KITSAP REGION HIGHER EDUCATION CENTER REPORT



KITSAP REGION HIGHER EDUCATION CENTER Report to the Higher Education Coordinating Board (FULL REPORT)

NOVEMBER 2008

NORTHWEST EDUCATION RESEARCH ASSOCIATION

FULL REPORT TABLE OF CONTENTS

	4
Background	4
Higher Education Centers in the Context of Recent History	6
Higher Education Centers in Washington and Other States	8
Aspects of Need	11
Present Higher Education Services in the Region	15
Enrollment Projections	20
Capital Cost Estimates	22
Conclusions and Recommendations	25
INTRODUCTION	
Acknowledgements	
WHAT IS A HIGHER EDUCATION CENTER?	41
Central Washington University - Des Moines, at Highline Community College Institution Partnership between a University and a Community College	A Two 44
The University Center at Everett Station a Multi-Institution Partnership Manag Community College	ged by a 51
Funding and Other HEC Issues	60
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC CHARACTERISTICS OF THE KITSAP REGION	60 C 69
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC CHARACTERISTICS OF THE KITSAP REGION	60 C 69 86
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC CHARACTERISTICS OF THE KITSAP REGION	C
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC CHARACTERISTICS OF THE KITSAP REGION HIGHER EDUCATION SERVICES IN THE REGION HIGHER EDUCATION PROGRAM AND SERVICE NEEDS	C
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC CHARACTERISTICS OF THE KITSAP REGION HIGHER EDUCATION SERVICES IN THE REGION HIGHER EDUCATION PROGRAM AND SERVICE NEEDS	C
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC CHARACTERISTICS OF THE KITSAP REGION HIGHER EDUCATION SERVICES IN THE REGION HIGHER EDUCATION PROGRAM AND SERVICE NEEDS	C
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC CHARACTERISTICS OF THE KITSAP REGION HIGHER EDUCATION SERVICES IN THE REGION HIGHER EDUCATION PROGRAM AND SERVICE NEEDS Olympic District Peninsula District Peninsula and Olympic Responses Compared	C
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC CHARACTERISTICS OF THE KITSAP REGION HIGHER EDUCATION SERVICES IN THE REGION HIGHER EDUCATION PROGRAM AND SERVICE NEEDS Olympic District	C
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMI CHARACTERISTICS OF THE KITSAP REGION HIGHER EDUCATION SERVICES IN THE REGION HIGHER EDUCATION PROGRAM AND SERVICE NEEDS Olympic District Peninsula District Peninsula and Olympic Responses Compared ENROLLMENT PROJECTIONS The Present Public 4-Year Participation Rate (PPR) Projection	
Funding and Other HEC Issues ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMI CHARACTERISTICS OF THE KITSAP REGION. HIGHER EDUCATION SERVICES IN THE REGION. HIGHER EDUCATION PROGRAM AND SERVICE NEEDS. Olympic District. Peninsula District Peninsula and Olympic Responses Compared ENROLLMENT PROJECTIONS. The Present Public 4-Year Participation Rate (PPR) Projection LOW PROJECTION: Present Statewide Average Four-Year Public Participation	

HIGH PROJECTION: Public Four-Year PPR of 14 States with CTC Par	rticipation Similar
to Washington [CCSR] (1.90%)	128
Relationship of Headcounts to FTEs	132
CAPITAL COST ESTIMATES	133

SUMMATION, RECOMMENDATIONS, AND THE REPORT IN BRIEF

This section summarizes the major findings of the study and presents recommendations. Typically in a report of this nature both the summation and the recommendations would appear last in the order of things. Here they appear first in the belief that many readers will be likely to turn to the final chapter first. Those who may wish to see more expansive supporting information will find it in the appropriate chapters of the full report and are encouraged to read these as well. The present chapter also is formatted for distribution as a condensed version of the report, or as a Report in Brief.

