

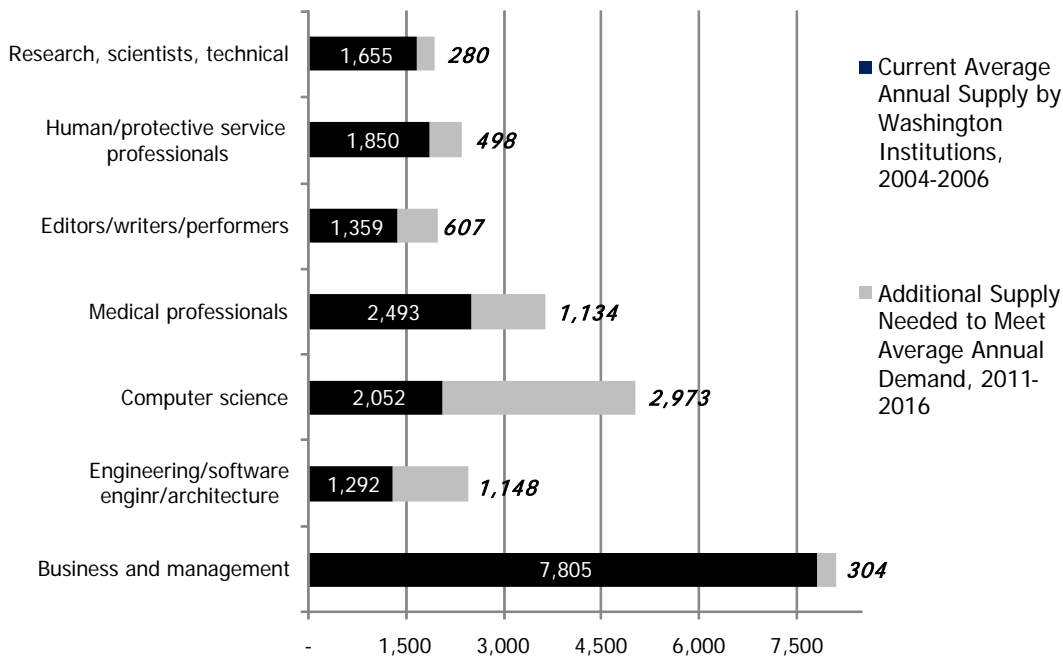
# Employer Demand for Skills in Snohomish County

## The Regional Economy and Existing Statewide Gaps

Snohomish County is home to 8 percent of the state’s jobs that require a post-secondary degree, but higher education institutions in the county produce only 2 percent of those degrees, most of which are Associate degrees. Forecasts predict that the County’s 8 percent share of college-level jobs will remain constant through 2020. The county produces 7 percent of the state’s Associate degrees and is home to 7 percent of all Associate degree-level jobs, so the problem is at the bachelor’s degree and above.<sup>1</sup>

The chart below identifies the skill gaps for the state for baccalaureate and higher-level jobs. The skill gaps are occupational clusters where the employer demand exceeds the available supply, based on total state degree production.

Chart 1: Comparison of Current Supply with Future Demand for Baccalaureate and Graduate Degrees



Source: Openings: Washington ESD June 2008 Long Term Employment Forecast  
 Supply: HECB Analysis of IPEDS data. Current supply is a 3 -year annual average of degree awards, 2006 -2008, adjusted for entry into the labor market.

The dark bars show the current supply when this study was done in 2009. The grey bars show the portion of demand not addressed by degree production. These are the jobs that are filled by

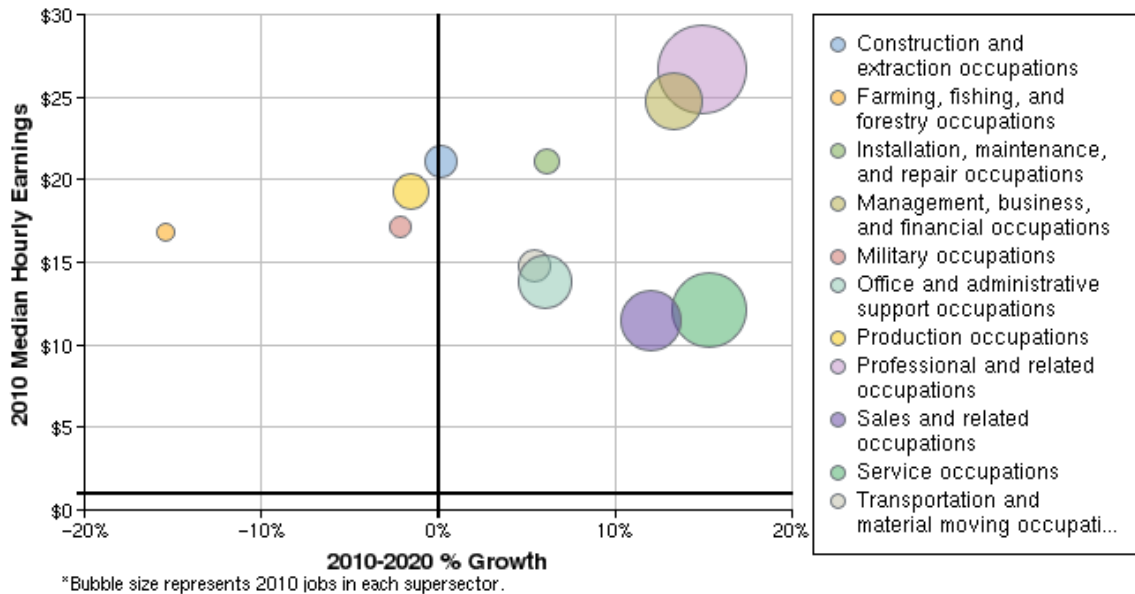
<sup>1</sup> HECB analysis of IPEDS degree production data and EMSI employment data for 2009.

