



Land Capacity & Demand Results

WHATCOM 2031 ■ Urban Growth Area Review ■ March 16, 2009¹

Overview

Purpose of Report

On February 10, 2009, Whatcom County Planning and Development Services published an initial analysis of the capacity of the ten urban growth areas in Whatcom County to accommodate growth over the next twenty year period.

Whatcom County has worked closely with cities on review of the initial analysis and the methodologies used. This version of the Land Capacity and Demand analysis incorporates that input. Highlights of the changes in assumption and methodology include:

- Commercial and Industrial Land Supply – incorporated new data from cities and county on employment density and assumed floor area ratios. The data indicates a significant shift in the amount of land necessary to accommodate employment due to lower gross floor area to land needs, and higher floor area per employee.
- Partially developed residential property – The analysis identifies parcels that could potentially be redeveloped due to a parcel size significantly higher than the zoning allows. The initial analysis likely overestimated redevelopment. The current analysis identifies only those parcels more than three (3) times larger in area than the underlying assumed residential density.
- Additional Alternatives – This analysis includes the three additional alternatives that will be studied in the Draft Environmental Impact Statement (EIS). There are now five total alternatives included within this analysis:
 - *No Action Alternative* – EIS alternative based on the current comprehensive plan population forecast of 234,917.
 - *GMCC Alternatives* – The Growth Management Coordinating Council recommended a population forecast of 251,490. Two alternative allocation scenarios are analyzed.
 - *EIS Alternatives* – Two alternatives in the EIS based on a population forecast of 258,448 are analyzed.

The conclusions from this report will be used to help prepare the Draft Environmental Impact Statement (EIS) for this project. Additional analysis will be done based on recommended UGA boundaries and EIS conclusions as the project moves forward towards action before the Whatcom County Council.

¹ A report published on March 11, 2009 had errors in employment sheets for Blaine, Ferndale and Lynden. As a result of this discovery, we have updated this report that affects the employment land capacity for those three urban growth areas.

Methodology

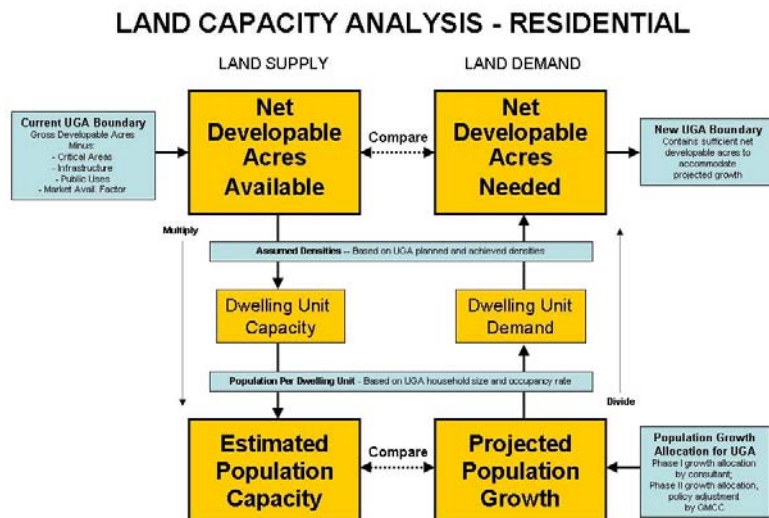
The land capacity analysis is based on the *methodology* dated February 10, 2009 and presented to the Whatcom County Planning Commission and Council. Additional amendments to the methodology have been agreed upon by the city and county planning directors. The methodology and amendments are attached for reference as Appendix B.

The land capacity analysis includes a review of land supply and land demand. *Land demand* is based on the five growth allocation alternatives outlined in the Phase I allocation memo prepared by Berk and Associates dated January 13, 2009 and in the EIS Scoping Documents dated February 11, 2009 prepared by ICF Jones & Stokes.

Land supply is an estimate of the amount of residential and employment land available within the ten designated urban growth areas. The analysis identifies land supply for either existing city limits or the unincorporated portions of the current urban growth area designation. The surplus or shortfall is based on the combination of both the city and unincorporated urban growth area designation.

