



**WHATCOM COUNTY
POPULATION AND EMPLOYMENT PROJECTIONS
AND URBAN GROWTH AREA ALLOCATIONS**

Phase I Technical Report

July 22, 2013

Revised: November 1, 2013

Prepared by: BERK

Note on November 1, 2013 Revisions:

Population estimates for the Everson urban growth area (UGA) were adjusted to address issues where Census tabulation geographies were not aligning with UGA boundaries well. Analysis of Whatcom County Assessor's parcel data, OFM population and annexation data, and aerial imagery were used to adjust population estimates. These adjustments affect exhibits 5-10 for the Everson UGA and overall County sums, but do not affect other individual UGA totals. All other content is unchanged from the original July 22, 2013 version of the report.

INTRODUCTION

The Whatcom County Department of Planning and Development Services, in coordination with the cities in Whatcom County, is engaged in a multi-year project to update the Whatcom County Comprehensive Plan and conduct an urban growth area (UGA) review by 2016, as required by the Washington State Growth Management Act (GMA). An initial step in this process is to develop a reasonable set of projections of future growth in population and economic activity and allocations of where this growth will occur. These projections and allocations of growth are foundational inputs that will inform many aspects of the comprehensive planning process over the next few years.

Projections and allocations of population and employment will be developed using a two-step process. The first step is to develop technical projections and allocations based on existing forecasts, historical trends, and additional data analysis. The second step is to make adjustments to the technical allocations based on local plans, special circumstances, and other policy considerations.

This technical memo addresses the first step in the process – to establish 20-year technical projections of population and employment and then distribute this growth to UGAs and areas outside UGAs. Using these technical projections as a starting point, city and county representatives will then collaborate to make policy-based adjustments to the technical projections and allocations of growth. It is anticipated that final projections and allocations of growth will be adopted by the Whatcom County Council and city councils in 2016.

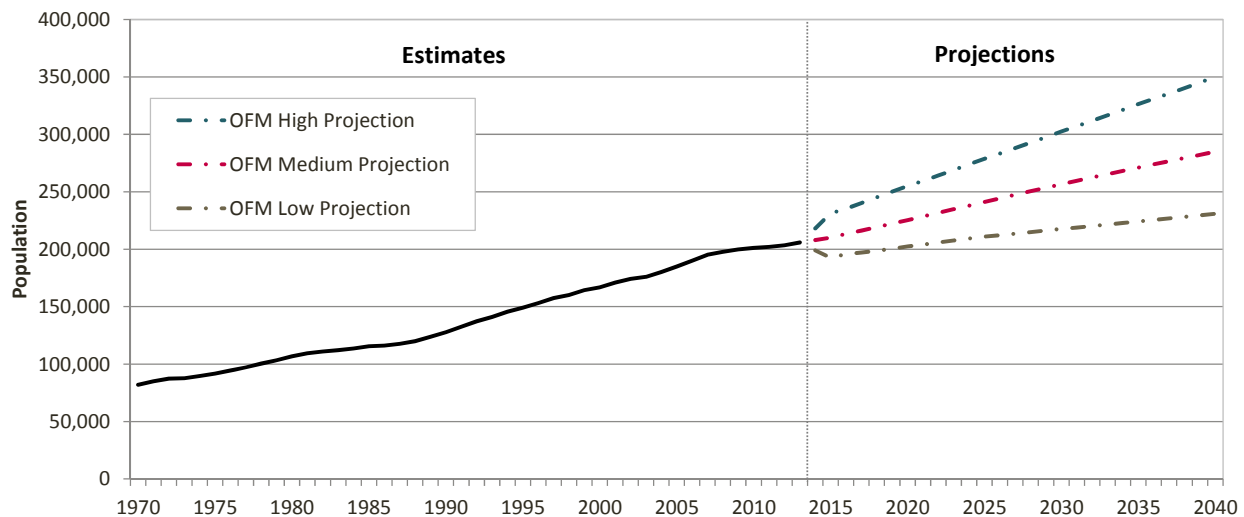
The specific elements documented in this technical memo include the following:

- Countywide projections of population and employment.
- Allocations of population and employment to UGAs and lands outside of UGAs.
- Trend analysis of Whatcom County age cohorts

COUNTY-WIDE POPULATION

The Washington Office of Financial Management (OFM) updates county and state long-range population forecasts every five years to support Growth Management Act planning. The most recent forecasts out to 2040 were issued in May 2012 and are shown in Exhibit 1. OFM considers the medium projection the most likely (RCW 43.62.035) because it is based on assumptions that have been validated with past and current information. The high and low projections represent the range of uncertainty that should be considered when using these projections for planning purposes.

Exhibit 1
Whatcom County Population, 1970-2040



Source: Office of Financial Management historical data and May 2012 projections.

The medium and low projections are very similar to OFM's 2007 forecasts, which were considered during the Whatcom County 2009 Comprehensive Plan update process. The high projection has been reduced significantly in the 2012 forecast, shifting from a 2030 population of 324,000 in the 2007 forecast to 302,500 in the 2012 forecast.

Components of Population Change

Population growth is driven by three components of change: births, deaths, and migration. The difference of births minus deaths is considered the natural component of change, and net migration is considered the migration component of change. Exhibit 2 shows that in both Whatcom County and Washington State, the net migration component has been and is expected to be larger than the natural component of population increase. Whatcom County has a larger percentage of its population growth come from net migration than the State.

The OFM forecasts assume a gradually decreasing natural component of population growth largely due to growth in elderly population, a trend explored further in the Age Cohort Analysis section of this report.

The migration component of population change is more variable than the natural component. Major economic, social, or policy changes can generate spurts or slowdowns in migration that are difficult to predict. The Office of Financial Management cites uncertainty about the pace of economic recovery and possible changes in U.S. immigration policy as factors that could affect migration trends in the future. The 2012 OFM forecasts do not attempt to predict the timing or magnitude of major long-term migration shifts but OFM will track migration closely for future forecast updates.

Exhibit 2
Components of Population Change, 1980-2040

		Whatcom County				Washington State			
		Net Migration	Natural	Total Population Growth	Percent Migration	Net Migration	Natural	Total Population Growth	Percent Migration
Estimates	1980-1985	4,569	4,213	8,782	52.0%	101,529	181,903	283,432	35.8%
	1985-1990	8,595	3,702	12,297	69.9%	267,625	183,253	450,878	59.4%
	1990-1995	17,838	4,324	22,162	80.5%	328,454	201,452	529,906	62.0%
	1995-2000	12,858	4,026	16,884	76.2%	316,328	181,246	497,574	63.6%
	2000-2005	14,475	3,664	18,139	79.8%	227,982	176,691	404,673	56.3%
	2005-2010	11,975	4,200	16,175	74.0%	222,154	203,570	425,724	52.2%
OFM Medium Forecast	2010-2015	5,313	3,597	8,910	59.6%	104,909	192,751	297,660	35.2%
	2015-2020	11,814	3,443	15,257	77.4%	210,000	179,777	389,777	53.9%
	2020-2025	12,873	2,958	15,831	81.3%	217,000	164,196	381,196	56.9%
	2025-2030	13,727	1,778	15,505	88.5%	225,000	136,020	361,020	62.3%
	2030-2035	14,020	479	14,499	96.7%	225,000	104,435	329,435	68.3%
	2035-2040	14,028	-269	13,759	102.0%	225,000	82,353	307,353	73.2%
10-yr Trend	2000-2010	26,450	7,864	34,314	77.1%	450,136	380,261	830,397	54.2%
20-yr Trend	1990-2010	57,146	16,214	73,360	77.9%	1,094,918	762,959	1,857,877	58.9%
30-yr Trend	1980-2010	70,310	24,129	94,439	74.5%	1,464,072	1,128,115	2,592,187	56.5%

Source: Washington Office of Financial Management, May 2012 projections.

