Appendix C: Land Use Capacity Analysis

Land Supply Analysis

Land Supply

Supply is the amount of land available for future growth. If the amount of land available for future growth is insufficient or is the wrong kind of land, (ie flood area, wetlands), the resulting increased prices for land discourage growth. If too much land is available, then the City may be burdened with providing expensive infrastructure and little revenue. Creating the right balance is the goal of the decision making process.

Residential Capacity within the City

The total residential net acres inside the city limits of Stanwood that are vacant, partially used or re-developable is 89 acres. Vacant land recently subdivided or approved for development was not included in the net acreage calculation. The *Snohomish County Buildable Lands Data* accounted for unbuildable areas, which included critical areas and utility easements. This allows for an additional 535 dwelling units, and 1,361 persons.

Table APC-1 Residential Land Availability within the City

Market Availability Reduction Factor	Vacant Land	Partially Used Parcels	Redevelopable Parcels	Total Net Acres
15% for Vacant Land	50.50 ac (**42.93 ac**)	--	--	**42.93 ac**
30% for Partially Used and Redevelopable Parcels	--	36.99 ac (**25.89 ac**)	28.63 ac (**20.04 ac**)	**45.93 ac**
				88.86 ac

1. Market availability reduction factors following the Snohomish County Tomorrow, Buildable Lands Report, Scenario A, methodology.
2. Calculations do not include "vacant building lots recently subdivided or approved. This accounts for 52.981 net buildable acres.
3. Data is based on the Snohomish County Tomorrow, Buildable Lands Report, Scenario A, January 14, 2003
4. Calculations use "buildable acres" or net acres, which excludes critical areas and utility easements.

Table APC-2 Residential Land Capacity within the City

Net Acres	20% Reduction	Net DU/Acre	Dwelling Units	96% Occupancy Reduction	Persons Per Dwelling Unit	Total Persons
88.86	71.09	7.53	535	514	2.65	1,362

1. Net acres is further reduced by 20 percent for infrastructure.
2. Dwelling units per acre is a net average of all zones.
3. Based on U.S. Census, average household size of 2.65 dwelling units.
4. A 96 percent occupancy rate is applied to the number of dwelling units before total persons is calculated.

Commercial Capacity within the City

The total commercial net buildable acres inside the city limits of Stanwood that is vacant, partially used or re-developable is 36.59 acres. This number is reduced to 29.13 net buildable acres once market availability factors are applied.

Table APC-3 Commercial Land Availability within the City

Market Availability Reduction Factor	Vacant Land	Partially Used Parcels	Redevelopable Parcels	Total Net Acres
15% for Vacant Land	23.45 ac (**19.93 ac**)	--	--	**19.93 ac**
30% for Partially Used and Redevelopable Parcels	--	12.49 ac (**8.74 ac**)	.65 ac (**.46 ac**)	**9.2 ac**
				29.13 ac

1. Data is based on the Snohomish County Tomorrow, Buildable Lands Report, Scenario A, January 14, 2003
2. Market availability factors following the Snohomish County Tomorrow, Buildable Lands Report, Scenario A, methodology
3. Calculations use "buildable acres" or net acres, which does not include critical areas or utility easements.

Industrial Land Availability within the City

The total industrial net acres inside the city limits of Stanwood that are vacant, partially used or re-developable is 20.94 acres. This number is reduced to 16.98 net buildable acres once market availability factors are applied.

Table APC-4 Industrial Land Availability within the City

Market Availability Reduction Factor	Vacant Land	Partially Used Parcels	Redevelopable Parcels	Total Net Acres
15% for Vacant Land	15.52 ac (**13.19 ac**)	--	--	**13.19 ac**
30% for Partially Used and Redevelopable Parcels	--	5.42 ac (**3.79 ac**)	--	**3.79 ac**
				16.98ac

1. Data is based on the Snohomish County Tomorrow, Buildable Lands Report, Scenario A, January 14, 2003
2. Market availability factors following the Snohomish County Tomorrow, Buildable Lands Report, Scenario A, methodology
3. Calculations use "buildable acres" or net acres, which does not include critical areas or utility easements.

