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DATE: July 2, 2020
TO: Clark County Buildable Lands Project Advisory Committee
CC: Jose Alvarez, Clark County
FROM: Bob Parker, Becky Hewitt, and Margaret Raimann, ECONorthwest
SUBJECT: Residential Density Assumptions

Introduction

Clark County contracted with ECONorthwest and AHBL to assist in identifying and addressing needed updates to the County's Buildable Lands Methodology and prepare the 2021 Buildable Lands Report in collaboration with the Clark County Buildable Lands Team, a Buildable Lands Project Advisory Committee and other key stakeholders. The goal of the process is to ensure that the County's methodology is consistent with state law (including recent legislative changes); reasonably accurate in estimating land capacity for each Urban Growth Area and rural area; and supported by the available evidence and a broad base of stakeholders.

Issue Overview and Background

Current County Practice

VBLM Assumptions

Clark County estimates the residential capacity of developable residential land based on a single density (expressed in housing units per net developable acre) for each UGA. These assumptions do not vary by zone / general plan designation. Density assumptions in the VBLM reflect the comprehensive plan policy targets, except for Woodland and Yacolt[1], for each UGA (see Exhibit 3 on page 4 – Table 3 from the 2015 Buildable Lands Report). They are applied to net acres, after accounting for infrastructure set-asides and discounting constrained acres.

Observed Densities and Capacity Calculations in the Buildable Lands Report

The 2015 Buildable Lands Report also includes achieved densities between 2006 and 2014 by jurisdiction. The calculations include observed densities for single-family and multi-family development separately as well as combined, but the analysis aggregates data regardless of zone. The summary table (which also aggregates single-family and multi-family development) is shown in Exhibit 2 on the following page. (Note that the observed densities within the UGA areas are excluded from the comparison to policy targets—except in Vancouver—because those areas do not have urban zoning.)

Most jurisdictions did not meet their target densities in 2015. (Only Washougal met or exceeded the target.) The 2015 Buildable Lands Report calculates land need using both policy and

[1] Woodland and Yacolt do not have comprehensive plan density targets. These are used for capacity estimate purposes only.

observed densities applied to the net vacant acres from the VBLM (see Exhibit 3). The 2015 Report concludes as follows:

> *In conclusion, based on observed density and the 2015 VBLM, Battle Ground, Camas and La Center show small deficits. If residential development continues to develop at the observed densities, then this deficit might become true by 2035. It is important to note that the observed densities occurred at a period of a deep recession having a significant impact to development occurring in the housing sector. However, Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal and Clark County have adopted local development regulations that may reflect higher density development within the planning horizon.*[2]

[2] Clark County Buildable Lands Plan Monitoring Report, June 2015, pages 11-12.

Exhibit 1: Observed Density Summary Table from 2015 Buildable Lands Report

Table 8

Single- and Multi-Family Building Permits, 2006-2014

Jurisdiction		Single-Family			Multi-Family			Total		
		Units	*%SF*	*Acres*	*Units*	*%MF*	*Acres*	*Units*	Acres	Units/ Acre
Battle Ground										
	City	506	**64%**	175.1	280	**36%**	11.8	786	187	4.2
	UGA	45	**100%**	62.2	0	**0%**	0	45	62	0.7
Sub Total		551	**66%**	237.3	280	**34%**	11.8	831	249	3.3
Camas										
	City	803	**72%**	267.9	306	**28%**	20.7	1,109	289	3.8
	UGA	21	**100%**	9.3	0	**0%**	0	21	9	2.3
Sub Total		824	**73%**	277.2	306	**27%**	20.7	1,130	298	3.8
La Center										
	City	66	**100%**	34	0	**0%**	0	66	34	1.9
	UGA	7	**100%**	13.2	0	**0%**	0	7	13	0.5
Sub Total		72	**100%**	47.2	0	**0%**	0	73	47	1.5
Ridgefield										
	City	680	**99%**	130.3	4	**1%**	0.2	684	131	5.2
	UGA	5	**100%**	62	0	**0%**	0	5	62	0.1
Sub Total		685	**99%**	192.3	4	**1%**	0.2	689	193	3.6
Vancouver										
	City	1,728	**38%**	271.5	2,838	**62%**	135	4,566	406	11.2
	UGA	4,534	**79%**	1006	1,220	**21%**	51.8	5,754	1,058	5.4
Sub Total		6,262	**61%**	1277	4,058	**39%**	186.9	10,320	1,464	7
Washougal										
	City	547	**77%**	99	163	**23%**	7.9	710	107	6.6
	UGA	7	**100%**	40.4	0	**0%**	0	7	40	0.2
Sub Total		554	**77%**	139.4	163	**23%**	7.9	717	147	4.9
Yacolt										
	City	51	**100%**	15	0	**0%**	0	51	15	3.4
	UGA	0	**0%**	0	0	**0%**	0	0	0	0
Sub Total		51	**100%**	15	0	**0%**	0	51	15	3.4
Clark County Rural		1,383	**100%**	7785.8	5	**0%**	15.6	1,388	7,801	0.2
Total Cities		4,381	**55%**	992.7	3,591	**45%**	175.7	7,972	1,168	6.8
Total UGAs		4,619	**79%**	1193.1	1,220	**21%**	51.8	5,839	1,245	4.7
Grand Total		9,000	**65%**	2185.8	4,811	**35%**	227.5	13,811	2,413	5.7