Note: The percentage of total growth that is attributed to migration exceeds 100% in 2035-2040 because the natural component is negative.

Historical and Projected Population Growth Rates

Exhibit 3
Whatcom County Population Growth Rates, 1970-2040

	Whatcom County			Washington State	
	Population	Growth in Previous 10 yrs		Population	10-year Avg Annual Growth Rate
Avg Annual Pop Growth		Avg Annual Growth Rate			
Historical Data					
1970	81,983	1,167	1.5%	3,413,250	1.8%
1980	106,701	2,472	2.7%	4,132,353	1.9%
1990	127,780	2,108	1.8%	4,866,663	1.6%
2000	166,826	3,905	2.7%	5,894,143	1.9%
2010	201,140	3,431	1.9%	6,724,540	1.3%
OFM Projections					
Low Projection					
2020	202,405	127	0.1%	6,650,247	-0.1%
2030	217,625	1,522	0.7%	7,014,757	0.5%
2040	230,907	1,328	0.6%	7,291,723	0.4%
Medium Projection					
2020	225,307	2,417	1.1%	7,411,977	1.0%
2030	256,643	3,134	1.3%	8,154,193	1.0%
2040	284,901	2,826	1.1%	8,790,981	0.8%
High Projection					
2020	255,016	5,388	2.4%	8,323,502	2.2%
2030	302,510	4,749	1.7%	9,545,795	1.4%
2040	350,000	4,749	1.5%	10,676,166	1.1%

Source: Washington Office of Financial Management, May 2012.

Note: 10-year annual average growth rate values represent the annual average growth rate for the previous 10 years.

- Ever since the 1970s, the Whatcom County population has consistently grown at a faster rate than the State. The 50-year annual average growth rate from 1960-2010 is 2.1% for Whatcom County and 1.7% for Washington State.
- By 2040, the spread between the OFM high and low population projections is about 119,000 (approximately 231,000 for the low projection and 350,000 for the high projection).
- By 2036, the horizon year for Whatcom County's 2016 Comprehensive Plan update, the difference between high and low projections is about 105,000 (approximately 226,000 for the low projection and 331,000 for the high projection).
- Growth rates assumed in the Whatcom County low projection are much lower than any period during the past fifty years. The medium projection also assumes growth rates lower than historical averages. The reduction in the growth rate is partially due to a slowing of the natural component of population growth shown earlier in Exhibit 2.
- The 30-year (2010-2040) annual average growth rate for Whatcom County under the high projection is 1.9%, which is the same rate of growth experienced between 2000-2010.

Considerations for 2016 Comprehensive Plan Alternatives

For the Comprehensive Plan update, the OFM long-range projections serve as bookends within which local decision-makers and planners can work. The OFM medium projection is considered the most likely future, but for planning purposes, it is also reasonable to explore different ranges of growth alternatives within the OFM high and low ranges. The migration component of population change is difficult to forecast and can vary significantly depending on political and economic shifts. For this reason, alternative high and low population projections were developed to estimate sensitivity to variations in migration. Exhibit 4 shows these alternative projections and how they compare to 2036 OFM population projections.

Exhibit 4
Alternative Projections Compared to OFM Projections

	Low Projection	Medium Projection	High Projection
OFM Projections			
2036 Population	225,580	273,911	330,869
2013-2036 Growth			
Total Population Growth	19,780	68,111	125,069
Avg Annual Pop Growth	860	2,961	5,438
Annual Avg Growth Rate	0.4%	1.3%	2.1%
Alternative Projections			
2036 Population	261,886	-	291,949
2013-2036 Growth			
Total Population Growth	56,086	-	86,149
Avg Annual Pop Growth	2,439	-	3,746
Avg Annual Growth Rate	1.1%	-	1.5%
Difference from OFM Projections			
2036 Population			
Total Population Difference	36,306	-	-38,920
Percentage Difference	16.1%	-	-11.8%
2013-2036 Growth			
Avg Annual Pop Growth Diff.	1,579	-	-1,692

Source: BERK, 2013

The alternatives were developed using the following rationale:

- **Medium projection.** No adjustments were made to the OFM medium projection, which is considered the most likely future. The OFM medium projection forecasts a slower annual growth rate between 2013-2036 (1.3%) than was experienced over the past 20 years (2.3% annually between 1990-2010).
- **Low projection.** The OFM low projection assumes growth rates much lower than historical averages. Over the past 30 years, there has not been a five-year period with an average annual growth rate as low as the rate OFM is projecting between 2013 and 2036 (0.4%). In the early-mid 1980s, five-year annual average growth rates slipped to 1.2%, and most recently the annual average growth rate between 2008 and 2013 was 0.8%.

The alternative low projection results in a 2036 population of about 262,000. It is based on an assumption that migration will be 20% less than under the medium projection, and the natural component is the same as the medium projection. The resulting 2036 population projection is about 16% (36,000 population) higher than the OFM low projection.

- **High projection.** The OFM high projection assumes an annual growth rate (2.1%) that is slightly higher than the 2000-2010 growth rate (1.9%) the County has experienced most recently. The alternative high projection results in a 2036 population of about 292,000. It is based on an assumption that migration will be 30% higher than under the medium projection, and the natural component is the same as the medium projection. The resulting 2036 population projection is about 12% (-39,000 population) lower than the OFM high projection.

The spread between the three projections is balanced in terms of annual average population growth rate, with the low projection assuming a 1.1% annual average growth rate, the medium projection assuming 1.3%, and the high projection assuming 1.5%.

ALLOCATION OF POPULATION TO UGAS

After establishing a range of countywide growth projections, the next step is to allocate future growth to UGAs. The process to develop technical allocations involves analysis of historical trends in population growth by UGA and assigning future growth based on these trends. The technical allocations will be used as a starting point for collaboration between the County and cities to make adjustments based on local plans, special circumstances, and other policy considerations.

