

**2018 Annual Recalculation and Reappraisal  
Setup Studies for All Residential Properties  
in Columbia County for Property Tax  
Assessment**



**Published by the Columbia County Assessor**

**January 2, 2018**



Table of Contents

**INTRODUCTION** ..... 1

    Summary of the Mass Appraisal of Property ..... 1

    Sales Reviews and Coding ..... 1

    Pre-appraisal and Recalculation Setup ..... 2

        Base Appraisal Date ..... 2

        Time Study ..... 2

        Land Values ..... 2

        Local Cost Modifier (LCM)..... 2

        Depreciation Study..... 3

        Adjustment Study ..... 3

    Reappraisal vs. Recalculation..... 3

        Physical Reappraisal..... 3

        Recalculation..... 4

        New Construction ..... 4

    Ratio Study ..... 4

2018 Time Study Analysis and Conclusions ..... 5

    Time Trend Study for all Maintenance Areas (MA) ..... 6

2018 Land Analysis and Conclusions..... 9

    Maintenance Area (MA) 1, City of Saint Helens Land Setup ..... 10

        MA 1 City of Saint Helens Recalculation Land Schedules for 2018..... 12

    Maintenance Area (MA) 2, City of Scappoose Land Setup ..... 13

        MA 2 City of Scappoose Recalculation Land Schedules for 2018 ..... 14

    Maintenance Area (MA) 2, Rural Scappoose Land Setup ..... 15

        MA 2 Rural Scappoose Recalculation Land Schedules for 2018 ..... 16

    Maintenance Area (MA) 3, City of Vernonia Land Setup..... 18

        MA 3 City of Vernonia Reappraisal Land Schedules for 2018..... 19

    Maintenance Area (MA) 3, Rural Vernonia Land Setup..... 20

        MA 3 Rural Vernonia Reappraisal Land Schedules for 2018..... 21

    Maintenance Area (MA) 4, City of Rainier Land Setup ..... 22

        MA 4 City of Rainier Recalculation Land Schedules for 2018 ..... 23

    Maintenance Area (MA) 4, Rural Rainier Land Setup ..... 24

        MA 4 Rural Rainier Recalculation Land Schedules for 2018 ..... 25

Maintenance Area (MA) 5, City of Clatskanie Land Setup .....	27
MA 5 City of Clatskanie Recalculation Land Schedules for 2018 .....	28
Maintenance Area (MA) 5, Rural Clatskanie Land Setup .....	29
MA 5 Rural Clatskanie Recalculation Land Schedules for 2018 .....	31
Maintenance Area (MA) 6, City of Columbia City Land Setup .....	32
MA 6 City of Columbia City Recalculation Land Schedules for 2018 .....	34
Maintenance Area (MA) 6, Rural Saint Helens Land Setup .....	35
MA 6 Rural Saint Helens Recalculation Land Schedules for 2018.....	36
2018 On-Site Development (OSD) Analysis and Conclusions .....	37
Maintenance Area 1, City of Saint Helens On-Site Development (OSD) Study .....	38
Maintenance Area 2, City of Scappoose On-Site Development (OSD) Study .....	39
Maintenance Area 2, Rural Scappoose On-Site Development (OSD) Study.....	40
Maintenance Area 3, City of Vernonia On-Site Development (OSD) Study.....	42
Maintenance Area 3, Rural Vernonia On-Site Development (OSD) Study.....	43
Maintenance Area 4, City of Rainier On-Site Development (OSD) Study .....	45
Maintenance Area 4, Rural Rainier On-Site Development (OSD) Study .....	46
Maintenance Area 4, City of Prescott On-Site Development (OSD) Study.....	48
Maintenance Area 5, City of Clatskanie On-Site Development (OSD) Study.....	50
Maintenance Area 5, Rural Clatskanie On-Site Development (OSD) Study.....	51
Maintenance Area 5, Fishhawk Lake On-Site Development (OSD) Study .....	53
Maintenance Area 6, City of Columbia City On-Site Development (OSD) Study .....	54
Maintenance Area 6, Rural Saint Helens On-Site Development (OSD) Study .....	55
2018 Local Cost Modifiers (LCM) Analysis and Conclusions .....	57
Countywide Local Cost Modifier (LCM) Study for Conventional Dwellings.....	58
Countywide Local Cost Modifier (LCM) Study Manufactured Dwellings.....	59
Countywide Local Cost Modifier (LCM) Study for Floating Property.....	60
Countywide Local Cost Modifier (LCM) for Farm Buildings .....	61
2018 Depreciation Schedules Analysis and Conclusions .....	63
Countywide Depreciation Study for Conventional Single Family Dwellings.....	64
Countywide Conventional Single Family Dwelling Depreciation Schedule for 2018 .....	65
Countywide Effective Year Built Based on Condition For Conventional Single Family Dwellings for 2018 .....	66
Countywide Depreciation Study for Multi-Family Dwellings.....	67

Countywide Effective Year Built Based on Condition For Multi-Family Dwellings for 2018.....	69
Countywide Depreciation Study for Real Property Manufactured Dwellings .....	70
Countywide Effective Year Built Based on Condition For Real Property Manufactured Dwellings for 2018 .....	72
Countywide Depreciation Study for Personal Property Manufactured Dwellings .....	73
Countywide Personal Property Manufactured Dwelling Depreciation Schedule for 2018 .....	74
Countywide Effective Year Built Based on Condition For Personal Property Manufactured Dwellings for 2018.....	74
Countywide Depreciation Study for Floating Property.....	75
Countywide Floating Property Depreciation Schedule for 2018 .....	76
Countywide Effective Year Built Based on Condition For Floating Property for 2018.....	77
Countywide Depreciation Study for Farm Buildings.....	78
Countywide Farm Building Depreciation Schedule for 2018 .....	79
2018 Land Adjustments Analysis and Conclusions .....	81
MA 01 and MA 06 (City) Adjustment Study for Premium Location.....	82
MA 3 SA 03 Adjustment Study for Non-Elevated Homes in the Floodplain .....	83
Countywide Adjustment Study for Topography .....	84
Maintenance Area 4 and 5 Adjustment Study for Views.....	85
Maintenance Area 1, 2 and 6 Adjustment Study for Views.....	86
Maintenance Area 4 Adjustment Study for City of Rainier Slide Area .....	87
MA 04 SA 47 Adjustment Study for Riverfront Properties .....	88
Other Adjustments Where a Study was Not Completed for 2018 .....	89
Creek Adjustment .....	89
Busy Street Adjustment .....	89
Transmission Lines - Countywide.....	89
2 Parcels/Taxlot, 3 Parcels/Taxlot - Countywide .....	89
Partition Costs - Countywide .....	89
Appeal Adjustments.....	89



# 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.

# **2018 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 2018 reappraisal and recalculation of residential properties countywide is January 1, 2017. 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, 2016 and December 31, 2016 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, 2016 base RMV of the same properties, which gives an estimated market trend for the entire 2016 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, 2017.

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, 2017 and June 30, 2017, 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, 2017 certified values (January 1, 2016 base RMV times the market trend from the 2017 Ratio Study) which gives an estimated market trend for the first half of 2017. 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, 2017.

### 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 2018 Residential Setup Studies

<b>Time Trend Rate for 2016 Sales to Reflect Base Appraisal Date of January 1, 2017</b>				
CITY RESIDENTIAL	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 RESIDENTIAL	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

<b>Time Trend Rate for 2017 Sales to Reflect Base Appraisal Date of January 1, 2017</b>				
CITY RESIDENTIAL	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 RESIDENTIAL	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*

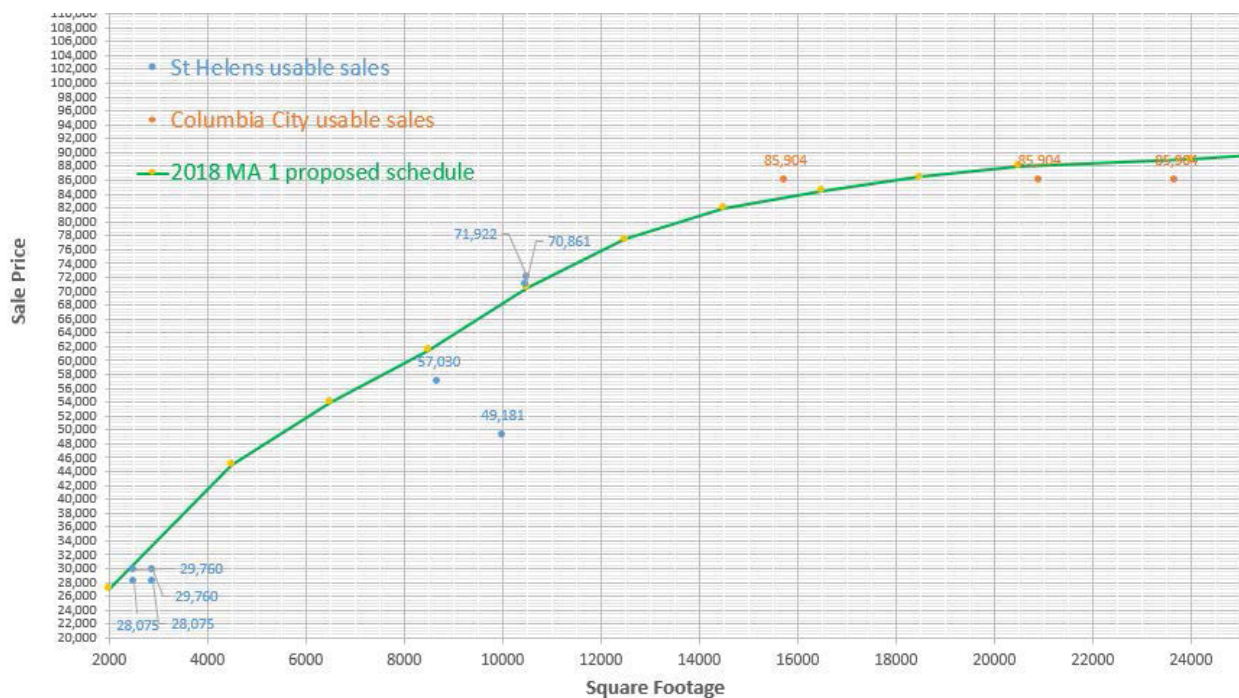
# **2018 Land Analysis and Conclusions**

## Maintenance Area (MA) 1, City of Saint Helens Land Setup

### Analysis

For 2018, MA 1 boundary lines were moved and adjusted with adjacent MA 6. The boundaries were shifted and balanced due to growth for management/maintenance purposes. This change resulted in moving Columbia City into MA 6, with no other changes made to MA 1. There were 14 sales within Saint Helens, of which 8 were considered usable and 6 were considered unusable because of topography issues and or view adjustments. A bulk sale of 4 smaller lots were included in this analysis. The use of this bulk sale is considered to be reasonable, as these 4 lots were similar in size and already partitioned. They were simply recorded on 1 deed by seller. Due to the close proximity to Saint Helens, 3 Columbia City sales were considered for analysis. When sales data from both Saint Helens and Columbia City were analyzed, the results between the two appeared to be similar. All sales analyzed were time trended to the base appraisal date of 1/1/17. The data compiled for analysis is considered to provide sufficient support for creating a new land schedule for SA 00.

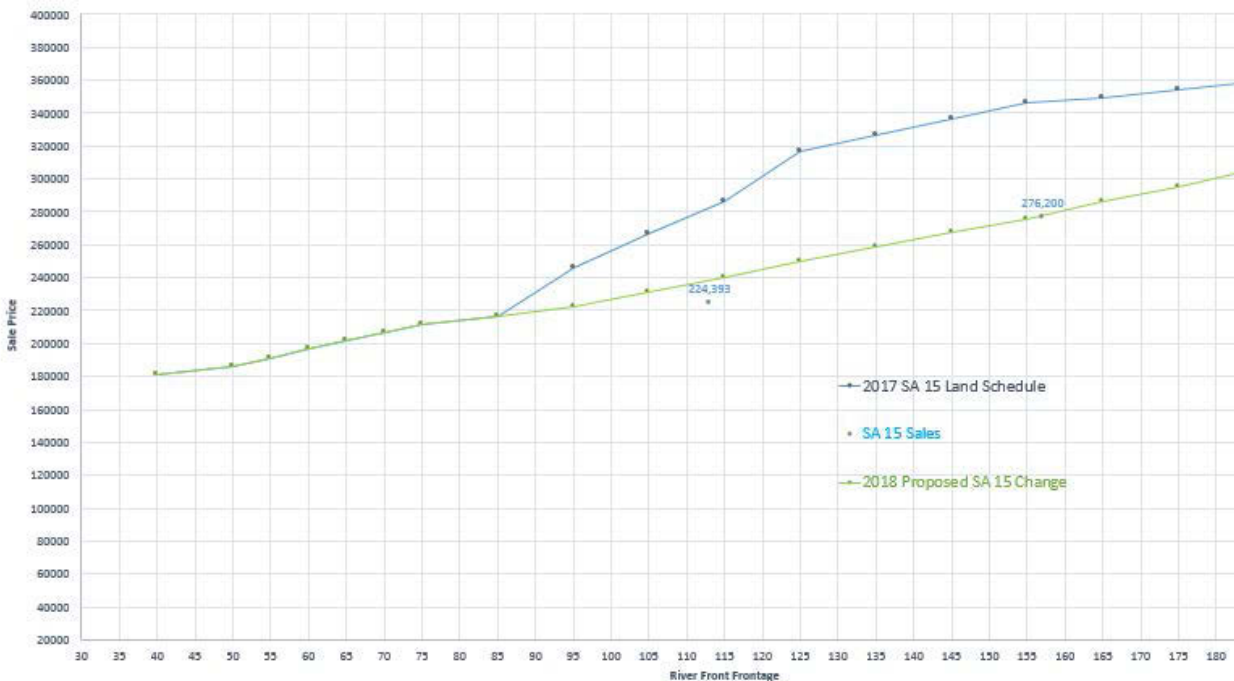
### 2018 MA 1 City Base Land Sales Graph



SA 15 had 2 usable land sales that when plotted against the previous year's land schedule indicated a slight reduction for properties that had more than 85' of river frontage.



## 2018 MA 1 and MA 6 City Riverfront Land Sales Graph



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 45% reduction between the areas. By reducing the City of Scappoose sales-based City Acreage land schedule by 45%, the resulting value provides a reasonable and credible City Acreage land schedule for both Columbia City and Saint Helens.

### Conclusions

Based on the supporting data collected, there is sufficient sales data for the creation of a new 2018 land schedule for SA 00. SA 30 and SA 43 will also use the SA 00 land schedule as these areas have very similar land characteristics.

SA 15 sales were limited but the data provided sufficient information to modify the 2017 schedule to be used for the 2018 land schedule.

Based on supporting data, the city acreage land schedules for Saint Helens and Columbia City will reflect a value that is 45% less than the City of Scappoose city acreage land schedule for 2018.

