

DRAFT KITTITAS COUNTY EMPLOYMENT PROJECTIONS AND ALLOCATION SCENARIOS

1.0 OVERVIEW

Kittitas County, in consultation with its cities, has elected to project and plan for employment growth in the 20-Year Comprehensive Plan Update. To support this work, BERK Consulting developed two alternative projections of countywide employment growth from 2015 – 2037. BERK also developed two separate scenarios for allocating this projected growth to UGA and Non-UGA study areas¹ within the county. These scenarios can be tested to explore the potential outcomes of a range of possible futures.

BERK will be calculating land capacity for each study area. Once complete, BERK will test up to two selected allocation scenarios with regards to available land capacity and other factors which may constrain the viability of a study area for accommodating growth. The County may use this information to inform the development of a Preferred Alternative.

This memo is organized in five sections:

1. Overview
2. Employment Projections
3. Study Area Employment
4. Employment Allocation Scenarios
5. Next Steps

2.0 EMPLOYMENT PROJECTIONS

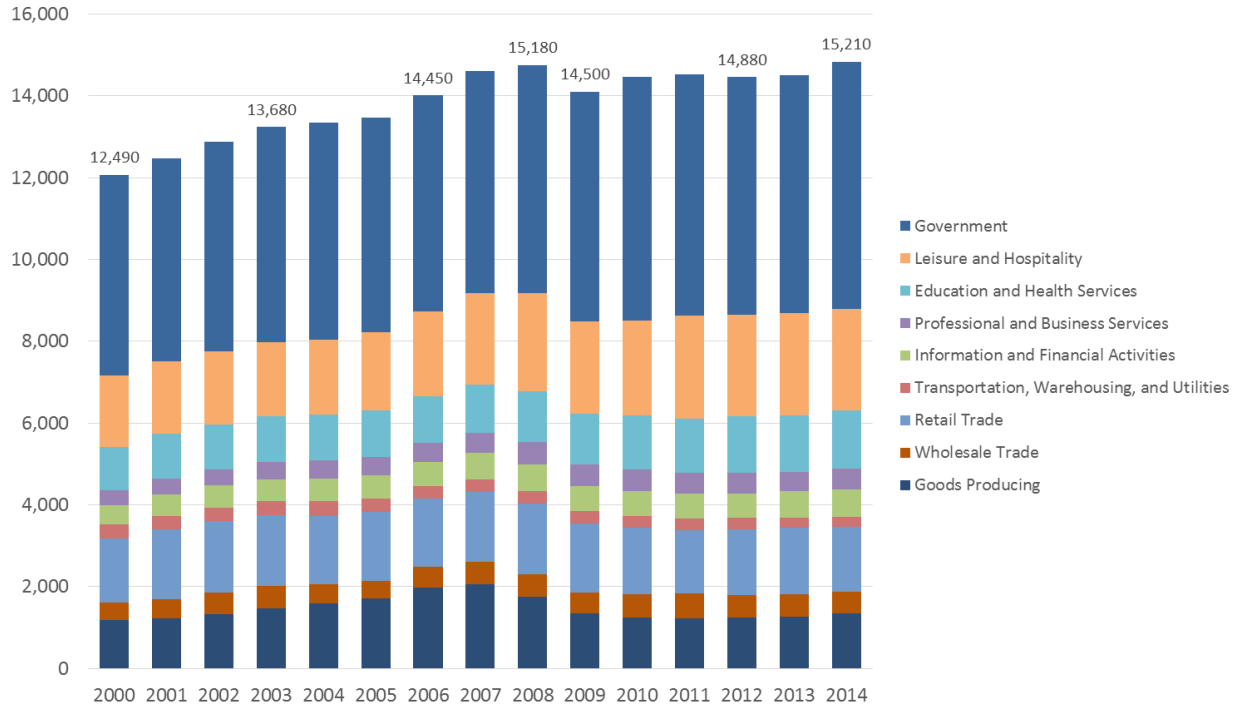
2.1 County-Wide Employment and Growth Trends²

Exhibit 1 shows total non-farm employment inside Kittitas County between 2000 and 2014. Employment grew at a rate of 2.5% between 2000 and 2008. The County suffered job losses during the recession beginning in 2009 and since then job growth has been stagnant or slow. In 2014 employment finally surpassed the 2008 peak. During the entire period employment grew at an average annual rate of 1.4%.