Source: Clark County Community Planning,

Exhibit 2: Capacity Calculations from 2015 Buildable Lands Report

Table 3
2035 Urban Growth Residential Land Need

Jurisdiction	2015 Population	Remaining Population for planning horizion 2035	Residential units needed	Assumed units per net	Residential acres needed	Deficit	Surplus	2015 Vacant Buildable Land Inventory
Battle Ground	20,871	15,972	5,169	6	862		208	1,070
Camas	22,843	11,255	3,868	6	645		248	892
La Center	3,209	3,233	1,089	4	272		101	373
Ridgefield	6,575	13,087	4,377	6	729		280	1,009
Vancouver	315,460	52,786	21,723	8	2,715		907	3,622
Washougal	15,932	6,023	2,247	6	375		102	477
Woodland	89	229	83	4	21		5	25
Yacolt	1,661	303	88	4	22		22	44
Total	**386,640**	**102,890**	**38,643**		**5,640**			**7,513**

Source: Clark County Community Planning. Note: Land needs are based on the VBLM2015 model using net acres.

Table 4
2035 Urban Growth Residential Land Need Based on Observed Density

Jurisdiction	2015 Population	Remaining Population for planning horizon 2035	Residential units needed	Observed units per acre	Residential acres needed	Deficit	Surplus	2015 Vacant Buildable Land inventory
Battle Ground	20,871	15,972	5,169	4.2	1,231	**-161**		1,070
Camas	22,843	11,255	3,868	3.8	1,018	**-125**		892
La Center	3,209	3,233	1,089	1.9	573	**-200**		373
Ridgefield	6,575	13,087	4,377	5.2	842		168	1,009
Vancouver	315,460	52,786	21,723	7	3,103		519	3,622
Washougal	15,932	6,023	2,247	6.6	341		136	477
Woodland	89	229	83	4	21		5	25
Yacolt	1,661	303	88	3.4	26		18	44
Total	**386,640**	**102,890**	**38,643**		**7,154**			**7,513**

Source: Clark County Community Planning. Note: Land needs are based on the VBLM 2015 model using net acres. Observed densities are based on actual development in urban areas. City densities are within city limits, except for Vancouver which uses full UGA density. Residential units needed is based on person per household from the 2013 ACS data. Additional population not included in the vacant land model is 15,224 persons; bringing the 2035 estimate to 118,114.

Residential Zoning

Most residential zones in the County specify a maximum density; some also specify a minimum density, though most do not. (See Appendix A for details.)

