	10.51	10.46
Mean	100	102
SD	13.97	14.19
COV	14.01	13.93
Wtd Mean	98	100
GeoMean	99	101
PRD	1.02	1.02
95% Confidence	11.18	11.35

Number Of Sales 6



Month	Mean	Median	Sales
Feb-19	91	91	2
Jul-19	118	118	2
Oct-19	89	89	1
Dec-19	93	93	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	55	000	551		33	8N4W2700 01400	2019-8226	25.32	211,150	163,160	374,310	419,184	Oct-19	1	89
05	55	000	551	134	33	7N4W0500 01000	2019-1079	22.71	149,240	252,830	402,070	447,619	Feb-19	2	90
05	55	000	401	132	33	8N5W36D 0 00400	2019-1091	8.81	126,600	191,930	318,530	350,870	Feb-19	3	91
05	55	000	541		33	7N5W0100 00500	2019-10776	79.23	193,740	179,500	373,240	400,397	Dec-19	4	93
05	55	000	551		30	7N5W0500 00300	2019-6031	16.11	133,590	225,820	359,410	311,850	Jul-19	5	115
05	55	000	551		33	7N5W0300 01100	2019-6096	4.79	113,730	213,860	327,590	274,032	Jul-19	6	120

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	05	55	000	2020	2	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	32
Sales as a percentage of the Population	6.25%
<i>Prior Year Population Values</i>	
Land Rmv	1,884,460
OSD RMV	1,455,800
Improvement RMV	2,123,450
Farm Improvement RMV	941,770
Selected Ratio From Sales	89
Time Trend Adjustment	9
Before Ratio	89
Overall Adjustment Factor	112
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	129
Farm Improvement Factor	129
After Ratio	100

Explanation

RMV 409: SA 55

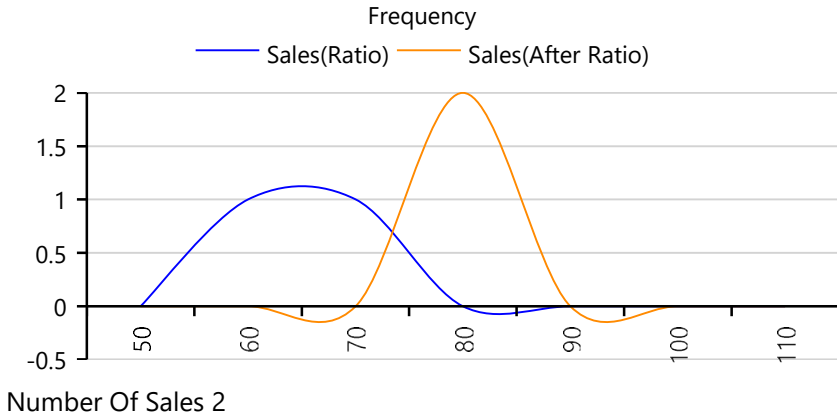
Improved Land – Dike Land - Manufactured Structure, Rural Clatskanie

This study returned only 2 sales that occurred during the first half of the collection year which is an inadequate amount for this study. Also, the ratio indicators of those two sales do not present a clear portrayal of the current market movement. Therefore it was deemed appropriate to apply the Mean (89) from the MA 05 SA 51 RMV Class 409 analysis.

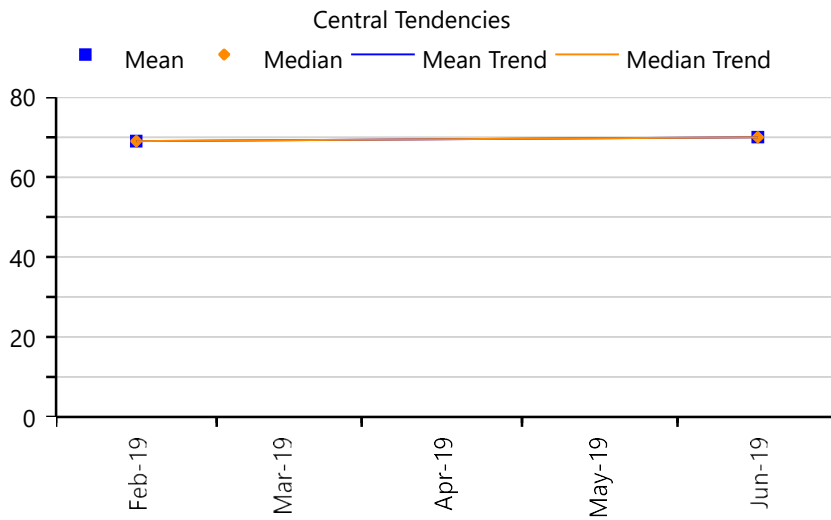
Performance History

	2020	2019	2018	2016
COD	0.72	5.28	7.65	0.00
PRD	0.99	1.00	1.02	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
50	0	0
60	1	0
70	1	0
80	0	2
90	0	0
100	0	0
110	0	0
Median	70	82
AD	.50	1.50
COD	.72	1.84
Mean	70	82
SD	.71	2.12
COV	1.02	2.60
Wtd Mean	70	82
GeoMean	69	81
PRD	.99	1.00
95% Confidence	.98	2.94



Month	Mean	Median	Sales
Feb-19	69	69	1
Jun-19	70	70	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
05	55	000	409	452	33	8N5W36D 0 01000	2019-1249	1.16	72,770	73,160	145,930	210,093	Feb-19	1	69
05	55	000	409		33	8N5W36D 0 00600	2019-5129	8.22	151,320	190,320	341,640	484,668	Jun-19	2	70

MAINTENANCE AREA 6

RURAL ST. HELENS,
CITY OF COLUMBIA CITY
& WARREN

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	06	01	000	2020		Columbia City							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	29
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	3,193,960
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	97
Time Trend Adjustment	0
Before Ratio	97
Overall Adjustment Factor	103
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

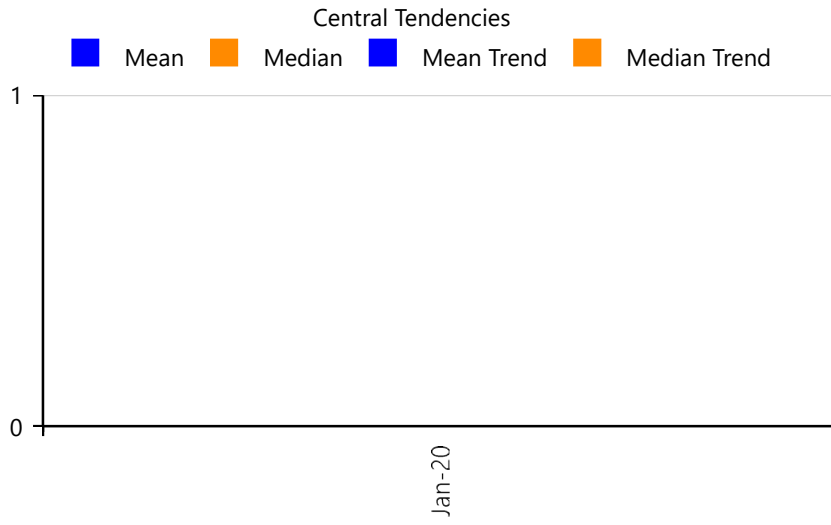
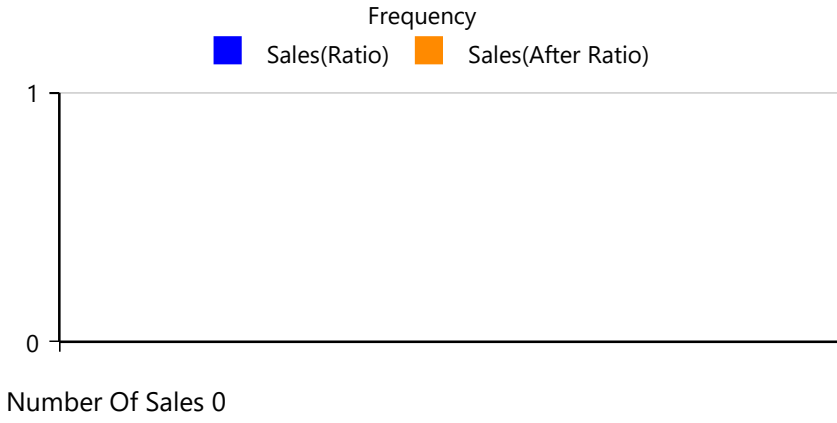
RMV 100: SA 01
Unimproved land, City of Columbia City General Area

This study is comprised of vacant land located within the small bedroom community of Columbia City. There were no sales available for the analysis within the study period. Because of this, it was decided to apply the Selected Ratio of 97 from the Improved RMV Class 101 study (MA 6, SA 01).

Performance History

	2020	2019	2018
COD	-	19.39	0.00
PRD	-	0.95	1.00

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	06	01	000	2020	30	Columbia City							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	30
Population - Number of Accounts	742
Sales as a percentage of the Population	4.04%
<i>Prior Year Population Values</i>	
Land Rmv	68,501,590
OSD RMV	24,029,400
Improvement RMV	149,288,220
Farm Improvement RMV	656,280
Selected Ratio From Sales	97
Time Trend Adjustment	11
Before Ratio	97
Overall Adjustment Factor	103
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	104
Farm Improvement Factor	104
After Ratio	100

Explanation

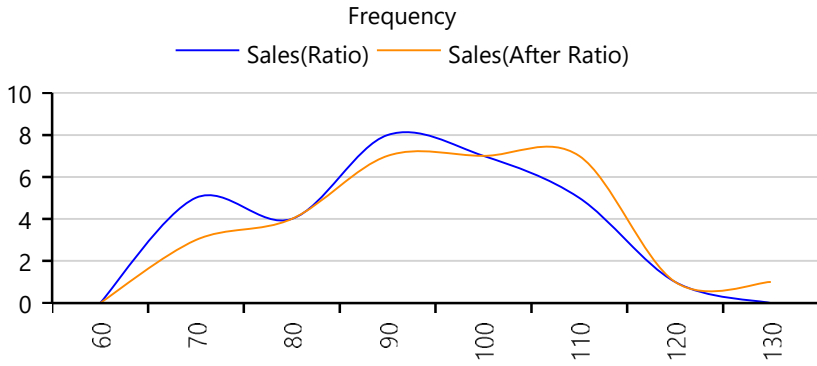
RMV 101: SA 01
Improved land, City of Columbia City General Area

This analysis consists of improved properties located in the City of Columbia City General Area. The central tendency selected is the Median 97. This indicator is further supported by the Mean (97), Weighted Mean (98) and the Geometric Mean (96). Once the Selected Ratio was applied, the Overall Adjustment Factor is 103.

Performance History

	2020	2019	2018
COD	11.74	14.27	11.78
PRD	0.99	0.99	0.99

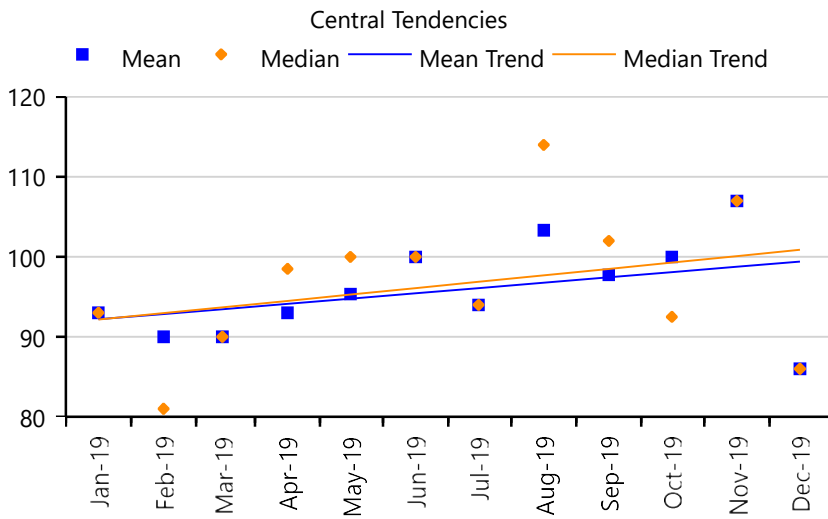
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
60	0	0
70	5	3
80	4	4
90	8	7
100	7	7
110	5	7
120	1	1
130	0	1

Median	97	100
AD	11.33	11.73
COD	11.74	11.73
Mean	97	100
SD	13.95	14.46
COV	14.44	14.47
Wtd Mean	98	101
GeoMean	96	99
PRD	.99	.99
95% Confidence	4.99	5.17

Number Of Sales 30



Month	Mean	Median	Sales
Jan-19	93	93	1
Feb-19	90	81	3
Mar-19	90	90	1
Apr-19	93	99	4
May-19	95	100	3
Jun-19	100	100	2
Jul-19	94	94	2
Aug-19	103	114	3
Sep-19	98	102	4
Oct-19	100	93	4
Nov-19	107	107	2
Dec-19	86	86	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	01	000	101	131	33	5N1W28BA 00200	2019-3491	0.17	93,440	107,500	200,940	280,856	May-19	1	72
06	01	000	101	131	33	5N1W28A D 03400	2019-2626	0.11	82,540	129,130	211,670	285,856	Apr-19	2	74
06	01	000	101	131	33	5N1W21CB 02600	2019-1415	0.27	111,310	136,560	247,870	328,450	Feb-19	3	75
06	01	000	101		33	5N1W28A A 02800	2019-6919	0.11	142,540	185,770	328,310	415,320	Aug-19	4	79
06	01	000	101		33	5N1W21C D 01201	2019-7224	0.29	114,720	110,420	225,140	284,790	Sep-19	5	79
06	01	000	101	131	33	5N1W28BA 00900	2019-928	0.24	105,640	106,080	211,720	260,894	Feb-19	6	81

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	01	000	101		33	5N1W21C A 03000	2019-10349	0.26	109,250	181,210	290,460	337,312	Dec-19	7	86
06	01	000	101		33	5N1W28BA 01904	2019-4768	0.20	98,730	234,820	333,550	375,134	Jun-19	8	89
06	01	000	101		33	5N1W21C A 03800	2019-9093	0.25	107,400	191,690	299,090	336,468	Oct-19	9	89
06	01	000	101	141	33	5N1W21CB 05200	2019-2679	0.30	115,180	183,680	298,860	332,824	Mar-19	10	90
06	01	000	101		33	5N1W21C A 03600	2019-5476	0.26	109,320	205,140	314,460	342,615	Jul-19	11	92
06	01	000	101		33	5N1W28D A 04301	2019-8408	0.38	121,400	503,370	624,770	681,795	Oct-19	12	92
06	01	000	101	143	33	5N1W21C A 01700	2019-385	0.25	107,530	220,020	327,550	352,463	Jan-19	13	93
06	01	000	101		33	5N1W21C A 00600	2019-9209	0.25	140,050	188,660	328,710	352,073	Oct-19	14	93
06	01	000	101		33	5N1W28BA 01916	2019-6007	0.20	98,730	351,360	450,090	468,009	Jul-19	15	96
06	01	000	101	142	33	5N1W28D B 06200	2019-2670	0.21	189,270	294,400	483,670	498,359	Apr-19	16	97
06	01	000	101		33	5N1W21BC 02200	2019-7996	0.23	135,260	212,640	347,900	350,030	Sep-19	17	99
06	01	000	101	142	30	5N1W28D A 02800	2019-3154	0.11	142,540	216,550	359,090	360,527	Apr-19	18	100
06	01	000	101		33	5N1W21BC 03400	2019-3984	0.29	148,390	212,850	361,240	362,391	May-19	19	100
06	01	000	101	132	33	5N1W28D A 04100	2019-2970	0.23	164,440	160,930	325,370	320,708	Apr-19	20	101
06	01	000	101		33	5N1W21B D 00400	2019-7976	0.26	142,440	243,540	385,980	367,231	Sep-19	21	105
06	01	000	101		33	5N1W28D A 03904	2019-9761	0.25	168,530	546,770	715,300	668,778	Nov-19	22	107
06	01	000	101		33	5N1W28D B 04000	2019-9871	0.23	134,640	233,190	367,830	344,217	Nov-19	23	107
06	01	000	101		33	5N1W28B D 00201	2019-7814	0.65	168,960	375,850	544,810	505,337	Sep-19	24	108
06	01	000	101		33	5N1W28D D 03200	2019-4473	0.14	201,050	432,590	633,640	572,957	Jun-19	25	111
06	01	000	101	143	33	5N1W28D D 01400	2019-1419	0.11	167,470	200,320	367,790	322,465	Feb-19	26	114
06	01	000	101		33	5N1W28D B 03304	2019-4017	0.23	135,230	273,950	409,180	358,781	May-19	27	114
06	01	000	101		33	5N1W28B D 00601	2019-6541	0.23	195,440	359,990	555,430	487,509	Aug-19	28	114
06	01	000	101		33	5N1W28C A 01900	2019-6418	0.23	225,700	272,220	497,920	425,030	Aug-19	29	117
06	01	000	101		33	5N1W28C A 03800	2019-8820	0.23	225,700	277,400	503,100	398,931	Oct-19	30	126

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	06	01	000	2020		Columbia City							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	8
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
	Pre-Trend Values
Land Rmv	625,160
OSD RMV	267,200
Improvement RMV	573,400
Farm Improvement RMV	0
	Pre-Trend Brkdwn
	42.65%
	18.23%
	39.12%
	0.00%
	Post Trend Values
	643,915
	267,200
	596,336
	0
	Post Trend Brkdwn
	42.72%
	17.73%
	39.56%
	0.00%
Selected Ratio From Sales	97
Time Trend Adjustment	0
Before Ratio	97
Overall Adjustment Factor	103
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	104
Farm Improvement Factor	104
After Ratio	100

Explanation

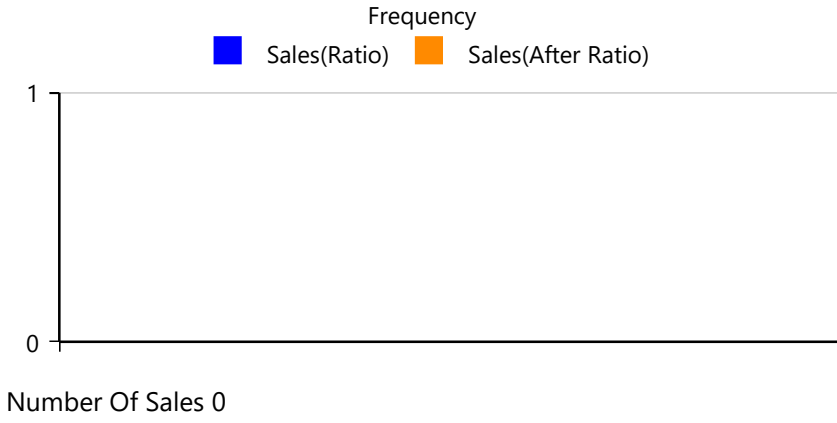
RMV 109: SA 01
 Improved land - Manufactured Structure - City of Columbia City General Area

Due to having no sales available for this analysis, it was decided to implement the conclusion from the MA 06 SA 01 RMV Class 101 analysis, applying the Selected Ratio adjustment of 97 resulting in an Overall Adjustment of 103.

Performance History

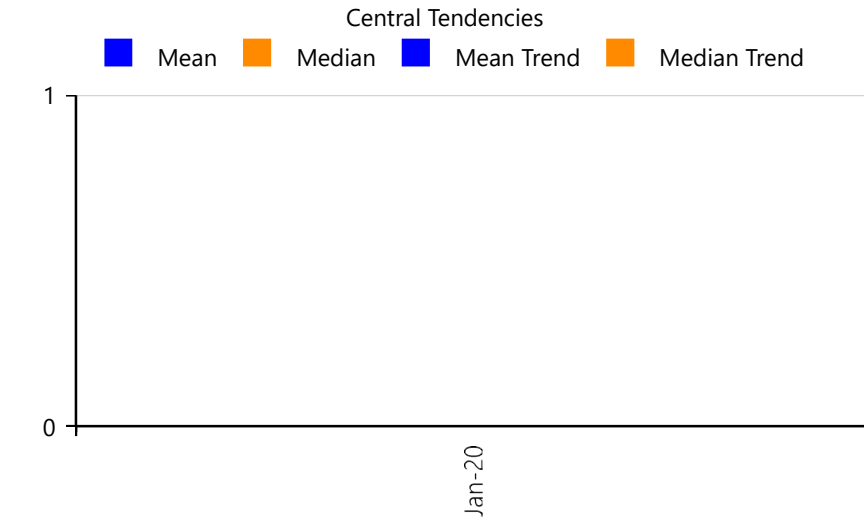
	2020	2019
COD	-	18.15
PRD	-	0.99

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
100	06	15	000	2020		Columbia City							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	5
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	1,168,690
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	97
Time Trend Adjustment	0
Before Ratio	97
Overall Adjustment Factor	103
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

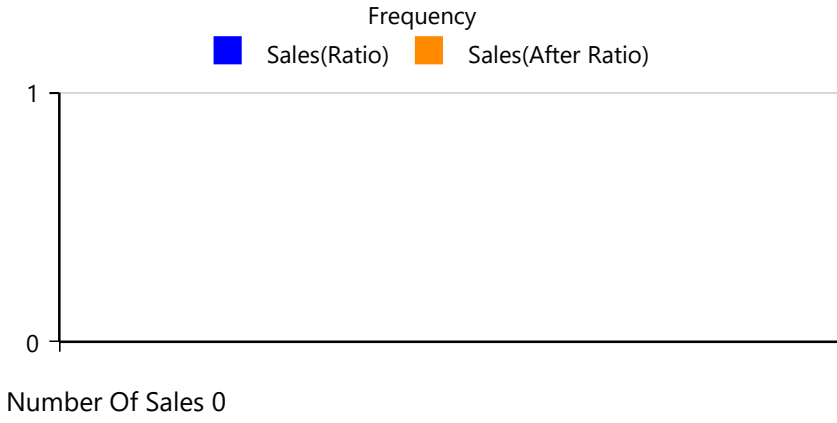
RMV 100: SA 15
Unimproved land, City of Columbia City River Front

Columbia City River Front property is located on the Columbia River and has spectacular views of multiple mountains. There are no sales available for this population of 5 accounts of River Front property. Therefore, the Median of 97 from the RMV 100 study located in MA 06 SA 01 was deemed appropriate and applied to this population of accounts.

Performance History

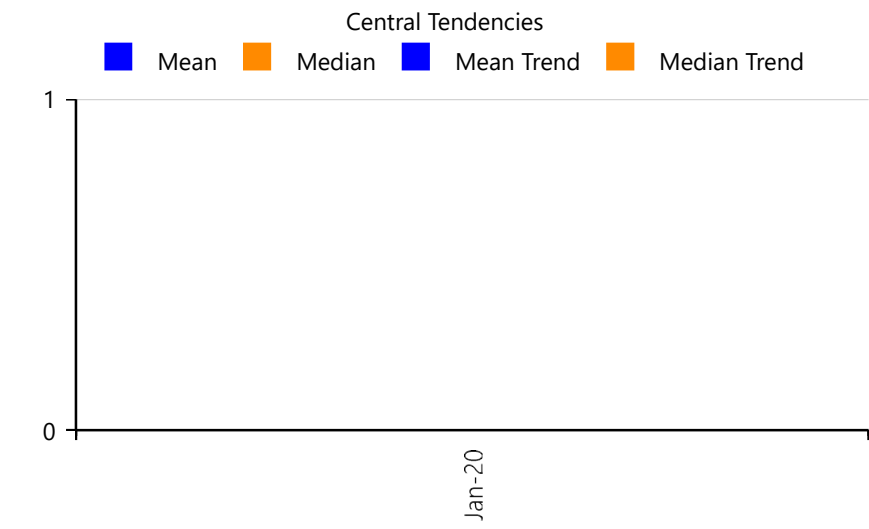
	2020	2019	2018
COD	-	0.00	0.00
PRD	-	1.00	1.00

COLUMBIA County 2020 Ratio Study



Sales (Ratio) Sales (After Ratio)

- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	06	15	000	2020		Columbia City							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0			
Population - Number of Accounts	22			
Sales as a percentage of the Population	0.00%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		4,910,390	36.87%	5,057,702 36.73%
OSD RMV		731,000	5.49%	731,000 5.31%
Improvement RMV		7,675,830	57.64%	7,982,863 57.97%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		97		
Time Trend Adjustment		0		
Before Ratio		97		
Overall Adjustment Factor		103		
Land Adjustment Factor		103		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		104		
Farm Improvement Factor		104		
After Ratio		100		

Explanation

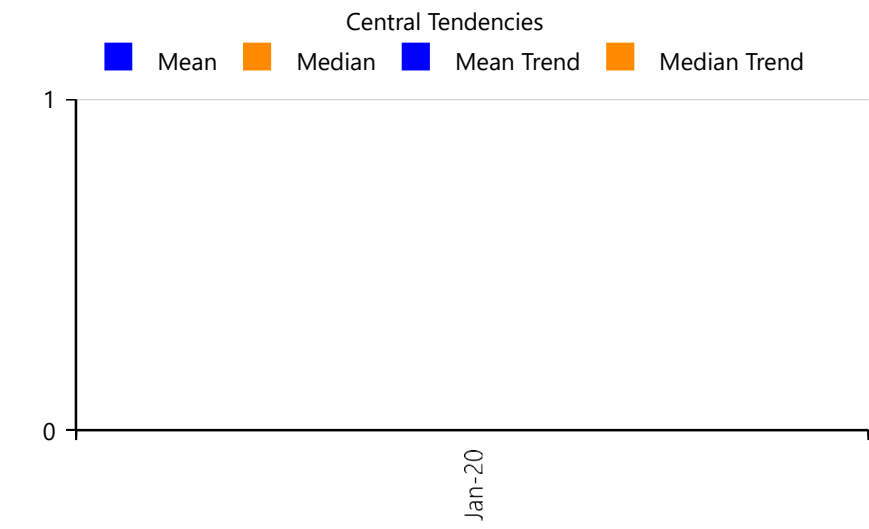
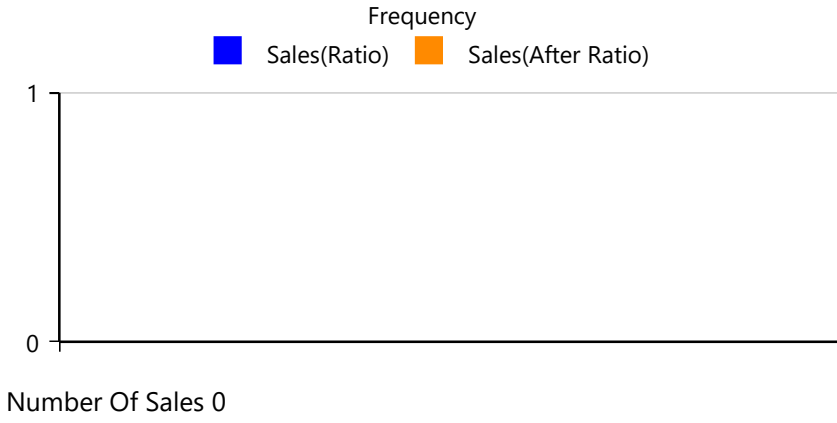
RMV 101: SA 15
Improved land, City of Columbia City River Front

With having no sales available for this analysis of improved River Front properties, it was decided to use the Selected Ratio of 97 from the conclusion of the RMV 101 study located in MA 06 SA 01.

Performance History

	2020	2018
COD	-	11.78
PRD	-	0.99

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
109	06	15	000	2020		Columbia City							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	2
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
	Pre-Trend Values
Land Rmv	499,200
OSD RMV	66,800
Improvement RMV	149,840
Farm Improvement RMV	0
	Pre-Trend Brkdwn
	69.74%
	9.33%
	20.93%
	0.00%
	Post Trend Values
	514,176
	66,800
	155,834
	0
	Post Trend Brkdwn
	69.78%
	9.07%
	21.15%
	0.00%
Selected Ratio From Sales	97
Time Trend Adjustment	0
Before Ratio	97
Overall Adjustment Factor	103
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	104
Farm Improvement Factor	104
After Ratio	100

Explanation

RMV 109: SA 15

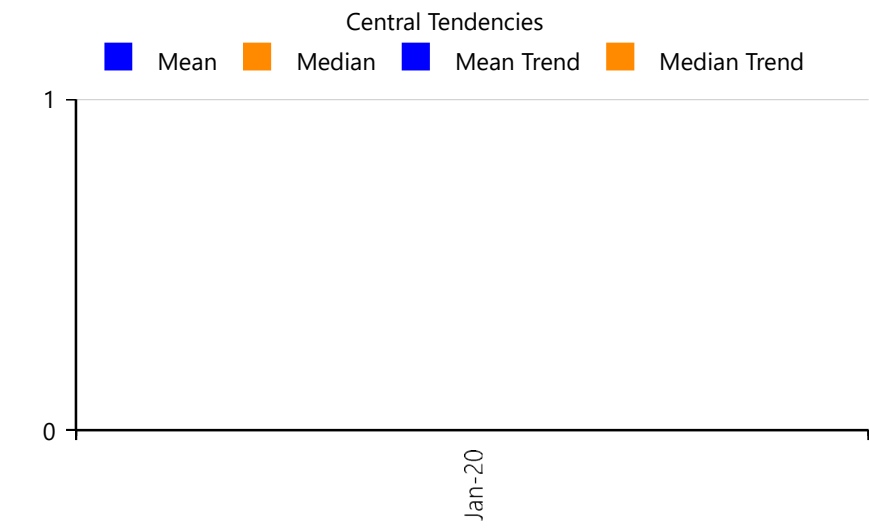
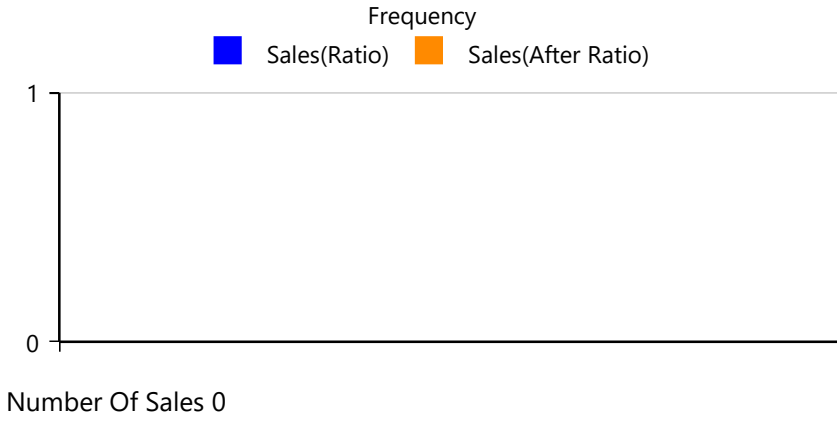
Improved land - Manufactured Structure, City of Columbia City River Front

Due to having no sales available of properties that are improved with manufactured structures for this analysis, the Selected Ratio of 97 and conclusion from the MA 06 SA 01 RMV Class 101 was applied here.

Performance History

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
101	06	31	000	2020		Columbia City							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	9
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	918,050
OSD RMV	433,800
Improvement RMV	1,912,800
Farm Improvement RMV	14,700
Selected Ratio From Sales	97
Time Trend Adjustment	0
Before Ratio	97
Overall Adjustment Factor	103
Land Adjustment Factor	103
OSD Adjustment Factor	100
Improvement Adjustment Factor	104
Farm Improvement Factor	104
After Ratio	100

Explanation

RMV 101: SA 31

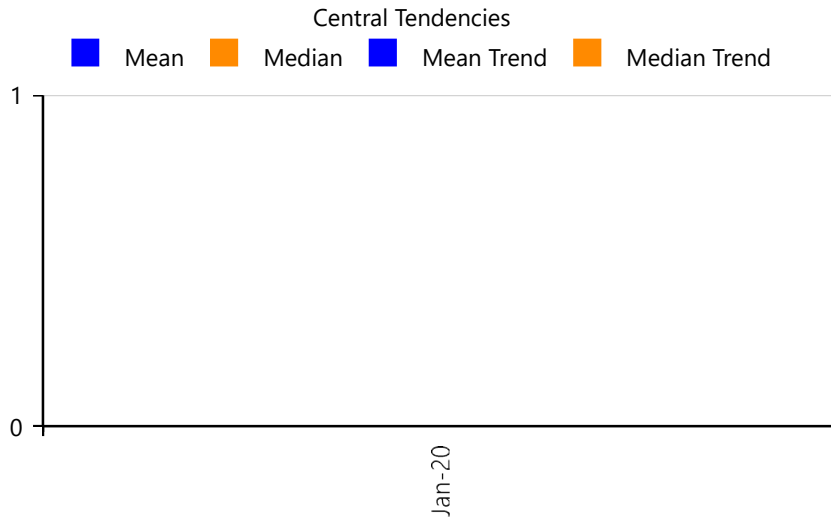
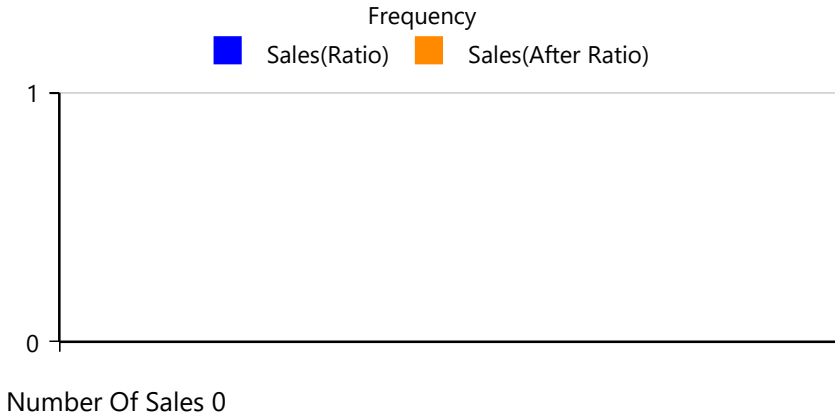
Improved study of Duplex/Triplex/Fourplex properties located in the City of Columbia City

The population of this study area is 9 and there are no sales available for this study period. Therefore, the Median of 97 from the RMV Class 101 MA 06 SA 01 analysis applied here.

Performance History

	2020	2019
COD	-	0.00
PRD	-	1.00

COLUMBIA County 2020 Ratio Study



Sales (Ratio) Sales (After Ratio)

- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	06	61	000	2020	12	Rural St Helens	400	06	67	000	2020	3	Warren

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	15
Population - Number of Accounts	341
Sales as a percentage of the Population	4.40%
<i>Prior Year Population Values</i>	
Land Rmv	64,287,150
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	88
Time Trend Adjustment	9
Before Ratio	88
Overall Adjustment Factor	114
Land Adjustment Factor	114
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 400: SA 61

RMV 400: SA 67

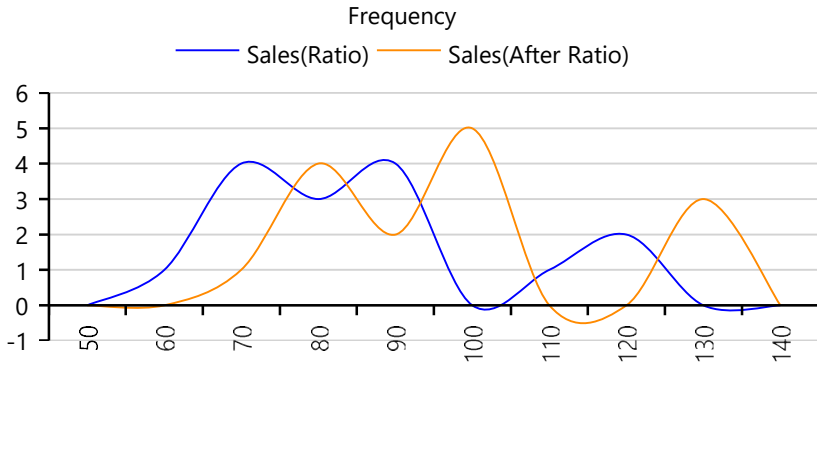
Unimproved land, Rural St. Helens and Warren (Value Zone 1) - North County and South County

This area is comprised of undeveloped rural properties surrounding the City of St. Helens and Warren. For this analysis, the time adjustment conclusion of 9% was applied to the data set. Once applied and calculated, the Median of 88 was selected as the best indicator for this classification of properties, resulting in a trend factor of 114.

Performance History

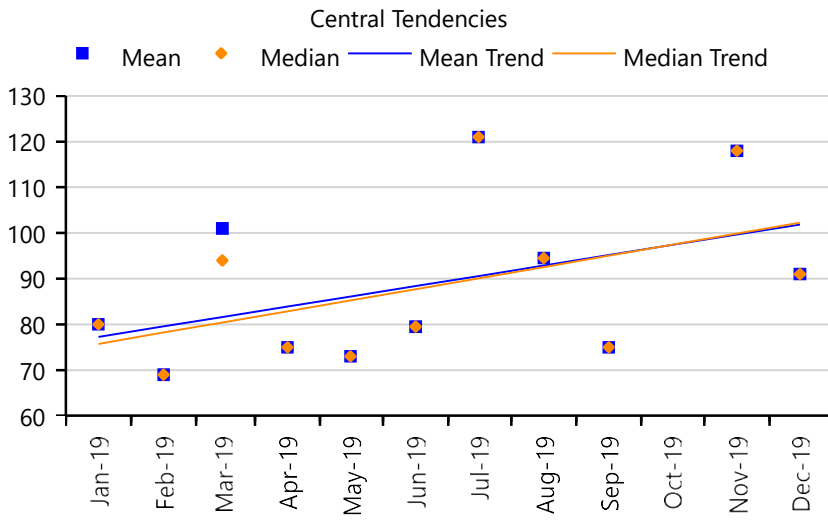
	2020	2019	2018	2017	2016
COD	15.38	21.68	16.13	14.38	24.84
PRD	1.04	1.09	0.99	1.04	1.02

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)		Sales (Ratio)	Sales (After Ratio)
50	0	0	Median	88	100
60	1	0	AD	13.53	15.33
70	4	1	COD	15.38	15.33
80	3	4	Mean	90	103
90	4	2	SD	17.55	19.96
100	0	5	COV	19.46	19.44
110	1	0	Wtd Mean	86	98
120	2	0	GeoMean	89	101
130	0	3	PRD	1.04	1.04
140	0	0	95% Confidence	8.88	10.10

Number Of Sales 15



Month	Mean	Median	Sales
Jan-19	80	80	1
Feb-19	69	69	1
Mar-19	101	94	3
Apr-19	75	75	1
May-19	73	73	1
Jun-19	80	80	2
Jul-19	121	121	1
Aug-19	95	95	2
Sep-19	75	75	1
Nov-19	118	118	1
Dec-19	91	91	1

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	61	000	400		33	4N1W07A C 00604	2019-1200	0.87	112,200	0	112,200	161,730	Feb-19	1	69
06	61	000	400		33	5N2W36C0 00703	2019-3653	13.57	231,560	0	231,560	317,504	May-19	2	73
06	61	000	400		33	4N2W12D D 00204	2019-3148	1.68	155,280	0	155,280	207,207	Apr-19	3	75
06	61	000	400		33	4N2W12D A 01100	2019-5054	2.13	179,060	0	179,060	238,579	Jun-19	4	75
06	61	000	400		30	4N2W12D A 01000	2019-7337	1.99	174,810	0	174,810	233,333	Sep-19	5	75
06	67	000	400		33	4N1W18B0 02301	2019-390	2.32	184,070	0	184,070	230,296	Jan-19	6	80
06	67	000	400		33	4N1W30B0 00100	2019-4666	5.80	230,000	0	230,000	272,948	Jun-19	7	84
06	61	000	640		33	4N2W12C0 00600	2019-2186	4.69	204,010	0	204,010	232,508	Mar-19	8	88
06	67	000	400		33	4N1W30B0 00101	2019-10352	5.80	230,000	0	230,000	253,813	Dec-19	9	91
06	61	000	640		33	4N2W12C0 00601	2019-6764	4.72	204,270	0	204,270	219,986	Aug-19	10	93
06	61	000	400		33	5N2W36C0 00206	2019-1687	2.02	176,170	0	176,170	187,898	Mar-19	11	94
06	61	000	640		33	4N2W12C0 00602	2019-7006	4.76	204,590	0	204,590	213,790	Aug-19	12	96
06	61	000	400		33	5N1W32D C 02300	2019-9807	0.93	89,760	0	89,760	75,998	Nov-19	13	118
06	61	000	400		33	4N2W0100 00501	2019-1643	2.00	175,440	0	175,440	144,990	Mar-19	14	121
06	61	000	400		33	4N1W06A0 00307	2019-5519	1.01	113,080	0	113,080	93,771	Jul-19	15	121

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	06	61	000	2020	52	Rural St Helens	401	06	67	000	2020	21	Warren

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	73
Population - Number of Accounts	2143
Sales as a percentage of the Population	3.41%
<i>Prior Year Population Values</i>	
Land Rmv	325,809,120
OSD RMV	111,551,730
Improvement RMV	408,134,549
Farm Improvement RMV	37,224,982
Selected Ratio From Sales	100
Time Trend Adjustment	9
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	114
OSD Adjustment Factor	100
Improvement Adjustment Factor	90
Farm Improvement Factor	90
After Ratio	100

Explanation

RMV 401: SA 61

RMV 401: SA 67

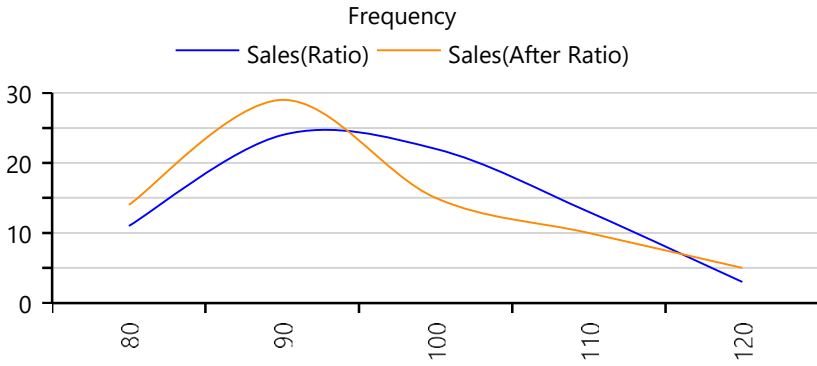
Improved land, Rural St. Helens and Warren (Value Zone 1) - North County and South County

For this analysis of property improved with conventionally built dwellings, the Median (100) was selected as the best ratio indicator. This central tendency is further supported by the Weighted Mean, and the Geometric Mean. The Median was applied, resulting in an Overall Adjustment Factor of 100.