¹ A map of study area boundaries is included at the end of this memo for reference.

² A more detailed analysis of historic county-wide employment growth is included in a separate report (*Kittitas County Population Projection Review and Analysis*).

Exhibit 1. Kittitas County Total Non-Farm Employment, 2000 - 2014



Source: Washington Employment Security Department, U.S. Bureau of Labor Statistics, 2015

Exhibit 2 shows the most current monthly employment data available as well as average annual growth rates. Between September 2014 and September 2015, the county experienced 12.1% employment growth. This growth occurred in several sectors, but the bulk of change is attributed to Leisure and Hospitality and State and Local Government Education. It is possible some of the Leisure and Hospitality growth is associated with the continued development of the Suncadia resort. Projected employment growth rates by sectors from the Washington State Employment Security Department for the South Central region³, which includes Kittitas County, are also included.

³ ESD's definition of the South Central region includes Kittitas, Yakima, Klickitat, and Skamania Counties.

Exhibit 2. Kittitas County Employment and Growth Rates by Sector

Employment Sector	Sept 2015 Employment	Average Annual Growth Rate		ESD Projected Annual Growth Rate	
		2000 - 2014	Sept. 14 - Sept. 15 *	2013 - 2018	2018 - 2023
Total Nonfarm	16,990	1.42%	12.10%	1.84%	1.32%
Total Private	10,470	1.36%	9.40%		
Goods Producing	1,510	0.91%	0.00%		
Mining, Logging, and Construction	930	2.32%	-2.10%	1.89%	0.00%
Manufacturing	580	-0.74%	3.60%	1.61%	0.76%
Service-Providing	15,480	1.46%	13.50%		
Trade, Transportation, and Utilities	2,500	0.12%	5.00%	1.37%	0.95%
Wholesale Trade	570	1.37%	5.60%	1.89%	1.05%
Retail Trade	1,660	0.18%	3.80%	1.10%	0.89%
Transportation and Warehousing	270	-2.46%	12.50%	1.66%	1.03%
Information and Financial Activities	730	2.41%	5.80%	0.00%	0.43%
Professional and Business Services	680	2.73%	17.20%	1.39%	2.23%
Education and Health Services	1,450	2.04%	3.60%	3.59%	1.89%
Leisure and Hospitality	3,210	2.52%	22.10%	2.07%	1.38%
Government	6,520	1.51%	16.80%	1.09%	1.25%
Federal	180	-1.78%	12.50%	-1.28%	0.00%
State and Local Government	6,340	1.61%	17.00%	1.29%	1.21%
State and Local Gov. Education	4,570	1.55%	26.20%	1.20%	1.41%

* ESD has not released seasonally adjusted 2015 employment counts that are comparable to the 2000-2014 data. Therefore, growth rates are calculated separately for this one year period.

Source: Washington State Employment Security Department, Labor Market and Performance Analysis, 2015.

2.2 Employment Projection Scenarios

To derive county-wide employment projections for 2037, BERK used ESD's September 2015 employment counts by sector as a baseline. BERK's moderate projection was calculated by applying the ESD growth rates by sector and assuming the 2018-2023 rates continue unchanged through 2037. BERK's higher projection augmented these rates of growth by sector to achieve a countywide growth rate closer to

what was experienced between 2000 and 2008.⁴ For both projections, total non-farm employment is calculated by adding projected employment for each individual sector. Therefore the county-wide total non-farm employment growth rates differs from ESD’s projected rate for the entire South Central region. The results of this analysis are shown in Exhibit 3.

Exhibit 3. Kittitas County Employment Growth Projections
(County-wide Employment)

	Employment Growth 2015 - 2037	Total Employment 2037	Average Annual Growth Rate 2015 - 2037
Moderate Growth	5,383	22,373	1.26%
Higher Growth	11,024	28,014	2.30%
<i>Historic Trend (2000 – 2014 growth rate, for comparison)</i>			1.42%

Source: BERK 2015

The Moderate projection assumes employment grows at a slower rate than the county experienced between 2000 and 2014. The Higher projection assumes a faster rate of growth, but one that is slightly slower than experienced between 2000 and 2008. When comparing these two projected growth rates to those assumed by the Moderate and Higher population growth projections, employment is projected to grow at a slightly faster rate. This is consistent with historic trends.