State Guidance

RCW 36.70A.215(3) includes the following requirements (emphasis added):

> *(3) At a minimum, the evaluation component of the program required by subsection (1) of this section shall:*
>
> *…*
>
> *(b) An evaluation and identification of land suitable for development or redevelopment shall include:*
>
> *(i)* ***A review and evaluation of the land use designation and zoning/development regulations****; environmental regulations (such as tree retention, stormwater, or critical area regulations) impacting development; and other regulations* ***that could prevent assigned densities from being achieved****;*
>
> *…*
>
> *(c) Provide an analysis of county and/or city development assumptions, targets, and objectives contained in the countywide planning policies and the county and city comprehensive plans when growth targets and assumptions are not being achieved. It is not appropriate to make a finding that assumed growth contained in the countywide planning policies and the county or city comprehensive plan will occur at the end of the current comprehensive planning twenty-year planning cycle without rationale;*
>
> *(d)* ***Determine the actual density of housing that has been constructed*** *and the actual amount of land developed for commercial and industrial uses within the urban growth area since the adoption of a comprehensive plan under this chapter or since the last periodic evaluation as required by subsection (1) of this section; and*
>
> *(e)* ***Based on the actual density of development as determined under (b) of this subsection, review*** *commercial, industrial, and* ***housing needs by type and density range to determine the amount of land needed for*** *commercial, industrial, and* ***housing*** *for the remaining portion of the twenty-year planning period used in the most recently adopted comprehensive plan.*

It further states that "zoned capacity of land alone is not a sufficient standard to deem land suitable for development or redevelopment within the 20-year period." (RCW 36.70A.215(3)

The Guidelines reinforce and clarify these regulations as follows (emphasis added):

> ***In addition to being a Review & Evaluation Program requirement to evaluate whether planned densities are being achieved, achieved density data serve as the basis for capacity projections on land suitable for development and***

> ***redevelopment and must be used to determine urban capacity for the remaining portion of the 20-year planning period.***[3]
>
> *Jurisdictions typically analyze the achieved densities of development projects during the evaluation period and create an average achieved density per zoning category based on the actual development data.*[4]
>
> *RCW 36.70A.215(3)(b)(i) provides that a review and evaluation of the land use designation and zoning/development regulations and infrastructure gaps are part of the evaluation criteria to determine if there is sufficient land suitable to accommodate county-wide population projections.* ***The goal is to understand if and how development regulations*** *or infrastructure gaps* ***may affect density*** *or timing of growth.* [5]
>
> …
>
> *It [RCW 36.70A.215(3)(a)] also states that zoned capacity of land alone is not a sufficient standard to deem land suitable for development or redevelopment within the 20-year period. This requirement places an expectation on jurisdictions to not just assume properties will develop to their maximum densities allowed under their zoning designations, but to conduct additional analysis related to how development and redevelopment might occur to support urban capacity findings. …*
>
> *With vacant land at lower densities, lot sizes based on zoning may be used to estimate capacity. These calculations generally result in capacity estimates that are near zoned capacity. Estimating future development capacities for higher density development and redevelopment generally requires more analysis since many other factors, such as vertical construction costs, impact whether or not areas zoned for higher densities will develop at the intensities that have been planned.*[6]

Taken together, the state laws and guidelines strongly suggest that achieved density should be the basis for capacity projections, and that it is important to consider zoning in evaluating achieved density and estimating capacity.

[3] Department of Commerce, *Buildable Lands Guidelines* (2018), page 34.

[4] Department of Commerce, *Buildable Lands Guidelines* (2018), page 24.

[5] Department of Commerce, *Buildable Lands Guidelines* (2018), page 30.

[6] Department of Commerce, *Buildable Lands Guidelines* (2018), page 33.

How Addressed in Other Buildable Lands Counties

Pierce County

Residential density assumptions vary by jurisdiction and zoning district. Jurisdictions establish their density assumptions upon past trends and recent regulatory modifications. Some jurisdictions also use density assumptions as defined in the local comprehensive plan. Achieved densities are compared to the urban densities defined in the Pierce County Comprehensive Plan (at least 4 units per acre). Reasonable measures are considered when a jurisdictions does not meet the adopted housing targets (2030 targets in the 2014 report).

Snohomish County

Snohomish County uses observed residential densities by adopted zoning and plan designations to set density assumptions, except where specific planned projects are known. Reasonable measures may be required if a jurisdiction's achieved density does not meet planned densities (defined in either the local comprehensive plan or in the Countywide Planning Policies) or if the capacity results show the jurisdiction is not meeting the adopted population growth target (2025 targets in the 2012 report).