Performance History

	2020	2019	2018	2017	2016
COD	8.33	11.59	7.92	11.22	17.03
PRD	1.00	1.01	1.01	1.01	1.03

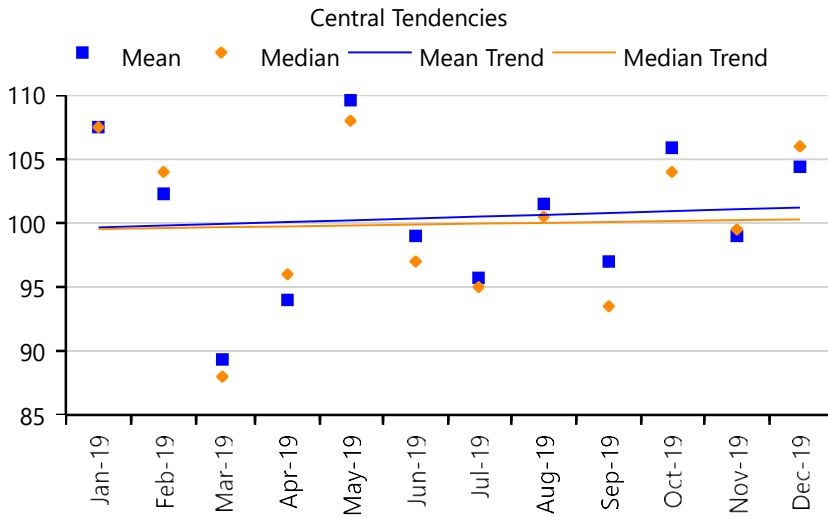
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
80	11	14
90	24	29
100	22	15
110	13	10
120	3	5

Median	100	98
AD	8.33	8.52
COD	8.33	8.69
Mean	101	100
SD	10.40	10.92
COV	10.34	10.94
Wtd Mean	100	99
GeoMean	100	99
PRD	1.00	1.01
95% Confidence	2.38	2.50

Number Of Sales 73



Month	Mean	Median	Sales
Jan-19	108	108	2
Feb-19	102	104	7
Mar-19	89	88	3
Apr-19	94	96	5
May-19	110	108	5
Jun-19	99	97	10
Jul-19	96	95	7
Aug-19	102	101	8
Sep-19	97	94	6
Oct-19	106	104	9
Nov-19	99	100	6
Dec-19	104	106	5

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	67	000	641		33	4N2W24BA 00306	2019-6261	5.52	286,550	390,280	676,830	822,444	Jul-19	1	82
06	61	000	401		30	4N1W18D 0 00100	2019-10943	2.43	243,660	163,890	407,550	477,572	Dec-19	2	85
06	67	000	401	141	33	4N2W24A D 01006	2019-2702	2.00	232,140	260,900	493,040	574,614	Apr-19	3	86
06	67	000	541		30	4N1W19B0 01500	2019-5262	5.81	286,710	434,940	721,650	836,233	Jun-19	4	86
06	61	000	401		33	5N1W33A0 01200	2019-7231	1.16	179,230	123,090	302,320	350,472	Aug-19	5	86
06	61	000	401	141	33	4N2W12D D 00406	2019-2163	2.01	232,610	467,470	700,080	802,618	Mar-19	6	87

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	67	000	401		33	4N1W19C A 01800	2019-5324	0.34	156,660	220,470	377,130	434,678	Jul-19	7	87
06	61	000	401		33	4N1W07D D 00500	2019-9518	1.36	191,830	117,820	309,650	354,235	Nov-19	8	87
06	61	000	401	151	33	4N1W17B0 10000	2019-1792	1.00	168,900	377,370	546,270	621,672	Mar-19	9	88
06	67	000	401		33	4N1W30B0 01200	2019-9081	2.28	239,710	221,030	460,740	523,137	Oct-19	10	88
06	67	000	401		33	4N1W18B0 02600	2019-4890	2.00	232,140	274,560	506,700	567,908	Jun-19	11	89
06	61	000	401		33	4N1W08B D 01200	2019-4437	1.30	188,040	340,880	528,920	585,853	Jun-19	12	90
06	61	000	401		33	4N1W08BB 03400	2019-5756	0.36	156,660	136,860	293,520	326,623	Jul-19	13	90
06	67	000	401		33	4N2W13B0 02100	2019-6523	2.88	255,500	338,070	593,570	656,908	Aug-19	14	90
06	61	000	401		33	4N1W17CB 01100	2019-7291	0.88	168,900	153,920	322,820	359,732	Sep-19	15	90
06	61	000	401	121	33	4N1W08CC 01000	2019-2644	0.50	156,660	134,600	291,260	320,655	Apr-19	16	91
06	67	000	401		33	4N2W25A0 03500	2019-4920	0.48	156,660	110,460	267,120	293,279	Jun-19	17	91
06	61	000	401		33	4N1W08BC 00900	2019-8130	0.33	156,660	127,690	284,350	312,229	Sep-19	18	91
06	61	000	401	143	33	4N1W08CC 00101	2019-932	1.00	168,900	305,100	474,000	517,607	Feb-19	19	92
06	67	000	401	155	33	4N2W25D 0 01609	2019-1627	2.00	232,140	365,630	597,770	640,116	Mar-19	20	93
06	61	000	401		33	4N1W07A A 01500	2019-7747	0.50	156,660	153,620	310,280	333,255	Sep-19	21	93
06	61	000	401		33	4N2W0100 02500	2019-7958	0.51	156,660	160,110	316,770	337,884	Sep-19	22	94
06	61	000	401		33	4N1W07D B 01800	2019-5435	1.50	200,640	289,140	489,780	517,226	Jul-19	23	95
06	67	000	401		33	4N2W24D 0 00100	2019-8888	2.01	232,620	300,530	533,150	559,350	Oct-19	24	95
06	67	000	401		33	4N1W19D 0 00600	2019-9873	1.00	168,900	142,290	311,190	328,380	Nov-19	25	95
06	61	000	401	152	33	4N1W18A0 01901	2019-2558	5.16	286,360	474,640	761,000	796,162	Apr-19	26	96
06	61	000	401	152	33	4N1W08B D 01100	2019-2552	2.18	237,080	322,710	559,790	577,393	Apr-19	27	97
06	61	000	401		33	4N2W13A0 02100	2019-4449	0.50	156,660	206,480	363,140	373,460	Jun-19	28	97
06	61	000	401		33	4N1W07A D 01301	2019-5065	1.00	168,900	198,330	367,230	376,776	Jun-19	29	97
06	61	000	551		33	5N2W3600 00210	2019-5062	16.00	289,340	502,910	792,250	812,685	Jun-19	30	97
06	67	000	541		33	4N1W19D 0 02600	2019-9345	3.20	262,430	240,130	502,560	517,191	Nov-19	31	97
06	61	000	401		33	4N2W13A0 00400	2019-4219	1.50	200,640	186,280	386,920	395,513	May-19	32	98

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	61	000	401		33	5N2W35A D 00501	2019-5472	1.48	199,390	226,830	426,220	437,101	Jul-19	33	98
06	61	000	401	161	33	5N2W36C0 00204	2019-1982	2.00	232,140	496,800	728,940	739,389	Feb-19	34	99
06	61	000	401		33	5N1W32C D 00300	2019-8937	0.68	163,800	340,600	504,400	507,992	Oct-19	35	99
06	61	000	401	142	33	4N1W06A D 00500	2019-864	2.16	236,560	250,220	486,780	486,630	Feb-19	36	100
06	61	000	401	143	30	4N1W07BA 00508	2019-3469	1.72	214,500	335,780	550,280	550,867	Apr-19	37	100
06	61	000	401		33	4N1W07C0 01600	2019-4079	2.00	233,340	549,150	782,490	779,634	May-19	38	100
06	61	000	401		33	4N2W0200 03002	2019-6670	4.57	282,280	187,890	470,170	467,949	Aug-19	39	100
06	67	000	401		33	4N1W30B0 01800	2019-7002	2.18	237,080	322,760	559,840	559,724	Aug-19	40	100
06	67	000	401	151	33	4N2W23D B 00200	2019-121	2.00	232,140	426,410	658,550	653,580	Jan-19	41	101
06	61	000	401		33	4N1W06A D 03400	2019-6929	1.03	171,030	296,110	467,140	463,995	Aug-19	42	101
06	61	000	401		30	4N1W06C0 01400	2019-5341	3.39	265,900	235,270	501,170	490,868	Jul-19	43	102
06	61	000	401		33	4N1W17CB 02300	2019-8279	0.87	168,900	274,760	443,660	434,561	Sep-19	44	102
06	61	000	401		33	4N1W07C0 02301	2019-9562	2.00	232,140	437,590	669,730	658,190	Nov-19	45	102
06	61	000	401		33	5N2W36C0 00102	2019-9902	2.00	232,140	502,340	734,480	722,079	Nov-19	46	102
06	61	000	401		33	4N2W0100 00100	2019-8659	1.20	181,740	289,940	471,680	459,090	Oct-19	47	103
06	61	000	401	151	33	4N1W17B0 12000	2019-1049	1.35	251,190	378,210	629,400	607,275	Feb-19	48	104
06	67	000	401		33	4N1W1800 00300	2019-4427	2.42	243,400	105,940	349,340	334,998	Jun-19	49	104
06	61	000	401		33	4N1W17B0 02400	2019-8205	1.00	168,900	205,860	374,760	359,374	Oct-19	50	104
06	67	000	401	151	33	4N2W25B0 01908	2019-849	2.00	232,140	390,030	622,170	594,662	Feb-19	51	105
06	61	000	401		30	4N1W07D A 01700	2019-10485	0.59	156,660	97,670	254,330	241,176	Dec-19	52	105
06	61	000	401		33	4N1W07A D 00600	2019-10247	0.84	168,900	170,190	339,090	320,131	Dec-19	53	106
06	61	000	641	152	33	4N2W1100 00902	2019-1043	10.17	241,550	413,830	655,380	609,861	Feb-19	54	107
06	61	000	401	143	30	4N1W07BC 00701	2019-3797	2.13	235,770	406,660	642,430	594,989	May-19	55	108
06	61	000	401		33	4N1W06B0 00800	2019-10490	0.51	156,660	267,320	423,980	393,502	Dec-19	56	108
06	61	000	401	154	33	4N1W05BA 02700	2019-1243	0.92	168,900	527,800	696,700	636,964	Feb-19	57	109
06	61	000	401		33	4N1W05BB 00904	2019-4501	2.01	292,610	456,310	748,920	682,424	Jun-19	58	110

COLUMBIA County 2020 Ratio Study

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	61	000	401		33	5N2W35A D 01101	2019-6269	2.00	232,140	193,700	425,840	388,763	Aug-19	59	110
06	61	000	401		33	4N1W06C0 00700	2019-7052	2.10	234,970	204,830	439,800	394,988	Aug-19	60	111
06	67	000	401		33	4N1W19A A 01800	2019-10532	2.89	255,760	247,460	503,220	453,086	Nov-19	61	111
06	67	000	541		33	4N2W26A0 00800	2019-8111	6.41	238,060	14,230	252,290	225,214	Sep-19	62	112
06	61	000	401		33	4N1W06C0 01902	2019-8230	1.91	226,470	281,950	508,420	454,590	Oct-19	63	112
06	61	000	401	142	33	4N1W08BC 02000	2019-291	0.93	168,900	365,830	534,730	467,625	Jan-19	64	114
06	61	000	401		33	4N1W17B0 11100	2019-6310	2.22	317,990	80,680	398,670	349,199	Aug-19	65	114
06	61	000	401		33	4N1W05BA 00400	2019-5478	0.72	163,800	593,160	756,960	650,661	Jul-19	66	116
06	61	000	401		33	4N1W08D 0 02300	2019-9131	1.05	172,290	4,620	176,910	152,325	Oct-19	67	116
06	61	000	401		33	4N1W06A0 00401	2019-9154	2.17	236,810	304,640	541,450	467,130	Oct-19	68	116
06	61	000	401		33	4N1W05BB 00903	2019-10645	2.33	241,030	528,010	769,040	649,265	Dec-19	69	118
06	67	000	641	154	33	4N2W2600 02000	2019-3478	5.01	286,280	409,570	695,850	583,110	May-19	70	119
06	67	000	401		33	4N2W24B0 00607	2019-8406	2.00	292,140	374,410	666,550	555,778	Oct-19	71	120
06	61	000	401		33	4N1W06C0 02907	2019-4311	2.17	236,810	312,170	548,980	447,525	May-19	72	123
06	67	000	401		33	4N1W19A A 00400	2019-4676	0.40	156,660	265,620	422,280	327,538	Jun-19	73	129

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	06	61	000	2020	2	Rural St Helens	409	06	67	000	2020	2	Warren

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	4
Population - Number of Accounts	239
Sales as a percentage of the Population	1.67%
<i>Prior Year Population Values</i>	
Land Rmv	38,477,560
OSD RMV	13,430,530
Improvement RMV	21,563,970
Farm Improvement RMV	6,937,190
Selected Ratio From Sales	87
Time Trend Adjustment	9
Before Ratio	87
Overall Adjustment Factor	115
Land Adjustment Factor	114
OSD Adjustment Factor	100
Improvement Adjustment Factor	123
Farm Improvement Factor	123
After Ratio	100

Explanation

RMV 409: SA 61

RMV 409: SA 67

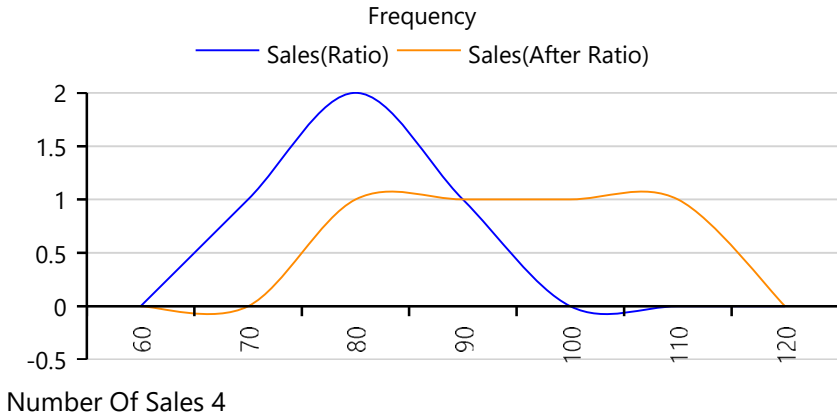
Improved land - Manufactured Structure - Rural St. Helens and Warren (Value Zone 1) - North County and South County

For this grouping of rural St Helens and Warren properties, the Median of 87 was selected as the best indicator. After applying this selected central tendency, the Overall Adjustment Factor of 115 was returned for this property type.

Performance History

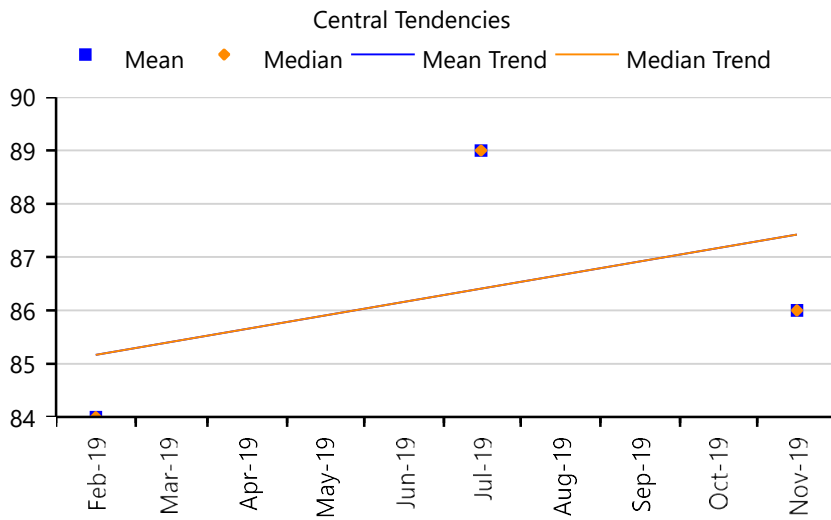
	2020	2019	2018	2017	2016
COD	7.23	6.33	10.18	0.00	14.52
PRD	1.00	1.00	1.01	1.00	1.04

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
60	0	0
70	1	0
80	2	1
90	1	1
100	0	1
110	0	1
120	0	0

Median	87	100
AD	6.25	7.75
COD	7.23	7.79
Mean	86	99
SD	8.42	10.21
COV	9.76	10.29
Wtd Mean	86	99
GeoMean	86	99
PRD	1.00	1.01
95% Confidence	8.25	10.01



Month	Mean	Median	Sales
Feb-19	84	84	1
Jul-19	89	89	1
Nov-19	86	86	2

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	67	000	409		33	4N2W24BA00303	2019-9937	2.17	236,810	102,490	339,300	445,104	Nov-19	1	76
06	61	000	409	452	33	4N1W07BB00501	2019-1126	2.00	232,140	90,350	322,490	383,720	Feb-19	2	84
06	67	000	409		33	4N2W24B00501	2019-5403	3.00	258,660	152,480	411,140	459,536	Jul-19	3	89
06	61	000	409		30	4N1W17A00400	2019-9450	0.73	163,800	155,960	319,760	333,047	Nov-19	4	96

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	06	62	000	2020	1	Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	1
Population - Number of Accounts	109
Sales as a percentage of the Population	0.92%
<i>Prior Year Population Values</i>	
Land Rmv	26,261,200
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	98
Time Trend Adjustment	0
Before Ratio	98
Overall Adjustment Factor	102
Land Adjustment Factor	102
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

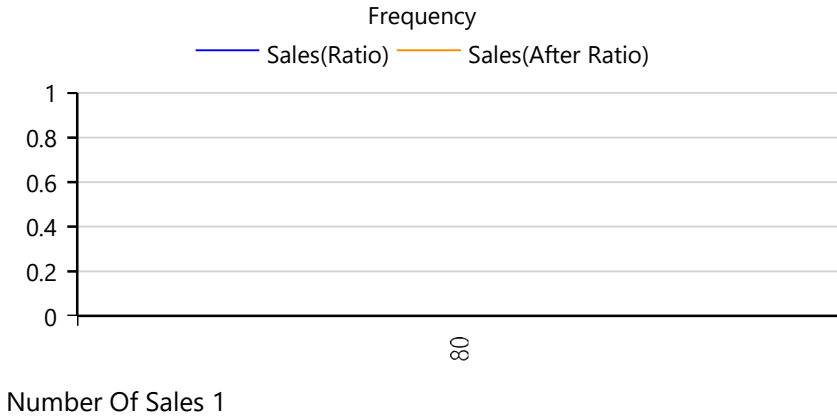
RMV 400: SA 62
Unimproved land, Rural St. Helens, Warren (Value Zone 2)

A single sale was identified in this study period, which is a sample too small to use as a determination of the current market. Therefore, it was decided to apply the Selected Ratio of 98 from the improved study located in MA 06 SA 62 for this property classification.

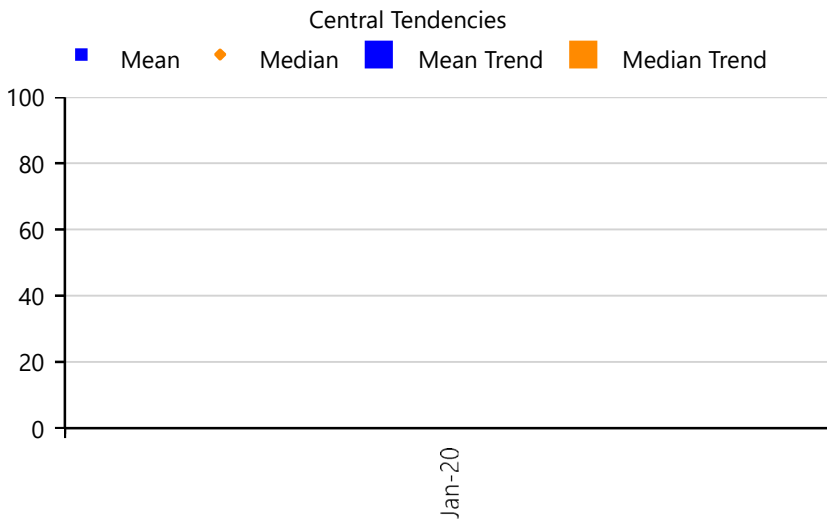
Performance History

	2020	2019	2018	2017	2016
COD	-	0.00	0.00	0.00	24.84
PRD	1.00	1.00	1.00	1.00	1.02

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
80	1	1
Median	86	88
AD		
COD		
Mean	86	88
SD	1.00	1.00
COV	1.16	1.14
Wtd Mean	86	88
GeoMean	86	88
PRD	1.00	1.01
95% Confidence	1.96	1.96



Month	Mean	Median	Sales
Feb-19	86	86	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	62	000	640		33	5N2W24B0 00201	2019-816	9.80	183,730	0	183,730	214,119	Feb-19	1	86

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
401	06	62	000	2020	5	Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	5
Population - Number of Accounts	257
Sales as a percentage of the Population	1.95%
<i>Prior Year Population Values</i>	
Land Rmv	37,284,420
OSD RMV	12,601,770
Improvement RMV	43,955,970
Farm Improvement RMV	5,866,930
	Pre-Trend Brkdwn
	37.39%
	Post Trend Values
	38,030,108
	Post Trend Brkdwn
	37.30%
	12.64%
	12,601,770
	44.08%
	45,274,649
	44.41%
	5.88%
	6,042,938
	5.93%
Selected Ratio From Sales	98
Time Trend Adjustment	9
Before Ratio	98
Overall Adjustment Factor	102
Land Adjustment Factor	102
OSD Adjustment Factor	100
Improvement Adjustment Factor	103
Farm Improvement Factor	103
After Ratio	100

Explanation

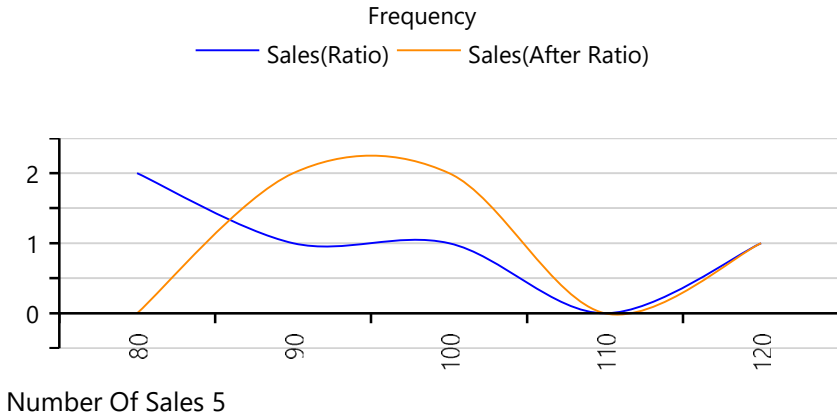
RMV 401: SA 62
Improved land, Rural St. Helens and Warren (Value Zone 2)

This sales analysis returned 5 sales which was deemed appropriate data for this classification of properties. The Median of 98 was selected and is further supported by the Mean (100), the Weighted Mean (97) and the Geometric Mean (99). The result is an Overall Adjustment of 102.

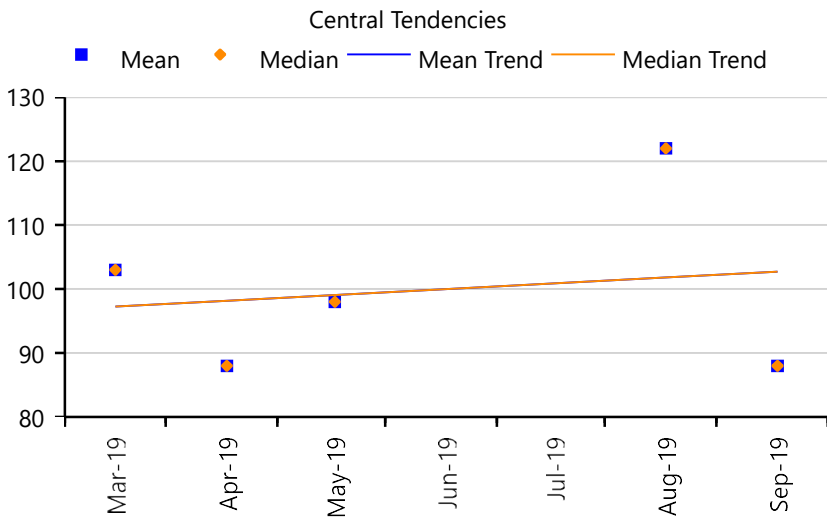
Performance History

	2020	2018	2017	2016
COD	10.00	8.63	10.20	17.03
PRD	1.02	1.01	1.03	1.03

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	98	100
AD	9.80	9.60
COD	10.00	9.60
Mean	100	102
SD	14.01	13.61
COV	14.04	13.40
Wtd Mean	97	100
GeoMean	99	101
PRD	1.02	1.02
95% Confidence	12.28	11.93



Month	Mean	Median	Sales
Mar-19	103	103	1
Apr-19	88	88	1
May-19	98	98	1
Aug-19	122	122	1
Sep-19	88	88	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	62	000	641	143	33	5N2W27B0 01800	2019-2690	4.25	237,330	257,000	494,330	558,810	Apr-19	1	88
06	62	000	401		33	5N2W27A0 01600	2019-8168	0.71	135,100	130,520	265,620	301,480	Sep-19	2	88
06	62	000	401		33	5N2W26D 0 01100	2019-4151	8.49	239,930	399,670	639,600	653,356	May-19	3	98
06	62	000	401	143	33	5N2W2900 00400	2019-2196	3.95	236,100	234,560	470,660	456,378	Mar-19	4	103
06	62	000	401		33	5N2W3000 00405	2019-6299	15.94	242,420	0	242,420	199,446	Aug-19	5	122

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
409	06	62	000	2020	3	Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	3
Population - Number of Accounts	76
Sales as a percentage of the Population	3.95%
<i>Prior Year Population Values</i>	
Land Rmv	10,828,330
OSD RMV	3,983,180
Improvement RMV	7,439,330
Farm Improvement RMV	2,128,720
	Pre-Trend Brkdwn
	44.42%
	Post Trend Values
	11,044,897
	45.80%
	3,983,180
	16.52%
	7,067,364
	29.30%
	2,022,284
	8.39%
Selected Ratio From Sales	101
Time Trend Adjustment	9
Before Ratio	101
Overall Adjustment Factor	99
Land Adjustment Factor	102
OSD Adjustment Factor	100
Improvement Adjustment Factor	95
Farm Improvement Factor	95
After Ratio	100

Explanation

RMV 409: SA 62

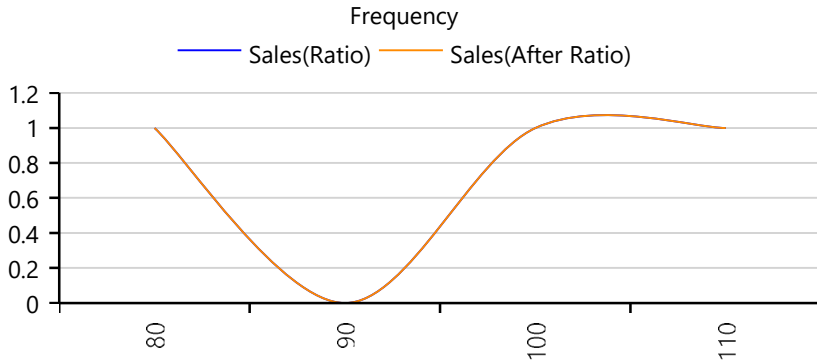
Improved land - Manufactured Structure - Rural St. Helens, Warren, (Value Zone 2)

For this grouping of manufactured structures located in Rural St. Helens and Warren, three sales were returned that comprise 3.95% of the population. The Mean (101) was deemed the best indicator after adjusting for time. Once the Mean was applied, an Overall Adjustment Factor of 99 was returned.

Performance History

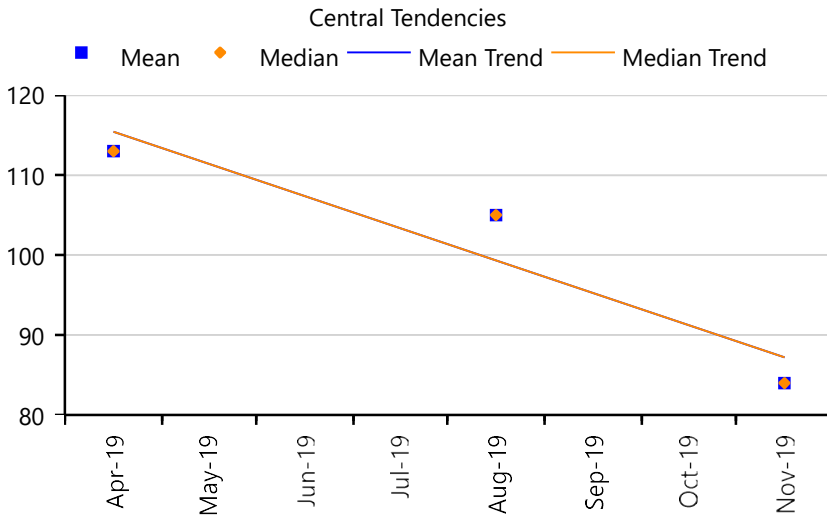
	2020	2019	2018	2016
COD	9.21	3.21	0.00	14.52
PRD	1.01	1.00	1.00	1.04

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
80	1	1
90	0	0
100	1	1
110	1	1
Median	105	105
AD	9.67	10.00
COD	9.21	9.52
Mean	101	100
SD	14.98	15.53
COV	14.88	15.48
Wtd Mean	100	100
GeoMean	100	99
PRD	1.01	1.01
95% Confidence	16.95	17.58

Number Of Sales 3



Month	Mean	Median	Sales
Apr-19	113	113	1
Aug-19	105	105	1
Nov-19	84	84	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	62	000	409		33	5N2W26D 0 02300	2019-9660	2.00	188,020	64,940	252,960	302,937	Nov-19	1	84
06	62	000	649		33	5N2W27B0 01700	2019-6575	4.82	237,840	87,290	325,130	310,200	Aug-19	2	105
06	62	000	649	452	33	5N2W2300 00702	2019-2707	4.61	237,650	54,780	292,430	259,518	Apr-19	3	113

MAINTENANCE AREA 7

PERSONAL PROPERTY

MANUFACTURED

STRUCTURES

MA 07 – Personal Property Manufactured Structures

Because of the unique way these properties move within the market, Maintenance Area 07 was developed 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.

Year	RMV Class	MA	SA	Park Name	Count	RMV Total
2019	019	07	01	GENERAL AREA - ST. HELENS	2	\$163,520
2019	019	07	02	GENERAL AREA - SCAPPOOSE	55	\$1,367,270
2019	019	07	02	CEDAR TREE	22	\$322,180
2019	019	07	02	COUNTRY VILLA	30	\$308,500
2019	019	07	02	GOSS MANUFACTURED HOME PARK	15	\$224,290
2019	019	07	02	GREEN MEADOWS	37	\$788,480
2019	019	07	02	RUDDS	26	\$392,820
2019	019	07	02	SUNVIEW	5	\$72,110
2019	019	07	02	TAMARACK	39	\$824,780
2019	019	07	02	WALLER'S	1	\$11,070
2019	019	07	03	GENERAL AREA - VERNONIA	21	\$628,180
2019	019	07	03	BOULDER RIDGE	7	\$112,100
2019	019	07	04	GENERAL AREA - RAINIER	58	\$1,294,710
2019	019	07	04	CLOVER HILL	4	\$78,440
2019	019	07	04	DEER ISLAND HEIGHTS	4	\$100,280
2019	019	07	04	DEER ISLAND VILLAGE	51	\$1,017,940
2019	019	07	04	FERNVIEW	24	\$394,110
2019	019	07	04	RAINIER HEIGHTS	9	\$129,460
2019	019	07	04	RIVERS EDGE	15	\$138,120
2019	019	07	04	RIVERWOOD	27	\$237,140
2019	019	07	04	WESTERN HILLS	81	\$1,182,060
2019	019	07	05	GENERAL AREA - CLATSKANIE	73	\$1,920,970
2019	019	07	05	DEER POINTE	36	\$627,170
2019	019	07	05	DRAKES J/M	28	\$328,470
2019	019	07	05	RIVERBEND	27	\$564,680
2019	019	07	05	SWEDETOWN VILLAGE	25	\$657,730
2019	019	07	06	GENERAL AREA - WARREN, RURAL ST. HELENS	28	\$794,170
2019	019	07	06	MAPLE TERRACE	23	\$489,450
2019	019	07	06	MOUNTIAN VIEW	12	\$172,320
2019	019	07	06	ROSE MANOR	30	\$522,090
2019	019	07	06	WESTWIND	6	\$270,700
2019	019	07	27	CRESTWOOD VILLAGE	123	\$5,375,120
2019	019	07	28	COLUMBIA CITY ESTATES	42	\$1,722,280
2019	019	07	30	SPRINGLAKE PARK	145	\$9,167,780
2019	019	07	31	CROWN PARK	22	\$1,000,010
2019	019	07	35	RIVERSIDE MEADOWS	22	\$237,430

Total Count: 1,175
 Total RMV: 33,637,930

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	01	000	2020	0	Maintenance Area 1	019	07	02	000	2020	3	Maintenance Area 2
019	07	06	000	2020	0	Maintenance Area 6							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	3			
Population - Number of Accounts	334			
Sales as a percentage of the Population	0.90%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv	0	0	0.00%	0 0.00%
OSD RMV	0	0	0.00%	0 0.00%
Improvement RMV	6,760,900	6,760,900	100.00%	6,760,900 100.00%
Farm Improvement RMV	0	0	0.00%	0 0.00%
Selected Ratio From Sales	100			
Time Trend Adjustment	0			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Improvement Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Explanation

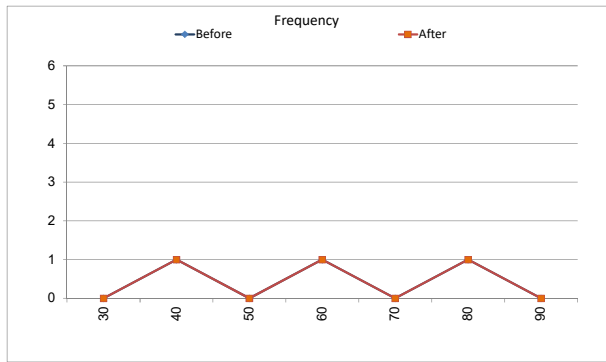
RMV 019: MA 07 SA 01, SA 02, SA 06
 Personal Property Manufactured Structures - South Columbia County

This analysis is comprised of personal property manufactured structures (PPMS) located throughout South Columbia County. The sales returned for this analysis did not provide a reliable indicator with which an accurate conclusion could be made. Therefore, no adjustment was applied to this population of accounts.

Performance History

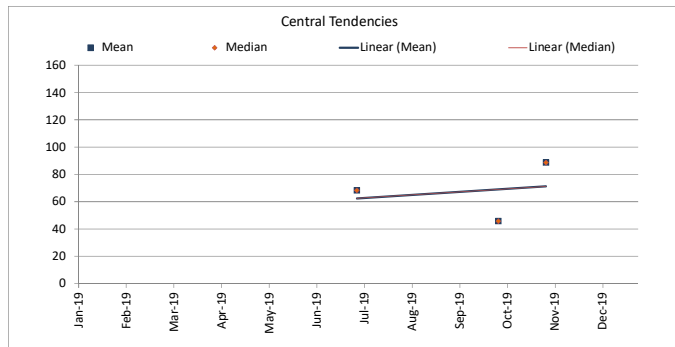
	2020	2019
COD	21.34	59.45
PRD	1.25	1.35

COLUMBIA County 2020 Ratio Study



	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190	Sales (Ratio)	Sales (After Ratio)
Median	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	67	67
AD	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	14.25	14.25
COD	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	21.34	21.34
Mean	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	67	67
SD	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	21.37	21.37
COV	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	32.08	32.08
Wtd. Mean	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	53	53
GeoMean	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	64	64
PRD	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1.25	1.25
95% Confidence	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	24.19	24.19

Number Of Sales: 3



Month	Mean	Median	Sales
Jul-19	68	68	1
Oct-19	46	46	1
Nov-19	89	89	1

Included Sales

MA	SA	NH	PRP	ST	CO CD	ACCT NO.	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RATIO
7	2	000	019	451	33	397	20,480	20,480	30,000	07/31/19	1	68
7	2	000	019	452	33	529	36,540	36,540	80,000	10/14/19	2	46
7	2	000	019	441	30	596	6,200	6,200	7,000	11/06/19	3	89

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	03	000	2020	0	Maintenance Area 3	019	07	04	000	2020	10	Maintenance Area 4
019	07	05	000	2020	10	Maintenance Area 5							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	20
Population - Number of Accounts	498
Sales as a percentage of the Population	4.02%

<i>Prior Year Population Values</i>	Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Land Rmv	0	0.00%	0	0.00%
OSD RMV	0	0.00%	0	0.00%
Improvement RMV	9,581,520	100.00%	9,868,966	100.00%
Farm Improvement RMV	0	0.00%	0	0.00%

Selected Ratio From Sales	97
Time Trend Adjustment	0

Before Ratio **97**

Overall Adjustment Factor	103
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	103
Farm Improvement Factor	100

After Ratio **100**

Explanation

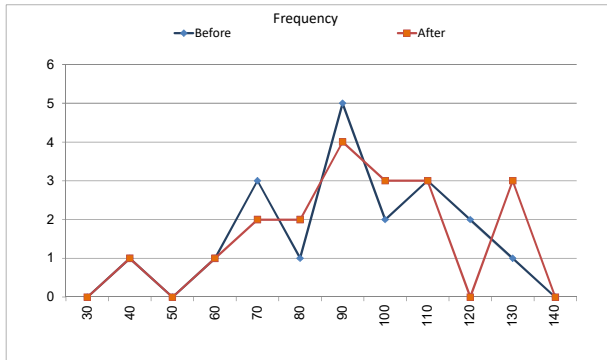
RMV 019: MA 07 SA 03, SA 04, SA 05
 Personal Property Manufactured Structures – North Columbia County

This analysis is comprised of personal property manufactured structures (PPMS) located throughout North Columbia County in the MA 07 General Areas of SA 03 (Vernonia), SA 04 (Rainier) and SA 05 (Clatskanie). The total population of North MA 07 is 498 and the percent of useable sales is 4.02%. Because there are indicators of low and high ratios, it was decided to use the Median of 97. The adjustment factor that is returned is 103 and has been applied accordingly.

Performance History

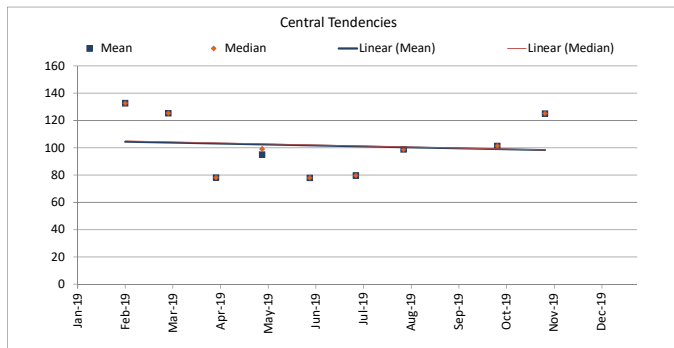
	2020	2019	2018	2017	2016
COD	22.08	24.78	24.83	19.74	-
PRD	1.07	1.07	0.97	0.95	-

COLUMBIA County 2020 Ratio Study



	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170
	0	0	1	0	1	3	1	5	2	3	2	1	0	0	0	0
	0	0	1	0	1	2	2	4	3	3	0	3	0	0	0	0
Median																
AD																
COD																
Mean														94	96	
SD														29.28	30.15	
COV														29.16	29.16	
Wtd. Mean																
GeoMean																
PRD														1.07	1.07	
95% Confidence														12.83	13.22	

Number Of Sales: 20



Month	Mean	Median	Sales
Jan-19	121	121	1
Feb-19	133	133	1
Mar-19	125	125	2
Apr-19	78	78	1
May-19	95	99	4
Jun-19	78	78	2
Jul-19	80	80	1
Aug-19	99	99	2
Oct-19	101	101	2
Nov-19	125	125	2
Dec-19	103	103	2

Included Sales

MA	SA	NH	PRP	ST	CO CD	ACCT NO.	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RATIO
06	5	000	019	452	30	2538	32,630	32,630	27,000	1/4/19	1	121
07	4	000	019	441	33	1784	11,280	11,280	8,500	2/7/19	2	133
07	4	000	019	441	30	1452	20,680	20,680	17,388	3/1/19	3	119
07	5	000	019	452	33	2538	32,630	32,630	24,750	3/4/19	4	132
07	5	000	019	451	30	436567	25,010	25,010	32,000	4/28/19	5	78
07	5	000	019	452	33	434644	25,310	25,310	24,850	5/1/19	6	102
07	5	000	019	452	33	429832	16,030	16,030	33,900	5/10/19	7	47
07	4	000	019	441	33	1937	6,740	6,740	7,000	5/13/19	8	96
07	5	000	019	441	33	2045	10,820	10,820	8,000	5/22/19	9	135
07	5	000	019	442	33	2531	25,840	25,840	35,000	6/1/19	10	74
07	5	000	019	442	33	2503	34,490	34,490	42,000	6/10/19	11	82
07	5	000	019	442	30	2074	11,910	11,910	14,950	7/5/19	12	80
07	4	000	019	452	30	440239	94,300	94,300	90,245	8/12/19	13	104
07	4	000	019	452	30	1810	23,710	23,710	25,500	8/16/19	14	93
07	4	000	019	442	30	1880	26,610	26,610	25,000	10/1/19	15	106
07	4	000	019	442	33	1818	19,260	19,260	20,000	10/15/19	16	96
07	5	000	019	452	33	2008	16,850	16,850	25,000	11/25/19	17	67
07	4	000	019	451	30	1820	12,790	12,790	7,000	11/26/19	18	183
07	4	000	019	442	33	440240	70,980	70,980	77,483	12/12/19	19	92
07	4	000	019	452	33	1426	22,840	22,840	20,000	12/23/19	20	114

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	27	000	2020	15	St. Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	15			
Population - Number of Accounts	123			
Sales as a percentage of the Population	12.20%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv	0	0	0.00%	0 0.00%
OSD RMV	0	0	0.00%	0 0.00%
Improvement RMV	5,375,120	5,375,120	100.00%	7,578,919 100.00%
Farm Improvement RMV	0	0	0.00%	0 0.00%
Selected Ratio From Sales	71			
Time Trend Adjustment	0			
Before Ratio	71			
Overall Adjustment Factor	141			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Improvement Adjustment Factor	141			
Farm Improvement Factor	100			
After Ratio	100			

Explanation

RMV 019: MA 07 SA 27

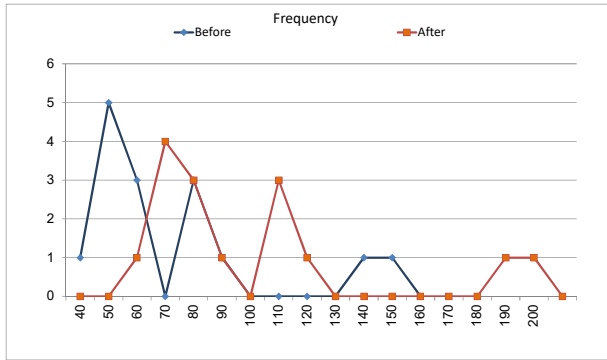
Personal Property Manufactured Structures - Crestwood Village, City of St. Helens

For this analysis, 15 sales were available for analysis. This sales array comprises 12.20% of the population for this classification of property. After review, the Mean of 71 was selected as the best indicator. Once applied, the Overall Trend Factor returned a ratio of 141.

Performance History

	2020	2019	2018	2017
COD	34.24	12.62	14.87	7.57
PRD	1.12	1.05	1.01	1.08

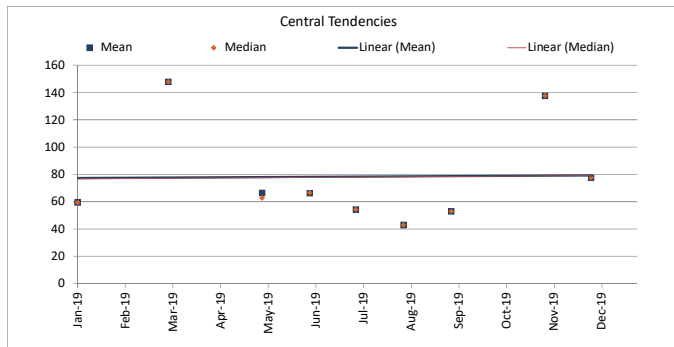
COLUMBIA County 2020 Ratio Study



40	1	0
50	5	0
60	3	1
70	0	4
80	3	3
90	1	1
100	0	0
110	0	3
120	0	1
130	0	0
140	1	0
150	1	0
160	0	0
170	0	0
180	0	0
190	0	1
200	0	1
210	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	60	84
AD	20.49	28.89
COD	34.24	34.24
Mean	71	100
SD	30.57	43.11
COV	42.90	42.90
Wtd. Mean	64	90
GeoMean	67	94
PRD	1.12	1.12
95% Confidence	15.47	21.82

Number Of Sales: 15



Month	Mean	Median	Sales
Jan-19	59	59	2
Mar-19	148	148	1
May-19	66	63	3
Jun-19	66	67	4
Jul-19	54	54	1
Aug-19	43	43	1
Sep-19	53	53	1
Nov-19	138	138	1
Dec-19	77	77	1

Included Sales

MA	SA	NH	PRP	ST	CO CD	ACCT NO.	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RATIO
07	27	000	019	442	33	1089	49,930	49,930	79,900	1/2/19	1	62
07	27	000	019	442	33	1050	34,080	34,080	60,500	1/10/19	2	56
07	27	000	019	442	30	1088	36,940	36,940	25,000	3/1/19	3	148
07	27	000	019	452	33	1192	43,610	43,610	85,000	5/16/19	4	51
07	27	000	019	452	33	1139	41,170	41,170	65,500	5/21/19	5	63
07	27	000	019	452	33	437267	83,560	83,560	97,924	5/31/19	6	85
07	27	000	019	452	30	1036	45,150	45,150	55,000	6/3/19	7	82
07	27	000	019	442	30	1129	36,020	36,020	72,500	6/8/19	8	50
07	27	000	019	442	30	1087	40,080	40,080	50,000	6/15/19	9	80
07	27	000	019	442	33	1088	36,940	36,940	69,900	6/28/19	10	53
07	27	000	019	442	33	1142	47,470	47,470	87,500	7/1/19	11	54
07	27	000	019	442	33	1143	35,130	35,130	82,000	8/5/19	12	43
07	27	000	019	442	33	1069	45,990	45,990	87,000	9/21/19	13	53
07	27	000	019	442	30	1115	34,390	34,390	25,000	11/30/19	14	138
07	27	000	019	442	33	1121	38,320	38,320	49,500	12/13/19	15	77

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	28	000	2020	0	Columbia City							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	42
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	0
OSD RMV	0
Improvement RMV	1,722,280
Farm Improvement RMV	0
Selected Ratio From Sales	71
Time Trend Adjustment	0
Before Ratio	71
Overall Adjustment Factor	141
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	141
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 019: MA 07 SA 28

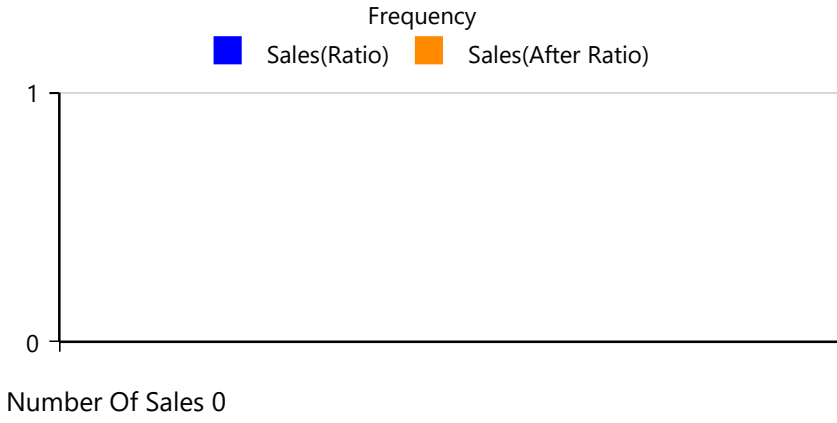
Personal Property Manufactured Structures – Columbia City Estates, City of Columbia City

No sales data was found for this small grouping of properties. Therefore, it was decided to use the conclusion from Study Area 27, Crestwood Village study located in the same maintenance area.

Performance History

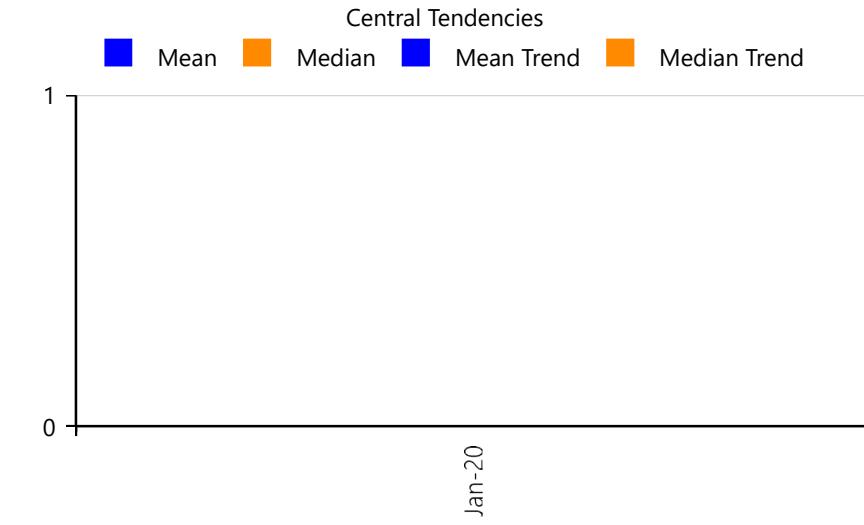
	2020	2019
COD	-	63.32
PRD	-	1.49

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	30	000	2020	12	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	12			
Population - Number of Accounts	145			
Sales as a percentage of the Population	8.28%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv	0	0	0.00%	0 0.00%
OSD RMV	0	0	0.00%	0 0.00%
Improvement RMV	9,167,780	100.00%		13,935,026 100.00%
Farm Improvement RMV	0	0	0.00%	0 0.00%
Selected Ratio From Sales	66			
Time Trend Adjustment	0			
Before Ratio	66			
Overall Adjustment Factor	152			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Improvement Adjustment Factor	152			
Farm Improvement Factor	100			
After Ratio	100			

Explanation

RMV 019: MA 07 SA 30

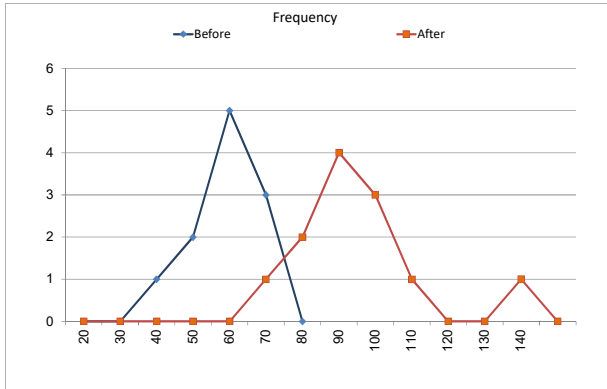
Personal Property Manufactured Structures – Springlake Park, City of Scappoose

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 sales data supports a large demand for these homes due to the unique nature and exclusive use of these properties. The Mean was selected (66) and applied to the population as a good and sufficient indicator of the current market. This selected ratio is further supported by the Median (65), Geo Mean (65) and the Weighted Mean (66).

