

# Clark County Comprehensive Plan 2016 Update

Planning for growth 2015 – 2035

Preferred Alternative –Urban VBLM and Rural Capacity Estimates – Issue Paper 7

## Purpose

The purpose of this issue paper is to ensure there is sufficient capacity to accommodate the projected 20-year population and employment growth in the Preferred Alternative under SEPA as selected by the Board of County Councilors on February 23, 2016.

## Background

In July 2013, Clark County began the process of updating its Comprehensive Growth Management Plan to meet the 2016 periodic update requirement of Chapter 36.70A.140 RCW. Several issue papers have already been prepared to allow the Board to make decisions about the update:

- Issue Paper 1 - Comprehensive Plan Overview: A summary of the county's Planning Assumptions, 2013 vacant and buildable lands model (VBLM) inventory and population and employment projections.
- Issue Paper 2 – Population and Job Projections: Background information for a discussion with the cities and the town of Yacolt on population and job planning assumptions for 2015-2035. On Jan. 21, 2014, the Board adopted the state Office of Financial Management's (OFM) medium population projection of 562,207 for the 20-year period ending 2035 (Res. 2014-01-09).
- Issue Paper 3 – Employment forecast based on input from Washington Employment Security Department (ESD). It was revised as Issue Paper 3.1 to include the 2014 VBLM information. On April 29, 2014, the Board adopted the high employment forecast of 91,200 net new jobs for the 20-year period ending 2035 (Res. 2014-04-01).
- Issue Paper 4 – Population and Job Allocation: On June 24, 2014, the Board identified the methodology for allocating growth by UGA and adopted preliminary allocations for initial review (Res. 2014-06-17). It was revised as Issue Paper 4.1 to reflect the additional capacity for population and jobs not captured by the vacant land model and presented at a BOCC Worksession on September 24, 2014. Following the 2015 assessor's population update, the issue paper was revised as Issue Paper 4.2. (Res. 2015-04-05).
- Issue Paper 5 – SEPA Scoping: On July 16, 2014, the Board discussed the environmental impact review process under the State Environmental Policy Act (SEPA) and directed staff to proceed to scoping on development of alternatives.
- Issue Paper 5.1 – SEPA provides a partial list of what has transpired from July 17, 2014 through March 11, 2015 and discussed four potential alternatives for study under SEPA. (Res. 2015-04-06).
- Issue Paper 6 CWPP – Discussed the role of the Countywide Planning Policies and introduced a proposed amendment procedure for updating countywide planning policies.

## Methodology

The Geographic Information System (GIS) department ran the vacant buildable lands model and rural capacity estimate on the Preferred Alternative Plan map selected by the Board of County Councilors on February 23, 2016. Exhibit 1 vacant buildable lands model and Exhibit 2 rural capacity analysis provide the methodologies used and the data output.

The summary results of the VBLM capacity analysis in Table 2 indicate that in aggregate, Clark County can accommodate population growth of 135,122 and is sufficient to accommodate the 20-year projected population growth of 128,586 as identified in Table 1 Population Allocation.

The VBLM indicates that the cities of La Center and Ridgefield do not have sufficient capacity to accommodate their respective growth allocation. However, the VBLM does not reflect site specific planned redevelopment improvements. Each city reviews the VBLM data and provides the county with site specific additional population capacity overrides based on future planned growth. For example, the Vancouver waterfront redevelopment potential is not captured in the VBLM. Site specific overrides have been recognized by the county to more accurately reflect development potential. When the overrides are factored in, each jurisdiction has sufficient capacity to accommodate the projected 20-year projected population growth.

The rural area is allocated 10% of the total county growth which would be 12,859. (128,586 \* 10%) The 2015 rural capacity estimate indicates the rural area can accommodate an additional 21,343 persons.

**Table 1 Population Allocation**

UGA	January 1, 2015 Population Estimates	2015 to 2035 VBLM Population Allocation	Additional Allocation	Total Allocation	2035 Estimates (Jan. 1, 2015 Pop. Est + Total Allocation)
Battle Ground	20,871	15,972	1,600	17,572	38,443
Camas	22,843	11,255		11,255	34,098
County	62,205	12,859		12,859	75,064
LaCenter	3,209	3,233	1,200	4,433	7,642
Ridgefield	6,575	13,087	5,832	18,919	25,494
Vancouver	315,460	52,786	3,815	56,601	372,061
Washougal	15,932	6,023	392	6,415	22,347
Woodland	89	229		229	318
Yacolt	1,661	303		303	1,964
<b>Total</b>	<b>448,845</b>	<b>115,747</b>	<b>12,839</b>	<b>128,586</b>	<b>577,431</b>

Note: This table reflects the revised information in Resolution 2016-03-01. The additional allocation column reflects the cities request to be made whole for the planning done in 2007 and to reflect site specific overrides to the VBLM. In order to stay within the 2035 population projection the Vancouver UGA additional allocation was reduced by 2,385.