Land supply and demand in this report is based on “planned densities” and not “achieved densities.” The Environmental Impact Statement will also analyze achieved densities for Alternative Y, and for the No Action Trend alternative. Most communities are experiencing densities less than what is planned. Where densities are less than planned, there is greater demand for increased urban growth areas. UGA proposals can be based on either planned or achieved densities, and the Whatcom County Council will have to consider the implications of those choices.

The following diagram demonstrates the relationship of supply and demand used in this process for residential growth.



Land Demand

The land capacity analysis is based on the five alternative allocation scenarios with a range of population forecast between 234,917 and 258,448 and a range in employment (additional growth) forecast of between 26,038 and 37,195.

Table 1, Alternative Forecasts and Allocations for Population Growth

Source: Whatcom County Comprehensive Plan, Growth Management Coordinating Council Total Population Forecast Recommendation and two alternative allocation scenarios, and SEPA Scoping Documents

Study Area	2008 Population	SEPA No Action Alternative	GMCC Historic Share Scenario	GMCC Current Comp Plan Scenario	EIS Alternative X	EIS Alternative Y
Bellingham UGA	89,284	22,580	26,920	31,101	36,744	23,771
Birch Bay UGA	5,290	3,299	2,909	4,546	3,239	6,017
Blaine UGA	5,754	2,040	2,227	2,810	3,319	3,720
Cherry Point UGA						
Columbia Valley UGA	3,924	1,076	3,304	2,230	1,000	2,952
Everson UGA	2,395	1,068	582	1,458	1,738	1,947
Ferndale UGA	12,019	4,764	4,817	6,563	7,753	8,688
Lynden UGA	11,613	4,705	4,947	6,480	7,656	8,580
Nooksack UGA	1,137	636	498	875	1,035	1,159
Sumas UGA	1,279	390	466	599	707	793
<i>Rural</i>	<i>58,305</i>	<i>3,359</i>	<i>13,820</i>	<i>3,828</i>	<i>4,257</i>	<i>9,821</i>
TOTALS	191,000	43,917	60,490	60,490	67,448	67,448

Table 2, Alternative Forecasts and Allocations for Employment

Source: Growth Management Coordinating Council Total Forecast Recommendation with two alternative allocation scenarios, and SEPA Scoping Documents

Study Area	2008 Employment	SEPA No Action Alternative	GMCC Current Job Dist. Alt.	GMCC Regional/Local Alt.	EIS Alternative X	EIS Alternative Y
Bellingham UGA	51,153	18,829	21,713	21,188	25,851	21,260
Birch Bay UGA	436	205	182	739	213	1,377
Blaine UGA	2,971	988	1,371	1,528	1,602	1,903
Cherry Point UGA	1,182	503	630	542	760	587
Columbia Valley UGA	90	45	39	840	47	455
Everson UGA	638	163	293	151	351	446
Ferndale UGA	5,534	1,286	2,603	2,762	3,137	3,669
Lynden UGA	4,832	1,643	2,084	2,404	2,502	3,227
Nooksack UGA	206	21	97	126	121	266
Sumas UGA	254	124	136	118	165	182
<i>Rural Growth</i>		<i>2,276</i>	<i>4,761</i>	<i>3,510</i>	<i>2,446</i>	<i>3,823</i>
TOTALS	67,296	26,083	33,909	33,908	37,195	37,195

Initial Results

Population: Based on the various growth forecasts and allocation scenarios, there is only one Urban Growth Area that is likely not large enough to accommodate the projected population growth: Lynden. In some scenarios, Bellingham and the Columbia Valley might also be undersized to accommodate alternatives.

The results continue to show two urban growth areas as being significantly oversized for the projected population growth: Blaine and Ferndale. The two unincorporated urban growth areas of Birch Bay and Columbia Valley also appear to be oversized depending on the growth forecast that is ultimately chosen.

Employment: Land supply for employment shows that most urban areas contain sufficient areas for employment depending on alternatives chosen. Blaine is showing a potential deficit in lands for employment. Bellingham is showing a deficit for most alternatives.

Overview: As with the previous analysis, each Urban Growth Area must also be separately analyzed for whether the right balance of land is available for growth. For example, while an area may show an excess land supply for employment, there may not be an adequate supply of land for industrial development. Similarly, while a residential land supply analysis shows an adequate supply of land for future residents, the mix of housing types and land may not provide adequate supply of single family homes.