# DRAFT

workers coming from out-of-state, or that in some instances go unfilled. We see that some of the largest gaps are among medical professions, computer science occupations, and engineering.

The chart below shows the wage level, size, and growth rate between 2010 and 2020 of the major occupational clusters in Snohomish County. We see that the highest wage clusters that are forecast to grow substantially over the next 10 years in the county are professional and related occupations and management, business, and financial occupations. Also forecast to grow at a similarly high rate, but paying far less are service occupations and sales and related occupations.

Chart 2: Growth and Wage Levels for Snohomish County Occupational Clusters, 2010-2020



## Current Enrollment Patterns

Presently, Snohomish County residents attend 4-year institutions at either a university center on the campuses of Everett and Edmonds Community College, attend one of the few private institutions in the county, or leave the county for college enrollment opportunities. About 30 percent of UW-Bothell students, 12 percent of UW-Seattle students and 13 percent of Western Washington University students from Washington State are Snohomish County residents. That makes a total of about 5,500 Snohomish County residents attending these three nearby institutions in fall 2009. It may not be unreasonable to speculate that as many as one quarter of the Snohomish-Island-Skagit residents who leave the area to attend a public 4-year institution today (2,600 students) would choose to go to a Snohomish university campus instead, if one were sited there.<sup>2</sup>

<sup>2</sup> HECB analysis of OFM Higher Education Enrollment Report data.

# DRAFT

**Table 1: Fall 2009 Enrollment by County of Residence**

<b>Institution</b>	<b>Snohomish</b>	<b>Island</b>	<b>Skagit</b>	<b>Total</b>
UW-Seattle	3,009	173	226	<b>3,408</b>
UW-Bothell	800	13	15	<b>828</b>
UW-Tacoma	137	2	2	<b>141</b>
WSU-Pullman	1,428	146	281	<b>1,855</b>
WSU-Spokane	36	3	12	<b>51</b>
WSU-Tri-Cities	4	0	4	<b>8</b>
WSU-Vancouver	16	3	2	<b>21</b>
CWU	1,046	62	163	<b>1,271</b>
EWU	323	45	54	<b>422</b>
Evergreen State	121	31	28	<b>180</b>
WWU	1,658	249	473	<b>2,380</b>
<b>Total</b>	<b>8,578</b>	<b>727</b>	<b>1,260</b>	<b>10,565</b>

Source: HECB from OFM HEER Report data.

Despite the apparent willingness of Snohomish County residents to travel far to attend a public 4-year institution, there still appears to be a gap between their participation and the population. Taken together, Snohomish, Island, and Skagit county residents make up 12.0 percent of total public 4-year enrollment. But the counties' 17-44 year old population is 13.5 percent of the total state population in that age cohort. If an additional 1,300 residents from these counties enrolled in a public 4-year institution, their share of total enrollment would be equal to the region's share of the college-age population.

## **High Demand Occupations**

The table below provides much more detail on the high wage, high growth occupations that require post-secondary education in Snohomish County. The table lists the top 50 growth occupations by the number of forecast new and replacement job openings.

The occupations in Snohomish County that pay family self-sufficiency level wages and that are forecast to grow the most are nurses, teachers, operations managers, business operations specialists, network systems and data communications analysis, engineers, and physicians. With the exception of teachers, all of these occupations are consistent with the statewide gap analysis and the bubble chart above. Teachers make the list because of the combination of forecast population growth and large numbers of replacement jobs due to turnover of a large employment base.