**Table 2 VBLM Capacity**

UGA	January 1, 2015 Population Estimates	VBLM Preferred Alt. 2016 Population Capacity
Battle Ground	20,871	17,845
Camas	22,843	13,832
County	62,205	NA
LaCenter	3,209	3,941
Ridgefield	6,575	16,542
Vancouver	315,460	74,724
Washougal	15,932	7,501
Woodland	89	468
Yacolt	1,661	269
<b>Total</b>	<b>448,845</b>	<b>135,122</b>

\*Rural Capacity is estimated at 21,343.

Table 3 below shows the VBLM Preferred Alternative 2016 employment capacity which includes additional land requested by the cities of Battle Ground, La Center and Ridgefield. The county has capacity for 75,847 net new jobs. The existing assumptions of total potential jobs not captured by the vacant lands model increase the employment capacity by 16,775 jobs for redevelopment and 7,400 public sector jobs, thus increasing the total potential job capacity from 75,847 to 100,022.

**Table 3 VBLM Employment Capacity**

UGA	VBLM Preferred Alt. 2016 Employment Capacity
Battle Ground	10,060
Camas	10,965
La Center	2,052
Ridgefield	8,780
Vancouver	39,496
Washougal	4,026
Woodland	0
Yacolt	468
Total	75,847
<b>Total w/redevelopment and public employment</b>	<b>100,022</b>

## NEXT STEPS

This data will be provided to Environmental Science Associates (ESA) for inclusion in the Final Supplemental Environmental Impact Statement (FSEIS). County staff are working to update the comprehensive plan policies and text, Title 40 Clark County code, the Capital Facilities Plan, and the Capital Facilities Financial Plan, consistent with the Preferred Alternative 2016.

## Vacant Buildable Lands Model

The Vacant Buildable Lands Model (VBLM) is a planning tool developed to analyze residential, commercial, and industrial lands within urban growth areas. The model serves as a tool for evaluating urban area alternatives during Clark County 20-year Comprehensive Growth Management Plan updates and for monitoring growth patterns during interim periods. The VBLM analyzes potential residential and employment capacity of each urban growth area within the county based on vacant and underutilized land classifications. This potential capacity is used to determine the amount of urban land needed to accommodate projected population and job growth for the next 20 years during plan updates and to analyze land consumption or conversion rates on an annual basis for plan monitoring purposes.

In 1992, Clark County began evaluating vacant lands as part of the initial 20-year growth management plan. At that time, County staff met with interested parties from development and environmental communities to examine criteria and establish a methodology for computing potential land supply available for development. A methodology relying on the Clark County Assessor's database and Geographic Information System (GIS) as primary data sources was developed. As a result the VBLM is a GIS based model built on geoprocessing scripts.