Addressing a shortfall in the land capacity of an urban area can be accomplished in one of several ways: 1) the Urban Growth Area can be expanded to include additional lands; 2) infill strategies like accessory housing options or increased employment densities can be implemented to accommodate the demand; 3) the existing land use plan can be amended to permit the development and densities necessary to accommodate the growth. Allocation and forecast of growth also has a direct relationship on this issue as evidenced in the tables.

It is important to remember that the overall results show trends only, and that additional review and analysis of each urban area is necessary to demonstrate whether the land supply and demand meets expectations. Each city and urban area can demonstrate these needs in the next step of the process as part of putting proposals together for the urban growth area.

Finally, the Growth Management Act does expect that an adequate amount of land be set aside for the growth anticipated to occur over the next twenty-years. If there is an inadequate supply of land, then either additional lands need to be set aside or the land use plan needs to be amended to allow for increased development. If there is a surplus supply of land, then lands need to be either removed from the urban growth area or strategies employed to ensure that urban growth does not sprawl into these areas.

The tables on the following pages outline the summary findings of the various Urban Growth Areas.

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Table 3. Comparison: Population Growth Accommodated and Projected using Three Growth Forecasts and Five (5) Alternative Allocation Scenarios

UGA	Land Supply (Population)			Land Demand (Population)									
	City	Unincorporated	Overall	No Action Alternative		GMCC Historic Growth Alt.		GMCC Current Plan Alt.		EIS Alt. X		EIS Alt. Y	
				Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)
Bellingham UGA	20,044	11,283	31,327	22,580	8,747	26,920	4,407	31,101	226	36,744	(5,417)	23,771	7,556
Birch Bay UGA	-	7,874	7,874	3,299	4,575	2,909	4,965	4,546	3,328	3,239	4,635	6,017	1,857
Blaine UGA	10,854	9,402	20,256	2,040	18,216	2,227	18,029	2,810	17,446	3,319	16,937	3,720	16,536
Cherry Point UGA	-	-	-	-	-	-	-	-	-	-	-	-	-
Columbia Valley UGA	-	3,166	3,166	1,076	2,090	3,304	(138)	2,230	936	1,000	2,166	2,952	214
Everson UGA	1,301	1,423	2,725	1,068	1,657	582	2,143	1,458	1,267	1,738	987	1,947	778
Ferndale UGA	8,239	10,687	18,926	4,764	14,162	4,817	14,109	6,563	12,363	7,753	11,173	8,688	10,238
Lynden UGA	1,943	1,660	3,603	4,705	(1,102)	4,947	(1,344)	6,480	(2,877)	7,656	(4,053)	8,580	(4,977)
Nooksack UGA	880	706	1,586	636	950	498	1,088	875	711	1,035	551	1,159	427
Sumas UGA	891	813	1,703	390	1,313	466	1,237	599	1,104	707	996	793	910
<i>Rural Growth</i>				<i>3,359</i>		<i>13,820</i>		<i>3,828</i>		<i>4,257</i>		<i>9,821</i>	
TOTAL Urban Growth	44,152	47,013	91,165	40,558	50,607	46,670	44,495	56,662	34,503	63,191	27,974	57,627	33,538
TOTAL GROWTH	44,152			43,917	50,607	60,490	44,495	60,490	34,503	67,448	27,974	67,448	33,538

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Table 4. Comparison: Residential Net Developable Acres Available and Needed using Three Growth Forecasts and Five (5) Alternative Allocation Scenarios

UGA	Land Supply (Acres)			Land Demand (Acres)									
	City	Unincorporated	Overall	No Action Alternative		GMCC Historic Growth Alt.		GMCC Current Plan Alt.		EIS Alt. X		EIS Alt. Y	
				Acres Needed	Surplus (Deficit)	Acres Needed	Surplus (Deficit)	Acres Needed	Surplus (Deficit)	Acres Needed	Surplus (Deficit)	Acres Needed	Surplus (Deficit)
Bellingham UGA	706	588	1,294	798	496	1,044	250	1,281	13	1,601	(307)	865	429
Birch Bay UGA	-	828	828	343	485	302	526	475	353	337	491	631	197
Blaine UGA	683	1,093	1,777	(168)	1,945	(148)	1,925	(86)	1,863	(32)	1,808	11	1,766
Cherry Point UGA	-	-	-	-	-	-	-	-	-	-	-	-	-
Columbia Valley UGA	-	322	322	113	209	336	(14)	229	94	106	216	301	21
Everson UGA	83	127	209	81	128	44	166	111	98	133	76	149	60
Ferndale UGA	265	1,081	1,346	271	1,075	275	1,071	408	938	498	848	569	777
Lynden UGA	177	106	283	356	(73)	372	(90)	474	(191)	552	(270)	614	(331)
Nooksack UGA	50	51	101	32	69	22	79	49	52	61	40	70	31
Sumas UGA	69	50	118	34	84	39	80	47	71	54	64	60	59
TOTAL Urban Growth	2,032	4,246	6,278	1,860	4,418	2,285	3,993	2,989	3,289	3,311	2,967	3,270	3,008

