Kimley»Horn

MEMORANDUM

To: Chad Bala
Kittitas County
From: Clay White and Joel Farias
Kimley-Horn and Associates, Inc.
Date: May 26, 2025
Subject: DRAFT Land Capacity Analysis Memorandum

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INTRODUCTION AND INITIAL FINDINGS

The County of Kittitas (County) contracted Kimley-Horn and Associates, Inc. (Kimley-Horn) to prepare a Land Capacity Analysis (LCA) consistent with the Growth Management Act (GMA) requirements in RCW 36.70A.115 and WAC 365-196-325. The LCA was prepared using the adopted methodology developed by Kittitas County. The LCA reviews existing capacity for population, housing, and employment in the County limits. **Table 1** shows the initial findings of the LCA under existing conditions. **Overall, the County showed sufficient total capacity for housing, jobs, and population allocations.** The following methodology walks through each step of the analysis.

Table 1: Initial Findings Summary

Subject	Findings
Housing Growth Projection	1,728 dwelling units
Housing Capacity (inc. pipeline)	5,128 dwelling units
Housing Surplus	**3,400 dwelling units**
Employment Growth Projection	1,555 jobs
Employment Capacity	3,473 jobs
Employment Surplus	**1,917 jobs**

Table 2 breaks down housing unit capacity by UGA and affordability. As seen in the table, capacity for the allocated housing types is sufficient for all zones except the Rural 3 Zoning District in S Cle Elum UGA. The land capacity analysis allocated 6 affordable housing units in the 0% to 80% AMI range, but existing projections only indicate capacity for 1 unit in this range. This is a capacity deficit of 5 units. Though capacity as a whole is sufficient, housing affordability may necessitate land use decisions to provide right-sized housing for the S Cle Elum UGA.

Table 2: Residential Capacity By Affordability

	Housing types	UGA	Zones	% serving AMI	Allocation	Capacity	Surplus (deficit)
0-80% AMI	Apartments, ADUs, Duplexes, Triplexes, most Manufactured/ Mobile/Modular home	Ellensburg UGA	Residential	20%	266	132	**631**
			Urban Residential	40%		765	
		Cle Elum UGA	Rural 3	20%	6	13	**9**
			Ag 3	20%		2	
		Kittitas UGA	Urban Residential	40%	6	11	**5**
		S Cle Elum UGA	Rural 3	20%	6	1	**(5)**
>80% AMI	Detached Single Family, some manufactured	Ellensburg UGA	Residential	80%	27	527	**1,647**
			Urban Residential	60%		1148	
		Cle Elum UGA	Rural 3	80%	0	53	**60**
			Ag 3	80%		7	
		Kittitas UGA	Urban Residential	60%	0	16	**16**
		S Cle Elum UGA	Rural 3	80%	0	3	**3**
50-80% AMI	Duplexes, ADUs	Unincorporated Rural County	All rural zones	10%	156	247	**91**
>80% AMI	Detached single family		All rural zones	90%	1,267	2,227	**960**

METHODOLOGY

As part of the Kittitas County's Comprehensive Plan Periodic Review and update, an analysis of housing, population, and employment land capacity is required. This analysis is conducted utilizing the methodology adopted by Kittitas County and the Housing for All Planning Tool (HAPT) developed by the Washington State Department of Commerce to calculate capacity by Area Median Income. The objective is to determine whether Kittitas County possesses sufficient land densities and buildable lands to accommodate planned growth out to 2046.

BASELINE (Steps 1-2)

Step 1: Determine the base point in time.

The first step in the methodology is to determine the point in time at which land capacity will be analyzed. For the purposes of this analysis, land use or zoning changes that occur after December 31st, 2024 is not considered within the LCA.

Step 2: Define the study area boundaries.

Define the spatial boundary that each jurisdiction will analyze as part of the LCA. This analysis includes all lands beyond incorporated city limits, which includes urban growth areas.

DATA COLLECTION AND CALCULATING GROSS DEVELOPABLE LAND INVENTORY (Steps 3-8)

Step 3: Parcel Data

County Assessor parcel data provides important information pertinent to the LCA. Information such as land value, improvement value, zoning designation, lot size, parcel number, legal description, owner data, and tax exemption status

are relevant to this analysis. Additionally, state use codes, legal descriptions, and aerial imagery were used. The following properties were removed from further analysis:

Step 4: Pipeline Development. Any development that has occurred between 2020 and 2025 was identified as "capacity" and the underlying parcels should be removed from the LCA.

Step 5: Easements and Tracts, as it is unlikely for structures to be built over an existing tract or easement.

Step 6: Publicly owned and tax-exempt properties, as they are unlikely to be developed for housing within the planning period and should be excluded from the available land supply.

Step 7: Other context-specific lands unlikely to redevelop, including condos and gas stations.