Background

A Legislative proviso in the 2008 Higher Education Coordinating Board [HECB] appropriation called for a program and operating plan for a higher education center in the Kitsap area of Washington:

[The funds are] provided solely for the [HECB] to prepare a program and operating plan for a higher education center in the Kitsap county area. The plan shall be developed in consultation with an advisory committee of civic, business, and education leaders from Clallam, Jefferson, Kitsap, and Mason counties. It shall include a projection of lower and upper division and graduate enrollment trends in the study area; a review of assessments of employer needs; an inventory of existing and needed postsecondary programs; recommended strategies for promoting active program participation in and extensive program offerings at the center by public and private baccalaureate institutions; and an estimate of operating and capital costs for the creation and operation of the center. The board shall submit its findings and recommendations to the governor and legislature by December 1, 2008.

The directive aligns with the 2008 HECB's statewide strategic master plan, which provides a 10year framework for improvement in all levels of higher education in Washington. The Plan's goals are directed to (1) increasing education attainment; (2) promoting economic growth, prosperity, innovation, and opportunity; and (3) monitoring and funding higher education based on the results. Among many other things, the plan addresses a chronically leaking education pipeline (only 19% of ninth graders complete a higher education degree) and the state as a leading employer of people with technical and scientific degrees (ranking first in engineers, sixth in computer specialists, and ninth in physical scientists per 10,000 workers) but which lags its peers in the education of people for these professions.

The HECB's strategies for achieving its goals include developing and expanding facilities, technology, and distance learning; fulfilling needs in high-demand fields; promoting student enrollment in Science, Technology, Engineering, and Mathematics [STEM] fields, and others. Perhaps most important in the immediate sense, the present study is considered an integral part of the HECB's Strategic Plan Implementation Program.

The research design, approach, and the study itelf have been guided by the provisions of the legislative mandate and the priorities of the HECB. The major study questions are:

What is a higher education center? What is the need for a higher education center? What form or forms of higher education center should be employed to provide services to a region comprising four counties and two peninsulas? Which programs should be offered? How can a comprehensive range of needed programs be provided? How many students are likely to be involved? And What are the likely costs and actions that need to be taken?

The question, "What is a higher education center?" was presented frequently by the community leaders, employers, residents, and others who were interviewed during the study. When asked what their impressions of such a center might be, they often referred to small temporary modular buildings and converted storefronts, images not greeted warmly by people whose hopes for the education attainment and economic future of their community were closely associated with visions of a substantial higher education presence.

These also are not the images of a higher education center a HECB policy statement definition conveys:

A higher education center may be a multi-institutional . . . entity or a single university/college enterprise. Centers are often located on community college campuses. They may include agreements in which [a host] institution brings [to the area or to its campus] programs offered by another institution (e.g., a public or independent Washington institution and/or an institution outside Washington). Centers also may include co-location of two- and four-year institutions or multiple four-year institutions sharing [a] site.

Typically a higher education center would enroll students in multiple degree programs (two or more). [Centers can] vary in size but [normally] would enroll between 150 and 1,500 [FTE] students.

The next part of the HECB's policy statement is important to an understanding of the role of such centers in the public higher education system's progress:

[Whereas] Establishing a new four-year college or university campus [de novo] represents a substantial investment of state resources and requires significant planning prior to consideration of transition to or creation of a four-year college, an institution may first operate as a center or branch campus to ensure that student, employer, and community demand exists.

This statement implicitly recognizes the potential interim nature of higher education centers and their importance to the process of allowing matters to develop and mature before taking next steps, in effect providing incubation and growth opportunities at comparatively low cost.