# DRAFT

**Table 2: Top 50 Growth Occupations Requiring a Post-Secondary Credential in Snohomish Region by Number of Jobs**

*Exceeds Sno. County (Exc. West Cities) Standard*

Rank	Description	SOC Code	2010 Jobs	2020 Jobs	Change	% Change	Job Openings	% New & Rep.	Current Median Hourly Earnings	BLS Entry Education Level	Exceeds Sno. County (Exc. West Cities) Standard		
											1 Adult, 1 Preschooler	1 Adult, 1 Preschooler, 1 Schoolage	2 Adults, 1 Preschooler, 1 Schoolage (each adult)
1	Real estate sales agents	41-9022	3,775	5,180	1,405	37%	2,024	54%	\$8.72	Postsecondary vocational award			
2	Registered nurses	29-1111	3,857	4,806	949	25%	1,622	42%	\$30.60	Associate's degree	✓	✓	✓
3	Property, real estate, and community association managers	11-9141	2,307	3,121	814	35%	1,212	53%	\$10.09	Bachelor's degree			
4	Aircraft structure, surfaces, rigging, and systems assemblers	51-2011	3,637	3,861	224	6%	993	27%	\$22.50	Long-term on-the-job training	✓		✓
5	Management analysts	13-1111	2,609	3,126	517	20%	964	37%	\$22.88	Degree plus work experience	✓		✓
6	Elementary school teachers, except special education	25-2021	2,254	2,686	432	19%	944	42%	\$32.76	Bachelor's degree	✓	✓	✓
7	Chief executives and sole proprietors	11-1011	1,916	2,284	368	19%	907	47%	\$21.91	Degree plus work experience	✓		✓
8	Accountants and auditors	13-2011	2,849	3,268	419	15%	900	32%	\$18.00	Bachelor's degree			✓
9	Carpenters	47-2031	3,985	3,828	-157	-4%	706	18%	\$20.37	Long-term on-the-job training	✓		✓
10	Photographers	27-4021	1,678	2,019	341	20%	676	40%	\$8.56	Long-term on-the-job training			
11	Personal financial advisors	13-2052	1,159	1,704	545	47%	670	58%	\$9.52	Bachelor's degree			
12	General and operations managers	11-1021	2,077	2,062	-15	-1%	664	32%	\$41.32	Degree plus work experience	✓	✓	✓
13	Securities, commodities, and financial services sales agents	41-3031	1,002	1,355	353	35%	660	66%	\$14.87	Bachelor's degree			✓
14	Business operation specialists, all other	13-1199	2,422	2,532	110	5%	649	27%	\$27.81	Bachelor's degree	✓	✓	✓
15	Cooks, restaurant	35-2014	1,831	2,011	180	10%	648	35%	\$10.98	Long-term on-the-job training			
16	Medical secretaries	43-6013	1,528	1,941	413	27%	618	40%	\$16.89	Postsecondary vocational award			✓
17	Postsecondary teachers	25-1099	1,581	1,896	315	20%	590	37%	\$32.08	Doctoral degree	✓	✓	✓
18	Fire fighters	33-2011	1,061	1,321	260	25%	585	55%	\$31.74	Long-term on-the-job training	✓	✓	✓
19	Teachers and instructors, all other	25-3099	1,621	1,950	329	20%	578	36%	\$19.02	Bachelor's degree			✓
20	Network systems and data communications analysts	15-1081	1,040	1,402	362	35%	550	53%	\$25.18	Bachelor's degree	✓	✓	✓
21	Aerospace engineers	17-2011	2,428	2,450	22	1%	545	22%	\$41.33	Bachelor's degree	✓	✓	✓
22	Secondary school teachers, except special and vocational education	25-2031	1,313	1,473	160	12%	541	41%	\$34.33	Bachelor's degree	✓	✓	✓
23	Physicians and surgeons	29-1069	1,134	1,440	306	27%	506	45%	\$78.26	First professional degree	✓	✓	✓
24	Nursing aides, orderlies, and attendants	31-1012	1,748	2,046	298	17%	471	27%	\$11.63	Postsecondary vocational award	✓	✓	✓
25	Industrial engineers	17-2112	1,271	1,417	146	11%	470	37%	\$37.94	Bachelor's degree	✓	✓	✓