3.0 STUDY AREA EMPLOYMENT

The Washington State Employment Security Department only provides employment data summarized for the entire county. To analyze employment trends by study area, BERK used data from the U.S. Census Bureau, Center for Economic Studies. While this data is not as current or complete as the county-wide data provided by ESD, it provides valuable insights into the distribution of jobs across the county as well as relative rates of growth by study area. However, this data should be interpreted with caution and qualified with local knowledge that puts the employments counts in context. For instance, the job counts for Snoqualmie Pass do not appear to reflect peak season employment when the ski areas are open for business.

Exhibit 4 summarizes employment by study area for 2002, 2007, and 2013. 2002 is the earliest year for which this data is available and 2013 is the most recent year. According to ESD employment data, Kittitas County did not reach pre-recession employment until 2014. Therefore it is not surprising to see some job losses between 2007 and 2013. However these employment counts include dramatic gains and losses—particularly for smaller study areas—indicating there may be some reliability issues at play. This should be kept in mind when interpreting the two columns on the right which summarize percentage shares of 2013 county employment and county employment growth (2000-2013).

⁴ To calculate the higher countywide employment projection, BERK simply multiplied the ESD projected growth rates for each sector by 1.8. For sectors which are projected to have negative rates of growth, BERK kept the original ESD projections. The 1.8 multiplier was selected because it resulted in a countywide growth rate (2.3%) that is reasonably consistent with historic trends and compatible with the OFM High projected rate of population growth. These assumptions could be adjusted if better information about expected or potential growth in Kittitas County becomes available.

Exhibit 4. Employment by Study Area

(Includes farming. Excludes military and self-employed.)

	2002	2007	2013	% Share of County Employment (2013)	% Share of County Employment Growth (2002 – 2013)
UGA Study Areas					
Cle Elum	1,008	1,346	1,470	10.57%	22.95%
Ellensburg	7,678	8,594	8,255	59.34%	28.66%
Kittitas	351	0	316	2.27%	-1.74%
Roslyn	855	922	826	5.94%	-1.44%
South Cle Elum	46	45	5	0.04%	-2.04%
Non-UGA Study Areas					
Easton	26	21	3	0.02%	-1.14%
Ronald	9	575	0	0.00%	-0.45%
Snoqualmie Pass	62	50	23	0.17%	-1.94%
Thorp	16	13	109	0.78%	4.62%
Vantage	5	0	22	0.16%	0.84%
Nelson Siding Rd/Westside Rd	3	15	23	0.17%	0.99%
Ranch on Swauk Creek	0	2	3	0.02%	0.15%
Salmon La Sac Rd	0	0	4	0.03%	0.20%
Suncadia	0	0	92	0.66%	4.57%
Rural Lands Outside Study Areas					
Upper County	462	565	325	2.34%	-6.81%
Lower County	1,377	853	2,435	17.50%	52.56%

Source: U.S. Census Bureau, Center for Economic Studies, 2015; BERK 2015.

The most dramatic finding of this analysis is the high percentage of jobs located outside of study areas in the Lower County, which experienced rapid growth. Over half of the total employment growth in the county from 2000 to 2013 is located in this area. Much of the growth was in the Agriculture, Forestry,

Fishing, and Hunting sector. Mining and Construction also accounted for a large share of growth. Local insights into the source of the jobs and their permanence would be helpful to interpreting this trend. For instance, construction of new windfarms in rural areas may explain some of this growth.

4.0 EMPLOYMENT ALLOCATION SCENARIOS

BERK developed two different scenarios for allocating county-wide employment growth to study areas within the county. Scenario 1 (“Historic Trends”) assumes that growth will follow historic trends. Total projected county-wide employment growth is allocated to study areas based on each study area’s share of county-wide employment growth from 2002 to 2013. This scenario is not sensitive to how differences in projected growth rates by employment sector could impact study areas differently due to their current breakdown of employment by sector.

