

**2019 Annual Recalculation and Reappraisal
Setup Studies for All Residential Properties
in Columbia County for Property Tax
Assessment**



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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

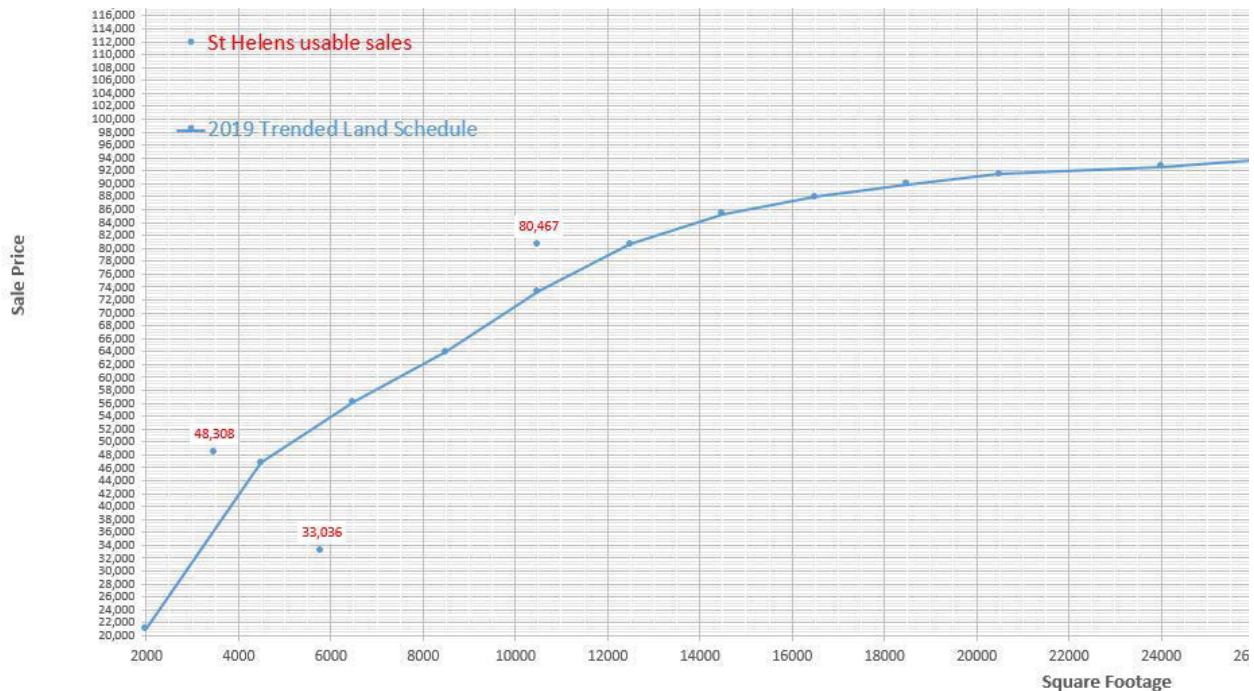
2019 Land Analysis and Conclusions

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

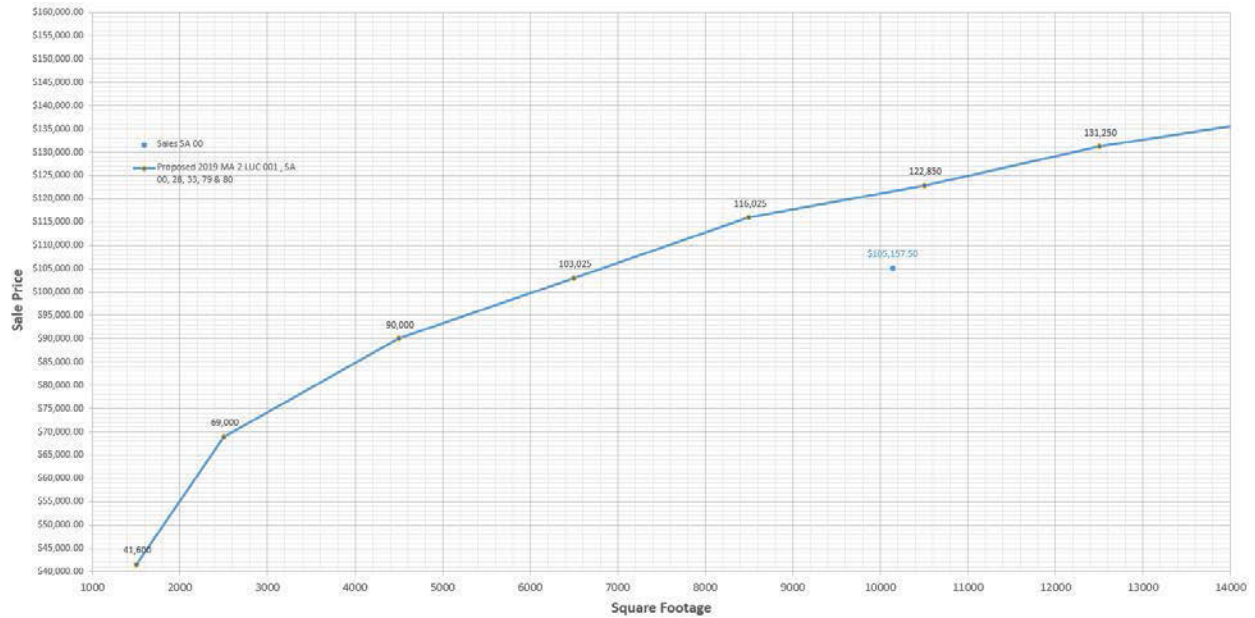
SA 43 LUC 001 Townhouse, Rowhouse		
Size (sq. ft.)		Total Value
From	To	
1	3500	36,520
3501	4500	46,800
4501	6500	56,160
6501	8500	63,960
8501	10500	73,320
10501	12500	80,600
12501	14500	85,280
14501	16500	87,880
16501	18500	89,960
18501	20500	91,520
20501	24000	92,560
24001	28000	94,640
28001	32000	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