Performance History

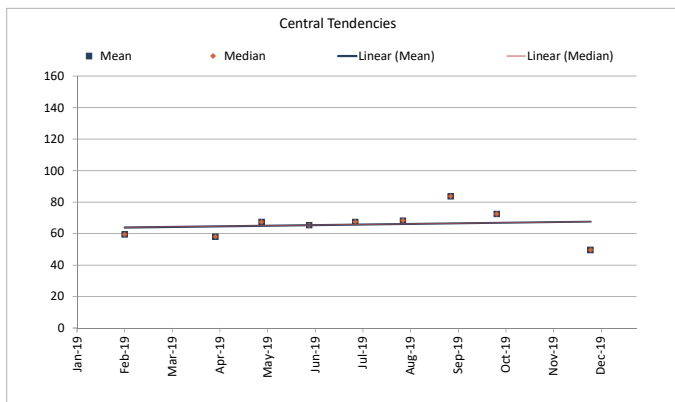
	2020	2019	2018	2017	2016
COD	11.82	12.44	9.63	19.59	16.00
PRD	1.01	1.01	0.00	1.10	1.05

COLUMBIA County 2020 Ratio Study



	20	30	40	50	60	70	80	90	100	110	120	130	140	150	Sales (Ratio)	Sales (After Ratio)
	0	0	1	2	5	3	0	1	0	0	0	0	0	0		
Median															65	98
AD															7.63	11.60
COD															11.82	11.82
Mean															66	100
SD															11.31	17.19
COV															17.14	17.14
Wtd. Mean															66	100
GeoMean															65	99
PRD															1.01	1.01
95% Confidence															6.40	9.73

Number Of Sales: 12



Month	Mean	Median	Sales
Feb-19	59	59	1
Apr-19	58	58	1
May-19	67	67	1
Jun-19	65	65	2
Jul-19	67	67	1
Aug-19	68	68	2
Sep-19	84	84	2
Oct-19	72	72	1
Dec-19	50	50	1

Included Sales

MA	SA	NH	PRP	ST	CO CD	ACCT NO.	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RATIO
07	30	000	019	462	33	30249	136,170	136,170	229,000	2/15/19	1	59
07	30	000	019	442	33	116	53,970	53,970	93,000	4/9/19	2	58
07	30	000	019	452	33	30423	92,890	92,890	138,000	5/31/19	3	67
07	30	000	019	442	33	131	61,960	61,960	94,749	6/11/19	4	65
07	30	000	019	462	33	429793	146,090	146,090	224,000	6/11/19	5	65
07	30	000	019	452	33	30243	123,290	123,290	183,000	7/1/19	6	67
07	30	000	019	463	33	432947	142,190	142,190	189,000	8/12/19	7	75
07	30	000	019	462	33	87	88,110	88,110	144,000	8/16/19	8	61
07	30	000	019	462	33	95	128,070	128,070	134,000	9/25/19	9	96
07	30	000	019	452	33	125	55,960	55,960	78,000	9/30/19	10	72
07	30	000	019	452	33	201	82,570	82,570	114,000	10/4/19	11	72
07	30	000	019	452	33	158	71,410	71,410	144,000	12/9/19	12	50

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	31	000	2020	0	Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	23
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	0
OSD RMV	0
Improvement RMV	1,010,940
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 019: MA 07 SA 31

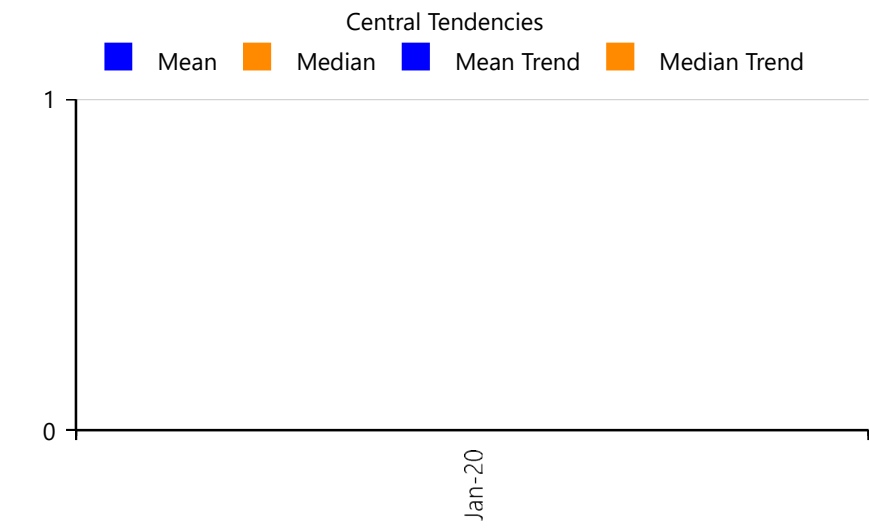
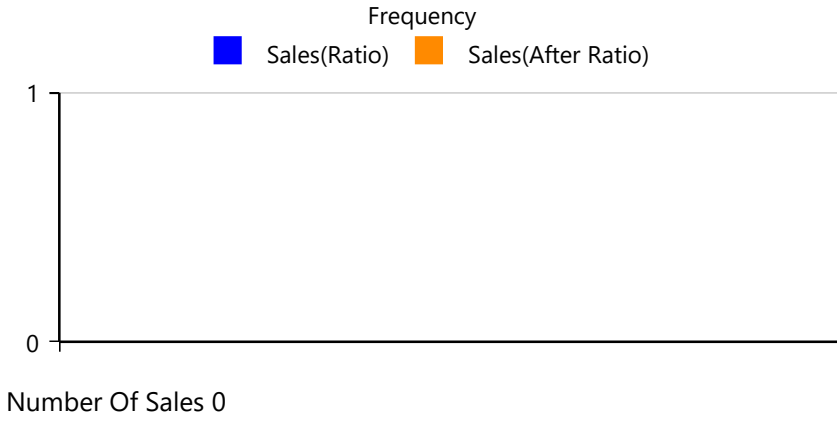
Personal Property Manufactured Structures – Crown Point, City of Scappoose

No sales data was found for this small grouping of properties. Therefore, due to the similar way these properties move within the market and the location of this manufactured home park, the conclusion from the South County (RMV 019) study was deemed appropriate and applied here.

Performance History

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
019	07	35	000	2020	2	Vernonia							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	2
Population - Number of Accounts	22
Sales as a percentage of the Population	9.09%
<i>Prior Year Population Values</i>	
Land Rmv	0
OSD RMV	0
Improvement RMV	237,430
Farm Improvement RMV	0
Selected Ratio From Sales	105
Time Trend Adjustment	0
Before Ratio	105
Overall Adjustment Factor	95
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	95
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 019: MA 07 SA 35

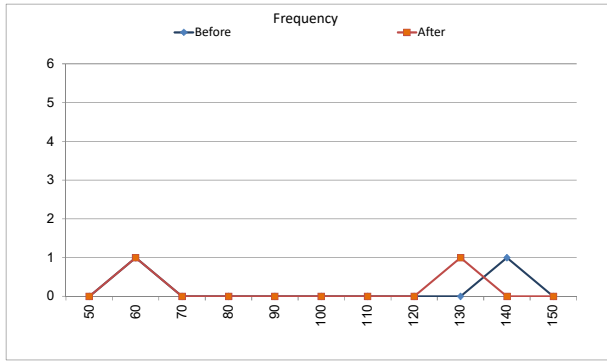
Personal Property Manufactured Structures – Riverside Meadows, City of Vernonia

The sales comprise 9.09% of the population for this classification of properties. The Median and Mean both returned indicators of 105. The Median was applied, resulting in an Overall Adjustment Factor of 95.

Performance History

	2020
COD	36.57
PRD	1.23

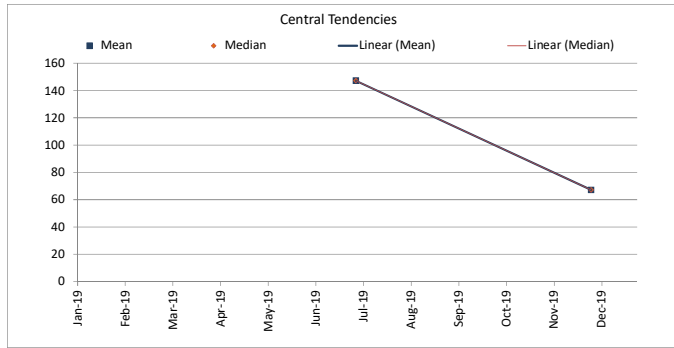
COLUMBIA County 2020 Ratio Study



	20	30	40	50	60	70	80	90	100	110	120	130	140	150	160	170	180	190
	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
Median																		
AD																		
COD																		
Mean																		
SD																		
COV																		
Wtd. Mean																		
GeoMean																		
PRD																		
95% Confidence																		

	Sales (Ratio)	Sales (After Ratio)
Median	105	100
AD	38.56	36.63
COD	36.57	36.57
Mean	105	100
SD	54.53	51.80
COV	51.71	51.71
Wtd. Mean	86	81
GeoMean	98	93
PRD	1.23	1.23
95% Confidence	75.57	71.79

Number Of Sales: 2



Month	Mean	Median	Sales
Jul-19	147	147	1
Dec-19	67	67	1

Included Sales

MA	SA	NH	PRP	ST	CO CD	ACCT NO.	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RATIO
06	35	000	019	442	30	2345	13,910	13,910	9,450	7/25/19	1	147
07	35	000	019	452	33	2342	20,140	20,140	30,000	12/13/19	2	67

RMV CLASS 111

*FLOATING HOMES,
BOAT HOUSES AND
COMBINATIONS*

Boathouses and Combinations/Floating Homes
located throughout the County

Year	RMV Class	MA	SA	Location	Count	RMV Total
2019	111	01	95	City of St. Helens - Combination/Floating Home	24	\$3,207,150
2019	111	01	97	City of St. Helens - Boathouse	21	\$531,100
2019	111	02	95	Scappoose - Combination/Floating Home	123	\$13,871,420
2019	111	02	97	Scappoose - Boathouse	36	\$1,523,320
2019	111	04	95	Rainier - Combination/Floating Home	2	\$20,020
2019	111	04	97	Rainier - Boathouse	5	\$76,650
2019	111	05	95	Clatskanie - Combination/Floating Home	2	\$120,420
2019	111	05	97	Clatskanie - Boathouse	48	\$1,021,390
2019	111	06	95	Warren & Rural St. Helens- Combination/Floating Home	3	\$374,650
2019	111	06	97	Warren & Rural St. Helens- Boathouse	30	\$762,840
					Boathouse Count	140
					Boathouse RMV	\$3,915,300
					Combination and/or Floating Property Count:	154
					Combination and/or Floating Property RMV:	\$ 17,593,660
					Total Floating Property Count:	294
					Total RMV:	\$21,508,960

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	01	95	000	2020		St. Helens	111	02	95	000	2020	3	Scappoose
111	06	95	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	3
Population - Number of Accounts	150
Sales as a percentage of the Population	2.00%
<i>Prior Year Population Values</i>	
Land Rmv	0.00
OSD RMV	0.00
Improvement RMV	17,453,220
Farm Improvement RMV	0.00
Selected Ratio From Sales	74
Time Trend Adjustment	0
Before Ratio	74
Overall Adjustment Factor	135
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	135
Farm Improvement Factor	100
After Ratio	100

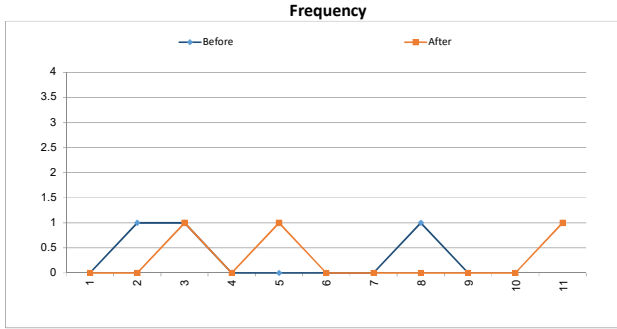
Explanation

RMV 111: SA 95 MA 01, MA 02 and MA 06
 Floating Homes and Combinations - St. Helens, Scappoose, Warren and Columbia City

This analysis is comprised of floating homes and combination homes, which are located along the Multnomah Channel in Scappoose (MA 02) and along the Columbia River (MA 01 and MA 06). This is a larger body of water and the moorages and marinas along it are highly sought after due to their proximity to Portland and peaceful "country" setting. The Mean of 74 was selected as the best indicator for this unique grouping of properties.

Performance History

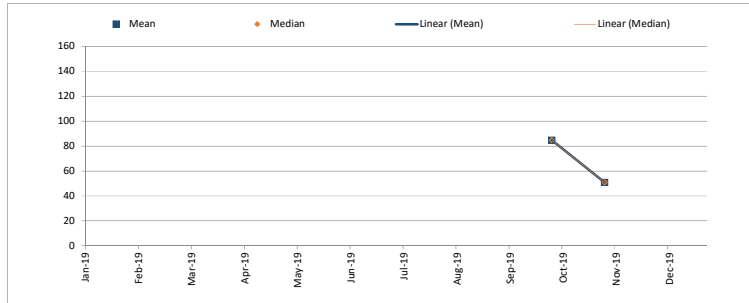
	2020	2019	2018
COD	31.19	11.33	11.00
PRD	1.09	0.99	1.02



Number Of Sales: 3

Interval	Before	After		Sales (Ratio)	Sales (After)
20	0	0			
30	0	0			
40	0	0			
50	1	0	Median	61	83
60	1	1	AD	19.15	25.85
70	0	0	COD	31.19	31.19
80	0	1			
90	0	0	Mean	74	99
100	0	0	SD	30.58	41.29
110	1	0	COV	41.59	41.59
120	0	0			
130	0	0	Wtd. Mean	68	91
140	0	1	GeoMean	70	94
150	0	0	PRD	1.09	1.09
160	0	0	95% Confide	34.61	46.72

Central Tendencies



Month	Mean	Median	Sales
Oct-19	85	85	2
Nov-19	51	51	1

Included Sale

MA	SA	NH	PRP CLS	ST CLS	CO CD	ACCOUNT NO.	TOTAL RMV	SALE PRICE	SALE DATE	#	RATIO
02	95	000	112	932	33	434382	132150	122000	10/6/2019	2	108
02	95	000	113	931	33	433249	229470	373788	10/16/2019	3	61
02	95	000	114	942	33	432485	78870	155000	11/8/2019	4	51

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	04	95	000	2020	0	Rainier	111	05	95	000	2020	0	Clatskanie

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	4
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	0.00
OSD RMV	0.00
Improvement RMV	140,440
Farm Improvement RMV	0.00
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

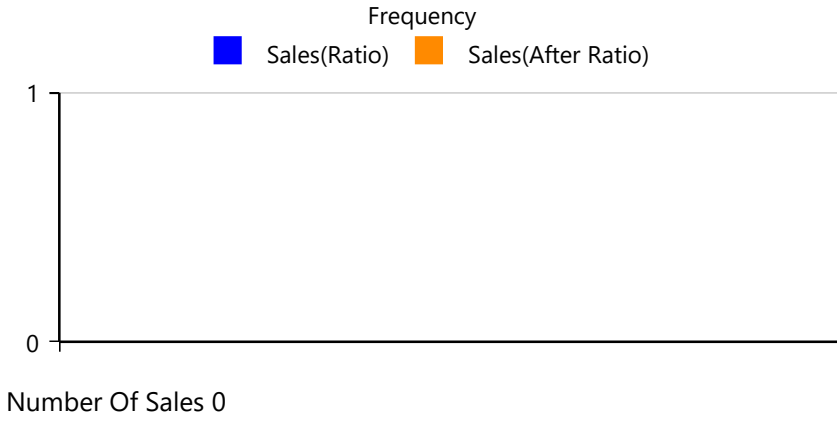
RMV 111: SA 95 MA 04 and MA 05
 Floating Homes and Combinations - Rainier and Clatskanie

This analysis is comprised of personal property Floating Homes and Combinations located along the Columbia River which are accessed by Highway 30. There is a population of four accounts located in MA 04 and MA 05, SA 95 and no sales were available to study. Therefore, it is recommend applying no adjustment at this time.

Performance History

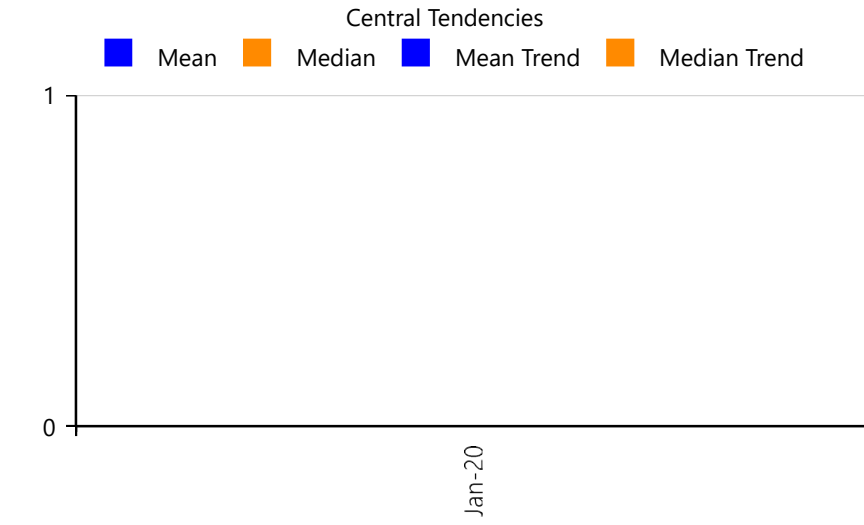
	2020	2019	2018
COD	-	-	-
PRD	-	-	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
111	01	97	000	2020	0	St. Helens	111	02	97	000	2020	0	Scappoose
111	04	97	000	2020	0	Rainier	111	05	97	000	2020	0	Clatskanie
111	06	97	000	2020	0	Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	140
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	0.00
OSD RMV	0.00
Improvement RMV	3,915,300
Farm Improvement RMV	0.00
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 111: SA 97

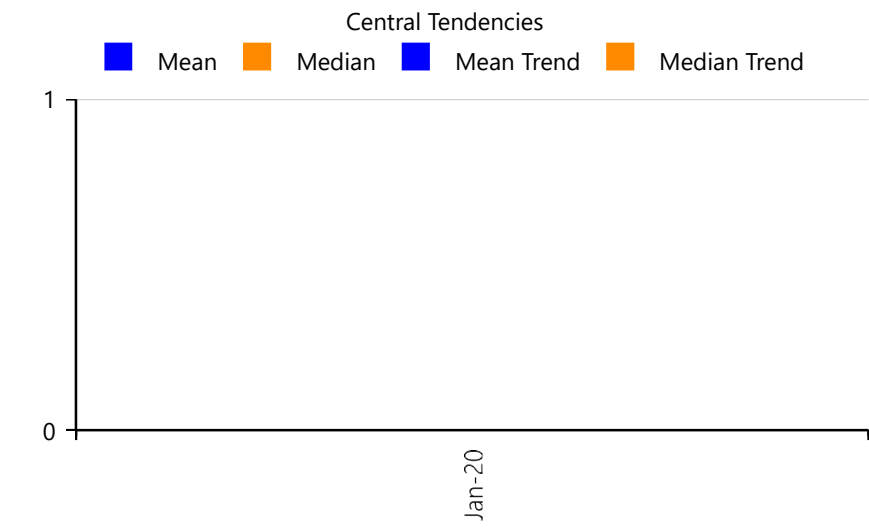
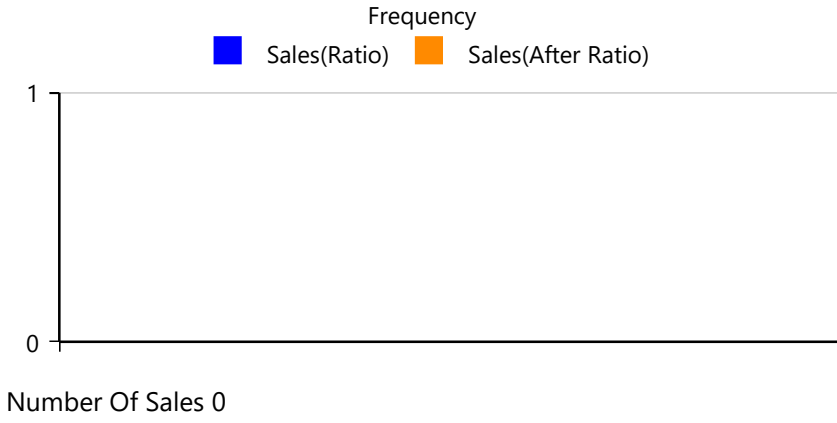
Boathouses - Countywide

The nature of how boathouses sell on the open market is quite unique and variable. Therefore, it was decided to perform a single countywide study to determine market trends. The sales returned only one sale for analysis which is an insufficient array to draw an adequate conclusion from. Therefore, it was decided to apply no adjustment to this grouping of Boathouses located throughout the county.

Performance History

	2020	2019	2018
COD	-	14.67	26.00
PRD	-	0.93	0.64

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

RMV CLASS 2XX

COMMERCIAL PROPERTY

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	01	00	000	2020		St Helens	200	02	00	000	2020		Scappoose
200	06	00	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	189
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	9,004,680
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	83
Time Trend Adjustment	0
Before Ratio	83
Overall Adjustment Factor	120
Land Adjustment Factor	120
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 200: MA 01, MA 02 and MA 06; Study Area 00

Unimproved land – Commercial, South County (St. Helens, Warren and Scappoose)

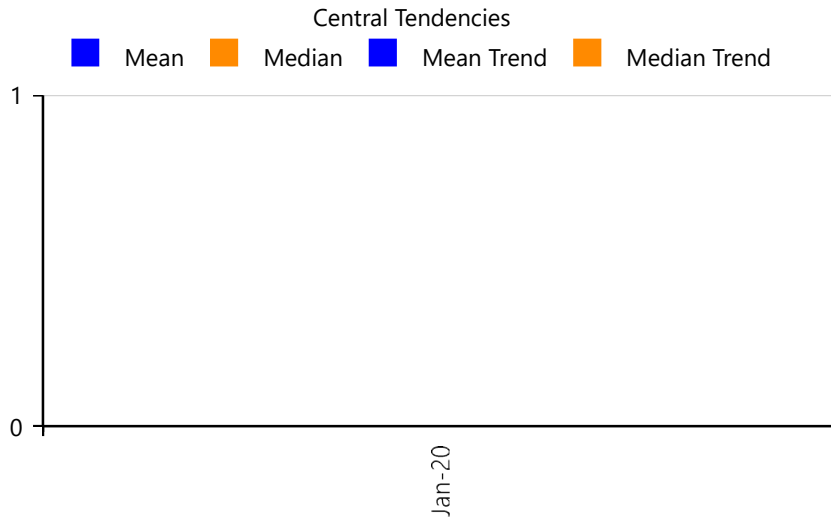
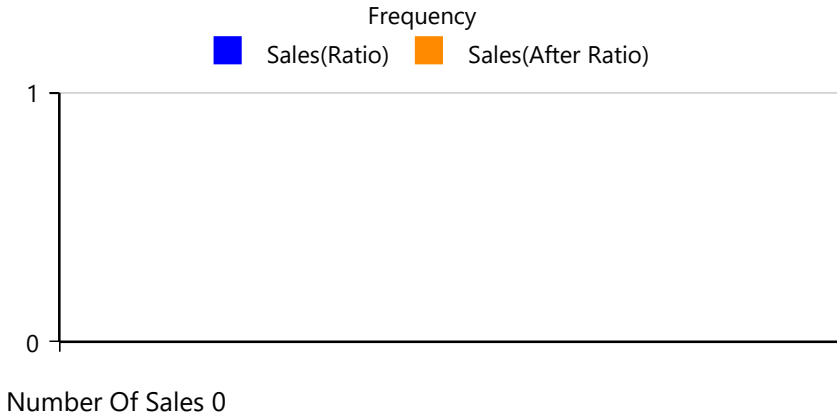
Having no sales returned to analyze for this grouping un-improved commercial properties located in St. Helens, Scappoose and Warren, it was decided to apply the Selected Ratio (83) from the RMV Class 201 study located in the same area (South County, SA 00).

Note: Commercial properties located throughout the Columbia County will be undergoing further review and will likely have a reappraisal performed for the 2021 ratio year.

Performance History

	2020	2019	2018	2017	2016
COD	-	19.62	9.09	26.47	118.47
PRD	-	1.37	1.05	1.11	1.58

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
201	01	00	000	2020	2	St Helens	201	02	00	000	2020	1	Scappoose
201	06	00	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	3
Population - Number of Accounts	442
Sales as a percentage of the Population	0.68%
<i>Prior Year Population Values</i>	
Land Rmv	48,125,610
OSD RMV	0
Improvement RMV	90,354,505
Farm Improvement RMV	186,830
Selected Ratio From Sales	83
Time Trend Adjustment	0
Before Ratio	83
Overall Adjustment Factor	120
Land Adjustment Factor	120
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 201: MA 01, MA 02 and MA 06; Study Area 00

Improved land – Commercial, South County (St. Helens, Warren and Scappoose)

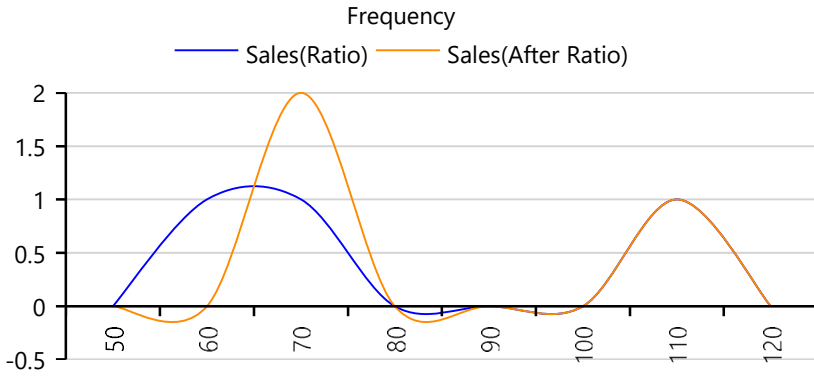
Even though three sales are available for this analysis, they have been deemed good indicators of how the market is moving within improved commercial property located in the general areas of St. Helens, Warren and Scappoose. Therefore, the Mean of 83 was selected and applied to the population. This returned an Overall Adjustment Factor of 120 which was then applied to the land only. No time adjustment was applied.

Note: Commercial properties located throughout the Columbia County will be undergoing further review and will likely have a reappraisal performed for the next 2021 ratio year.

Performance History

	2020	2019	2018	2017	2016
COD	21.13	22.15	15.58	22.85	25.63
PRD	1.01	0.94	1.00	1.12	0.93

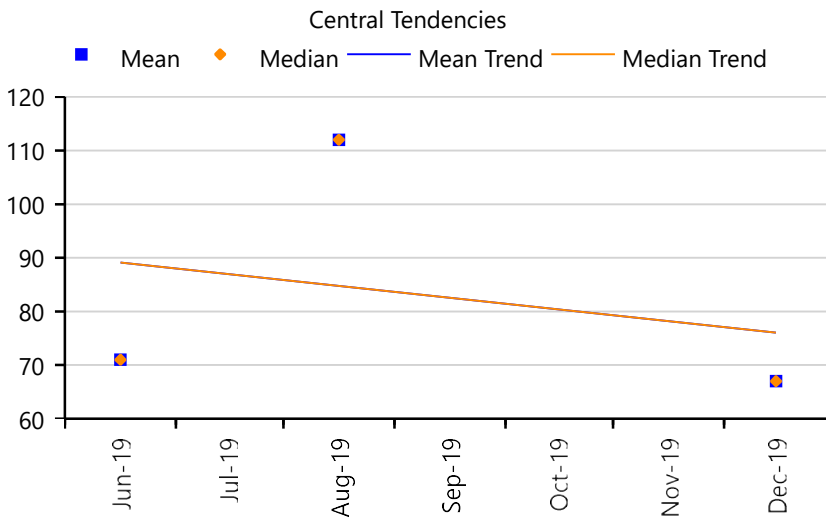
COLUMBIA County 2020 Ratio Study



50	0	0
60	1	0
70	1	2
80	0	0
90	0	0
100	0	0
110	1	1
120	0	0

	Sales (Ratio)	Sales (After Ratio)
Median	71	78
AD	15.00	15.33
COD	21.13	19.66
Mean	83	88
SD	24.91	24.58
COV	29.89	27.93
Wtd Mean	82	88
GeoMean	81	86
PRD	1.01	1.01
95% Confidence	28.18	27.81

Number Of Sales 3



Month	Mean	Median	Sales
Jun-19	71	71	1
Aug-19	112	112	1
Dec-19	67	67	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	201	526	30	4N1W04B D 08500	2019-10939	0.13	52,670	158,160	210,830	315,000	Dec-19	1	67
02	00	000	201	576	30	3N2W12BA 00200	2019-5155	0.54	163,650	168,740	332,390	470,000	Jun-19	2	71
01	00	000	201	579	30	4N1W04C A 00900	2019-7078	0.19	75,490	316,540	392,030	350,000	Aug-19	3	112

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	03	00	000	2020		Vernonia	200	04	00	000	2020		Rainier
200	05	00	000	2020		Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	226
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	3,397,177
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	86
Time Trend Adjustment	0
Before Ratio	86
Overall Adjustment Factor	116
Land Adjustment Factor	116
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 200: MA 03, MA 04 and MA 05; Study Area 00
 Unimproved land – Commercial, North County (Vernonia, Rainier and Clatskanie)

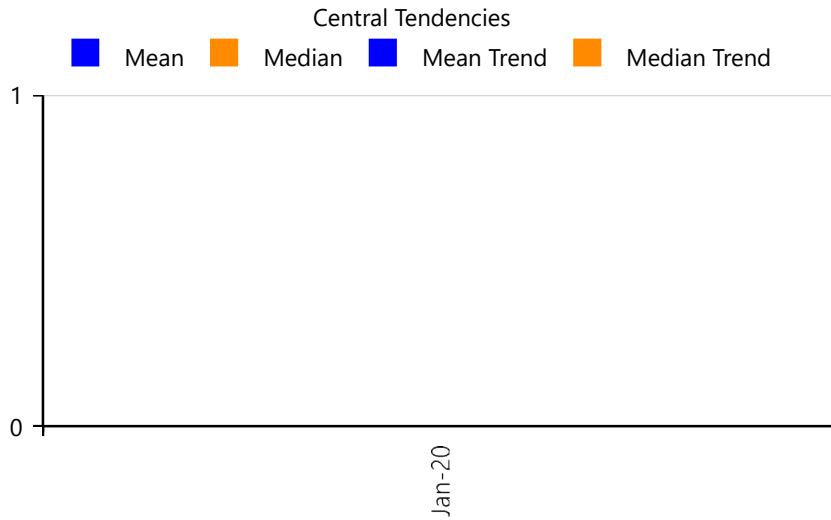
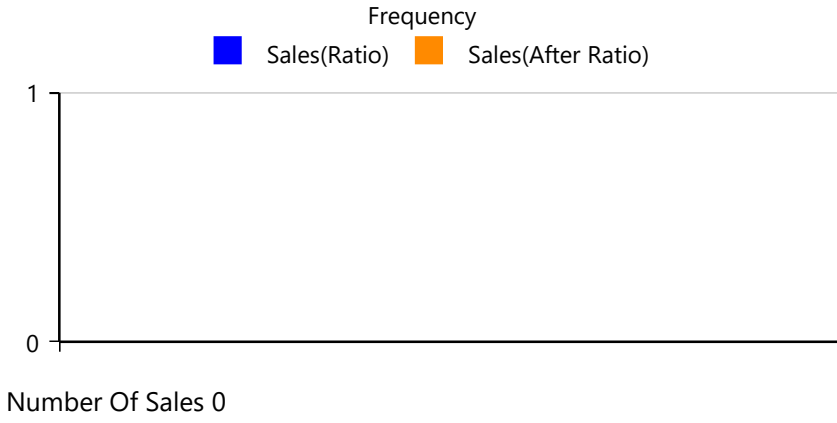
With having no sales available for this analysis of Commercial unimproved properties, it was decided to use the Selected Ratio of 86 from the conclusion of the RMV 201 study located in North County (SA 00).

Note: Commercial properties located throughout the Columbia County will be undergoing further review and will likely have a reappraisal performed for the 2021 ratio year.

Performance History

	2020	2018	2017	2016
COD	-	0.00	0.00	118.47
PRD	-	1.00	1.00	1.58

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
201	03	00	000	2020	1	Vernonia	201	04	00	000	2020	1	Rainier
201	05	00	000	2020	1	Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	3
Population - Number of Accounts	345
Sales as a percentage of the Population	0.87%
<i>Prior Year Population Values</i>	
Land Rmv	14,396,430
OSD RMV	118,950
Improvement RMV	35,605,552
Farm Improvement RMV	100,307
Selected Ratio From Sales	86
Time Trend Adjustment	0
Before Ratio	86
Overall Adjustment Factor	116
Land Adjustment Factor	116
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 201: MA 03, MA 04 and MA 05; Study Area 00

Improved land – Commercial, North County (Vernonia, Rainier and Clatskanie)

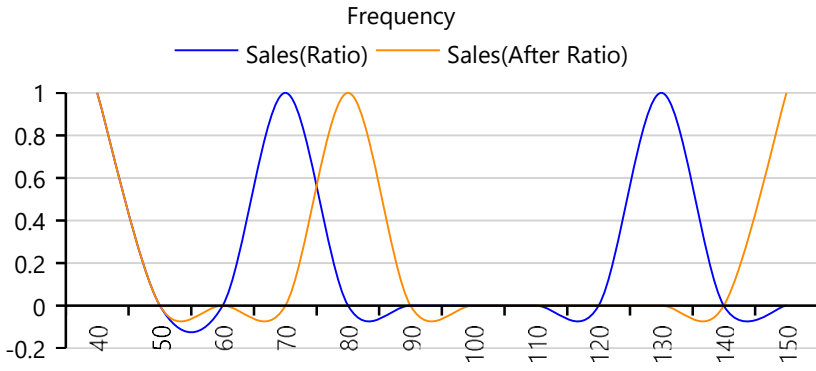
The sales array returned 3 good and appropriate sales for this analysis of improved commercial accounts located in North County SA 00. The Mean was selected and applied accordingly. The result is an adjustment of 116. This was applied to the land only with no adjustment for time.

Note: Commercial properties located throughout the Columbia County will be undergoing further review and will likely have a reappraisal performed for the 2021 ratio year.

Performance History

	2020	2019	2018	2017	2016
COD	36.32	16.55	26.27	25.29	25.63
PRD	1.09	1.27	0.92	1.07	0.93

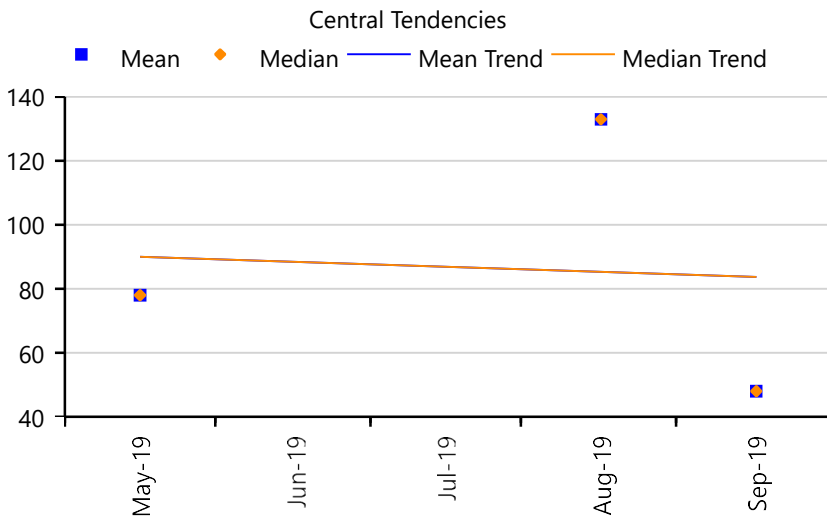
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
40	1	1
50	0	0
60	0	0
70	1	0
80	0	1
90	0	0
100	0	0
110	0	0
120	0	0
130	1	0
140	0	0
150	0	1

	Sales (Ratio)	Sales (After Ratio)
Median	78	84
AD	28.33	35.00
COD	36.32	41.67
Mean	86	96
SD	43.11	53.46
COV	49.93	55.89
Wtd Mean	79	87
GeoMean	79	86
PRD	1.09	1.10
95% Confidence	48.78	60.50

Number Of Sales 3



Month	Mean	Median	Sales
May-19	78	78	1
Aug-19	133	133	1
Sep-19	48	48	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
03	00	000	201	579	33	4N4W04BC 06500	2019-7504	0.07	15,260	81,030	96,290	200,000	Sep-19	1	48
05	00	000	201	579	30	8N4W27D C 01700	2019-4270	0.51	107,480	86,470	193,950	250,000	May-19	2	78
04	00	000	201		30	7N2W17BA 00900	2019-7083	1.36	158,400	1,500	159,900	120,000	Aug-19	3	133

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	01	72	000	2020		St Helens/Col City	200	02	71	000	2020		Scappoose
200	02	72	000	2020		Scappoose	200	06	72	000	2020		Rural St Helens
201	01	71	000	2020	1	St Helens/Col City	201	01	72	000	2020		St Helens/Col City
201	02	71	000	2020	1	Scappoose	201	02	72	000	2020	2	Scappoose
201	06	72	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	4
Population - Number of Accounts	187
Sales as a percentage of the Population	2.14%
<i>Prior Year Population Values</i>	
Land Rmv	70,241,260
OSD RMV	30,500
Improvement RMV	110,178,629
Farm Improvement RMV	0
	Pre-Trend Brkdwn
	Post Trend Values
	Post Trend Brkdwn
	38.93%
	87,801,575
	44.34%
	0.02%
	30,500
	0.02%
	61.06%
	110,178,629
	55.64%
	0.00%
	0
	0.00%
Selected Ratio From Sales	80
Time Trend Adjustment	0
Before Ratio	80
Overall Adjustment Factor	125
Land Adjustment Factor	125
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 200 and RMV 201: MA 01, MA 02 and MA 06; Study Area 71 and Study Area 72
 Unimproved and Improved land– Commercial, South County (St. Helens, Warren and Scappoose)

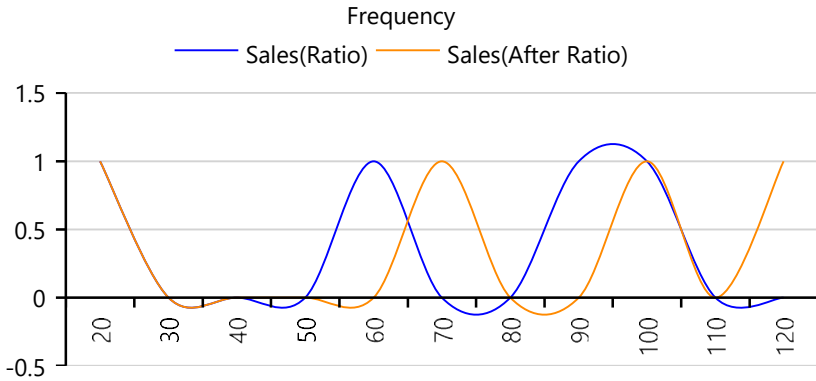
The sales array returned a percentage of 2.14% for this study area of commercial properties along the highway with or without access to a highway light. The Median of 80 was selected as the best indicator for this grouping and applied here. No adjustment to the improvements were made and a time adjustment was not applied.

Note: Commercial properties located throughout the Columbia County will be undergoing further review and will likely have a reappraisal performed for the 2021 ratio year.

Performance History

	2020	2019	2018	2017	2016
COD	30.50	-	-	-	-
PRD	1.36	-	-	-	-

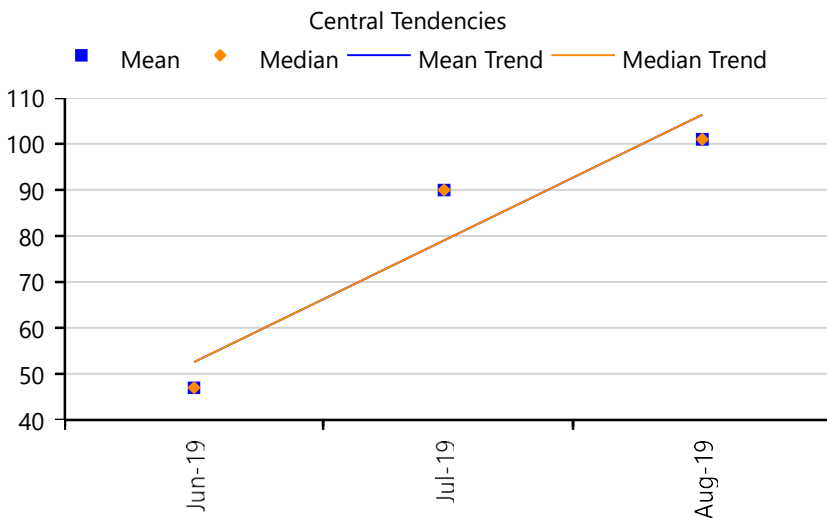
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
20	1	1
30	0	0
40	0	0
50	0	0
60	1	0
70	0	1
80	0	0
90	1	0
100	1	1
110	0	0
120	0	1

	Sales (Ratio)	Sales (After Ratio)
Median	80	93
AD	24.25	31.75
COD	30.50	34.14
Mean	71	84
SD	33.57	42.30
COV	47.12	50.50
Wtd Mean	52	61
GeoMean	63	73
PRD	1.36	1.38
95% Confidence	32.90	41.45

Number Of Sales 4



Month	Mean	Median	Sales
Jun-19	47	47	2
Jul-19	90	90	1
Aug-19	101	101	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
02	72	000	201	582	30	3N2W13B00100	2019-4724	0.60	350,220	414,550	764,770	3,100,000	Jun-19	1	25
01	71	000	201	550	30	4N1W08A A 01100	2019-4461	0.80	468,980	490,620	959,600	1,400,000	Jun-19	2	69
02	72	000	201	599	33	3N2W13B00200	2019-5695	1.76	553,650	96,270	649,920	725,000	Jul-19	3	90
02	71	000	201		33	3N2W13A C 03500	2019-6989	1.92	607,630	153,420	761,050	750,000	Aug-19	4	101

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	04	71	000	2020	1	Rainier	200	04	72	000	2020		Rainier
200	05	72	000	2020		Clatskanie	201	04	71	000	2020	2	Rainier
201	04	72	000	2020	1	Rainier	201	05	71	000	2020		Clatskanie
201	05	72	000	2020		Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	4
Population - Number of Accounts	128
Sales as a percentage of the Population	3.13%
<i>Prior Year Population Values</i>	
Land Rmv	14,941,029
OSD RMV	0
Improvement RMV	26,822,980
Farm Improvement RMV	29,510
	Pre-Trend Brkdwn
	35.75%
	Post Trend Values
	16,584,542
	Post Trend Brkdwn
	38.18%
	0.00%
	0
	61.75%
	0.07%
	29,510
Selected Ratio From Sales	90
Time Trend Adjustment	0
Before Ratio	90
Overall Adjustment Factor	111
Land Adjustment Factor	111
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 200 and RMV 201: MA 03, MA 04 and MA 05; Study Areas 71 & 72
 Unimproved and Improved land– Commercial, North County (Vernonia, Rainier and Clatskanie)

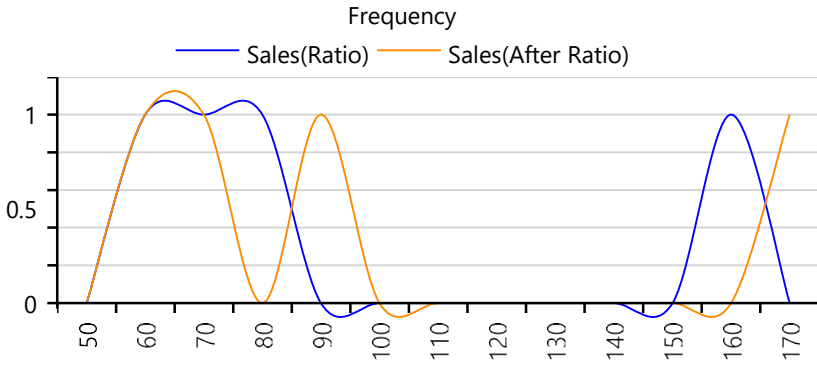
For this analysis of commercial properties located along the highway that may or may not have access to a highway light, the sales percent is 3.13%. This is deemed an adequate percentage for this study. Therefore the Geometric Mean of 90 has been applied. The Overall Adjustment factor that is returned is 111 which has been applied to the land only. For this study, no time adjustment has been applied to the sales array.

Note: Commercial properties located throughout the Columbia County will be undergoing further review and will likely have a reappraisal performed for the 2021 ratio year.

Performance History

	2020	2019	2018	2017	2016
COD	35.48	16.55	-	-	-
PRD	1.09	1.27	-	-	-

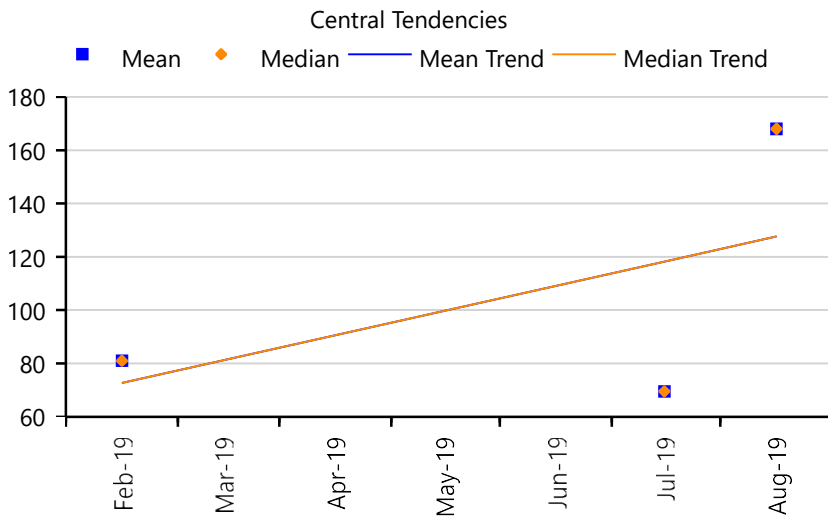
COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
50	0	0
60	1	1
70	1	1
80	1	0
90	0	1
100	0	0
110	0	0
120	0	0
130	0	0
140	0	0
150	0	0
160	1	0
170	0	1

	Sales (Ratio)	Sales (After Ratio)
Median	78	85
AD	27.50	30.00
COD	35.48	35.50
Mean	97	103
SD	47.78	49.56
COV	49.26	48.12
Wtd Mean	89	95
GeoMean	90	96
PRD	1.09	1.09
95% Confidence	46.83	48.57

Number Of Sales 4



Month	Mean	Median	Sales
Feb-19	81	81	1
Jul-19	70	70	2
Aug-19	168	168	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
04	71	000	201	585	30	7N2W17BA 00608	2019-6080	2.14	244,800	720,540	965,340	1,487,500	Jul-19	1	65
04	72	000	201	574	33	7N2W16D B 05700	2019-5825	0.30	84,600	67,420	152,020	205,000	Jul-19	2	74
04	71	000	200		30	7N2W17BB 00100	2019-936	20.92	1,057,620	0	1,057,620	1,300,000	Feb-19	3	81
04	71	000	201	587	30	7N2W17B D 01603	2019-7013	1.44	488,150	559,890	1,048,040	625,000	Aug-19	4	168

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	01	73	000	2020	1	St Helens/Col City	200	02	73	000	2020		Scappoose
201	01	73	000	2020		St Helens/Col City	201	02	73	000	2020		Scappoose
201	06	73	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	1
Population - Number of Accounts	68
Sales as a percentage of the Population	1.47%
<i>Prior Year Population Values</i>	
Land Rmv	16,114,130
OSD RMV	0
Improvement RMV	15,182,450
Farm Improvement RMV	0
Selected Ratio From Sales	80
Time Trend Adjustment	0
Before Ratio	80
Overall Adjustment Factor	125
Land Adjustment Factor	125
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 200 and RMV 201: MA 01, MA 02 and MA 06; Study Area 73
 Unimproved and Improved land – Commercial, South County (St. Helens, Warren and Scappoose)

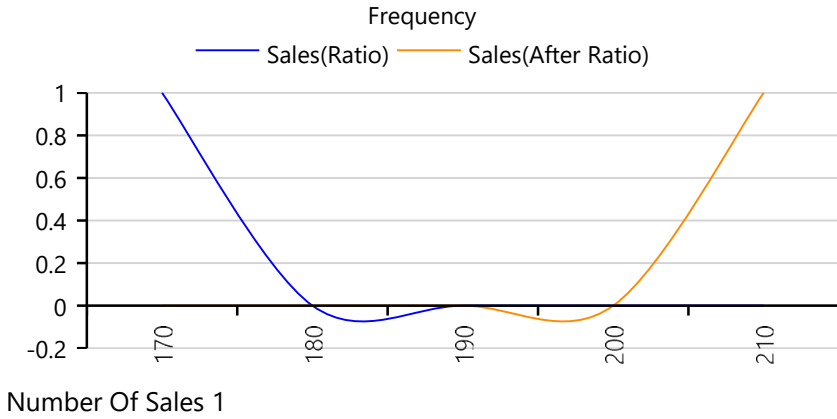
The single sale returned for this analysis did not portray an adequate representation of the current market for this grouping of properties. Therefore, it is recommended to apply the selected ratio of 80 from the Commercial South SA 71 and 72 report to this classification of properties.