# DRAFT

Job ID	Description	SOC Code	2010 Jobs	2020 Jobs	Change	% Change	Job Openings	% New & Rep.	Current Median Hourly Earnings	BLS Entry Education Level	2 Adults, 1 Preschooler, 1 Schoolage (each adult)		
											1 Adult, 1 Preschooler	1 Adult, 1 Preschooler, 1 Schoolage	1 Adult, 1 Preschooler, 1 Schoolage
26	Electricians	47-2111	1,501	1,565	64	4%	464	31%	\$26.25	Long-term on-the-job training Postsecondary vocational	✓	✓	✓
27	Appraisers and assessors of real estate	13-2021	817	1,108	291	36%	440	54%	\$10.43	award			✓
28	Insurance sales agents	41-3021	1,171	1,331	160	14%	432	37%	\$14.29	Bachelor's degree			✓
29	Financial managers	11-3031	1,405	1,577	172	12%	424	30%	\$32.59	Degree plus work experience	✓	✓	✓
30	Fitness trainers and aerobics instructors	39-9031	684	983	299	44%	422	62%	\$14.19	Postsecondary vocational award			✓
31	Engineers, all other	17-2199	1,997	1,935	-62	-3%	419	21%	\$43.61	Bachelor's degree	✓	✓	✓
32	Computer software engineers, applications	15-1031	2,078	2,320	242	12%	417	20%	\$29.51	Bachelor's degree	✓	✓	✓
33	Middle school teachers, except special and vocational education	25-2022	996	1,183	187	19%	413	41%	\$32.83	Bachelor's degree	✓	✓	✓
34	Gaming dealers	39-3011	615	732	117	19%	379	62%	\$11.48	Postsecondary vocational award			✓
35	Police and sheriff's patrol officers	33-3051	851	977	126	15%	345	41%	\$31.30	Long-term on-the-job training	✓	✓	✓
36	Lawyers	23-1011	996	1,154	158	16%	344	35%	\$27.40	First professional degree	✓	✓	✓
37	Market research analysts	19-3021	791	915	124	16%	337	43%	\$27.56	Bachelor's degree	✓	✓	✓
38	Computer systems analysts	15-1051	1,102	1,192	90	8%	327	30%	\$26.57	Bachelor's degree	✓	✓	✓
39	Computer software engineers, systems software	15-1032	2,125	2,268	143	7%	321	15%	\$33.64	Bachelor's degree	✓	✓	✓
40	Automotive service technicians and mechanics	49-3023	1,446	1,490	44	3%	320	22%	\$18.34	Postsecondary vocational award			✓
41	Mechanical engineers	17-2141	1,132	1,154	22	2%	316	28%	\$40.12	Bachelor's degree	✓	✓	✓
42	Licensed practical and licensed vocational nurses	29-2061	605	716	111	18%	300	50%	\$19.23	Postsecondary vocational award			✓
43	Civil engineers	17-2051	946	1,080	134	14%	293	31%	\$34.24	Bachelor's degree	✓	✓	✓
44	Preschool teachers, except special education	25-2011	781	913	132	17%	289	37%	\$11.41	Postsecondary vocational award			✓
45	Human resources, training, and labor relations specialists, all other	13-1079	703	808	105	15%	289	41%	\$25.85	Bachelor's degree	✓	✓	✓
46	Construction managers	11-9021	1,456	1,613	157	11%	285	20%	\$24.45	Bachelor's degree	✓		✓
47	Sales managers	11-2022	802	913	111	14%	283	35%	\$35.48	Degree plus work experience	✓	✓	✓
48	Writers and authors	27-3043	651	797	146	22%	282	43%	\$9.57	Bachelor's degree			✓
49	Financial analysts	13-2051	571	736	165	29%	268	47%	\$17.79	Bachelor's degree			✓
50	Coaches and scouts	27-2022	520	677	157	30%	256	49%	\$16.40	Long-term on-the-job training			✓

Source: EMSI Complete Employment - 3rd Quarter 2010

Note: The Snohomish County (excluding west county cities) Self-Sufficiency Standard is the lowest living wage standard for the counties that comprise this region, based on calculations found in Pearce, Diana (2009), "The Self-Sufficiency Standard for Washington State," UW School of Social Work.

# DRAFT

## **HECB Priority Occupations for the Snohomish Region**

Table 3 below lists just those occupations from the top 50 list above that pay self-sufficiency wages for all three family types (shown in the three most right-hand columns of Table 2). Table 3 also shows the primary instructional programs (CIPs) that are determined by NCES to lead to employment in these occupations. The table divides the list into two groups, those for which a statewide gap in degree production was documented in the 2006 joint agency report, *A Skilled and Educated Workforce*, and those occupations that are in high demand in the region but for which there is no evidence in the report of a statewide gap.

The top half of the list (in green) shows the HECB's highest priority programs for expanding 4-year capacity—both statewide and in the Snohomish County region. Registered nurses are identified by BLS as an Associate Degree level occupation, but the HECB considers nursing to be both an Associate and Bachelor's/Masters degree priority, as 51% of practicing registered nurses in Washington have a Bachelor's degree or above.<sup>3</sup> Respondents to this RFP need not show that supply is insufficient in these occupations, as this has already been done in the joint report.

The bottom half of the list are high demand occupations. If respondents to the RFP for Snohomish County chooses to focus on one of these occupations, they would need to show that current supply of degrees and certificates in the related instructional programs is inadequate to meet the forecast occupation demand.

Respondents to this RFP may also choose to focus on an occupation that is not on this list. But in doing so they will need to document demand for baccalaureate and above-educated workers that exceeds the current available supply.

Respondents to this RFP may also propose an instructional program not identified on Table 3 below as a primary CIP for that occupation. In doing so, it will be important to provide data on students with degrees in other fields who successfully transition to employment in the occupation.

---

<sup>3</sup> WWAMI Center for Health Workforce Studies (2008), "Demographic, Education, and Practice Characteristics of Registered Nurses in Washington State: Results of a 2007 Survey." University of Washington School of Medicine. See table 15.