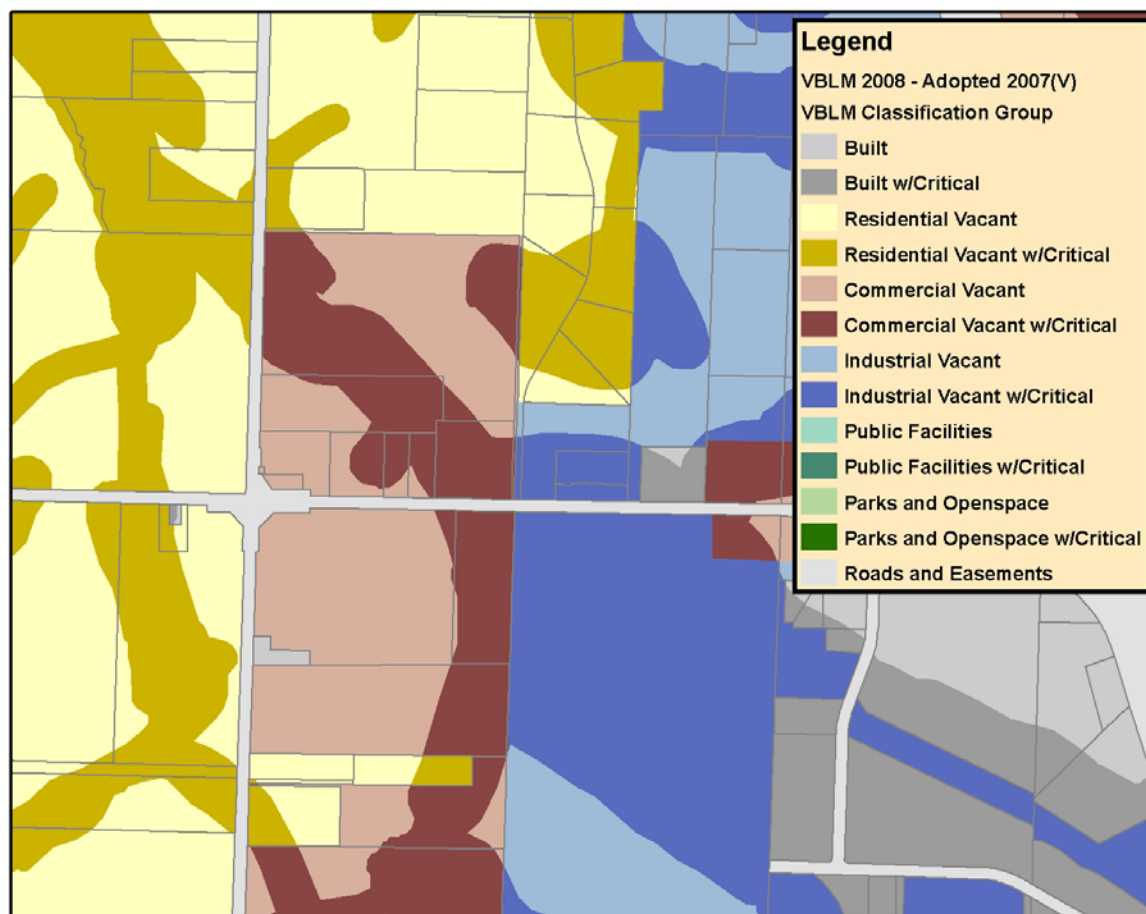
In the spring of 2000, the Board of Clark County Commissioners appointed a technical advisory committee consisting of local government agencies, Responsible Growth Forum members, and Friends of Clark County to revisit this process. They reviewed definitions for each classification of land and planning assumptions for determining potential housing units and employment.

Another comprehensive review of the VBLM criteria and assumptions was undertaken in 2006 as part of the growth management plan update. This review compared the 1996 prediction to the 2006 model. This review demonstrated that for the most part the model was a good predictor of what land would develop. However, changes were made to the model based on results of this review. Important changes to the model include:

- Underutilized land determination for all models was changed to a building value per acre criteria.
- The industrial model and commercial model now have consistent classifications. The industrial model was revised to match the commercial process.
- Environmental constraints methodology changed from applying assumptions to parcels based on percentage of critical land to simply

identifying constrained and non constrained land by parcel and applying higher deductions to constrained lands.

### *Example Map of Constrained Lands*



Benefits of the current improvements are more consistency and easier monitoring of the model. Better accounting for private open space, constrained lands, and exempt port properties. And calculations for underutilized lands are more dynamic.

### **Model Classifications**

The model classifies lands into three urban land use categories--residential, commercial, and industrial. Lands are grouped into land use codes based on comprehensive plan designations for model purposes. Lands designated as parks & open space, public facility, mining lands, or airport within the urban growth areas are excluded from available land calculations. Additionally, all rural

and urban reserve designated lands are excluded from the model. Table 1 lists a breakdown of the land use classes.