Historical Population Estimates

Historical estimates of population by urban growth areas are shown in Exhibit 5 and Exhibit 6 below. The estimates are based on current 2013 UGA boundaries. The 2010 estimates are based on 2010 Census data. The 1990 and 2000 estimates build on previous work completed for the Whatcom County 2009 Comprehensive Plan update¹, which estimated population using 2009 UGA boundaries. We adjusted the 2009 estimates to reflect UGA boundary changes that have occurred between 2009 and 2013.

Exhibit 5
Population by Growth Area, 1990-2010

	Population			Population Growth		Total 1990-2010
	1990	2000	2010	1990-2000	2000-2010	
Urban Growth Areas						
Bellingham	60,714	76,957	91,251	16,243	14,294	30,537
Birch Bay	2,141	4,163	7,391	2,022	3,228	5,250
Blaine	3,023	3,700	5,058	677	1,358	2,035
Cherry Point	0	0	43	0	43	43
Columbia Valley	454	2,384	3,061	1,930	677	2,607
Everson	1,578	2,146	2,598	568	452	1,020
Ferndale	6,689	9,180	11,899	2,491	2,719	5,210
Lynden	6,452	9,619	12,167	3,167	2,548	5,715
Nooksack	616	895	1,363	279	468	747
Sumas	792	995	1,319	203	324	527
All Urban Growth Areas	82,459	110,039	136,150	27,580	26,111	53,691
Other Areas Outside UGAs	45,321	56,775	64,990	11,454	8,215	19,669
Total Whatcom County	127,780	166,814	201,140	39,034	34,326	73,360

Source: BERK, Washington Office of Financial Management, 2013

Note: All population estimates are based on current 2013 UGA boundaries, not older historical UGA boundaries, to maintain consistent geographic areas. City totals include population within the incorporated city boundary and their associated UGAs.

Note: The Sudden Valley area, which was a provisional UGA between December 2001 and February 2006, is included in the "Other Areas Outside UGAs" category.

¹ Phase I Allocations of 2031 Growth to Planning Areas. BERK, January 13, 2009.

Exhibit 6
Population Growth Rates by Growth Area, 1990-2010

	Annual Avg Population Growth			Annual Avg Growth Rate		
	10-year Average 1990-2000	10-year Average 2000-2010	20-year Average 1990-2010	10-year Rate 1990-2000	10-year Rate 2000-2010	20-year Rate 1990-2010
Urban Growth Areas						
Bellingham	1,624	1,429	1,527	2.4%	1.7%	2.1%
Birch Bay	202	323	263	6.9%	5.9%	6.4%
Blaine	68	136	102	2.0%	3.2%	2.6%
Cherry Point	0	4	2	NA	NA	NA
Columbia Valley	193	68	130	18.0%	2.5%	10.0%
Everson	57	45	51	3.1%	1.9%	2.5%
Ferndale	249	272	261	3.2%	2.6%	2.9%
Lynden	317	255	286	4.1%	2.4%	3.2%
Nooksack	28	47	37	3.8%	4.3%	4.1%
Sumas	20	32	26	2.3%	2.9%	2.6%
All Urban Growth Areas	2,758	2,611	2,685	2.9%	2.2%	2.5%
Other Areas Outside UGAs	1,145	821	983	2.3%	1.4%	1.8%
Total Whatcom County	3,903	3,433	3,668	2.7%	1.9%	2.3%

Source: BERK, Washington Office of Financial Management, 2013

Note: All population estimates are based on current 2013 UGA boundaries, not older historical UGA boundaries, to maintain consistent geographic areas. City totals include population within the incorporated city boundary and their associated UGAs.

- As displayed in the countywide totals, many UGAs grew faster in the 1990s than in the 2000s.
- The fastest growing UGAs since 1990, in terms of annual average growth rate, have been Birch Bay and Columbia Valley.
- In terms of absolute population growth, Bellingham UGA has grown by about 30,000 since 1990.
- Growth rates in urban areas outpaced growth rates outside UGAs in the 1990s and this trend continued in the 2000s.

Exhibit 7
Shares of Population by Growth Area, 1990-2010

	Share of Population			Share of Population Growth		Total 1990-2010
	1990	2000	2010	1990-2000	2000-2010	
Urban Growth Areas						
Bellingham	47.5%	46.1%	45.4%	41.6%	41.6%	41.6%
Birch Bay	1.7%	2.5%	3.7%	5.2%	9.4%	7.2%
Blaine	2.4%	2.2%	2.5%	1.7%	4.0%	2.8%
Cherry Point	0.0%	0.0%	0.02%	0.0%	0.1%	0.1%
Columbia Valley	0.4%	1.4%	1.5%	4.9%	2.0%	3.6%
Everson	1.2%	1.3%	1.3%	1.5%	1.3%	1.4%
Ferndale	5.2%	5.5%	5.9%	6.4%	7.9%	7.1%
Lynden	5.0%	5.8%	6.0%	8.1%	7.4%	7.8%
Nooksack	0.5%	0.5%	0.7%	0.7%	1.4%	1.0%
Sumas	0.6%	0.6%	0.7%	0.5%	0.9%	0.7%
All Urban Growth Areas	64.5%	66.0%	67.7%	70.7%	76.1%	73.2%
Other Areas Outside UGAs	35.5%	34.0%	32.3%	29.3%	23.9%	26.8%
Total Whatcom County	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: BERK, Washington Office of Financial Management, 2013

Note: Green shading indicates areas that increased their share of population the most between 1990 and 2010. Orange shading indicates areas that decreased their share of population the most over the same time period.

Note: All population shares are based on current 2013 UGA boundaries, not older historical UGA boundaries, to maintain consistent geographic areas.

- Overall, UGAs have captured a larger share of growth since 1990. Specifically, UGAs captured 70.7% of growth from 1990-2000 and 76.1% of growth between 2000-2010. This pattern of growth has resulted in UGAs increasing their share of overall population from 64.5% in 1990 to 67.7% in 2010.
- Most UGAs have increased their share of population since 1990, with Birch Bay, Columbia Valley, Ferndale, and Lynden seeing the largest increases.
- Birch Bay, Blaine, Ferndale, Nooksack, and Sumas have seen an increased share of growth in the 2000-2010 decade compared to the 1990s.
- The UGA that has seen the most decrease in population share is Bellingham, which shifted from 47.5% of the County's population in 1990 to 45.4% in 2010.

Alternative Growth Scenarios

The scenarios included in this section are preliminary alternatives representing simple allocations based on historical trends. We have developed allocations for the OFM medium, alternative high, and alternative low countywide projections shown in bold in Exhibit 4.

These scenarios are the technical allocations that will be used as a starting point for collaboration between the County and cities to make adjustments. The technical alternatives will be augmented and adjusted in the policy phase of the planning process.

In the exhibits below, the allocations of growth for the high, medium, and low projections are based on the share of growth observed between 2000 and 2010. The only exception is Cherry Point, which was not assigned any

growth. During this time period, more growth has started to occur in UGAs, and this pattern of growth is expected to continue as jurisdictions support policies consistent with the Growth Management Act.