MA 1 City of Saint Helens Recalculation Land Schedules for 2018

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	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 30 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 00 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	999999	65,390

SA 15 LUC 005 Riverfront		
Size (front footage)		Total Value
From	To	
0	40	181450
41	50	186450
51	55	191450
56	60	196450
61	65	201450
66	70	206450
71	75	211450
76	85	216450
86	95	222000
96	105	231000
106	115	240000
116	125	250000
126	135	259000
136	145	268000
146	155	276000
156	165	286000
166	175	295000
176	185	306000
186	195	316000
196	999999	318000

SA 80 LUC 001 Yachts Landing PUD		
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

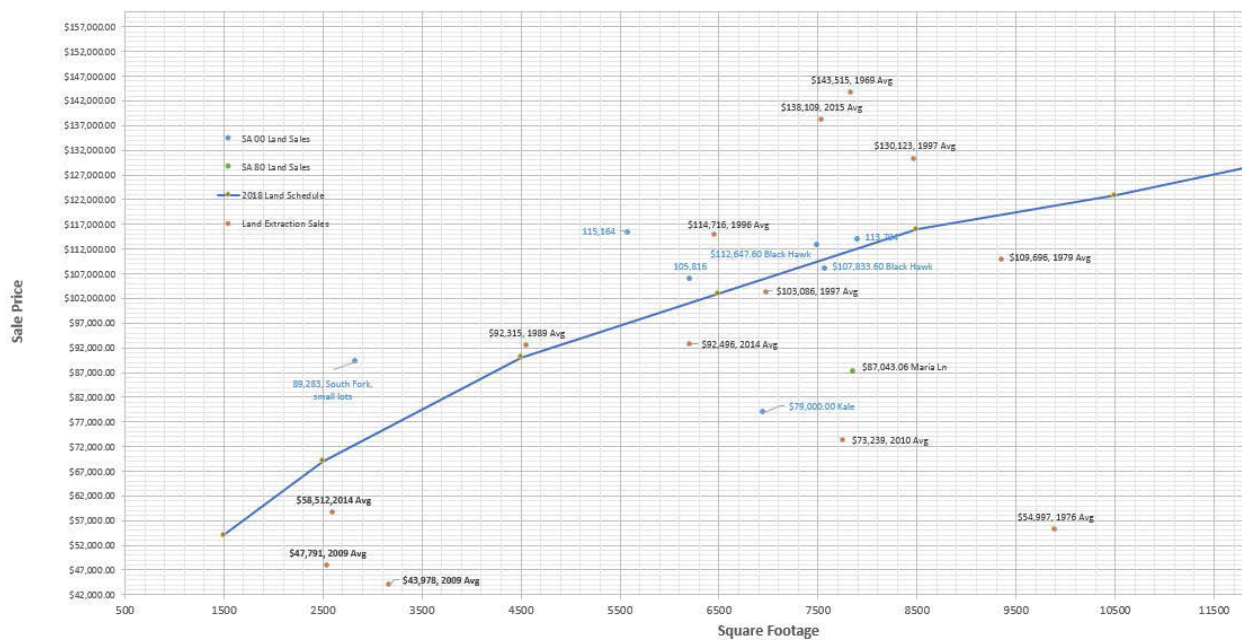
SA 43 LUC 001 Townhouse, Rowhouse		
Size (sq. ft.)		Total Value
From	To	
1	3500	35,120
3501	4500	45,000
4501	6500	54,000
6501	8500	61,500
8501	10500	70,500
10501	12500	77,500
12501	14500	82,000
14501	16500	84,500
16501	18500	86,500
18501	20500	88,000
20501	24000	89,000
24001	28000	91,000
28001	32000	93,000
32001	40000	96,000
40001	43560	98,000

## Maintenance Area (MA) 2, City of Scappoose Land Setup

### Analysis

For 2018, the City of Scappoose vacant land sales were mostly comprised of newly created subdivisions where the lots were sold in bulk to contractors. There were only 4 sales that were not in these subdivisions located in SA 00. The sales were time trended to the base appraisal date of 1/1/17. The plotted sales on the graph did not give a good indication of value. Due to the limited sales data for a vacant city lot, the land extraction method was used. This method uses improved property sales trended to the base appraisal date, and then subtract the calculated OSD and depreciated replacement cost of the structures to get the residual value for land only. There were 18 improved sales in SA 00 that were used. The residual land values were plotted on the same graph as the bare land sales. This provided us enough data to support a new land schedule.

2018 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 the supporting data, a new 2018 land schedule for SA 00 has been created. This schedule will also be used for SA 28, SA 33, SA 79 and SA 80 due to lack of sales in those areas and similar land characteristics.

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 2018 will be \$119,540 per acre.

**MA 2 City of Scappoose Recalculation Land Schedules for 2018**

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 Townhouse, Rowhouse, 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

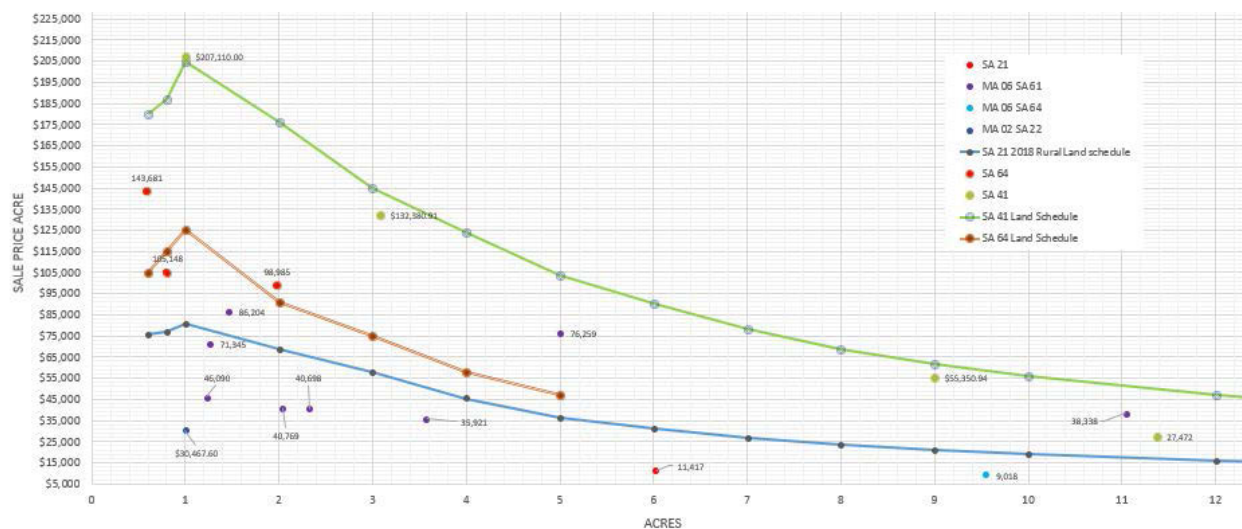
### Analysis

For 2018, MA 2 boundary lines were moved and adjusted with adjacent MA 3 and 6. The boundaries were shifted and balanced due to growth for management/maintenance purposes. Land sales from nearby MA 6 with similar characteristics and market appeal were used due to a limited number of sales available in MA 2. There were 35 vacant land sales of which 22 were useable for the vacant land study. These sales were site visited and time trended to the base appraisal date of 1/1/17. The data supported a new land schedule for SA 21.

The land sales in SA 64 and 63 showed differences in market values, views and topography when compared to SA 21, therefore, a new land schedule was created.

Due to the lack of vacant land sales, the extraction method was used for SA 41. There were 12 sales, 5 useable for this study.

### MA 2 Rural Land Sales Graph



### Conclusions

Based on the supporting data, new land schedules were created for SA 21 and SA 41. SA 63 was combined into SA 64 and a new land schedule was created. Due to lack of sales in SA 25, SA 45 and SA 62, SA 21 land schedule will be used for SA 25 and SA 62, and SA 41 land schedule will be used for SA 45.

MA 2 Rural Scappoose Recalculation Land Schedules for 2018

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 2018 (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	105000
0.61	0.80	115000
0.81	1.00	125000
Over 1 Acre		Per Acre
1.01	2.00	91,000
2.01	3.00	75,000
3.01	4.00	58,000
4.01	5.00	47,000

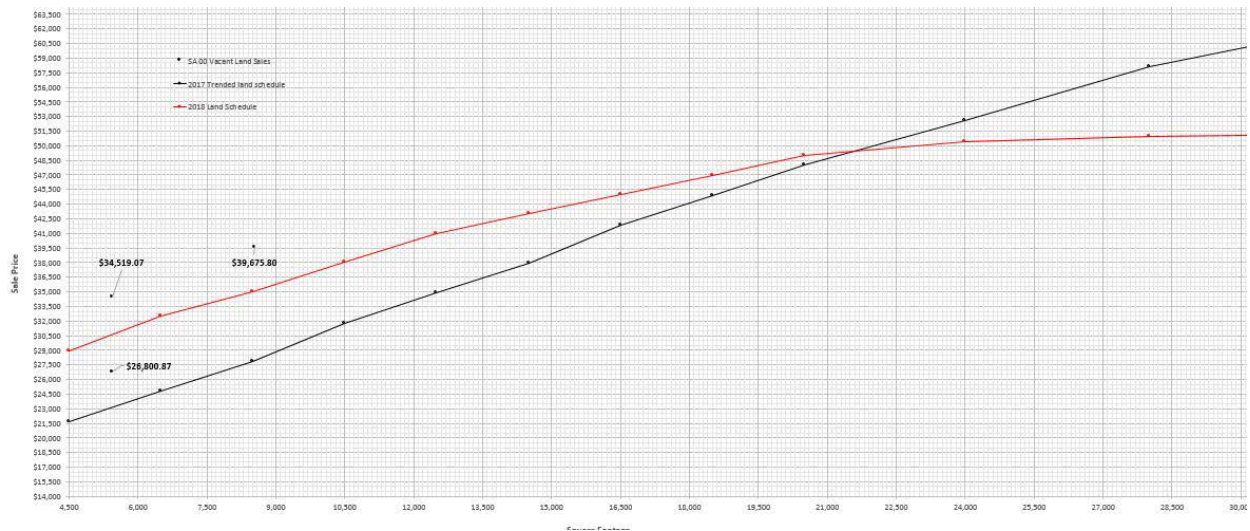
SA 64 LUC 003 Columbia Acres/Hillcrest (Unbuildable)		
Size (Lots)		Value
From	To	Lump Sum
Per Platted Lot		500

## Maintenance Area (MA) 3, City of Vernonia Land Setup

### Analysis

For 2018, there were 17 vacant land sales in SA 00, 1 vacant land sale in SA 03, and 0 vacant land sales in SA 38, SA 39 and SA 40. Only 3 of the sales in SA 00 were considered useable and were site visited and time trended to the base appraisal date of 1/1/17. With very limited data, the sales were compared to the previous year's trended land schedule. While the sales were for smaller lots and showed an increase in value, it is unlikely that larger parcels would have increased by the same percentage. Therefore, when a new curve was created on the graph, it was drawn to reflect a curve more typical of other cities' land data. The data compiled for analysis is considered to provide sufficient support for creating a new land schedule. At this time, the market does not indicate a difference in value for properties located in SA 03, designated floodplain.

### MA 3 City Base Land Sales Graph



### Conclusions

Based on the supporting data, a new land schedule was developed for SA 00. This schedule will also be used in SA 03 due to a market that does not currently support a difference. The SA 00 schedule will also be used for SA 38, SA 39 and SA 40 due to lack of sales data and similar land characteristics. There was no sales data for City Acreage, therefore, the 2017 trended land values will be used as a base value for these properties.



MA 3 City of Vernonia Reappraisal Land Schedules for 2018

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	29,000
4501	6500	32,500
6501	8500	35,000
8501	10500	38,000
10501	12500	41,000
12501	14500	43,000
14501	16500	45,000
16501	18500	47,000
18501	20500	49,000
20501	24000	50,500
24001	28000	51,000
28001	32000	51,200
32001	40000	51,500
40001	43560	51,700

SA 03 LUC 001		
Flood Zone Properties		
Size (sq. ft.)		Total Value
From	To	
1	4500	29,000
4501	6500	32,500
6501	8500	35,000
8501	10500	38,000
10501	12500	41,000
12501	14500	43,000
14501	16500	45,000
16501	18500	47,000
18501	20500	49,000
20501	24000	50,500
24001	28000	51,000
28001	32000	51,200
32001	40000	51,500
40001	43560	51,700

SA 38 LUC 001		
Roseview Heights		
Size (sq. ft.)		Total Value
From	To	
1	4500	26,500
4501	6500	28,000
6501	8500	29,000
8501	10500	30,000
10501	12500	30,800
12501	14500	31,500
14501	16500	32,000
16501	18500	32,500
18501	20500	33,000
20501	24000	34,000
24001	28000	34,500
28001	32000	34,500
32001	40000	35,000
40001	43560	36,500

SA 40 LUC 001		
Duplex, Triplex, Fourplex		
Size (sq. ft.)		Total Value
From	To	
1	4500	26,500
4501	6500	28,000
6501	8500	29,000
8501	10500	30,000
10501	12500	30,800
12501	14500	31,500
14501	16500	32,000
16501	18500	32,500
18501	20500	33,000
20501	24000	34,000
24001	28000	34,500
28001	32000	34,500
32001	40000	35,000
40001	43560	36,500

SA 00 LUC 002		
City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	999999	29,880

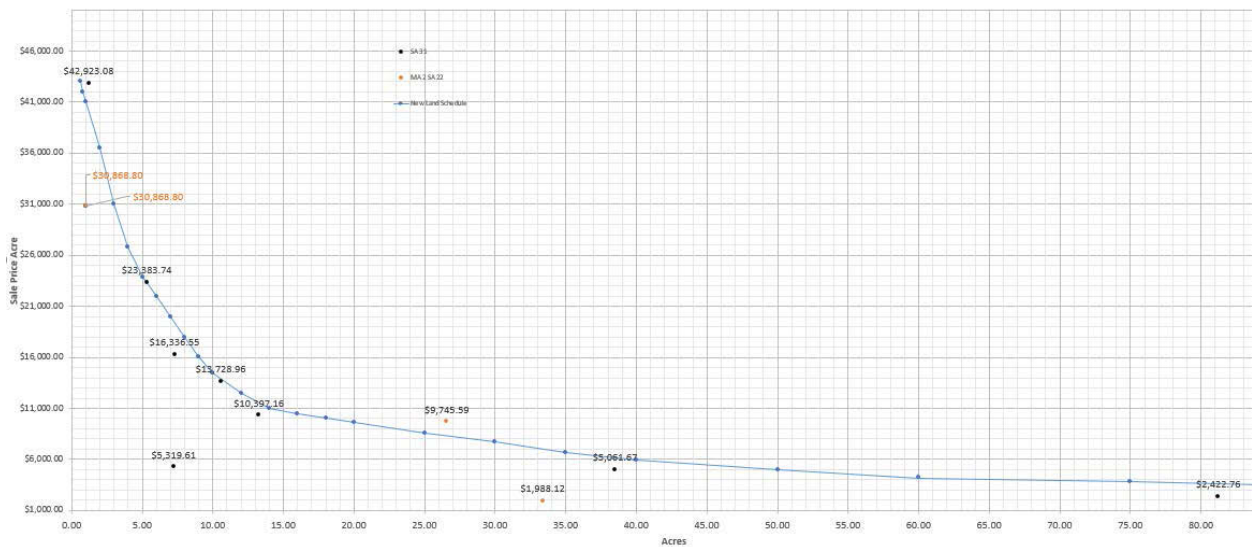
SA 03 LUC 002		
Flood Zone City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	999999	16,240

## Maintenance Area (MA) 3, Rural Vernonia Land Setup

### Analysis

For 2018, MA 3 boundary lines were moved and adjusted with adjacent MA 2, MA 5 and MA 6. The boundaries were shifted and balanced due to growth for management/maintenance purposes. Land sales from nearby MA 2 with similar characteristics and market appeal were used due to a limited number of sales available in MA 3. There were 22 vacant land sales of which 12 were useable for the vacant land study. These sales were site visited and time trended to the base appraisal date of 1/1/17. The data supported a new land schedule for SA 31.

### MA 3 Rural Land Sales Graph



### Conclusions

Based on the supporting data, a new land schedule was developed for SA 31.