Higher Education Centers in the Context of Recent History

The HECB's policy statement and its statewide strategic master plan probably are best understood in a larger context, one that itself may be better appreciated in retrospect than it was in prospect. As a state, Washington has been blessed in a lot of ways, not the least of which is its appeal to people in other states as a place to relocate and reside. For years it has been able to count on in-migration for a crucial stream of educated citizens, people who in large part received their college education and degrees elsewhere. If it ranked in the lower reaches of states in per capita baccalaureate participation, the combination of its own efforts and the influx from other states assured that neither commerce nor society would be adversely affected. There were some important tradeoffs that would become more pressing in time, but with a feeling that baccalaureate and graduate workforce needs would be pretty much able to take care of themselves, access, affordability, and the preparation of skilled workers essentially at the certificate and associate degree levels became dominant values. The establishment of a comprehensive statewide community college system in 1967 is the best manifestation of this.

Baccalaureate level and graduate education were not completely ignored, however, and as the system evolved adjustments were made. The Evergreen State College was established in 1969 to expand baccalaureate access in the southwestern sector of the state. With essentially two statewide public higher education systems in place, to coordinate all of this the Council on Higher Education (which became the Council on Postsecondary Education in 1975 and then the Higher Education Coordinating Board in 1987) was formed in 1969.

The process did not end there. The then state colleges, Central, Eastern, and Western, which had been limited to regional baccalaureate and graduate education roles focused essentially on Education, the Humanities, and the Social Sciences, were renamed and re-designated as comprehensive universities in the 1970s, and their degree granting authority was broadened to include other professional fields, especially at the master's degree level where authority to grant professional masters degrees (MPA, MBA, MSW, etc.) was provided (Evergreen, which is treated officially with the other three as a state university, elected to retained its title as The Evergreen State College).

With a strong community college system in place, during the 1980s the state launched a broad initiative aimed at baccalaureate participation – the establishment of branch campuses in five of its largest urban areas. Efforts to form a sixth are underway. The comprehensiveness of the community college system was expanded with the movement of the five vocational-technical institutes from the K-12 sector into that system and their reconstitution as technical colleges.

Matters continued during the 1980s and 1990s with the establishment of community college satellite campuses in outlying areas, in at least one instance (Pierce College) evolving into a

community college. Enhanced distance education capacity and outreach were additional attributes, which made possible, in turn, the formation of higher education centers in Everett and Jefferson County.

The opening years of the 21st century witnessed the advent of university centers, most notably those of Central Washington University located on community college campuses in the Puget Sound and central valley regions. The most recent adjustment authorizes native baccalaureate degree programs at community colleges on a test basis. Both of the Kitsap Region's community colleges, Olympic and Peninsula, are participants.

This is about where Washington is now. The public higher education infrastructure has changed dramatically. It is not only impressive by any measure; it would have been unimaginable a generation or so ago. But it should be no surprise that progress was more incremental than synoptic; this is the way important change seems to unfold. The expression, "steady work" would not be inappropriate.

The state is getting close, but problems persist. A leaky pipeline and as yet unfulfilled workforce needs were mentioned. One could add articulation and transfer issues and others to the list. Access, affordability, and baccalaureate participation problems also continue.¹ But a solid foundation for future development is in place. The next steps probably will focus on equity with respect to things that were missed or bypassed. One of these is the subject of the present study: higher education centers in remaining underserved regions.

Economies of scale have dominated decisions about where to locate public higher education facilities from the beginning. This is understandable, but it may no longer be the curtailing force it once was. Residential universities are no longer considered to be the only way to provide higher education. Higher education and university centers accommodating cost-effective partnerships between community colleges and universities, often on community college campuses; community college baccalaureate programs, offered especially in situations where program needs may be too limited to warrant an inter-institutional alternative; opportunities to engage other providers; and continued progress in distance education technologies and their application; coupled with state higher education policies that are not locked in stasis but allow for experimentation and change, contribute to and help shape and define other alternatives. The subjects of this report and its recommendations are probably best understood in this context. There may not need to be a lot of higher education centers in Washington, but there is need for

¹ OFM, "Higher Education Trends & Highlights," February 2007, p. 2. Participation rates in the four-year system have remained comparatively stable at around 15% for the prime college age group (age 17-29), since 1980, but 'stability' needs to be seen as a relative term in the context of population increase. Participation for this age group increased from 14.3 to 15.2 percent, but this population also increased from about 945,000 to about 1.1 million during this period; those participating in public four-year institutions, accordingly, would have increased from an annual rate of about 135,000 to 165,000.

some. The Kitsap Region, one of Washington's largest remaining inadequately served population centers is one of these places.