Thurston County

Thurston County's model includes a residential density estimate for each zoning district. This estimate is developed based on the range of allowable densities, the actual densities being achieved in each zoning district, and calibration against proposed development projects. There are exceptions for known development projects and platted lots. Land is subtracted from partially-used properties to account for retention of the existing home prior to calculating density. Jurisdictions must meet urban densities of at least 4 dwelling units per net acre, as defined by the Thurston County Comprehensive Plan. Reasonable measures may be required if a jurisdiction did not achieve this density target or if a jurisdiction's capacity results do not meet population targets (2035 targets in the 2014 report).

Options for Updates

The current methodology should be updated to better align with the recommended approaches in the Guidelines because it largely overlooks the impact of zoning on capacity going forward, including differences in how remaining vacant land is zoned and changes to zoning regulations over time. Below are two options that the County could use to better account for how zoning influences future capacity.

Note that with either option the County will continue to calculate observed density for each UGA overall to compare to the density targets set in Comprehensive Plan policy. (However, staff has raised a question as to whether the options below would require changes to the density targets set in Comprehensive Plan policy to align with the observed density assumptions.) The difference in the approaches relates to how capacity is estimated in the VBLM.

Option 1: Use Observed Density by Zone to Estimate Capacity

It would be more in line with state guidance and current practice in other Buildable Lands counties to use observed densities by zone rather than in aggregate to estimate capacity. The trade-offs associated with this approach are summarized below.

Advantages

- Allows for more refined capacity estimates that better reflect changing regulations and development trends.
- Provides a more accurate way to evaluate whether jurisdictions are likely to meet their density targets in advance.
- Allows for adjustments to assumptions for a specific zone if regulations change in ways that are likely to affect density going forward.
- Provides better information on remaining capacity in interim years based on which land has been developed and which remains vacant.
- Makes capacity estimates more useful for other planning purposes (e.g. transportation and infrastructure planning).

Disadvantages

- There may be little or no historical data in some zones due to limited development activity or new zoning designations.
- The County does not currently have data on observed densities by zone.
- Would require making assumptions for areas in UGAs that do not yet have urban zoning.
- Would create challenges for interim year model runs if new zoning designations are introduced.

- Fundamentally changes how the model is run from comprehensive plan designations to zoning.
- Introduces additional complexity to the model.

Option 2: Use Observed Density by Comprehensive Plan Designation to Estimate Capacity

An alternative that would require fewer changes to current practice would be to use observed densities at the comprehensive plan designation level to estimate capacity going forward. The County could complement this with collecting data on observed density by zone and also reporting net vacant acres by zone.

Advantages

- Provides better information about whether jurisdictions are likely to meet their density targets in advance.
- If the County determines that comprehensive plan policy changes are needed to align with this approach, it would require setting density targets only for one or two comprehensive plan designations for each jurisdiction, rather than for each zone.
- Provides time for the County to collect data on observed densities by zone.
- Does not require major changes to the way the model is run.

Disadvantages

- Capacity estimates in interim years will not reflect which land has been developed (as is the case today).
- Compared to using zoning, this will offer less spatial accuracy for anticipated densities and would be harder to adjust based on recent changes to zoning regulations that may not be reflected in observed trends.

Preliminary Recommendation

Staff recommends Option 2 for this update to the Buildable Lands Report.

Appendices

Appendix A. Residential Zones and Density Standards for Clark County Jurisdictions

Appendix A: Residential Zones and Density Standards for Clark County Jurisdictions