MA 3 Rural Vernonia Reappraisal Land Schedules for 2018

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

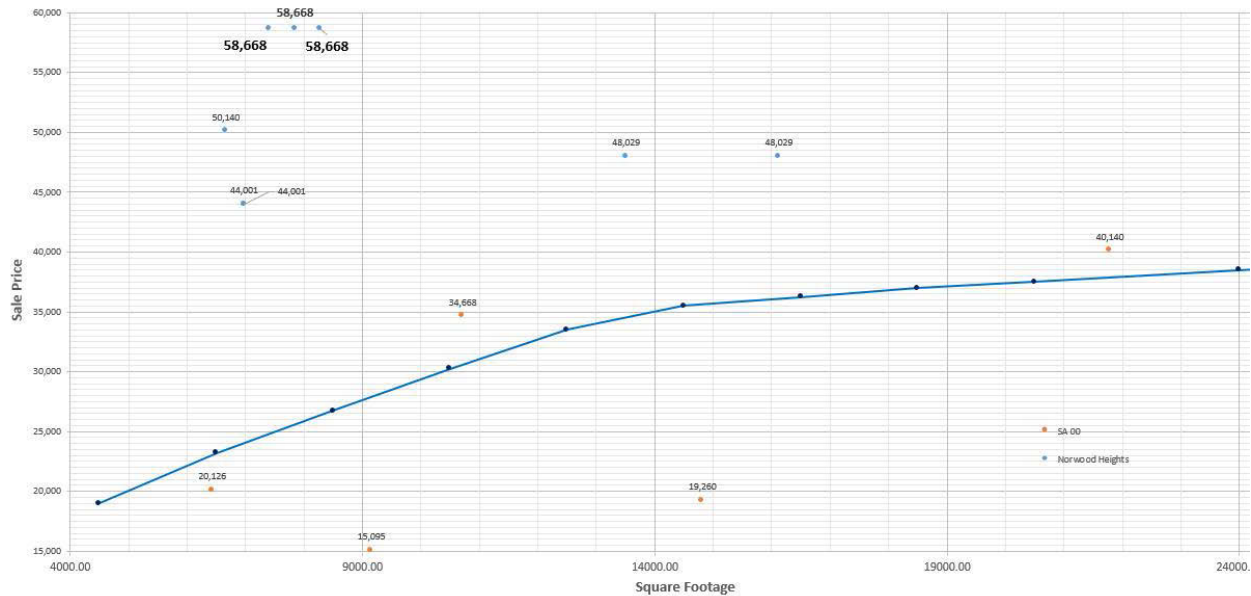
SA 31 LUC 003 Rural Vernonia		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	38,000
0.61	0.80	40,000
0.81	1.00	43,000
Over 1 Acre		Per Acre
1.01	2.00	36,500
2.01	3.00	31,000
3.01	4.00	26,800
4.01	5.00	23,900
5.01	6.00	22,000
6.01	7.00	20,000
7.01	8.00	18,000
8.01	9.00	16,100
9.01	10.00	14,500
10.01	12.00	12,500
12.01	14.00	11,000
14.01	16.00	10,500
16.01	18.00	10,000
18.01	20.00	9,600
20.01	25.00	8,600
25.01	30.00	7,700
30.01	35.00	6,700
35.01	40.00	5,900
40.01	50.00	5,000
50.01	60.00	4,200
60.01	80.00	3,800
80.01	999999.00	3,000

## Maintenance Area (MA) 4, City of Rainier Land Setup

### Analysis

For 2018, there were 18 vacant land sales of which 13 were useable for the vacant land study in SA 00. These sales were site visited and time trended to the base appraisal date of 1/1/17. The data supported a new land schedule for SA 00.

### MA 4 City Base Land Sales Graph



There were 3 city acreage vacant land sales of which 2 were not usable due to severe topography issues. 1 sale gave a good indication of value for raw vacant land with a highest and best use for future subdivision development and was used to develop the city acreage land schedule. SA 47, Riverfront Estates, is unique since the majority of these properties have attached homes on 2,500 sf +/- lots along the riverfront and interior lots. There are also a handful of 5,000 sf +/- single family detached dwellings. There were 2 vacant land sales of 5,000 sf +/- lots, which appear to have been purchased by homeowners for detached single family dwellings, each for approximately \$90,000. Analysis of the data determined that these 2 sales are representative of the larger 5,000 sf +/- single family detached dwellings sites, but not necessarily reflective of the smaller 2500 sf +/- lots with attached dwelling. 6 improved sales were used to determine the value of the smaller lots by extracting the OSD and dwellings, to determine a residual value for the land, which resulted in an average small lot value of \$17,000.

### Conclusions

Based on the supporting data, new land schedules were created for SA 00, SA 47 and for city acreage. The land schedule for SA 00 will also be used for SA 40 and SA 46 due to lack of sales in those areas and similar land characteristics.

MA 4 City of Rainier Recalculation Land Schedules for 2018

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 46 LUC 001 Riverview Dr, Maple Dr		
Size (sq. ft.)		Total Value
From	To	
1	3500	35,120
3501	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.)		Lump Sum Value
From	To	
1	4500	17,000
4501	6500	90,000

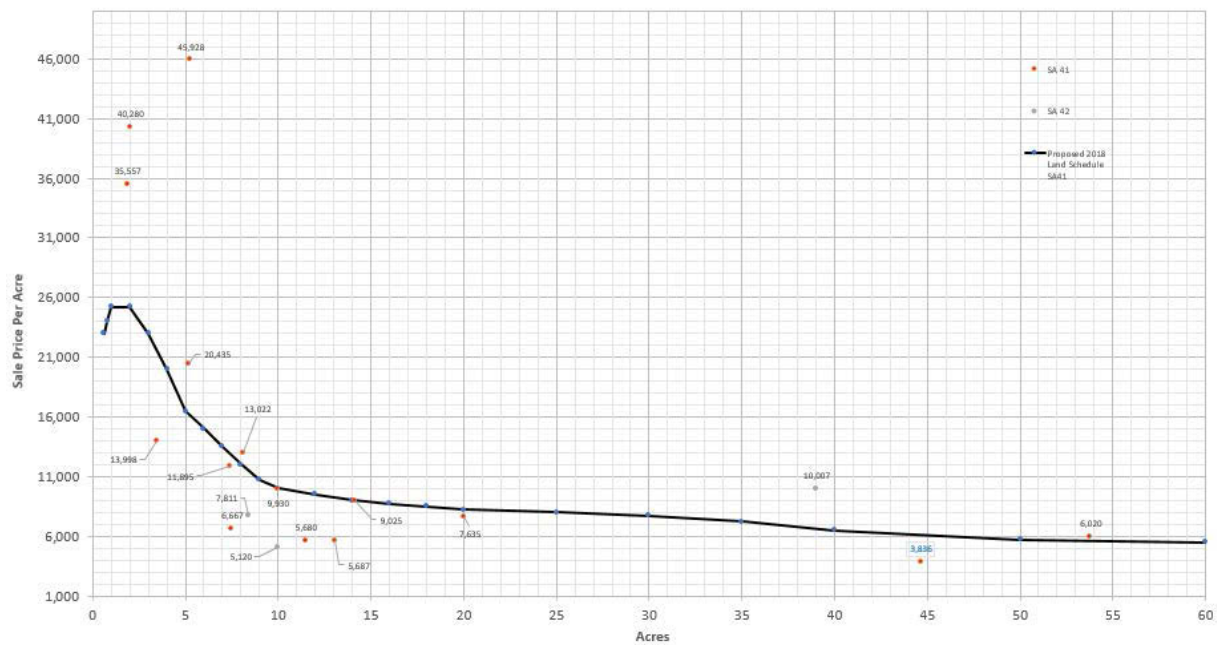
SA 00 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
0.01	999999	12,650

## Maintenance Area (MA) 4, Rural Rainier Land Setup

### Analysis

For 2018, MA 4 boundary lines were moved and adjusted with adjacent MA 5 and MA 6. The boundaries were shifted and balanced due to growth for management/maintenance purposes. There were 25 vacant land sales combined for SA 41 and SA 42, of which 18 were useable for the vacant land study. These sales were site visited and time trended to the base appraisal date of 1/1/17. The sales did not reflect a difference between SA 41 and 42, and the data supported a new land schedule.

### MA 4 Rural Land Sales Graph



### Conclusions

Based on the supporting data, a new land schedule for SA 41 and SA 42 was developed. The land schedule for SA 41 will also be used for SA 44, SA 45 and SA 56 due to lack of sales in those areas and similar land characteristics.

MA 4 Rural Rainier Recalculation Land Schedules for 2018

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 Lump Sum
From	To	
0.00	0.60	23,000
0.61	0.80	24,000
0.81	1.00	25,200
Over 1 Acre		Per Acre
1.01	2.00	25,200
2.01	3.00	23,000
3.01	4.00	20,000
4.01	5.00	16,500
5.01	6.00	15,000
6.01	7.00	13,500
7.01	8.00	12,000
8.01	9.00	10,750
9.01	10.00	10,000
10.01	12.00	9,500
12.01	14.00	9,000
14.01	16.00	8,750
16.01	18.00	8,500
18.01	20.00	8,250
20.01	25.00	8,000
25.01	30.00	7,750
30.01	35.00	7,250
35.01	40.00	6,500
40.01	50.00	5,750
50.01	60.00	5,500
60.01	80.00	5,000
80.01	999999.00	4,500

SA 42 LUC 003 Rainier Value Zone 2		
Size (Acres)		Value Lump Sum
From	To	
0.00	0.60	23,000
0.61	0.80	24,000
0.81	1.00	25,200
Over 1 Acre		Per Acre
1.01	2.00	25,200
2.01	3.00	23,000
3.01	4.00	20,000
4.01	5.00	16,500
5.01	6.00	15,000
6.01	7.00	13,500
7.01	8.00	12,000
8.01	9.00	10,750
9.01	10.00	10,000
10.01	12.00	9,500
12.01	14.00	9,000
14.01	16.00	8,750
16.01	18.00	8,500
18.01	20.00	8,250
20.01	25.00	8,000
25.01	30.00	7,750
30.01	35.00	7,250
35.01	40.00	6,500
40.01	50.00	5,750
50.01	60.00	5,500
60.01	80.00	5,000
80.01	999999.00	4,500

SA 45 LUC 003 Rainier Dikeland		
Size (Acres)		Value Lump Sum
From	To	
0.00	0.60	23,000
0.61	0.80	24,000
0.81	1.00	25,200
Over 1 Acre		Per Acre
1.01	2.00	25,200
2.01	3.00	23,000
3.01	4.00	20,000
4.01	5.00	16,500
5.01	6.00	15,000
6.01	7.00	13,500
7.01	8.00	12,000
8.01	9.00	10,750
9.01	10.00	10,000
10.01	12.00	9,500
12.01	14.00	9,000
14.01	16.00	8,750
16.01	18.00	8,500
18.01	20.00	8,250
20.01	25.00	8,000
25.01	30.00	7,750
30.01	35.00	7,250
35.01	40.00	6,500
40.01	50.00	5,750
50.01	60.00	5,500
60.01	80.00	5,000
80.01	999999.00	4,500

MA 4 Rural Rainier Recalculation Land Schedules for 2018 (Continued)

SA 44 LUC 003 Prescott		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	23,000
0.61	0.80	24,000
0.81	1.00	25,200
Over 1 Acre		Per Acre
1.01	2.00	25,200
2.01	3.00	23,000
3.01	4.00	20,000
4.01	5.00	16,500

SA 56 LUC 003 Deer Island Heights		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	23,000
0.61	0.80	24,000
0.81	1.00	25,200
Over 1 Acre		Per Acre
1.01	2.00	25,200
2.01	3.00	23,000
3.01	4.00	20,000
4.01	5.00	16,500

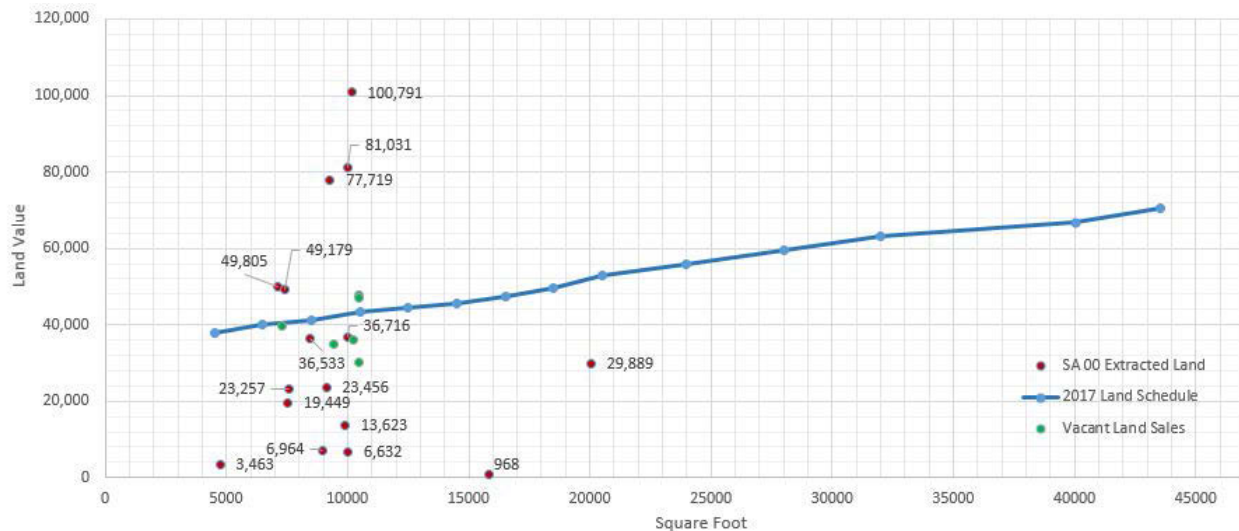


## Maintenance Area (MA) 5, City of Clatskanie Land Setup

### Analysis

For 2018, there were 6 vacant land sales in SA 00 of which 1 was a large bulk sale of 20 lots. The remaining sales were analyzed but were insufficient to develop a new land schedule. 16 improved sales were used to determine the value of the residual land by extracting the OSD and dwelling values. Both the vacant land and improved sales were site visited and time trended to the base appraisal date of 1/1/17. The data was still insufficient to develop a supportable new land schedule. The final analyses was to overlay the previous year's trended land schedule to identify any additional market trends. The sales data fell both above and below that schedule.

### MA 5 City Base Land Sales Graph



There were no sales of city acreage recent enough to use for analysis. It is assumed this schedule would trend similarly to city lots.

### Conclusions

Due to both the bare land sales and extracted sales in MA 5 SA 00 not resulting in a conclusion which would allow for a new land schedule to be developed, the 2017 MA 5 SA 00 trended base land values will be used for MA 5 SA 00. The trended city acreage land schedule for 2017 will be used for 2018.