Higher Education Centers in Washington and Other States

Costs are perennial concerns. Higher education centers do well in this respect, and with maturation, strong cost-benefit ratios can be expected. In this state cost effectiveness begins with the fact that higher education center buildings usually are located on community college campuses, constructed at comparatively lower costs than university buildings, and jointly utilized by both the college and the participating universities. Strong utilization patterns are accomplished by scheduling classes throughout the day and evenings and on weekends. In terms of operating costs, funding is pegged at the upper-division FTE costs of the comprehensive universities, which in this state are on average 28 percent less than the averages of the research universities and the branch campuses. Should growth and demand warrant the transition of a center into another configuration, the building will remain and be used by the host college. Since many of these institutions are pressed for space they will be welcomed. Centers clearly offer a comparatively low-risk investment.

The placement of higher education centers on community college campuses should not be surprising in a state that has invested so extensively in its community college system (placing it in the top tier of states in this regard). Washington has built a large part of its response to postsecondary enrollment needs on a model that assumes many students will begin their studies at a community college near their residence and transfer to a four-year college or university for the final half of a baccalaureate degree. Often this happens; sometimes it does not (this community college mission is shared, of course, with the preparation of students for employment, often in "two-year" or less programs, although in some cases these too involve program articulation and transfer into baccalaureate programs).

Still, this basic approach, the "2+2 model," has the advantage that two-year colleges offer essentially the first and second year ("lower-division") courses at lower overall cost than would be the case at a four-year institution, and at substantially lower price (tuition) to the student. Moreover, community colleges are widely distributed, providing accessible opportunities to students in all regions of the state. Thus, Washington stands near the top among the American states in the percentage of its public sector students enrolled in two-year colleges (64%). As community college-based higher education/university centers become more manifest there seems no reason why one would not expect this pattern to continue to the baccalaureate level as well.

While the involvement of community colleges in higher education centers in this state is clear, it also is apparent that centers vary widely around the country. In other states some higher education centers have their own governing or managing boards; others rely on the governance authorities of the participating institutions, and still others are governed by the trustees of the host (community college) institution. Some involve two institutions (such as Central Washington University's university center partnerships with community colleges); others are based on multi-

institution partnerships with a number of participating institutions, sometimes both public and private, in a consortium that is either managed by the host or proximate community college or (in other states) by a separate governing board, although there are no instances of a separately-governed/managed university center in Washington State. In many states the centers are on campus; in some they are located off campus in downtown or outlying rural areas.

A number of higher education (or university) centers were visited. Four are in other states; six, including two on military installations, are in Washington. Two Washington centers, Central Washington University at Des Moines (CWU-Highline Community College partnership) and the University Center at Everett Station (Everett Community College and a consortium principally of public universities) were chosen as the examples that seem to best fit the higher education and political cultures of Washington State. It should be noted that the Everett Station Center, which presently is located off-campus, will move into a new building on the Everett Community College campus in spring, 2009.

In the case of the CWU-Des Moines facility -- a university center partnership between Central and Highline Community College -- all of the bachelor and master's degree programs are provided by CWU. Enrollments for 2007-08 totaled 625 headcount and 512.2 FTEs, for a headcount-FTE ratio of about five to four, suggesting a comparatively high average student course load.