Jurisdiction	Zone	Min. Density	Max. Density (Gross)	Max. Density (Net)	Notes
Battle Ground	Mixed Use - Employment (MU-E)	N/A	22	N/A	Mixed Use Employment allows up to 25% residential
	Mixed Use - Residential (MU-R)	10	22	30.4	Mixed use residential allows up to 25% employment
	Residential 10 units/acre (R10)	5	10	13.8	
	Residential 12 units/acre (R12)	6	12	16.6	
	Residential 16 units/acre (R16)	8	16	22.1	
	Residential 20 units/acre (R20)	10	20	27.7	
	Residential 3 units/acre (R3)	N/A	3	4.1	
	Residential 5 units/acre (R5)	N/A	5	6.9	
	Residential 7 units/acre (R7)	N/A	7	9.7	
Camas	Multifamily Residential-10 (MF-10)	6	N/A	10	
	Multifamily Residential-18 (R-18)	6	N/A	18	
	Mixed Use (MX)	N/A	N/A	24	
	Residential-10,000 (R-10)	3.1	N/A	4.3	
	Residential-12 (R-12)	2.4	N/A	3.6	
	Residential-15,000 (R-15)	1.8	N/A	2.9	
	Residential-6,000 (R-6)	4.8	N/A	7.2	
	Residential-7,500 (R-7.5)	5.8	N/A	5.8	
La Center	Downtown Commercial (C-1)	N/A	N/A	22	
	Low Density Residential (LDR-7.5)	4	N/A	5.8	
	Medium Density Residential (MDR-16)	8	N/A	14	
	Residential/Professional (RP)	4	N/A	22	
Ridgefield	Commercial Community Business (CCB)	8	N/A	28	Ridgefield Mixed Use Overlay - only applies to those properties with the overlay. Minimum 35% residential and maximum of 60%
	Central Mixed Use (CMU)	8	N/A	16	
	Commercial Neighborhood Business (CNB)*	8	N/A	28	Ridgefield Mixed Use Overlay - only applies to those properties with the overlay. Minimum 35% residential and maximum of 60%
	Commercial Regional Business (CRB)	8	N/A	28	Ridgefield Mixed Use Overlay - only applies to those properties with the overlay. Minimum 35% residential and maximum of 60%
	Employment (E)	10	N/A	16	Minimum of 20% residential and maximum of 35% residential
	Residential Low Density - 4 (RLD-4)	4	N/A	4	
	Residential Low Density - 6 (RLD-6)	4	N/A	6	
	Residential Low Density - 8 (RLD-8)	6	N/A	8	
	Residential Medium Density (RMD-16)	8	N/A	16	
Vancouver	Mixed Use (MX)	12	N/A	N/A	
	Higher Density Residential (R-18)	12	N/A	18	
	Low Density Residential-2du/ac (R-2)	1.8	N/A	2.2	
	Higher Density Residential (R-22)	18.1	N/A	22	
	Higher Density Residential (R-30)	22.1	N/A	30	
	Higher Density Residential-35du/ac (R-35)	30.1	N/A	35	
	Low Density Residential-4du/ac (R-4)	2.3	N/A	4.4	
	Low Density Residential-6du/ac (R-6)	4.5	N/A	5.8	
	Low Density Residential-9du/ac (R-9)	5.9	N/A	8.7	
	Waterfront Mixed Use (WX)	10	N/A	N/A	
Clark County (Vancouver UGA)	Mixed Use (MX)	12	43	N/A	Minimum of 20% of site shall be nonresidential and a minimum of 20% of the development shall be residential.
	Office Residential-15 (OR-15)	8	15	N/A	
	Office Residential-18 (OR-18)	12	18	N/A	
	Office Residential-22 (OR-22)	15	22	N/A	
	Office Residential-30 (OR-30)	18	30	N/A	
	Office Residential-43 (OR-43)	22	43	N/A	
	Residential (R-12)	8	12	N/A	
	Residential (R-18)	12	18	N/A	
	Residential (R-22)	15	22	N/A	
	Residential (R-30)	18	30	N/A	
	Residential (R-43)	20	43	N/A	
	Single Family Residential (R1-10)	2.9	N/A	4.4	
	Single Family Residential (R1-20)	1.4	N/A	2.2	
	Single Family Residential (R1-5)	6.2	N/A	8.7	
	Single Family Residential (R1-6)	5.1	N/A	7.3	
	Single-family Residential (R1-7.5)	4.1	N/A	5.8	
Washougal	Multiple-family Residential (AR-16)	N/A	16	N/A	
	Multiple-family Residential (AR-22)	N/A	22	N/A	
	Single Family Residential (R1-10)	N/A	4.3	N/A	
	Single-family Residential (R1-15)	N/A	2.9	N/A	
	Single-family Residential (R1-5)	N/A	8.7	N/A	
	Single Family Residential (R1-7.5)	N/A	5.8	N/A	
Woodland	LDR-6	N/A	N/A	7.26	
Yacolt	Single-family Residential (R1-12.5)	N/A	N/A	3.48	