MA 5 City of Clatskanie Recalculation Land Schedules for 2018

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	38,020
4501	6500	40,130
6501	8500	41,180
8501	10500	43,300
10501	12500	44,350
12501	14500	45,410
14501	16500	47,520
16501	18500	49,630
18501	20500	52,800
20501	24000	55,970
24001	28000	59,320
28001	32000	62,890
32001	40000	66,660
40001	43560	70,650

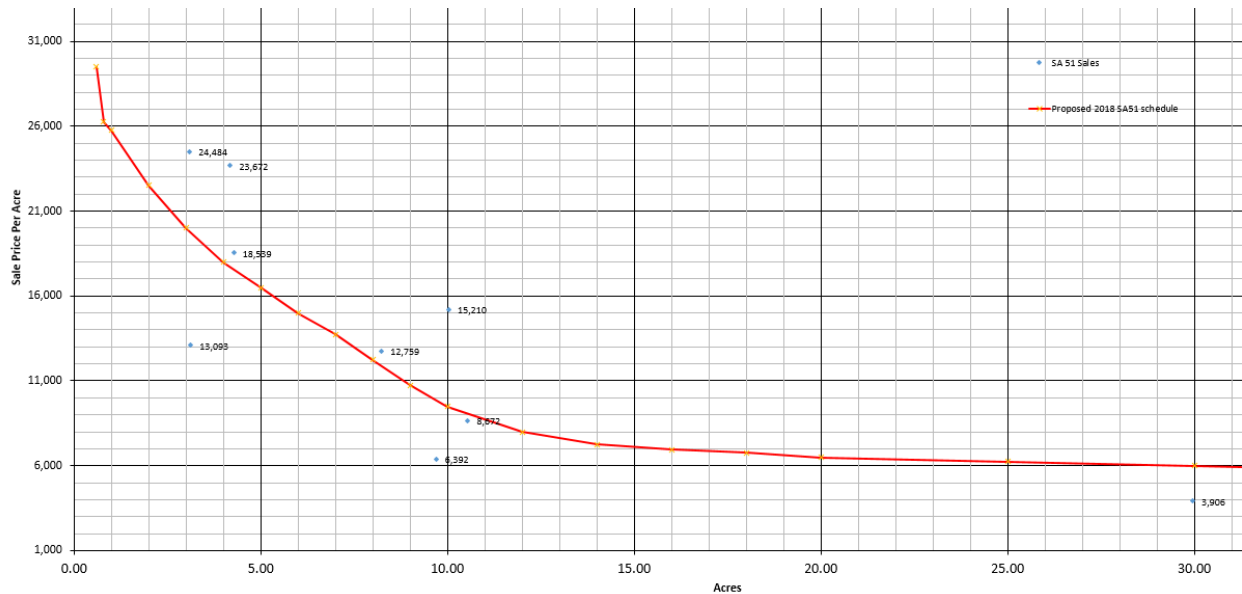
SA 00 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
0	999999	37,620

## Maintenance Area (MA) 5, Rural Clatskanie Land Setup

### Analysis

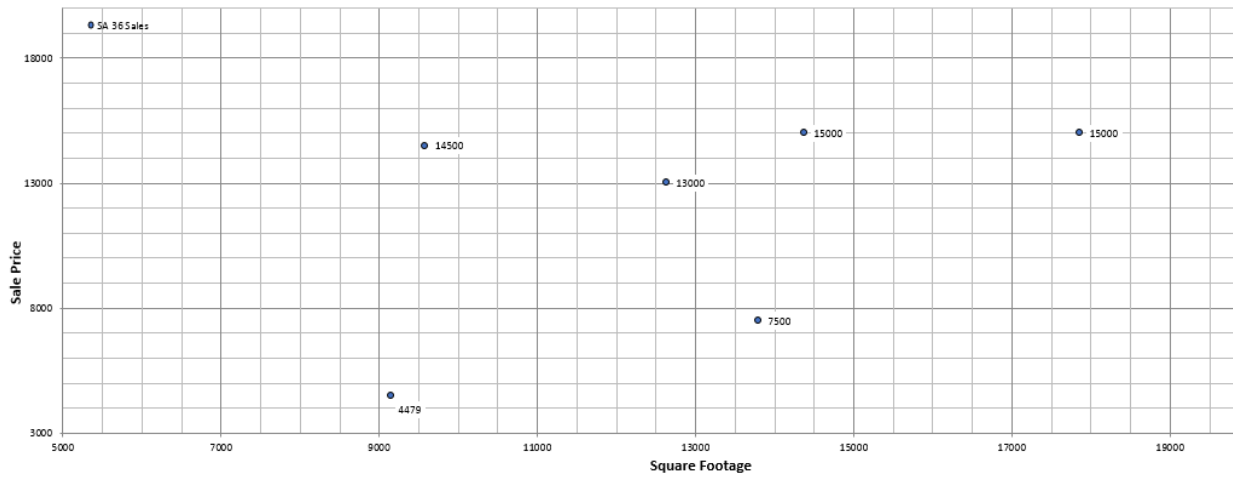
For 2018, MA 5 boundary lines were moved and adjusted with adjacent MA 3 and MA 4. The boundaries were shifted and balanced due to growth for management/maintenance purposes. There were 16 vacant land sales for SA 51, of which 9 were useable for the vacant land study. These sales were site visited and time trended to the base appraisal date of 1/1/17. The data supported a new land schedule for SA 51.

### MA 5 Rural Land Sales Graph



For 2018, SA 36 was moved from MA 3 to MA 5. There were 9 sales of which 6 were usable for the vacant land study. In attempting to time trend and analyze the sales, it was determined that Fishhawk Lake Estates is a unique community and has not kept up with the average market trends. Once time trends were removed, it was determined that a per lot value was warranted.

## MA 5 Fishhawk Lake Estates Land Graph



### Conclusions

Based on the supporting data, a new land schedule for SA 51 was developed. The land schedule for SA 51 will also be used for SA 55 due to lack of sales in those areas and similar land characteristics. The land schedule for SA 36 will have a per lot base value of \$15,000 regardless of size.

MA 5 Rural Clatskanie Recalculation Land Schedules for 2018

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 Lump Sum
From	To	
0.00	0.60	29,500
0.61	0.80	26,250
0.81	1.00	25,750
Over 1 Acre		Per Acre
1.01	2.00	22,500
2.01	3.00	20,000
3.01	4.00	18,000
4.01	5.00	16,500
5.01	6.00	15,000
6.01	7.00	13,750
7.01	8.00	12,250
8.01	9.00	10,900
9.01	10.00	9,900
10.01	12.00	8,500
12.01	14.00	7,300
14.01	16.00	6,950
16.01	18.00	6,750
18.01	20.00	6,500
20.01	25.00	6,250
25.01	30.00	6,000
30.01	35.00	5,750
35.01	40.00	5,500
40.01	50.00	5,250
50.01	60.00	5,000
60.01	80.00	4,500
80.01	999999.00	4,000

SA 55 LUC 003 Clatskanie Dikeland		
Size (Acres)		Value Lump Sum
From	To	
0.00	0.60	29,500
0.61	0.80	26,250
0.81	1.00	25,750
Over 1 Acre		Per Acre
1.01	2.00	22,500
2.01	3.00	20,000
3.01	4.00	18,000
4.01	5.00	16,500
5.01	6.00	15,000
6.01	7.00	13,750
7.01	8.00	12,250
8.01	9.00	10,900
9.01	10.00	9,900
10.01	12.00	8,500
12.01	14.00	7,300
14.01	16.00	6,950
16.01	18.00	6,750
18.01	20.00	6,500
20.01	25.00	6,250
25.01	30.00	6,000
30.01	35.00	5,750
35.01	40.00	5,500
40.01	50.00	5,250
50.01	60.00	5,000
60.01	80.00	4,500
80.01	999999.00	4,000

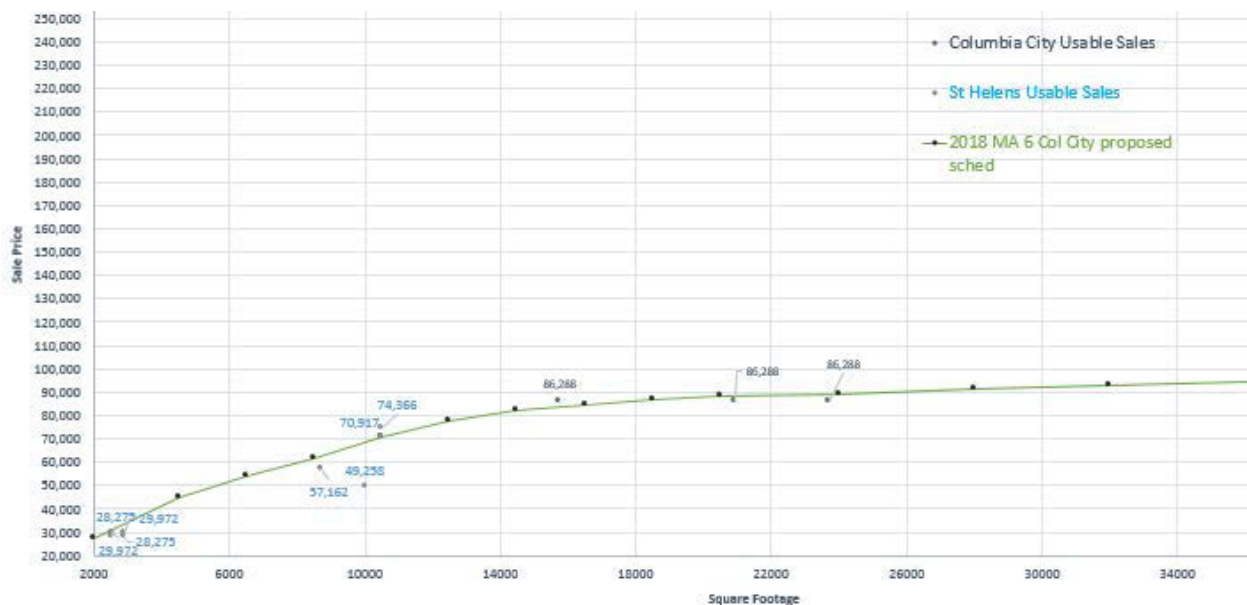
SA 36 LUC 003 Fishhawk Lake Estates		
Size (Acres)		Value Lump Sum
From	To	
0.01	5.00	15,000

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

### Analysis

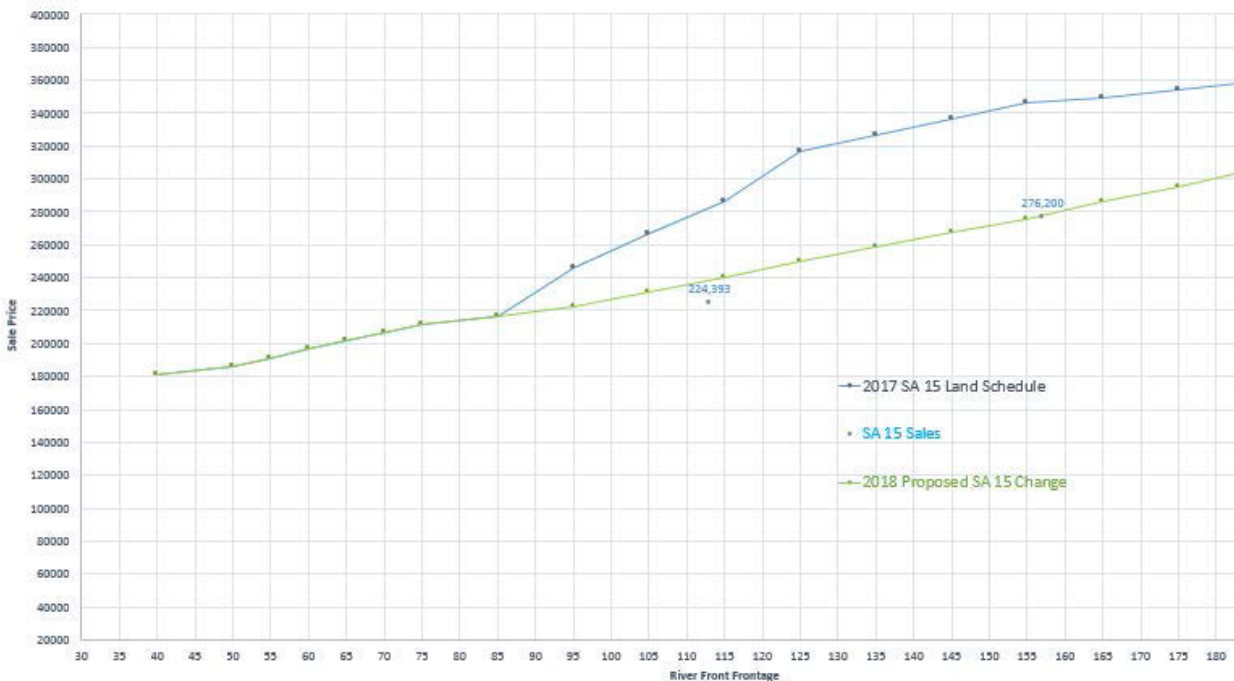
For 2018, MA 6 boundary lines were moved and adjusted with adjacent MA 1, MA 2, MA 3 and MA 4. The boundaries were shifted and balanced due to growth for management/maintenance purposes. This change resulted in moving Columbia City into MA 6, with no other changes made to MA 1. There were 9 sales within Columbia City, of which 3 were considered usable and 6 were considered unusable because of topography issues and or view adjustments. Due to the close proximity to Columbia City, 8 Saint Helens sales were considered for analysis. When sales data from both Columbia City and Saint Helens were analyzed, the results between the two appeared to be similar. All sales analyzed were time trended to the base appraisal date of 1/1/17. The data compiled for analysis is considered to provide sufficient support for creating a new land schedule for SA 01.

### 2018 MA 6 City Base Land Sales Graph



SA 15 had 2 usable land sales that when plotted against the previous year's land schedule indicated a slight reduction for properties that had more than 85' of river frontage.

## 2018 MA 1 and MA 6 City Riverfront Land Sales Graph



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 45% reduction between the areas. By reducing the City of Scappoose sales-based City Acreage land schedule by 45%, the resulting value provides a reasonable and credible City Acreage land schedule for both Columbia City and Saint Helens.

### Conclusions

Based on the supporting data collected, there is sufficient sales data for the creation of a new 2018 land schedule for SA 01. SA 21 and SA 31 will also use the SA 01 land schedule as these areas have very similar land characteristics.

SA 15 sales were limited but the data provided sufficient information to modify the 2017 schedule to be used for the 2018 land schedule.

Based on supporting data, the city acreage land schedules for Saint Helens and Columbia City will reflect a value that is 45% less than the City of Scappoose city acreage land schedule for 2018.

MA 6 City of Columbia City Recalculation Land Schedules for 2018

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	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 21 LUC 001 McBride Meadows, Sophie Park		
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 15 LUC 005 Riverfront		
Size (front footage)		Total Value
From	To	
0	40	181,450
41	50	186,450
51	55	191,450
56	60	196,450
61	65	201,450
66	70	206,450
71	75	211,450
76	85	216,450
86	95	222,000
96	105	231,000
106	115	240,000
116	125	250,000
126	135	259,000
126	135	268,000
136	145	276,000
146	155	286,000
156	165	295,000
166	175	306,000
176	185	316,000
186	195	318,000

SA 31 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 01 LUC 002 City Acreage		
Size (Acres)		Value Per Acre
From	To	
1.00	999999	65,390

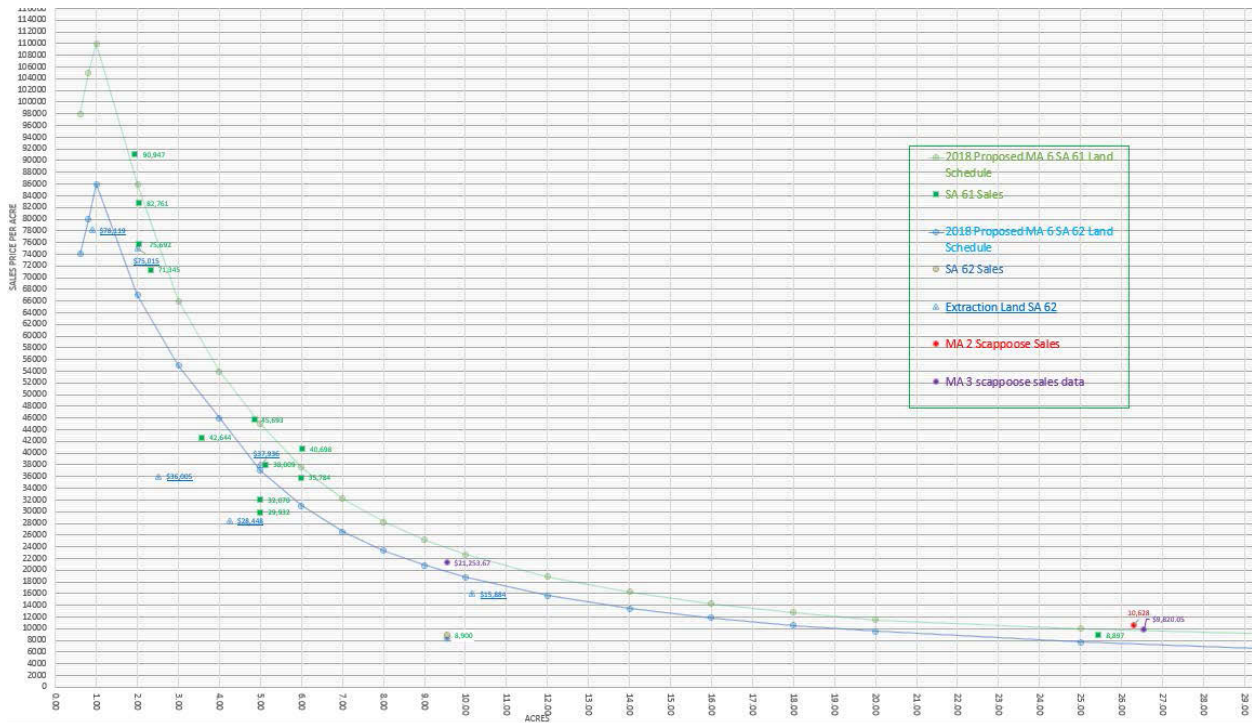


## Maintenance Area (MA) 6, Rural Saint Helens Land Setup

### Analysis

For 2018, MA 6 boundary lines were moved and adjusted with adjacent MA 1, MA 2, MA 3 and MA 4. The boundaries were shifted and balanced due to growth for management/maintenance purposes. After MA lines were adjusted, sales data indicated a realignment of SA boundaries in MA 6 resulting in 2 different market perceived study areas, SA 61 and SA 62. There were 24 vacant land sales of which 12 were considered usable for SA 61 and 7 considered unusable due to potential topography and view adjustments. SA 62 had only 1 usable sale, so an additional 3 land sales from nearby MA 2 and MA 3 were also included. With so few sales available, the study was extended to include land extraction value from improved sales in SA 62. The combination of vacant and extracted land sales when compared to the new SA 61 schedule provided sufficient support to develop a new SA 62 Land Schedule.