Note: Commercial properties located throughout the Columbia County will be undergoing further review and will likely have a reappraisal performed for the 2021 ratio year.

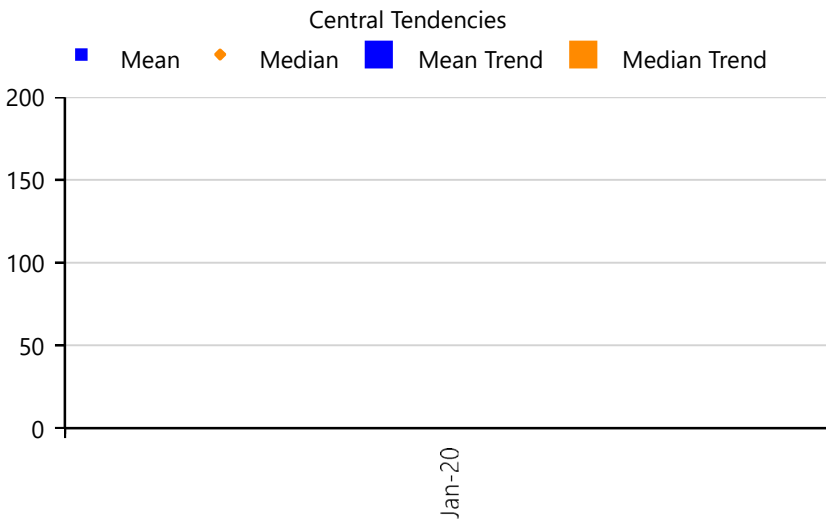
Performance History

	2020	2019	2018	2017	2016
COD	-	-	-	-	-
PRD	1.00	-	-	-	-

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
170	1	0
180	0	0
190	0	0
200	0	0
210	0	1
Median	175	219
AD		
COD		
Mean	175	219
SD	1.00	1.00
COV	.57	.46
Wtd Mean	175	219
GeoMean	175	219
PRD	1.00	1.00
95% Confidence	1.96	1.96



Month	Mean	Median	Sales
May-19	175	175	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	73	000	200		30	4N1W08A D 01300	2019-3837	0.97	297,950	0	297,950	170,000	May-19	1	175

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
200	03	73	000	2020		Vernonia	200	04	73	000	2020		Rainier
201	03	73	000	2020		Vernonia							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	15
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	1,972,200
OSD RMV	0
Improvement RMV	1,182,370
Farm Improvement RMV	0
Selected Ratio From Sales	90
Time Trend Adjustment	0
Before Ratio	90
Overall Adjustment Factor	111
Land Adjustment Factor	111
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 200 and RMV 201: MA 03, MA 04 and MA 05; Study Area 73

Unimproved and Improved land – Commercial, North County (Vernonia, Rainier and Clatskanie)

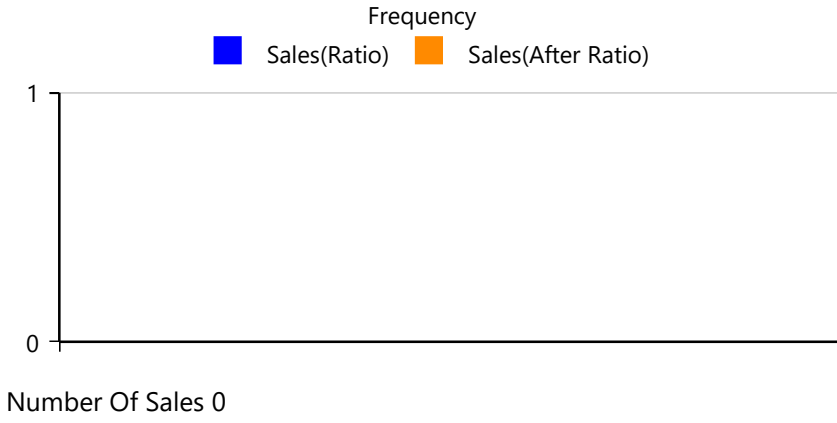
With having no sales data available for this classification of commercial properties, it was decided to apply the adjustment from the Commercial North SA 71 and SA 72 analysis here (Selected ratio of 90).

Note: Commercial properties located throughout the Columbia County will be undergoing further review and will likely have a reappraisal performed for the 2021 ratio year.

Performance History

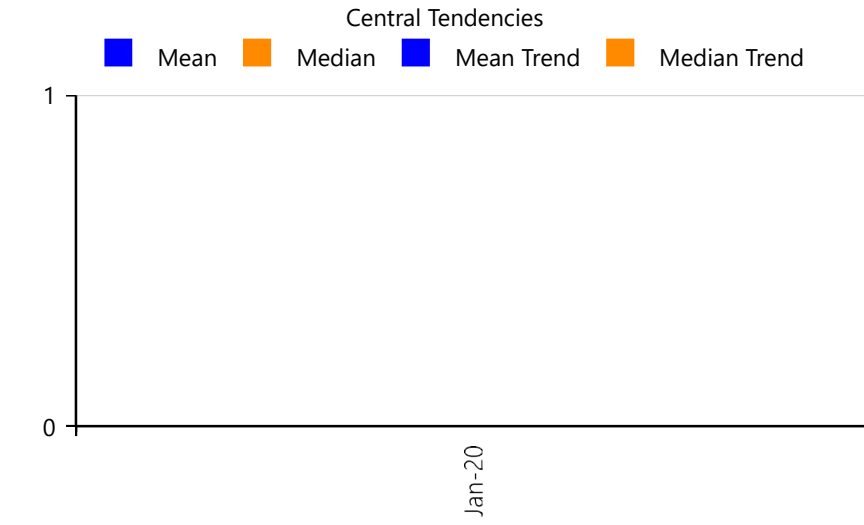
	2020	2019	2018	2017	2016
COD	-	-	-	-	-
PRD	-	-	-	-	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
207	01	00	000	2020		St Helens	207	02	00	000	2020		Scappoose
207	03	00	000	2020		Vernonia	207	04	00	000	2020	1	Rainier
207	05	00	000	2020	1	Clatskanie	207	06	00	000	2020	1	Rural St Helens

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	3
Population - Number of Accounts	34
Sales as a percentage of the Population	8.82%
<i>Prior Year Population Values</i>	
Land Rmv	16,612,080
OSD RMV	0
Improvement RMV	28,330,670
Farm Improvement RMV	61,390
	Pre-Trend Brkdwn
	36.91%
	0.00%
	62.95%
	0.14%
	Post Trend Values
	16,612,080
	0
	28,330,670
	61,390
	Post Trend Brkdwn
	36.91%
	0.00%
	62.95%
	0.14%
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 207

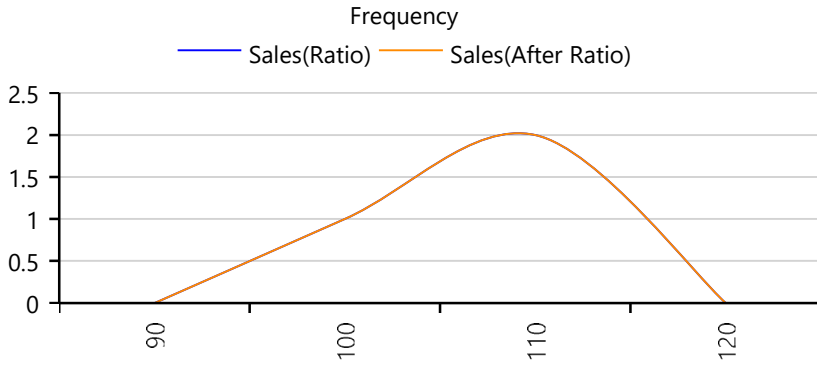
Improved land – Manufactured Home Parks, Countywide

An analysis of this RMV classification has not been performed because this property type is appraised annually based on income. Because of this approach, no adjustment has been applied.

Performance History

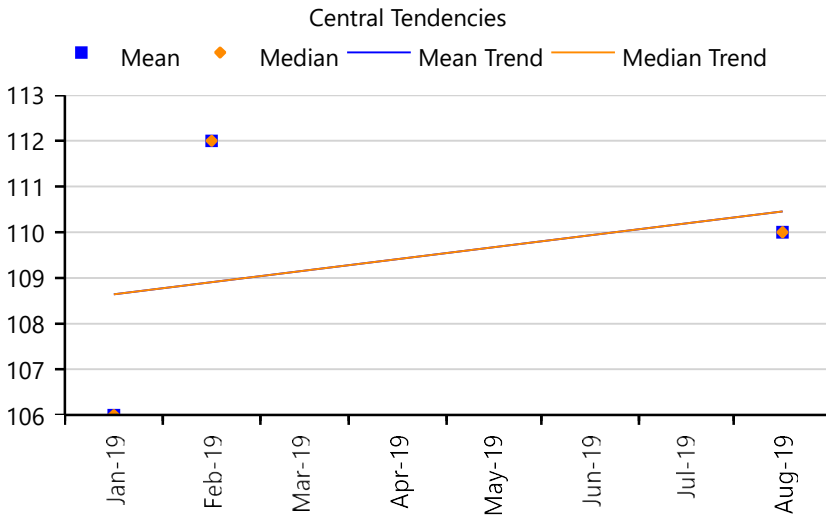
	2020	2018
COD	1.82	0.00
PRD	1.00	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
Median	110	110
AD	2.00	2.00
COD	1.82	1.82
Mean	109	109
SD	3.06	3.06
COV	2.79	2.79
Wtd Mean	109	109
GeoMean	109	109
PRD	1.00	1.00
95% Confidence	3.46	3.46

Number Of Sales 3



Month	Mean	Median	Sales
Jan-19	106	106	1
Feb-19	112	112	1
Aug-19	110	110	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
06	00	000	207	592	33	4N1W19C0 01200	2019-295	8.78	569,960	967,000	1,536,960	1,450,000	Jan-19	1	106
04	00	000	207	592	33	5N1W07A0 00807	2019-6785	1.94	60,000	133,000	193,000	175,000	Aug-19	2	110
05	00	000	207	592	33	7N4W08D D 00900	2019-1105	9.10	585,000	1,314,000	1,899,000	1,700,000	Feb-19	3	112

RMV CLASS 3XX

INDUSTRIAL PROPERTY

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
008	01	00	000	2020		St Helens	008	01	90	000	2020		St Helens/Col City
008	02	00	000	2020		Scappoose	008	02	90	000	2020		Scappoose
008	04	00	000	2020		Rainier	008	05	00	000	2020		Clatskanie
008	06	90	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0			
Population - Number of Accounts	42			
Sales as a percentage of the Population	0.00%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv	0	0	0.00%	0 0.00%
OSD RMV	0	0	0.00%	0 0.00%
Improvement RMV	249,545,660	249,545,660	100.00%	249,545,660 100.00%
Farm Improvement RMV	0	0	0.00%	0 0.00%
Selected Ratio From Sales	100			
Time Trend Adjustment	0			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Improvement Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Explanation

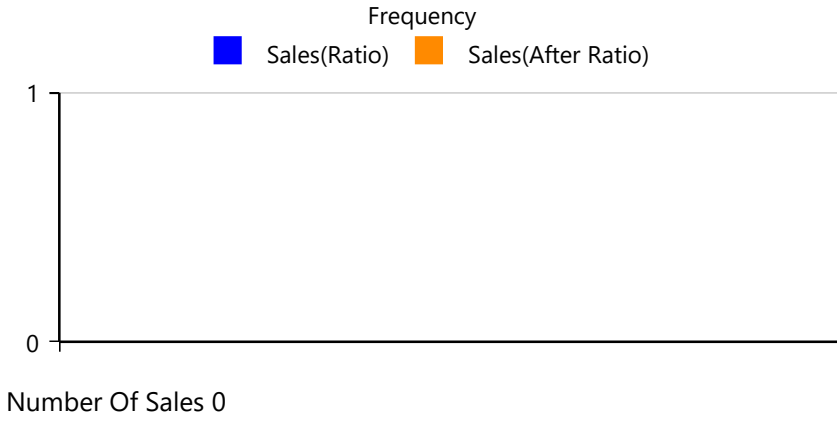
RMV 008: MA 01 SA 00; MA 02 SA 00; MA 04 SA 00; MA 05 SA 00; MA 06 SA 00
Machinery and Equipment – Industrial, Countywide

This grouping will not have an adjustment applied as they are machinery and equipment accounts that are valued through an State IPR and County RPR reporting process.

Performance History

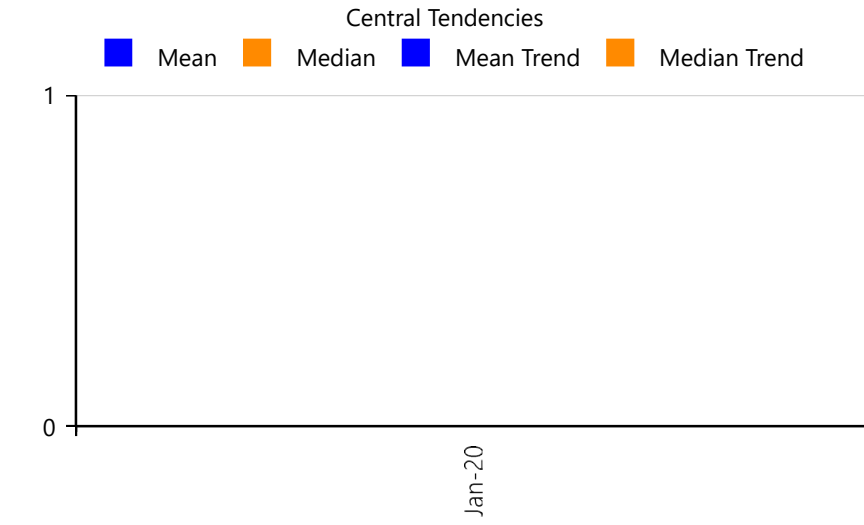
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
300	01	00	000	2020		St Helens	300	02	00	000	2020		Scappoose
300	02	74	000	2020		Scappoose	300	03	00	000	2020		Vernonia
300	04	00	000	2020		Rainier	300	05	00	000	2020		Clatskanie
300	06	00	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0			
Population - Number of Accounts	107			
Sales as a percentage of the Population	0.00%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		31,370,230	100.00%	31,370,230 100.00%
OSD RMV		0	0.00%	0 0.00%
Improvement RMV		0	0.00%	0 0.00%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		100		
Time Trend Adjustment		0		
Before Ratio		100		
Overall Adjustment Factor		100		
Land Adjustment Factor		100		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		100		
Farm Improvement Factor		100		
After Ratio		100		

Explanation

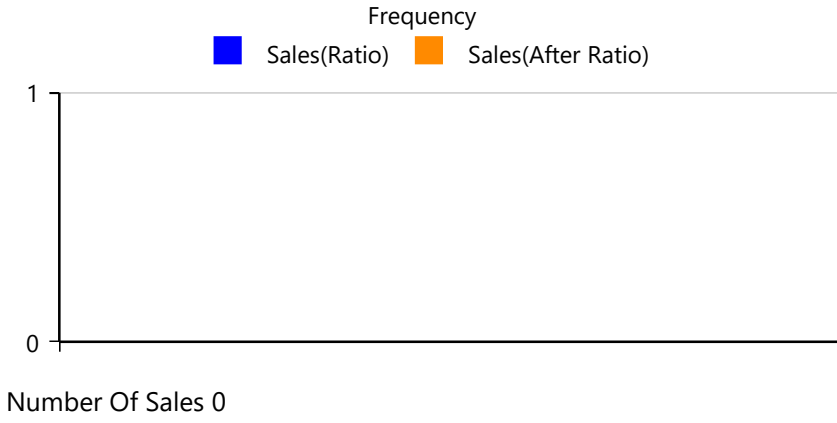
RMV 300: MA 01 SA 00; MA 02 SA 00 and SA 74; MA 03 SA 00; MA 04 SA 00; MA 05 SA 00; MA 06 SA 00
 Unimproved land – Industrial, Countywide

This study has no usable sales data available for this analysis of industrial unimproved land located throughout the County. Because of this, it was decided to apply 100 as the Selected Ratio with no adjustment for time.

Performance History

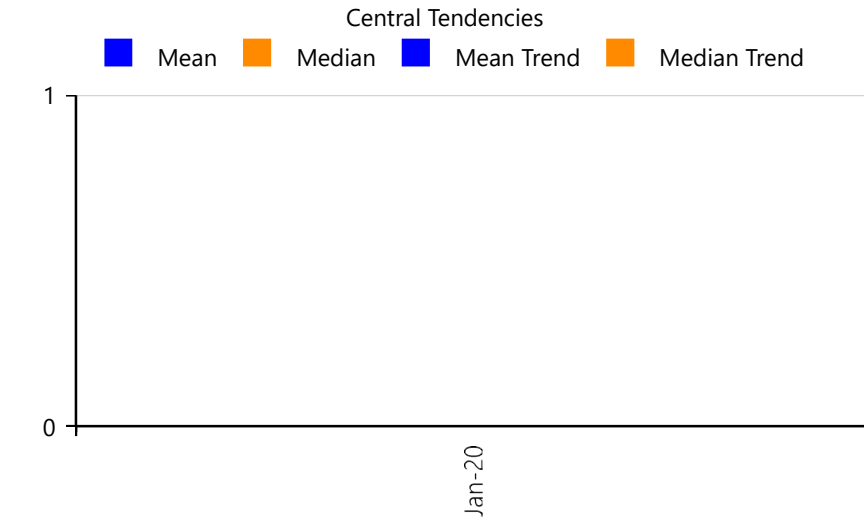
	2020	2018	2017	2016
COD	-	0.00	0.00	0.00
PRD	-	1.00	1.00	1.00

COLUMBIA County 2020 Ratio Study



Sales (Ratio) Sales (After Ratio)

- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
301	01	00	000	2020		St Helens	301	02	00	000	2020		Scappoose
301	02	74	000	2020		Scappoose	301	03	00	000	2020		Vernonia
301	04	00	000	2020		Rainier	301	04	74	000	2020		Rainier
301	05	00	000	2020		Clatskanie	301	06	00	000	2020		Rural St Helens

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	59
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	12,060,380
OSD RMV	0
Improvement RMV	5,676,450
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

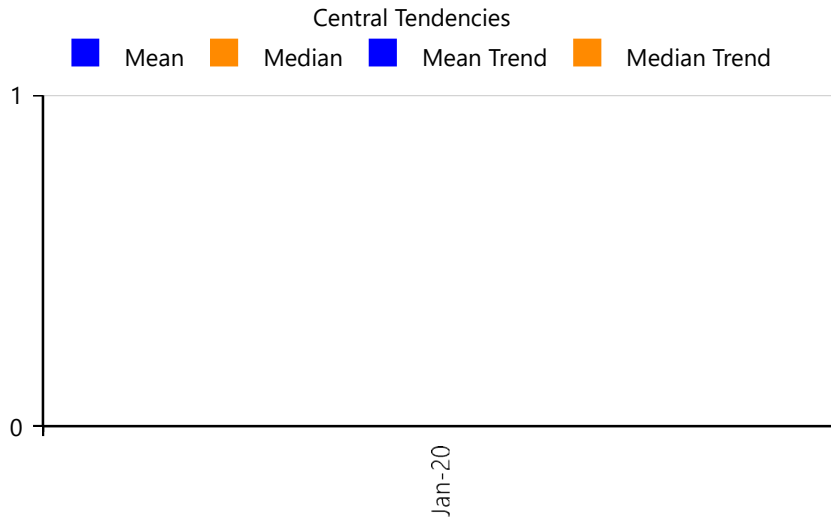
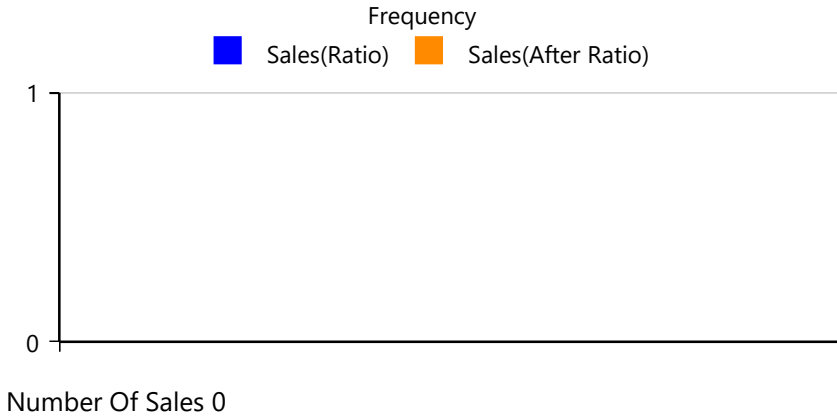
RMV 301: MA 01 SA 00; MA 02 SA 00 and SA 74; MA 03 SA 00; MA 04 SA 00 and SA 74; MA 05 SA 00; MA 06 SA 00
 Improved Land – Industrial, Countywide

For this study of improved industrial property with a population of 59, no sales were available. Due to the insufficient data available, it was deemed appropriate to apply the Selected Ratio of 100. No adjustment for time was made.

Performance History

	2020	2018	2016
COD	-	0.00	0.00
PRD	-	1.00	1.00

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
300	02	77	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	16
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	32,622,170
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 300: MA 02 SA 77

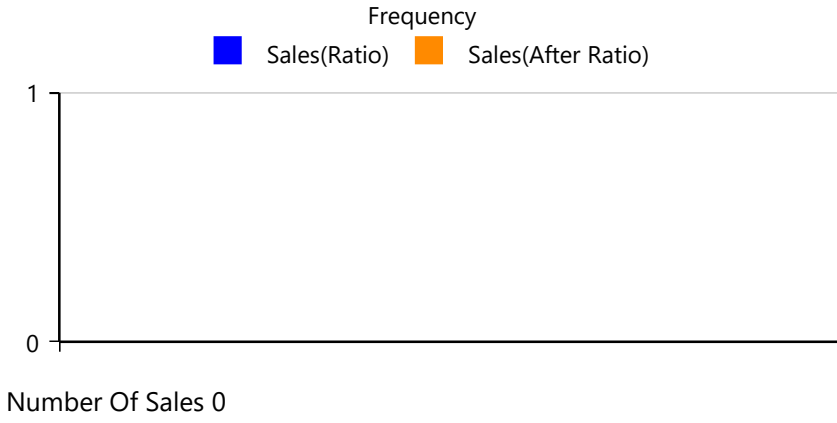
Unimproved land – Industrial, Scappoose Industrial Air Park

This industrial study area is located in close proximity to the Scappoose Airport. These properties are of a light industrial use and have seen an increase in development and demand. For this analysis, no sales were returned for study. Therefore, it was decided to apply a Selected Ratio of 100 to this classification of property. No time adjustment was applied at this time.

Performance History

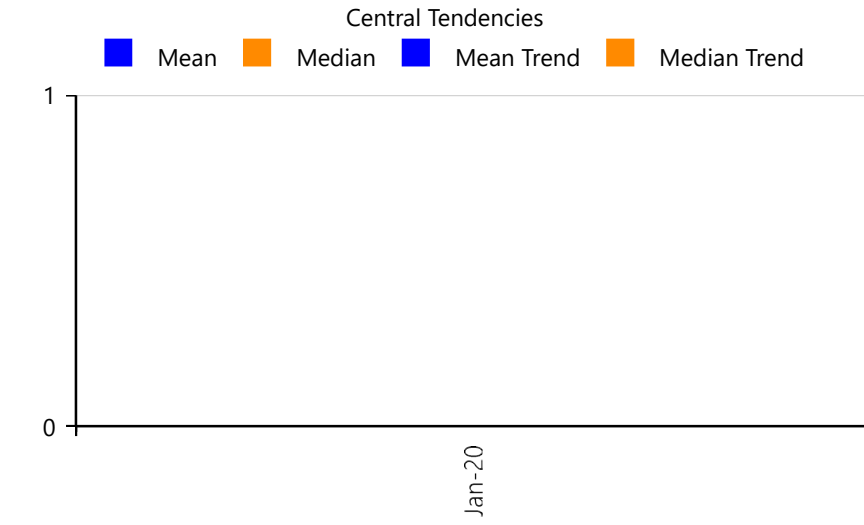
	2020	2019	2018	2017
COD	-	0.00	0.00	0.00
PRD	-	1.00	1.00	1.00

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
301	02	77	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	9
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	7,487,840
OSD RMV	0
Improvement RMV	1,077,290
Farm Improvement RMV	0
Selected Ratio From Sales	100
RMV Adjustment	100
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 301: MA 02 SA 77

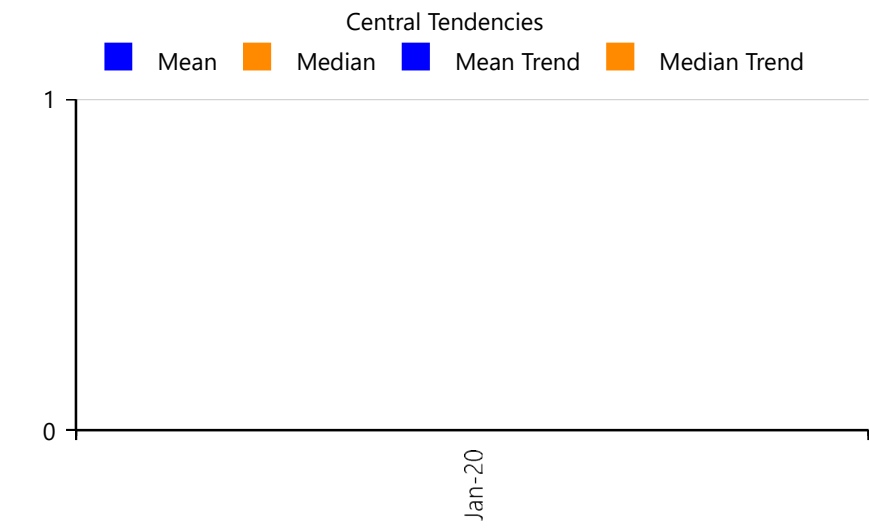
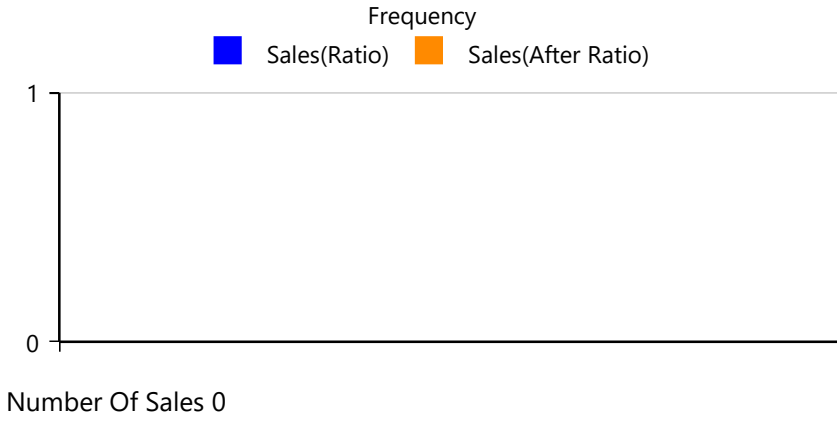
Improved land – Industrial, Scappoose Industrial Air Park

There are no sales available for this study of properties located by the Scappoose Airport. Therefore, the Selected Ratio of 100 was applied. No time adjustment was deemed appropriate.

Performance History

	2020	2018
COD	-	0.00
PRD	-	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)	
Median			
AD			
COD			
Mean			
SD			
COV			
Wtd Mean			
GeoMean			
PRD			
95% Confidence			
Month	Mean	Median	Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
303	01	00	000	2020		St Helens	303	02	00	000	2020		Scappoose
303	02	77	000	2020		Scappoose	303	04	00	000	2020		Rainier
303	05	00	000	2020		Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	45
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	23,984,260
OSD RMV	0
Improvement RMV	98,490,810
Farm Improvement RMV	3,940
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

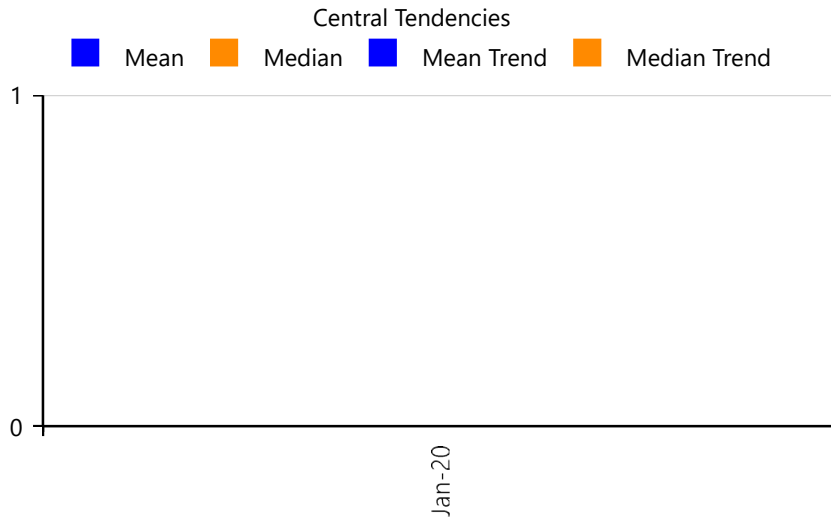
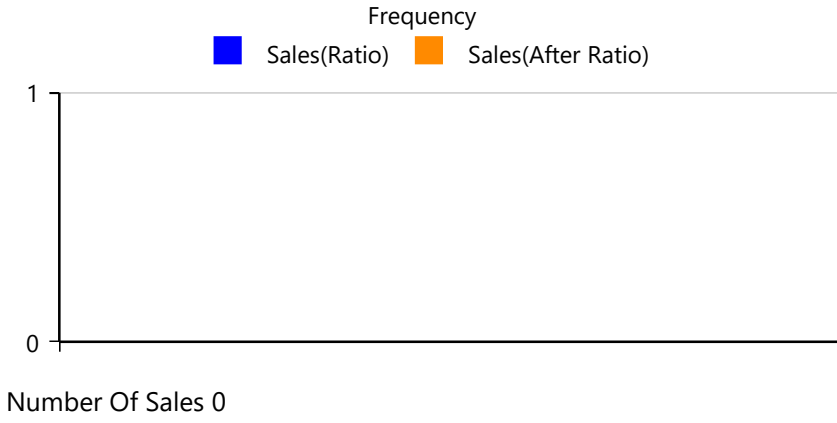
RMV 303: MA 01 SA 00; MA 02 SA 00 and SA 77; MA 04 SA 00; MA 05 SA 00
Industrial, Countywide

Since this classification of properties is processed via an IPR at the State level, no adjustment is warranted.

Performance History

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
308	01	90	000	2020	1	St Helens/Col City	308	02	90	000	2020		Scappoose
308	04	90	000	2020		Rainier	308	06	00	000	2020		Rural St Helens

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	1
Population - Number of Accounts	18
Sales as a percentage of the Population	5.56%
<i>Prior Year Population Values</i>	
Land Rmv	5,134,960
OSD RMV	0
Improvement RMV	18,513,340
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

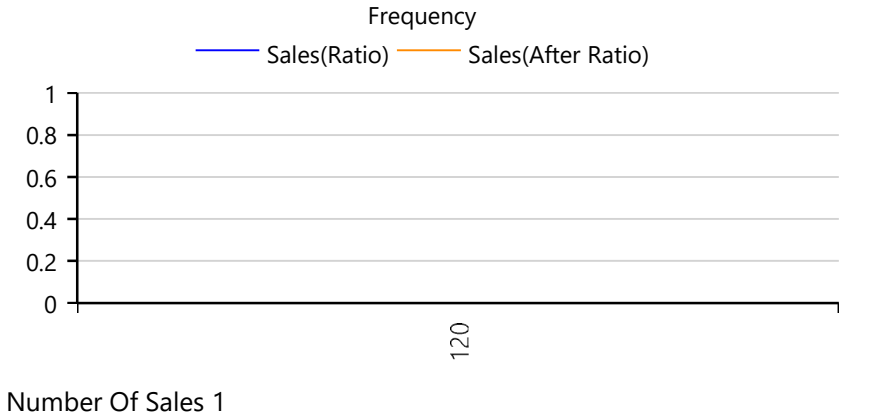
RMV 308: MA 01 SA 90; MA 02 SA 90; MA 04 SA 90; MA 06 SA 90
Industrial, Countywide

Since this classification of properties is processed via an RPR at the County level, no adjustment is warranted.

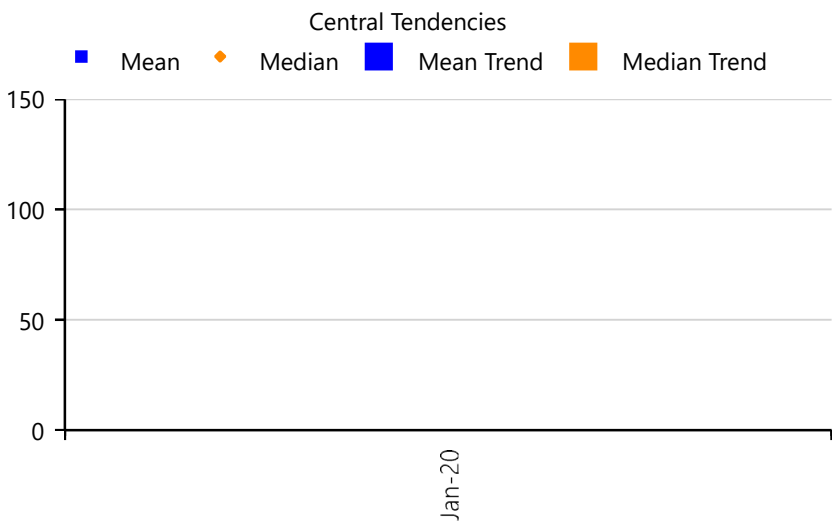
Performance History

	2020
COD	-
PRD	1.00

COLUMBIA County 2020 Ratio Study



	Sales (Ratio)	Sales (After Ratio)
120	1	1
Median	127	127
AD		
COD		
Mean	127	127
SD	1.00	1.00
COV	.79	.79
Wtd Mean	127	127
GeoMean	127	127
PRD	1.00	1.00
95% Confidence	1.96	1.96



Month	Mean	Median	Sales
Jun-19	127	127	1

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	90	000	308	600	30	4N1W09B00100	2019-5093	25.16	1,467,030	2,961,690	4,428,720	3,500,000	Jun-19	1	127

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
333	02	00	000	2020		Scappoose							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0			
Population - Number of Accounts	1			
Sales as a percentage of the Population	0.00%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		2,294,160	100.00%	2,294,160 100.00%
OSD RMV		0	0.00%	0 0.00%
Improvement RMV		0	0.00%	0 0.00%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		100		
Time Trend Adjustment		0		
Before Ratio		100		
Overall Adjustment Factor		100		
Land Adjustment Factor		100		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		100		
Farm Improvement Factor		100		
After Ratio		100		

Explanation

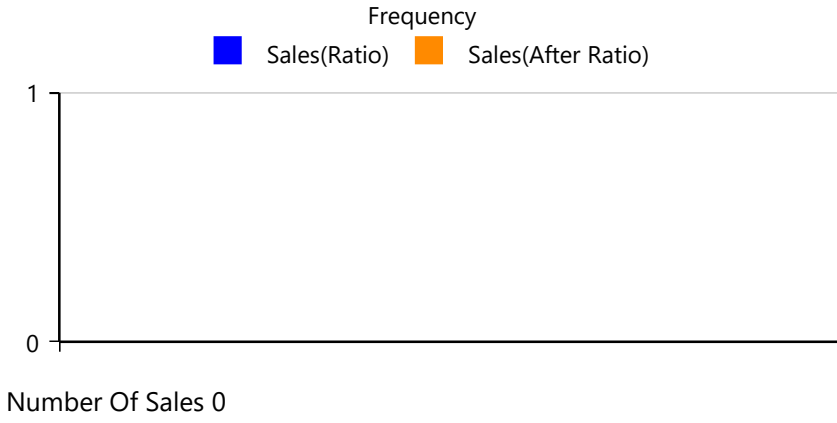
RMV 333: MA 02 SA 00
Industrial Improved, Countywide

Valuation of this property type is performed at the State level. No adjustment is warranted.

Performance History

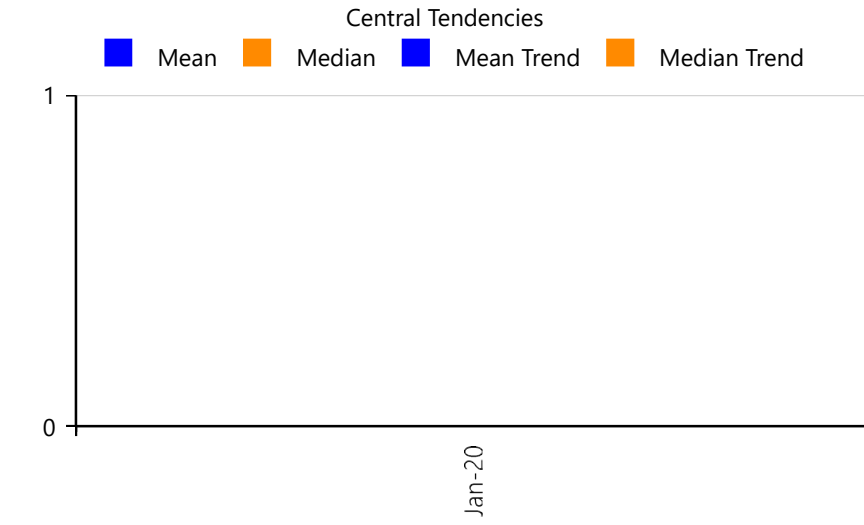
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

RMV CLASS 600

HIGHEST AND BEST USE

FORESTLAND (SA 06)

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
600	03	06	000	2020		Vernonia	600	04	06	000	2020		Rainier
600	05	06	000	2020		Clatskanie	601	04	06	000	2020		Rainier

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	611
Sales as a percentage of the Population	0.00%

<i>Prior Year Population Values</i>	Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values	Post Trend Brkdwn
Land Rmv	102,949,030	100.00%	102,949,030	100.00%
OSD RMV	0	0.00%	0	0.00%
Improvement RMV	0	0.00%	0	0.00%
Farm Improvement RMV	2,740	0.00%	2,740	0.00%

Selected Ratio From Sales	100
Time Trend Adjustment	0

Before Ratio **100**

Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100

After Ratio **100**

Explanation

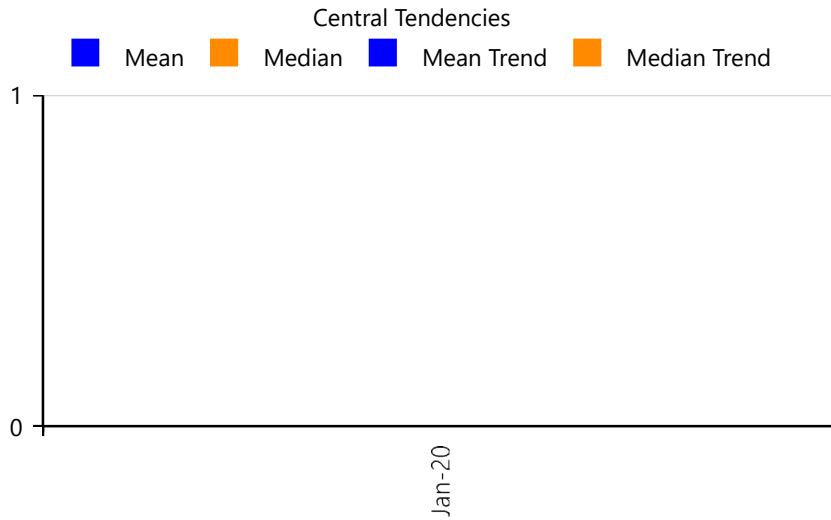
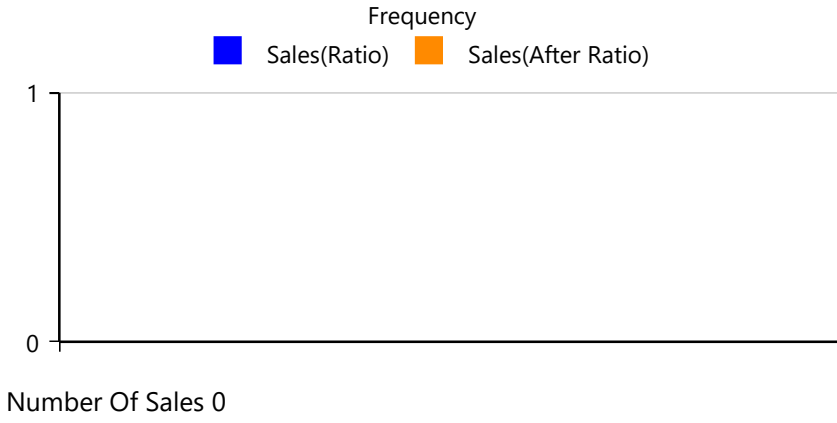
RMV 600: SA 06
 RMV 601: SA 06
 Highest & Best Use Forestland

This grouping of Highest and Best Use Forest Land properties are located throughout Columbia County. They are large tracts of land and many have topographical issues as well as access limitations that hinder 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

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

RMV CLASS 701

MULTI FAMILY

(Five or more units)

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
701	01	00	000	2020	4	St Helens	701	01	72	000	2020		St Helens/Col City
701	02	00	000	2020		Scappoose	701	03	00	000	2020		Vernonia
701	04	00	000	2020	1	Rainier	701	05	00	000	2020		Clatskanie
701	06	00	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	5
Population - Number of Accounts	87
Sales as a percentage of the Population	5.75%
<i>Prior Year Population Values</i>	
Land Rmv	13,425,800
OSD RMV	13,900
Improvement RMV	51,143,240
Farm Improvement RMV	0
	Pre-Trend Brkdwn
	20.79%
	Post Trend Values
	23,092,376
	Post Trend Brkdwn
	31.10%
	0.02%
	13,900
	79.19%
	51,143,240
	68.88%
	0
	0.00%
Selected Ratio From Sales	58
Time Trend Adjustment	0
Before Ratio	58
Overall Adjustment Factor	172
Land Adjustment Factor	172
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

RMV 701

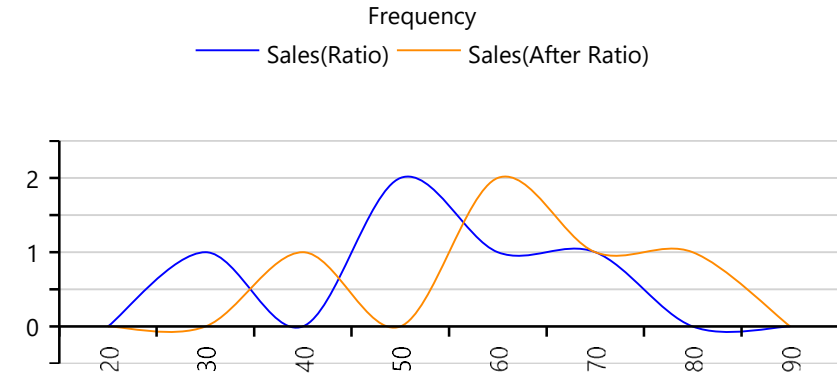
Improved land – H & B Use Multi-Family (Apartments), Countywide

There are 5 sales available for this analysis out of a population of 87 accounts resulting in 5.75% of the population. It is recommended to use the Selected Ratio of 58 without adjustment for time and to apply it here. Once applied, the Overall Adjustment Factor is 172. This factor will be applied to the land only.