Step 8: Critical Areas including slopes, streams, wetlands, floodways, and critical area buffers, as they create undevelopable conditions.

Result: Gross Developable Land by Zone (Steps 1-8)

As seen in the table below, about 1/3 of all land was removed from gross parcel area to find gross developable land

Table 3: Gross Developable Land By Zone

Zone	Gross LCA Parcel area (acres)	Gross Developable Land (acres)
Residential	225.34	159.62
Residential 2	9.03	3.40
Urban Residential	1012.09	643.75
Rural 3	378.96	279.04
Ag 3	47.07	42.33
Rural 5	3891.18	2308.48
R-R	775.05	531.19
Ag 5	4000.58	2965.52
PUD	134.87	96.76
MPR	2037.55	1234.18
Limited Commercial	4.39	2.39
Highway Commercial	78.62	44.08
Gen Commercial	107.58	94.26
Light Industrial	227.50	186.10
Gen Industrial	140.63	108.61
Total	**13070.45**	**8699.70**

Step 9: Analysis Parcels

The next section uses the Gross Developable Land of each Analysis Parcel to categorize them into four LCA types. All parcels which were categorized as unlikely to develop in Steps 4-7 were removed from each zone. Step 8 removed critical areas from parcels.

LCA TYPES (Steps 10-14)

Step 10: Vacant Parcels (All zones)

These include parcels of land that contain no structures or have buildings with low assessed value (an improvement value of less than $10,000). Vacant parcels have the lowest base market factor because they have the highest likelihood of developing during the planning period.

Step 11: Partially used Parcels (Rural and Single-Family Zones)

These include parcels occupied by an existing use but include enough land to be further subdivided for additional development without rezoning. Partially used parcels have a scaling market factor depending on the existing lot size and density.

Step 12: Under-utilized Parcels (Multifamily, Mixed-Use, Commercial, and Industrial Zones)

Underutilized parcels are likely to redevelop to a more intensive land use than that which currently occupies the property, either due to market forces or because applicable zoning allows a more intensive use than the current development. Examples include a single-family home on property in a multifamily zone, a multifamily residential property developed at a lower density below than allowed by the applicable zone, or a property with relatively low improvement value compared to the value of the land.

Step 13: Fully Developed Parcels

These are parcels which do not fit into either Pipeline, Vacant, Partially used, Under-utilized, or Undevelopable categories. These parcels will not be used for this analysis as they are assumed to have no capacity for additional development under current zoning regulations.

Step 14: LCA Parcel Summary

Table 3 below summarizes developable area of each LCA type by zone.

Table 4: Gross Developable Area by LCA Type

Zone	Vacant (UGA)	Vacant (Rural)	Partially used	Under-utilized
Residential	50.23	69.89	39.50	0
Residential 2	0	3.40	0	0
Urban Residential	174.78	0	468.98	0
Rural 3	269.57	0	9.47	0
Ag 3	40.13	2.20	0	0
Rural 5	0	1117.63	1190.85	0
R-R	0	268.91	262.28	0
Ag 5		643.89	2321.64	0
PUD	23.71	73.05	0	0
MPR	0	1234.18	0	0
Limited Commercial	0.00	0	0.00	2.39
Highway Commercial	9.50	6.31	0	28.27
Gen Commercial	0.66	51.30	0	42.30
Light Industrial	118.92	0	0	67.17
Gen Industrial	99.87	0	0	8.74
Total	**787.36**	**3470.76**	**4292.71**	**148.87**

DEDUCTIONS AND MARKET FACTORS (Steps 15-18)

This analysis assumes that a portion of the remaining developable land supply may remain unavailable for development during the planning period due to site conditions, economic factors, or unwillingness to develop or sell on the part of the property owner. The following are deduction types used in this analysis:

Step 15: Vacant Parcel Deduction (10-15%)

Step 16: Partially Used Parcel Deduction (25%)

Step 17: Under-Utilized Parcel Deduction (25%)

Step 18: Infrastructure Deduction (15%)

New development generally requires new infrastructure improvements (roads, utilities, landscaping, open space, etc.). These improvements occupy land, reducing the acreage available for housing development. The amount of the deduction for infrastructure can vary by location and development status. For example, redevelopable land and infill vacant lots in urban areas may already be partially or fully served by existing infrastructure and may require a smaller deduction than greenfield areas. Below is a table summarizing the deductions of each parcel type in this analysis.

Table 5: Parcel Type Deductions

Deduction Type	Deduction
Vacant (UGA)	10%
Vacant (Rural)	15%
Partially used	25%
Under-utilized	25%
Infrastructure Deduction	15%

Step 19: Net Developable Area

Net Developable Area is the remaining developable area after applying the LCA parcel type deduction and the Infrastructure deduction.