*Table 1: Land Use Classes*

LU	Comprehensive Plan Classification	VBLM Model
1	Urban Low Density Residential	Residential – Urban Low
1	Single-Family_Low	Residential – Urban Low
1	Single-Family_Medium	Residential – Urban Low
1	Single-Family_High	Residential – Urban Low
2	Urban Medium Density Residential	Residential – Urban High
2	Urban High Density Residential	Residential – Urban High
2	Multi-Family_Low	Residential – Urban High
2	Multi-Family_High	Residential – Urban High
3	Neighborhood Commercial	Commercial
3	Community Commercial	Commercial
3	General Commercial	Commercial
3	City Center	Commercial
3	Regional Center	Commercial
3	Downtown	Commercial
3	Commercial	Commercial
4	Mixed Use	Commercial
4	Town Center	Commercial
5	Office Park/Business Park	Industrial
5	Light industrial/Business park	Industrial
5	Employment Campus	Industrial
6	Light Industrial	Industrial
6	Heavy Industrial	Industrial
6	Railroad Industrial	Industrial
6	Industrial	Industrial
33	Mixed use - Residential	Residential
34	Mixed use - Employment	Commercial

The model classifies each urban parcel as built, vacant, or underutilized by the three major land uses. Additionally lands with potential environmental concerns and/or geologic hazards as consistent with the applicable section of the Clark County and other municipal codes are classified as constrained (critical lands) lands. Constrained lands are identified by parcel in the model.

**Constrained lands include:**

- 100 year floodplain or flood fringe
- Wetlands inventory (NWI, high quality, permitted, modeled) with 100 foot buffer

- Slopes greater than 15 percent (>25% for City of Vancouver)
- Land slide area that has active or historically unstable slopes
- Designated shorelines
- Hydric soils with 50 foot buffer
- Habitat areas with 100 foot buffer
- Species areas with 300 foot buffer
- Riparian stream buffers by stream type (Table 2)

*Table 2: Riparian Buffers*

Stream Type	Countywide	Vancouver Exception
Type S (Shoreline)	250 Feet	175 Feet
Type F (Fish Bearing)	200 Feet	175 Feet
Type NP (Non-fish bearing, perennial)	100 Feet	150 Feet
Type NP (Non-fish bearing, seasonal)	75 Feet	100 Feet

### **Residential Model**

Important residential classifications include vacant, vacant critical, underutilized, and underutilized critical. These classes are used to determine gross acres available for development. Vacant exempt, vacant lots less than 5,000 square feet and all other classes are excluded from available land calculations. Table 3 lists all residential classes.

*Table 3: Residential Classifications*

RESCLASS	Description
0	Not Residential
1	Built
2	Unknown
3	Vacant
4	Underutilized
5	Roads and Easements
6	Mansions and Condos
12	Built Exempt
13	Vacant Exempt
14	Vacant Critical
18	Underutilized Critical
19	Less than 5,000 square feet
20	Private Open Space
21	Parks and Open Space



Criteria for classifying residential lands are as follows:

- Residential Vacant Criteria
  - Building value less than \$13,000
  - Parcel greater than 5,000 square feet
  - Not tax exempt
  - Not an easement or right of way
  - Not a state assessed or institutional parcel
  - Not parks or open space (public and private)
  - Not a mobile home park
  
- Underutilized
  - Same as Vacant except building value criteria is replaced with a building value per acre criteria.
  - Building value per acre of land is below the 10<sup>th</sup> percentile of building value per acre for all residential parcels within all UGAs. The 10<sup>th</sup> percentile is calculated by the model for each year and for each UGA alternative.
  - Parcel size greater than 1 acre
  
- Mansions and Condos
  - Parcel size greater than 1 acre
  - Building value per acre greater than the 10<sup>th</sup> percentile.
  
- Residential Exempt
  - Properties with tax exempt status
  
- Easements and right of ways
  
- Constrained (Critical lands)
  - All classifications may be subdivided into constrained vs. not constrained. Constrained lands are described above.

## **Commercial and Industrial Models**

Commercial and industrial lands are classified using consistent criteria with one exception; industrial classes include exempt port properties in the current model.

Important commercial classes for determining gross acres available for development include vacant, vacant critical, underutilized, and underutilized critical. Vacant exempt and vacant lots less than 5,000 square feet are excluded from available land calculations. Table 4 lists all commercial classes.

Table 4: Commercial Classifications

COMCLASS	Description
0	Not Commercial
1	Built
2	Vacant
3	Underutilized
5	Vacant Lot less than 5,000 sq feet
7	Vacant Critical
9	Underutilized Critical
10	Vacant Exempt

Important industrial classes for determining gross acres available for development include vacant, vacant critical, exempt vacant port property, exempt vacant port property critical, underutilized, underutilized critical, exempt underutilized port property, and exempt underutilized port property critical. All exempt not port properties are excluded in the available land calculations. Table 5 lists all industrial classes.