Exhibit 8
Population Allocation by Growth Area, 2013-2036
LOW PROJECTION

	2013 Population	2036 Population	Population Growth 2013-2036		
			Total Pop Growth	Annual Avg Pop Growth	Annual Avg Growth Rate
Urban Growth Areas					
Bellingham	93,107	116,491	23,384	1,017	1.0%
Birch Bay	7,737	13,019	5,282	230	2.3%
Blaine	5,177	7,398	2,221	97	1.6%
Cherry Point	45	45	0	0	0.0%
Columbia Valley	3,204	4,312	1,108	48	1.3%
Everson	2,670	3,409	739	32	1.1%
Ferndale	12,778	17,226	4,448	193	1.3%
Lynden	12,879	17,048	4,169	181	1.2%
Nooksack	1,436	2,202	766	33	1.9%
Sumas	1,449	1,979	530	23	1.4%
All Urban Growth Areas	140,482	183,129	42,647	1,854	1.2%
Other Areas Outside UGAs	65,318	78,757	13,439	584	0.8%
Total Whatcom County	205,800	261,886	56,086	2,439	1.1%

Source: BERK, 2013

Exhibit 9
Population Allocation by Growth Area, 2013-2036
MEDIUM PROJECTION

	2013 Population	2036 Population	Population Growth 2013-2036		
			Total Pop Growth	Annual Avg Pop Growth	Annual Avg Growth Rate
Urban Growth Areas					
Bellingham	93,107	121,505	28,398	1,235	1.2%
Birch Bay	7,737	14,151	6,414	279	2.7%
Blaine	5,177	7,875	2,698	117	1.8%
Cherry Point	45	45	0	0	0.0%
Columbia Valley	3,204	4,549	1,345	58	1.5%
Everson	2,670	3,568	898	39	1.3%
Ferndale	12,778	18,180	5,402	235	1.5%
Lynden	12,879	17,942	5,063	220	1.5%
Nooksack	1,436	2,366	930	40	2.2%
Sumas	1,449	2,093	644	28	1.6%
All Urban Growth Areas	140,482	192,274	51,792	2,252	1.4%
Other Areas Outside UGAs	65,318	81,637	16,319	710	1.0%
Total Whatcom County	205,800	273,911	68,111	2,961	1.3%

Source: BERK, 2013

Exhibit 10
Population Allocation by Growth Area, 2013-2036
HIGH PROJECTION

	2013 Population	2036 Population	Population Growth 2013-2036		
			Total Pop Growth	Annual Avg Pop Growth	Annual Avg Growth Rate
Urban Growth Areas					
Bellingham	93,107	129,025	35,918	1,562	1.4%
Birch Bay	7,737	15,850	8,113	353	3.2%
Blaine	5,177	8,589	3,412	148	2.2%
Cherry Point	45	45	0	0	0.0%
Columbia Valley	3,204	4,905	1,701	74	1.9%
Everson	2,670	3,806	1,136	49	1.6%
Ferndale	12,778	19,611	6,833	297	1.9%
Lynden	12,879	19,282	6,403	278	1.8%
Nooksack	1,436	2,612	1,176	51	2.6%
Sumas	1,449	2,263	814	35	2.0%
All Urban Growth Areas	140,482	205,988	65,506	2,848	1.7%
Other Areas Outside UGAs	65,318	85,961	20,643	898	1.2%
Total Whatcom County	205,800	291,949	86,149	3,746	1.5%

Source: BERK, 2013

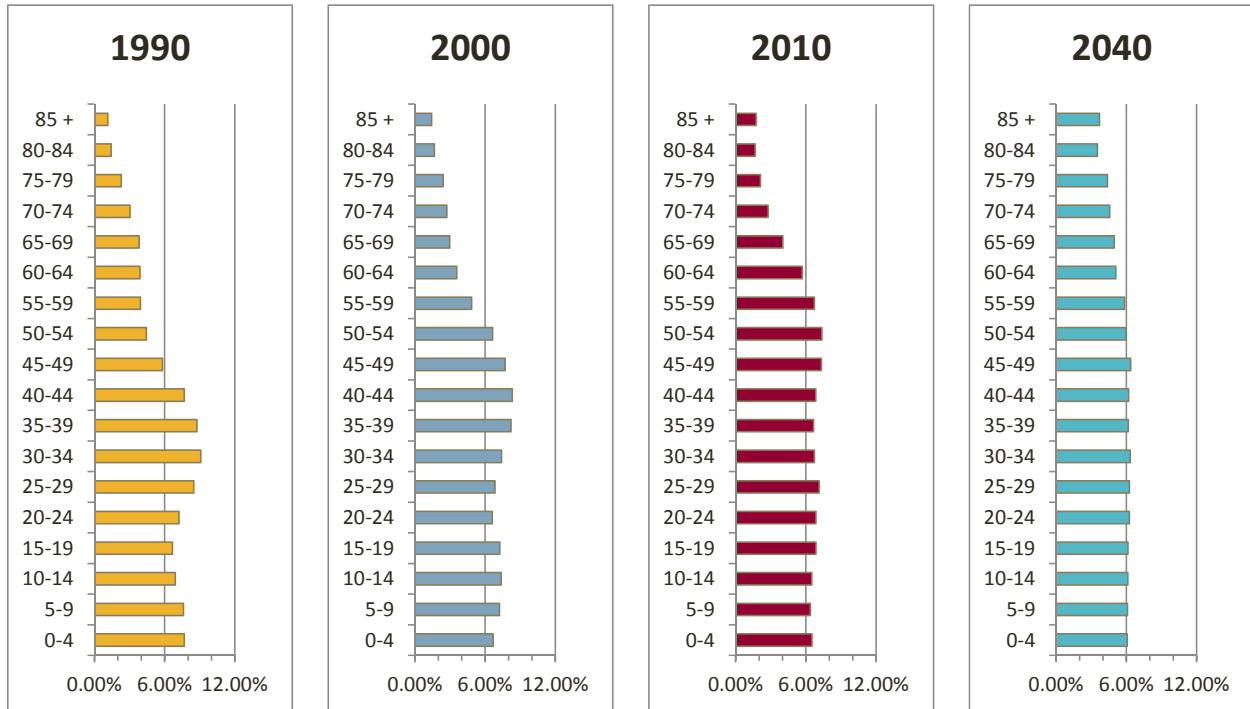
AGE COHORT ANALYSIS

Age cohorts in Whatcom County and Washington State were analyzed to provide context for some of the broader population changes being projected by the Office of Financial Management.

Exhibit 11 and Exhibit 12 on the following page show the age distributions in Washington State and Whatcom County over the past twenty years and how they are projected to change by 2040.