University Center/Teaching Sites	Programs
CWU at Des Moines	13 Bachelor's and 3 Master's program
CWU at Lynnwood	11 Bachelor's and 1 Master's
CWU at Moses Lake (Teaching Site)	1 Master's
CWU Pierce County (Teaching site)	2 Bachelor's
CWU at Wenatchee (Teaching Site)	1 Bachelor's and 1 Master's
CWU at Yakima (Teaching Site)	2 Bachelor's

The CWU university centers vary in size and space, and some operate in established community college buildings, although the Des Moines and Lynnwood Centers and Yakima's Deccio Center are dedicated higher education center facilities. Their size ranges between 80,000 square feet (Des Moines) and 7,000 square feet (Wenatchee). The Deccio Higher Education Center at Yakima [Yakima Valley College] comprises 65,920 gross square feet and cost \$18.5 million The cost of the Lynnwood facility [Edmonds Community College] which opened in 2002, (51,247 GSF) was \$16.5 million. The newest, the Des Moines facility [2005] cost approximately \$30 million. University students at the centers are counted and funded at average FTE rates as part of Central's budget in the manner of the funding of students on the home campus [i.e., funds for center operations are not separately budgeted but distributed by

the home campus in accord with demand]. Tuition charges also are similar. Central has a longstanding presence in the Des Moines-Federal Way area, as has Highline. The university center allows them to consolidate these activities on a college campus.

The University Center at Everett Station, the second example featured in the report, is the product of a 1997 HECB study that recommended creation of a higher education center based on a multi-institution model in the Everett area. Initially called the North Snohomish, Island, and Skagit Counties Higher Education Consortium (NSIS), it is now known as the University Center at Everett Station, a title that probably will apply until it relocates to Everett Community College's campus, whereupon it will be known as the University Center of North Puget Sound.

Western Washington University was the original fiscal agent for the Everett consortium. In 2005 the Legislature shifted this responsibility to Everett Community College. The Center has been in operation at Everett Station since the 2000-02 academic year, a location made possible by a 1999 appropriation of \$1 million to the HECB for equipment for the facility. In 2001 the Legislature provided an operating budget to staff and manage Everett Station and to make lease payments to the city, which owns the building. The Center occupies a floor and a half in the renovated terminal.

Six public institutions – Central, Eastern, and Western Washington Universities, The Evergreen State College, the University of Washington, Washington State University– and one independent institution, Hope International University, offer programs there, although not all are typically available on-site at any given time. The Center's program inventory is shown on the next table. Delivery modes include on-site classroom, online, and teleconferencing.

Institution	Program
CWU	MS Engineering Technology
	BAS Information Technology and Administrative Management
	BS Interdisciplinary Studies – Social Sciences
EWU	Master of Social Work
TESC	BA Liberal Arts (Tulalip Reservation-Based Bachelor's Degree
UW	Adult Nurse Practitioner – Rural
WSU	BA Business Administration – Entrepreneurship
	BA Business Administration – Management and Operations
	BA Business Administration – Management and Information
	Systems
	Certificate in School Psychology (collaboration with EWU)

	Certificate in Construction Project Management
	BA Criminal Justice
	BA Human Development
	BA Humanities
	MS Engineering Management
	BA Social Sciences
	BA Women's Studies
WWU	BA and Post-Baccalaureate in Elementary Education
	BA Human Services
	BA Planning and Environmental Policy
	BC Environmental Science
	MA Rehabilitation Counseling
HIU	BS Human Development
	BS Business Administration

The Center presently occupies about 22,000 GSF, 13,650 of which are assignable for education use, and which staff consider sufficient for about 225 FTE students. Its operating budget is included in the SBCTC/Everett Community College budget. Several existing programs at the Center operate on a self-support basis and utilize a fee structure rather than a common tuition rate. As self-support programs they charge higher tuition and fee rates to students and are vulnerable to discontinuation if the program does not meet its expenses in a given year.

Planning for a University of Washington branch campus in the area has added an aspect of uncertainty to the Everett Center's development efforts. While these are not exactly on hold, the program inventory probably will not be expanded until after the move to the Everett Community College campus, but a future higher education role in the region seems certain.