Table 5: Industrial Classifications

INDCLASS	Description
0	Not Industrial
1	Vacant
2	Underutilized
3	Vacant Critical
4	Underutilized Critical
6	Built
7	Exempt Vacant Port Property
8	Exempt Vacant Not Port
9	Exempt Vacant Port Property Critical
10	Exempt Underutilized Port
11	Exempt Underutilized Port Critical
12	Exempt Underutilized Not Port
15	Easements

Commercial and industrial models classify vacant and underutilized land as follows:

- Vacant land
  - Building value less than \$67,500
  - Not "Assessed With"- Some parcels are assessed with other parcels. These parcels are often parking lots, or multiple parcels comprising a single development. All assessed with parcels are considered built.

- Not Exempt.
    - Port property is exempt, and is included as a separate classification in the Industrial land model.
  - Not an Easement or right of way
  - Parcel greater than 5,000 square feet
  - Not a state assessed or institutional parcel
- Underutilized Lands
    - Same as vacant except building value criteria is replaced with a building value per acre criteria of less than \$50,000.
  - Constrained (Critical lands)
    - All classifications may be subdivided into constrained vs. not constrained. Commercial and industrial constrained lands are defined the same as residential constrained lands and are listed above.
  - Exempt Port Properties in the Industrial Model
    - Includes lands that are under port ownership and available for development. Buildable exempt port properties are included in available land calculations.
    - Port properties can be classified as vacant, underutilized, or constrained.

The model produces a summary of gross residential, commercial, and industrial acres available for development. Gross acres are defined as the total raw land available for development prior to any deductions for infrastructure, constrained lands, and not to convert factors.

## Planning Assumptions

The next step in the buildable lands process is applying planning assumptions to the inventory of vacant and underutilized gross acres in order to arrive at a net available land supply. These assumptions account for infrastructure, reduced development on constrained land, and never to convert factors. Use factors along with employment and housing units per acre densities are applied to derived net acres to predict future capacities.

Residential Model Planning Assumptions:

- 27.7% deduction to account for both on and off-site infrastructure needs. 20% infrastructure deduction for mixed use lands.
- Never to convert factor
  - 10% for vacant land
  - 30% for underutilized
- 50% of available constrained (critical) land will not convert

- 60% of mixed use land will develop as residential, 85% residential for Battle Ground mixed use - residential and 25% residential for mixed use - employment.

#### Commercial and Industrial Model Planning Assumptions

- 25% infrastructure factor applied for both commercial and industrial lands.
- 20% of available constrained (critical) commercial and mixed use land will not convert
- 50% of available constrained (critical) industrial land will not convert
- 40% of mixed use land will develop as commercial, 15% commercial for Battle Ground mixed use - residential and 75% commercial for mixed use - employment.

Employees and unit per acre density assumptions are applied to net developable acres to predict future employment and housing unit capacities. Densities are set by the Current Planning staff based on observed development and comprehensive plan assumptions for each UGA.

Applied residential densities vary by UGA. Table 6 lists the units per acre by UGA.

*Table 6: Residential units per Acre*

<b>Urban Growth Area</b>	<b>Applied Housing Units per Net Developable Acre</b>
Battle Ground	6
Camas	6
La Center	4
Ridgefield	6
Vancouver	8
Washougal	6
Woodland	6
Yacolt	4

Applied employment densities vary by land use as well. Commercial classes which include commercial and mixed use categories apply 20 employees per acre while industrial classes apply 9 employees per acre.

Applying residential and employment planning assumptions to the VBLM results produce housing units and employment carrying capacity estimates for urban growth areas. These estimates help monitor growth on an annual basis and is part of the criteria used for setting UGA boundaries during growth management plan updates.

Current model layers and reports are available for viewing in Clark County's GIS MapsOnline web application at:

<http://gis.clark.wa.gov/vblm/>

Underutilized land classes are grouped with vacant classes by land use in MapsOnline and on other map products. Table 7 lists the group classes used for mapping.

*Table 7: Group Classes*

GRPCLASS	Description
1	Built
2	Built w/Constraints
3	Residential Vacant
4	Residential Vacant w/Constraints
5	Commercial Vacant
6	Commercial Vacant w/Constraints
7	Industrial Vacant
8	Industrial Vacant w/Constraints
99	Excluded

For more information on the model inputs, structure and outputs, please contact Clark County Community Planning at (360) 397-2280 or Clark County Geographic Information System (GIS) at (360) 397-2002.