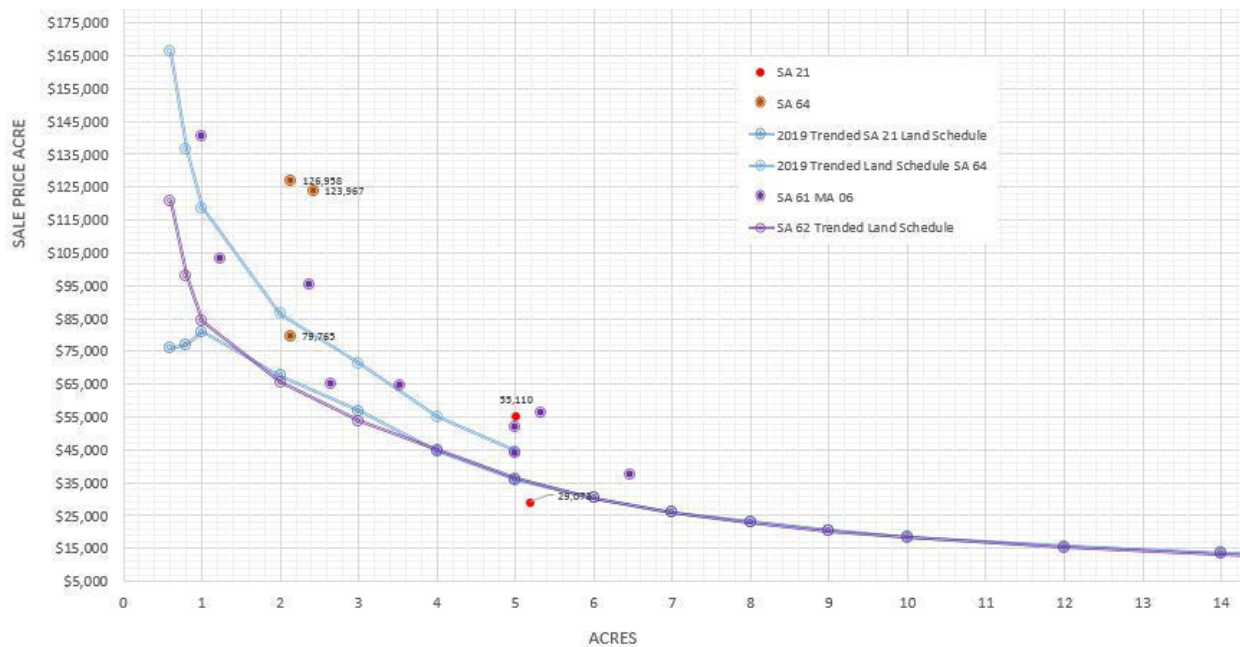
SA 00 LUC 002 City Acreage		
Size (Acres)		Total Value
From	To	
0.01	999999	119,540