Aspects of Need

With a land area of nearly 5,000 square miles, the Kitsap Region compares with the state of Connecticut, which spans 5,543 square miles. If the Region were a state, it would rank just below Connecticut on a national list organized by land area, above Delaware and Rhode Island. In fact, the Kitsap Region is larger than Delaware and Rhode Island combined (4,034 square miles.) One could add the U.S. Virgin Islands (737 square miles) and still be about 140 square miles shy of the land area of the Kitsap Region.

The region's namesake, Kitsap County, is the population center, but in many respects the region is really two: Clallam and Jefferson Counties in the north, and Kitsap and Mason

Counties in the south, each comprising a separate community college district. This is a consideration crucial to any higher education center decision for the region.

With a year 2007 total population of 400, 000 (and a projected year 2030 population of 650,000) the region qualifies as a sizable population center, although the numbers are not evenly spread. The individual county numbers, rank, and population density are the following:

County	2007 Estimate	Rank	Persons/ Square Mile
Kitsap	244,800	6	585.8
Clallam	68,500	18	37.1
Mason	54,600	21	51.4
Jefferson	28,600	27	14.3
Total	396,500	N/A	N/A
State	6,488,000	N/A	88.6

Projections of population growth for the period 2000 to 2030 for the four counties are as follows:

Total Resident Population for Growth Management

Data Source: Office of Financial Management

	2000	2005	2010	2015	2020	2025	2030	% Chg
Clallam	64,179	66,800	73,723	78,014	83,145	88,196	92870	45
Jefferson	26,299	27,600	33,815	38,161	43,014	47,945	52,778	101
Kitsap	231,969	249,400	296,494	316,624	347,255	371,972	396,879	71
Mason	49,405	51,900	66,794	75,649	85,360	95,348	105,257	113
Region Total	371,852	386,700	470,826	508,448	558,744	603,461	647,784	74
State Total	5,894,121	6,256,400	7,372,751	8,042,721	8,713,386	9,379,550	10,026,660	70

Projections of population change by major age group, an important consideration in any higher education planning process, are depicted on the following chart:



Although it is not often recognized as such, the Bremerton-Silverdale MSA is the fourth largest in Washington (the Census Bureau treats the Seattle-Bellevue-Everett-Tacoma area as one mega-Metropolitan Statistical Area; were it to partition the Seattle Mega-MSA, the Bremerton-Silverdale MSA would rank seventh.)

MSA	2000 Рор.	Rank in WA	Rank in US
Seattle-Tacoma-Bellevue	3,043,878	1	15
Seattle-Bellevue-Everett*	2,343,058	N/A	
Tacoma*	700,820	N/A	
Portland-Vancouver	1,927,881	2	25
Spokane	417,939	3	107
Bremerton-Silverdale	231,969	4	176
Yakima	222,581	5	182
Olympia	207355	6	189
Kennewick-Pasco-Richland	191822	7	201
Bellingham	166,814	8	224

Metropolitan Statistical Areas in Washington 2000 Population and Rankings

Mt. Vernon-Anacortes	102,979	9	365
Wenatchee	99,219	10	375
Longview-Kelso	92,948	11	391
Lewiston, ID-WA	57,961	12	531

*Metropolitan Divisions

Source: Census Bureau, "Population in Metropolitan and Micropolitan Statistical Areas: 1990 and 2000"

With respect to employment, federal Civilian and Military sectors together comprise the largest employment sector in Kitsap County (about 26,700). The Naval Submarine Base at Bangor and the Undersea Warfare Center employ about 5,000. People on active duty in the military in the area number nearly 16,500.

The leading employment sectors in the four counties together (those involving more than 5% of the employment force) are shown on the following table, which also lists the percentages of the total.

	Jefferson	Clallam	Kitsap	Mason
Health Care	12.1	9	12.65	6.19
Local Government	10.72	13.45	8.67	18.8
Retail Trades	9.68	14.16	13.03	11.08
Accommodation	9.08	7.65	5.94	6.36
Professional Services	6.77	5.27	6.05	N/R
Construction	4.53	8.65	6.36	7.42
Federal Civilian			11.62	
Federal Military			9.07	
Manufacturing	5.19	5.06	4.29	10.52
Real Estate	5.72	4.89	4.77	5.05

The needs for specific bachelors and masters programs that were identified through the survey research of this and earlier studies correspond with these employment patterns, although, of course, employment is not the only indicator of higher education need.