### MA 6 Rural Land Sales Graph



### Conclusions

Based on the supporting data collected, there is sufficient sales data for the creation of a new 2018 land schedule for SA 61 and SA 62. The SA 61 land schedule will also be used for SA 65 due to lack of sales for that area and similar land characteristics.

MA 6 Rural Saint Helens Recalculation Land Schedules for 2018

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	98,000
0.61	0.80	105,000
0.81	1.00	110,000
Over 1 Acre		Per Acre
1.01	2.00	86,000
2.01	3.00	66,000
3.01	4.00	54,000
4.01	5.00	45,000
5.01	6.00	37,600
6.01	7.00	32,250
7.01	8.00	28,250
8.01	9.00	25,150
9.01	10.00	22,650
10.01	12.00	18,900
12.01	14.00	16,250
14.01	16.00	14,250
16.01	18.00	12,750
18.01	20.00	11,500
20.01	25.00	10,000
25.01	30.00	9,000
30.01	35.00	8,500
35.01	40.00	8,000
40.01	50.00	7,500
50.01	60.00	7,000
60.01	80.00	6,500
80.01	999999.00	5,000

SA 62 LUC 003 Rural St Helens Value Zone 2		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	74,000
0.61	0.80	80,000
0.81	1.00	86,000
Over 1 Acre		Per Acre
1.01	2.00	67,000
2.01	3.00	55,000
3.01	4.00	46,000
4.01	5.00	37,000
5.01	6.00	31,000
6.01	7.00	26,600
7.01	8.00	23,350
8.01	9.00	20,800
9.01	10.00	18,750
10.01	12.00	15,650
12.01	14.00	13,450
14.01	16.00	11,850
16.01	18.00	10,550
18.01	20.00	9,500
20.01	25.00	7,650
25.01	30.00	6,400
30.01	35.00	6,000
35.01	40.00	5,500
40.01	50.00	5,000
50.01	60.00	4,900
60.01	80.00	4,500
80.01	999999.00	3,500

SA 65 LUC 003 Rural St Helens Dikeland		
Size (Acres)		Value
From	To	Lump Sum
0.00	0.60	98,000
0.61	0.80	105,000
0.81	1.00	110,000
Over 1 Acre		Per Acre
1.01	2.00	86,000
2.01	3.00	66,000
3.01	4.00	54,000
4.01	5.00	45,000
5.01	6.00	37,600
6.01	7.00	32,250
7.01	8.00	28,250
8.01	9.00	25,150
9.01	10.00	22,650
10.01	12.00	18,900
12.01	14.00	16,250
14.01	16.00	14,250
16.01	18.00	12,750
18.01	20.00	11,500
20.01	25.00	10,000
25.01	30.00	9,000
30.01	35.00	8,500
35.01	40.00	8,000
40.01	50.00	7,500
50.01	60.00	7,000
60.01	80.00	6,500
80.01	999999.00	5,000

# **2018 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
<b>TOTAL</b>	<b>\$27,213</b>	<b>\$37,514</b>	<b>\$49,982</b>	<b>\$62,459</b>

### 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.

<b>2018 City of Saint Helens OSD</b>	
Single Family Dwelling	\$27,000
Multi-Family – Duplex	\$38,000
Multi-Family – Triplex	\$50,000
Multi-Family – Fourplex	\$62,000

## 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	\$5,519	\$11,038	\$15,992	\$21,322
Sanitary services SDC + connection	\$4,942	\$9,886	\$14,828	\$19,771
Parks SDC	\$2,008	\$2,953	\$4,430	\$5,906
Streets SDC	\$2,447	\$4,894	\$7,341	\$9,789
Storm SDC	\$605	\$605	\$908	\$1,211
<b>TOTAL</b>	<b>\$28,261</b>	<b>\$42,256</b>	<b>\$56,529</b>	<b>\$71,189</b>

### 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.

2018 City of Scappoose OSD	
Single Family Dwelling	\$28,000
Multi-Family – Duplex	\$42,000
Multi-Family – Triplex	\$57,000
Multi-Family – Fourplex	\$71,000

## 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.

<b>Description</b>	<b>SFD</b>	<b>Duplex</b>	<b>Triplex</b>	<b>Fourplex</b>
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	\$11,408	\$11,408	\$11,408	\$11,408
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
<b>TOTAL</b>	<b>\$54,313</b>	<b>\$55,298</b>	<b>\$56,299</b>	<b>\$57,301</b>

## 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.

<b>2018 Rural Scappoose OSD</b>	
Single Family Dwelling	\$54,000
Multi-Family – Duplex	\$55,000
Multi-Family – Triplex	\$56,000
Multi-Family – Fourplex	\$57,000

## 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
<b>TOTAL</b>	<b>\$27,029</b>	<b>\$39,003</b>	<b>\$50,977</b>	<b>\$62,977</b>

### 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.

<b>2018 City of Vernonia OSD</b>	
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 seperately metered for electric and not water & sewer. It should be noted that contractors indicated no real increase in excavation costs forl 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	\$11,408	\$11,408	\$11,408	\$11,408
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
<b>TOTAL</b>	<b>\$56,927</b>	<b>\$58,253</b>	<b>\$59,579</b>	<b>\$60,906</b>

## 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.

<b>2018 Rural Vernonia OSD</b>	
Single Family Dwelling	\$57,000
Multi-Family – Duplex	\$58,000
Multi-Family – Triplex	\$60,000
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)	\$50	\$50	\$50	\$50
Sanitary services SDC + connection	\$2,745	\$5,490	\$8,235	\$10,980
Water SDC + connection	\$1,420	\$1,420	\$1,420	\$1,420
<b>TOTAL</b>	<b>\$15,215</b>	<b>\$17,960</b>	<b>\$20,705</b>	<b>\$23,450</b>

### 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.

<b>2018 City of Rainier OSD</b>	
Single Family Dwelling	\$15,000
Multi-Family – Duplex	\$18,000
Multi-Family – Triplex	\$21,000
Multi-Family – Fourplex	\$23,000

## 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	\$11,408	\$11,408	\$11,408	\$11,408
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
<b>TOTAL</b>	<b>\$54,313</b>	<b>\$55,298</b>	<b>\$56,299</b>	<b>\$57,301</b>

## 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.

<b>2018 Rural Rainier OSD</b>	
Single Family Dwelling	\$54,000
Multi-Family – Duplex	\$55,000
Multi-Family – Triplex	\$56,000
Multi-Family – Fourplex	\$57,000

## 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	\$11,408	\$11,408	\$11,408	\$11,408
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
<b>TOTAL</b>	<b>\$36,313</b>	<b>\$37,798</b>	<b>\$39,299</b>	<b>\$40,801</b>

## 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.

<b>2018 City of Prescott OSD</b>	
Single Family Dwelling	\$36,000
Multi-Family – Duplex	\$38,000
Multi-Family – Triplex	\$39,000
Multi-Family – Fourplex	\$41,000

## 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.
- 

<b>Description</b>	<b>SFD</b>	<b>Duplex</b>	<b>Triplex</b>	<b>Fourplex</b>
Excavation	\$11,000	\$11,000	\$11,000	\$11,000
Power (Clatskanie)	\$50	\$50	\$50	\$50
Sanitary services SDC + connection	\$1,500	\$2,250	\$3,000	\$3,750
Water SDC + connection	\$1,250	\$1,900	\$2,550	\$3,200
<b>TOTAL</b>	<b>\$13,800</b>	<b>\$15,200</b>	<b>\$16,600</b>	<b>\$18,000</b>

### 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.

<b>2018 City of Clatskanie OSD</b>	
Single Family Dwelling	\$14,000
Multi-Family – Duplex	\$15,000
Multi-Family – Triplex	\$17,000
Multi-Family – Fourplex	\$18,000



## 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)	\$50	\$50	\$50	\$50
Well Drilling & Pump System 280' @\$65	\$18,500	\$18,500	\$18,500	\$18,500
Sanitation (Standard Septic) w/permits	\$11,408	\$11,408	\$11,408	\$11,408
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
<b>TOTAL</b>	<b>\$50,081</b>	<b>\$50,081</b>	<b>\$50,081</b>	<b>\$50,081</b>

## 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.

<b>2018 Rural Clatskanie OSD</b>	
Single Family Dwelling	\$50,000
Multi-Family – Duplex	\$50,000
Multi-Family – Triplex	\$50,000
Multi-Family – Fourplex	\$50,000

## 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
<b>TOTAL</b>	<b>\$29,019</b>	<b>\$30,345</b>	<b>\$31,671</b>	<b>\$32,998</b>

### 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.

2018 Fishhawk Lake OSD	
Single Family Dwelling	\$29,000
Multi-Family – Duplex	\$30,000
Multi-Family – Triplex	\$32,000
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 separate 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	\$1,495	\$2,990	\$4,485	\$5,980
Storm SDC	\$250	\$300	\$450	\$600
Transportation SDC	\$4,575	\$5,604	\$8,406	\$11,208
<b>TOTAL</b>	<b>\$30,377</b>	<b>\$44,408</b>	<b>\$60,322</b>	<b>\$76,246</b>

### 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.

2018 City of Columbia City OSD	
Single Family Dwelling	\$30,000
Multi-Family – Duplex	\$44,000
Multi-Family – Triplex	\$60,000
Multi-Family – Fourplex	\$76,000

## 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	\$11,408	\$11,408	\$11,408	\$11,408
LDS Transportation SDC	\$2,273	\$2,273	\$2,273	\$2,273
LDS Parks SDC	\$750	\$750	\$750	\$750
<b>TOTAL</b>	<b>\$54,313</b>	<b>\$55,298</b>	<b>\$56,299</b>	<b>\$57,301</b>

## 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.

<b>2018 Rural Saint Helens OSD</b>	
Single Family Dwelling	\$54,000
Multi-Family – Duplex	\$55,000
Multi-Family – Triplex	\$56,000
Multi-Family – Fourplex	\$57,000

# **2018 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 1/1/17.

### Analysis

This analysis for the 2018 LCM set up year was based on sales of homes built in 2016. The initial raw data included 162 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 28 sales, 10 were properties where the new home and land were marketed and sold together, and 18 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, 2017. All sites were field inspected by appraisers to verify class and gather data on the cost to build, if appropriate.

For the 10 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 1.30. For the 18 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 1.16.

### Conclusions

The overall LCM mean calculated at 1.22; the sales extraction was higher at 1.30; the cost method indicated an LCM of 1.16; and the weighted mean calculated for a total of 1.21 with the cost method accounting for 64% and sales extraction method 36%. Columbia County has a mix of contractor, site and homeowner built residences. Therefore, the weighted mean is the best indicator for Columbia County's current market condition.

**The 2018 Conventional Dwelling LCM to be applied to the 2005 Residential Cost Factor Book is 1.21.**



## **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 1/1/17.

### Analysis

For the previous year's study, three manufactured home dealers were visited, Factory Expo/Fleetwood, Palm Harbor Homes and J&M Homes/Goldenwest. Cost data was collected on various models of varying qualities and the dealer cost including delivery and setup were included. For this year's study, two of the dealers were contacted by telephone to determine if costs have changed since last year. Palm Harbor Homes reported that prices have increased by 5% over the last year, and may continue to increase due to demand as well as the increased cost of materials caused by the hurricanes. J&M Homes/Goldenwest indicated an increase of approximately 4-5% in the last year.

Based on the data provided by the dealers, last year's study was used for the two dealerships that were contacted and 5% was added to each of the homes in that study. The revised dealer prices were compared to the RCN as calculated from the 2004 Cost Factors for Manufactured Structures, resulting in an average LCM of 1.47.

### Conclusions

The overall mean, overall median and the weighted mean all gave an indicated LCM of 1.47.

**The 2018 Manufactured Dwelling LCM to be applied to the 2004 Cost Factors for Manufactured Structures is 1.47.**

## **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 1/1/17.

### Analysis

This analysis for the floating property LCM uses sales of new floating homes from 2014 through 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, 2017. There were 13 sales that occurred in Multnomah County and 4 sales that occurred in Columbia County. An appropriate quality class was determined for each of the floating homes. All 17 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 2.52 and the Columbia County sales indicated an average LCM of 2.51. With all 17 sales combined the overall average LCM was 2.52. In order to adequately reflect a local LCM, the 4 Columbia County sales were weighted at 75% and the 13 Multnomah County sales were weighted at 25%, which gives a weighted mean of 2.51.

### Conclusions

Based on the data available, it was determined that the weighted mean is the most reliable indicator for the floating property LCM at 2.51.

**The 2018 Floating Property LCM to be applied to the 2005 Cost Factors for Residential Buildings is 2.51.**

## **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 1/1/17. 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. Three knowledgeable pole building companies, ECON-O-FAB Buildings Inc., Parker Buildings Inc., and M&W Building Supply Co., were contacted to get estimates for the typical cost of the most common pole buildings found in Columbia County. Although these contractors are located outside of Columbia County, they are widely used by Columbia County residents seeking a pole building contractor. The costs given included material, labor and concrete floor costs. Local permit fees were estimated and added to these costs in order to directly compare with the cost factors found in the 2009 Cost Factors for Farm Buildings. A total of 7 cost estimates were given for various sized pole buildings. The contractor cost, with permit fees added, were compared to the calculated cost of the same building from the 2009 Cost Factors for Farm Buildings. The average LCM indicated was 1.45, the median LCM was 1.44, and the weighted mean LCM indicated was 1.44.

### Conclusions

The data collected is considered to be reliable building cost for farm buildings in Columbia County. These buildings are common for the area and represent a reasonable direct comparison of the 2009 Cost Factors for Farm Buildings. The mean, median and weighted mean indicate a tight pattern of indicated farm LCM based on current data. It is therefore recommended, that the 2009 Oregon DOR Farm Cost Factor Book be adjusted with an LCM of 1.44.