Table 6: Net Developable Area

Zone	LCA Type	Developable Area (acres)	LCA Parcel deduction	Infrastructure Deduction	Net Developable Area (acres)
Residential	Vacant (UGA)	50.23	10%	15%	**114.10**
	Vacant (Rural)	69.89	15%		
	Partially used	39.50	25%		
Residential 2	Vacant (Rural)	3.40	15%	15%	**2.45**
	Partially used	0	25%		
Urban Residential	Vacant (UGA)	174.78	10%	15%	**432.68**
	Partially used	468.98	25%		
Rural 3	Vacant (UGA)	269.57	10%	15%	**212.26**
	Partially used	9.47	25%		
Ag 3	Vacant (UGA)	40.13	10%	15%	**32.29**
	Vacant (Rural)	2.20	15%		
	Partially used	0	25%		
Rural 5	Vacant (Rural)	1117.63	15%	15%	**1566.65**
	Partially used	1190.85	25%		
R-R	Vacant (Rural)	268.91	15%	15%	**361.49**
	Partially used	262.28	25%		
Ag 5	Vacant (Rural)	643.89	15%	15%	**1945.25**
	Partially used	2321.64	25%		
PUD	Vacant (UGA)	23.71	10%	15%	**70.92**
	Vacant (Rural)	73.05	15%		
	Partially used	0	25%		
MPR	Vacant (Rural)	1234.18	15%	15%	**891.69**
	Partially used	0.00	25%		
Light Commercial	Vacant (Rural)	0.00	15%	15%	**1.52**
	Under-utilized	2.39	25%		
Highway Com	Vacant (UGA)	9.50	10%	15%	**29.85**
	Vacant (Rural)	6.31	15%		
	Under-utilized	28.27	25%		

Gen Commercial	Vacant (UGA)	0.66	10%	15%	**64.53**
	Vacant (Rural)	51.30	15%		
	Under-utilized	42.30	25%		
Light Industrial	Vacant (UGA)	118.92	10%	15%	**133.80**
	Under-utilized	67.17	25%		
Gen Industrial	Vacant (UGA)	99.87	10%	15%	**81.97**
	Under-utilized	8.74	25%		

HOUSING AND EMPLOYMENT CAPACITY (Steps 20-27)

Step 20: Assumed Density For Zones Allowing Residential Development

Assumed residential densities were assigned to each zone that allows residential development.

The LCA is a forward-looking analysis. Jurisdictions should focus on the level of development expected to occur during the planning period. Assumed densities for use in the LCA consider:

- The maximum and minimum densities allowed under current zoning,
- Historically achieved residential densities,
- Any factors which may cause trends to change in the future.

The 2012 Commerce UGA Guidebook and WAC Sections 365-196-210(6), 365-196-310(4)(b)(ii)(E) and 365-196-325(2) establish guidance on the factors that should be considered when establishing growth and density assumptions for a land capacity analysis.

Step 21: Gross Residential Capacity

Housing capacity by zone was calculated using the Assumed Density of each zone which multiplies the Net Developable Area of each zone by assumed dwelling unit density. This provides the amount of units each zone is assumed to be able to accommodate.

Step 22: Net Residential Capacity

To calculate net residential capacity by zone, add pipeline units and subtract existing units from Partially Used and Under-Utilized parcels per zone to get Net Residential Capacity by zone.

Table 7: Net Residential Capacity by Zone

Zone	Net Developable Area (acres)	Assumed Density (du/ac)	Gross Residential Capacity (du)	Pipeline Units (du)	Existing units on lot (du)	Net Residential Capacity (du)
Residential	114.10	5	570.50	50	33	**587**
Residential 2	2.45	5	12.27	4	0	**16**
Urban Residential	432.68	5	2163.39	7	224	**1,946**
Rural 3	212.26	0.25	53.06	0	1	**52**
Ag 3	32.29	0.25	8.07	0	0	**8**
Rural 5	1566.65	0.15	235.00	152	37	**350**
R-R	361.49	0.15	54.22	89	5	**138**
Ag 5	1945.25	0.15	291.79	189	70	**411**
PUD	70.92	0.15	10.64	167	0	**178**
MPR	891.69	0.15	133.75	570	0	**704**
Ag 20	**NOT STUDIED FOR GROWTH CAPACITY**			288	0	**288**
HTC				2	0	**2**
Forest and Range				381	0	**381**
Commercial Forest				6	0	**6**

Zone	Net Developable Area (acres)	Assumed Density (du/ac)	Gross Residential Capacity (du)	Pipeline Units (du)	Existing units on lot (du)	Net Residential Capacity (du)
Commercial Ag				60	0	**60**
Total						**5,128**

Step 23: Calculate Net Commercial and Industrial Floor Area

Use existing floor-area-ratio (FAR) in zones allowing commercial and industrial zones to determine total commercial and industrial floor area by zone in square feet.