Performance History

	2020	2019	2017	2016
COD	16.55	0.00	5.00	0.00
PRD	1.17	1.00	1.05	1.00

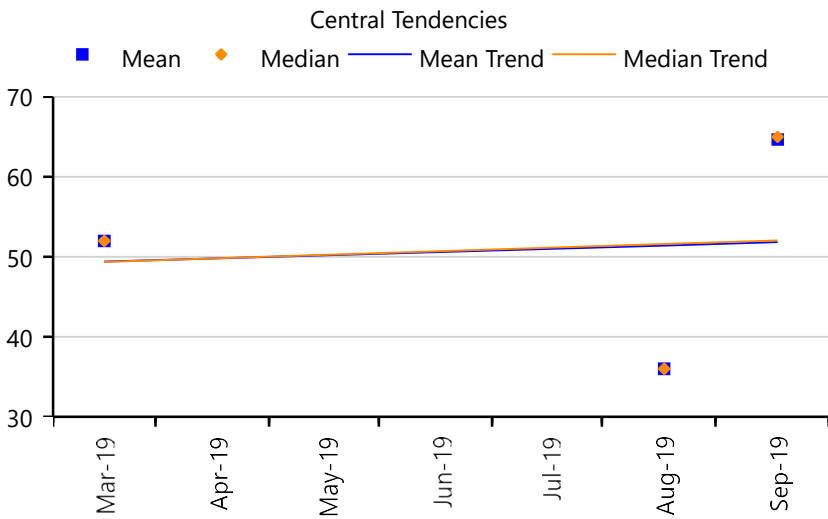
COLUMBIA County 2020 Ratio Study



Number Of Sales 5

	Sales (Ratio)	Sales (After Ratio)
20	0	0
30	1	0
40	0	1
50	2	0
60	1	2
70	1	1
80	0	1
90	0	0

Median	58	68
AD	9.60	10.80
COD	16.55	15.88
Mean	56	66
SD	13.46	15.23
COV	23.87	23.08
Wtd Mean	48	57
GeoMean	55	64
PRD	1.17	1.17
95% Confidence	11.80	13.35



Month	Mean	Median	Sales
Mar-19	52	52	1
Aug-19	36	36	1
Sep-19	65	65	3

Included Sales

MA	SA	NH	PRP CLS	ST CLS	CO CD	MAP NO.	DOC NUM.	AC	RMV LAND	RMV IMP	TOTAL RMV	SALE PRICE	SALE DATE	#	RT
01	00	000	701	763	33	4N1W04BC 00700	2019-7044	1.39	343,290	868,760	1,212,050	3,365,000	Aug-19	1	36
04	00	000	701	761	33	5N1W08CB 01500	2019-2140	0.29	62,280	182,360	244,640	475,000	Mar-19	2	52
01	00	000	701	761	33	5N1W33D B 00806	2019-8119	0.53	198,570	654,210	852,780	1,475,000	Sep-19	3	58
01	00	000	701	761	33	4N1W05D A 10200	2019-7241	0.22	85,720	339,460	425,180	650,000	Sep-19	4	65
01	00	000	701	761	33	4N1W05D A 10100	2019-7239	0.23	88,120	304,580	392,700	550,000	Sep-19	5	71

RMV CLASS 8XX

*RECREATIONAL
LAND*

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
800	01	00	000	2020		St Helens	800	01	15	000	2020		St Helens
800	02	00	000	2020		Scappoose	800	02	72	000	2020		Scappoose
800	02	73	000	2020		Scappoose	800	04	00	000	2020		Rainier
800	04	44	000	2020		Rainier	800	05	00	000	2020		Clatskanie
800	05	51	000	2020		Clatskanie	800	05	55	000	2020		Clatskanie
800	06	61	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0			
Population - Number of Accounts	22			
Sales as a percentage of the Population	0.00%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv	0	0	0.00%	0 0.00%
OSD RMV	0	0	0.00%	0 0.00%
Improvement RMV	0	0	0.00%	0 0.00%
Farm Improvement RMV	0	0	0.00%	0 0.00%
Selected Ratio From Sales	100			
Time Trend Adjustment	0			
Before Ratio	100			
Overall Adjustment Factor	100			
Land Adjustment Factor	100			
OSD Adjustment Factor	100			
Improvement Adjustment Factor	100			
Farm Improvement Factor	100			
After Ratio	100			

Explanation

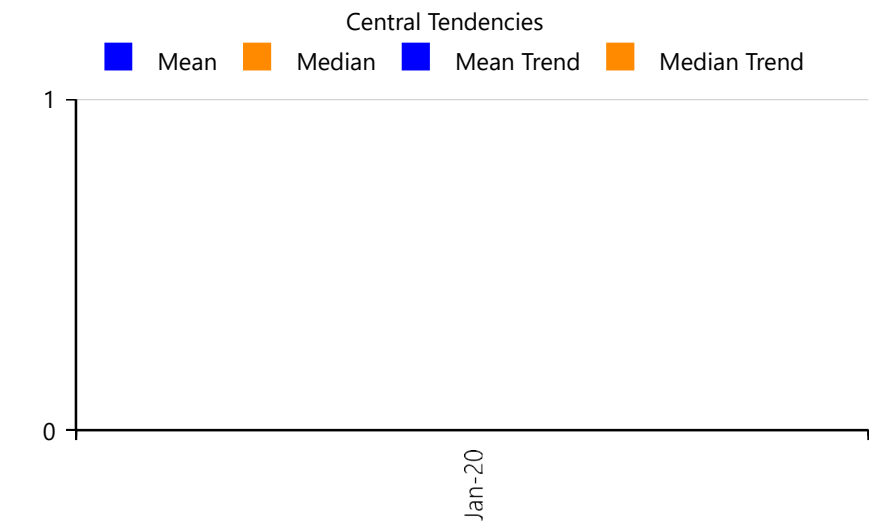
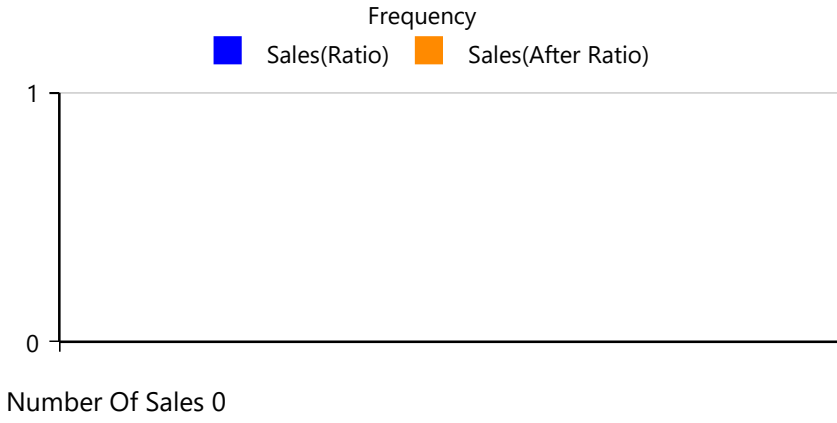
RMV 800: MA 01 SA 00, SA 15; MA 02 SA 00, SA 72, SA 73; MA 04 SA 00, SA 44; MA 05 SA 00, SA 51, SA 55; MA 06 SA 61
 Undeveloped land - Countywide

These properties are categorized as recreational land. Many are parks that are non-assessable and owned by varying agencies. Due to the unique nature of these groupings, it is recommended to make no adjustment at this time.

Performance History

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
801	01	00	000	2020		St Helens	801	02	00	000	2020		Scappoose
801	03	31	000	2020		Vernonia	801	04	00	000	2020		Rainier
801	05	36	000	2020		Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	9
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	500
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

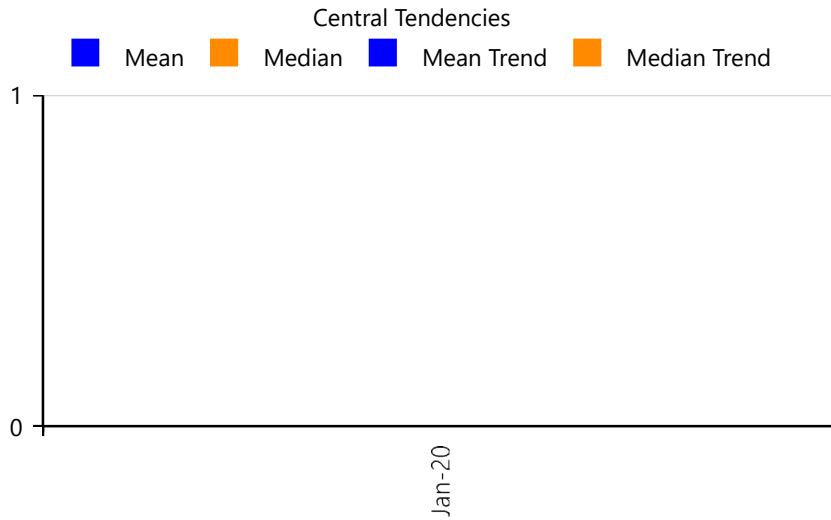
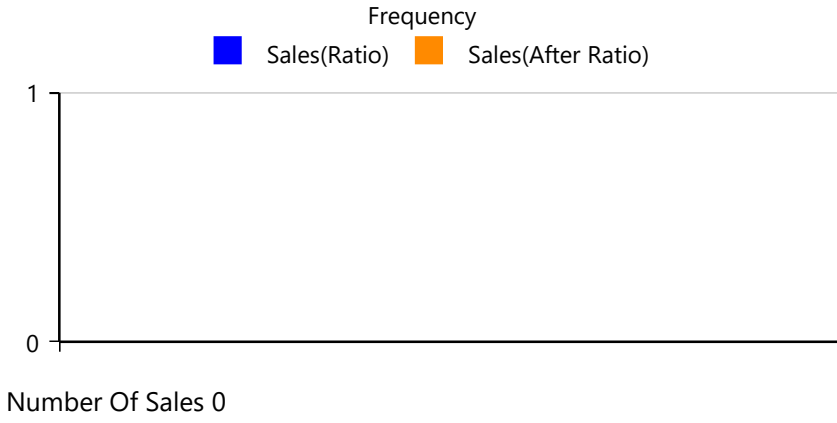
RMV 801:
 MA 01 SA 00; MA 02 SA 00; MA 03 SA 31; MA 04 SA 00; MA 05 SA 36
 Developed land - Countywide

These properties are categorized as improved recreational land. Because of the distinctive nature of these groupings, it is recommended to make no adjustment at this time.

Performance History

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

ODD LOTS

RMV CLASS 010

RMV CLASS 020

RMV CLASS 030

RMV CLASS 040

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
010	01	00	000	2020		St Helens	010	02	00	000	2020		Scappoose
010	03	00	000	2020		Vernonia	010	03	03	000	2020		Vernonia
010	04	00	000	2020		Rainier	010	05	00	000	2020		Clatskanie
010	06	00	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	123
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	67,428
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

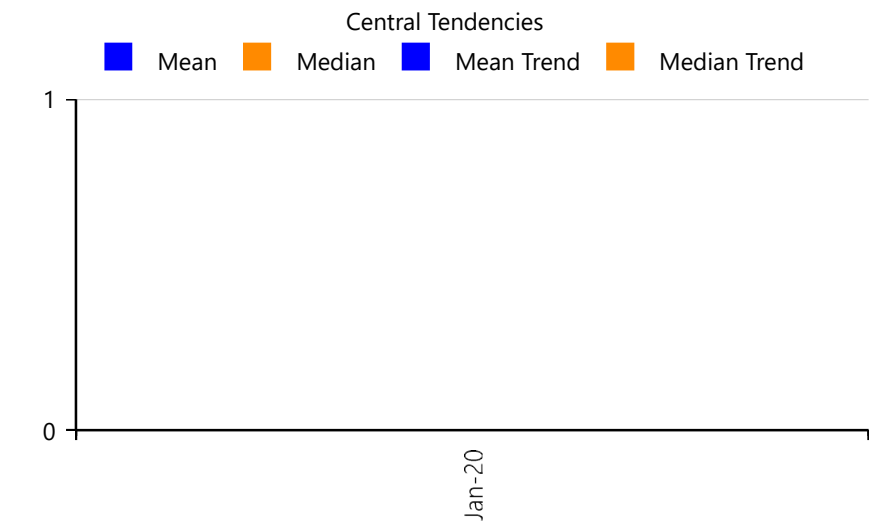
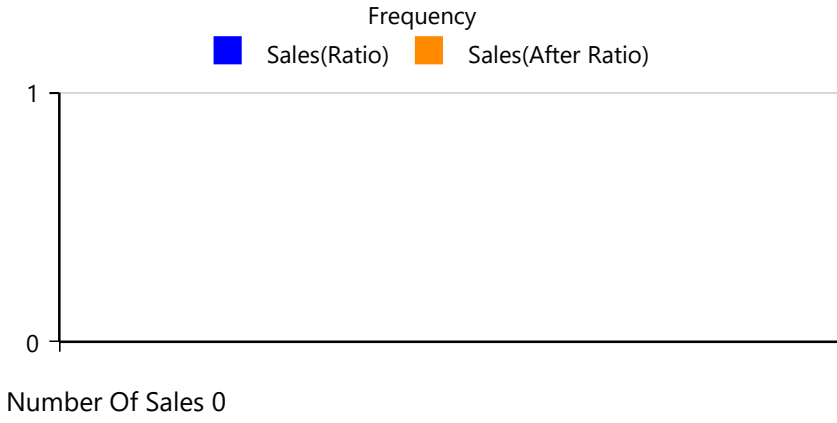
RMV 010
Odd Lot – Unbuildable, Zoned Residential

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

Performance History

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
020	01	00	000	2020		St Helens	020	02	00	000	2020		Scappoose
020	03	00	000	2020		Vernonia	020	04	00	000	2020		Rainier
020	05	00	000	2020		Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	13
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	6,000
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

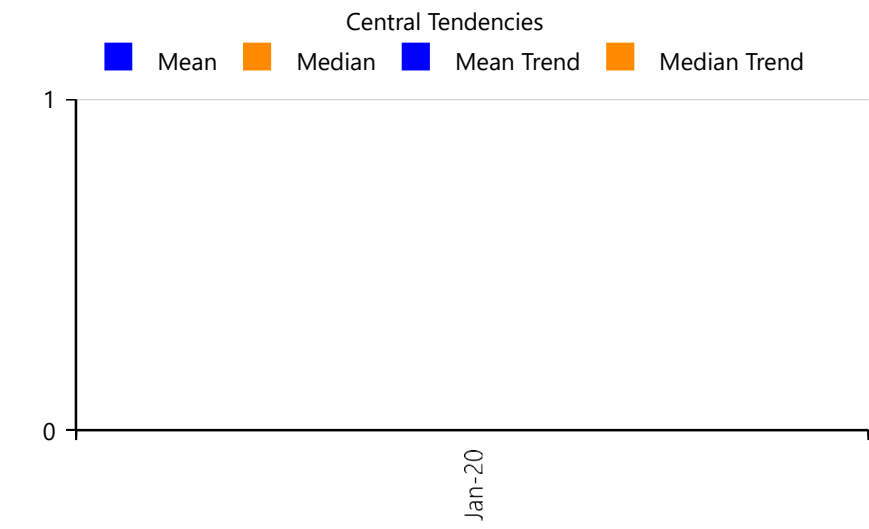
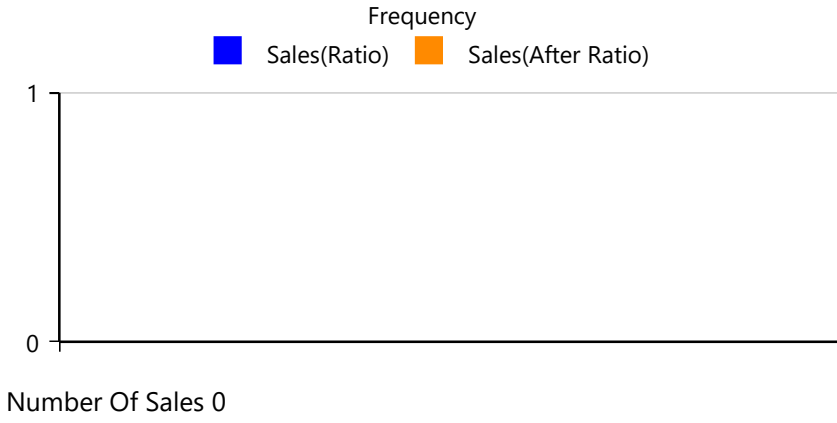
RMV 020
Odd Lot – Unbuildable, Zoned Commercial

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

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
030	01	00	000	2020		St Helens	030	03	00	000	2020		Vernonia
030	04	00	000	2020		Rainier	030	05	00	000	2020		Clatskanie
030	06	00	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	120
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	75,700
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	100
Time Trend Adjustment	0
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

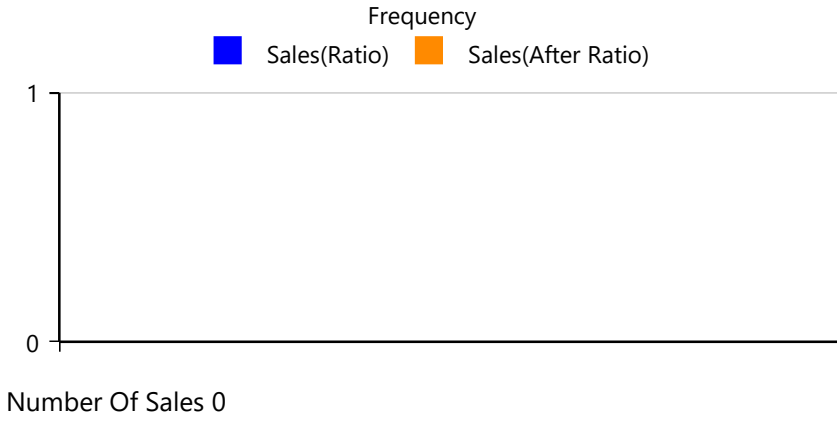
RMV 030
Odd Lot – Unbuildable, Zoned Industrial

This analysis is for odd lots that 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

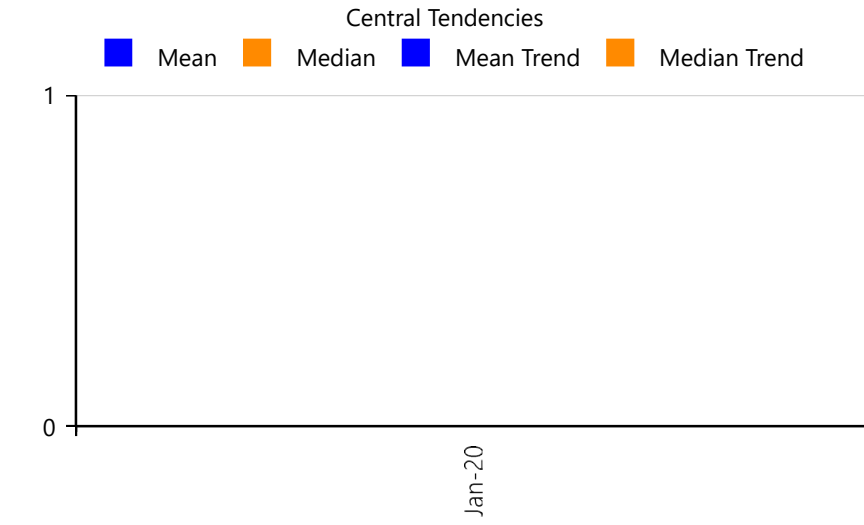
	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Sales (Ratio) Sales (After Ratio)



Month Mean Median Sales

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
040	02	00	000	2020		Scappoose	040	02	21	000	2020		Scappoose
040	03	00	000	2020		Vernonia	040	03	31	000	2020		Vernonia
040	04	00	000	2020		Rainier	040	04	41	000	2020		Rainier
040	04	42	000	2020		Rainier	040	05	00	000	2020		Clatskanie
040	06	00	000	2020		Rural St Helens	040	06	61	000	2020		Rural St Helens
040	06	62	000	2020		Rural St Helens							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0			
Population - Number of Accounts	152			
Sales as a percentage of the Population	0.00%			
<i>Prior Year Population Values</i>		Pre-Trend Values	Pre-Trend Brkdwn	Post Trend Values Post Trend Brkdwn
Land Rmv		238,000	100.00%	238,000 100.00%
OSD RMV		0	0.00%	0 0.00%
Improvement RMV		0	0.00%	0 0.00%
Farm Improvement RMV		0	0.00%	0 0.00%
Selected Ratio From Sales		100		
Time Trend Adjustment		0		
Before Ratio		100		
Overall Adjustment Factor		100		
Land Adjustment Factor		100		
OSD Adjustment Factor		100		
Improvement Adjustment Factor		100		
Farm Improvement Factor		100		
After Ratio		100		

Explanation

RMV 040

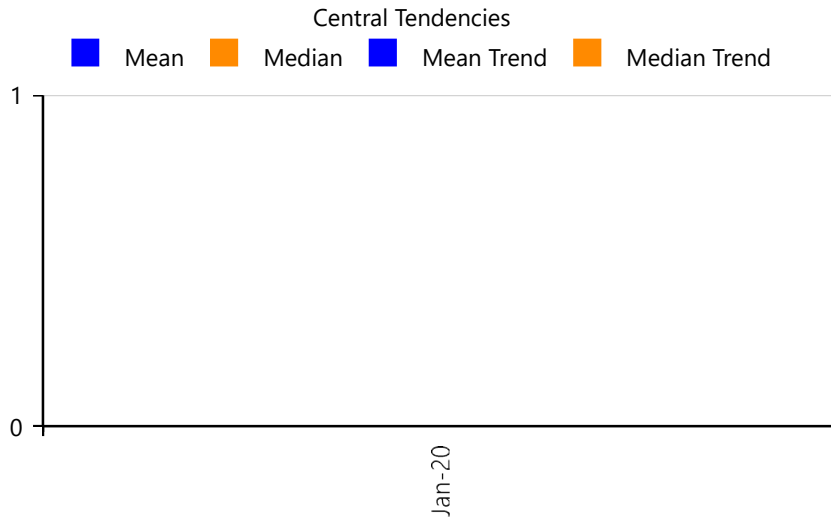
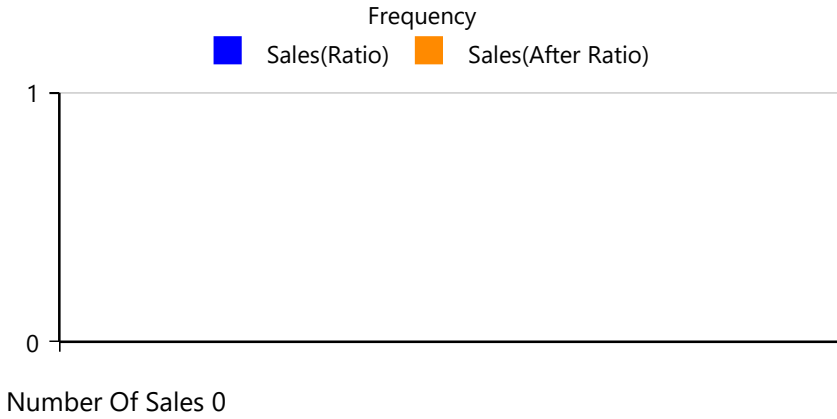
Odd Lot – Unbuildable, zoning not significant

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

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



Sales (Ratio) Sales (After Ratio)

- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence

Month Mean Median Sales

ISLANDS

STUDY AREA 60

COLUMBIA County 2020 Ratio Study

Study Definition

RMV Class	MA	SA	NH	App Year	# of Sales	Location	RMV Class	MA	SA	NH	App Year	# of Sales	Location
400	02	60	000	2020		Scappoose	400	05	60	000	2020		Clatskanie
800	02	60	000	2020		Scappoose	800	04	60	000	2020		
800	05	60	000	2020		Clatskanie							

Adjustment Calculation Summary

RECALCULATED

Sample - Number of Sales	0
Population - Number of Accounts	14
Sales as a percentage of the Population	0.00%
<i>Prior Year Population Values</i>	
Land Rmv	543,580
OSD RMV	0
Improvement RMV	0
Farm Improvement RMV	0
Selected Ratio From Sales	100
RMV Adjustment	100
Before Ratio	100
Overall Adjustment Factor	100
Land Adjustment Factor	100
OSD Adjustment Factor	100
Improvement Adjustment Factor	100
Farm Improvement Factor	100
After Ratio	100

Explanation

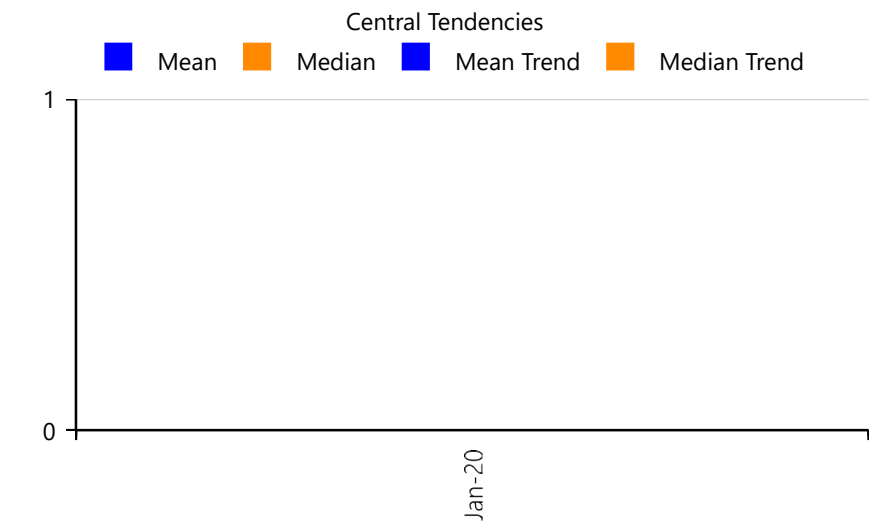
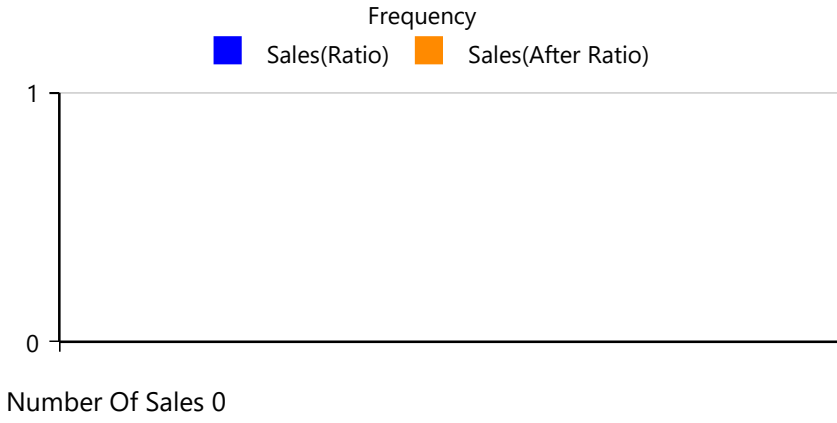
RMV 400 and 800, located in MA 02 and MA 05, SA 60 Islands located Countywide

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

	2020
COD	-
PRD	-

COLUMBIA County 2020 Ratio Study



- Sales (Ratio)
- Sales (After Ratio)
- Median
- AD
- COD
- Mean
- SD
- COV
- Wtd Mean
- GeoMean
- PRD
- 95% Confidence
- Month
- Mean
- Median
- Sales

AREAS OF CONCERN

COEFFICIENT OF DISPERSION

AND

PRICE RELATED DIFFERENTIAL

Coefficient of Dispersion

The Coefficients of Dispersion (COD) standards are defined under Oregon Administrative Rule 150-308-0380. The maximum COD standards (as illustrated below) are used by the County Assessor and the Oregon Department of Revenue to measure appraisal valuations and RMV uniformity.

Type of Property (RMV Class)	Maximum COD
Vacant Land (100, 400)	20
Real and Pers. Prop. MS (XX9)	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
Floating Property (111)	No Standard Set

Following are the COD's for the RMV Classes that have exceeded the current standards for the 2020 ratio year. The sales used in the 2020 Ratio study are from January 1, 2019 to December 31, 2019.

RMV Class	MA	SA	Location	Number of Accounts Affected	Current Year COD	Prior Year COD			
						2019	2018	2017	2016
019	07	01, 02, 06	South County	334	21.34	59.45	-	-	-
019	07	27	Crestwood Village	123	34.24	12.62	14.87	7.57	-
019	07	35	Riverside Meadows	22	38.56	-	-	-	-
100	03	00 & 03	Vernonia	231	17.99	12.98	7.41	22.59	8.91
100	04	00	Rainier	168	25.39	6.33	20.24	32.31	-
101	01	30	St. Helens	223	22.55	9.72	4.67	15.00	14.68
201	01, 02, 06	00	South County	442	21.13	22.15	15.58	22.85	25.63
201	03, 04, 05	00	North County	345	36.32	16.55	26.27	25.29	25.63
200/201	01, 02, 06	71 & 72	South County	187	30.50	-	-	-	-
200/201	03, 04, 05	71 & 72	North County	128	35.48	16.55	-	-	-
400	02	21	Scappoose	162	24.21	32.76	20.06	11.39	-
400	02	64	Scappoose	14	31.49	-	8.91	-	-
400	03	31	Vernonia	717	27.89	14.18	9.11	25.00	8.93
701	01 thru 06	00	County Wide	87	16.55	-	-	5.00	-

Explanation for properties out of the COD range:

MA 01, SA 30, RMV Class 101 – This classification of properties are those that are designated as “Duplex, Tri-plex and Four-plex”. There were too few sales to use in the ratio study however, this grouping of properties has been impacted by the supply and demand of the current market due to the limited availability of single family residences located in St. Helens. It is expected the market will level out this next year resulting in an improved COD level.

MA 02, SA 21 and SA 64, RMV Class 400 - This area is comprised of vacant land located in rural Scappoose. There were not enough sales provided for both of these studies to determine reliable ratios. As the population moves further in to the rural areas of the County, we anticipate the COD indicators will fall back into range as the market continues to grow.

MA 03, SA 00 and SA 03, RMV Class 100 – Un-improved property located in the General area and FEMA Floodway in City of Vernonia. The COD indicator is slightly over the current COD standard. Sales have increased greatly in this area over the past year due to the influence from Hillsboro and Forest Grove. As growth continues, we will continue to monitor this area.

MA 03, SA 31, RMV Class 400 – the sales for this area represent 0.70% of the population which is insufficient for the ratio study analysis. As the market continues to be influenced by the Hillsboro and Portland areas, properties in the city have dwindled in availability. It is expected that the market in the rural areas of Vernonia will increase. Therefore, we will continue to monitor this area and anticipate an appropriate COD range in the coming year.

MA 04, SA 00, RMV Class 100 – there were only two arm’s length transactions available in this area which were deemed insufficient in quantity to apply to the ratio analysis. This area continues to see growth as the areas located in South County become more populated resulting in fewer properties available to purchase. It is anticipated that more sales will occur in this area next year and that the COD indicator will be back in standard range.

RMV Class 019 located in MA 07 SA 01, 02, 06 (South County), SA 27 (Crestwood Village), and SA 35 (Riverside Meadows) - this RMV Class is designated as personal property manufactured structures. The intent for the next appraisal year is to perform an analysis of these areas: review classing benchmarks, local cost modifiers and to analyze the current depreciation schedules. It is believed this will bring the Real Market Value of these properties in line with the current market and reduce the current COD indicators.

RMV Class 200 and RMV Class 201, County Wide – For the 2020/2021 appraisal year, all Commercial properties will be reviewed and re-appraised. Current study areas will be analyzed, land tables adjusted, and benchmarks reviewed. As Columbia County continues to be influenced by the Portland market, we anticipate an increase in demand for this property type.

RMV Class 701, County Wide – This classification of properties has seen an increase of sales (5 this ratio year) and it is anticipated the demand may continue to rise as the influence of the Portland market increases. For the next appraisal year, an analysis will be performed and sales will be reviewed in order to develop a new land schedule.

Price Related Differential

Following are the areas of concern or the Price Related Differential (PRD) by Maintenance Area, Study Area and RMV Class. The PRD illustrates whether valuations are reasonably equal between high and low properties

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. (Valuations are higher than their sale price).

When the PRD is below .98, then the properties are considered progressive. This means the high-value properties are overvalued and the low-value properties are undervalued. (Valuations are lower than their sale price).

This data is from the sales file date January 1, 2019 through December 31, 2019 and has been used in the 2020 Ratio Report.

RMV Class	MA	SA	PRD	Under .98	Over 1.03
019	07	01, 02, 06	1.25		X
019	07	03, 04 05	1.07		X
019	07	27	1.12		X
019	07	35	1.23		X
101	01	30	.97	X	
109	05	00	1.05		X
201	03, 04, 05	00	1.09		X
200/201	01, 02, 06	71 & 72	1.36		X
200/201	03, 04, 05	71 & 72	1.09		X
400	02	21	.92	X	
400	03	31	1.10		X
400	06	61	1.04		X
409	05	51	1.04		X
701	01, 02, 03, 04, 05, 06	00	1.17		X

*APPENDIX A
RECALCULATION
AND
REAPPRAISAL SETUPS*



2020 Annual Recalculation and Reappraisal Setup

Due to limited resources, a complete recalculation and reappraisal setup was not conducted for the 2020-21 tax year.

Minor changes were made to the depreciation tables to reflect one additional year of depreciation. Otherwise, the factors published in the 2019 Annual Recalculation and Reappraisal Setup were used for the 2020 tax year. A ratio study will be conducted to trend the resulting recalculated values to January 1, 2020.

A new setup study is planned for the 2021-22 tax year.

Sue Martin
Columbia County Assessor

**2019 Annual Recalculation and Reappraisal
Setup Studies for All Residential Properties
in Columbia County for Property Tax
Assessment**



Published by the Columbia County Assessor

January 2, 2019

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INTRODUCTION

As part of our effort to provide as much information to the public as possible who are interested in how a mass appraisal system works and the steps taken to study the current market and apply our conclusions to all residential properties annually, we are publishing our setup analysis on our website. This document includes our methods, analysis, and conclusions. The raw data used for this setup is not included in this publication, however, it is available in our office.

In order to ensure statewide uniformity in administering Oregon's Property Tax Laws, the Oregon Department of Revenue (DOR) exercises its supervisory authority over the property tax system under Oregon Revised Statute (ORS) 306.115. In addition to its statewide supervisory authority, under ORS 306.120, DOR must develop and provide manuals and instruction to all county assessors to ensure uniform methods of assessments. The publication developed by DOR and used as a guide for our setup is the "Appraisal Methods" manual. This manual, along with the "Cost Factors for Residential Buildings" and "Cost Factors for Farm Buildings", can be found on and downloaded from the DOR's website at <http://www.oregon.gov/DOR/forms/>.

Summary of the Mass Appraisal of Property

Mass Appraisal is an accepted method of appraisal and is not simply a cost approach to value.

A successful mass appraisal of residential properties in a selected area is dependent on an in-depth analysis of recent sales to determine land values, local cost modifiers to apply to our cost factors, and to develop local market-based depreciation schedules based on age and condition of structures. Set-up includes establishing benchmark properties to be used in determining class quality and condition of properties being reappraised so each appraiser can be consistent. Whenever a new residential cost factor book is published by the Department of Revenue, a local class quality benchmark study is completed to increase uniformity among appraisers when determining the class quality of a dwelling. Several homes of varying ages, design and quality are selected throughout the county and compared to the class quality descriptions given in the cost factor book. A class quality benchmark notebook is developed and used during the reappraisal process in addition to the cost factor book.

Sales Reviews and Coding

All real property deeds recorded in the county clerk's office and personal property sales brought to our attention through various sources are reviewed on an ongoing basis to determine whether or not the sale meets the definition of 'Real Market Value'. Real Market Value is defined under ORS 308.205(1):

Real market value of all property, real and personal, means the amount in cash that could reasonably be expected to be paid by an informed buyer to an informed seller, each acting without compulsion in an arm's-length transaction occurring as of the assessment date for the tax year.

Each sale is coded based on the conditions of the sale, such as sale between relatives, foreclosures, confirmed market sale, etc. On sales considered to be market sales (meet the definition of real market value), the property is reviewed to determine if it is adequately described in our records. If the property is in better or worse condition, or inventory items are missing or overstated, our records are corrected to reflect the property as it sold. Only those sales that meet the definition of real market value are used in our setup studies.

Pre-appraisal and Recalculation Setup

Base Appraisal Date

Before a setup can be started, a base appraisal date must be selected. All sales data must be adjusted to this date. Generally, sales that occurred during the previous 12 months are used for the setup studies. However, when there are insufficient sales for a study, sales for the last 2 or more years may be included.

Time Study

A time study must be completed to determine if the market has been steady or if a time adjustment must be applied to all sales used in the study to adjust the sales prices to the base appraisal date.

Land Values

Vacant land sales in each Maintenance Area (MA) and Study Area (SA) are analyzed and graphed according to size and time adjusted sale price. This data is used to determine the typical value per acre (or square foot) of land for different size parcels and is converted to a land table used to calculate the land value of a property. Typical on-site development costs are gathered by obtaining cost data from general contractors and utility companies to determine the amount of on-site development (OSD) to add to the land value on improved properties. When there are not enough vacant land sales in a specific area to develop a land schedule, the improved sales for that area are set aside to use after the LCM and Depreciation Studies have been completed in order to 'extract' the land value from the sales price.

Local Cost Modifier (LCM)

In order to adjust the "Cost Factor Book for Residential Buildings" provided by the Department of Revenue to reflect local area costs, sales of new homes are analyzed. With the land study complete, the calculated land value and OSD are subtracted from the time adjusted sales price to determine the residual value attributed to the new home. Using the cost factor book, a replacement cost is calculated for the new home and accessory improvements. The residual value is then divided by the replacement cost new to determine the local cost modifier to be applied to the cost factor book for all improvements. If there are limited sales of properties with new homes, an analysis of homes that were built by a contractor hired by the land owner is included. The total contractor price is divided by the replacement cost new to determine a local cost modifier. In the absence of any sales data, local contractors are contacted to try to

determine an appropriate local cost modifier. This is generally the method used for general purpose and farm buildings. A separate LCM is calculated for conventional dwellings, manufactured dwellings, floating property and farm buildings.

Depreciation Study

Sales of improved properties are analyzed based on age and condition. Only verified market sales are used. The calculated land value and OSD are subtracted from the time adjusted sales price of each property to determine the residual value attributable to the dwelling and accessory improvements. A replacement cost new with the local modifier applied is calculated for the dwelling and any accessory improvements. The residual value is then divided by the adjusted replacement cost new to determine the depreciation for that age and condition. Once all the sales have been analyzed, the data is graphed based on age and condition to develop a depreciation schedule that is based on effective age. A separate schedule is created to restrict effective year to be selected based on physical age and noted condition (poor, fair, average, good, excellent). This ensures consistency among appraisers when selecting an effective age that is different than the physical age of a structure. A separate depreciation study is conducted for conventional single family dwellings, multi-family dwellings, manufactured dwellings sited on real property (same ownership and considered real property), manufactured dwellings sited in a park or other leased site (these are considered personal property), and floating property. A straight line depreciation schedule is used for general purpose and farm buildings, since it is not possible to extract enough data to base their depreciation on sales.

Adjustment Study

During the previous studies, sales of properties identified as having potential adjustments due to topography, views, or other unique features are set aside to determine the value of various factors that may influence value. After all studies have been completed, including the extraction method for determining land values in areas with insufficient vacant land sales, these sales are analyzed based on the type of adjustment and the area they are located in, however, if there is insufficient data, nearby areas may be combined in the study. By comparing the total sales price of the sold property with the total calculated cost of land, OSD and depreciated dwelling, the difference gives an indication of the value of the adjustment.

Reappraisal vs. Recalculation

Physical Reappraisal

With resources becoming more limited, very few interior inspections are completed during a reappraisal. The appraiser will determine class quality and condition of the structures from the exterior, attempt to contact owner to verify inventory at the door, and note any necessary adjustments for topography, views or any other factor that would likely have an effect on the value. The last appraisal diagram and inventory are reviewed to determine if there have been any changes to the property. The value of the property is calculated electronically using the

factors developed in the setup study.

Recalculation

Recalculation is an electronic revaluation of properties based on factors developed during the setup study and the existing inventory in our system. These properties are not visited to determine if any changes have taken place, however, the recalculation is a more reliable method of maintaining accurate real market values rather than relying solely on a ratio study to determine overall market trends.

New Construction

New construction throughout the county is physically inspected and appraised using the setup factors for the area.

Ratio Study

A ratio study is an analysis of sales in all study areas to determine the percentage of market increase or decrease in each study area since the base appraisal date selected in our setup. The study separates properties by type, such as commercial, industrial or residential, by location or study area, and by improved or vacant. All sales are time adjusted to the assessment date of January 1 before comparing to our current value. Once complete, the resulting trends are electronically applied to all properties prior to certifying the assessment roll.

2019 Time Study Analysis and Conclusions

Time Trend Study for all Maintenance Areas (MA)

Analysis

Before any setup studies can be conducted, a time trend for each Maintenance Area must be completed to adjust sales to the selected base appraisal date. The selected base appraisal date for the 2019 reappraisal and recalculation of residential properties countywide is January 1, 2018. A separate time study was completed for City Residential Property and Rural Residential Property in each Maintenance Area.

All sales of residential properties that occurred between January 1, 2017 and December 31, 2017 that reflected real market value were extracted from our sales files. The sales were separated based on Maintenance Area and property type (city or rural). The total sales price of all properties for each area was compared to our January 1, 2017 base RMV of the same properties, which gives an estimated market trend for the entire 2017 year. The trend is divided by 12 in order to give a per month percentage to apply to each sales price, based on the month in which the sale occurred, and used in our setup studies to reflect a sales price as of January 1, 2018.

Some studies required additional data before we were able to establish a reliable conclusion for the study. For this purpose, another time trend study was completed on properties that sold between January 1, 2018 and June 30, 2018, and separated based on Maintenance Area and property type (city or rural). The total sales price of all properties for each area was compared to our January 1, 2018 certified values (January 1, 2017 base RMV times the market trend from the 2018 Ratio Study) which gives an estimated market trend for the first half of 2018. The trend was divided by 6 in order to give a per month percentage to apply to each sales price, based on the month in which the sale occurred, and used in our setup studies to reflect a sales price as of January 1, 2018.

Conclusions

Based on the supporting data collected, there is sufficient sales data to estimate the market trends to be used to time trend sales to the base appraisal date of January 1, 2018 for city residential property and rural residential property in each maintenance area.

Time Trend Factors to be Applied to Sales Used for the 2019 Residential Setup Studies

Time Trend Rate for 2017 Sales to Reflect Base Appraisal Date of January 1, 2018				
CITY	AREA	NO. OF SALES	ANNUAL TREND	PER MONTH TREND
Saint Helens	MA 1	210	0.1474	0.0123
Scappoose	MA 2	110	0.1792	0.0149
Vernonia	MA 3	42	0.1155	0.0096
Rainier	MA 4	20	0.0084	0.0007
Clatskanie	MA 5	23	0.0207	0.0017
Columbia City	MA 6	30	0.1569	0.0131
RURAL	AREA	NO. OF SALES	ANNUAL TREND	PER MONTH TREND
Rural Scappoose	MA 2	42	0.0979	0.0082
Rural Vernonia	MA 3	35	-0.1392	-0.0116
Rural Rainier	MA 4	30	0.0359	0.0030
Rural Clatskanie	MA 5	34	0.1093	0.0091
Rural Saint Helens	MA 6	77	0.0832	0.0069

Time Trend Rate for 2018 Sales to Reflect Base Appraisal Date of January 1, 2018				
CITY	AREA	NO. OF SALES	ANNUAL TREND	PER MONTH TREND
Saint Helens	MA 1	109	0.0949	0.0158
Scappoose	MA 2	49	0.0560	0.0093
Vernonia	MA 3	21	0.0379	0.0063
Rainier	MA 4	15	0.0446	0.0074
Clatskanie	MA 5	19	0.0141	0.0024
Columbia City	MA 6	13	0.0053	0.0009
RURAL	AREA	NO. OF SALES	ANNUAL TREND	PER MONTH TREND
Rural Scappoose	MA 2	11	-0.0714	-0.0119
Rural Vernonia	MA 3	12	0.0154	0.0026
Rural Rainier	MA 4	25	-0.0419	-0.0070
Rural Clatskanie	MA 5	23	0.0123	0.0021
Rural Saint Helens	MA 6	38	-0.0069	-0.0012

Notes

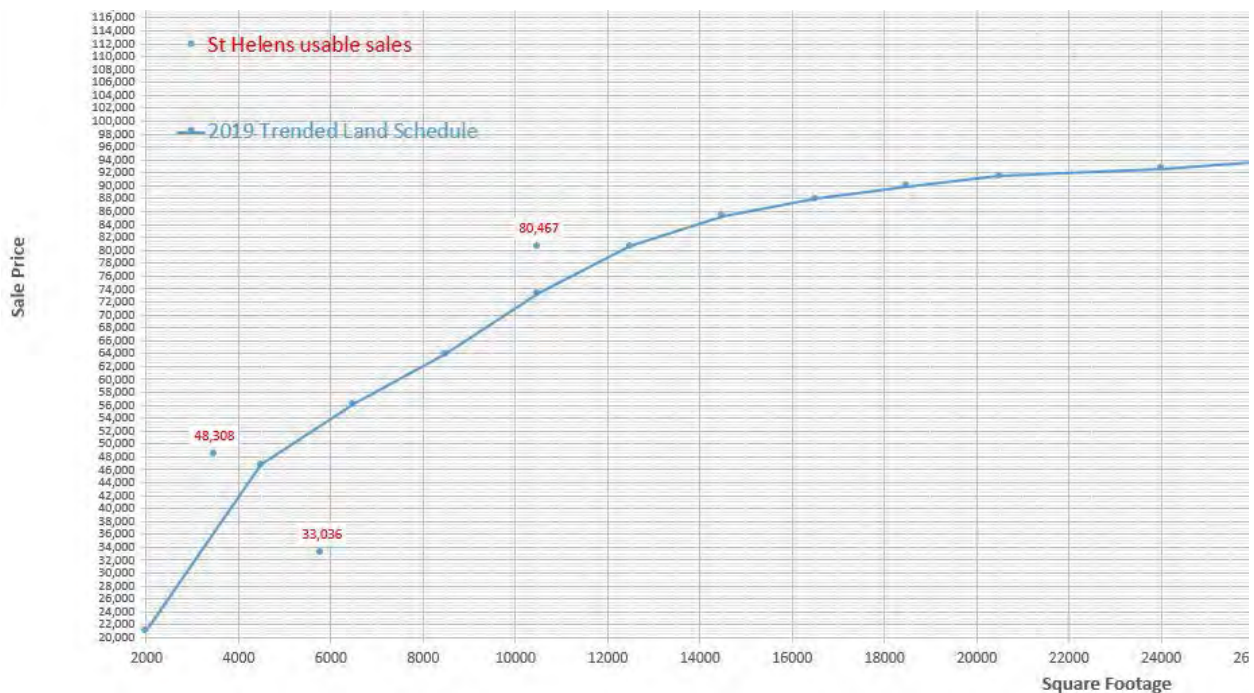
2019 Land Analysis and Conclusions

Maintenance Area (MA) 1, City of Saint Helens Land Setup

Analysis

There were 14 sales within the City of St Helens, of which 3 were considered usable and reflective of a base lot. The sales analyzed were ranging from 1/1/17 to 12/31/17 and time trended to the base appraisal date of 1/1/18. The remaining 11 sales were considered not useable because of various factors such as view, topography, bulk sale and or unusual terms. Due to the limited sales data the 2018 trend of 1.04 was applied to the 2018 base schedule and analyzed together with the 3 usable land sales. These land sales appear to fall around the 2018 trended line and are considered to be a credible and reliable indicators of value. SA 15 had no new additional sales for analysis and should follow the same trend as the general SA 00 of 1.04.

MA 1 City Base Land Sales Graph



SA 15 had no new additional sales for analysis and should follow the same trend as the general SA 00 of 1.04.

Due to the lack of City Acreage sales data within Columbia City and St Helens, the need to expand the search to nearby Scappoose was warranted. Scappoose has recently seen several city acreage sales that were sold for subdivision development, which provides reasonable and credible data for a city acreage land schedule. When analyzing residential lot sales data between City of Scappoose versus Columbia City/Saint Helens, land values indicate a 43% reduction between the areas. By reducing the City of Scappoose sales-based City Acreage land schedule by 43%, the resulting value provides a reasonable and credible City Acreage land schedule for both Columbia City and Saint Helens.

Conclusions

Based on limited sales data it is recommended to keep the 2018 base land schedule for SA 00, 15, 30 & 43 and land use code 001, 002 and 004, but to apply the 2018 trend of 1.04 for 2019.

Based on supporting data, the city acreage land schedules for Saint Helens and Columbia City will reflect a value that is 43% less than the City of Scappoose city acreage land schedule for 2019.