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

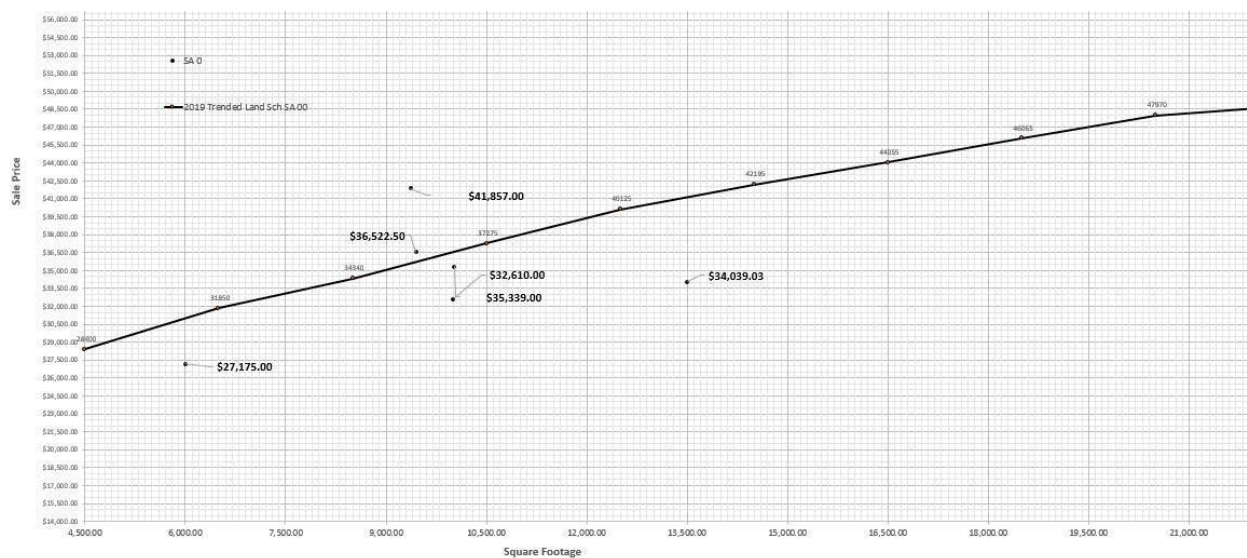
SA 64 LUC 003 Columbia Acres/Hillcrest (Unbuildable)		
Size (Lots)		Value
From	To	Lump Sum
Per Platted Lot		500

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

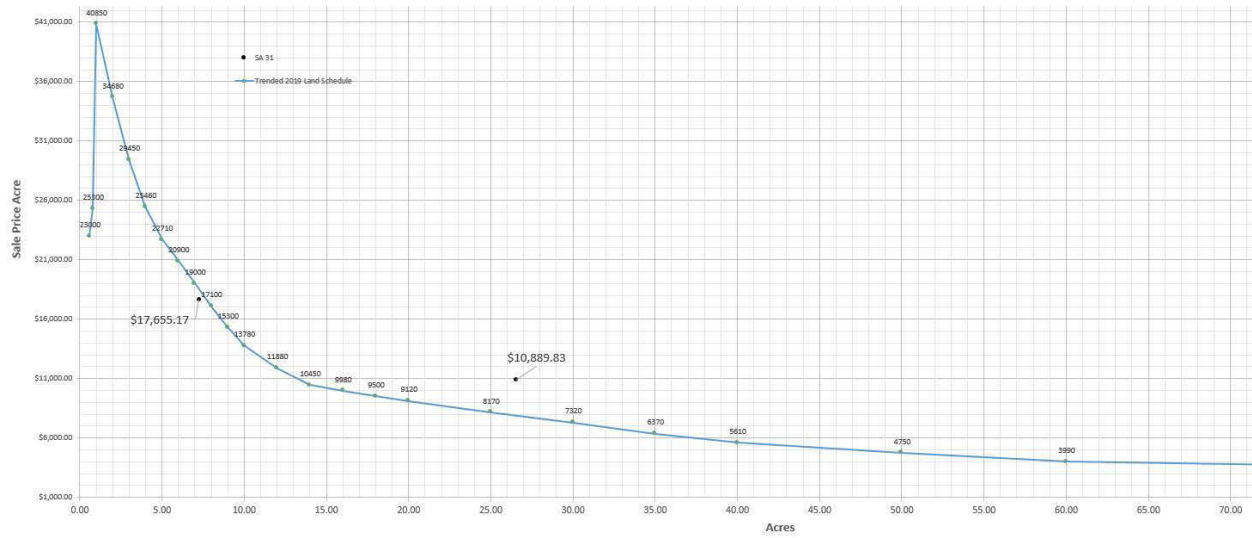
SA 03 LUC 002		
Flood Zone City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	9999	43,124