February 2016 BOCC Preferred Alt Summary Totals 2016

<b>RESIDENTIAL</b>	<b>Gross Acres</b>	<b>Will Not Convert Acres</b>	<b>Infrastructure Acres</b>	<b>Developable Net Acres</b>	<b>Housing Units</b>	<b>Persons</b>
<b>Battle Ground</b>						
City	1,797.3	711.9	299.2	786.1	4,716.8	12,546.6
UGA	740.0	283.7	124.3	331.9	1,991.7	5,297.9
<b>Total</b>	<b>2,537.2</b>	<b>995.6</b>	<b>423.5</b>	<b>1,118.1</b>	<b>6,708.4</b>	<b>17,844.5</b>
<b>Camas</b>						
City	1,517.4	561.5	264.8	691.2	4,147.0	11,030.9
UGA	383.9	141.1	67.3	175.5	1,053.2	2,801.5
<b>Total</b>	<b>1,901.3</b>	<b>702.5</b>	<b>332.1</b>	<b>866.7</b>	<b>5,200.2</b>	<b>13,832.4</b>
<b>La Center</b>						
City	570.6	227.5	94.5	248.6	994.4	2,645.1
UGA	314.2	145.8	46.7	121.8	487.1	1,295.6
<b>Total</b>	<b>884.8</b>	<b>373.2</b>	<b>141.2</b>	<b>370.4</b>	<b>1,481.4</b>	<b>3,940.7</b>
<b>Ridgefield</b>						
City	1,535.4	643.2	247.1	645.0	3,870.3	10,294.9
UGA	921.2	379.7	150.0	391.4	2,348.7	6,247.4
<b>Total</b>	<b>2,456.6</b>	<b>1,023.0</b>	<b>397.1</b>	<b>1,036.5</b>	<b>6,218.9</b>	<b>16,542.3</b>
<b>Vancouver</b>						
City	1,178.7	412.0	211.6	555.2	4,441.5	11,814.3
UGA	6,498.8	2,418.2	1,124.4	2,956.3	23,650.2	62,909.6
<b>Total</b>	<b>7,677.5</b>	<b>2,830.1</b>	<b>1,335.9</b>	<b>3,511.5</b>	<b>28,091.7</b>	<b>74,723.9</b>
<b>Washougal</b>						
City	659.1	247.4	113.2	298.6	1,791.4	4,765.1
UGA	403.9	166.8	65.7	171.4	1,028.4	2,735.6
<b>Total</b>	<b>1,063.1</b>	<b>414.3</b>	<b>178.8</b>	<b>470.0</b>	<b>2,819.8</b>	<b>7,500.7</b>
<b>Yacolt</b>						
City	65.6	14.8	14.1	36.7	147.0	390.9
UGA	16.4	6.4	2.8	7.3	29.1	77.3
<b>Total</b>	<b>82.0</b>	<b>21.1</b>	<b>16.9</b>	<b>44.0</b>	<b>176.0</b>	<b>468.3</b>
<b>Woodland</b>						
City	5.8	3.1	0.8	2.0	8.0	21.2
UGA	88.9	56.8	8.9	23.3	93.0	247.4
<b>Total</b>	<b>94.8</b>	<b>59.9</b>	<b>9.7</b>	<b>25.2</b>	<b>101.0</b>	<b>268.5</b>
<b>RESIDENTIAL TOTAL</b>	<b>16,697.2</b>	<b>6,419.8</b>	<b>2,835.1</b>	<b>7,442.3</b>	<b>50,797.5</b>	<b>135,121.2</b>