Scenario 2 (“Current Shares”) allocates county-wide projected employment growth by sector based on each study area’s baseline (2013) share of total employment in that sector. For instance, Cle Elum contained 24% of county-wide manufacturing jobs in 2013. Therefore 24% of projected manufacturing job growth is allocated to Cle Elum in this scenario. Exhibit 6 shows baseline shares of countywide employment by sector for all study areas. Unlike the Historic Trends scenario, Current Shares is sensitive to projected growth rates by employment sector and the impacts these could have on the pattern of future employment growth across the county.

Exhibit 5. Employment Growth Allocation Scenarios

	Scenario 1: Historic Trends			Scenario 2: Current Shares		
	Share of growth	Scenario 1a (Moderate Growth)	Scenario 1b (Higher Growth)	Share of growth	Scenario 2a (Moderate Growth)	Scenario 3b (Higher Growth)
Kittitas County	100%	5,383	11,024	100%	5,383	11,024
UGA Study Areas						
Cle Elum	20%	1,069	2,190	12%	620	1,263
Ellensburg	25%	1,335	2,735	57%	3,043	6,257
Kittitas	0%	0	0	2%	127	264
Roslyn	0%	0	0	6%	349	717
South Cle Elum	0%	0	0	0%	0	1
All UGAs (combined)	45%	2,404	4,924	77%	4,139	8,502
Non-UGA Study Areas						
Easton	0%	0	0	0%	3	6
Ronald	0%	0	0	0%	0	0
Snoqualmie Pass	4%	215	441	0%	9	19
Thorp	0%	0	0	0%	24	52
Vantage	1%	39	81	0%	7	14
Nelson Siding Rd/Westside Rd	1%	46	95	0%	2	3
Ranch on Swauk Creek	0%	7	14	0%	0	0
Salmon La Sac Rd	0%	9	19	0%	2	4
Suncadia	4%	213	436	1%	40	82
Rural lands outside of study areas						
Upper County	0%	0	0	4%	195	396
Lower County	45%	2,448	5,014	18%	961	1,946

5.0 NEXT STEPS

The County and cities are invited to provide feedback on the projections and preliminary allocation scenarios presented in this memo. Due to the reliability issues associated with study area employment, particular scrutiny should be given to the baseline counts and historic trends presented in Section 3.0 above.

During the month of January BERK will calculate land capacity for accommodating new population and employment growth by study area. . Cities will be consulted regarding local data and assumptions to include in this analysis. Once this land capacity analysis is complete, selected allocation scenarios can be tested against available capacity and other factors that may shape future growth.

County and city feedback and insights, as well as the results of the land capacity testing, can be used to inform the development of a Preferred Alternative employment project and allocation.

Exhibit 6. Baseline Study Area Shares of Countywide Employment by Sector

	Mining and Construction	Manufacturing	Wholesale Trade	Retail Trade	Transportation and Warehousing	Finance, Info., & Real Estate	Prof. and Business Services	Edu. and Health Services*	Leisure and Hospitality	Public Administration
UGA Study Areas										
Cle Elum	7%	24%	1%	13%	15%	13%	10%	6%	20%	9%
Ellensburg	30%	57%	70%	72%	34%	74%	53%	81%	45%	52%
Kittitas	0%	0%	1%	3%	0%	3%	5%	3%	1%	2%
Roslyn	6%	0%	1%	1%	3%	5%	9%	1%	22%	1%
South Cle Elum	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Non-UGA Study Areas										
Easton	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ronald	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Snoqualmie Pass	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Thorp	0%	2%	0%	0%	0%	0%	0%	2%	0%	0%
Vantage	0%	0%	0%	1%	0%	0%	1%	0%	0%	0%
Nelson Siding Rd/Westside Rd	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Ranch on Swauk Creek	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Salmon La Sac Rd	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Suncadia	0%	0%	0%	0%	0%	0%	0%	0%	3%	0%
Rural lands outside of study areas										
Upper County	11%	3%	1%	1%	9%	1%	5%	0%	3%	5%
Lower County	41%	14%	26%	9%	40%	4%	17%	6%	4%	30%

* Includes public sector education jobs.

Source: BERK analysis of 2013 employment data from U.S. Census Bureau, Center for Economic Studies, 2015