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

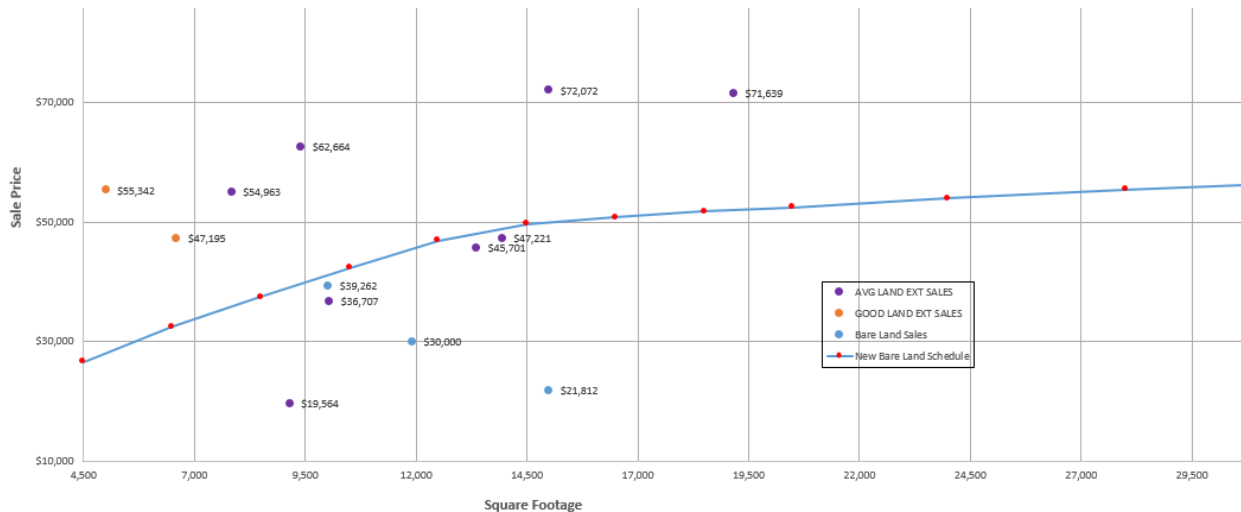
Analysis

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

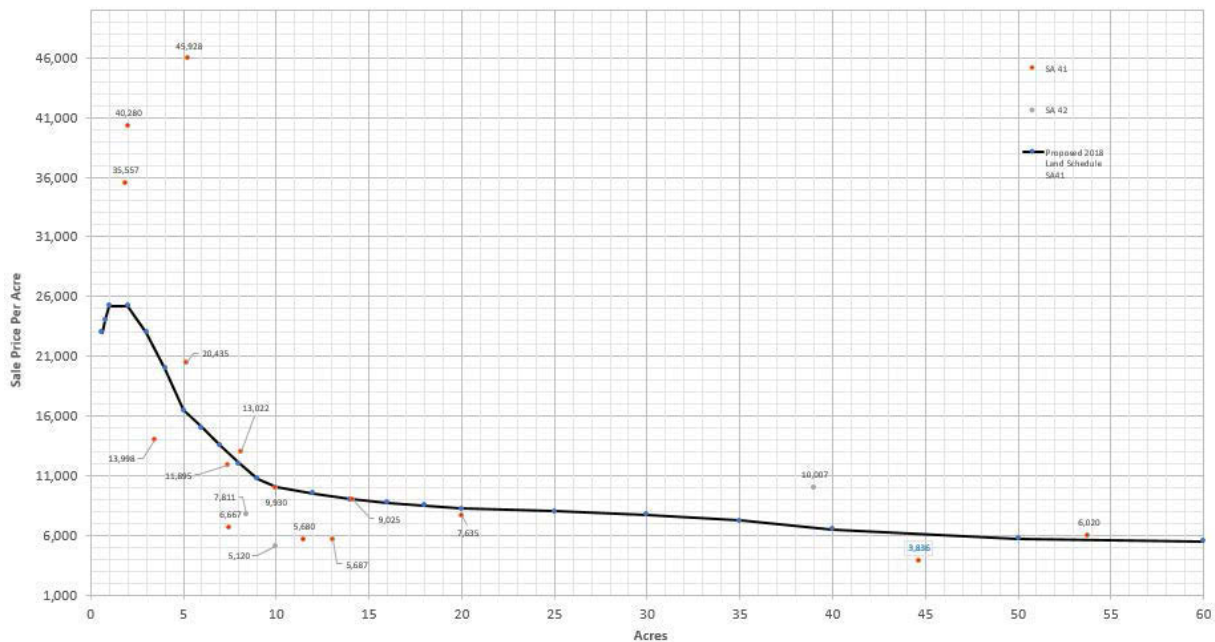
SA 00 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	999999	39,450

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

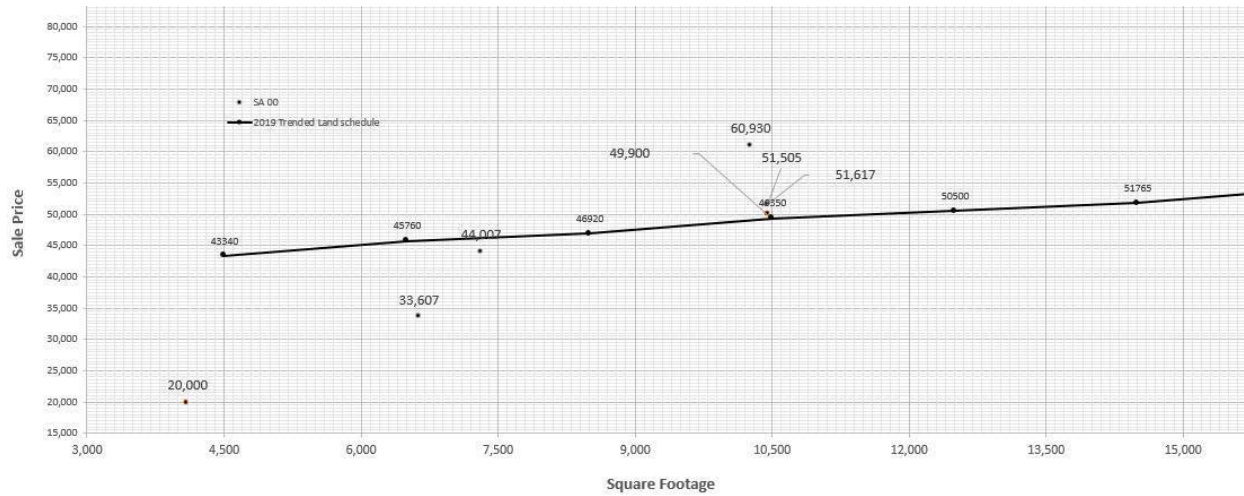
SA 56 LUC 003 Deer Island Heights		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	50,000
0.61	0.80	52,500
0.81	1.00	55,000
Over 1 Acre		Per Acre
1.01	2.00	47,000
2.01	3.00	37,000
3.01	4.00	29,500
4.01	5.00	24,000