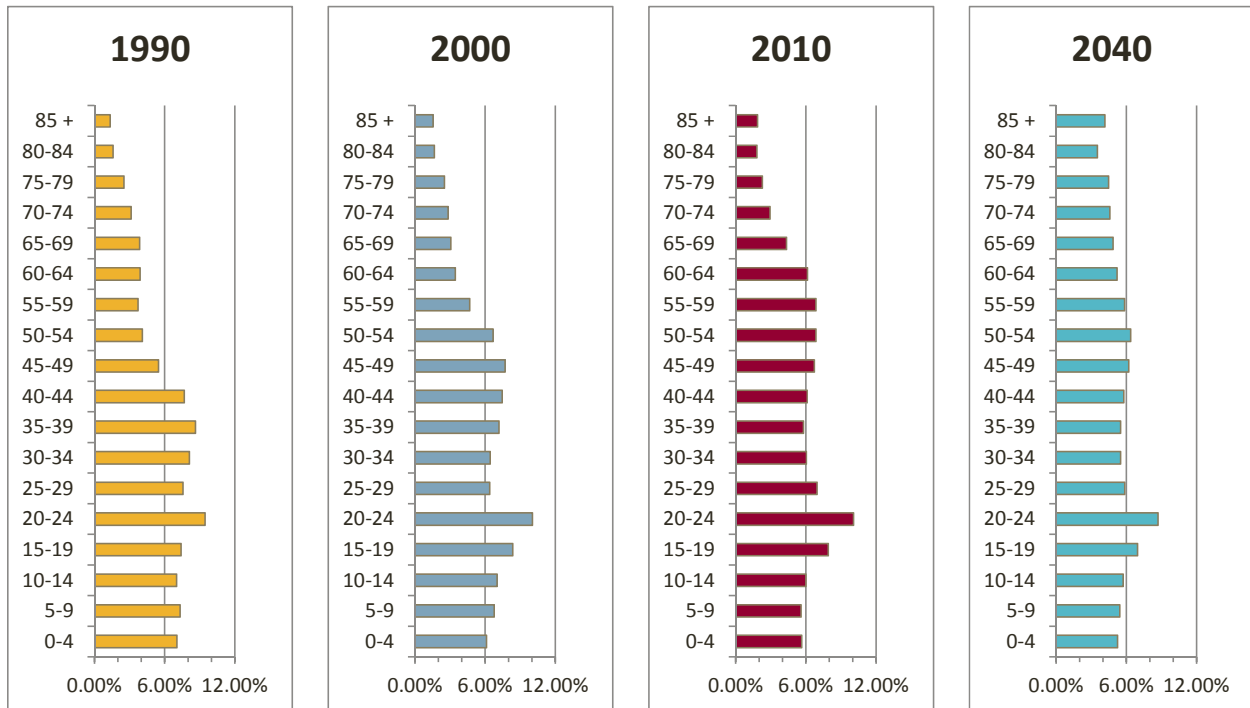
- In the Washington exhibit, the baby boom generation is clearly visible like the crest of a wave moving up the age categories before eventually flattening out by 2040.
- The Whatcom County exhibit shows the same baby boom pattern but also exhibits a consistent spike in the 20-24 age group. This represents the consistent influx of college students to attend universities in Whatcom County. This spike does not carry forward as the cohort ages because many of the incoming students leave Whatcom County once they graduate.

Exhibit 11
Age Distribution: Percentage of Population by Age Group
WASHINGTON STATE



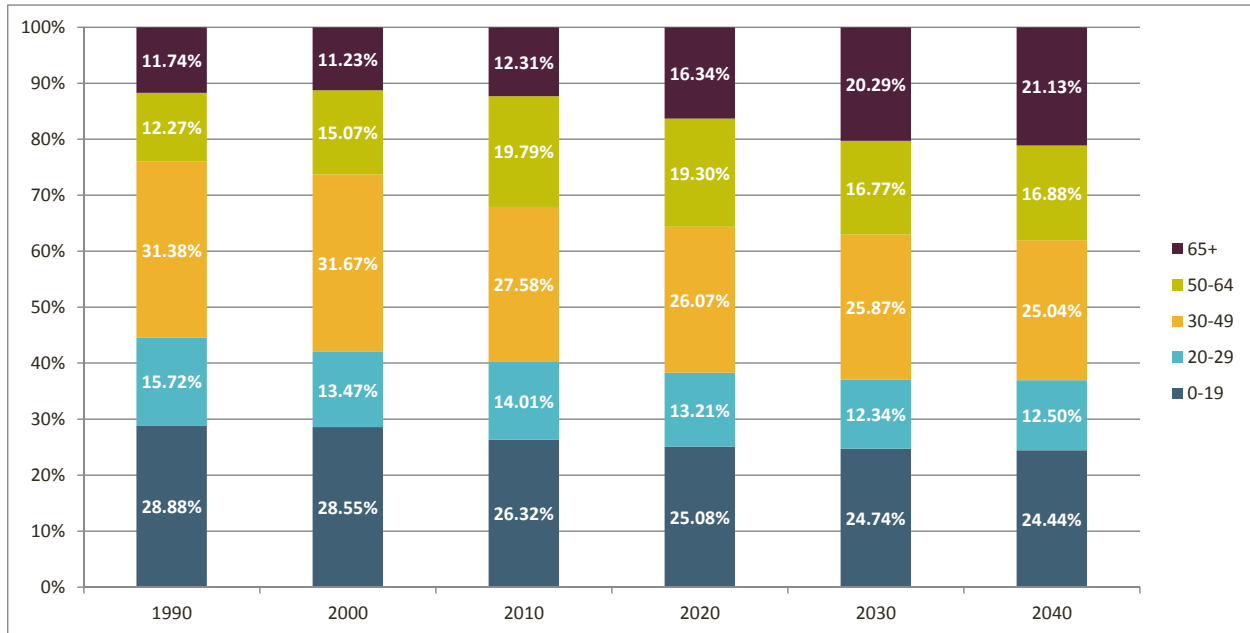
Source: OFM, 2013

Exhibit 12
Age Distribution: Percentage of Population by Age Group
WHATCOM COUNTY