**The 2018 Farm Building LCM to be applied to the 2009 Cost Factors for Farm Buildings is 1.44.**

## *Notes*

# **2018 Depreciation Schedules Analysis and Conclusions**

## Countywide Depreciation Study for Conventional Single Family Dwellings

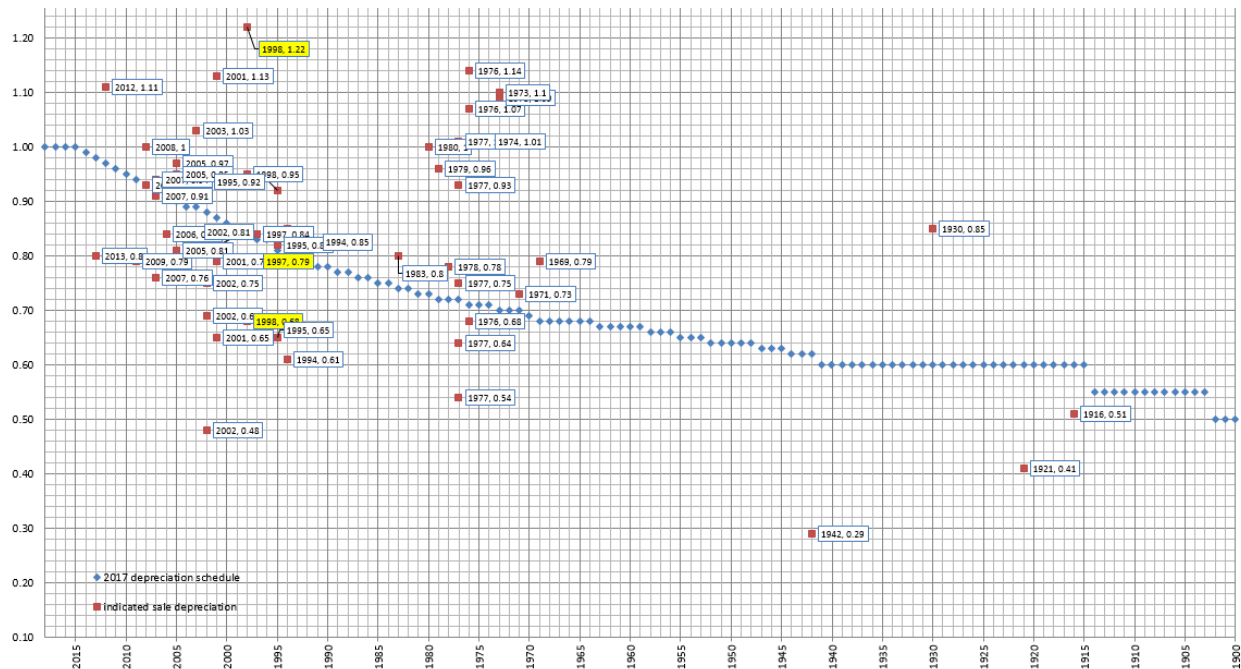
### Analysis

There were a total of 872 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 52 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. These percentages were then graphed with the previous year depreciation to determine if the current depreciation schedule needed adjustments.

### Countywide Conventional Single Family Dwelling Depreciation Sales Graph



Conclusions

The data collected and analyzed for the 2018 Depreciation Study showed no changes from the depreciation schedule developed for 2017. Based on this analysis, the depreciation schedule from 2017 will continue to be used for 2018.

Countywide Conventional Single Family Dwelling Depreciation Schedule for 2018

Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent
2017	100	1985	75	1953	64	1921	60
2016	100	1984	74	1952	64	1920	60
2015	99	1983	74	1951	64	1919	60
2014	98	1982	73	1950	64	1918	60
2013	97	1981	73	1949	64	1917	60
2012	96	1980	72	1948	63	1916	60
2011	95	1979	72	1947	63	1915	55
2010	94	1978	72	1946	63	1914	55
2009	93	1977	71	1945	62	1913	55
2008	92	1976	71	1944	62	1912	55
2007	91	1975	71	1943	62	1911	55
2006	90	1974	70	1942	60	1910	55
2005	89	1973	70	1941	60	1909	55
2004	89	1972	70	1940	60	1908	55
2003	88	1971	69	1939	60	1907	55
2002	87	1970	68	1938	60	1906	55
2001	86	1969	68	1937	60	1905	55
2000	85	1968	68	1936	60	1904	55
1999	84	1967	68	1935	60	1903	50
1998	83	1966	68	1934	60	1902	50
1997	83	1965	68	1933	60	1901	50
1996	81	1964	67	1932	60	1900	50
1995	80	1963	67	1931	60	1899	50
1994	80	1962	67	1930	60	1898	50
1993	79	1961	67	1929	60	1897	45
1992	78	1960	67	1928	60	1896	45
1991	78	1959	66	1927	60	1895	40
1990	77	1958	66	1926	60	1894	40
1989	77	1957	66	1925	60	1893	40
1988	76	1956	65	1924	60	1892	30
1987	76	1955	65	1923	60	1891	20
1986	75	1954	65	1922	60	1890	10

Countywide Effective Year Built Based on Condition For Conventional Single Family Dwellings  
for 2018

Poor	Fair	Avg	Good	Exc
1995	2005	2018	2018	2018
1990	2000	2017	2017	2018
1985	2000	2016	2016	2016
1980	1995	2015	2015	2016
1975	1995	2014	2014	2016
1975	1995	2013	2013	2016
1970	1990	2012	2013	2016
1970	1990	2011	2013	2016
1965	1990	2010	2013	2016
1965	1985	2009	2013	2015
1960	1985	2008	2013	2015
1960	1985	2007	2013	2015
1955	1980	2006	2013	2015
1955	1980	2005	2010	2015
1950	1980	2004	2010	2015
1950	1975	2003	2010	2015
1945	1975	2002	2010	2015
1945	1975	2001	2010	2015
1945	1970	2000	2005	2015
1940	1970	1999	2005	2015
1940	1970	1998	2005	2015
1940	1965	1997	2005	2015
1935	1965	1996	2005	2015
1935	1965	1995	2000	2010
1935	1960	1994	2000	2010
1930	1960	1993	2000	2010
1930	1960	1992	2000	2010
1930	1955	1991	2000	2010
1925	1955	1990	1995	2010
1925	1955	1989	1995	2010
1925	1955	1988	1995	2010
1925	1955	1987	1995	2010
1925	1950	1986	1995	2010
1925	1950	1985	1995	2010
1925	1950	1984	1995	2010
1925	1950	1983	1995	2010
1925	1950	1982	1995	2010
1925	1950	1981	1995	2010
1925	1950	1980	1995	2010
1925	1950	1979	1995	2010
1925	1950	1978	1995	2010
1925	1950	1977	1995	2010
1925	1950	1976	1995	2010

Poor	Fair	Avg	Good	Exc
1920	1945	1975	1990	2005
1920	1945	1974	1990	2005
1920	1945	1973	1990	2005
1920	1945	1972	1990	2005
1920	1945	1971	1990	2005
1920	1945	1970	1990	2005
1920	1945	1969	1990	2005
1920	1945	1968	1990	2005
1920	1945	1967	1990	2005
1920	1945	1966	1990	2005
1915	1940	1965	1985	2000
1915	1940	1964	1985	2000
1915	1940	1963	1985	2000
1915	1940	1962	1985	2000
1915	1940	1961	1985	2000
1915	1935	1960	1985	2000
1915	1935	1959	1985	2000
1915	1935	1958	1985	2000
1915	1935	1957	1985	2000
1915	1935	1956	1985	2000
1915	1930	1955	1980	2000
1915	1930	1954	1980	2000
1915	1930	1953	1980	2000
1915	1930	1952	1980	2000
1915	1930	1951	1980	1995
1910	1925	1950	1975	1995
1910	1925	1949	1975	1995
1915	1925	1948	1975	2000
1915	1925	1947	1975	2000
1915	1925	1946	1975	2000
1915	1925	1945	1970	2000
1915	1925	1944	1970	2000
1915	1925	1943	1970	2000
1915	1925	1942	1970	2000
1915	1925	1941	1970	2000
1910	1920	1940	1970	1995
1910	1920	1939	1970	1995
1910	1920	1938	1970	1995
1910	1920	1937	1970	1995
1910	1920	1936	1970	1995
1910	1915	1935	1965	1995
1910	1915	1934	1965	1995
1910	1915	1933	1965	1995

Poor	Fair	Avg	Good	Exc
1910	1915	1932	1965	1995
1910	1915	1931	1965	1995
1905	1915	1930	1965	1990
1905	1910	1929	1965	1990
1905	1910	1928	1965	1990
1905	1910	1927	1965	1990
1905	1910	1926	1965	1990
1905	1910	1925	1960	1990
1905	1910	1924	1960	1990
1905	1910	1923	1960	1990
1905	1910	1922	1960	1990
1905	1910	1921	1960	1990
1905	1910	1920	1955	1990
1905	1905	1919	1955	1990
1905	1905	1918	1955	1990
1905	1905	1917	1955	1990
1905	1905	1916	1955	1990
1905	1905	1915	1950	1990
1905	1905	1914	1950	1990
1905	1905	1913	1950	1990
1905	1905	1912	1950	1990
1905	1905	1911	1950	1990
1905	1905	1910	1950	1990
1910	1910	1909	1950	1990
1905	1905	1908	1950	1990
1905	1905	1907	1945	1985
1905	1905	1906	1945	1985
1905	1905	1905	1945	1985
1905	1905	1904	1945	1985
1900	1900	1903	1945	1985
1900	1900	1902	1940	1980
1900	1900	1901	1940	1980
1900	1900	1900	1940	1980
1900	1900	1899	1940	1980
1895	1895	1898	1940	1980
1895	1895	1897	1935	1975
1895	1895	1896	1935	1975
1895	1895	1895	1935	1975
1895	1895	1894	1935	1975
1890	1890	1893	1935	1975
<i>min</i>	<i>value</i>	1892	<i>min</i>	<i>value</i>
<i>stg</i>	<i>value</i>	1891	<i>stg</i>	<i>value</i>
<i>salv</i>	<i>value</i>	1890	<i>salv</i>	<i>value</i>

**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

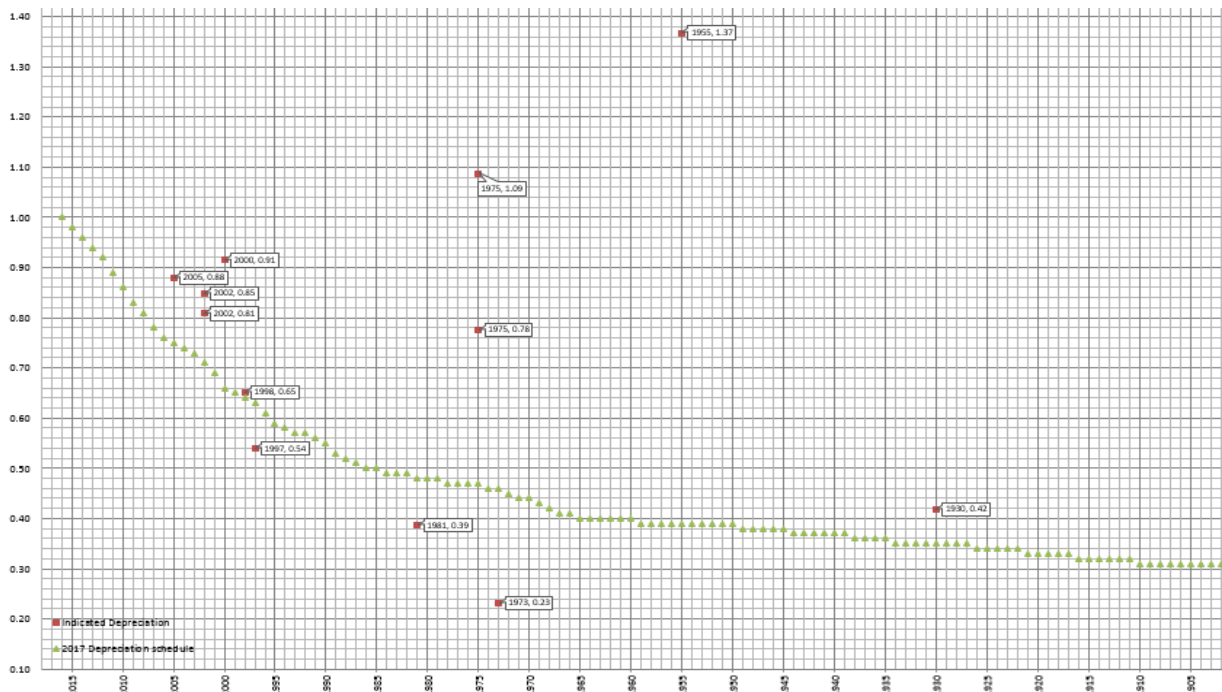
## Analysis

There were a total of 28 sales of multi-family dwellings during the past year of which only 8 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 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.

Due to the limited number, 4 additional sales were selected from the previous year. These 12 accounts were site inspected to verify quality class and condition of improvements for use in the depreciation study. An indicated depreciation of the multi-family 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 Multi-Family Dwellings Depreciation Sales Graph



Conclusions

The data collected and analyzed for the 2018 Depreciation Study showed no changes from the depreciation schedule developed for 2017. Based on this analysis, the depreciation schedule from 2017 will continue to be used for 2018.