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

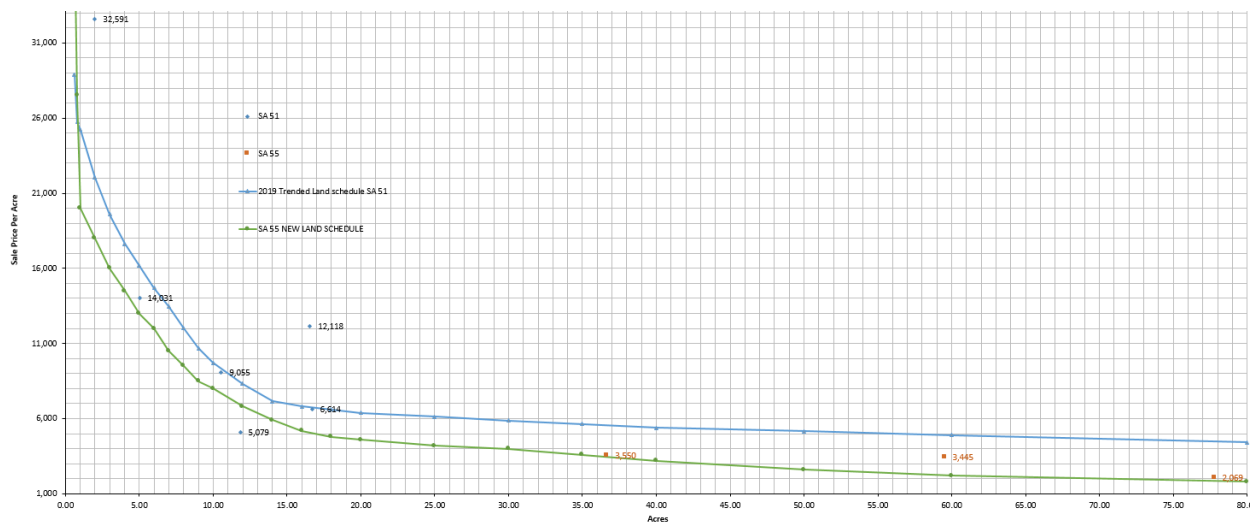
Analysis

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

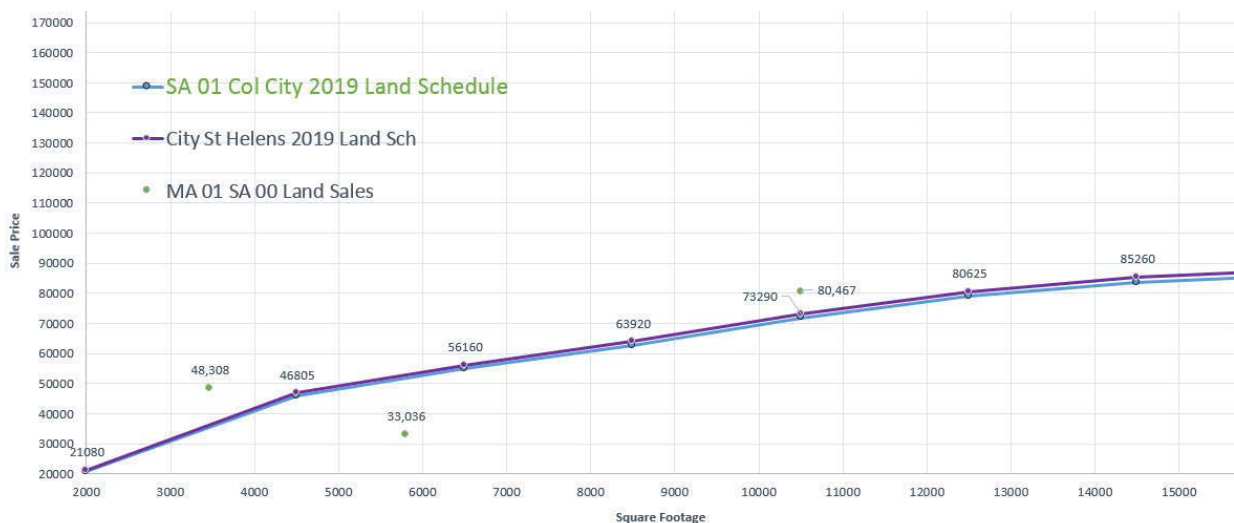
Maintenance Area (MA) 6, City of Columbia City Land Setup