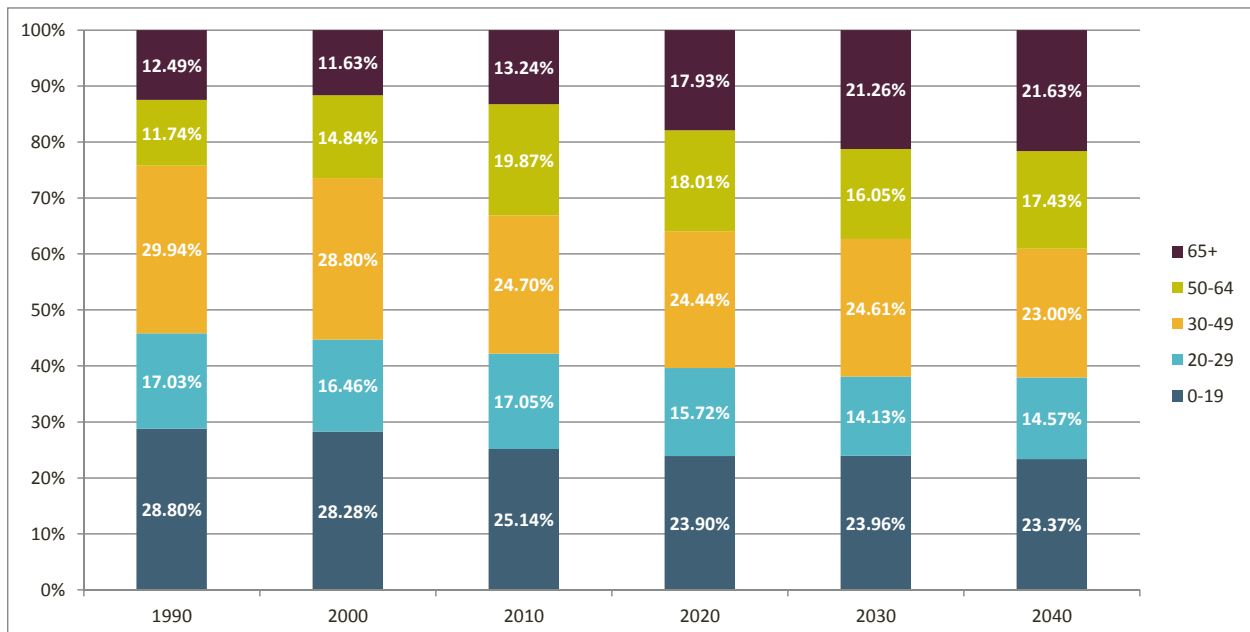
Source: OFM, 2013

Exhibit 13
Age Distribution, 1990-2040
WASHINGTON STATE



Source: OFM, 2013

Exhibit 14
Age Distribution, 1990-2040
WHATCOM COUNTY



Source: OFM, 2013

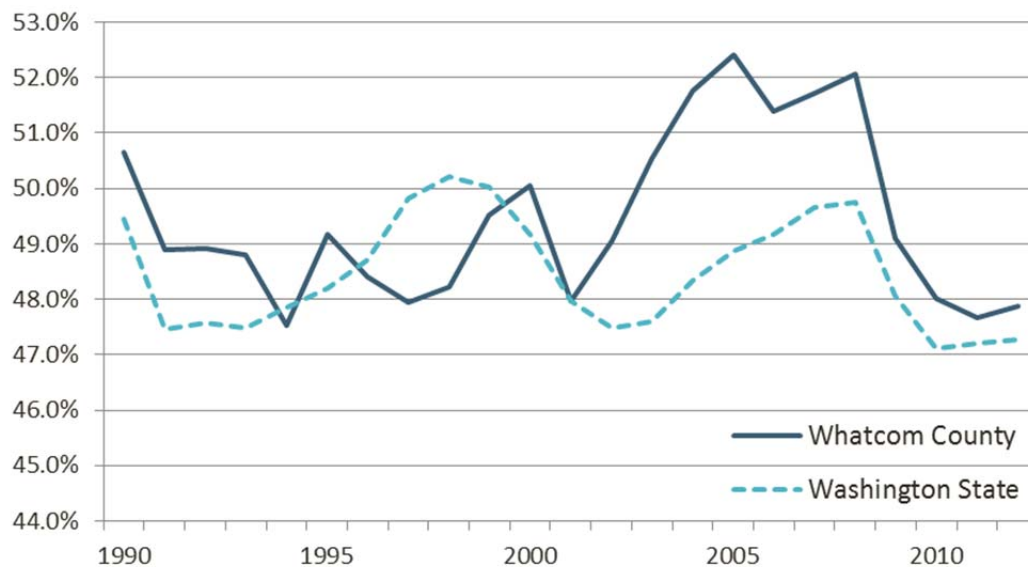
Exhibit 13 and Exhibit 14 show the distribution of population by larger age categories. These exhibits show that Whatcom County has a slightly higher proportion of population age 65 and over than the State average. The proportion of 65+ population had a notable increase in 2010 and it is unclear whether this is signaling a new trend for Whatcom County or not. According to the Office of Financial Management, Whatcom County was not treated

as a retirement community for the 2010-2040 long-range forecasts. It was treated as a metro county, like Snohomish or Clark Counties. These counties were assigned some attraction for 65+ population, compared to King County, due to relatively affordable living and accessibility to services.

COUNTY-WIDE EMPLOYMENT

Neither the Washington Employment Security Department (ESD) nor OFM generate long-range employment projections for Whatcom County specifically. Given this limitation, it is useful to examine the historical relationship between employment and population, which are typically correlated. Exhibit 15 shows recent trends in the ratio between employment and population (referred to as the employment rate) for Whatcom County and Washington State. As an example of what the employment rate indicator represents, in 2012, Whatcom County had a population of 203,500 and total employment of 97,410. The employment rate in this case is 47.9% (97,410 divided by 203,500).

Exhibit 15
Employment Rates for Whatcom County and Washington State, 1990-2012



Source: OFM Long-term Forecast of the Washington Labor Force, March 2013; ESD Local Unemployment Statistics, 2013

- Since 1990, except for a brief period in the late 1990s, Whatcom County's employment rate has generally been higher than the State employment rate.
- The Whatcom County employment rate has fluctuated from a high of 52.4% in 2005 to a low of 47.5% in 1994. Most recently, in 2012, the employment rate was 47.9%

Although employment projections are not available for Whatcom County, Exhibit 16 shows how employment, population, and the employment rate are projected to change for the State of Washington.

Exhibit 16
Employment Rates for Whatcom County and Washington State, 1990-2040

	Whatcom County			Washington State		
	Population	Total Employed	Employment Rate	Population	Total Employed	Employment Rate
Historical Estimates						
1990	127,780	64,720	50.6%	4,866,663	2,406,400	49.4%
2000	166,826	83,510	50.1%	5,894,143	2,898,100	49.2%
2010	201,140	96,590	48.0%	6,724,540	3,167,500	47.1%
2012	203,500	97,410	47.9%	6,817,770	3,223,300	47.3%
Projections						
2020	-	-	-	7,411,977	3,456,200	46.6%
2030	-	-	-	8,154,193	3,657,100	44.8%
2040	-	-	-	8,790,981	3,904,300	44.4%

Source: OFM Long-term Forecast of the Washington Labor Force, March 2013; ESD Local Unemployment Statistics, 2013

- According to the OFM Long-term Forecast of the Washington Labor Force, the employment rate is projected to decline over time and approach 44% by 2040. One factor driving this decline is the retirement of the baby boom generation and aging of the State population.

Projections of Countywide Employment

Using the high, medium, and low population projections for 2036, described earlier, it is possible to estimate Whatcom County 2036 employment using an assumption about the future employment rate. Based on the projected Washington State employment rate of about 44.5% in 2036, and the fact that Whatcom County's employment rate has typically been higher than the State's, we have developed Countywide employment projections using an assumption that the Whatcom County employment rate will be 46% in 2036.