Countywide Multi-Family Dwelling Depreciation Schedule for 2018

Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent
2017	100	1985	50	1953	39	1921	33
2016	100	1984	49	1952	39	1920	33
2015	98	1983	49	1951	39	1919	33
2014	96	1982	49	1950	39	1918	33
2013	94	1981	48	1949	38	1917	33
2012	92	1980	48	1948	38	1916	32
2011	89	1979	48	1947	38	1915	32
2010	86	1978	47	1946	38	1914	32
2009	83	1977	47	1945	38	1913	32
2008	81	1976	47	1944	37	1912	32
2007	78	1975	47	1943	37	1911	32
2006	76	1974	46	1942	37	1910	31
2005	75	1973	46	1941	37	1909	31
2004	74	1972	45	1940	37	1908	31
2003	73	1971	44	1939	37	1907	31
2002	71	1970	44	1938	36	1906	31
2001	69	1969	43	1937	36	1905	31
2000	66	1968	42	1936	36	1904	31
1999	65	1967	41	1935	36	1903	31
1998	64	1966	41	1934	35	1902	31
1997	63	1965	40	1933	35	1901	31
1996	61	1964	40	1932	35	1900	31
1995	59	1963	40	1931	35	1899	30
1994	58	1962	40	1930	35	1898	30
1993	57	1961	40	1929	35	1897	30
1992	57	1960	40	1928	35	1896	30
1991	56	1959	39	1927	35	1895	30
1990	55	1958	39	1926	34	1894	30
1989	53	1957	39	1925	34	1893	30
1988	52	1956	39	1924	34	1892	30
1987	51	1955	39	1923	34	1891	20
1986	50	1954	39	1922	34	1890	10

Countywide Effective Year Built Based on Condition For Multi-Family Dwellings for 2018

Poor	Fair	Avg	Good	Exc	Poor	Fair	Avg	Good	Exc	Poor	Fair	Avg	Good	Exc
1995	2005	2018	2018	2018	1920	1945	1975	1990	2005	1910	1915	1932	1965	1995
1990	2000	2017	2017	2018	1920	1945	1974	1990	2005	1910	1915	1931	1965	1995
1985	2000	2016	2016	2016	1920	1945	1973	1990	2005	1905	1915	1930	1965	1990
1980	1995	2015	2015	2016	1920	1945	1972	1990	2005	1905	1910	1929	1965	1990
1975	1995	2014	2014	2016	1920	1945	1971	1990	2005	1905	1910	1928	1965	1990
1975	1995	2013	2013	2016	1920	1945	1970	1990	2005	1905	1910	1927	1965	1990
1970	1990	2012	2013	2016	1920	1945	1969	1990	2005	1905	1910	1926	1965	1990
1970	1990	2011	2013	2016	1920	1945	1968	1990	2005	1905	1910	1925	1960	1990
1965	1990	2010	2013	2016	1920	1945	1967	1990	2005	1905	1910	1924	1960	1990
1965	1985	2009	2013	2015	1920	1945	1966	1990	2005	1905	1910	1923	1960	1990
1960	1985	2008	2013	2015	1915	1940	1965	1985	2000	1905	1910	1922	1960	1990
1960	1985	2007	2013	2015	1915	1940	1964	1985	2000	1905	1910	1921	1960	1990
1955	1980	2006	2013	2015	1915	1940	1963	1985	2000	1905	1910	1920	1955	1990
1955	1980	2005	2010	2015	1915	1940	1962	1985	2000	1905	1905	1919	1955	1990
1950	1980	2004	2010	2015	1915	1940	1961	1985	2000	1905	1905	1918	1955	1990
1950	1975	2003	2010	2015	1915	1935	1960	1985	2000	1905	1905	1917	1955	1990
1945	1975	2002	2010	2015	1915	1935	1959	1985	2000	1905	1905	1916	1955	1990
1945	1975	2001	2010	2015	1915	1935	1958	1985	2000	1905	1905	1915	1950	1990
1945	1970	2000	2005	2015	1915	1935	1957	1985	2000	1905	1905	1914	1950	1990
1940	1970	1999	2005	2015	1915	1935	1956	1985	2000	1905	1905	1913	1950	1990
1940	1970	1998	2005	2015	1915	1930	1955	1980	2000	1905	1905	1912	1950	1990
1940	1965	1997	2005	2015	1915	1930	1954	1980	2000	1905	1905	1911	1950	1990
1935	1965	1996	2005	2015	1915	1930	1953	1980	2000	1905	1905	1910	1950	1990
1935	1965	1995	2000	2010	1915	1930	1952	1980	2000	1910	1910	1909	1950	1990
1935	1960	1994	2000	2010	1915	1930	1951	1980	1995	1905	1905	1908	1950	1990
1930	1960	1993	2000	2010	1910	1925	1950	1975	1995	1905	1905	1907	1945	1985
1930	1960	1992	2000	2010	1910	1925	1949	1975	1995	1905	1905	1906	1945	1985
1930	1955	1991	2000	2010	1915	1925	1948	1975	2000	1905	1905	1905	1945	1985
1925	1955	1990	1995	2010	1915	1925	1947	1975	2000	1905	1905	1904	1945	1985
1925	1955	1989	1995	2010	1915	1925	1946	1975	2000	1900	1900	1903	1945	1985
1925	1955	1988	1995	2010	1915	1925	1945	1970	2000	1900	1900	1902	1940	1980
1925	1955	1987	1995	2010	1915	1925	1944	1970	2000	1900	1900	1901	1940	1980
1925	1950	1986	1995	2010	1915	1925	1943	1970	2000	1900	1900	1900	1940	1980
1925	1950	1985	1995	2010	1915	1925	1942	1970	2000	1900	1900	1899	1940	1980
1925	1950	1984	1995	2010	1915	1925	1941	1970	2000	1895	1895	1898	1940	1980
1925	1950	1983	1995	2010	1910	1920	1940	1970	1995	1895	1895	1897	1935	1975
1925	1950	1982	1995	2010	1910	1920	1939	1970	1995	1895	1895	1896	1935	1975
1925	1950	1981	1995	2010	1910	1920	1938	1970	1995	1895	1895	1895	1935	1975
1925	1950	1980	1995	2010	1910	1920	1937	1970	1995	1895	1895	1894	1935	1975
1925	1950	1979	1995	2010	1910	1920	1936	1970	1995	1890	1890	1893	1935	1975
1925	1950	1978	1995	2010	1910	1915	1935	1965	1995	<i>min</i>	<i>value</i>	1892	<i>min</i>	<i>value</i>
1925	1950	1977	1995	2010	1910	1915	1934	1965	1995	<i>stg</i>	<i>value</i>	1891	<i>stg</i>	<i>value</i>
1925	1950	1976	1995	2010	1910	1915	1933	1965	1995	<i>salv</i>	<i>value</i>	1890	<i>salv</i>	<i>value</i>

**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

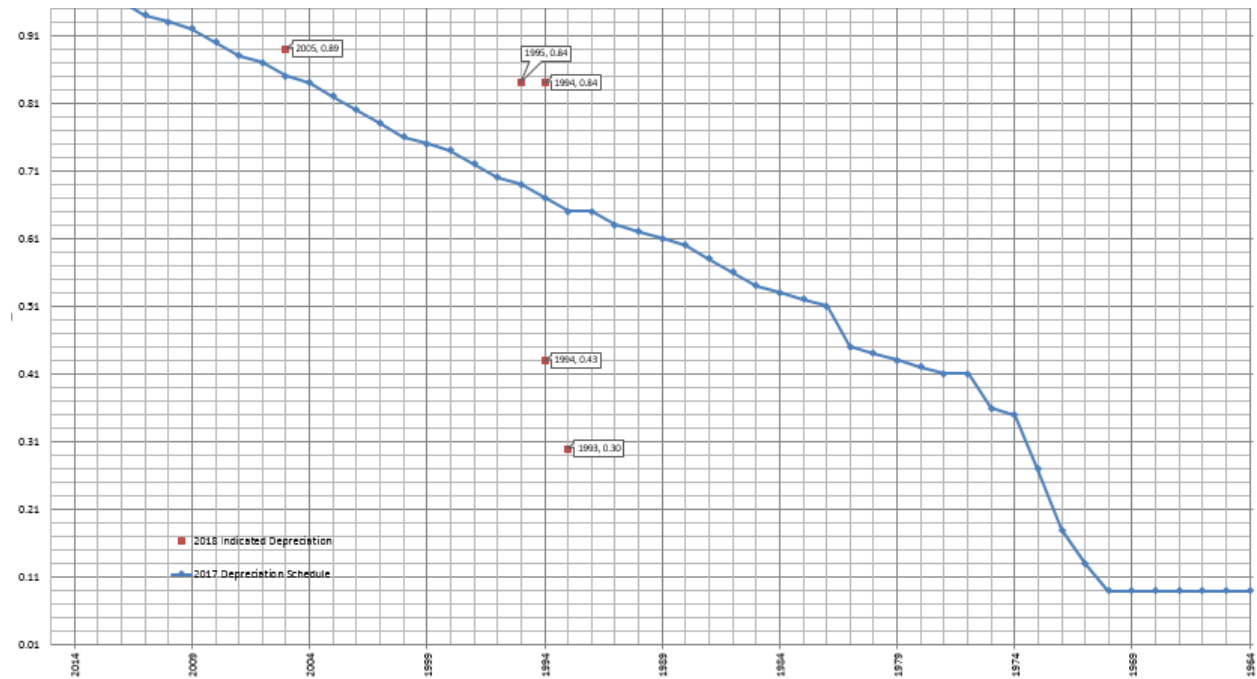
### Analysis

There were a total of 88 sales of real property manufactured dwellings during the past year of which only 6 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 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.

These 6 accounts were site inspected to verify quality class and condition of improvements for use in the depreciation study. 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

The data collected and analyzed for the 2018 Depreciation Study showed no changes from the depreciation schedule developed for 2017. Based on this analysis, the depreciation schedule from 2017 will continue to be used for 2018.

Countywide Real Property Manufactured Dwelling Depreciation Schedule for 2018

Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent
2017	100	2003	73	1989	53	1975	47
2016	100	2002	71	1988	52	1974	46
2015	98	2001	69	1987	51	1973	46
2014	96	2000	66	1986	50	1972	45
2013	94	1999	65	1985	50	1971	44
2012	92	1998	64	1984	49	1970	44
2011	89	1997	63	1983	49	1969	43
2010	86	1996	61	1982	49	1968	42
2009	83	1995	59	1981	48	1967	41
2008	81	1994	58	1980	48	1966	41
2007	78	1993	57	1979	48	1965	40
2006	76	1992	57	1978	47	1964	40
2005	75	1991	56	1977	47	1963	40
2004	74	1990	55	1976	47		

Countywide Effective Year Built Based on Condition For Real Property Manufactured Dwellings  
for 2018

Poor	Fair	Avg	Good	Exc		Poor	Fair	Avg	Good	Exc		Poor	Fair	Avg	Good	Exc
2008	2012	<b>2018</b>	2018	2018		1982	1990	<b>1999</b>	2004	2010		1966	1970	<b>1980</b>	1982	1990
2006	2012	<b>2017</b>	2017	2017		1982	1990	<b>1998</b>	2004	2010		1966	1970	<b>1979</b>	1982	1990
2006	2010	<b>2016</b>	2016	2016		1982	1990	<b>1997</b>	2004	2010		1966	1970	<b>1978</b>	1982	1990
2004	2010	<b>2015</b>	2015	2015		1982	1990	<b>1996</b>	2004	2010		1966	1970	<b>1977</b>	1982	1990
2004	2010	<b>2014</b>	2014	2014		1982	1984	<b>1995</b>	2000	2010		1966	1970	<b>1976</b>	1982	1990
2004	2010	<b>2013</b>	2014	2014		1982	1984	<b>1994</b>	2000	2010		1966	1966	<b>1975</b>	1980	1986
2004	2010	<b>2012</b>	2012	2014		1982	1984	<b>1993</b>	2000	2010		1966	1966	<b>1974</b>	1980	1986
2000	2004	<b>2011</b>	2012	2014		1976	1984	<b>1992</b>	2000	2010		1966	1966	<b>1973</b>	1980	1986
1994	2004	<b>2010</b>	2012	2014		1976	1984	<b>1991</b>	2000	2010		1966	1966	<b>1972</b>	1980	1986
1990	2000	<b>2009</b>	2012	2014		1976	1982	<b>1990</b>	1994	2004		1966	1966	<b>1971</b>	1980	1986
1990	2000	<b>2008</b>	2012	2014		1976	1982	<b>1989</b>	1994	2004		1966	1966	<b>1970</b>	1974	1982
1990	2000	<b>2007</b>	2012	2014		1976	1982	<b>1988</b>	1994	2004		1966	1966	<b>1969</b>	1974	1982
1990	2000	<b>2006</b>	2012	2012		1970	1982	<b>1987</b>	1994	2004		1966	1966	<b>1968</b>	1974	1982
1984	1994	<b>2005</b>	2010	2012		1970	1982	<b>1986</b>	1994	2004		1966	1966	<b>1967</b>	1974	1982
1984	1994	<b>2004</b>	2010	2012		1970	1976	<b>1985</b>	1990	2000		1964	1964	<b>1966</b>	1974	1980
1984	1994	<b>2003</b>	2010	2012		1970	1976	<b>1984</b>	1990	2000		1964	1964	<b>1965</b>	1972	1980
1984	1994	<b>2002</b>	2010	2012		1970	1976	<b>1983</b>	1990	2000		1963	1963	<b>1964</b>	1972	1978
1984	1994	<b>2001</b>	2010	2012		1970	1976	<b>1982</b>	1990	2000		1963	1963	<b>1963</b>	1970	1978
1982	1990	<b>2000</b>	2004	2010		1966	1976	<b>1981</b>	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 Personal Property Manufactured Dwellings

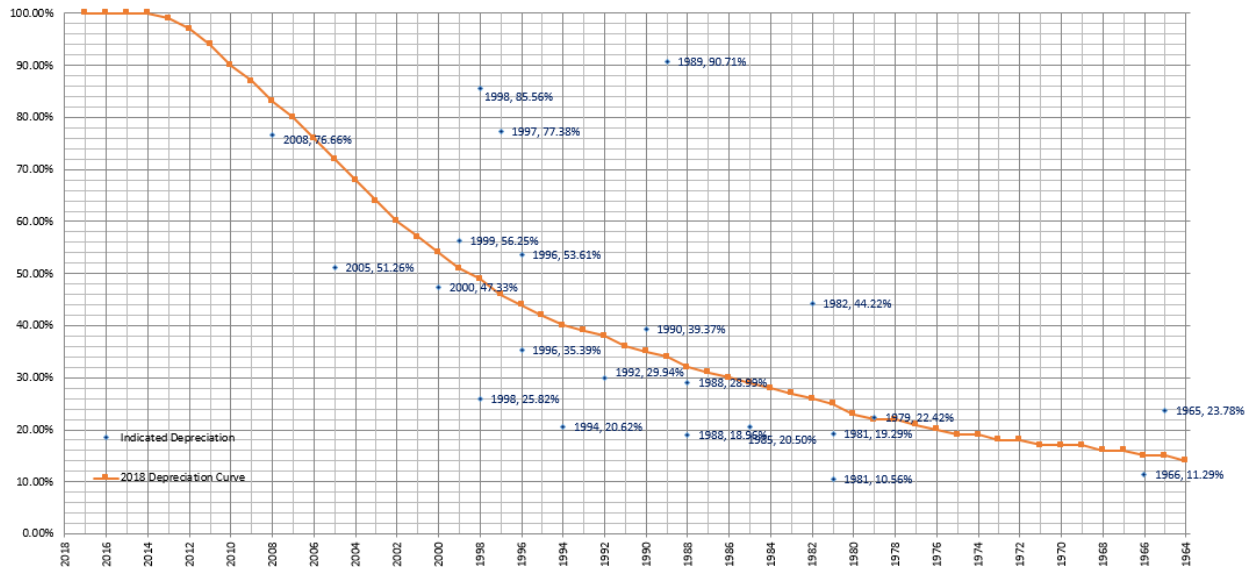
## Analysis

There were a total of 40 sales of personal property manufactured dwellings during the past year of which only 29 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 29 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 to identify a potential depreciation curve.

Countywide Personal Property Manufactured Dwellings Depreciation Sales Graph



## Conclusions

The data collected and analyzed for the 2018 Depreciation Study was determined to be sufficient to develop a new depreciation schedule for 2018.

