Appendix C: Land Capacity Analysis

Residential Land Capacity Analysis

Table 1 Gross Residential Lands by Zone

*Zoned areas only include parcel areas, no Rights of Ways were included

**Clyde Hill has one Residential Zone, the R1 zone.

***Vacant land includes G-1 vacant land as well. The city of Clyde Hill operates one affordable housing rental on government land.

Total City Zoned area*	**Residential Zones****	**Total AC (not including ROW/Public land)**	**Gross Lands (ac)*****	
542.47	**R1 (Low Density Residential)**	489.889	Vacant	9.67
			Partially Utilized	282.389
			Under Utilized	89.08
			Developed and Pipeline	108.75

Table 2 Net Residential Land Capacity

Residential Zones	Critical Areas Deduction Factor*	Gross Lands Remaining after Critical Areas*		Market Factor Deduction	Gross Lands Remaining after Market Factor Deduction	Net Developable Lands**	Assumed Density	Gross Residential Capacity (units)
R1 (Low Density Residential)	0.76%	Vacant	9.60	15%	8.16	306.73	3	920
		Partially Utilized	280.23	25%	210.17			
		Under Utilized	88.40	0%	88.40			
		Developed	NA***	NA***	NA***			

*The City of Clyde Hill has no designated critical areas. A critical area reduction distributes the 3.745 acres of open water within the city between all areas of the City.

**Bellevue's water and sewer consumption forecasts do not anticipate significant changes to Clyde Hill land uses or consumer behavior. The existing system, with planned maintenance and improvements, can provide high levels of service to the City of Clyde Hill. Thus, there is no infrastructure or Land Availability deduction factor.

Table 3 Net Total Residential Capacity

Zone	Assumed Density		Net Developable Acres per Zone	Net Residential Capacity on Developable Parcels (vacant, partial, under lands)	Existing Housing units on Vacant, Partial, or Under developed lands	Net Residential Capacity Remaining
RL (Low Density Residential)	3*	DU/AC	306.73	920	773	147

*Please see Table 11 for the Assumed Density Methodology

Table 4 Accessory Dwelling Unit (ADU) Capacity

Zone	Estimated Lots Eligible for ADU	Estimated Rate of Production	Eligible Lot ADU Participation Deduction**	
RL	596*	1 ADU per year X 20 years = 20 ADUs by 2044	119	**20 ADUs by 2044 Anticipated**

*Estimated total lots are those lots with less than 20% lot coverage and have sufficient square footage to build the largest unattached ADU possible (1200 square feet per zoning code).

** It is realistic to assume a lower rate of ADU production. Clyde Hill is small and has a much higher AMI than many jurisdictions nearby. There is an inherent value and connection to open space on private properties – Clyde Hill residents value open space, privacy, and large lots. A 20% participation rate is anticipated Additionally, it is assumed only 1 ADU per lot will likely be developed.

Table 5 Total Residential Capacity

Zone	Net Developable Lands (AC)	Assumed planned Density (units/ac)	Gross Residential Capacity	Existing Housing on Lands (units)	Net Residential Capacity (units)	Anticipated 20-year ADU Production (all zones)*	Total Residential Capacity	Assigned Zone Category
R1	306.73	3	920	773	147	**20**	**167 units**	Low Density

* 80% lots assumed unavailable in terms of participation and interest. ADU Eligible Lots indicates properties that are suited for ADU development and can likely meet the current zoning code requirements.

Table 6 Projected Housing Needs and Capacity by Income Level

Income Level (AMI%)	Projected Housing Need	Zone Categories Serving Needs	Aggregate Housing Needs	Total Capacity	Capacity Surplus or Deficit
0-30% (PSH or Non PSH)	3	Mid Rise Multifamily	5	0	5
30-50%	2				
50-80%	2	Low Rise, Mid Rise, ADUs*	5	20	15
80-100%	3				
100-120%	0	Medium Density Residential	0	0	0
120% +	0	Low Density Residential	0	167	167
Total	**10 units**		**10 units**	**187 units**	**177-unit Surplus**

*The City of Clyde Hill is in support of the development of ADUs to meet the housing needs of those in the 50-100% AMI range. As explained in the Housing Element text, the city is committed to supporting the development of ADUs to meet affordable housing goals. Housing Policy 3.4 enables the city to accommodate and plan for the development of affordable housing options consistent with the states legislation mandates.

Table 7 Projected Housing Needs by Income

Income Level	Percent of AMI	Net New Units Needed, 2020-2044
Extremely Low Income	0-30% PSH	3
	0-30% Non PSH	2
Very Low Income	30-50%	2
Low Income	50-80%	3
Moderate Income	80-100%	0
	100-120%	0
Above Moderate	120% +	0
Emergency Housing	NA	0

Table 8 Production Barrier Assessment

Percent of AMI	Projected Housing Need (2020-2044)	Housing Types to Serve Needs	Aggregate Housing Need (2020-2044)	Annual Unit Production Needed	Historic Average Annual Production (PSRC Data 2010-2023)	Barrier to sufficient production?
0-30% PSH*	3	Mid Rise	7	0.29	0	Yes
0-30% Non PSH	2	Mid Rise				
30-50%	2	Mid Rise, ADUs				
50-80%	3	Low Rise, ADUs	3	0.125	0.818	No
80-100%	0	Low Rise, ADUs				
100-120%	0	Medium Density - Middle Housing	0	0	0.818	No
120% +	0	Low Density (SFR)	0	0	-1.545	No**

*No forms of emergency, PSH, or transitional housing exist in Clyde Hill. There are no subsidized providers either.