Exhibit 17
Whatcom County Employment Projections, 2012-2036

	Low Projection	Medium Projection	High Projection
2012 Total Employment	97,410	97,410	97,410
2036 Population Projection	261,886	273,911	291,949
2036 Total Employment @ 46% Emp Rate	120,468	125,999	134,297
2012-2036 Employment Growth			
Total Employment Growth	23,058	28,589	36,887
Avg Annual Employment Growth	961	1,191	1,537
Annual Avg Employment Growth Rate	0.9%	1.1%	1.3%
2012-2036 Non-Ag Employment Growth	22,194	27,518	35,505

Source: BERK, 2013

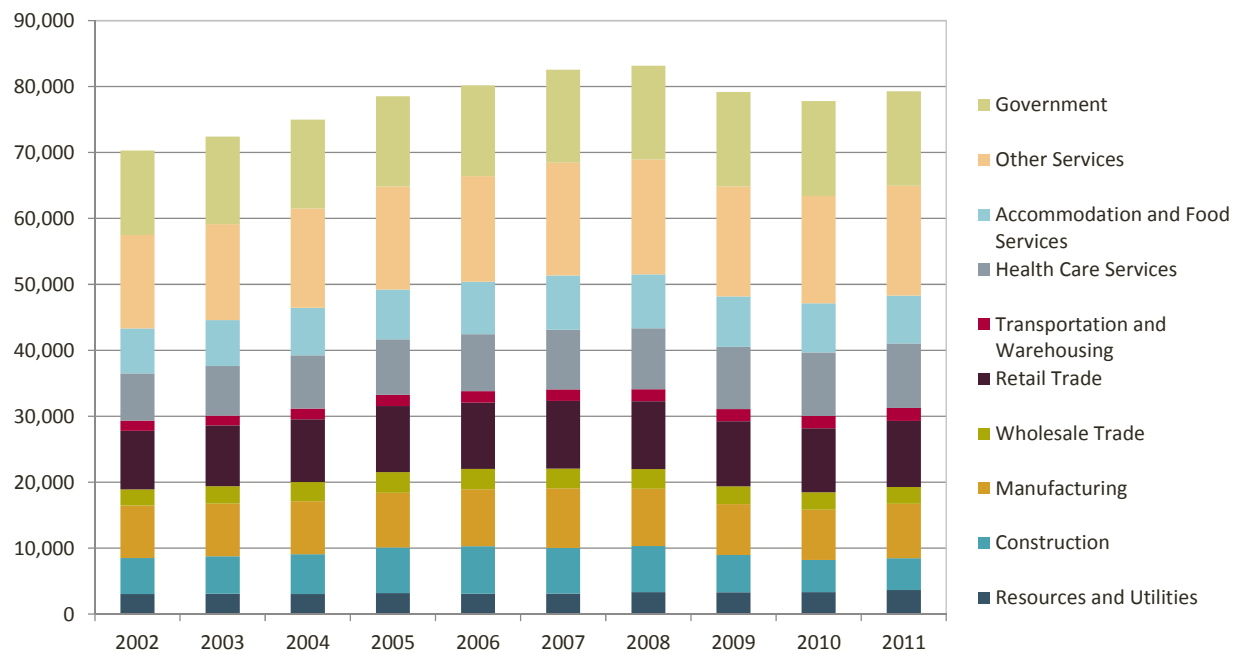
- Using the population ranges established earlier and an employment rate assumption of 46%, employment projections range from a low of about 120,000 to a high of 134,000. This represents employment growth of 23,000 to 37,000 between 2012-2036.
- Exhibit 17 includes a growth estimate of non-agricultural employment, which excludes agriculture and mining employment categories. Non-agricultural employment is what will be allocated to UGAs in the following section, as the comprehensive plan update process focuses on non-agricultural commercial growth and land supply.

Employment by Industry

In addition to total employment, it is also important to assess the distribution of employment by industry. Exhibit 18 shows recent employment shifts by industry in Whatcom County. Each industry represents a selection of North American Industry Classification System (NAICS) industry codes.

Exhibit 18
Whatcom County Covered Employment by Industry, 2002-2011

NAICS	Industry	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
11, 21-22	Resources and Utilities	3,053	3,110	3,071	3,196	3,097	3,115	3,362	3,336	3,376	3,645
23	Construction	5,471	5,679	6,030	6,906	7,216	6,928	6,979	5,652	4,861	4,845
31-33	Manufacturing	7,932	7,991	8,034	8,324	8,630	9,027	8,695	7,727	7,617	8,242
42	Wholesale Trade	2,465	2,629	2,919	3,127	3,075	2,994	2,971	2,677	2,648	2,552
44-45	Retail Trade	8,877	9,211	9,487	10,012	10,063	10,253	10,295	9,855	9,701	10,029
48-49	Transportation and Warehousing	1,562	1,506	1,634	1,707	1,751	1,782	1,827	1,862	1,856	1,950
62	Health Care Services	7,139	7,507	8,086	8,394	8,644	9,015	9,232	9,445	9,625	9,784
72	Accommodation and Food Services	6,818	6,936	7,220	7,544	7,944	8,266	8,159	7,621	7,454	7,257
51-61, 71, 81	Other Services	14,172	14,576	15,056	15,639	16,026	17,084	17,421	16,673	16,295	16,675
	Government	12,817	13,272	13,451	13,652	13,742	14,082	14,224	14,316	14,346	14,291
	Total	70,306	72,417	74,988	78,501	80,188	82,544	83,167	79,164	77,779	79,270



Source: ESD, 2013

Note: "Covered employment" refers to jobs covered by the state unemployment insurance program. Workers excluded from covered employment totals include members of the armed forces, self-employed workers, sole proprietors, and other non-insured workers. Due to these exclusions, total covered employment in this exhibit does not match total employment reported in earlier exhibits.

- Countywide covered employment grew by almost 13,000 jobs between 2002 and 2008, declined during the economic downturn, and started to rebound in 2011. Overall between 2002 and 2011, covered employment grew by almost 9,000 jobs.
- The fastest growing industry is Health Care Services, which grew by about 2,600 jobs between 2002 and 2011, at an annual average growth rate of 3.6%.
- The only industry to decline since 2002 is Construction, a sector hard hit during the economic downturn, which lost about 600 jobs between 2002 and 2011.

In the next section, employment in three broad industry categories (commercial, retail, and industrial), are allocated to UGAs. These three categories each comprise a selection of NAICS codes as shown in Exhibit 19 below. These broad categories are used because they generally correspond to the County's land capacity analysis and allow flexibility when exploring alternative growth scenarios. Later in the comprehensive plan update process, future employment demand will be compared to developable land capacity to determine the ability for jurisdictions to accommodate future employment growth.