Countywide Personal Property Manufactured Dwelling Depreciation Schedule for 2018

Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent
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
2004	64	1990	34	1976	19		

Countywide Effective Year Built Based on Condition For Personal Property Manufactured Dwellings for 2018

Poor	Fair	Avg	Good	Exc	Poor	Fair	Avg	Good	Exc	Poor	Fair	Avg	Good	Exc
2008	2012	<b>2018</b>	2018	2018	1982	1990	<b>1999</b>	2004	2010	1966	1970	<b>1980</b>	1982	1990
2006	2012	<b>2017</b>	2017	2017	1982	1990	<b>1998</b>	2004	2010	1966	1970	<b>1979</b>	1982	1990
2006	2010	<b>2016</b>	2016	2016	1982	1990	<b>1997</b>	2004	2010	1966	1970	<b>1978</b>	1982	1990
2004	2010	<b>2015</b>	2015	2015	1982	1990	<b>1996</b>	2004	2010	1966	1970	<b>1977</b>	1982	1990
2004	2010	<b>2014</b>	2014	2014	1982	1984	<b>1995</b>	2000	2010	1966	1970	<b>1976</b>	1982	1990
2004	2010	<b>2013</b>	2014	2014	1982	1984	<b>1994</b>	2000	2010	1966	1966	<b>1975</b>	1980	1986
2004	2010	<b>2012</b>	2012	2014	1982	1984	<b>1993</b>	2000	2010	1966	1966	<b>1974</b>	1980	1986
2000	2004	<b>2011</b>	2012	2014	1976	1984	<b>1992</b>	2000	2010	1966	1966	<b>1973</b>	1980	1986
1994	2004	<b>2010</b>	2012	2014	1976	1984	<b>1991</b>	2000	2010	1966	1966	<b>1972</b>	1980	1986
1990	2000	<b>2009</b>	2012	2014	1976	1982	<b>1990</b>	1994	2004	1966	1966	<b>1971</b>	1980	1986
1990	2000	<b>2008</b>	2012	2014	1976	1982	<b>1989</b>	1994	2004	1966	1966	<b>1970</b>	1974	1982
1990	2000	<b>2007</b>	2012	2014	1976	1982	<b>1988</b>	1994	2004	1966	1966	<b>1969</b>	1974	1982
1990	2000	<b>2006</b>	2012	2012	1970	1982	<b>1987</b>	1994	2004	1966	1966	<b>1968</b>	1974	1982
1984	1994	<b>2005</b>	2010	2012	1970	1982	<b>1986</b>	1994	2004	1966	1966	<b>1967</b>	1974	1982
1984	1994	<b>2004</b>	2010	2012	1970	1976	<b>1985</b>	1990	2000	1964	1964	<b>1966</b>	1974	1980
1984	1994	<b>2003</b>	2010	2012	1970	1976	<b>1984</b>	1990	2000	1964	1964	<b>1965</b>	1972	1980
1984	1994	<b>2002</b>	2010	2012	1970	1976	<b>1983</b>	1990	2000	1963	1963	<b>1964</b>	1972	1978
1984	1994	<b>2001</b>	2010	2012	1970	1976	<b>1982</b>	1990	2000	1963	1963	<b>1963</b>	1970	1978
1982	1990	<b>2000</b>	2004	2010	1966	1976	<b>1981</b>	1990	2000					

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



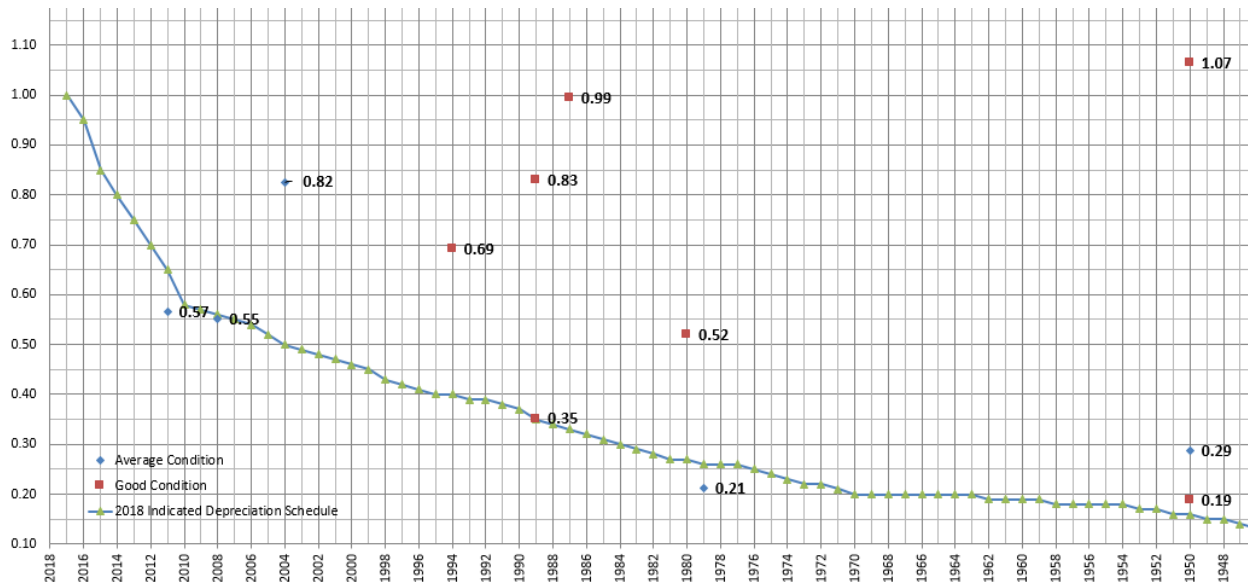
## Countywide Depreciation Study for Floating Property

### Analysis

There were only 6 useable sales of floating property that occurred during 2016, of which only 2 were in average condition. Due to the limited sales, 6 additional floating properties that sold during 2015 were included. All sales were time trended to the base appraisal date of 1/1/2017.

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 Personal Property Manufactured Dwellings 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 rapidly in the first few years before leveling out as they get older. Based on the supporting data, a new depreciation schedule for floating property has been developed.

Countywide Floating Property Depreciation Schedule for 2018

Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent
2017	100	1985	31	1953	17	1921	10
2016	95	1984	30	1952	16	1920	10
2015	85	1983	29	1951	16	1919	10
2014	80	1982	28	1950	15	1918	10
2013	75	1981	27	1949	15	1917	10
2012	70	1980	27	1948	14	1916	10
2011	65	1979	26	1947	13	1915	10
2010	58	1978	26	1946	13	1914	10
2009	57	1977	26	1945	12	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	11	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	10	1902	10
1997	42	1965	20	1933	10	1901	10
1996	41	1964	20	1932	10	1900	10
1995	40	1963	20	1931	10		
1994	40	1962	19	1930	10		
1993	39	1961	19	1929	10		
1992	39	1960	19	1928	10		
1991	38	1959	19	1927	10		
1990	37	1958	18	1926	10		
1989	35	1957	18	1925	10		
1988	34	1956	18	1924	10		
1987	33	1955	18	1923	10		
1986	32	1954	17	1922	10		

Countywide Effective Year Built Based on Condition For Floating Property for 2018

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
1954	1973	1978	2000	2013
1952	1972	1977	1999	2013
1950	1971	1976	1998	2013

Poor	Fair	Avg	Good	Exc
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
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

Poor	Fair	Avg	Good	Exc
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 2018

Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent	Eff Yr Built	2018 Percent
2017	100	1985	68	1953	36	1921	10
2016	99	1984	67	1952	35	1920	10
2015	98	1983	66	1951	34	1919	10
2014	97	1982	65	1950	33	1918	10
2013	96	1981	64	1949	32	1917	10
2012	95	1980	63	1948	31	1916	10
2011	94	1979	62	1947	30	1915	10
2010	93	1978	61	1946	29	1914	10
2009	92	1977	60	1945	28	1913	10
2008	91	1976	59	1944	27	1912	10
2007	90	1975	58	1943	26	1911	10
2006	89	1974	57	1942	25	1910	10
2005	88	1973	56	1941	24	1909	10
2004	87	1972	55	1940	23	1908	10
2003	86	1971	54	1939	22	1907	10
2002	85	1970	53	1938	21	1906	10
2001	84	1969	52	1937	20	1905	10
2000	83	1968	51	1936	19	1904	10
1999	82	1967	50	1935	18	1903	10
1998	81	1966	49	1934	17	1902	10
1997	80	1965	48	1933	16	1901	10
1996	79	1964	47	1932	15	1900	10
1995	78	1963	46	1931	14		
1994	77	1962	45	1930	13		
1993	76	1961	44	1929	12		
1992	75	1960	43	1928	11		
1991	74	1959	42	1927	10		
1990	73	1958	41	1926	10		
1989	72	1957	40	1925	10		
1988	71	1956	39	1924	10		
1987	70	1955	38	1923	10		
1986	69	1954	37	1922	10		

*Notes*

# **2018 Land Adjustments Analysis and Conclusions**

## MA 01 and MA 06 (City) Adjustment Study for Premium Location

### Analysis

The neighborhoods in St. Helens and Columbia City that are considered by market perception to be more desirable than older city lots that our land values are initially based on have been identified. The assumption is made that neighborhoods where homes are similar in style, quality and age, and usually located in areas with curbs, sidewalks and underground utilities will command a higher sales price than areas where there is a mix of old and new homes of varying qualities with overhead utilities and few curbs and sidewalks.

There were a total of 15 sales selected for use in this study based on their location and newer dwellings to minimize variables in attempting to extract the value attributable to their location in a more desirable neighborhood. All sales were time adjusted to the base appraisal date of 1/1/17. 6 of the sales resulted in a negative value and were eliminated from the study. The remaining 9 sales indicated a 37% adjustment. By trimming the highest and lowest ratios from these 9, the indicated adjustment was 34%.

Sales in Premium Locations in MA 01 and MA 06 (City)

Sale #	Time Adj. Sales Price	2018 Land Value	2018 OSD Value	2018 Impr DRC	Residual Value	Indicated Premium % of Land
1	359,900	59,457	27,000	218,617	54,826	0.9221
2	461,734	73,346	27,000	316,195	45,193	0.6162
3	314,033	51,309	27,000	205,443	30,281	0.5902
4	262,221	47,471	27,000	169,421	18,329	0.3861
5	379,900	83,578	30,000	243,513	22,809	0.2729
6	272,162	47,575	27,000	188,193	9,394	0.1975
7	277,120	47,701	27,000	193,790	8,629	0.1809
8	321,800	67,980	27,000	216,721	10,099	0.1486
9	260,000	55,934	27,000	175,028	2,038	0.0364
Overall Average:						0.3723
Trimmed Average:						0.3418

### Conclusions

Based on the supporting data and averages ranging from 34% to 37%, the Premium Location adjustment to be applied to land values of properties within selected neighborhoods in the cities of Saint Helens and Columbia City is 35%.



## MA 3 SA 03 Adjustment Study for Non-Elevated Homes in the Floodplain

### Analysis

There were 6 sales of homes within the floodplain in the City of Vernonia that had not been elevated. For this study, the difference between the residual dwelling value from the time adjusted sale and the calculated depreciated replacement cost (DRC) using the cost factor book, LCM and depreciation schedule was used to determine an estimated cost to cure. This difference was converted to a percentage of the DRC. The average percentage value loss to the non-elevated dwelling resulted in -23.17%.

Sales in MA 3 SA 03 with Non-Elevated Dwellings

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

Based on the supporting sales data, an 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

Based on the data collected, the percentage reductions for topography adjustments will remain the same as last year. This percentage is to be applied to the entire land value unless otherwise noted in the appraisal.

<b>Countywide Topography Adjustment</b>		
<b>Code</b>	<b>Description</b>	<b>Rate %</b>
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 MA 5 was first analyzed individually by each maintenance and study area, but due to limited sales data of view properties, a decision was made to combine areas that are geographically similar (North County) in market perception. The extraction method was utilized by time adjusting the sales price then subtracting the depreciated improvement value, subtracting OSD and subtracting the base land value from the 2018 land schedule for the remaining residual contributory value associated with a market view. Previously views were broken down into 4 different categories fair, good, very good and excellent. During analyzation of the data for all areas, it appears that market perception is recognizing only 2 view categories Fair/Good and Very Good/Excellent. There was a total of 17 sales of which 8 were considered unusable because of the difficulty to adequately identify other characteristics that affected the value. The remaining 9 sales analyzed were time trended to the base appraisal date of 1/1/17.

**Sales in MA 4 and MA 5 with Fair to Good Views**

SALE #	MA	SA	DESCRIPTION	Time Adj Sales Price	Dep Impr Value	OSD	Land/View Residual Value	Schedule Land Value	Residual Value for View
1	04	00	VIEW - FAIR	180,378	130,750	15,000	34,628	32,848	1,780
2	04	00	VIEW - GOOD	115,483	88,027	15,000	12,456	10,775	1,681
3	04	41	VIEW - FAIR	411,100	171,889	54,000	185,211	141,627	43,584
4	04	41	VIEW - FAIR	406,358	241,401	54,000	110,957	82,574	28,383
5	04	41	VIEW - FAIR	283,910	117,034	54,000	112,876	82,500	30,376
6	05	51	VIEW - GOOD	327,740	204,512	50,000	73,228	48,919	24,309
7	04	00	VIEW - FAIR	161,789	85,155	15,000	61,634	23,393	38,241
Average Value for View:									24,051

**Sales in MA 4 and MA 5 with Very Good to Excellent Views**

SALE #	MA	SA	DESCRIPTION	Time Adj Sales Price	Dep Impr Value	OSD	Land/View Residual Value	Schedule Land Value	Residual Value for View
1	04	00	VIEW - V GOOD	279,751	202,897	15,000	61,854	29,375	32,479
2	04	00	VIEW - EXCEL	100,210	52,182	15,000	33,028	23,205	9,823
Average Value for View:									21,151

### Conclusions

Based on the data collected for view adjustments in North Columbia County, it did not appear the current market recognizes a difference in the type of view. The results for the two categories were both very similar in value. Therefore, it's recommended that for 2018, all view adjustments for MA 4 and MA 5 be applied as a lump sum of \$23,000.

<b>MA 4 and MA 5 View Adjustments for 2018</b>	
Fair/Good View	\$23,000
Very Good/Excellent View	\$23,000

## Maintenance Area 1, 2 and 6 Adjustment Study for Views

### Analysis

The data collected for extracting view adjustments for MA 1, MA 2 and MA 6 was first analyzed individually by each maintenance and study area, but due to limited sales data of view properties, a decision was made to combine areas that are geographically similar (South County) in market perception. The extraction method was utilized by time adjusting the sales price then subtracting the depreciated improvement value, subtracting OSD and subtracting the base land value from the 2018 land schedule for the remaining residual contributory value associated with a market view. Previously views were broken down into 4 different categories fair, good, very good and excellent. During analyzation of the data for all areas, it appears that market perception is recognizing only 2 view categories Fair/Good and Very Good/Excellent. There was a total of 21 sales of which 8 were considered unusable because of the difficulty to adequately identify other characteristics that affected the value. The remaining 13 sales analyzed were time trended to the base appraisal date of 1/1/17.

Sales in MA 1, MA 2 and MA 6 with Fair to Good Views

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

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	282,598	27,000	234,650	77,661	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

Based on the data collected for view adjustments in South Columbia County, it appears the current market recognizes a difference in the type of view. The results for the two categories are shown in the table below.

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 \$8,150.

### 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.

<b>MA 4 City of Rainier Slide Area Adjustments for 2018</b>	
Rainier Slide – City Fees	\$500
Rainier Slide – Engineering Fees	\$8,150

## 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 being riverfront and the other an interior lot for a difference of \$44,000. Also included were 2 bare land sales of similar size with one riverfront and the other interior which indicated a difference of \$60,000. An average of these sales would indicate a \$52,000 adjustment for riverfront properties.

**2018 MA 4 SA 47 Riverfront Paired Sales Study**

<b>Sale #</b>	<b>Property Description</b>	<b>Time-Adj Sales Price</b>
1	Interior Lot - Vacant	90,149
2	Riverfront Lot - Vacant	149,885
<b>Sales Price Difference for Riverfront:</b>		<b>59,736</b>
3	Interior Lot - Improved 1686 sf dwelling	212,397
4	Riverfront Lot - Improved 1686 sf dwelling	256,053
<b>Sales Price Difference for Riverfront:</b>		<b>43,656</b>
<b>Average Sales Price Difference:</b>		<b>51,696</b>

### Conclusions

Based on the data available for analysis it is recommended that an average of both figures be used in the 2018 setup, for a Riverfront adjustment of \$52,000.

## **Other Adjustments Where a Study was Not Completed for 2018**

### 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 1 SA 00	MA 1 SA 30	MA 1 SA 31	MA 1 SA 43
MA 6 SA 01	MA 6 SA 21	MA 6 SA 31	MA 6 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 1 SA 00	MA 1 SA 30	MA 1 SA 31	MA 1 SA 43
MA 6 SA 01	MA 6 SA 21	MA 6 SA 31	MA 6 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.

2018 Partition Costs adjustment is -\$10,280.

### 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.

Published By  
Columbia County Assessor  
230 Strand Street  
Saint Helens, OR 97051  
503-397-2240  
[www.co.columbia.or.us](http://www.co.columbia.or.us)