** net Loss of units is likely due to economic lot consolidation trends seen in Clyde Hill, not due to a barrier to construction. Every year 2010-2020 8 units or more were built, but more were lost.

Table 9 Classified Zones by Housing, Density, and Affordability

Zone Category	Typical Housing Types Allowed	Max Density Level Allowed*	Assigned Zone Category	Median Price**	Market Rate	With Subsidies	Assumed Affordability Level for Capacity Analysis
R1	SFR, ADU	4.4 du/ac	Low Density	$ 3,743,000	>120% AMI	Not feasible at scale	Over 120% AMI

*Max Density assumes a 10,000 minimum lot size, half of the current zoning code, to align with state requirements.
**Sourced from City of Clyde Hill website.

Table 10 Assumed Density Methodology

Zones	Gross Acres	Mixed Use	Existing Housing Units (2020 Census)	Achieved Densities (units/acre)	Maximum Densities- based on 10,000 ft^2 minimum lot size	Potential Gross Density (ac * max density)	Density Bonus Programs / FAR	Applied Annual Growth Rate Average*	Estimated total Units by 2044* (existing housing * annual growth rate)	Is the Zone underperforming?**, ***	Assumed Density for Net Capacity Estimate
R1	498.98	None	1098	2.20	Max: 4.36 units/acre	2174 units	None	-1.64%	738	Yes	3 units/acre**

*According to the Office of Financial Management, there was a net loss of housing units in Clyde Hill between 2010 and 2023.
** Midpoint between Achieved Density and Maximum Density. There is continued interest in SFR development. Clyde Hill is primarily an SFR community with 48% of RL lots exceeding double the minimum lot requirement (min lot 10,000 sf and 20,000 sf required to subdivide after implementing state legislation) will have financial incentive to divide lands and help the city achieve full residential buildout.

Employment Land Capacity Analysis

Table 11 Gross Employment Capacity by Zone

Zones	Gross Zone Area (ac)	Net developable lands remaining (not including ROW / Public Lands)	Gross Lands	
R1	489.97	379.15	Vacant	7.68
			Partially Utilized	282.39
			Under Utilized	89.08
			Developed	110.75
G1	3.34	3.13	Vacant	1.91
			Partially Utilized	0
			Under Utilized	1.22
			Developed	0.19
B1	0.68	0.00	Vacant	0.00
			Partially Utilized	0
			Under Utilized	0.00
			Developed	0.674
S1	48.48	21.77	Vacant	0.00
			Partially Utilized	10.67
			Under Utilized	11.1
			Developed	26.7
Total				**542.36**

Table 12 Net Employment Capacity by Zone

Zones	Gross Zone Area (ac)	Gross Lands		Critical Areas Dedication Factor	Gross Lands Remaining after Critical Areas****		Net Developable Lands Remaining	Est. Job Per Zone (developed, partial, and underutilized lands) PSRC 2022
R1	489.97	Vacant	7.74	1%	Vacant	7.68	379.15	**666.88**
		Partially Utilized	282.39		Partially Utilized	282.39		
		Under Utilized	89.08		Under Utilized	89.08		
		Developed*	110.75	**NA**	Developed	110.75		
G1	3.34	Vacant	1.92	1%	Vacant	1.91	3.13	**51**
		Partially Utilized	0		Partially Utilized	0		
		Under Utilized	1.22		Under Utilized	1.22		
		Developed	0.19	**NA**	Developed	0.19		
B1	0.68	Vacant	0.00	1%	Vacant	0.00	0.00	**1.1173**
		Partially Utilized	0		Partially Utilized	0		
		Under Utilized	0.00		Under Utilized	0.00		
		Developed	0.674	**NA**	Developed	0.674		
S1	48.48	Vacant	0	1%	Vacant	0.00	21.77	**179**
		Partially Utilized	10.67		Partially Utilized	10.67		
		Under Utilized	11.1		Under Utilized	11.1		
		Developed	26.7	**NA**	Developed	26.7		
Total	**542.47**					**542.36**	**404.05**	**898.00**

* developed also includes pipeline projects and publicly owned parcels on residential lands.

Table 13 Net Employment Capacity by Zone

Zone	Gross SF	Total Jobs (PSRC 2022)	Est. Jobs Distributed by Zone*	SF per Job	Notes
R1	3810798	908	666.8826875	5714	Each 5700 sf of R1 generates 1 job. These are likely jobs in the information sector
G1	16255		51	319	Each 320 sf of G1 generates 1 job
B1	6970		1.117312524	6238	Each 6200 sf of B1 generates 1 job. This likely is an overestimate of the number of jobs provided
S1	1957248		179	10934	Each 11000 sf of S1 generates 1 job.

*See the distribution of jobs in *PSRC Jobs and Trends*. In general, there are a limited number of jobs in the city

Table E 14 Net Employment Capacity by Zone

Zone	Remaining Developable Lands (Vacant, Partial, Under)	Total SF of Net Developable Lands (Vacant, Partial, Under)	Max Lot Coverage (permitted by zone)	Potential Job SF (based on maximum lot coverage permitted by zone)	Job Capacity per SF Ratio (Potential Job SF / Achieved Jobs per SF)	Total Job Capacity Remaining	2044 Capacity Target
R1	379.15	16515825	0.30	4954747.568	867	1060	10
G1	3.13	136143	0.40	54457.10899	171		
B1	0.00	0	0.20	0	0		
S1	21.77	948301	0.25	237075.3	22		

*Note - the city does not have a max lot coverage for B1. Instead of this, site features like setbacks and building site area were used to assume a coverage of 0.2.
** Note- The job capacity for the R1 district is likely inflated. However, even if these were removed from the total job capacity remaining, there is ample job capacity to meet the 2044 capacity target.