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Table 5. Comparison: Employment Growth Accommodated and Projected using Three Growth Forecasts and Five (5) Alternative Allocation Scenarios

UGA	Land Supply (Employment)			Land Demand (Employment)									
	City	Unincorporated	Overall	No Action Alternative		GMCC Current Job Dist. Alt.		GMCC Regional/Local Alt.		EIS Alt. X		EIS Alt. Y	
				Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)
Bellingham UGA	11,763	8,092	19,855	18,829	1,026	21,713	(1,858)	21,188	(1,333)	25,851	(5,996)	21,260	(1,405)
Birch Bay UGA	-	930	930	205	725	182	748	739	191	213	717	1,377	(447)
Blaine UGA	794	-	794	988	(194)	1,371	(577)	1,528	(734)	1,602	(808)	1,903	(1,109)
Cherry Point UGA	-	1,320	1,320	503	817	630	690	542	778	760	560	587	733
Columbia Valley UGA	-	683	683	45	638	39	644	840	(157)	47	636	455	228
Everson UGA	266	547	813	163	650	293	520	151	662	351	462	446	367
Ferndale UGA	1,828	2,182	4,010	1,286	2,724	2,603	1,407	2,762	1,248	3,137	873	3,669	341
Lynden UGA	1,904	1,257	3,161	1,643	1,518	2,084	1,077	2,404	757	2,502	659	3,227	(66)
Nooksack UGA	130	133	263	21	242	97	166	126	137	121	142	266	(3)
Sumas UGA	459	235	694	124	570	136	558	118	576	165	529	182	512
<i>Rural Growth</i>				<i>2,276</i>		<i>4,761</i>		<i>3,510</i>		<i>2,446</i>		<i>3,823</i>	
TOTAL Urban Growth	17,144	15,379	35,523	23,807	8,716	29,148	3,375	30,398	2,125	34,749	(2,226)	33,372	(849)
TOTAL GROWTH				26,083		33,909		33,908		37,195		37,195	

Table 6. Comparison: Employment Net Developable Acres Available and Needed Projected using Three Growth Forecasts and Five (5) Alternative Allocation Scenarios

UGA	Land Supply (Employment)			Land Demand (Employment)									
	City	Unincorporated	Overall	No Action Alternative		GMCC Current Job Dist. Alt.		GMCC Regional/Local Alt.		EIS Alt. X		EIS Alt. Y	
				Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)	Allocation	Surplus (Deficit)
Bellingham UGA	741	610	1,351	1,272	79	1,496	(145)	1,455	(104)	1,817	(466)	1,461	(110)
Birch Bay UGA	-	73	73	21	53	19	54	59	14	21	52	106	(32)
Blaine UGA	90	-	90	127	(37)	185	(96)	209	(120)	221	(131)	267	(177)
Cherry Point UGA	-	1,468	1,468	547	921	690	778	591	877	837	631	642	826
Columbia Valley UGA	-	61	61	4	57	3	57	74	(14)	4	56	(13)	74
Everson UGA	50	126	176	50	125	76	100	48	128	87	89	105	71
Ferndale UGA	306	255	561	197	364	373	188	394	167	444	117	515	45
Lynden UGA	276	133	409	248	161	295	115	329	81	339	70	416	(7)
Nooksack UGA	17	14	31	3	28	12	19	15	16	15	16	32	(0)
Sumas UGA	130	19	148	27	122	29	119	25	123	35	113	39	110
TOTAL Urban Growth	1,610	2,759	4,368	2,496	1,873	3,178	1,189	3,100	1,168	3,820	547	3,570	800

Appendix A

Urban Growth Area Land Capacity Sheets

Appendix B

Land Capacity Methodology