Commercial and Industrial Land Capacity

Calculating commercial and industrial capacity is deceptively simple. While the formula or model is clear, most of the factors cannot be known with certainty. Therefore, it is necessary to make certain assumptions and generalizations that will represent a reasonable estimate. For the purposes of these calculations, the following average employees per net acre based on historical averages will be used:

Table APC-5- Averages for Employees Per Net Acre

Stanwood Zoning	Avg. Employees per Net Acre
MBI	**21**
MBII	**18**
NB	**21**
GC	**16**
GI	**34**
LI	**23**

Table APC-6 Commercial and Industrial Land Capacity

Net Acres	Zone	Avg. Employees per AC	Total Employment Capacity
.79	MBI	21	17
13.87	MBII	18	250
.18	NB	21	4
12.88	GC	16	206
8.49	GI	34	289
7.66	LI	23	176
			942

1. Data based on Snohomish County Tomorrow, Buildable Lands Report, Scenario A, Jan, 14, 2003
2. Net acres includes a 5% reduction for public lands and infrastructure.
3. General Industrial (GI) includes 4.032 acres for AEO.
4. Acreage is based on "buildable acres" or net acres.

Urban Growth Area

The total net acres within the City's UGA that is vacant, partially used or re-developable that can be used for residential uses is 339.17 acres.

Table APC-7 Residential Land Availability within the UGA

Market Availability Reduction Factor	Vacant Land	Partially Used Parcels	Redevelopable Parcels	Total Net Acres
15% for Vacant Land	153 ac (**130.24 ac**)	--	--	**130.24 ac**
30% for Partially Used and Redevelopable Parcels	--	271.28 ac (**189.9 ac**)	112.90 ac (**79.03 ac**)	**268.93 ac**
				399.17 ac

1. Data based on Snohomish County Tomorrow, Buildable Lands Report, Scenario A, Jan. 14, 2003.
2. Market availability reduction factors following the *Scenario A* Buildable Lands methodology.
3. Recently subdivided parcels are not included.
4. Calculations are based on "buildable acres" which does not include critical areas or utility easements.

Existing residential land in the UGA will house a total of 3,339 population, as shown below.

Table APC-8 Residential Land Capacity within the UGA

Net Acres	20% Reduction	Net DU/Acre	Dwelling Units	96% Occupancy Reduction	Persons Per Dwelling Unit	Total Persons
399.17	319.34	4.11	1,312	1,260	2.65	3,339

1. Net acres is further reduced by 20 percent for public lands and infrastructure.
2. Dwelling units per acre is the historical net density of the SR 9.6 zone.
3. A 96 percent occupancy rate is applied to the number of dwelling units before total persons is calculated.
4. Based on U.S. Census, average household size of 2.65.

The preferred land use alternative provides for minor expansions of the City's UGA in order to assist in meeting the County's countywide population allocation. This expansion allows for an additional 811 population.

Table APC-9 Residential Land Capacity within UGA Expansion areas

Area/Zone	Net Acres (includes 20% Reduction)	Net DU/ Acre	Dwelling Units	96% Occupancy Reduction	Persons Per Dwelling Unit	Total Persons
East 9,600	52.68	4.11	217	208	2.65	551
South MR	7.24	18.74	136	131	2	260
Total	60.12		353	339		811

1. Net acres is reduced by 20 percent for public lands and infrastructure.
2. Dwelling units per acre reflects the historical net density of the zone.
3. A 96 percent occupancy rate is applied to the number of dwelling units before total persons is calculated.
4. Based on U.S. Census, average household size of 2.65 for SFR and 2 for MR.

Commercial and industrial land within the UGA is 28.53 acres of buildable land. This has a capacity for 755 employees.

Table APC-10 Commercial and Industrial Land Availability within the UGA

Market Availability Reduction Factor	Vacant Land	Partially Used Parcels	Redevelopable Parcels	Total Net Acres
15% for Vacant Land	16.18 ac (**13.75 ac**)	--	--	**13.75 ac**
30% for Partially Used and Redevelopable Parcels	--	21.12 ac (**14.78 ac**)	--	**14.78 ac**
				28.53 ac

1. Data based on Snohomish County Tomorrow, Buildable Lands Report, Scenario A, Jan. 14, 2003.
2. Market availability reduction factors following the *Scenario A* Buildable Lands methodology.
3. Calculations are based on "buildable acres" or net acres.