MA 1 City of Saint Helens Recalculation Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

001 = Residential City Under an Acre – Square Feet

002 = Residential City Acreage – Acres

005 = Residential Riverfront – Front Footage

SA 00 LUC 001 General Saint Helens		
Size (sq. ft.)		Total Value
From	To	
1	4500	46,800
4501	6500	56,160
6501	8500	63,960
8501	10500	73,320
10501	12500	80,600
12501	14500	85,280
14501	16500	87,880
16501	18500	89,960
18501	20500	91,520
20501	24000	92,560
24001	28000	94,640
28001	32000	96,720
32001	40000	99,840
40001	43560	101,920

SA 30 LUC 001 Duplex, Triplex, Fourplex		
Size (sq. ft.)		Total Value
From	To	
1	4500	46,800
4501	6500	56,160
6501	8500	63,960
8501	10500	73,320
10501	12500	80,600
12501	14500	85,280
14501	16500	87,880
16501	18500	89,960
18501	20500	91,520
20501	24000	92,560
24001	28000	94,640
28001	32000	96,720
32001	40000	99,840
40001	43560	101,920

SA 00 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	999999	68,010

SA 15 LUC 005 Riverfront		
Size (front footage)		Total Value
From	To	
0	40	188,710
41	50	193,910
51	55	199,110
56	60	204,310
61	65	209,510
66	70	214,710
71	75	219,910
76	85	225,110
86	95	230,880
96	105	240,240
106	115	249,600
116	125	260,000
126	135	269,360
136	145	278,720
146	155	287,040
156	165	297,440
166	175	306,800
176	185	318,240
186	195	328,640
196	999999	330,720

SA 80 LUC 001 Yachts Landing PUD		
Size (sq. ft.)		Total Value
From	To	
1	4500	46,800
4501	6500	56,160
6501	8500	63,960
8501	10500	73,320
10501	12500	80,600
12501	14500	85,280
14501	16500	87,880
16501	18500	89,960
18501	20500	91,520
20501	24000	92,560
24001	28000	94,640
28001	32000	96,720
32001	40000	99,840
40001	43560	101,920

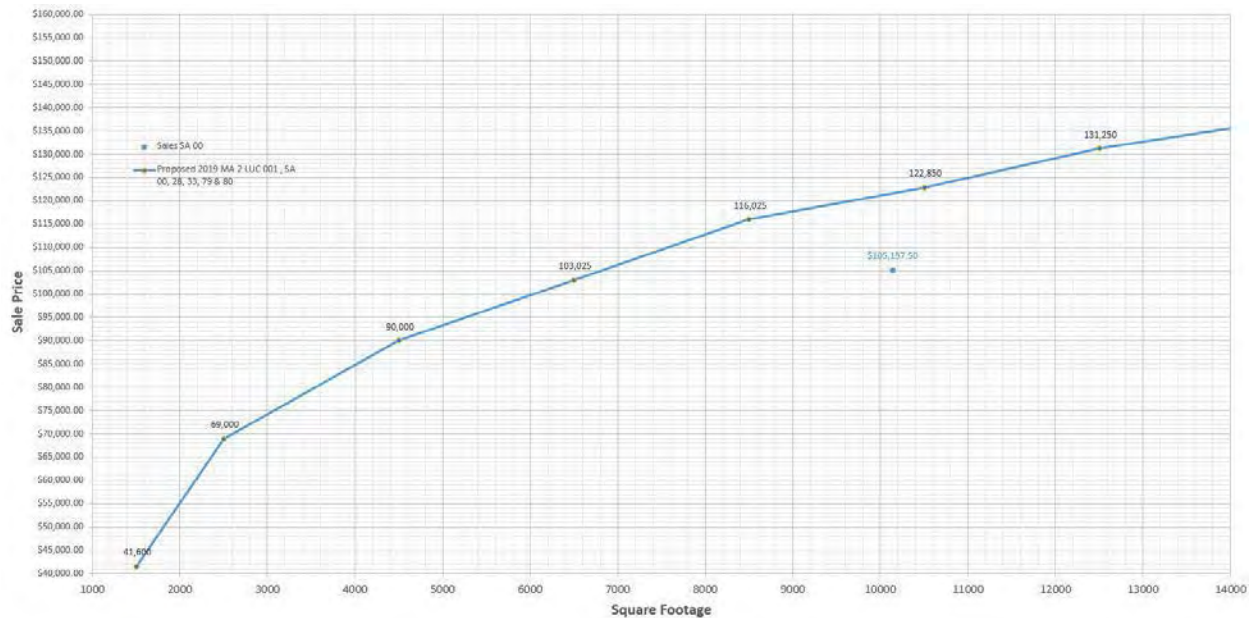
SA 43 LUC 001 Townhouse, Rowhouse		
Size (sq. ft.)		Total Value
From	To	
1	3500	36,520
3501	4500	46,800
4501	6500	56,160
6501	8500	63,960
8501	10500	73,320
10501	12500	80,600
12501	14500	85,280
14501	16500	87,880
16501	18500	89,960
18501	20500	91,520
20501	24000	92,560
24001	28000	94,640
28001	32000	96,720
32001	40000	99,840
40001	43560	101,920

Maintenance Area (MA) 2, City of Scappoose Land Setup

Analysis

For this bare land study, there were no sales in SA 33 & 28, 5 useable sales in SA 79, 2 useable sales in SA 80 and 1 useable sale in SA 00. These sales were time trended to the base appraisal date of 1/1/18. After reviewing the ratio report and the lack of bare land sales in SA 00 it was determined to leave the land schedule flat with no trend applied. For SA 33, 79, & 80 due to lack of data to support separate land schedules these will follow SA 00 land schedule.

MA 2 City Base Land Sales Graph



There were 4 City Acreage sales in Scappoose ranging from 1.25 acres to 15.03 acres. The price per acre for these sales ranged from \$90,000 to \$140,000, and resulted in an overall average price per acre of 119,540.

Conclusions

Based on lack of bare land sales a recommendation to keep existing SA 00 land schedule for 2019. For SA 28, 33, 79 & 80 to follow SA 00.

Based on the 4 city acreage sales of raw vacant land with a highest and best use for future subdivision development, the city acreage schedule for 2019 will be \$119,540 per acre.

MA 2 City of Scappoose Recalculation Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

001 = Residential City Under an Acre – Square Feet

002 = Residential City Acreage – Acres

SA 00 LUC 001 General Scappoose		
Size (sq. ft.)		Total Value
From	To	
1	2500	69,000
2501	4500	90,000
4501	6500	103,000
6501	8500	116,000
8501	10500	122,850
10501	12500	131,250
12501	14500	137,030
14501	16500	144,710
16501	18500	149,850
18501	20500	154,160
20501	24000	160,320
24001	28000	168,560
28001	32000	176,960
32001	40000	192,800
40001	43560	200,380

SA 28 LUC 001 Duplex, Triplex, Fourplex		
Size (sq. ft.)		Total Value
From	To	
1	4500	90,000
4501	6500	103,000
6501	8500	116,000
8501	10500	122,850
10501	12500	131,250
12501	14500	137,030
14501	16500	144,710
16501	18500	149,850
18501	20500	154,160
20501	24000	160,320
24001	28000	168,560
28001	32000	176,960
32001	40000	192,800
40001	43560	200,380

SA 33 LUC 001 Townhse, Rowhse, Common Wall		
Size (sq. ft.)		Total Value
From	To	
1	2500	69,000
2501	4500	90,000
4501	6500	103,000
6501	8500	116,000
8501	10500	122,850
10501	12500	131,250
12501	14500	137,030
14501	16500	144,710
16501	18500	149,850
18501	20500	154,160
20501	24000	160,320
24001	28000	168,560
28001	32000	176,960
32001	40000	192,800
40001	43560	200,380

SA 79 LUC 001 Keys Landing, Keys Crest, Keys Orch		
Size (sq. ft.)		Total Value
From	To	
1	4500	90,000
4501	6500	103,000
6501	8500	116,000
8501	10500	122,850
10501	12500	131,250
12501	14500	137,030
14501	16500	144,710
16501	18500	149,850
18501	20500	154,160
20501	24000	160,320
24001	28000	168,560
28001	32000	176,960
32001	40000	192,800
40001	43560	200,380

SA 80 LUC 001 Columbia River View Estates		
Size (sq. ft.)		Total Value
From	To	
1	4500	90,000
4501	6500	103,000
6501	8500	116,000
8501	10500	122,850
10501	12500	131,250
12501	14500	137,030
14501	16500	144,710
16501	18500	149,850
18501	20500	154,160
20501	24000	160,320
24001	28000	168,560
28001	32000	176,960
32001	40000	192,800
40001	43560	200,380

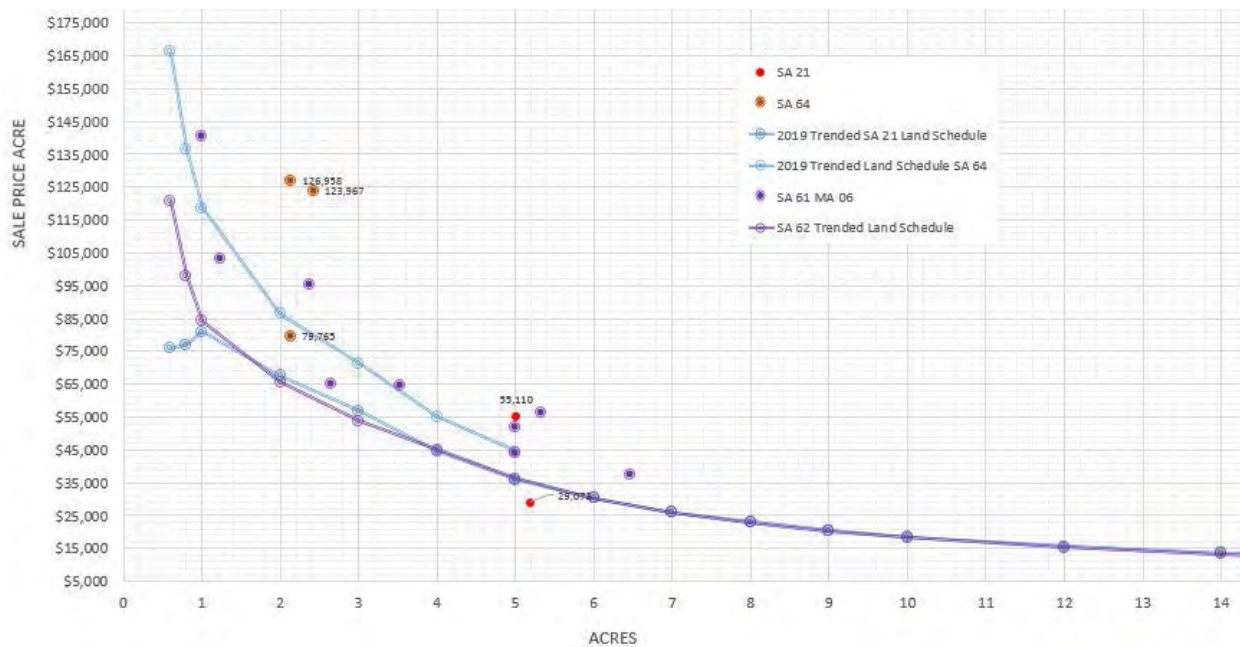
SA 00 LUC 002 City Acreage		
Size (Acres)		Total Value
From	To	
0.01	999999	119,540

Maintenance Area (MA) 2, Rural Scappoose Land Setup

Analysis

For this bare land study, there were 5 sales of which two were useable in SA 21. For SA 41, 62, and 45 there were no sales. For SA 64 there were 3 total sales with 1 useable. There was only one useable sale in SA 25. These sales were from 1/1/17 to 12/31/17. In order to support SA 21 land schedule, MA 06 SA 61 with 10 useable sales were plotted on the graph. The 14 useable sales were site visited and time trended to the base appraisal date of 1/1/18.

MA 2 Rural Land Sales Graph



Conclusions

For 2019, SA 21 will retain existing 2018 bare land schedule with the 2018 trend applied. The land schedule for SA 64 will have the 2018 trend applied to existing land schedule. Due to the lack of any data to show otherwise, SA 62 and SA 25 will follow SA 21 land schedule. For SA 41, will retain existing land schedule for 2019 with 2018 trend applied. SA 45 will follow SA 41 land schedule.

MA 2 Rural Scappoose Recalculation Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

003 = Residential Rural Tract – Acres

SA 21 LUC 003 Scappoose Value Zone 1		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	76,000
0.61	0.80	77,000
0.81	1.00	81,000
Over 1 Acre		Per Acre
1.01	2.00	69,000
2.01	3.00	58,000
3.01	4.00	45,500
4.01	5.00	36,500
5.01	6.00	31,000
6.01	7.00	26,600
7.01	8.00	23,500
8.01	9.00	21,000
9.01	10.00	19,000
10.01	12.00	16,000
12.01	14.00	14,000
14.01	16.00	12,500
16.01	18.00	11,500
18.01	20.00	10,400
20.01	25.00	8,400
25.01	30.00	7,100
30.01	35.00	6,100
35.01	40.00	5,400
40.01	50.00	5,000
50.01	60.00	4,500
60.01	80.00	4,200
80.01	999999.00	4,000

SA 41 LUC 003 Sauvie Island Value Zone 1		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	180,000
0.61	0.80	187,000
0.81	1.00	205,000
Over 1 Acre		Per Acre
1.01	2.00	176,000
2.01	3.00	145,200
3.01	4.00	124,300
4.01	5.00	103,400
5.01	6.00	90,200
6.01	7.00	78,100
7.01	8.00	68,750
8.01	9.00	61,600
9.01	10.00	56,100
10.01	12.00	46,970
12.01	14.00	40,370
14.01	16.00	35,750
16.01	18.00	31,900
18.01	20.00	28,820
20.01	25.00	23,100
25.01	30.00	19,470
30.01	35.00	16,720
35.01	40.00	14,850
40.01	50.00	12,100
50.01	60.00	11,000
60.01	80.00	10,200
80.01	999999.00	9,700

SA 62 LUC 003 Freeman Road		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	76,000
0.61	0.80	77,000
0.81	1.00	81,000
Over 1 Acre		Per Acre
1.01	2.00	69,000
2.01	3.00	58,000
3.01	4.00	45,500
4.01	5.00	36,500
5.01	6.00	31,000
6.01	7.00	26,600
7.01	8.00	23,500
8.01	9.00	21,000
9.01	10.00	19,000
10.01	12.00	16,000
12.01	14.00	14,000
14.01	16.00	12,500
16.01	18.00	11,500
18.01	20.00	10,400
20.01	25.00	8,400
25.01	30.00	7,100
30.01	35.00	6,100
35.01	40.00	5,400
40.01	50.00	5,000
50.01	60.00	4,500
60.01	80.00	4,200
80.01	999999.00	4,000

MA 2 Rural Scappoose Recalculation Land Schedules for 2019 (continued)

SA 25 LUC 003 Scappoose Dikeland		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	76,000
0.61	0.80	77,000
0.81	1.00	81,000
Over 1 Acre		Per Acre
1.01	2.00	69,000
2.01	3.00	58,000
3.01	4.00	45,500
4.01	5.00	36,500
5.01	6.00	31,000
6.01	7.00	26,600
7.01	8.00	23,500
8.01	9.00	21,000
9.01	10.00	19,000
10.01	12.00	16,000
12.01	14.00	14,000
14.01	16.00	12,500
16.01	18.00	11,500
18.01	20.00	10,400
20.01	25.00	8,400
25.01	30.00	7,100
30.01	35.00	6,100
35.01	40.00	5,400
40.01	50.00	5,000
50.01	60.00	4,500
60.01	80.00	4,200
80.01	999999.00	4,000

SA 45 LUC 003 Sauvie Island Dikeland		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	180,000
0.61	0.80	187,000
0.81	1.00	205,000
Over 1 Acre		Per Acre
1.01	2.00	176,000
2.01	3.00	145,200
3.01	4.00	124,300
4.01	5.00	103,400
5.01	6.00	90,200
6.01	7.00	78,100
7.01	8.00	68,750
8.01	9.00	61,600
9.01	10.00	56,100
10.01	12.00	46,970
12.01	14.00	40,370
14.01	16.00	35,750
16.01	18.00	31,900
18.01	20.00	28,820
20.01	25.00	23,100
25.01	30.00	19,470
30.01	35.00	16,720
35.01	40.00	14,850
40.01	50.00	12,100
50.01	60.00	11,000
60.01	80.00	10,200
80.01	999999.00	9,700

SA 64 LUC 003 Columbia Acres/Hillcrest		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	99750
0.61	0.80	109250
0.81	1.00	118750
Over 1 Acre		Per Acre
1.01	2.00	86,450
2.01	3.00	71,250
3.01	4.00	55,100
4.01	5.00	44,650

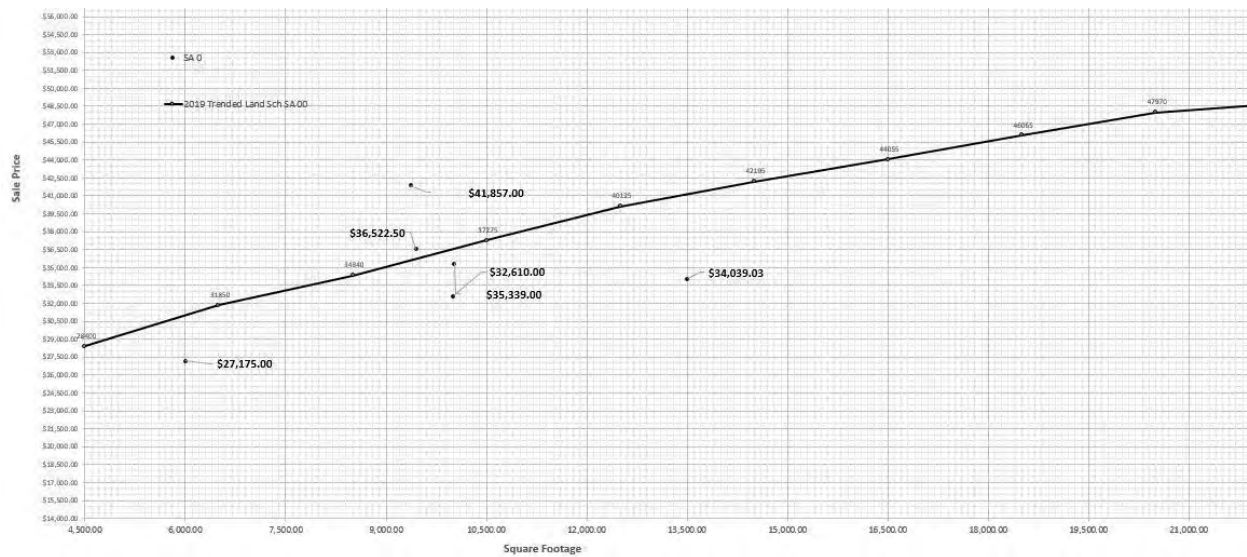
SA 64 LUC 003 Columbia Acres/Hillcrest (Unbuildable)		
Size (Lots)		Value
From	To	Lump Sum
Per Platted Lot		500

Maintenance Area (MA) 3, City of Vernonia Land Setup

Analysis

For the 2019 land study, there were 10 sales in SA 00 and no bare land sales for SA 03, 38 & 40. These sales had dates of 1/1/17-12/31/17. There were 7 useable sales in SA 00 which were site visited and time trended to the base appraisal date of 1/1/18. These sales plotted on the graph showed for SA 00, had enough data to support the existing land schedule trended forward for 2019. For City Acreage there were 4 usable sales, which were in both SA 00 & 03. All sales were analyzed and they provided a credible indicator of value, for development of a new city acreage land schedule.

MA 3 City Base Land Sales Graph



Conclusions

Based on the supporting data, the land schedule for SA 00 will maintain the base values with the 2018 trend applied. At this time the market shows no differentiation between the city lots in SA 00 and SA 03 (FEMA designated floodplain), therefore it will follow the SA 00 land schedule. Due to lack of sales, SA 38 and 40 LUC 001 will follow the SA 00 land schedule. SA 39 was moved into SA 00. Based on supporting data a new city acreage land schedule has been developed for 2019 in both SA 00 & 03.

MA 3 City of Vernonia Reappraisal Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

001 = Residential City Under an Acre – Square Feet

002 = Residential City Acreage – Acres

SA 00 LUC 001		
General Vernonia		
Size (sq. ft.)		Total Value
From	To	
1	4500	28,420
4501	6500	31,850
6501	8500	34,300
8501	10500	37,240
10501	12500	40,180
12501	14500	42,140
14501	16500	44,100
16501	18500	46,060
18501	20500	48,020
20501	24000	49,490
24001	28000	49,980
28001	32000	50,180
32001	40000	50,470
40001	43560	50,670

SA 03 LUC 001		
Flood Zone Properties		
Size (sq. ft.)		Total Value
From	To	
1	4500	28,420
4501	6500	31,850
6501	8500	34,300
8501	10500	37,240
10501	12500	40,180
12501	14500	42,140
14501	16500	44,100
16501	18500	46,060
18501	20500	48,020
20501	24000	49,490
24001	28000	49,980
28001	32000	50,180
32001	40000	50,470
40001	43560	50,670

SA 38 LUC 001		
Roseview Heights		
Size (sq. ft.)		Total Value
From	To	
1	4500	28,420
4501	6500	31,850
6501	8500	34,300
8501	10500	37,240
10501	12500	40,180
12501	14500	42,140
14501	16500	44,100
16501	18500	46,060
18501	20500	48,020
20501	24000	49,490
24001	28000	49,980
28001	32000	50,180
32001	40000	50,470
40001	43560	50,670

SA 40 LUC 001		
Duplex, Triplex, Fourplex		
Size (sq. ft.)		Total Value
From	To	
1	4500	28,420
4501	6500	31,850
6501	8500	34,300
8501	10500	37,240
10501	12500	40,180
12501	14500	42,140
14501	16500	44,100
16501	18500	46,060
18501	20500	48,020
20501	24000	49,490
24001	28000	49,980
28001	32000	50,180
32001	40000	50,470
40001	43560	50,670

SA 00 LUC 002		
City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	9999	43,124

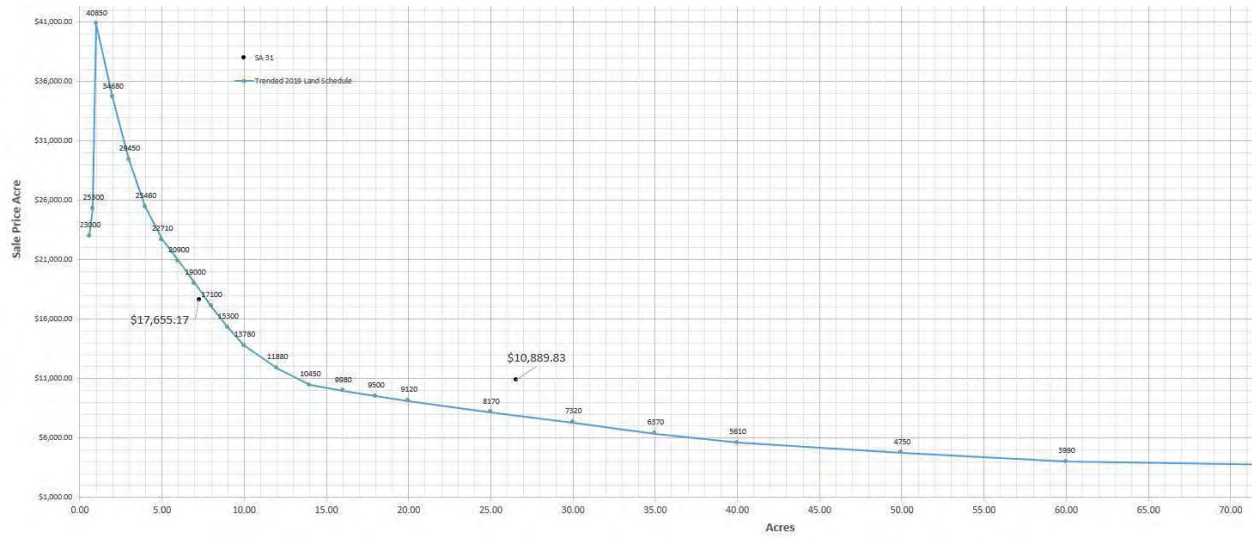
SA 03 LUC 002		
Flood Zone City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	9999	43,124

Maintenance Area (MA) 3, Rural Vernonia Land Setup

Analysis

There were 4 bare land sales, 2 of which were useable in the analysis for SA 31. These sales were site visited and time trended to the base appraisal date of 1/1/18. The plotted sales on the graph did appear to support the previous years land schedule.

MA 3 Rural Land Sales Graph



Conclusions

Based on the supporting data, SA 31 will retain the base land values with the 2018 trend applied.

MA 3 Rural Vernonia Reappraisal Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

003 = Residential Rural Tract – Acres

SA 31 LUC 003 Rural Vernonia		
Size (Acres)		Value Lump Sum
From	To	
0.00	0.60	36,100
0.61	0.80	38,000
0.81	1.00	40,850
Over 1 Acre		Per Acre
1.01	2.00	34,680
2.01	3.00	29,450
3.01	4.00	25,460
4.01	5.00	22,710
5.01	6.00	20,900
6.01	7.00	19,000
7.01	8.00	17,100
8.01	9.00	15,300
9.01	10.00	13,780
10.01	12.00	11,880
12.01	14.00	10,450
14.01	16.00	9,980
16.01	18.00	9,500
18.01	20.00	9,120
20.01	25.00	8,170
25.01	30.00	7,320
30.01	35.00	6,370
35.01	40.00	5,610
40.01	50.00	4,750
50.01	60.00	3,990
60.01	80.00	3,610
80.01	999999.00	2,850

Maintenance Area (MA) 4, City of Rainier Land Setup

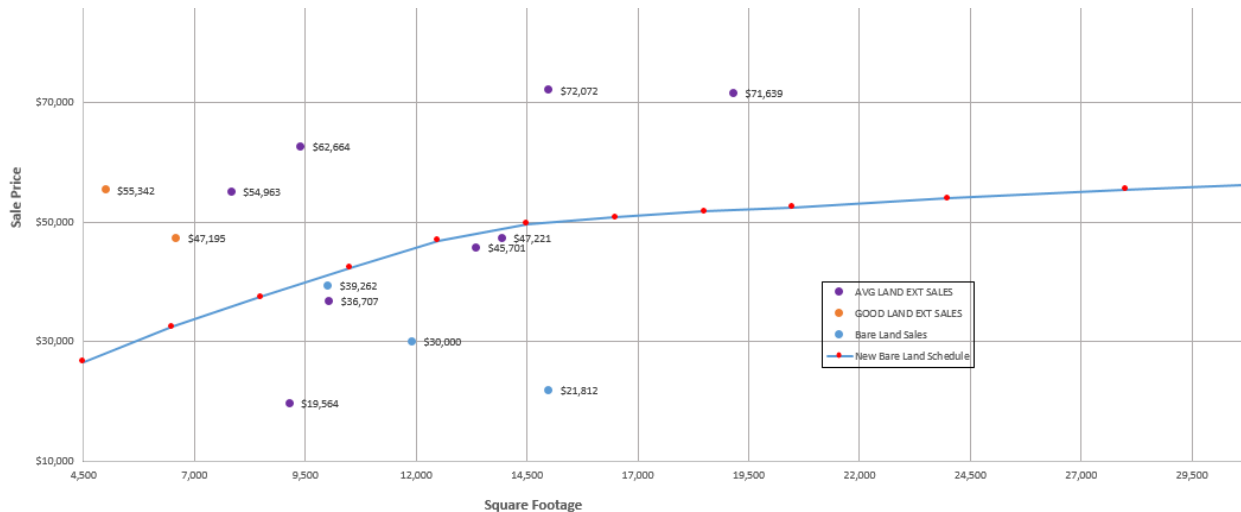
Analysis

For 2019, there were 4 city bare land sales of which 3 sales were used in the analysis for SA 00. The sales were time trended to the base appraisal date of 1/1/18. The plotted sales were insufficient to create a new land schedule for SA 00. Therefore, an extraction method was applied. There were 18 improved sales site visited and time trended to the base appraisal date of 1/1/18. The residual land value of each sale was plotted on the graph along with the bare land sales. These sales did not appear to support the previous years trended land schedule and a new schedule was developed. This year it was determined that SA 46 will be combined with SA 00 going forward.

Due to the lack of City acreage sales data within City of Rainier, the need to expand the search to nearby areas with a credible city acreage sale was warranted. Scappoose has recently seen several city acreage sales that were developed and which provide reasonable & credible data for a city acreage land schedule. When analyzing residential land sales data between City of Scappoose vs City of Rainier, land values indicate a -67% reduction between the areas. This negative reduction was then applied to the City of Scappoose City Acreage schedule, to provide a reasonable and credible City acreage land schedules for the City of Rainier.

There was insufficient data to create a new land schedule for SA 47.

MA 4 City Base Land Sales Graph



Conclusions

Based on the supporting data, a new land schedule for 2019 MA 04 SA 00 was developed. For SA 46, this was combined with SA 00. Due to the lack of data within SA 47, the prior year schedule should be used applying the 2018 ratio trend of 1.03. The City of Scappoose city acreage schedule of \$119,540 reduced by -67% for a rate per acre of \$39,450 will be used for the City acreage in the City of Rainier.

MA 4 City of Rainier Recalculation Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

001 = Residential City Under an Acre – Square Feet

002 = Residential City Acreage – Acres

SA 00 LUC 001 General Rainier		
Size (sq. ft.)		Total Value
From	To	
1	4500	45,000
4501	6500	54,000
6501	8500	61,500
8501	10500	70,500
10501	12500	77,500
12501	14500	82,000
14501	16500	84,500
16501	18500	86,500
18501	20500	88,000
20501	24000	89,000
24001	28000	91,000
28001	32000	93,000
32001	40000	96,000
40001	43560	98,000

SA 40 LUC 001 Duplex, Triplex, Fourplex		
Size (sq. ft.)		Total Value
From	To	
1	4500	45,000
4501	6500	54,000
6501	8500	61,500
8501	10500	70,500
10501	12500	77,500
12501	14500	82,000
14501	16500	84,500
16501	18500	86,500
18501	20500	88,000
20501	24000	89,000
24001	28000	91,000
28001	32000	93,000
32001	40000	96,000
40001	43560	98,000

SA 47 LUC 001 Rainier Riverfront Estates		
Size (sq. ft.)		Total Value
From	To	
1	4500	17,500
4501	6500	92,700

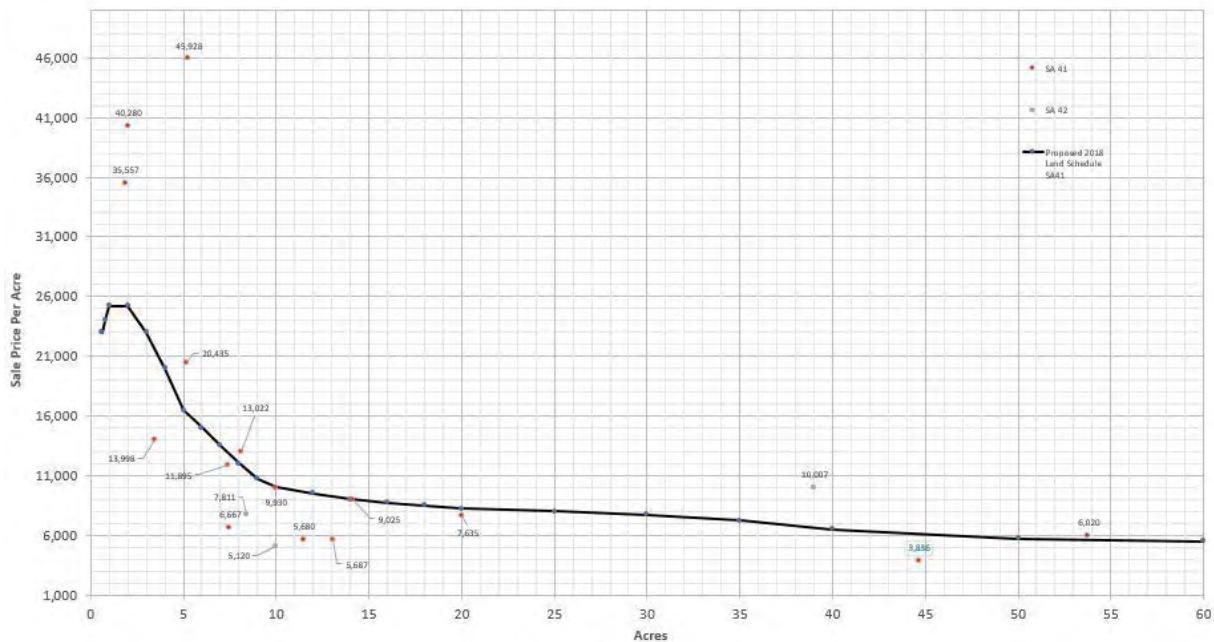
SA 00 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	999999	39,450

Maintenance Area (MA) 4, Rural Rainier Land Setup

Analysis

The sales are located in multiple SA's and when graphed for comparison appear to show a difference between SA 41 & 42 areas for parcels that are under 35 acres. Therefore, a schedule for both study areas has been created. The sales from these distinct study areas should continue to be analyzed and checked in future years. There were no useable bare land sales for SA 45 (Dike Land) during the sales period of 01/01/17 through 12/31/17. However, nearby and competing area (SA 55 Clatskanie Dike) had enough sales to create a new land schedule. The data indicated an overall average rate of reduction from SA 55 (Clatskanie Dike) vs SA 51 (Rural Clatskanie) resulting in approximately 30% less. There were no useable bare land sales for SA 44 (Prescott) and SA 56 (Deer Island Heights) during the sales period of 01/01/17 through 12/31/17. Therefore, data is insufficient for further analysis in SA 44 and SA 56 for the 2019 setup.

MA 4 Rural Land Sales Graph



Conclusions

Based on the supporting data, new land schedules for SA 41 and SA 42 were developed. Due to the lack of sales in SA 45, it is recommended to use the market derived data from nearby and competing Dike area of Clatskanie. It is recommended that SA 45 follow SA 41 land schedule with a -30% reduction based on the data collected from Clatskanie Dike. The land schedule for SA 41 will also be used for SA 44 and SA 56 due to lack of sales in those areas and similar land characteristics.

MA 4 Rural Rainier Recalculation Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

003 = Residential Rural Tract – Acres

SA 41 LUC 003 Rainier Value Zone 1		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	50,000
0.61	0.80	52,500
0.81	1.00	55,000
Over 1 Acre		Per Acre
1.01	2.00	47,000
2.01	3.00	37,000
3.01	4.00	29,500
4.01	5.00	24,000
5.01	6.00	20,500
6.01	7.00	18,000
7.01	8.00	16,000
8.01	9.00	14,250
9.01	10.00	13,500
10.01	12.00	12,000
12.01	14.00	11,000
14.01	16.00	9,700
16.01	18.00	9,000
18.01	20.00	8,500
20.01	25.00	7,000
25.01	30.00	6,000
30.01	35.00	5,150
35.01	40.00	4,750
40.01	50.00	4,100
50.01	60.00	4,100
60.01	80.00	4,100
80.01	999999.00	4,100

SA 42 LUC 003 Rainier Value Zone 2		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	42,500
0.61	0.80	44,630
0.81	1.00	46,750
Over 1 Acre		Per Acre
1.01	2.00	39,950
2.01	3.00	31,450
3.01	4.00	25,080
4.01	5.00	20,400
5.01	6.00	17,430
6.01	7.00	15,300
7.01	8.00	13,600
8.01	9.00	12,110
9.01	10.00	11,480
10.01	12.00	10,200
12.01	14.00	9,350
14.01	16.00	8,250
16.01	18.00	7,650
18.01	20.00	7,230
20.01	25.00	6,300
25.01	30.00	5,700
30.01	35.00	5,150
35.01	40.00	4,750
40.01	50.00	4,100
50.01	60.00	4,100
60.01	80.00	4,100
80.01	999999.00	4,100

SA 45 LUC 003 Rainier Dikeland		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	35,000
0.61	0.80	36,750
0.81	1.00	38,500
Over 1 Acre		Per Acre
1.01	2.00	32,900
2.01	3.00	25,900
3.01	4.00	20,650
4.01	5.00	16,800
5.01	6.00	14,350
6.01	7.00	12,600
7.01	8.00	11,200
8.01	9.00	9,975
9.01	10.00	9,450
10.01	12.00	8,400
12.01	14.00	7,700
14.01	16.00	6,790
16.01	18.00	6,300
18.01	20.00	5,950
20.01	25.00	4,900
25.01	30.00	4,200
30.01	35.00	3,605
35.01	40.00	3,325
40.01	50.00	2,870
50.01	60.00	2,870
60.01	80.00	2,870
80.01	999999.00	2,870

MA 4 Rural Rainier Recalculation Land Schedules for 2019 (continued)

SA 44 LUC 003 Prescott		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	50,000
0.61	0.80	52,500
0.81	1.00	55,000
Over 1 Acre		Per Acre
1.01	2.00	47,000
2.01	3.00	37,000
3.01	4.00	29,500
4.01	5.00	24,000

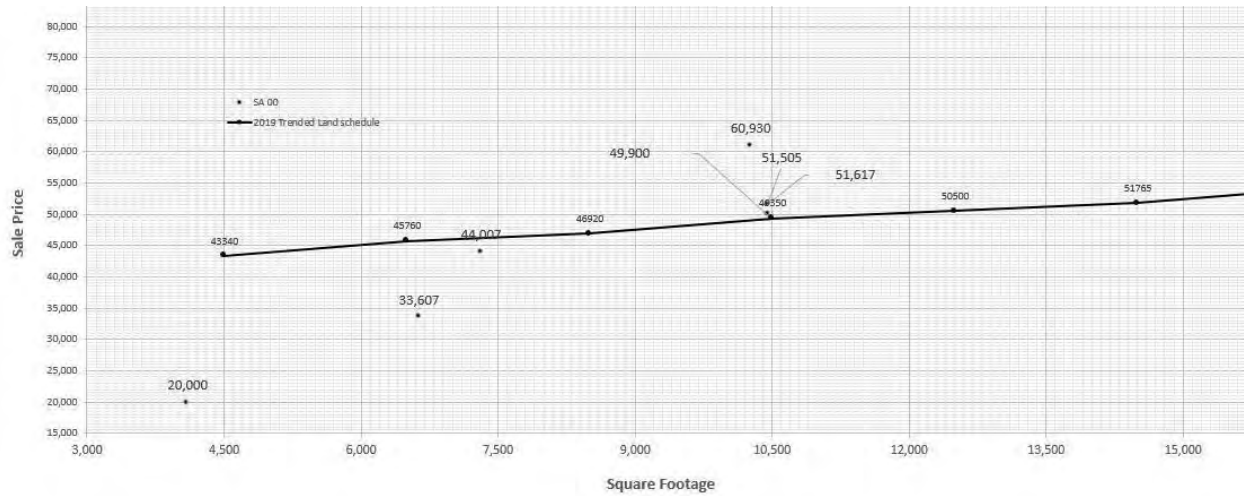
SA 56 LUC 003 Deer Island Heights		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	50,000
0.61	0.80	52,500
0.81	1.00	55,000
Over 1 Acre		Per Acre
1.01	2.00	47,000
2.01	3.00	37,000
3.01	4.00	29,500
4.01	5.00	24,000

Maintenance Area (MA) 5, City of Clatskanie Land Setup

Analysis

For the 2019 bare land study, there were 8 useable sales. These sales had a date of 1/1/17 - 12/31/17. These sales were plotted on the graph and supported the existing land schedule. For SA 40 and City Acreage, there were no sales.

MA 5 City Base Land Sales Graph



Conclusions

Based on the supporting data, the land schedule for SA 00 will maintain the current land base values with the 2018 trend applied. For SA 40, it will follow SA 00 land schedule. Due to the lack of sales for city acreage it will retain the existing land schedule with the 2018 trend applied.

MA 5 City of Clatskanie Recalculation Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

001 = Residential City Under an Acre – Square Feet

002 = Residential City Acreage – Acres

SA 00 LUC 001 General Clatskanie		
Size (sq. ft.)		Total Value
From	To	
1	4500	43,340
4501	6500	45,750
6501	8500	46,950
8501	10500	49,360
10501	12500	50,560
12501	14500	51,770
14501	16500	54,170
16501	18500	56,580
18501	20500	60,190
20501	24000	63,810
24001	28000	67,620
28001	32000	71,690
32001	40000	75,990
40001	43560	80,540

SA 40 LUC 001 General Clatskanie		
Size (sq. ft.)		Total Value
From	To	
1	4500	43,340
4501	6500	45,750
6501	8500	46,950
8501	10500	49,360
10501	12500	50,560
12501	14500	51,770
14501	16500	54,170
16501	18500	56,580
18501	20500	60,190
20501	24000	63,810
24001	28000	67,620
28001	32000	71,690
32001	40000	75,990
40001	43560	80,540

SA 00 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
0	999999	42,890

Maintenance Area (MA) 5, Rural Clatskanie Land Setup

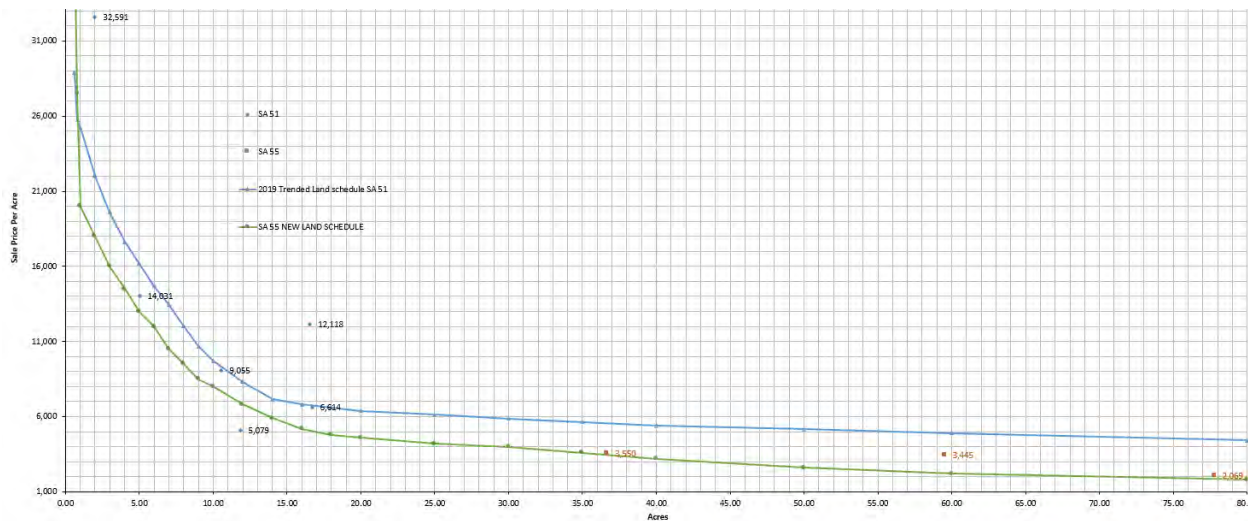
Analysis

In SA 51, there were 11 rural bare land sales of which 6 sales were used in the analysis for SA 51. The sales were time trended to the base appraisal date of 1/1/18. The 2018 land schedule was trended and plotted. The plotted sales on the graph appear to support the previous years trended land schedule.

In SA 55, there were two sales used to analyze if SA 55 warranted a different land schedule than SA 51. The plotted sales did support a new land schedule for SA 55. Therefore, a new land schedule was created for 2019 setup for this study area.

In SA 36, Fishhawk Lake, the extraction method was used. Sales from both Columbia County and Clatsop County were used. 10 sales, and of those 5 sales showed a base land value range between 19,000 and 24,000. The other 5 were determined to be outliers. The average of these sales were compared to 2 base lot sales that took place in August of 2018. Those lots were sold for 25,000 each. The decision was made to use a base lot value of 22,500 for 2019.

MA 5 Rural Land Sales Graph



Conclusions

For 2019 in SA 51, the useable sales plotted on the graph did support the current land schedule with the 2018 ratio applied. There were three sales used to analyze if SA 55 warranted a different land schedule than SA 51. The plotted sales did support a new land schedule for SA 55. Based on the supporting sales data in SA 37, the new base lot land value in Fishhawk Lake Estates is \$22,500.

MA 5 Rural Clatskanie Recalculation Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

003 = Residential Rural Tract – Acres

SA 51 LUC 003 Clatskanie Value Zone 1		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	28,910
0.61	0.80	25,730
0.81	1.00	25,240
Over 1 Acre		Per Acre
1.01	2.00	22,050
2.01	3.00	19,600
3.01	4.00	17,640
4.01	5.00	16,170
5.01	6.00	14,700
6.01	7.00	13,480
7.01	8.00	12,010
8.01	9.00	10,680
9.01	10.00	9,700
10.01	12.00	8,330
12.01	14.00	7,150
14.01	16.00	6,810
16.01	18.00	6,620
18.01	20.00	6,370
20.01	25.00	6,130
25.01	30.00	5,880
30.01	35.00	5,640
35.01	40.00	5,390
40.01	50.00	5,150
50.01	60.00	4,900
60.01	80.00	4,410
80.01	999999.00	3,920

SA 55 LUC 003 Clatskanie Dikeland		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	23,000
0.61	0.80	22,000
0.81	1.00	20,000
Over 1 Acre		Per Acre
1.01	2.00	18,000
2.01	3.00	16,000
3.01	4.00	14,500
4.01	5.00	13,000
5.01	6.00	12,000
6.01	7.00	10,500
7.01	8.00	9,500
8.01	9.00	8,500
9.01	10.00	8,000
10.01	12.00	6,800
12.01	14.00	5,900
14.01	16.00	5,200
16.01	18.00	4,800
18.01	20.00	4,600
20.01	25.00	4,200
25.01	30.00	4,000
30.01	35.00	3,600
35.01	40.00	3,200
40.01	50.00	2,600
50.01	60.00	2,200
60.01	80.00	1,800
80.01	999999.00	1,500

SA 36 LUC 003 Fishhawk Lake Estates		
Size (Acres)		Value
From	To	Lump Sum
0.01	5.00	22,500

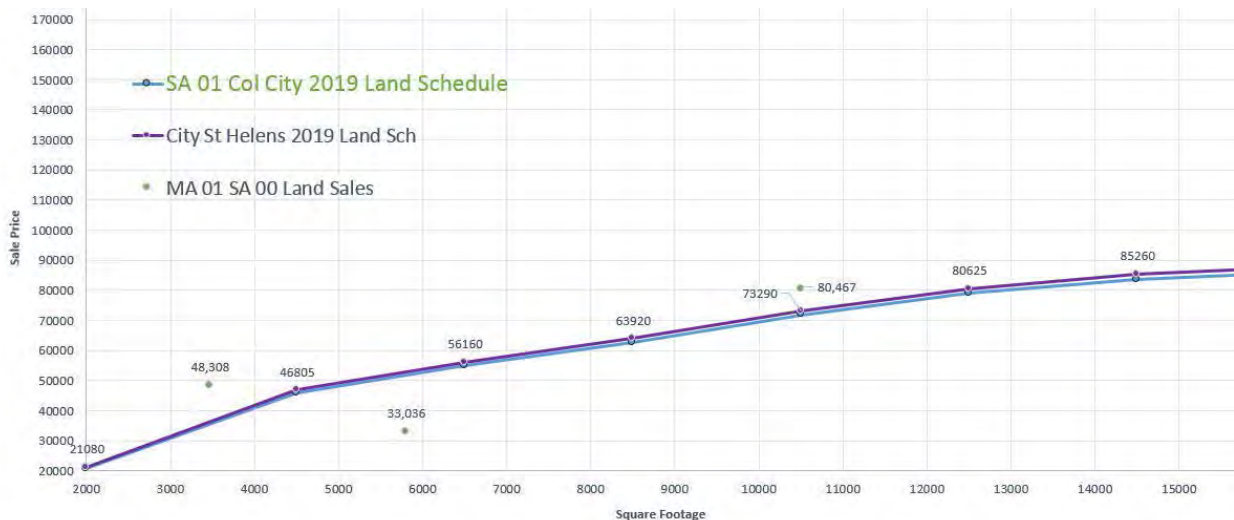
Maintenance Area (MA) 6, City of Columbia City Land Setup

Analysis

Columbia City had no bare land sales for SA 01, SA 21 and SA 31, therefore sales from a nearby and competing market area of St Helens were included for analysis. There were 7 bare land sales with only 3 useable in St. Helens. Since both land schedules were developed collectively between St Helens and Columbia City, its considered reasonable and most reflective of market data to apply the trend of 1.04 to the 2018 base schedule for the base appraisal of 1/1/18. All sales analyzed were ranging from 1/1/17 to 12/31/17 and time trended to the base appraisal date of 1/1/18. For SA 15 there was only one bare land sale which was included last year and due to the lack of additional sales in SA 15, it's also considered reasonable to also trend the 2018 SA 15 schedule at rate of 1.04 for the 1/1/18 base appraisal. In addition, market data appears to indicate that SA 21 is moving at the same rate as the general SA 01 of Columbia City, therefore it is recommended to combine SA 21 into the general SA 01 for 2019 set up.

Due to the lack of City acreage sales data within Columbia City and St Helens, the need to expand the search to nearby Scappoose was warranted. Scappoose has recently seen several city acreage sales that were developed, which provides reasonable & credible data for a city acreage land schedule. When analyzing residential land sales data between City of Scappoose vs Columbia City & St Helens, land values indicate a 55% reduction between the areas. This 55% reduction was applied to the City of Scappoose City Acreage schedule, to provide reasonable and credible City acreage land schedules for both Columbia City and St Helens. It is recommended that the following rate per acre of \$65,410 be utilized for City acreage LUC 002 land schedule in both Columbia City and St Helens, but to have the 2018 City of St Helens trend of 1.04 applied for an adjusted rate/per acre of \$68,010.

MA 6 City Base Land Sales Graph



Conclusions

Based on the supporting data, Columbia City will use the existing base land values with the City of St Helens 2018 trend of 1.04 for SA 01, 15, 31 and land use codes 001 and 002.