Exhibit 19
NAICS Industries Included in Broad Industry Groups

NAICS Codes	Industry	Broad Industry Category For Allocations
11	Agriculture, forestry, fishing and hunting	RESOURCES (Not Included in allocations)
21	Mining	
22	Utilities	INDUSTRIAL
23	Construction	
31-33	Manufacturing	
42	Wholesale trade	
48-49	Transportation and warehousing	
44-45	Retail trade	RETAIL
51	Information	COMMERCIAL
52	Finance and insurance	
53	Real estate and rental and leasing	
54	Professional and technical services	
55	Management of companies and enterprises	
56	Administrative and waste services	
61	Educational services	
62	Health care and social assistance	
71	Arts, entertainment, and recreation	
72	Accommodation and food services	
81	Other services, except public administration	
	Government	

Source: BERK, 2013

ALLOCATION OF EMPLOYMENT TO UGAS

After establishing a range of countywide employment projections, the next step is to allocate employment growth to UGAs. Due to confidentiality constraints, the Employment Security Department must suppress certain industry employment totals at the UGA-level of geography. Given this constraint, to examine UGA-level employment distributions, we used a 2010 employment database developed by the Whatcom Council of Governments (WCOG). The WCOG database includes employment information at individual business locations and was developed using third-party commercial data from InfoUSA and Dun & Bradstreet, extensive quality assurance and quality control, and direct outreach to local businesses.

The initial technical allocations of employment growth in this section use a simple allocation based on the 2010 distribution of employment within the County. For example, the Bellingham UGA comprises 67% of commercial employment in the County, and therefore will receive 67% of projected commercial growth.

Exhibit 20
Share of Employment by UGA, 2010

	Employment Category			Total
	Commercial	Retail	Industrial	
Urban Growth Areas				
Bellingham	67.4%	72.6%	50.4%	63.8%
Birch Bay	1.0%	0.5%	0.3%	0.8%
Blaine	3.9%	2.7%	4.0%	3.8%
Cherry Point	0.2%	0.0%	9.1%	2.5%
Columbia Valley	0.1%	0.0%	0.1%	0.1%
Everson	0.8%	0.8%	1.2%	0.9%
Ferndale	4.8%	5.6%	11.2%	6.6%
Lynden	6.0%	5.5%	6.6%	6.1%
Nooksack	0.3%	0.2%	0.4%	0.3%
Sumas	0.5%	0.7%	1.5%	0.8%
All Urban Growth Areas	85.1%	88.6%	84.9%	85.6%
Other Areas Outside UGAs	14.9%	11.4%	15.1%	14.4%
Total Whatcom County	100.0%	100.0%	100.0%	100.0%
% of Total Whatcom Employment in Each Employment Category				
	58.6%	15.2%	26.1%	100.0%

Source: WCOG, 2013

Note: Until the travel demand model calibration process is complete by July 31, 2013, WCOG may make some minor changes to the employment database.

- The Bellingham UGA comprises about 64% of all employment in the County and is the clear economic center of activity.
- Among the employment categories, commercial employment accounts for 59% of the non-agricultural employment base, followed by industrial (26%) and Retail (15%).

Alternative Growth Scenarios

The technical allocations will be used as a starting point for collaboration between the County and cities to make adjustments based on local plans, special circumstances, and other policy considerations. In the exhibits below, the high, medium, and low projections correspond to the total non-agricultural employment projections shown earlier in Exhibit 17.

Exhibit 21
Employment Allocation by Growth Area, 2012-2036
LOW PROJECTION

	Commercial	Retail	Industrial	Total
Urban Growth Areas				
Bellingham	8,777	2,456	2,923	14,156
Birch Bay	134	17	17	168
Blaine	509	90	233	832
Cherry Point	29	0	527	556
Columbia Valley	10	1	6	17
Everson	99	29	72	200
Ferndale	625	189	652	1,466
Lynden	778	186	384	1,348
Nooksack	42	6	24	72
Sumas	69	22	87	178
All Urban Growth Areas	11,072	2,996	4,925	18,993
Other Areas Outside UGAs	1,939	387	875	3,201
Total Whatcom County	13,011	3,383	5,800	22,194

Source: BERK, 2013

Exhibit 22
Employment Allocation by Growth Area, 2012-2036
MEDIUM PROJECTION

	Commercial	Retail	Industrial	Total
Urban Growth Areas				
Bellingham	10,883	3,044	3,624	17,551
Birch Bay	166	21	21	208
Blaine	631	112	289	1,032
Cherry Point	36	0	653	689
Columbia Valley	13	2	7	22
Everson	122	35	90	247
Ferndale	775	234	809	1,818
Lynden	965	231	476	1,672
Nooksack	52	8	29	89
Sumas	86	27	108	221
All Urban Growth Areas	13,729	3,714	6,106	23,549
Other Areas Outside UGAs	2,404	480	1,085	3,969
Total Whatcom County	16,133	4,194	7,191	27,518

Source: BERK, 2013

Exhibit 23
Employment Allocation by Growth Area, 2012-2036
HIGH PROJECTION

	Commercial	Retail	Industrial	Total
Urban Growth Areas				
Bellingham	14,038	3,927	4,676	22,641
Birch Bay	214	28	27	269
Blaine	815	145	373	1,333
Cherry Point	47	0	843	890
Columbia Valley	17	2	9	28
Everson	158	46	116	320
Ferndale	1,000	302	1,044	2,346
Lynden	1,245	298	614	2,157
Nooksack	67	10	38	115
Sumas	111	35	139	285
All Urban Growth Areas	17,712	4,793	7,879	30,384
Other Areas Outside UGAs	3,102	619	1,400	5,121
Total Whatcom County	20,814	5,412	9,279	35,505

Source: BERK, 2013

Considerations for the Policy Phase

The technical allocations of population and employment in this memo will be used as a starting point for collaboration between the County and cities to make adjustments. The technical alternatives can be augmented or adjusted in the policy phase of the planning process in following ways:

1. **Adjust Countywide Totals.** The countywide high and low projections of population can be adjusted to represent a broader or tighter range around the OFM medium projection. For the employment projections, alternative employment rate assumptions can be considered.
2. **Adjust Allocation Shares.** There are several market and policy considerations that could justify adjustments in the UGA-level allocations of population or employment. These include, but are not limited to, the following:
 - Targeting growth to specific UGAs that are expected to experience more growth in the future than has been observed historically.
 - Considering developable land capacity to target more growth where developable capacity exists and less growth where there is limited land capacity.
 - Making adjustments to account for infrastructure capacity and constraints.
 - Considering allocation of a declining share of growth to areas outside of UGAs, reflecting a continuation of the trend over the past 20 years.
 - Considering Canadian influences on the housing and commercial markets. This could result in adjustments to allocations for communities affected by the Canadian influence.
 - Factoring in local plans and actions to attract additional development.
 - Considering potential effects of large catalyst projects and the market-changing effects these developments can have on population or employment growth patterns.

It is important to note that the high and low technical allocations of population and employment for each UGA can be adjusted, and should not be seen as high and low brackets for the policy phase discussions.