# DRAFT

**Table 3: Top High Wage Growth Occupations Requiring a Post-Secondary Degree in Snohomish Region by Number of Jobs**

	Description	SOC Code	Job Openings	Current Median Hourly Earnings	BLS Entry Education Level	Crosswalk CIPs
<b>Statewide Gap Occupations (Supply Gap Already Documented)</b>						
1	Registered nurses	29-1111	1,622	\$30.60	Associate's degree	51.0704, 51.1105, 51.3801 to 51.3815
2	Network systems and data communications analysts	15-1081	550	\$25.18	Bachelor's degree	11.0101, 11.0103, 11.0501, 11.0801, 11.0901, 11.1003
3	Aerospace engineers	17-2011	545	\$41.33	Bachelor's degree	14.0101, 14.0201
4	Physicians and surgeons	29-1069	506	\$78.26	First professional degree	51.1102, 51.1201, 51.1899, 51.1901, 60.0401, 60.0402, 60.0410 to 60.0412, 60.0417, 60.0418, 60.0420, 60.0421, 60.0424, 60.0426, 60.0430, 60.0433, 60.0503, 60.0505, 60.0512, 60.0513, 60.0517, 60.0523, 60.0524, 60.0526, 60.0529, 60.0537, 60.0542, 60.0545, 60.0547, 60.0568, 60.0572, 60.0574, 60.0577
5	Industrial engineers	17-2112	470	\$37.94	Bachelor's degree	14.0101, 14.3501, 14.3601
6	Engineers, all other	17-2199	419	\$43.61	Bachelor's degree	14.0101, 14.1101, 14.1201, 14.1301, 14.2701, 14.2801, 14.9999, 51.2312
7	Computer software engineers, applications	15-1031	417	\$29.51	Bachelor's degree	11.0102, 11.0103, 11.0701, 14.0901, 14.0903, 14.0999, 15.1204, 26.1103, 30.1601, 51.2706, 51.2799
8	Computer systems analysts	15-1051	327	\$26.57	Bachelor's degree	11.0101, 11.0103, 11.0501, 11.0801, 11.1004, 30.1601, 51.0709, 52.1201, 52.1207, 52.1299
9	Computer software engineers, systems software	15-1032	321	\$33.64	Bachelor's degree	11.0102, 11.0103, 11.0401, 11.0701, 14.0901, 14.0903, 14.0999, 15.1204, 26.1103, 30.1601, 51.0709, 51.2706, 51.2799
10	Mechanical engineers	17-2141	316	\$40.12	Bachelor's degree	14.0101, 14.1901
11	Civil engineers	17-2051	293	\$34.24	Bachelor's degree	14.0101, 14.0401, 14.0801, 14.0802, 14.0803, 14.0804, 14.0805, 14.0899, 14.2401, 14.3301, 14.3401
<b>Regional High Demand Occupations (Supply Gap not Documented)</b>						
1	Elementary school teachers, except special education	25-2021	944	\$32.76	Bachelor's degree	13.0101, 13.1004, 13.1202, 13.1206 to 13.1208, 13.1210, 13.1399
2	General and operations managers	11-1021	664	\$41.32	Degree plus work experience	44.0401, 52.0101, 52.0201, 52.0204, 52.0205, 52.0206, 52.0299, 52.0701, 52.0703, 52.1111
3	Business operation specialists, all other	13-1199	649	\$27.81	Bachelor's degree	51.0717, 51.3201, 52.0101, 52.9999
4	Postsecondary teachers	25-1099	590	\$32.08	Doctoral degree	05.01, 05.0201 to 05.0208, 13.13, 23.1402 to 23.1404, 24.01, 25.0101, 38.01, 38.02, 38.99, 39.02 to 39.05, 50.0505, 50.0704, 50.0901, 50.0902, 50.0912, 52.0101, 52.0201, 52.0299
5	Secondary school teachers, except special and vocational education	25-2031	541	\$34.33	Bachelor's degree	13.0101, 13.1004, 13.1203-13.1208, 13.1302 to 13.1318, 13.1321 to 13.1333, 13.1335, 13.1399
6	Nursing aides, orderlies, and attendants	31-1012	471	\$11.63	Postsecondary vocational award	51.0000, 51.2601, 51.2699, 51.3902
7	Financial managers	11-3031	424	\$32.59	Degree plus work experience	44.0401, 52.0101, 52.0201, 52.0299, 52.0304, 52.0305, 52.0399, 52.0801, 52.0806, 52.0808, 52.0809, 52.0899
8	Middle school teachers, except special and vocational education	25-2022	413	\$32.83	Bachelor's degree	13.0101, 13.1004, 13.1203, 13.1206 to 13.1208, 13.1302, 13.1305 to 13.1308, 13.1311 to 13.1318, 13.1321, 13.1327, 13.1328, 13.1399
9	Police and sheriff's patrol officers	33-3051	345	\$31.30	Long-term on-the-job training	43.0103, 43.0104, 43.0107, 43.0111, 43.0199, 43.9999
10	Lawyers	23-1011	344	\$27.40	First professional degree	22.0001, 22.0101, 22.0201 to 22.0211, 22.0299, 22.9999
11	Market research analysts	19-3021	337	\$27.56	Bachelor's degree	19.0203, 45.0101, 45.9999, 52.0601, 52.1401, 52.1402, 52.1403, 52.1499
12	Human resources, training, and labor relations specialists, all other	13-1079	289	\$25.85	Bachelor's degree	52.0101 to 52.1004, 52.1099
13	Sales managers	11-2022	283	\$35.48	Degree plus work experience	52.0101, 52.0201, 52.0208, 52.0299, 52.1801

Source: EMSI Complete Employment - 3rd Quarter 2010

# DRAFT

## Why Focus on Snohomish County?

Snohomish County is not the only region of the state with low instructional capacity at the baccalaureate level and above, and there are other regions with lower baccalaureate participation rates. So why so much concern with Snohomish County? Why focus attention there first?