<b>COMMERCIAL</b>	<b>Gross Acres</b>	<b>Will Not Convert Acres</b>	<b>Infrastructure Acres</b>	<b>Developable Net Acres</b>	<b>Jobs</b>
<b>Battle Ground</b>					
City	580.2	90.9	123.9	365.3	7,306.8
UGA	98.2	11.6	21.6	64.9	1,298.3
<b>Total</b>	<b>678.4</b>	<b>102.5</b>	<b>145.6</b>	<b>430.3</b>	<b>8,605.1</b>
<b>Camas</b>					
City	499.7	63.3	109.1	327.2	6,544.7
UGA	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>499.7</b>	<b>63.3</b>	<b>109.1</b>	<b>327.2</b>	<b>6,544.7</b>
<b>La Center</b>					
City	61.5	4.4	14.3	42.8	856.7
UGA	54.3	4.0	12.6	37.8	755.7
<b>Total</b>	<b>115.9</b>	<b>8.4</b>	<b>26.9</b>	<b>80.6</b>	<b>1,612.4</b>
<b>Ridgefield</b>					
City	283.0	32.2	62.7	188.1	3,762.3
UGA	10.4	1.0	2.3	7.0	140.3
<b>Total</b>	<b>293.4</b>	<b>33.2</b>	<b>65.0</b>	<b>195.1</b>	<b>3,902.7</b>
<b>Vancouver</b>					
City	484.2	25.2	114.7	344.2	6,884.2
UGA	835.7	58.5	194.3	582.9	11,658.5
<b>Total</b>	<b>1,319.9</b>	<b>83.7</b>	<b>309.0</b>	<b>927.1</b>	<b>18,542.6</b>
<b>Washougal</b>					
City	74.2	7.3	16.7	50.2	1,003.3
UGA	45.5	3.2	10.6	31.8	635.0
<b>Total</b>	<b>119.7</b>	<b>10.5</b>	<b>27.3</b>	<b>81.9</b>	<b>1,638.4</b>
<b>Yacolt</b>					
City	14.1	0.0	3.5	10.6	211.5
UGA	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>14.1</b>	<b>0.0</b>	<b>3.5</b>	<b>10.6</b>	<b>211.5</b>
<b>Woodland</b>					
City	0.0	0.0	0.0	0.0	0.0
UGA	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>COMMERCIAL TOTAL</b>	<b>3,041.0</b>	<b>301.6</b>	<b>686.5</b>	<b>2,052.9</b>	<b>41,057.3</b>

0

INDUSTRIAL	INDUSTRIAL				Jobs
	Gross Acres	Will Not Convert Acres	Infrastructure Acres	Developable Net Acres	
<b>Battle Ground</b>					
City	307.3	91.9	53.9	161.6	1,454.5
UGA	0.0	0.0	0.0	0.0	0.0
Total	307.3	91.9	53.9	161.6	1,454.5
<b>Camas</b>					
City	848.7	240.1	152.1	456.4	4,108.0
UGA	72.6	26.4	11.5	34.6	311.5
Total	921.2	266.5	163.7	491.1	4,419.5
<b>La Center</b>					
City	83.3	19.1	16.1	48.2	433.5
UGA	1.1	0.2	0.2	0.7	6.1
Total	84.4	19.3	16.3	48.8	439.6
<b>Ridgefield</b>					
City	941.4	266.5	168.7	506.2	4,555.5
UGA	65.3	17.7	11.9	35.7	321.5
Total	1,006.7	284.1	180.6	541.9	4,877.0
<b>Vancouver</b>					
City	2,650.7	841.2	452.4	1,357.1	12,213.7
UGA	1,779.3	484.6	323.7	971.0	8,739.0
Total	4,429.9	1,325.8	776.0	2,328.1	20,952.7
<b>Washougal</b>					
City	218.4	87.7	32.7	98.0	881.9
UGA	286.8	63.8	55.8	167.3	1,505.5
Total	505.2	151.5	88.4	265.3	2,387.5
<b>Yacolt</b>					
City	9.7	0.9	2.2	6.5	58.9
UGA	39.6	10.3	7.3	21.9	197.5
Total	49.2	11.3	9.5	28.5	256.4
<b>Woodland</b>					
City	0.0	0.0	0.0	0.0	0.0
UGA	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0
<b>INDUSTRIAL TOTAL</b>	<b>7,304.1</b>	<b>2,150.4</b>	<b>1,288.4</b>	<b>3,865.2</b>	<b>34,787.1</b>

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## **Estimating Potential Rural Housing and Employment Clark County, Washington**

The Rural Vacant Buildable Land Model (Rural VBLM) estimates the number of houses and jobs on lands outside of the Urban Growth Area. Rural lands and rural development behave differently than urban development. These differences are significant enough to require a new VBLM classification method. This document describes the Rural VBLM.

The Rural VBLM works very similar to the Urban VBLM. The primary input is a proposed land use layer. This layer is used to classify lands into the 3 VBLM land use categories: Residential, Commercial, or Industrial. The Assessor's database is used to classify the parcels into VBLM classifications: Vacant, Built, Underutilized, Excluded) based on the property type, ownership, and size. The Residential Rural VBLM differs most substantially from the Urban VBLM.

### **Rural VBLM Land Uses**

Land use designations from the comprehensive plan or proposed zoning plan are categorized into the three land use models.