Step 24: Assumed Employment Density

Use commercial and industrial employment density assumptions to calculate employment capacity. Assumed densities can be adjusted using local knowledge and analysis. Ranges of assumed employment densities have been provided.

Step 25: Net Employment Capacity

Calculate net employment capacity by zone using the Assumed Employment Density of each zone and the net commercial and industrial floor area of each zone. The assumed FAR came from the previous Kittitas County LCA developed in 2018.

Table 8: Net Employment Capacity

Zone	Net Developable Area (acres)	Assumed FAR	Floor Area	Apply 95% Occupancy Rate	Assumed Employment Density (sf/job)	Net Employment Capacity
Light Commercial	1.52	0.25	16,579	15,750	500	31
Highway Commercial	29.85	0.25	325,081	308,827	500	618
Gen Commercial	64.53	0.25	702,780	667,641	500	1,335
Light Industrial	133.80	0.15	874,240	830,528	900	923
Gen Industrial	81.97	0.15	535,601	508,821	900	565
Totals	**312**		**2,454,281**	**2,331,567**		**3,473**

Step 26: Net Population Capacity

This step uses US Census Bureau housing occupancy data and average amount of people per household. A portion of new homes may not be occupied year-round due to vacation and seasonal-uses, and these homes should not be used as population capacity.

Table 9: Housing Occupancy Data

Occupancy Type	Number of Units
Total housing units	24,326
Total vacant	4,725
For seasonal use	3,172
Vacant, non-seasonal	1,553

Source: US Census Bureau, American Community Survey, 5-Year Data Profiles, 2019-2023, Tables B25004 and S2501.

Table 10: Net Population Capacity

Net Residential Capacity	Vacancy Rate	Seasonal/ Vacation home rate	Average person per household (S1101)	Population Capacity
5,128	6.4%	13.0%	2.19	**9,142**

Step 27: Compare Capacity to Allocated growth

The final step of this analysis is to calculate the projected surplus or deficit for housing, population, and employment. The table below summarizes the results, showing a housing surplus of 3,400, a population surplus of 1,862, and an employment surplus of 1,917.

Table 11: Growth Percentage Comparison

Residential Growth Projections			
Study Area	Allocation	Capacity	Surplus/(Deficit)
Ellensburg UGA	293	2,623	2,330
Cle Elum UGA	6	9	3
Kittitas UGA	6	27	21
Unincorporated Rural	1,423	2,470	1,047
Total	**1,728**	**5,128**	**3,400**
Population Growth Projections			
	Projection	Capacity	Surplus/(Deficit)
All Unincorporated Lands	7,280	9,142	**1,862**
Employment Growth Projections			
	Projection	Capacity	Surplus/(Deficit)
All Unincorporated Lands	1,555	3,473	**1,917**

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APPENDIX

Screenshots from Kimley-Horns parcels analysis.

1. Gross Developable Land by Zone

Zone	Gross LCA Parcel area (acres)	Gross Developable Land (acres)
Residential	225.34	159.62
Residential 2	9.03	3.40
Urban Residential	1012.09	643.75
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Light Industrial	227.50	186.10
Gen Industrial	140.63	108.61
Total	**13070.45**	**8699.70**

2. Gross Developable Area by LCA Type

Zone	Vacant (UGA)	Vacant (Rural)	Partially used	Under-utilized
Residential	50.23	69.89	39.50	0
Residential 2	0	3.40	0	0
Urban Residential	174.78	0	468.98	0
Rural 3	269.57	0	9.47	0
Ag 3	40.13	2.20	0	0
Rural 5	0	1117.63	1190.85	0
R-R	0	268.91	262.28	0
Ag 5		643.89	2321.64	0
PUD	23.71	73.05	0	0
MPR	0	1234.18	0	0
Limited Commercial	0.00	0	0.00	2.39
Highway Commercial	9.50	6.31	0	28.27
Gen Commercial	0.66	51.30	0	42.30
Light Industrial	118.92	0	0	67.17
Gen Industrial	99.87	0	0	8.74
Total	**787.36**	**3470.76**	**4292.71**	**148.87**

4. Net Residential Capacity

Zone	Net Developable Area (acres)	Assumed Density (du/ac)	Gross Residential Capacity (du)	Pipeline Units (du)	Existing units on lot (du)	Net Residential Capacity (du)
Residential	114.10	5	570.50	50	33	**587**
Residential 2	2.45	5	12.27	4	0	**16**
Urban Residential	432.68	5	2163.39	7	224	**1,946**
Rural 3	212.26	0.33	70.04	0	1	**69**
Ag 3	32.29	0.33	10.66	0	0	**11**
Rural 5	1566.65	0.15	235.00	152	37	**350**
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Commercial Forest				6	0	**6**
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2023 ACS 5-Year Estimates (B25004 and S2501)	
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