### Areas of Need in Washington

When looking at existing 4-year capacity, participation rates, and enrollment data, it is clear that the areas of the state where 4-year capacity is lacking are the Olympic Peninsula, the north central and northeast counties, and Skagit/Island/Snohomish Counties. While southwestern Washington and Pierce County also have low participation rates, they have public branch campuses and private colleges and universities in the region on which to build and grow. The focus in these regions should be on program expansion at the existing institutions and finding ways to get more local residents enrolled. The remaining regions warrant further examination.

Does the lack of a public 4-year campus in these regions prevent students from participating in higher education? If so, we would expect to find that these regions have low participation rates in the public system. And in fact, that is what we find.

Below are the public institution participation rates for the three regions and the counties that comprise them. We see that all three regions have 4-year total participation rates below the statewide rate. The Olympic and Snohomish (SIS) regions have the lowest 4-year regional participation rates, but all three are comparably low. A cursory look at participation rates does not point strongly toward one region having substantially greater unmet need.

### Participation Rates by County at Washington Public Institutions

Fall 2009 Public Enrollments/100 population, 17-44

County/ Region	Total	2-Year	4-Year	4-Year County Rank (N=39)
ISLAND	11.05	8.33	2.73	28
SKAGIT	13.26	10.01	3.24	22
SNOHOMISH	12.88	9.58	3.30	21
<b>SIS Region</b>	<b>12.78</b>	<b>9.53</b>	<b>3.25</b>	
CLALLAM	19.95	16.87	3.08	26
JEFFERSON	12.80	9.36	3.44	17
KITSAP	12.08	8.70	3.38	20
MASON	12.53	9.94	2.58	33
<b>Olympic Region</b>	<b>13.28</b>	<b>10.05</b>	<b>3.23</b>	
FERRY	15.70	13.18	2.52	34
OKANOGAN	9.42	5.70	3.71	13
STEVENS	9.41	6.00	3.41	19
PEND OREILLE	11.60	8.16	3.44	18
<b>Northeast Region</b>	<b>10.12</b>	<b>6.65</b>	<b>3.47</b>	
<b>Statewide</b>	<b>12.83</b>	<b>9.18</b>	<b>3.65</b>	

Source: HECB from OFM analysis of PCHEES and SBCTC data.

the regional share of the college age population, 1,300 more students from Snohomish county would have been served by the public 4-years institutions in 2009. These numbers are substantially less for the other two regions.

### Existing Supply

While none of these three regions are home to a public 4-year campus, they all have some 4-year capacity in the form of university centers and teaching sites. In addition, many residents leave their regions to attend college elsewhere. The table below compares the percentage of all enrollments (undergraduate and graduate) at public 4-year institutions with each region's share of the state's 17-44 population. The SIS region accounts for 13.5% of the state's population age 17-44, but only 12% of the enrollment in public four year colleges and universities statewide. If the region's enrollments were consistent with



All three regions have very limited private degree-granting baccalaureate and above options. ITT Tech in Everett enrolls about 500 students. NW College of Art in Poulsbo (Olympic Region) enrolls about 100 students. St. Martins University offers small engineering programs in both regions. There are no private degree-granting colleges in the Northeast region.

## Economic Demand for Higher Education

Another reason to focus on one region over another would be differences in the scale of employer demand for skilled workers, the impact of the region on the state economy, and population growth. The SIS region is an economic

powerhouse and home to the Boeing Everett plant and related suppliers, and many biotechnology and biomedical device companies.

## Comparison of Employment and Working Age Population by Region

County/ Region	2009 Employers	2009 Covered Employment	2009 25-64 Population	25-64 Population Growth, 2010-2025	25-64 Pop. Growth Rate
ISLAND	1,900	15,000	42,408	5,334	12.6%
SKAGIT	3,800	49,000	61,226	14,363	23.5%
SNOHOMISH	16,300	254,000	390,688	55,334	14.2%
<b>SIS Region</b>	<b>22,000</b>	<b>319,000</b>	<b>494,322</b>	<b>75,031</b>	<b>15.2%</b>
CLALLAM	2,400	23,000	35,452	1,795	5.1%
JEFFERSON	1,100	9,000	16,247	1,311	8.1%
KITSAP	6,100	84,000	134,339	14,659	10.9%
MASON	1,400	14,000	30,389	4,690	15.4%
<b>Olympic Region</b>	<b>12,000</b>	<b>130,000</b>	<b>216,427</b>	<b>22,455</b>	<b>10.4%</b>
FERRY	200	2,000	4,265	344	8.1%
OKANOGAN	1,800	18,000	21,294	629	3.0%
PEND OREILLE	400	3,000	7,089	880	12.4%
STEVENS	1,200	10,000	23,526	6,104	25.9%
<b>Northeast Region</b>	<b>3,600</b>	<b>33,000</b>	<b>56,174</b>	<b>7,957</b>	<b>14.2%</b>

Source: HECB from OFM County Profiles and 2007 medium county population growth projections.