All recent studies, including this one, have found strong interest in more higher education services in the region, especially among residents and employers. While the former, which some have deemed "aspirational," outdistance the latter, which some have deemed "pragmatic."

In fact these are adjectives that characterize the interests of both, which also are strong and convergent. In the case of the present study, respondents to the residents' and employers' surveys conducted in August and September 2008 were almost categorical in this respect. Ninety-five percent of the more than 400 residents who participated in the survey either Strongly Agreed or Agreed that more higher education services, especially those leading to a bachelors or masters degree, were needed. There were almost none who Disagreed or ventured No Opinion. In the case of employers, the question was asked a little differently, but the responses were similar. More than 80% "Disagreed" with a statement that sufficient relevant bachelors and masters programs are now offered in the region.

Present Higher Education Services in the Region

Ten institutions report active bachelor, masters, and a few doctoral programs in the area [June 2008]. Four, Peninsula College (enrollments 27), Olympic College (35), WSU (103), and WWU (207), are Washington public institutions, accounting for 372 of the 958 total baccalaureate-graduate headcount enrollment. About one-third of the public institution enrollments, 103 at WSU, are exclusively On-line programs.

The remaining six institutions are City University (152), Education Consortium Chapman (173), St. Martin's (15), Southern Illinois (45), Old Dominion (156), and Goddard College (90). It appears that 45 bachelor's, 18 masters, and two doctoral programs are available. The rest are certificate or endorsement programs. A mechanical engineering degree is offered by St. Martin's University (Olympia) on the Olympic College campus. Olympic also has partnered with the University of North Dakota to offer four-year engineering degrees starting Fall, 2008. These will be online upper-division programs, with the four-year degree awarded by UND.

The programs of WSU and WWU operate on a self-sustaining basis. The only on-site state funded upper-division FTEs are those associated with Olympic and Peninsula Colleges' bachelor programs in Nursing and Applied Technology.

The role of the Navy is important here, as much of the present higher education programming is directly associated with its presence. In the words of one especially knowledgeable resident, "it is more than simply an employer. It is that, but it also is both an important player and a unique feature of the West Sound landscape because of the numbers of students and universities involved with it and because it has a developed higher education administration infrastructure (which divides into two distinct streams, one for the general Navy population and one for the shipyard). The Navy has assertive policies regarding personnel and workforce higher education aimed specifically at military families and civilian shipyard workers. Its higher education administrative capability."²

² November 15, 2008 e-mail exchange between Rep. Larry Seaquist and William Chance.

Recent changes in Navy workforce education policies are likely to have a dramatic affect on projected baccalaureate education needs for the area. This will couple with the new GI-Bill [2009], which also is expected to heavily influence demand and participation, so much so the projected enrollments (outlined below) in Kitsap County could very prove conservative. Moreover, and whatever else, the Navy is an important component of the higher education support system. The area has remarkable strengths in local businesses, civic groups, and existing educational institutions. The Navy is among them. Combined they can represent an important resource for a higher education center.

Many believe the region is underserved, and there is evidence to support this view. It begins with education attainment, in this case the percentage of residents over age 25 with a high school education and the percentage with a bachelor's degree or higher. According to the Census Bureau, the four-county figures are the following. All but Jefferson County are below the state average in Bachelor's Degree and Higher Attainment.