- Residential – rural, rural center residential, urban reserve, agriculture, and forest land use designations
- Commercial – commercial land use designations
- Industrial – industrial land use designations

### **Residential VBLM Classifications**

Property with a proposed land use of Residential are subdivided into the following VBLM categories based on information from the Assessor's database.

- Built
  - Parcel has existing housing units
  - Parcel is too small to be further divided based on minimum lot size requirements
- Vacant
  - No existing housing units
  - May contain outbuildings
- Underutilized
  - Parcel has existing housing units
  - Parcel is large enough to be further divided based on minimum lot size requirements
- Excluded
  - Forest zoned lands in the Current Use program (Timber or Designated Forest Land (DFL))
  - Remainder lots of cluster developments
  - Surface mining overlay area
  - Water Areas
  - Private street or Right of Way
  - Transportation or utilities
  - Private park or recreation areas
  - Assessed as a zero value property
  - Size is less than 1 acre
  - Tax exempt
  - Mobile Home Parks

- Not a Residential land use

**Residential Planning Assumptions:**

- Housing capacity calculation:
  - One housing unit per undersized vacant parcel
  - Conforming vacant and underutilized parcels
    - Housing unit capacity is calculated by dividing the parcel acres by the minimum lot size.
    - For dividable parcels remainder lots are considered buildable if they are within 10% of the minimum lot size.
- Population Capacity calculation
  - 2.66 persons per housing unit

**Employment**

Most of the rural area is designated rural residential but there are pockets of commercial and industrial areas available for future employment. Commercial and Industrial lands use the same Rural VBLM classifications. The only difference is in the number of employees per acre

**Commercial and Industrial VBLM Classifications**

- Vacant
  - Building value less than \$67,500
- Underutilized
  - Parcels with existing buildings that have a building value per acre less than \$50,000
- Excluded
  - Surface mining overlay area
  - Water
  - Private street
  - Right of Way
  - Utilities
  - A Private park or recreation areas
  - Assessed as a zero value property
  - Tax exempt
- Built
  - Building value of \$67,500 or more
- Not Commercial or industrial

**Employment Planning Assumptions:**

- Vacant and underutilized lands receive the same number of employees per acre.
  - No reductions for constrained areas or infrastructure
  - Commercial employment
    - 20 employees per acre
  - Industrial employment
    - 9 employee per acre

Potential Housing Units and Persons in Rural Clark County								
Zone	Conforming Parcels				Undersized Parcels		Total	
	VACANT		UNDERUTILIZED		VACANT			
	Net Acres	Housing Units	Net Acres	Housing Units	Net Acres	Housing Units	Housing Units	Persons
AG-10	7,822.02	712	10,879.19	705	1,550.76	333	1,750	4,655
AG/WL	269.50	1	0.00	0	377.64	15	16	43
FR-20	1,300.50	60	641.31	16	1,143.29	225	301	801
FR-80	320.43	3	0.00	0	1,436.25	108	111	295
GLSA 40	593.23	13	96.44	1	133.02	12	26	69
GLSA 80	293.45	3	0.00	0	186.51	6	9	24
GR 10	15.71	1	41.77	2	23.48	5	8	21
GR 5	17.93	3	0.00	0	18.18	8	11	29
GSAG	131.62	5	64.19	2	10.29	1	8	21
GSFF	0.00	0	0.00	0	25.17	2	2	5
GSSA	100.39	5	157.72	5	34.00	5	15	40
GSW 20	38.44	2	39.83	1	31.73	5	8	21
GSW 40	0.00	0	0.00	0	8.32	1	1	3
R-10	5,132.96	464	4,376.89	255	1,880.69	422	1,141	3,035
R-20	761.81	35	558.94	15	420.55	73	123	327
R-5	10,548.35	1,927	9,151.32	1,074	2,746.27	1,118	4,119	10,957
RC-1	100.31	94	283.92	179	0.00	0	273	726
RC-2.5	149.57	53	179.72	40	14.57	9	102	271
Total	27,596.22	3,381	26,471.24	2,295	10,040.72	2,348	8,024	21,343

Potential Employment in Rural Clark County

Zone	VACANT		UNDERUTILIZED	
	Acres	Jobs	Acres	Jobs
CR-1	38.59	771.71	8.16	163.28
CR-2	68.60	1,372.08	46.53	930.59
IH	121.35	121.35	78.86	78.86
Total	228.54	2,265.14	133.55	1,172.73