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

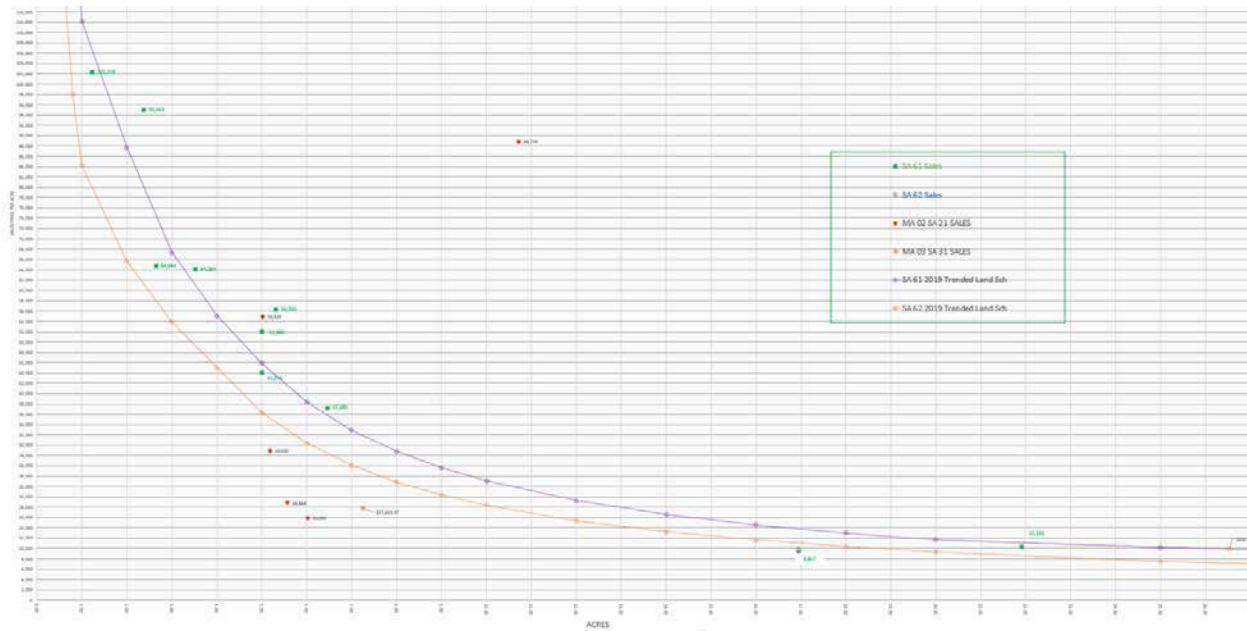
SA 01 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
1.00	999999	68,010

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. 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)	\$2,304	\$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