Table APC-11 Commercial and Industrial Land Capacity within the UGA

Net Acres	Zone	Avg. Employees per AC	Total Employment Capacity
1.24	NB	21	26
13.36	GI	34	454
12.52	Urban Industrial	22	275
		Total:	**755**

1. Data based on Snohomish County Tomorrow, Buildable Lands Report, Scenario A, Jan. 14, 2003.
2. Net acres includes market availability reduction factors and a 5 percent reduction for public lands and infrastructure.
3. Average employees per acre based on historical data in Snohomish County Tomorrow, Buildable Lands Report, Scenario A, Jan. 14, 2003.

The preferred land use alternative shows a 63.02-acre expansion of the UGA for light industrial development. This allows for an additional 1,160 employees. When this area is included, a total of 2,857 employees can be accommodated, which will meet the city's 2025 target of 1,939 additional jobs.

Table APC-12 Industrial Land Capacity within UGA Expansion Area

Net Acres	Zone	Avg. Employees per AC	Total Employment Capacity
50.42	LI	23	1,160
		Total:	**1,160**

1. Net acres includes market availability reduction factors and a 5 percent reduction for public lands and infrastructure (20% total).
2. Average employees per acre based on historical data in Snohomish County Tomorrow, Buildable Lands Report, Scenario A, Jan. 14, 2003.

Demand for Residential Land

Demand is the City's future requirement for land to satisfy its need for balanced growth. Within the City of Stanwood and the UGA, the population is expected to increase by 4,755 persons for a total population of 8,840 by 2025. Based on the chosen growth targets for 2025 the City needs to provide housing for an additional 1,794 people. This means that vacant, partially used and re-developable parcels need to accommodate an additional 1,794 dwelling units. Current land capacity within the City and the UGA provides for 1,847 people and is sufficient to meet targeted growth goals for 2025.

Minor expansion of the UGA provides for much needed multi-family housing as well as land needed for Snohomish County to meet its overall countywide population targets.

Demand for Land and Employment

The City of Stanwood employment target for 2025 is 5,550 jobs. The City's planning area currently provides 3,611[1] jobs. To meet its 2025 targeted employment number the City needs an additional 1,939[2] jobs. Land that is vacant, partially used or re-developable within the City could support an additional 942 jobs over 20 years. The City's UGA could support an additional 755 new jobs over 20 years. The combination of land with the City and UGA could provide a total of 1,697 additional jobs over the next 20 years. The preferred alternative Comprehensive Plan map shows the addition of approximately 63 acres of land zoned light industrial to increase industrial land,

[1] Source: Snohomish County Tomorrow, Buildable Lands Report, Scenario A, Jan. 14, 2003; estimate for 2003 based on 2000 estimate and 6.7 percent growth rate.

[2] Future employment needs is based on the 2025 employment target (5,550) minus the current number of jobs within Stanwood (3,611) equals additional employment needs (1,939).

currently needed within the city. This acreage will allow the City to meet its 2025 employment target.

Residential Assumptions

1. Future population numbers are based on the targeted growth for 2025 as chosen by the City of Stanwood (City, 5,650 and UGA, 3,190);
2. Based on the U.S. Census the average household size is 2.65;
3. The net densities are based on historical development within the city and are applied are as follows:

Zone	DU/acre
MR	18.74
SR 12.4	4.02
SR 9.6	4.11
SR 7.0	6.22
SR 5.0	9.84

4. Market availability factors included 15% for vacant land and 30% for partially used or Redevelopable parcels;
5. Vacant land recently subdivided or approved for development was not included in the calculations, because it is either developed or in the process of being developed.
6. A 20 percent reduction is applied to residential lands for public uses and infrastructure, including roads, drainage, and recreation/open space.

Commercial and Industrial Assumptions

1. Available land for commercial and industrial land uses is based on Snohomish County Buildable Lands Report data for the City of Stanwood, Scenario A;
2. Market availability factors included 15% for vacant land and 30% for partially used or Redevelopable parcels;
3. To calculate the average employees per acre, figures based on historical averages are used. For Urban Industrial land in the currently unincorporated area, 22 employees are used, per Snohomish County Tomorrow Buildable Lands Report, 2003.