MA 6 City of Columbia City Recalculation Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

001 = Residential City Under an Acre – Square Feet

002 = Residential City Acreage – Acres

005 = Residential Riverfront – Front Footage

SA 01 LUC 001 General Columbia City		
Size (sq. ft.)		Total Value
From	To	
1	4500	46,800
4501	6500	56,160
6501	8500	63,960
8501	10500	73,320
10501	12500	80,600
12501	14500	85,280
14501	16500	87,880
16501	18500	89,960
18501	20500	91,520
20501	24000	92,560
24001	28000	94,640
28001	32000	96,720
32001	40000	99,840
40001	43560	101,920

SA 31 LUC 001 Duplex, Triplex, Fourplex		
Size (sq. ft.)		Total Value
From	To	
1	4500	46,800
4501	6500	56,160
6501	8500	63,960
8501	10500	73,320
10501	12500	80,600
12501	14500	85,280
14501	16500	87,880
16501	18500	89,960
18501	20500	91,520
20501	24000	92,560
24001	28000	94,640
28001	32000	96,720
32001	40000	99,840
40001	43560	101,920

SA 15 LUC 005 Riverfront		
Size (front footage)		Total Value
From	To	
0	40	188,710
41	50	193,910
51	55	199,110
56	60	204,310
61	65	209,510
66	70	214,710
71	75	219,910
76	85	225,110
86	95	230,880
96	105	240,240
106	115	249,600
116	125	260,000
126	135	269,360
126	135	278,720
136	145	287,040
146	155	297,440
156	165	306,800
166	175	318,240
176	185	328,640
186	195	330,720

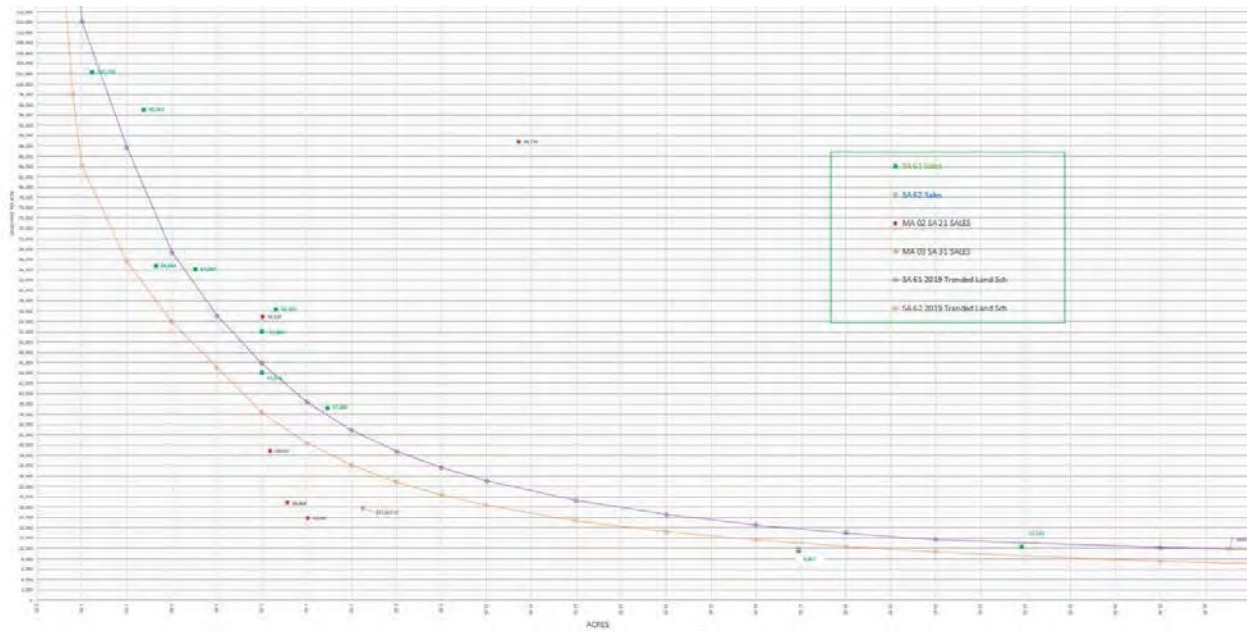
SA 01 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
1.00	999999	68,010

Maintenance Area (MA) 6, Rural Saint Helens Land Setup

Analysis

For this bare land study, there were a total of 18 sales analyzed. Of those sales, 10 were considered usable in SA 61. For SA 62 there was 1 usable sale and 1 unusable. Also included were 7 land sales from nearby and competing market areas of Rural Scappoose (SA's 21). For SA 65 there were no sales. All sales analyzed were ranging from 1/1/17 to 12/31/17 and time trended to the base appraisal date of 1/1/18.

MA 6 Rural Land Sales Graph



Conclusions

The sales data was analyzed together and separately to identify indicated patterns based on location, size, or other influencing factors. The sales data for SA 61 & SA 62 support the existing bare land schedule with the 2018 trend applied. SA 65 had no useable sales for analysis therefore will follow SA 61 land schedule with 2018 trend applied.

MA 6 Rural Saint Helens Recalculation Land Schedules for 2019

SA = Study Area (Properties, usually within specified boundaries, that share similar market attributes and influence)

LUC = Land Use Code (Type of land value schedule used for assessment)

003 = Residential Rural Tract - Acres

SA 61 LUC 003 Rural St Helens Value Zone 1		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	99,960
0.61	0.80	107,100
0.81	1.00	112,200
Over 1 Acre		Per Acre
1.01	2.00	87,720
2.01	3.00	67,320
3.01	4.00	55,080
4.01	5.00	45,900
5.01	6.00	38,350
6.01	7.00	32,900
7.01	8.00	28,820
8.01	9.00	25,650
9.01	10.00	23,100
10.01	12.00	19,280
12.01	14.00	16,580
14.01	16.00	14,540
16.01	18.00	13,010
18.01	20.00	11,730
20.01	25.00	10,200
25.01	30.00	9,180
30.01	35.00	8,670
35.01	40.00	8,160
40.01	50.00	7,650
50.01	60.00	7,140
60.01	80.00	6,630
80.01	999999.00	5,100

SA 62 LUC 003 Rural St Helens Value Zone 2		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	72,520
0.61	0.80	78,400
0.81	1.00	84,280
Over 1 Acre		Per Acre
1.01	2.00	65,660
2.01	3.00	53,900
3.01	4.00	45,080
4.01	5.00	36,260
5.01	6.00	30,380
6.01	7.00	26,070
7.01	8.00	22,880
8.01	9.00	20,380
9.01	10.00	18,380
10.01	12.00	15,340
12.01	14.00	13,180
14.01	16.00	11,610
16.01	18.00	10,340
18.01	20.00	9,310
20.01	25.00	7,500
25.01	30.00	6,270
30.01	35.00	5,880
35.01	40.00	5,390
40.01	50.00	4,900
50.01	60.00	4,800
60.01	80.00	4,410
80.01	999999.00	3,430

SA 65 LUC 003 Rural St Helens Dikeland		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	99,960
0.61	0.80	107,100
0.81	1.00	112,200
Over 1 Acre		Per Acre
1.01	2.00	87,720
2.01	3.00	67,320
3.01	4.00	55,080
4.01	5.00	45,900
5.01	6.00	38,350
6.01	7.00	32,900
7.01	8.00	28,820
8.01	9.00	25,650
9.01	10.00	23,100
10.01	12.00	19,280
12.01	14.00	16,580
14.01	16.00	14,540
16.01	18.00	13,010
18.01	20.00	11,730
20.01	25.00	10,200
25.01	30.00	9,180
30.01	35.00	8,670
35.01	40.00	8,160
40.01	50.00	7,650
50.01	60.00	7,140
60.01	80.00	6,630
80.01	999999.00	5,100

2019 On-Site Development (OSD) Analysis and Conclusions

Maintenance Area 1, City of Saint Helens On-Site Development (OSD) Study

Analysis

The cost figures below are estimates associated with the development of a residential structure within the City of St Helens. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner, or developer, for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of 5-10k square foot lot.
- Power costs are provided by the local governing utility company Columbia River PUD. These cost estimates are based on CRPUD's flat rate fee schedule.
- All the necessary SDC fees associated with; water, sewer, parks, streets, and storms are only charged at initial development of a site.
- Multifamily properties, if available, have the choice to have each unit metered independently for water and sewer for billing purposes. It should be noted that contractors indicated no real increase in excavation costs for the typical up to 4 unit multifamily. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$11,000	\$11,000	\$11,000	\$11,000
Power (Columbia River PUD)	\$1,740	\$1,880	\$2,030	\$2,190
Water SDC + connection	\$4,086	\$8,172	\$12,258	\$16,344
Sanitary services SDC + connection	\$4,252	\$8,504	\$12,756	\$17,008
Parks SDC	\$2,944	\$2,904	\$4,357	\$5,809
Streets SDC	\$2,370	\$4,233	\$6,350	\$8,466
Storm SDC	\$821	\$821	\$1,231	\$1,642
School Construction Excise Tax (CET)	\$2,340	\$2,600	\$3,640	\$4,680
TOTAL	\$29,553	\$40,114	\$53,622	\$67,139

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 City of Saint Helens OSD	
Single Family Dwelling	\$29,600
Multi-Family – Duplex	\$40,100
Multi-Family – Triplex	\$53,600
Multi-Family – Fourplex	\$67,100

Maintenance Area 2, City of Scappoose On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the City of Scappoose. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner or, developer, for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of 5-10k square foot lot.
- Power costs are provided by the local governing utility company Columbia River PUD. These cost estimates are based on CRPUD's flat rate fee schedule.
- All the necessary SDC fees associated with; water, sewer, parks, streets, and storms are SDC fees that are charged only at initial development of a site.
- Multi-family properties in this area generally opt to have each unit separately metered for water and sewer, because of the cost of water & sewer rates. It should be noted that contractors indicated no real increase in excavation costs for the typical up to 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$11,000	\$11,000	\$11,000	\$11,000
Power (Columbia River PUD)	\$1,740	\$1,880	\$2,030	\$2,190
Water SDC + connection	\$5,715	\$11,430	\$17,145	\$22,860
Sanitary services SDC + connection	\$5,116	\$10,232	\$15,348	\$20,464
Parks SDC	\$2,087	\$3,068	\$4,603	\$6,136
Streets SDC	\$2,034	\$4,068	\$6,102	\$8,136
Storm SDC	\$629	\$629	\$944	\$1,258
School Construction Excise Tax (CET)	\$2,268	\$2,520	\$3,528	\$4,536
TOTAL	\$30,589	\$44,827	\$60,699	\$76,580

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 City of Scappoose OSD	
Single Family Dwelling	\$30,600
Multi-Family – Duplex	\$44,800
Multi-Family – Triplex	\$60,700
Multi-Family – Fourplex	\$76,600

Maintenance Area 2, Rural Scappoose On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the rural areas of Scappoose. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner, or developer, for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of less than an acre.
- Power costs are provided by the local governing utility companies; Columbia River PUD (CRPUD), West Oregon Electric, and PGE. Approximately 75% of the area is served by Columbia River PUD, therefore these cost estimates are based on CRPUD's flat rate fee schedule.
- Water is generally provided by drilled domestic water wells on each property at an average well depth of 280' deep (per local drillers).
- Sanitation is generally provided by a private onsite standard septic system. Its known that other alternative septic systems are utilized throughout the county, but the standard septic system is reported to be the typical system as shown below. Columbia County Land Development Services imposes transportation & parks SDC fees, that are charged at initial development of the site.
- Multi-family properties in the rural areas are limited, with the assumption that they are only separately metered for electric and not water & sewer. It should be noted that contractors indicated no real increase in excavation costs for the typical up to 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$17,100	\$17,100	\$17,100	\$17,100
Power (Columbia River PUD)	\$4,282	\$5,267	\$6,268	\$7,270
Well Drilling & Pump System 280' @\$65	\$18,500	\$18,500	\$18,500	\$18,500
Sanitation (Standard Septic) w/permits	\$11,473	\$11,473	\$11,473	\$11,473
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
School Construction Excise Tax (CET)	\$2,268	\$2,520	\$3,528	\$4,536
TOTAL	\$56,646	\$57,882	\$59,891	\$61,902

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 Rural Scappoose OSD	
Single Family Dwelling	\$56,600
Multi-Family – Duplex	\$57,900
Multi-Family – Triplex	\$59,900
Multi-Family – Fourplex	\$61,900

Maintenance Area 3, City of Vernonia On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the City of Vernonia. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner, or developer, for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of 5-10k square foot lot.
- Power costs are provided by the local governing utility company West Oregon Electric Co-op (WOEC).
- All the necessary SDC fees associated with; water, sewer, parks, streets, and storms are fees that are charged only at initial development of a site.
- Multi-family properties in this area generally opt to have each unit separately metered for water and sewer, because of the cost of water & sewer rates. It should be noted that contractors indicated no real increase in excavation costs for up to a typical 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$11,000	\$11,000	\$11,000	\$11,000
Power (Western Oregon Electric)	\$5,305	\$6,555	\$7,805	\$9,055
Sewer SDC	\$2,957	\$5,914	\$8,871	\$11,828
Storm SDC	\$1,340	\$2,680	\$4,020	\$5,360
Streets SDC	\$858	\$1,716	\$2,574	\$3,432
Parks SDC	\$1,000	\$2,000	\$3,000	\$4,000
Water Connection Fee	\$1,050	\$2,100	\$3,150	\$4,200
Sewer Connection Fee	\$1,250	\$2,500	\$3,750	\$5,000
TOTAL	\$27,029	\$39,003	\$50,977	\$62,977

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2018, the new OSD costs are listed below.

2019 City of Vernonia OSD	
Single Family Dwelling	\$27,000
Multi-Family – Duplex	\$39,000
Multi-Family – Triplex	\$51,000
Multi-Family – Fourplex	\$63,000

Maintenance Area 3, Rural Vernonia On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the rural areas of Vernonia. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner or developer for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of less than an acre.
- Power costs estimates are provided by the local governing utility company West Oregon Electric Co-op (WOEC).
- Water is generally provided by drilled domestic water wells on each property with an average well depth of 280' deep (per local drillers).
- Sanitation is generally provided by a private onsite standard septic system. Its known that other alternative septic systems are utilized throughout the county, but the standard septic system is reported to be the most typical system as shown below. Columbia County Land Development Services impose transportation & park SDC fees, which are charged at initial development of the site.
- Multi-family properties in the rural areas are limited, with the assumption that they are only separately metered for electric and not water & sewer. It should be noted that contractors indicated no real increase in excavation costs for up to the 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$17,100	\$17,100	\$17,100	\$17,100
Power (Western Oregon Electric)	\$6,896	\$8,222	\$19,548	\$10,875
Well Drilling & Pump System 280' @\$65	\$18,500	\$18,500	\$18,500	\$18,500
Sanitation (Standard Septic) w/permits	\$11,473	\$11,473	\$11,473	\$11,473
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
TOTAL	\$56,992	\$58,318	\$59,644	\$60,971

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 Rural Vernonia OSD	
Single Family Dwelling	\$57,000
Multi-Family – Duplex	\$58,300
Multi-Family – Triplex	\$69,600
Multi-Family – Fourplex	\$61,000

Maintenance Area 4, City of Rainier On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the City of Rainier. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner, or developer, for site development of a new structure.

Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of 5-10k square foot lot.

Power costs are provided by the local governing utility company Clatskanie PUD. Clatskanie PUD offers a line credit for new installations that generally cover the costs.

All the necessary SDC fees associated with water & sewer are charged at initial development of a site.

Multi-family properties in Rainier generally opt not to separately meter for water and sewer, but do opt for a separate meter for electric. It should be noted that contractors indicated no real increase in excavation costs for up to a typical 4 unit multi-family home. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$11,000	\$11,000	\$11,000	\$11,000
Power (Clatskanie PUD)	\$100	\$100	\$100	\$100
Sanitary services SDC + connection	\$2,745	\$5,490	\$8,235	\$10,980
Water SDC + connection	\$1,420	\$1,420	\$1,420	\$1,420
TOTAL	\$15,265	\$18,010	\$20,755	\$23,500

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 City of Rainier OSD	
Single Family Dwelling	\$15,300
Multi-Family – Duplex	\$18,000
Multi-Family – Triplex	\$20,800
Multi-Family – Fourplex	\$23,500

Maintenance Area 4, Rural Rainier On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the rural areas of Rainier. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner, or developer, for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of less than an acre.
- Power costs are provided by the local governing utility company Columbia River PUD (CRPUD) and are based on CRPUD's flat rate fee schedule.
- Water is generally provided by drilled domestic water wells on each property at an average well depth of 280' deep (per local drillers).
- Sanitation is generally provided by a private onsite standard septic system. Its known that other alternative septic systems are utilized throughout the county, but the standard septic system is reported to be the typical system as shown below. Columbia County Land Development Services imposes transportation & parks SDC fees, that are charged at initial development of the site.
- Multi-family properties in the rural areas are limited, with the assumption that they are only separately metered for electric and not water & sewer. It should be noted that contractors indicated no real increase in excavation costs for the typical up to 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$17,100	\$17,100	\$17,100	\$17,100
Power (Columbia River PUD)	\$4,282	\$5,267	\$6,268	\$7,270
Well Drilling & Pump System 280' @\$65	\$18,500	\$18,500	\$18,500	\$18,500
Sanitation (Standard Septic) w/permits	\$11,473	\$11,473	\$11,473	\$11,473
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
TOTAL	\$54,378	\$55,363	\$56,364	\$57,366

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 Rural Rainier OSD	
Single Family Dwelling	\$54,400
Multi-Family – Duplex	\$55,400
Multi-Family – Triplex	\$56,400
Multi-Family – Fourplex	\$57,400

Maintenance Area 4, City of Prescott On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the rural areas of Rainier. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner, or developer, for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of less than an acre.
- Power costs are provided by the local governing utility company, Columbia River PUD (CRPUD), and are based on CRPUD's flat rate fee schedule.
- Water is provided by a community water source in Prescott.
- Sanitation is generally provided by a private onsite standard septic system. It is known that other alternative septic systems are utilized throughout the county, but the standard septic system is reported to be the typical system as shown below. Columbia County Land Development Services imposes transportation & parks SDC fees, that are charged at initial development of the site.
- Multi-family properties in the rural areas are limited, with the assumption that they are only separately metered for electric and not water & sewer. It should be noted that contractors indicated no real increase in excavation costs for the typical up to 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$17,100	\$17,100	\$17,100	\$17,100
Power (Columbia River PUD)	\$4,282	\$5,267	\$6,268	\$7,270
Community Water Hook Up	\$500	\$1,000	\$1,500	\$2,000
Sanitation (Standard Septic) w/permits	\$11,473	\$11,473	\$11,473	\$11,473
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
TOTAL	\$36,378	\$37,863	\$39,364	\$40,866

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 City of Prescott OSD	
Single Family Dwelling	\$36,040
Multi-Family – Duplex	\$38,090
Multi-Family – Triplex	\$39,040
Multi-Family – Fourplex	\$41,090

Maintenance Area 5, City of Clatskanie On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the City of Clatskanie. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner, or developer, for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of 5-10k square foot lot.
- Power costs are provided by the local governing utility company Clatskanie PUD. Clatskanie PUD offers a line credit for new installations that generally cover the costs.
- All the necessary SDC fees associated with water & sewer are charged at initial development of a site.
- Multi-family properties in this area generally opt not to separately meter for water and sewer, but do separately meter for electric. It should be noted that contractors indicated no real increase in excavation costs for up to a typical 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.
-

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$11,000	\$11,000	\$11,000	\$11,000
Power (Clatskanie)	\$100	\$100	\$100	\$100
Sanitary services SDC + connection	\$1,500	\$2,250	\$3,000	\$3,750
Water SDC + connection	\$1,250	\$1,900	\$2,550	\$3,200
TOTAL	\$13,850	\$15,250	\$16,650	\$18,050

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 City of Clatskanie OSD	
Single Family Dwelling	\$13,900
Multi-Family – Duplex	\$15,300
Multi-Family – Triplex	\$16,700
Multi-Family – Fourplex	\$18,100

Maintenance Area 5, Rural Clatskanie On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the rural areas of Clatskanie. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner or developer for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of less than an acre.
- Power costs are provided by the local governing utility company Clatskanie PUD. Clatskanie PUD offers a line credit for new installations that generally cover the costs.
- Water is generally provided by drilled domestic water wells on each property at an average well depth of 280' deep (per local drillers).
- Sanitation is generally provided by a private onsite standard septic system. Its known that other alternative septic systems are utilized throughout the county, but the standard septic system is reported to be the typical system as shown below. Columbia County Land Development Services imposes transportation & parks SDC fees, that are charged at initial development of the site.
- Multi-family properties in the rural areas are limited, with the assumption that they are only separately metered for electric and not water & sewer. It should be noted that contractors indicated no real increase in excavation costs for the typical up to 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$17,100	\$17,100	\$17,100	\$17,100
Power (Clatskanie PUD)	\$100	\$100	\$100	\$100
Well Drilling & Pump System 280' @\$65	\$18,500	\$18,500	\$18,500	\$18,500
Sanitation (Standard Septic) w/permits	\$11,473	\$11,473	\$11,473	\$11,473
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
TOTAL	\$50,196	\$50,196	\$50,196	\$50,196

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 Rural Clatskanie OSD	
Single Family Dwelling	\$50,200
Multi-Family – Duplex	\$50,200
Multi-Family – Triplex	\$50,200
Multi-Family – Fourplex	\$50,200

Maintenance Area 5, Fishhawk Lake On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the rural areas of Clatskanie (Fishhawk Lake). The categories listed below are market related costs and supplemental development charges (SDC) required by the owner or developer for site development of a new structure.

- Excavation costs include clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of less than an acre.
- Power costs estimates are provided by the local governing utility company West Oregon Electric Co-op (WOEC).
- Water & sewer are provided by a community system operated by Fishhawk homeowners association. Columbia County Land Development Services imposes transportation & parks SDC fees, that are charged at initial development of the site.
- Multi-family properties in the rural areas are limited, with the assumption that they are only separately metered for electric and not water & sewer. It should be noted that contractors indicated no real increase in excavation costs for the typical up to 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$17,100	\$17,100	\$17,100	\$17,100
Power (Western Oregon Electric)	\$6,896	\$8,222	\$9,548	\$10,875
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
Fishhawk Community Water/Sewer Hook Up	\$2,000	\$2,000	\$2,000	\$2,000
TOTAL	\$29,019	\$30,345	\$31,671	\$32,998

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 Fishhawk Lake OSD	
Single Family Dwelling	\$29,000
Multi-Family – Duplex	\$30,300
Multi-Family – Triplex	\$31,700
Multi-Family – Fourplex	\$33,000

Maintenance Area 6, City of Columbia City On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the City of Columbia City. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner, or developer, for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of 5-10k square foot lot.
- Power costs are provided by the local governing utility company, Columbia River PUD (CRPUD), these cost estimates are based on CRPUD's flat rate fee schedule.
- All the necessary SDC fees associated with; water, sewer, parks, streets, and storms are SDC fees that are charged only at initial development of a site.
- Multi-family properties in this area generally opt to have each unit separately metered for water and sewer, because of the cost of water & sewer rates. It should be noted that contractors indicated no real increase in excavation costs for the typical up to 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$11,000	\$11,000	\$11,000	\$11,000
Power (Columbia River PUD)	\$1,740	\$1,880	\$2,030	\$2,190
Water SDC + connection	\$5,477	\$10,954	\$16,431	\$21,908
Sanitary services SDC + connection	\$5,840	\$11,680	\$17,520	\$23,360
Parks SDC	\$2,019	\$4,038	\$6,057	\$8,076
Storm Drainage SDC	\$389	\$464	\$696	\$928
Transportation SDC	\$4,575	\$5,604	\$8,406	\$11,208
School Construction Excise Tax (CET)	\$2,340	\$2,600	\$3,640	\$4,680
TOTAL	\$33,380	\$48,220	\$65,780	\$83,350

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 City of Columbia City OSD	
Single Family Dwelling	\$33,400
Multi-Family – Duplex	\$48,200
Multi-Family – Triplex	\$65,800
Multi-Family – Fourplex	\$83,400

Maintenance Area 6, Rural Saint Helens On-Site Development (OSD) Study

Analysis

The cost figures below are cost estimates associated with the development of a residential structure within the rural areas of Warren, Scappoose, & St Helens. The categories listed below are market related costs and supplemental development charges (SDC) required by the owner or developer for site development of a new structure.

- Excavation costs include; clearing, driveway, excavation, backfill, grading, & utility trenching. The site development cost is based on an overall typical site of less than an acre.
- Power costs are provided by the local governing utility company, Columbia River PUD (CRPUD), and are based on CRPUD's flat rate fee schedule.
- Water is generally provided by drilled domestic water wells on each property at an average well depth of 280' deep (per local drillers).
- Sanitation is generally provided by a private onsite standard septic system. It's known that other alternative septic systems are utilized throughout the county, but the standard septic system is reported to be the typical system as shown below. Columbia County Land Development Services imposes transportation & parks SDC fees, that are charged at initial development of the site.
- Multi-family properties in the rural areas are limited, with the assumption that they are only separately metered for electric and not water & sewer. It should be noted that contractors indicated no real increase in excavation costs for the typical up to 4 unit multi-family. These cost figures have been acquired and refreshed annually to keep up with market related development costs of residential dwellings.

Description	SFD	Duplex	Triplex	Fourplex
Excavation	\$17,100	\$17,100	\$17,100	\$17,100
Power (Columbia River PUD)	\$4,282	\$5,267	\$6,268	\$7,270
Well Drilling & Pump System 280' @\$65	\$18,500	\$18,500	\$18,500	\$18,500
Sanitation (Standard Septic) w/permits	\$11,473	\$11,473	\$11,473	\$11,473
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
School Construction Excise Tax (CET)	\$2,304	\$2,560	\$3,584	\$4,608
TOTAL	\$56,682	\$57,923	\$59,948	\$61,974

Conclusions

The collected cost data is deemed to be credible and reliable indicators of on site development costs for residential dwellings. For 2019, the new OSD costs are listed below.

2019 Rural Saint Helens OSD	
Single Family Dwelling	\$56,700
Multi-Family – Duplex	\$57,900
Multi-Family – Triplex	\$59,900
Multi-Family – Fourplex	\$62,000

2019 Local Cost Modifiers (LCM) Analysis and Conclusions

Countywide Local Cost Modifier (LCM) Study for Conventional Dwellings

This study establishes a modifier to be applied to construction costs found in the 2005 Cost Factors for Residential Buildings, to adjust the factors for conventional dwellings to the base appraisal date of 1/1/18.

Analysis

This analysis for the 2019 LCM set up year was based on sales of homes built in 2017. The initial raw data included 99 properties to review for use in the study. After an initial review of these properties, many were removed from this study for the following reasons:

- Sales of properties that included carriage houses, farm buildings, or additional structures.
- Sales of properties that had notable value influences due to topography, views, etc.
- Sales of properties in areas that there were not enough vacant land sales to establish a land schedule.
- Sales of properties where it was difficult to accurately determine the quality of construction as compared to our cost factor book and class benchmarks.
- Cost of new homes where the owners were the general contractor.

Of the remaining 46 sales, 25 were properties where the new home and land were marketed and sold together, and 21 were homes where the owner had previously purchased the land and hired a general contractor to build. Sales that included land were time trended to the base appraisal date of January 1, 2018. All sites were field inspected by appraisers to verify class and gather data on the cost to build, if appropriate.

For the 25 homes that sold with the land, the land and OSD are calculated using the new factors from our land and OSD studies, and then subtracted from the time trended sale price of the property to extract the value of the dwelling. This residual value is then compared to a replacement cost new (RCN) calculated from the 2005 Residential Cost Factor Book. The ratio between the residual value and the RCN is an indicated Local Cost Modifier (LCM). The average LCM using this method was 1.29. For the 21 homes that were the contractor's total cost to build on the buyer's land, the ratio between the contractor's cost and the RCN is an indicated LCM. The average LCM using this method was 1.29.

Conclusions

The overall LCM mean calculated at 1.29; the sales extraction and the cost method both indicated an LCM of 1.29.

The 2019 Conventional Dwelling LCM to be applied to the 2005 Residential Cost Factor Book is 1.29.

Countywide Local Cost Modifier (LCM) Study Manufactured Dwellings

This study establishes a modifier to be applied to construction costs found in the 2004 Cost Factors for Manufactured Structures, to adjust the factors for manufactured dwellings to the base appraisal date of 1/1/18.

Analysis

This analysis for the 2019 MS LCM set up year was based on sales of manufactured homes built in 2017 that were sited in Columbia County. These homes were placed throughout the county and site visited to verify classing and confirm building cost data for analyzation. There were a total of 12 usable properties for analysis based on constructions costs. No sales were available for extraction analysis at this time. The indicated LCM's for the 12 homes ranged from 1.07 to 1.84, with a mean of 1.45.

Conclusions

The overall mean of 1.45 is consistent with the prior year LCM of 1.47.

The 2019 Manufactured Dwelling LCM to be applied to the 2004 Cost Factors for Manufactured Structures is 1.45.

Countywide Local Cost Modifier (LCM) Study for Floating Property

The Oregon Department of Revenue does not provide a separate cost factor book to be used on floating property, however, the primary difference between conventional dwellings and floating homes is the foundation structure, so the same factor book is used. The costs to build a floating home are much higher than to build a home on land, so the calculated LCM is expected to reflect those higher costs. This study establishes a modifier to be applied to construction costs found in the 2005 Cost Factors for Residential Buildings to adjust the factors for floating property to the base appraisal date of 1/1/18.

Analysis

This analysis for the floating property LCM uses sales of new floating homes from 2016 and 2017. Due to a lack of sales in Columbia County, the majority of sales used were from Multnomah County. The sales were all time adjusted to the base appraisal date of January 1, 2018. There were 9 sales that occurred in Multnomah County and 2 sales that occurred in Columbia County. An appropriate quality class was determined for each of the floating homes. All 11 of the sales have been included in the analysis and the time adjusted sales price was compared with the calculated cost from the 2005 Cost Factors for Residential Buildings. The Multnomah County sales indicated an average LCM of 2.73 and the Columbia County sales indicated an average LCM of 2.89. With all 11 sales combined the overall average LCM was 2.76. The weighted LCM mean between the 2 Columbia County sales and 9 Multnomah County Sales was also 2.76.

Conclusions

Based on the data available, it was determined that the mean is the most reliable indicator for the floating property LCM at 2.76.

The 2019 Floating Property LCM to be applied to the 2005 Cost Factors for Residential Buildings is 2.76.

Countywide Local Cost Modifier (LCM) for Farm Buildings

This study establishes a modifier to be applied to construction costs found in the 2009 Cost Factors for Farm Buildings, to adjust the factors for farm buildings to the base appraisal date of 1/1/18. The majority of farm buildings in Columbia County are general purpose pole frame type buildings.

Analysis

A sales extraction method for determining a Farm Building LCM was not done, properties are not generally sold with a new pole building. The best method of determining a local cost modifier for these types of buildings is by collecting data on the actual market cost to build. This analysis for the 2019 Farm LCM set up year was based on reported cost of Farm buildings that were built by contractors in Columbia County. These farm buildings were scattered throughout the county and site visited to verify classing and confirm building cost data for analyzation. There were a total of 10 usable properties for analysis based on owner reported constructions costs. The majority of the cost data above is reflective of class 4, 5 and 6 general purpose buildings. Other type of farm buildings were considered, but specialty type buildings were considered difficult to accurately gather costs for comparison.

Conclusions

The data consists of construction costs associated with building farm buildings in Columbia County. The LCM ranged from 1.34 to 1.85 with a mean of 1.58. This data appears to show an increase of approximately 10% from the prior year. It's recommended that the mean LCM of 1.58 be used for the 2019 setup.

The 2019 Farm Building LCM to be applied to the 2009 Cost Factors for Farm Buildings is 1.58.

Notes

2019 Depreciation Schedules Analysis and Conclusions

Countywide Depreciation Study for Conventional Single Family Dwellings

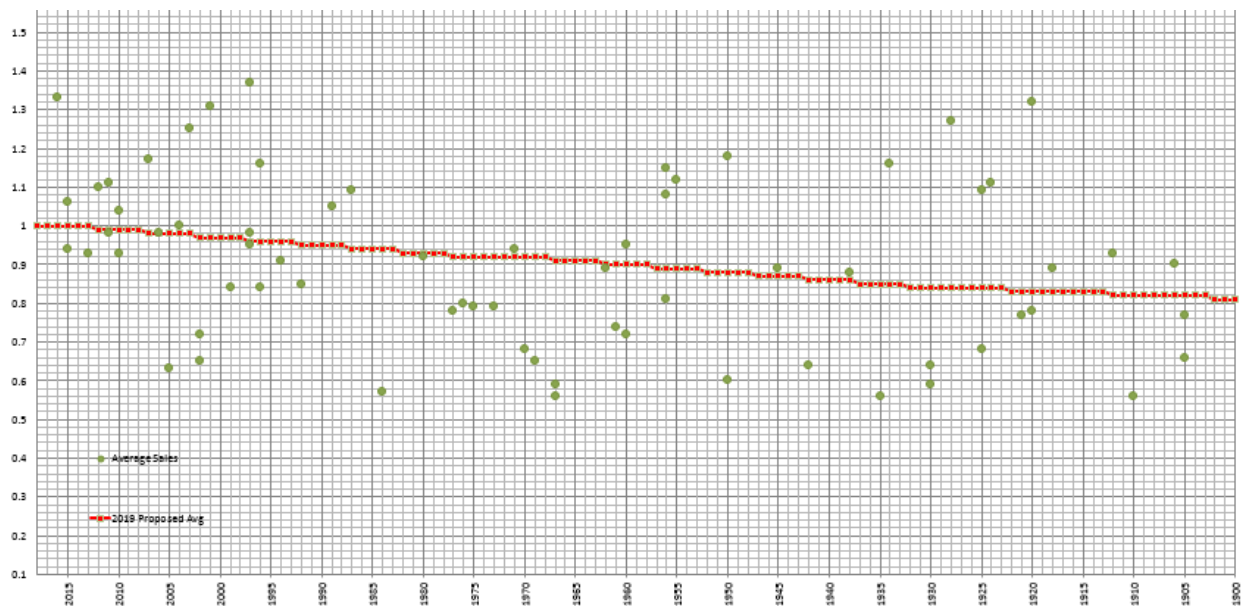
Analysis

There were a total of 869 sales of conventional single family dwellings during the past year. The first step in evaluating the sales was to narrow down the results to a more manageable number. Sales of properties that were eliminated included:

- Sales with dwellings in better or worse than average condition for their physical age.
- Sales of properties that had notable value influences due to topography, views, etc.
- Sales of properties in areas that there were not enough vacant land sales to establish a land schedule.
- Sales of properties with a high percentage of additional structures or accessory improvements where it would be difficult to adequately determine and extract the contributory value of these improvements.

The remaining 124 accounts were site inspected to verify quality class and condition of improvements for use in the depreciation study. An indicated depreciation of the dwelling was calculated for each sale by subtracting the scheduled land value and OSD from the time adjusted sale price. The residual value was divided by the calculated RCN (including the LCM) to determine the 'percent good' of the dwelling for its age. The data was further analyzed by class and location to determine if there was any difference, but there was no obvious pattern indicating any difference in depreciation by class or by area. These percentages were then graphed to determine the average depreciation by year built.

Countywide Conventional Single Family Dwelling Depreciation Sales Graph



Conclusions

The data collected and analyzed for the 2019 Depreciation Study showed significant change from the prior year depreciation schedule, which appears to be the result of high market demand for housing in the county. Based on the data it's recommended to apply the newly developed depreciation schedule for 2019.

Countywide Conventional Single Family Dwelling Depreciation Schedule for 2019

Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent
2018	100	1985	94	1953	88	1921	83
2017	100	1984	94	1952	88	1920	83
2016	100	1983	93	1951	88	1919	83
2015	100	1982	93	1950	88	1918	83
2014	100	1981	93	1949	88	1917	83
2013	99	1980	93	1948	87	1916	83
2012	99	1979	93	1947	87	1915	83
2011	99	1978	92	1946	87	1914	83
2010	99	1977	92	1945	87	1913	82
2009	99	1976	92	1944	87	1912	82
2008	98	1975	92	1943	86	1911	82
2007	98	1974	92	1942	86	1910	82
2006	98	1973	92	1941	86	1909	82
2005	98	1972	92	1940	86	1908	82
2004	98	1971	92	1939	86	1907	82
2003	97	1970	92	1938	85	1906	82
2002	97	1969	92	1937	85	1905	82
2001	97	1968	91	1936	85	1904	82
2000	97	1967	91	1935	85	1903	81
1999	97	1966	91	1934	85	1902	81
1998	96	1965	91	1933	84	1901	81
1997	96	1964	91	1932	84	1900	81
1996	96	1963	90	1931	84	1899	81
1995	96	1962	90	1930	84	1898	81
1994	96	1961	90	1929	84	1897	80
1993	95	1960	90	1928	84	1896	70
1992	95	1959	90	1927	84	1895	60
1991	95	1958	89	1926	84	1894	50
1990	95	1957	89	1925	84	1893	40
1989	95	1956	89	1924	84	1892	30
1988	94	1955	89	1923	83	1891	20
1987	94	1954	89	1922	83	1890	10
1986	94						

**Countywide Effective Year Built Based on Condition For Conventional Single Family Dwellings
and Multi Family Dwellings for 2019**

Poor	Fair	Avg	Good	Exc
1995	2005	2018	2018	2018
1990	2005	2017	2017	2018
1985	2000	2016	2016	2018
1980	2000	2015	2015	2018
1980	2000	2014	2015	2018
1975	1995	2013	2015	2018
1975	1995	2012	2015	2015
1970	1995	2011	2015	2015
1970	1990	2010	2015	2015
1965	1990	2009	2015	2015
1965	1990	2008	2015	2015
1960	1985	2007	2015	2015
1960	1985	2006	2010	2015
1955	1985	2005	2010	2015
1955	1980	2004	2010	2015
1950	1980	2003	2010	2015
1950	1980	2002	2010	2015
1950	1975	2001	2005	2015
1945	1975	2000	2005	2015
1945	1975	1999	2005	2015
1945	1970	1998	2005	2015
1940	1970	1997	2005	2015
1940	1970	1996	2000	2010
1940	1965	1995	2000	2010
1935	1965	1994	2000	2010
1935	1965	1993	2000	2010
1935	1960	1992	2000	2010
1930	1960	1991	1995	2010
1930	1960	1990	1995	2010
1930	1960	1989	1995	2010
1930	1960	1988	1995	2010
1930	1955	1987	1995	2010
1930	1955	1986	1995	2010
1930	1955	1985	1995	2010
1930	1955	1984	1995	2010
1930	1955	1983	1995	2010
1930	1955	1982	1995	2010
1930	1955	1981	1995	2010
1930	1955	1980	1995	2010
1930	1955	1979	1995	2010
1930	1955	1978	1995	2010
1930	1955	1977	1995	2010
1925	1950	1976	1990	2005
1925	1950	1975	1990	2005

Poor	Fair	Avg	Good	Exc
1925	1950	1974	1990	2005
1925	1950	1973	1990	2005
1925	1950	1972	1990	2005
1925	1950	1971	1990	2005
1925	1950	1970	1990	2005
1925	1950	1969	1990	2005
1925	1950	1968	1990	2005
1925	1950	1967	1990	2005
1920	1945	1966	1985	2000
1920	1945	1965	1985	2000
1920	1945	1964	1985	2000
1920	1945	1963	1985	2000
1920	1945	1962	1985	2000
1920	1940	1961	1985	2000
1920	1940	1960	1985	2000
1920	1940	1959	1985	2000
1920	1940	1958	1985	2000
1920	1940	1957	1985	2000
1920	1935	1956	1980	2000
1920	1935	1955	1980	2000
1920	1935	1954	1980	2000
1920	1935	1953	1980	2000
1920	1935	1952	1980	1995
1915	1930	1951	1975	1995
1915	1930	1950	1975	1995
1920	1930	1949	1975	2000
1920	1930	1948	1975	2000
1920	1930	1947	1975	2000
1920	1930	1946	1970	2000
1920	1930	1945	1970	2000
1920	1930	1944	1970	2000
1920	1930	1943	1970	2000
1920	1930	1942	1970	2000
1915	1925	1941	1970	1995
1915	1925	1940	1970	1995
1915	1925	1939	1970	1995
1915	1925	1938	1970	1995
1915	1925	1937	1970	1995
1915	1920	1936	1965	1995
1915	1920	1935	1965	1995
1915	1920	1934	1965	1995
1915	1920	1933	1965	1995
1915	1920	1932	1965	1995

Poor	Fair	Avg	Good	Exc
1910	1920	1931	1965	1990
1910	1915	1930	1965	1990
1910	1915	1929	1965	1990
1910	1915	1928	1965	1990
1910	1915	1927	1965	1990
1910	1915	1926	1960	1990
1910	1915	1925	1960	1990
1910	1915	1924	1960	1990
1910	1915	1923	1960	1990
1910	1915	1922	1960	1990
1910	1915	1921	1955	1990
1910	1910	1920	1955	1990
1910	1910	1919	1955	1990
1910	1910	1918	1955	1990
1910	1910	1917	1955	1990
1910	1910	1916	1950	1990
1910	1910	1915	1950	1990
1910	1910	1914	1950	1990
1910	1910	1913	1950	1990
1910	1910	1912	1950	1990
1910	1910	1911	1950	1990
1910	1910	1910	1950	1990
1909	1909	1909	1950	1990
1908	1908	1908	1950	1990
1907	1907	1907	1945	1985
1906	1906	1906	1945	1985
1905	1905	1905	1945	1985
1904	1904	1904	1945	1985
1903	1903	1903	1945	1985
1902	1902	1902	1940	1980
1901	1901	1901	1940	1980
1900	1900	1900	1940	1980
1899	1899	1899	1940	1980
1898	1898	1898	1940	1980
1897	1897	1897	1935	1975
			<i>Resid</i>	<i>M-F</i>
<i>Override</i>		1896	70%	50%
<i>Override</i>		1895	60%	50%
<i>Override</i>		1894	50%	50%
<i>Override</i>		1893	40%	40%
<i>barely livable</i>		1892	30%	30%
<i>storage value</i>		1891	20%	20%
<i>salvage value</i>		1890	10%	10%

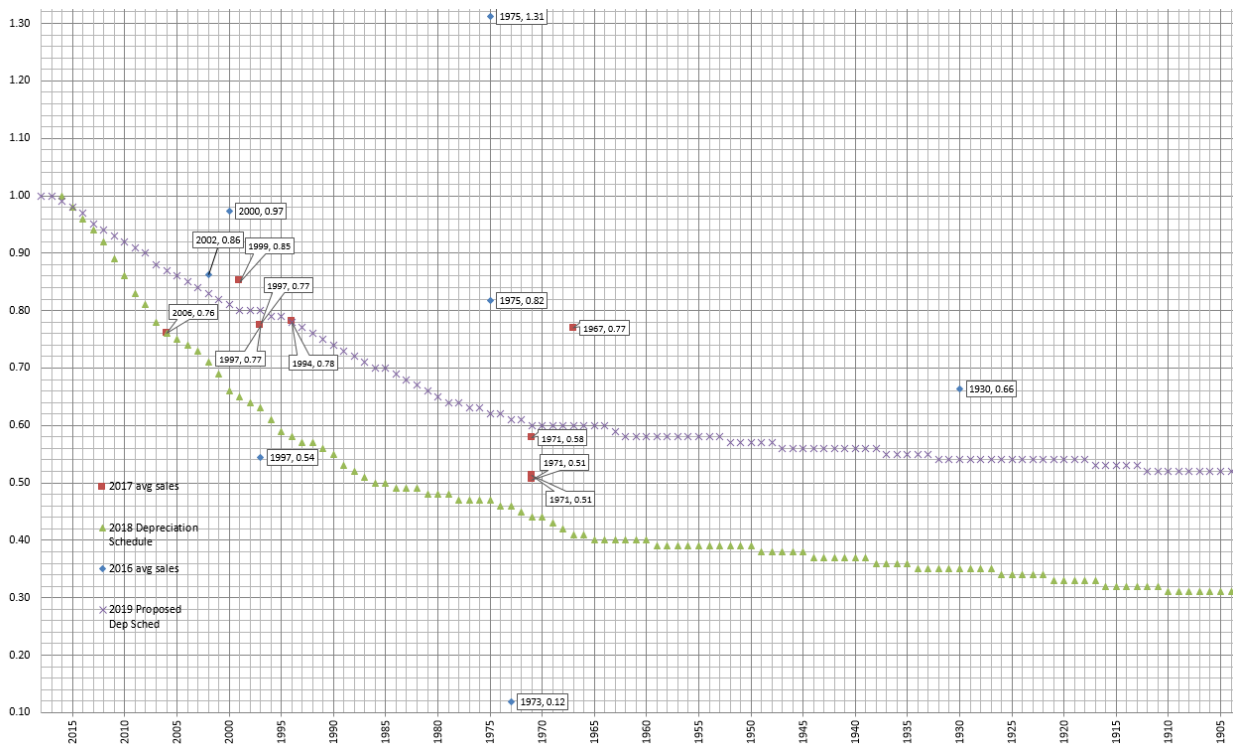
Note: Highlighted year is actual year built. Appraiser selects effective year based on condition for physical year in order to calculate depreciation.

Countywide Depreciation Study for Multi-Family Dwellings

Analysis

The objective for the multi-family depreciation study is to find the percent good for average condition multi-family properties that sold from 1/1/17-12/31/17. There were a total of 9 useable multi family residence sales in 2017. In order to find the percent good we took the 9 useable sales in average condition and valued each of them as new, from the 2005 cost factor for residential building book provided by the DOR. Each plex was valued to find the RCN (replacement cost new), these sales were entered into a spreadsheet which contained the above information. Each sale was time trended to the base appraisal date of 1/1/18, subtracted any concessions or farm building values from the sale price and divided the RCN amount by the residual to find the percent good. Once the percent good for each sale was determined, it was then plotted onto the graph and compared to last years depreciation line. To further support our depreciation schedule we time trended 8 useable 2016 sales. After plotting all 17 useable sales it showed that the current 2018 multi-family depreciation schedule was low and the data provided credible support for a new depreciation schedule.

Countywide Multi-Family Dwellings Depreciation Sales Graph



Conclusions

The data provided supports the creation of a new 2019 multifamily depreciation schedule for the base appraisal date of 1/1/18.