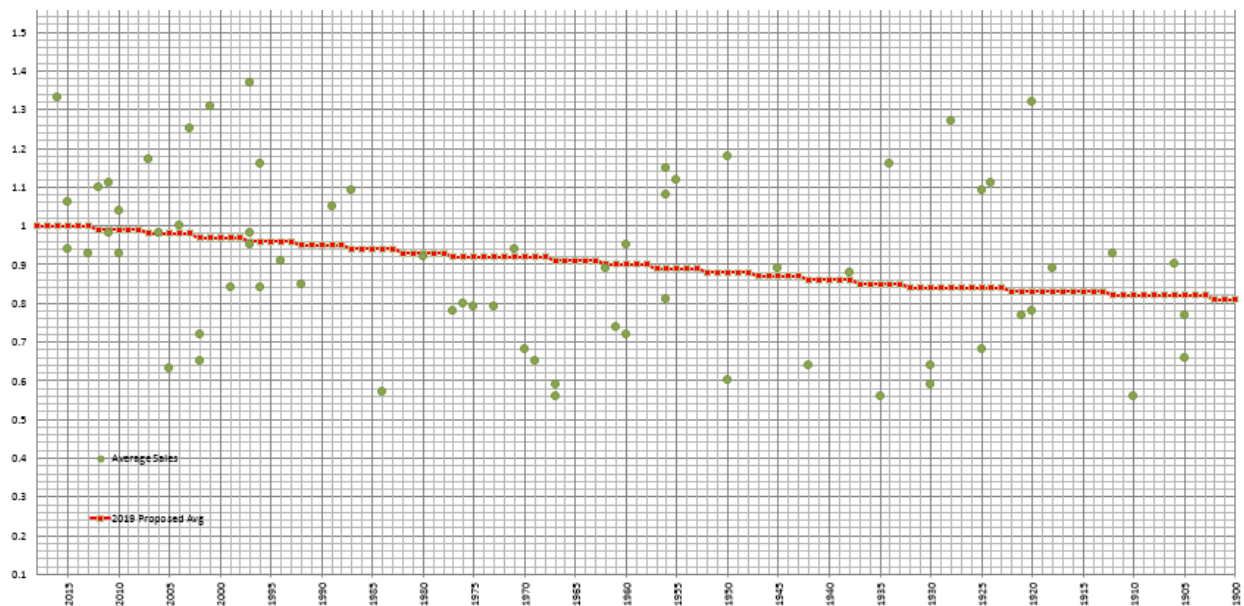
Analysis

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%

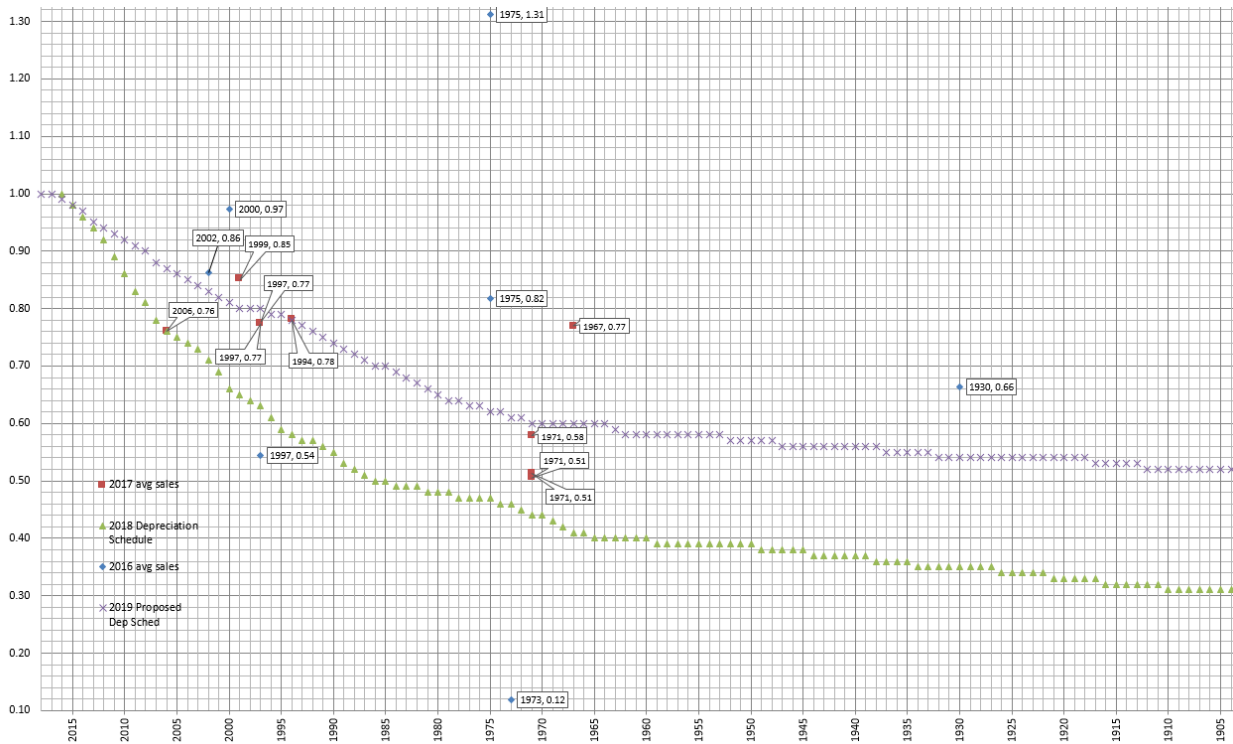
Note: Highlighted year is actual year built. Appraiser selects effective year based on condition for physical year in order to calculate depreciation.