## Conclusion

None of these three regions have a public 4-year campus and all have comparably low college participation rates. The SIS region is the most underserved region with regard to public 4-year enrollments. The SIS region is also home to the largest number of employers, jobs, and working adults.

## Comparison of Public Enrollments and Population

Fall 2009 Public Enrollments, 2009 Population

County/ Region	% Public 4-Year Enrollment	% Population, 17-44	Difference	Enrollment Difference from Parity
ISLAND	0.8%	1.1%	-0.2%	-219
SKAGIT	1.4%	1.6%	-0.1%	-118
SNOHOMISH	9.8%	10.9%	-1.1%	-959
<b>SIS Region</b>	<b>12.0%</b>	<b>13.5%</b>	<b>-1.5%</b>	<b>-1,295</b>
CLALLAM	0.6%	0.7%	-0.2%	-146
JEFFERSON	0.3%	0.3%	0.0%	-4
KITSAP	3.3%	3.6%	-0.3%	-257
MASON	0.5%	0.7%	-0.2%	-178
<b>Olympic Region</b>	<b>4.6%</b>	<b>5.3%</b>	<b>-0.7%</b>	<b>-584</b>
FERRY	0.1%	0.1%	0.0%	-24
OKANOGAN	0.5%	0.5%	0.0%	31
STEVENS	0.5%	0.5%	0.0%	-4
PEND OREILLE	0.1%	0.1%	0.0%	-22
<b>Northeast Region</b>	<b>1.2%</b>	<b>1.2%</b>	<b>0.0%</b>	<b>-20</b>
<b>Staterwide</b>	<b>100.0%</b>	<b>100.0%</b>		

Source: HECB from OFM Higher Education Enrollment Reports.

The SIS region has nearly twice as many employers and more than twice as many jobs and working age residents than the Olympic region. Its working age population is projected to grow at a higher rate than the other regions.

## Community Support

Finally, it should be noted that the Snohomish region has consistently demonstrated strong community support for the development of a 4-year campus. Over the past two decades a great deal of analysis and planning has been done in the region and the need for new higher education resources have been documented.

# DRAFT

## System Design Test Case: Statement of Need

---

### Goals and Targets

In planning for the growth of our higher education system it is important to consider the needs of the entire state and those of each local community. Heavily populated local areas like Snohomish County have an especially key role in meeting statewide needs, since they are home to a large share of the state's population and economic base. It is important to ensure that these areas are “pulling their weight” with regard to meeting statewide goals. As part of the analysis leading up to the development of the system design plan, the HECB found that not enough capacity exists within the existing institutions to either meet the 2018 degree production targets set in the *Strategic Master Plan for Higher Education*, or accommodate forecast population growth to 2030. In order to meet the current and future degree production needs of the state and ensure Washington can support an innovation-based economic development strategy, we would need to continue to expand the capacity of our existing campuses and develop new higher education resources.

As the preceding analysis demonstrates, there is strong local demand for additional baccalaureate and graduate capacity in the Snohomish County and the adjoining Skagit and Island Counties. While it is important to raise higher education capacity in the region to achieve parity with the rest of the state, we also need to consider how doing so will move us toward achievement of our statewide goals.

The Central Puget Sound region (Snohomish, King, Pierce, and Kitsap Counties) is one large labor market and the center of our state's economy. The chart below depicting cross-county commute patterns shows the long-term trend toward dependence on King County to support employment for the central Puget Sound region, especially residents of Snohomish County. The Central Puget Sound also constitutes the majority of our state economy. The region is home to 65% of our workforce, 62% of state retail sales, and 60% of the forecast job openings requiring post-secondary degrees between 2010 and 2020.<sup>1</sup> The goals for this region must be aligned with our statewide goals if we have any hope of achieving them.

The relevant policy goals for our state outlined in the *2008 Strategic Master Plan for Higher Education* are:

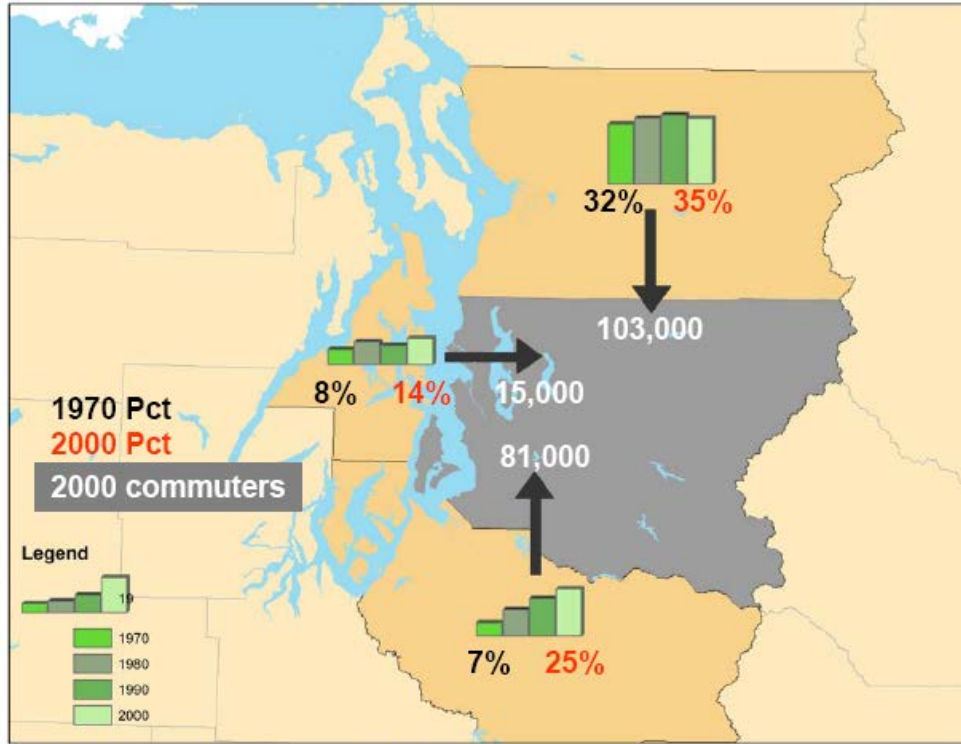
- Grow higher education capacity to meet demand based on population growth;
- Ensure that each region of the state achieves higher education participation rates that are at least equal to the 2009 state average participation rate (raise all regions to at least the state average).

---

<sup>1</sup> HECB (2011), *Regional Needs Analysis Report* (see <http://www.hecb.wa.gov/research/Issues/NeedsAssessment.asp>) and U.S. Bureau of the Census, State and County QuickFacts (see <http://quickfacts.census.gov/qfd/states/53/53001.html>).

- Expand degree production to meet our long-term forecast economic needs and achieve degree production rates comparable to the most innovative states in the nation.

## Cross County Commuting to King County for Work



Source: Puget Sound Regional Council, *2010 Destination 2030 Update*, Sept. 13, 2007.

As Table 1 below indicates, to achieve the first goal of keeping pace with forecast population growth, Snohomish County would need to add 1,800 undergraduate and graduate enrollments. Raising the Snohomish County participation rate to the state average rate would require an additional 900 enrollments for a total of 2,700. To achieve its share of the Master Plan degree production goal, Snohomish County would need to double enrollments again. Achieving all three policy goals requires almost 6,400 additional enrollments at the graduate and undergraduate level.

**Table 1: Additional Snohomish County Enrollment Targets by Policy Goal by 2030**

	Policy Goal	Under-graduate	Graduate	Total Headcount	Total FTE*	Degrees
<b>Good</b>	Maintain County’s current higher education participation rate (accommodate forecast population growth)	1,500	300	1,800	1,500	<b>420</b>
<b>Better</b>	Raise the Snohomish County participation rate to the 2008 state average rate	2,000	700	2,700	2,300	<b>710</b>
<b>Best</b>	Achieve <i>Master Plan</i> goals for 2018 degree production (county’s share of statewide goal)	4,600	1,800	6,400	5,500	<b>1,560</b>
<p><i>Source: HECB adaptation of system design regional enrollment and degree targets with updated data. Targets represent difference between actual 2009-10 enrollments and estimated 2030 enrollments. Enrollment data from 2009-10 PCHEES. Population data from 2005-09 American Community Survey and State population estimates.</i></p> <p><i>Note: FTE estimated based on FTE / HC ratios at branches, centers, and other off campus locations for 2006-07 - 2008 -09 all fund sources (PCHEES).</i></p>						

According to OFM HEER reports, in 2009-10 there were 10,600 Snohomish, Island, and Skagit County residents enrolled in a public 4-year institution somewhere in the state. Of that total, 820 (8%) were attending college in Snohomish County at a community college campus university center. The existing university centers at Everett and Edmonds Community College have room to grow. It may be possible to develop other locations in the region cost-effectively. Some private for-profit institutions have indicated plans to do so. Expanding enrollment by an additional 1,800 students (a 17% increase over current public enrollment) would allow the region to maintain its current participation rate based on forecast population growth to 2030. This goal can be accomplished without major capital expenditures or changes in institutional mission or purpose. It can be accomplished by joint efforts of both public and private institutions, state-supported enrollments, and fee-based programs.

Expansion of enrollments beyond 1,800 students will require additional capital investment and possibly the creation of a new branch campus or institution. This will be necessary to accomplish the important additional goals outlined above (raising the participation rate to the state average rate and achieving the *Master Plan* degree production targets) but is not feasible at this time, given the current fiscal constraints on state and local government. For all of these reasons, boosting Snohomish region enrollments by 1,800 additional students is a reasonable and attainable benchmark for Washington to attempt to achieve in the short run, on its way to achieving the overall Master Plan target of 6,400 additional enrollments.