Countywide Multi-Family Dwelling Depreciation Schedule for 2019

Eff Yr Built	2019 Percent		Eff Yr Built	2019 Percent		Eff Yr Built	2019 Percent		Eff Yr Built	2019 Percent
2018	100		1985	70		1953	58		1921	54
2017	100		1984	69		1952	57		1920	54
2016	99		1983	68		1951	57		1919	54
2015	98		1982	67		1950	57		1918	54
2014	97		1981	66		1949	57		1917	53
2013	95		1980	65		1948	57		1916	53
2012	94		1979	64		1947	56		1915	53
2011	93		1978	64		1946	56		1914	53
2010	92		1977	63		1945	56		1913	53
2009	91		1976	63		1944	56		1912	52
2008	90		1975	62		1943	56		1911	52
2007	88		1974	62		1942	56		1910	52
2006	87		1973	61		1941	56		1909	52
2005	86		1972	61		1940	56		1908	52
2004	85		1971	60		1939	56		1907	52
2003	84		1970	60		1938	56		1906	52
2002	83		1969	60		1937	55		1905	52
2001	82		1968	60		1936	55		1904	52
2000	81		1967	60		1935	55		1903	52
1999	80		1966	60		1934	55		1902	51
1998	80		1965	60		1933	55		1901	51
1997	80		1964	60		1932	54		1900	51
1996	79		1963	59		1931	54		1899	51
1995	79		1962	58		1930	54		1898	51
1994	78		1961	58		1929	54		1897	51
1993	77		1960	58		1928	54		1896	50
1992	76		1959	58		1927	54		1895	50
1991	75		1958	58		1926	54		1894	50
1990	74		1957	58		1925	54		1893	40
1989	73		1956	58		1924	54		1892	30
1988	72		1955	58		1923	54		1891	20
1987	71		1954	58		1922	54		1890	10
1986	70									

Countywide Effective Year Built Based on Condition For Conventional Single Family Dwellings
and Multi Family Dwellings for 2019

Poor	Fair	Avg	Good	Exc
1995	2005	2018	2018	2018
1990	2005	2017	2017	2018
1985	2000	2016	2016	2018
1980	2000	2015	2015	2018
1980	2000	2014	2015	2018
1975	1995	2013	2015	2018
1975	1995	2012	2015	2015
1970	1995	2011	2015	2015
1970	1990	2010	2015	2015
1965	1990	2009	2015	2015
1965	1990	2008	2015	2015
1960	1985	2007	2015	2015
1960	1985	2006	2010	2015
1955	1985	2005	2010	2015
1955	1980	2004	2010	2015
1950	1980	2003	2010	2015
1950	1980	2002	2010	2015
1950	1975	2001	2005	2015
1945	1975	2000	2005	2015
1945	1975	1999	2005	2015
1945	1970	1998	2005	2015
1940	1970	1997	2005	2015
1940	1970	1996	2000	2010
1940	1965	1995	2000	2010
1935	1965	1994	2000	2010
1935	1965	1993	2000	2010
1935	1960	1992	2000	2010
1930	1960	1991	1995	2010
1930	1960	1990	1995	2010
1930	1960	1989	1995	2010
1930	1960	1988	1995	2010
1930	1955	1987	1995	2010
1930	1955	1986	1995	2010
1930	1955	1985	1995	2010
1930	1955	1984	1995	2010
1930	1955	1983	1995	2010
1930	1955	1982	1995	2010
1930	1955	1981	1995	2010
1930	1955	1980	1995	2010
1930	1955	1979	1995	2010
1930	1955	1978	1995	2010
1930	1955	1977	1995	2010
1925	1950	1976	1990	2005
1925	1950	1975	1990	2005

Poor	Fair	Avg	Good	Exc
1925	1950	1974	1990	2005
1925	1950	1973	1990	2005
1925	1950	1972	1990	2005
1925	1950	1971	1990	2005
1925	1950	1970	1990	2005
1925	1950	1969	1990	2005
1925	1950	1968	1990	2005
1925	1950	1967	1990	2005
1920	1945	1966	1985	2000
1920	1945	1965	1985	2000
1920	1945	1964	1985	2000
1920	1945	1963	1985	2000
1920	1945	1962	1985	2000
1920	1940	1961	1985	2000
1920	1940	1960	1985	2000
1920	1940	1959	1985	2000
1920	1940	1958	1985	2000
1920	1940	1957	1985	2000
1920	1935	1956	1980	2000
1920	1935	1955	1980	2000
1920	1935	1954	1980	2000
1920	1935	1953	1980	2000
1920	1935	1952	1980	1995
1915	1930	1951	1975	1995
1915	1930	1950	1975	1995
1920	1930	1949	1975	2000
1920	1930	1948	1975	2000
1920	1930	1947	1975	2000
1920	1930	1946	1970	2000
1920	1930	1945	1970	2000
1920	1930	1944	1970	2000
1920	1930	1943	1970	2000
1920	1930	1942	1970	2000
1915	1925	1941	1970	1995
1915	1925	1940	1970	1995
1915	1925	1939	1970	1995
1915	1925	1938	1970	1995
1915	1925	1937	1970	1995
1915	1920	1936	1965	1995
1915	1920	1935	1965	1995
1915	1920	1934	1965	1995
1915	1920	1933	1965	1995
1915	1920	1932	1965	1995

Poor	Fair	Avg	Good	Exc
1910	1920	1931	1965	1990
1910	1915	1930	1965	1990
1910	1915	1929	1965	1990
1910	1915	1928	1965	1990
1910	1915	1927	1965	1990
1910	1915	1926	1960	1990
1910	1915	1925	1960	1990
1910	1915	1924	1960	1990
1910	1915	1923	1960	1990
1910	1915	1922	1960	1990
1910	1915	1921	1955	1990
1910	1910	1920	1955	1990
1910	1910	1919	1955	1990
1910	1910	1918	1955	1990
1910	1910	1917	1955	1990
1910	1910	1916	1950	1990
1910	1910	1915	1950	1990
1910	1910	1914	1950	1990
1910	1910	1913	1950	1990
1910	1910	1912	1950	1990
1910	1910	1911	1950	1990
1910	1910	1910	1950	1990
1909	1909	1909	1950	1990
1908	1908	1908	1950	1990
1907	1907	1907	1945	1985
1906	1906	1906	1945	1985
1905	1905	1905	1945	1985
1904	1904	1904	1945	1985
1903	1903	1903	1945	1985
1902	1902	1902	1940	1980
1901	1901	1901	1940	1980
1900	1900	1900	1940	1980
1899	1899	1899	1940	1980
1898	1898	1898	1940	1980
1897	1897	1897	1935	1975
			<i>Resid</i>	<i>M-F</i>
<i>Override</i>		1896	70%	50%
<i>Override</i>		1895	60%	50%
<i>Override</i>		1894	50%	50%
<i>Override</i>		1893	40%	40%
<i>barely livable</i>		1892	30%	30%
<i>storage value</i>		1891	20%	20%
<i>salvage value</i>		1890	10%	10%

Note: Highlighted year is actual year built. Appraiser selects effective year based on condition for physical year in order to calculate depreciation.

Countywide Depreciation Study for Real Property Manufactured Dwellings

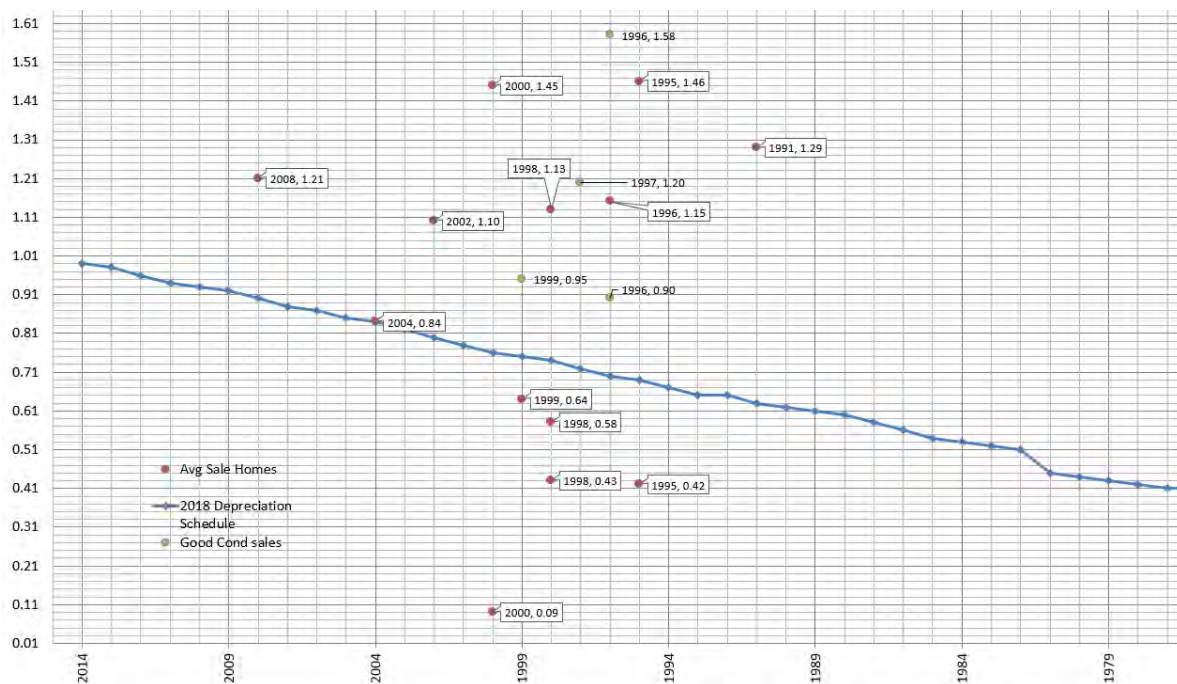
Analysis

There were a total of 72 sales of real property manufactured dwellings during the past year of which only 25 were assessed in average condition. These properties were site inspected to verify class and condition of improvements for use in this depreciation study. The inspections resulted in reducing the number of usable sales to 17. Sales of properties that were eliminated from this total included:

- Sales with dwellings in better or worse than average condition for their physical age.
- Sales of properties that had notable value influences due to topography, views, etc.
- Sales of properties in areas that there were not enough vacant land sales to establish a land schedule.
- Sales of properties with a high percentage of additional structures or accessory improvements where it would be difficult to adequately determine and extract the contributory value of these improvements.

For these 17 accounts, an indicated depreciation of the manufactured dwelling was calculated for each sale by subtracting the scheduled land value and OSD from the time adjusted sale price. The residual value was divided by the calculated RCN (including the LCM) to determine the 'percent good' of the dwelling for its age. These percentages were then graphed with the previous year depreciation to determine if the current depreciation schedule needed adjustments.

Countywide Real Property Manufactured Dwellings Depreciation Sales Graph



Conclusions

When the line from last prior year Real MS Depreciation schedule was applied to the graph, the current data fell within that line. Therefore, the conclusion is drawn that the depreciation schedule for 2018 appears to remain accurate for this year. Based on this analysis, the depreciation schedule from 2018 will continue to be used for 2019.

Countywide Real Property Manufactured Dwelling Depreciation Schedule for 2019

Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent
2018	100	2004	84	1990	62	1976	41
2017	100	2003	82	1989	61	1975	36
2016	100	2002	80	1988	60	1974	32
2015	100	2001	78	1987	58	1973	27
2014	99	2000	76	1986	56	1972	23
2013	98	1999	75	1985	54	1971	18
2012	96	1998	74	1984	53	1970	17
2011	94	1997	72	1983	52	1969	9
2010	93	1996	70	1982	51	1968	9
2009	92	1995	69	1981	45	1967	9
2008	90	1994	67	1980	44	1966	9
2007	88	1993	65	1979	43	1965	9
2006	87	1992	64	1978	42	1964	9
2005	85	1991	63	1977	41	1963	9

Countywide Effective Year Built Based on Condition For Real and Personal Property
Manufactured Dwellings for 2019

Poor	Fair	Avg	Good	Exc
2008	2012	2018	2018	2018
2006	2012	2017	2017	2017
2006	2010	2016	2016	2016
2006	2010	2015	2015	2015
2006	2010	2014	2015	2015
2006	2010	2013	2013	2015
2000	2006	2012	2013	2015
1996	2006	2011	2013	2015
1990	2000	2010	2013	2015
1990	2000	2009	2013	2015
1990	2000	2008	2013	2015
1990	2000	2007	2013	2014
1986	1996	2006	2010	2014
1986	1996	2005	2010	2014
1986	1996	2004	2010	2014
1986	1996	2003	2010	2014
1986	1996	2002	2010	2014
1982	1990	2001	2006	2010
1982	1990	2000	2006	2010
1982	1990	1999	2006	2010
1982	1990	1998	2006	2010
1982	1990	1997	2006	2010
1982	1986	1996	2000	2010
1982	1986	1995	2000	2010
1982	1986	1994	2000	2010
1976	1986	1993	2000	2010
1976	1986	1992	2000	2010
1976	1982	1991	1996	2006

Poor	Fair	Avg	Good	Exc
1976	1982	1990	1996	2006
1976	1982	1989	1996	2006
1970	1982	1988	1996	2006
1970	1982	1987	1996	2006
1970	1976	1986	1990	2000
1970	1976	1985	1990	2000
1970	1976	1984	1990	2000
1970	1976	1983	1990	2000
1966	1976	1982	1990	2000
1966	1970	1981	1982	1990
1966	1970	1980	1982	1990
1966	1970	1979	1982	1990
1966	1970	1978	1982	1990
1966	1970	1977	1982	1990
1966	1966	1976	1980	1986
1966	1966	1975	1980	1986
1966	1966	1974	1980	1986
1966	1966	1973	1980	1986
1966	1966	1972	1980	1986
1966	1966	1971	1976	1982
1966	1966	1970	1976	1982
1966	1966	1969	1976	1982
1966	1966	1968	1976	1982
1966	1966	1967	1974	1982
1964	1964	1966	1974	1980
1963	1963	1965	1972	1980
1963	1963	1964	1972	1978
1963	1963	1963	1970	1978

Note: Highlighted year is actual year built. Appraiser selects effective year based on condition for physical year in order to calculate depreciation.

Countywide Depreciation Study for Personal Property Manufactured Dwellings

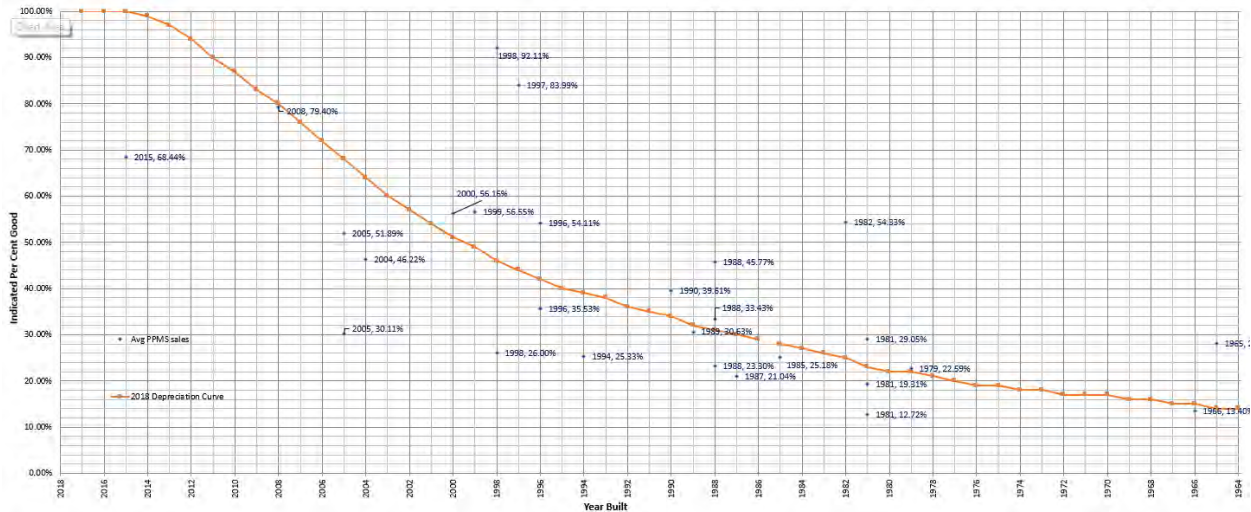
Analysis

There were a total of 72 sales of personal property manufactured dwellings during the past year of which 37 were useable for this study. Sales of properties that were eliminated from this total included:

- Sales with dwellings in better or worse than average condition for their physical age.
- Sales of properties with a high percentage of additional structures or accessory improvements where it would be difficult to adequately determine and extract the contributory value of these improvements.

These 37 accounts were site inspected to verify quality class and condition of improvements for use in the depreciation study. The time adjusted sales price was divided by the calculated RCN (including the LCM) to determine the 'percent good' of the dwelling for its age. These percentages were then graphed with the previous year depreciation to determine if the current depreciation schedule needed adjustments.

Countywide Personal Property Manufactured Dwellings Depreciation Sales Graph



Conclusions

When the line from last prior year Personal MS Depreciation schedule was applied to the graph, the current data fell within that line. Therefore, the conclusion is drawn that the depreciation schedule for 2018 appears to remain accurate for this year. Based on this analysis, the depreciation schedule from 2018 will continue to be used for 2019.

Countywide Personal Property Manufactured Dwelling Depreciation Schedule for 2019

Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent
2018	100	2004	64	1990	34	1976	19
2017	100	2003	60	1989	32	1975	19
2016	100	2002	57	1988	31	1974	18
2015	100	2001	54	1987	30	1973	18
2014	99	2000	51	1986	29	1972	17
2013	97	1999	49	1985	28	1971	17
2012	94	1998	46	1984	27	1970	17
2011	90	1997	44	1983	26	1969	16
2010	87	1996	42	1982	25	1968	16
2009	83	1995	40	1981	23	1967	15
2008	80	1994	39	1980	22	1966	15
2007	76	1993	38	1979	22	1965	14
2006	72	1992	36	1978	21	1964	14
2005	68	1991	35	1977	20	1963	14

Countywide Effective Year Built Based on Condition For Real and Personal Property Manufactured Dwellings for 2019

Poor	Fair	Avg	Good	Exc	Poor	Fair	Avg	Good	Exc	Poor	Fair	Avg	Good	Exc
2008	2012	2018	2018	2018	1982	1990	1999	2004	2010	1966	1970	1980	1982	1990
2006	2012	2017	2017	2017	1982	1990	1998	2004	2010	1966	1970	1979	1982	1990
2006	2010	2016	2016	2016	1982	1990	1997	2004	2010	1966	1970	1978	1982	1990
2004	2010	2015	2015	2015	1982	1990	1996	2004	2010	1966	1970	1977	1982	1990
2004	2010	2014	2014	2014	1982	1984	1995	2000	2010	1966	1970	1976	1982	1990
2004	2010	2013	2014	2014	1982	1984	1994	2000	2010	1966	1966	1975	1980	1986
2004	2010	2012	2012	2014	1982	1984	1993	2000	2010	1966	1966	1974	1980	1986
2000	2004	2011	2012	2014	1976	1984	1992	2000	2010	1966	1966	1973	1980	1986
1994	2004	2010	2012	2014	1976	1984	1991	2000	2010	1966	1966	1972	1980	1986
1990	2000	2009	2012	2014	1976	1982	1990	1994	2004	1966	1966	1971	1980	1986
1990	2000	2008	2012	2014	1976	1982	1989	1994	2004	1966	1966	1970	1974	1982
1990	2000	2007	2012	2014	1976	1982	1988	1994	2004	1966	1966	1969	1974	1982
1990	2000	2006	2012	2012	1970	1982	1987	1994	2004	1966	1966	1968	1974	1982
1984	1994	2005	2010	2012	1970	1982	1986	1994	2004	1966	1966	1967	1974	1982
1984	1994	2004	2010	2012	1970	1976	1985	1990	2000	1964	1964	1966	1974	1980
1984	1994	2003	2010	2012	1970	1976	1984	1990	2000	1964	1964	1965	1972	1980
1984	1994	2002	2010	2012	1970	1976	1983	1990	2000	1963	1963	1964	1972	1978
1984	1994	2001	2010	2012	1970	1976	1982	1990	2000	1963	1963	1963	1970	1978
1982	1990	2000	2004	2010	1966	1976	1981	1990	2000					

Note: Highlighted year is actual year built. Appraiser selects effective year based on condition for physical year in order to calculate depreciation.

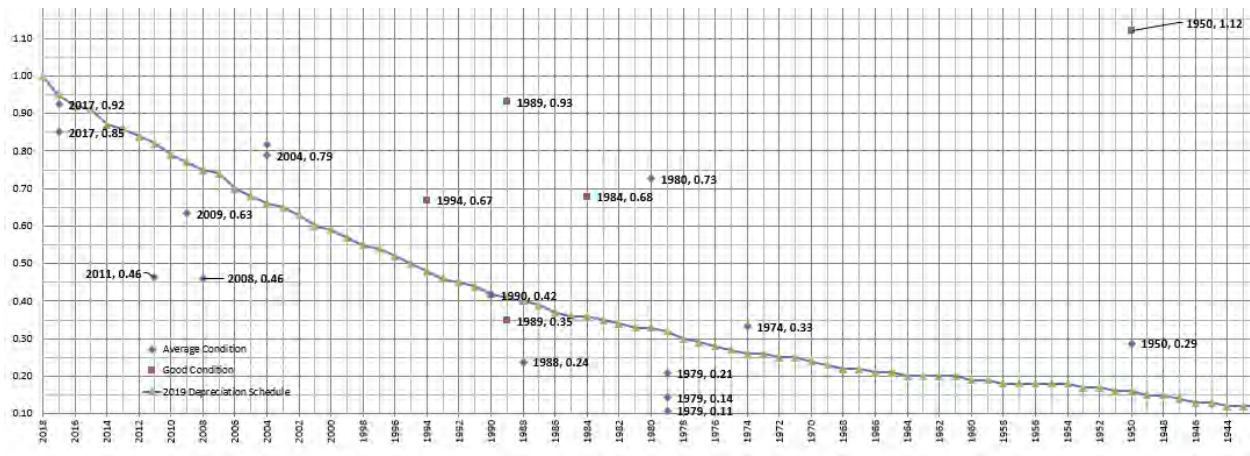
Countywide Depreciation Study for Floating Property

Analysis

There were only 12 useable sales of floating property that occurred during 2017, most of which were in average condition. Due to the limited sales, 12 additional floating properties that sold during 2015 and 2016 were included. All sales were time trended to the base appraisal date of 1/1/2018.

Each property was inspected to verify quality class and condition. Properties in better than average condition were not removed from the study, but rather included on the graph due to the limited number of sales available. The time adjusted sales price of each property was divided by the calculated RCN (including the LCM) to determine the 'percent good' of the dwelling for its age. These percentages were then graphed to identify a potential depreciation curve.

Countywide Floating Property Depreciation Sales Graph



Conclusions

Floating property has a much higher LCM than conventional dwellings, indicating a much higher cost of construction. However, they appear to depreciate much faster than conventional dwellings. Based on the supporting data, a new depreciation schedule for floating property has been developed.

Countywide Floating Property Depreciation Schedule for 2019

Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent
2018	100	1986	32	1954	18	1922	10
2017	100	1985	31	1953	17	1921	10
2016	95	1984	30	1952	17	1920	10
2015	85	1983	29	1951	16	1919	10
2014	80	1982	28	1950	16	1918	10
2013	75	1981	27	1949	15	1917	10
2012	70	1980	27	1948	15	1916	10
2011	65	1979	26	1947	14	1915	10
2010	58	1978	26	1946	13	1914	10
2009	57	1977	26	1945	13	1913	10
2008	56	1976	25	1944	12	1912	10
2007	55	1975	24	1943	12	1911	10
2006	54	1974	23	1942	12	1910	10
2005	52	1973	22	1941	12	1909	10
2004	50	1972	22	1940	11	1908	10
2003	49	1971	21	1939	11	1907	10
2002	48	1970	20	1938	11	1906	10
2001	47	1969	20	1937	11	1905	10
2000	46	1968	20	1936	11	1904	10
1999	45	1967	20	1935	11	1903	10
1998	43	1966	20	1934	11	1902	10
1997	42	1965	20	1933	10	1900	10
1996	41	1964	20	1932	10	1899	10
1995	40	1963	20	1931	10	1898	10
1994	40	1962	19	1930	10	1897	10
1993	39	1961	19	1929	10	1896	10
1992	39	1960	19	1928	10	1895	10
1991	38	1959	19	1927	10	1894	10
1990	37	1958	18	1926	10	1893	10
1989	35	1957	18	1925	10	1892	10
1988	34	1956	18	1924	10	1891	10
1987	33	1955	18	1923	10	1890	10

Countywide Effective Year Built Based on Condition for Floating Property for 2019

Poor	Fair	Avg	Good	Exc
2017	2017	2018	2018	2018
2016	2016	2017	2017	2017
2014	2015	2016	2017	2017
2012	2014	2015	2017	2017
2010	2013	2014	2017	2017
2004	2011	2013	2017	2017
1998	2009	2012	2016	2017
1997	2007	2011	2016	2017
1997	2005	2010	2016	2017
1996	2004	2009	2016	2016
1996	2003	2008	2015	2016
1995	2002	2007	2015	2016
1994	2002	2006	2015	2016
1992	2001	2005	2015	2016
1990	2001	2004	2014	2016
1989	2000	2003	2014	2016
1988	2000	2002	2014	2016
1987	1999	2001	2014	2016
1987	1998	2000	2013	2016
1986	1996	1999	2013	2015
1985	1994	1998	2013	2015
1985	1992	1997	2013	2015
1984	1991	1996	2013	2015
1983	1990	1995	2012	2015
1983	1989	1994	2012	2015
1982	1988	1993	2012	2015
1980	1987	1992	2012	2015
1978	1986	1991	2012	2015
1977	1986	1990	2011	2015
1976	1985	1989	2011	2014
1974	1985	1988	2010	2014
1972	1984	1987	2010	2014
1970	1984	1986	2009	2014
1968	1983	1985	2009	2014
1966	1982	1984	2008	2014
1964	1980	1983	2006	2014
1962	1978	1982	2004	2013
1960	1976	1981	2003	2013
1958	1975	1980	2002	2013
1956	1974	1979	2001	2013

Poor	Fair	Avg	Good	Exc
1954	1973	1978	2000	2013
1952	1972	1977	1999	2013
1950	1971	1976	1998	2013
1948	1970	1975	1997	2013
1946	1968	1974	1996	2013
1944	1965	1973	1995	2012
1942	1961	1972	1994	2012
1942	1957	1971	1993	2012
1942	1952	1970	1992	2012
1942	1950	1969	1991	2012
1941	1948	1968	1990	2012
1941	1947	1967	1989	2012
1941	1946	1966	1988	2012
1940	1945	1965	1987	2012
1940	1944	1964	1986	2012
1940	1944	1963	1985	2011
1940	1943	1962	1984	2011
1940	1943	1961	1983	2011
1940	1942	1960	1982	2011
1940	1942	1959	1981	2011
1940	1942	1958	1980	2011
1940	1941	1957	1980	2011
1940	1941	1956	1978	2011
1940	1940	1955	1978	2011
1940	1940	1954	1976	2011
1940	1940	1953	1976	2011
1940	1940	1952	1976	2011
1940	1940	1951	1976	2011
1940	1940	1950	1975	2011
1940	1940	1949	1975	2010
1940	1940	1948	1975	2010
1940	1940	1947	1974	2010
1940	1940	1946	1974	2010
1940	1940	1945	1973	2010
1940	1940	1944	1973	2010
1940	1940	1943	1973	2010
1940	1940	1942	1972	2010
1940	1940	1941	1972	2010
1940	1940	1940	1971	2010
1939	1939	1939	1971	2010

Poor	Fair	Avg	Good	Exc
1938	1938	1938	1971	2010
1937	1937	1937	1971	2010
1936	1936	1936	1971	2010
1935	1935	1935	1970	2010
1934	1934	1934	1970	2010
1933	1933	1933	1970	2010
1932	1932	1932	1970	2010
1931	1931	1931	1970	2010
1930	1930	1930	1970	2010
1929	1929	1929	1970	2010
1928	1928	1928	1970	2010
1927	1927	1927	1970	2010
1926	1926	1926	1970	2010
1925	1925	1925	1970	2010
1924	1924	1924	1970	2010
1923	1923	1923	1970	2010
1922	1922	1922	1970	2010
1921	1921	1921	1970	2010
1920	1920	1920	1970	2010
1919	1919	1919	1970	2010
1918	1918	1918	1970	2010
1917	1917	1917	1970	2010
1916	1916	1916	1970	2010
1915	1915	1915	1970	2010
1914	1914	1914	1970	2010
1913	1913	1913	1970	2010
1912	1912	1912	1970	2010
1911	1911	1911	1970	2010
1910	1910	1910	1970	2010
1909	1909	1909	1970	2010
1908	1908	1908	1970	2010
1907	1907	1907	1970	2010
1906	1906	1906	1970	2010
1905	1905	1905	1970	2010
1904	1904	1904	1970	2010
1903	1903	1903	1970	2010
1902	1902	1902	1970	2010
1901	1901	1901	1970	2010
1900	1900	1900	1970	2010

Note: Highlighted year is actual year built. Appraiser selects effective year based on condition for physical year in order to calculate depreciation.

Countywide Depreciation Study for Farm Buildings

Analysis

It is not feasible to use an extraction method to determine a market-based depreciation schedule for farm buildings. In most cases, these structures represent a minimal portion of the overall real market value of a property.

Conclusions

Farm buildings are depreciated using a straight-line depreciation method. The appraiser uses judgment in determining the effective age of the structure.

Countywide Farm Building Depreciation Schedule for 2019

Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent	Eff Yr Built	2019 Percent
2018	100	1986	68	1954	36	1922	10
2017	99	1985	67	1953	35	1921	10
2016	98	1984	66	1952	34	1920	10
2015	97	1983	65	1951	33	1919	10
2014	96	1982	64	1950	32	1918	10
2013	95	1981	63	1949	31	1917	10
2012	94	1980	62	1948	30	1916	10
2011	93	1979	61	1947	29	1915	10
2010	92	1978	60	1946	28	1914	10
2009	91	1977	59	1945	27	1913	10
2008	90	1976	58	1944	26	1912	10
2007	89	1975	57	1943	25	1911	10
2006	88	1974	56	1942	24	1910	10
2005	87	1973	55	1941	23	1909	10
2004	86	1972	54	1940	22	1908	10
2003	85	1971	53	1939	21	1907	10
2002	84	1970	52	1938	20	1906	10
2001	83	1969	51	1937	19	1905	10
2000	82	1968	50	1936	18	1904	10
1999	81	1967	49	1935	17	1903	10
1998	80	1966	48	1934	16	1902	10
1997	79	1965	47	1933	15	1901	10
1996	78	1964	46	1932	14	1900	10
1995	77	1963	45	1931	13	1898	10
1994	76	1962	44	1930	12	1897	10
1993	75	1961	43	1929	11	1896	10
1992	74	1960	42	1928	10	1895	10
1991	73	1959	41	1927	10	1894	10
1990	72	1958	40	1926	10	1893	10
1989	71	1957	39	1925	10	1892	10
1988	70	1956	38	1924	10	1891	10
1987	69	1955	37	1923	10		

Notes

2019 Land Adjustments Analysis and Conclusions

MA 01 and MA 06 (City) Adjustment Study for Premium Location

Analysis

The subdivisions in St. Helens and Columbia City that are considered by market perception to be superior than your typical city lot and block have been identified. The assumption is made that homes located in a recently platted subdivision with curbs, sidewalks, street lights, and have been developed with uniform standards are considered superior than most City of St. Helens typical Lot and Blocks. Some exceptions are taken into account such as Grey Cliffs which lacks curbs and sidewalks. However, Grey Cliffs market sales are superior to our base lots.

The sales in the identified premium locations were compiled. The extraction method was chosen to analyze the data to obtain a percentage adjustment. In attempt to isolate this percentage, property with improvements built in 2002 and newer were used. From that list, the subdivision location was identified. This resulted in a list of eight sales. The land, OSD and improvement value were extracted from the time adjusted sales price, leaving the premium location value as the residual. Of the eight sales, the residual value was divided by the land value. This resulted in a percentage representative of the additional value that the premium location adds to the overall value of the property. An average of these eight sales resulted in a 43% adjustment.

Sales in Premium Locations in MA 01 and MA 06 (city)										
Sale #	Adj Sale Price	Dep imp value	OSD	Residual Land Value	size (sq.ft.)	Land value from 2019 schedule	residual prem value	Residual ratio increase to base schedule	Land value with 1.43 prem adjust	Test ratio to account. Total account value
1	284,790	187,970	27,000	69,820	7009	58,135	11,685	0.2010	83,133	298,103
2	286,715	182,210	27,000	77,505	7589	60,385	17,119	0.2835	86,351	295,561
3	273,377	172,100	27,000	74,277	6782	57,254	17,023	0.2973	81,873	280,973
4	288,585	188,670	27,000	72,915	5943	53,553	19,362	0.3615	76,581	292,251
5	281,906	184,290	27,000	70,616	5049	49,369	21,247	0.4304	70,598	281,888
6	351,033	230,270	27,000	93,763	7527	60,145	33,618	0.5589	86,007	343,277
7	289,224	177,080	27,000	85,144	5261	50,361	34,783	0.6907	72,017	276,097
8	495,041	310,960	33,400	150,681	19950	91,012	59,669	0.6556	130,147	474,507
						Average prem residual		26,813		
						Average ratio		0.43		

Conclusions

Based on an overall average result of 43%, the premium adjustment for St. Helens and City of Columbia City is recommended to be 43% for the 2019 setup.

MA 02 City Adjustment for Premium Location

Analysis

Study areas (SA) 79 and 80 in the city of Scappoose are considered superior to your typical city lot and block or subdivision home within SA 00. The assumption is made that homes located in a recently platted subdivision with curbs, sidewalks, street lights, and have been developed with uniform standards are considered most similar to those in SA's 79 & 80. Therefore, this study consists of sales from SA 79, SA 80, and those homes in SA 00 that meet the above criteria.

All sales included in this analysis are for improved properties. There were 8 useable sales selected from SA 00, 5 useable sales from SA 79 and 2 useable sales from SA 80. The improved sales had a trended improvement RMV and OSD. Any adjustments were deducted out of the time trended sales price to leave the residual land value. The residual land value was averaged for the each study area. The difference between each SA's averages were looked at to see if there could be a lump sum value. The sales were also analyzed by lot size to confirm a lump sum. The data was inconclusive in both studies to determine a lump sum value. It was then determined to analyze the data to calculate a ratio. The process consisted of the land value differences in SA 00 divided by the total differences of SA 79 & 80. The data supported a ratio of a positive 10% adjustment to land in SA 79 and SA 80 for the premium location.

LOTS UNDER 10K SQ.FT.

Sale #	Lot size	Time adj Sales Price	Trended Imp Value	Adj	OSD	Land Residual
1	7980	\$380,000	\$269,540	0	\$28,000	\$82,460
2	7240	\$414,989	\$296,380		\$28,000	\$90,609
3	7557	\$434,911	\$267,800		\$28,000	\$139,111
Non Premium Residual Land Average:						\$104,060
1	7502	\$495,594	\$381,410	0	\$28,000	\$86,184
2	8588	\$488,293	\$347,380	0	\$28,000	\$112,913
3	7762	\$565,509	\$389,060	0	\$28,000	\$148,449
4	8114	\$385,352	\$249,790	0	\$28,000	\$107,562
Premium Residual Land Average:						\$113,777
Lump Sum Difference						\$9,717
Percent Difference						0.0934

LOTS OVER 10K SQ.FT.

Sale #	Lot size	Time adj Sales Price	Trended Imp Value	Adj	OSD	Land Residual
1	14974	\$435,914	\$280,560	0	\$28,000	\$127,354
2	10445	\$425,893	\$273,480	0	\$28,000	\$124,413
3	13193	\$408,155	\$227,670	500	\$28,000	\$151,985
Non Premium Residual Land Average:						\$134,584
1	13800	\$441,762	\$224,060	0	\$28,000	\$189,702
2	11683	\$586,051	\$397,790	0	\$28,000	\$160,261
3	15917	\$615,923	\$493,250	0	\$28,000	\$94,673
Premium Residual Land Average:						\$148,212
Lump Sum Difference						\$13,628
Percent Difference						0.1013

Conclusion

It is recommended to apply a premium location adjustment for study areas 79 and 80 of +10% for 2019.

MA 3 SA 03 Adjustment Study for Non-Elevated Homes in the Floodplain

Analysis

Since the prior year land schedule with the 2018 trend applied will be used for the 2019 year, no changes will be made to this adjustment in 2019.

Sales in MA 3 SA 03 with Non-Elevated Dwellings (2018 Setup Study)

Sale #	Time Adj. Sales Price	2018 Land Value	2018 OSD Value	Residual Impr Value	2018 DRC of Impr	Cost vs Sale Difference	Indicated % Adj.
1	197,902	29,330	27,000	141,572	154,171	(12,599)	-0.08
2	157,200	34,140	27,000	96,060	165,854	(69,794)	-0.42
3	128,674	26,890	27,000	74,784	88,725	(13,941)	-0.16
4	123,789	31,620	27,000	65,169	92,129	(26,960)	-0.29
5	124,516	26,890	27,000	70,626	76,262	(5,636)	-0.07
6	119,468	26,890	27,000	65,578	103,428	(37,850)	-0.37
Average Indicated % Adj:							-0.2317

Conclusions

The adjustment of -25% will be used on the depreciated replacement cost of the dwelling for all non-elevated dwellings in MA 3 SA 03. This adjustment is only applied to non-elevated dwellings in the floodplain area.

Countywide Adjustment Study for Topography

Analysis

The data collected was located in MA 6, but the extracted % difference is considered reasonable to be applied to the remaining MA areas. There were 5 usable sales available for analysis of topography adjustments. All sales analyzed were time trended to the base appraisal date of 1/1/17. Of the 5 usable sales 3 were considered minimal topography, with 2 considered severe topography. The minimal topography adjustment was ranging from 19 % to -16%. The severe topography adjustment was ranging from -58% to -61%. The data collected appears to support the percentage adjustments used during the previous year.

Conclusions

For the 2019 setup, the base land table for MA 06 remained the same however, the 2018 trend was applied. The percentage reductions for topography adjustments as seen below will remain the same. This percentage is to be applied to the entire land value unless otherwise noted in the appraisal.

Countywide Topography Adjustment		
Code	Description	Rate %
411	Topo- Minimal impact	-10%
412	Topo- Low Impact	-20%
413	Topo- Moderate Impact	-30%
415	Topo- Severe Impact	-40%

Maintenance Area 4 and 5 Adjustment Study for Views

Analysis

The data collected for extracting view adjustments for MA 4 and 5 was first analyzed individual by each maintenance & study area, but due to limited sales data of view properties, it was warranted to combine areas that are geographically similar (North County) in market perception. Both bare land sales and extraction/residual sales were also used. The extraction method was utilized by time adjusting the sales price then subtracting the depreciated improvement value, subtracting on site development (utilities) and subtracting the base land value from the 2018 land schedule for the remaining residual contributory value associated with a market view. Analyzation of these values were analyzed on a lump sum average and by a percentage of the land value. Historically, views were broken down into 4 different categories fair, good, very good and excellent. During analyzation of data the prior year it appeared that market perception is recognizing 2 view categories, Good and Excellent. There was a total of 37 sales with only 6 usable, the remaining being unusable. All sales analyzed were ranging close to 1/1/17 to 12/31/17 and time trended to the base appraisal date of 1/1/18. The unusable sales were considered unusable because the difficulty to adequately identify characteristics that appeared to effect value and or no longer had a market related view adjustment.

2019 North County MA 4 & 5 View

SALE #	MA	SA	DESC	Time Adj Sales Price	Dep Imp Value	OSD	Land/View Residual Value	Land Value	Residual Value for View
1	04	41	excellent	249,469	147,277	54,400	47,792	12,077	35,715
2	04	41	excellent	490,000	221,617	54,000	214,383	120,658	93,725
3	04	41	excellent	236,833	-	-	236,833	120,865	115,968
4	04	41	excellent	264,056	-	-	264,056	118,290	145,766
5	04	00	good	210,882	105,298	15,300	90,284	44,299	45,985
6	04	42	Good	151,365	-	-	151,365	144,790	6,575
Average Value for Good View									26,280
Average Value for Excellent View									81,803

Conclusions

Based on the data collected for view adjustments, the lump sum average values are considered to be the most reliable. The lump sum results for the two categories good and excellent indicate separate lump sum values. Therefore, it's recommend that for 2019 the following view adjustments of \$25,000 be applied for Good and \$80,000 for Excellent views in MA areas 4 & 5.

MA 4 and MA 5 View Adjustments for 2019	
Fair/Good View	\$25,000
Very Good/Excellent View	\$80,000

Maintenance Area 1, 2 and 6 Adjustment Study for Views

Analysis

Land schedules in MA areas 1, 2 and 6 indicated no change from the the prior year base appraisal date of 1/1/17 and since land sale data indicated no change in land values, it was considered reasonable to maintain the prior year view data and and adjustments for south county view. No 2017 sales data was analyzed for extraction of south county view adjustments.

Sales in MA 1, MA 2 and MA 6 with Fair to Good Views (2018 Setup Study)									
SALE #	MA	SA	DESCRIPTION	Time Adj Sales Price	Dep Impr Value	OSD	Land/View Residual Value	Schedule Land Value	Residual Value for View
1	06	01	VIEW - FAIR	151,834	61,641	30,000	60,193	47,250	12,943
2	06	01	VIEW - GOOD	363,488	224,482	30,000	109,006	71,924	37,082
3	06	01	VIEW - FAIR	266,812	145,704	30,000	91,108	47,250	43,858
4	02	21	VIEW - GOOD	640,375	334,739	54,000	251,636	182,592	69,044
5	06	61	VIEW - GOOD	674,434	279,892	54,000	340,542	225,563	114,979
6	06	61	VIEW - GOOD	299,754	95,979	54,000	149,775	141,737	8,038
7	02	21	VIEW - GOOD	545,100	255,961	54,000	235,139	115,816	119,323
							Average Value for View:		\$ 57,895
Sales in MA1, MA 2 and MA 6 with Very Good to Excellent Views (2018 Setup Study)									
SALE #	MA	SA	DESCRIPTION	Time Adj Sales Price	Dep Impr Value	OSD	Land/View Residual Value	Schedule Land Value	Residual Value for View
1	01	00	VIEW - EXCELLENT	441,632	325,691	27,000	88,941	50,136	38,805
2	01	00	VIEW - VERY GOOD	279,963	129,923	27,000	123,040	42,424	80,616
3	01	00	VIEW - VERY GOOD	544,243	282,593	27,000	234,650	77,681	156,969
4	01	00	VIEW - VERY GOOD	474,669	291,652	27,000	156,017	50,858	105,159
5	06	01	VIEW - VERY GOOD	430,568	322,565	30,000	78,003	59,660	18,343
6	06	01	VIEW - VERY GOOD	694,584	462,746	30,000	201,838	72,227	129,611
							Average Value for View:		\$ 88,250

Conclusions

It's recommended that the prior year view adjustments carry forward from the base appraisal date of 1/1/17 for the current base appraisal date of of 1/1/18. The following view adjustment of \$60,000 be applied for Fair/Good views and \$90,000 be applied for Very Good/Excellent views for MA 1, 2 and 6 for 2019.

MA 1, MA 2 and MA 6 View Adjustments for 2018	
Fair/Good View	\$60,000
Very Good/Excellent View	\$90,000

Maintenance Area 4 Adjustment Study for City of Rainier Slide Area

Analysis

The slide area in Rainier is an area east of Fox Creek and South of Columbia River Highway. In addition, any piece of land within the city limits that has a slope of 20% or more west of Fox Creek. The City of Rainier is currently working on an overlay map of the slide area.

For undeveloped lots in the slide area, there is approximately \$500 worth of planners time and application fee to review the required 'Geological Technical Report' prior to building.

Several Geological Engineers were contacted to determine the cost of having a Geological Technical Study and Report done for a property within the slide area of Rainier. The average cost is \$8,525.

Conclusions

Following are the slide area adjustments that should be applied to all vacant properties in the slide area and to all older improved properties that appear to have problems due to being located within the slide area of Rainier.

MA 4 City of Rainier Slide Area Adjustments for 2019	
Rainier Slide – City Fees	\$500
Rainier Slide – Engineering Fees	\$8,525

MA 04 SA 47 Adjustment Study for Riverfront Properties

Analysis

The data collected for extracting a Riverfront location adjustment in MA 4 SA 47 was based on a sales comparison of 2 identical homes with one riverfront and the other an interior lot for a difference of \$54,000. Prior year setup analyzation of this adjustment indicated an adjustment of \$52,000, which when applying the ratio adjustment of 1.03 results in a trended adjustment of \$53,500. When analyzing current data and trended prior year data both indicate a slight increase to the SA 47 Riverfront location adjustment of ranging from \$53,500 to \$54,000.

2019 MA 4 SA 47 Riverfront Paired Sales Study

Sale #	Property Description	Time-Adj Sales Price
1	Interior Lot - Improved 1686 sf dwelling	237,530
2	Riverfront Lot - Improved 1686 sf dwelling	291,296
Sales Price Difference for Riverfront:		53,766

Conclusions

Based on the data available for analysis its recommended that the adjustment be increased slightly to \$54,000 for the 2019 setup, for a Riverfront adjustment of \$54,000.

2019 Adjustment Study for Over-Improved Properties

Analysis

During analysis of new construction homes and sales reviews of resale homes, it was noted that homes of a higher quality of construction (class 6, 7) are selling differently than they are being valued. Since the difference is not something that can be solved through the ratio study, an analysis of sales has been done to determine the adjustment that is needed to bring the values in line with the sales price. Sales from 1/1/2017 through 12/31/17 were looked at for usability. These sales were time adjusted to the 1/1/2018 base appraisal date. There were a total of 6 arm's length transaction sales that were used for this analysis.

2019 Over Improvement Study

SALE #	Total RMV	Time Adjusted Sales Price	Total Land Size (Acres)	Total Impr SQFT	Year Built	Ratio of Sales Price to RMV
1	1,200,360	1,007,200	9.61	4258	2005	0.8391
2	1,014,660	689,229	0.23	3854	1991	0.6793
3	1,206,800	664,090	0.18	5789	1999	0.5503
4	998,730	615,923	0.37	4269	2010	0.6167
5	830,240	625,086	0.14	3622	1993	0.7529
6	704,700	488,146	0.20	2222	2015	0.6927
Total RMV						5,955,490
Total Time Adj. Sales Price						4,089,674
Ratio of Sales Price to RMV						0.6867

Conclusion

Based on the above time adjusted sales, it is recommended to use a -30% over-improvement adjustment on all class 6 and 7 homes that are greater than 3500 square feet.

Other Adjustments Where a Study was Not Completed for 2019

Creek Adjustment

There is no measurable data at to support a percentage or fixed amount adjustment for this area identifiers at this time in the following areas.

MA 01 SA 00	MA 04 SA 00	MA 04 SA 44	MA 06 SA 01
MA 01 SA 30	MA 04 SA 40	MA 04 SA 45	MA 06 SA 21
MA 01 SA 31	MA 04 SA 41	MA 04 SA 47	MA 06 SA 31
MA 01 SA 43	MA 04 SA 42	MA 04 SA 56	MA 06 SA 44

Busy Street Adjustment

There is no measurable data at to support a percentage or fixed amount adjustment for this area identifiers at this time in the following areas.

MA 01 SA 00	MA 04 SA 00	MA 04 SA 44	MA 06 SA 01
MA 01 SA 30	MA 04 SA 40	MA 04 SA 45	MA 06 SA 21
MA 01 SA 31	MA 04 SA 41	MA 04 SA 47	MA 06 SA 31
MA 01 SA 43	MA 04 SA 42	MA 04 SA 56	MA 06 SA 44

Transmission Lines - Countywide

A 50% adjustment is made to the value of the portion of land that lays directly under a major transmission line easement. This adjustment is not based on market sales, but rather is made to recognize the limited use and negative market perception of land that lies beneath major transmission lines.

2 Parcels/Taxlot, 3 Parcels/Taxlot - Countywide

These adjustments are used on non-platted properties where the highest and best use of the property based on location, zoning and access is to divide the property through the partition plat process and sell each parcel individually.

2 Parcels/Taxlot adds 50% of the land value

3 Parcels/Taxlot adds 90% of the land value

Partition Costs - Countywide

This adjustment is added to all properties that have either a 2 or 3 Parcels per Taxlot adjustment. It reduces the total land value by the typical partitioning costs.

2019 Partition Costs adjustment is -\$10,870.

Appeal Adjustments

This adjustment is used on properties where the value has been reduced by the Board of Property Tax Appeals or by the Oregon Tax Court (either Magistrate or Regular Division), to maintain the same percentage of reduction over the 5 year adjudication period while continuing to recalculate the values using current setup factors.

Notes

Published By
Columbia County Assessor
230 Strand Street
Saint Helens, OR 97051
503-397-2240
www.co.columbia.or.us