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

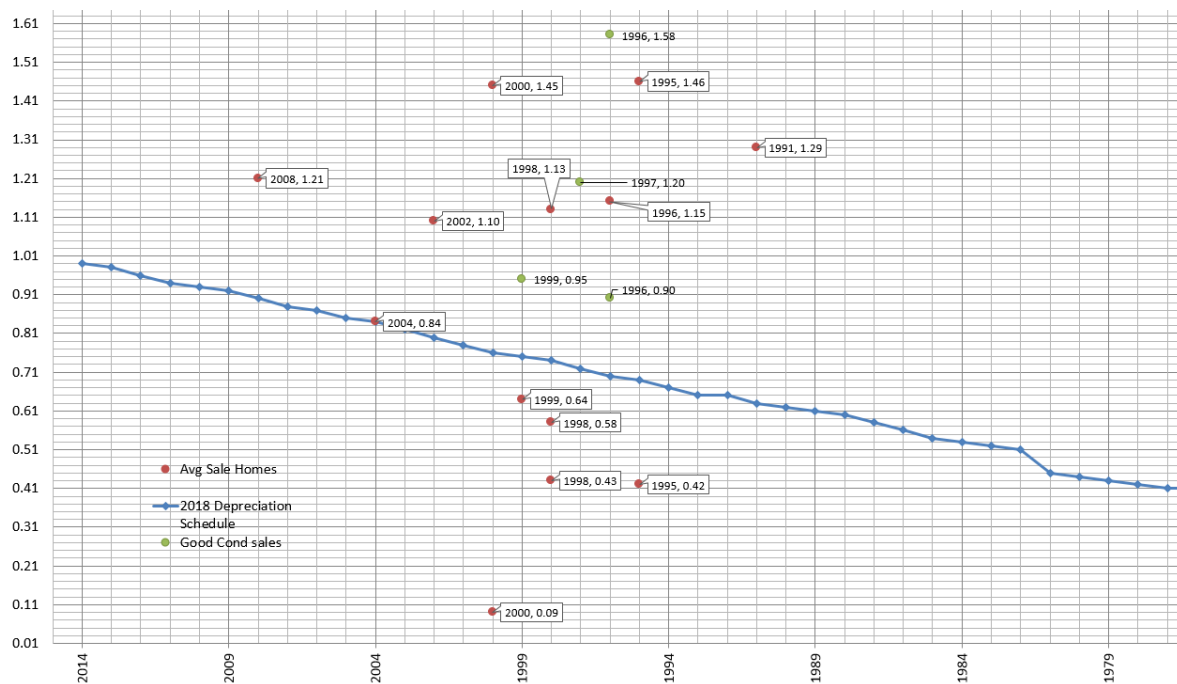
Analysis

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

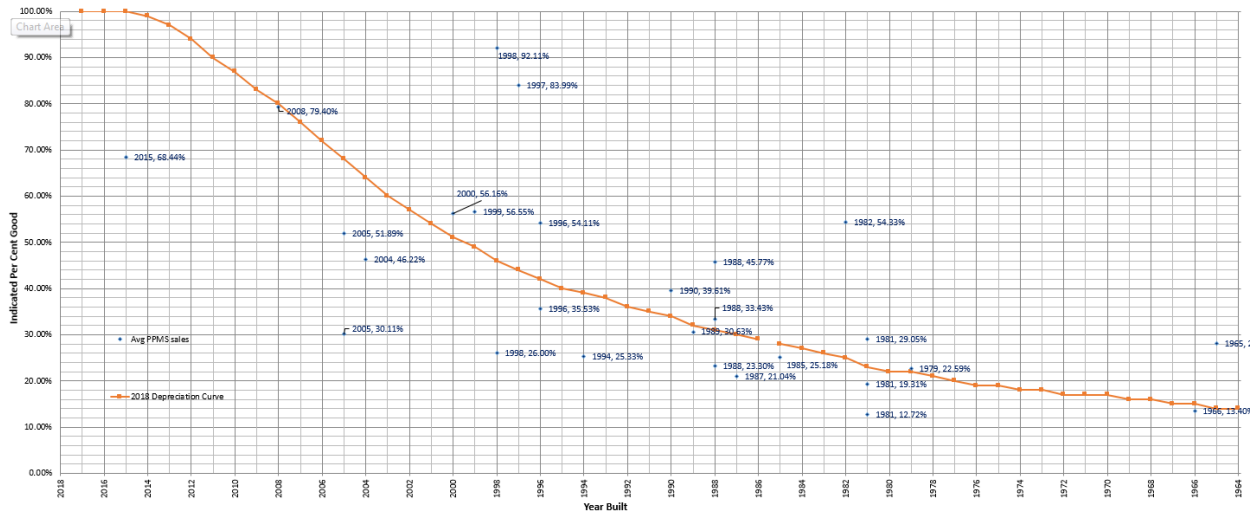
Analysis

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.

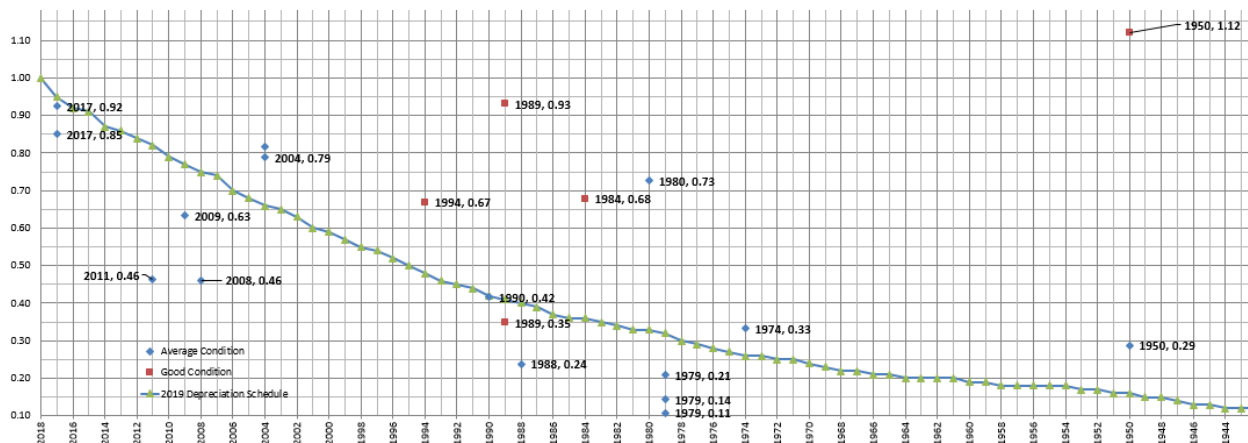
Countywide Depreciation Study for Floating Property

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

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