	Clallam	Jefferson	Kitsap	Mason	WA State
High School Graduates (age 25+) ³	85.5%	91.6%	90.8%	83.7%	87.1%
Bachelor's Degree and Higher (age 25+)	20.8%	28.4%	25%	15.6%	27.7%

If present public institution participation rates for the four counties are guides, without some intervention none are likely to catch up soon. Public college/university participation rates for the

Participation in Public Colleges, Fall 2006. Figures in %. Source: OFM Higher Education Trends and Highlights					four counties and their ranking among all counties of the state
	CTCs	Rank	Public Four-Year	Rank	are listed on the table.
Clallam	5.16	2	1.03	33	The four-county average
Jefferson	2.92	27	0.9	38	60% below the average rate for
Kitsap	3.62	16	1.46	18	the state as a whole (1.63%).
Mason	2.61	29	0.95	37	When it comes to transfer
State	3.69		1.63		students from the two community colleges to the public universities,

both appear to be carrying their load: Olympic College ranks 13th among the community colleges and Peninsula places 28th in the number of transfer students from their institutions in public fouryear universities. This is the same proportion or a little better than their respective rankings in lower-division academic enrollments.

When residents were asked the reasons why college had not been an option for them or their family members, distance and commuting problems were the leading responses; cost and financial considerations also registered high scores. When those who indicated they had attended one of the area's community colleges but had not continued on were asked why, they

cited distance, commuting, need to work, cost, and other causes. The absence of desired or needed programs in the region also was a prominent reason. Perhaps the most telling indication of feelings on this matter were the answers to a question about the likelihood of enrolling if needed programs were offered in the region: more than 80% considered it "Very Likely" or "Likely" they would do so.

Turning to programs that people believe are needed, the fields at the bachelor degree level employers and residents consider to be in greatest need are shown on the following graph. Business was the most important category for employers, but it ranked fourth, behind Health Sciences, Computer and Information Sciences, Education, and Engineering, in that order, for residents.



A similar pattern emerged when the topic turned to master's programs, as suggesed by the bars on the next graph.



The question of whether there should be one or two higher education centers located in the region rose during the study. Responses to the survey questions, accordingly, were organized by community college district. These are depicted on the next two charts.



Responses to the question about master's programs were these:



Some variance in the preferences of respondents from the different districts is apparent, but it is not great. In general, both districts display similar patterns.

Interviews with individuals throughout the region accord closely with these patterns. Frequent references were to programs to support economic development, including engineering, computer science, business, the "hard sciences," and clean or green technology industries. Math and science programs, some suggested, would help keep young people in the area. Several mentioned need for engineering programs, among them people associated with the Navy shipyard (who stressed need for civil and mechanical engineering programs). Others spoke of social needs, programs in general education, social work, and human services, concerns driven by the poverty rate of the area and all it brings with it. References to the health sciences were frequent. Public administration and management were strong interests of local government officials and members of the tribes who were interviewed (and who also stressed engineering, nursing, business, and social and human services as needed program areas). The natural sciences, especially biology and forestry, received frequent mention from respondents throughout the region.

The study directive specifically called for consideration of earlier assessments of employer needs. All of the recent major reports and studies were reviewed. These and the present research agree on virtually all of the program dimensions. The patterns that form provide a community based and mutually reinforcing agenda for a higher education center program plan.

Notably, these preferences also correspond well with the HECB's 2008 Strategic Master Plan's policy goal to "expand bachelor's and advanced degree programs in science, technology,

engineering, mathematics, and health sciences."⁴ The plan also calls for increased enrollments in STEM fields, all of which, again, are priorities shared by residents and employers in the Kitsap Region. Although there are a few exceptions, programs in these high demand areas have not been especially prominent, or dominant, in the inventories of other university and higher education centers. This may be a function of demand on university home campuses. The responses of people in the Kitsap Region, however, suggest a receptive audience, and these and other programs they consider to be in great need represent strong candidates for inclusion on the program inventories of the higher education centers that would be located in the area.

Enrollment Projections

How many students to plan for is an important study question for a number of reasons, not the least of which is the capital cost models' dependence on FTEs, projected enrollments, as the crucial cost variable. Three projections were developed in the study, each founded on a different upper-division and graduate education participation goal for the region:

1. <i>Low Projection Model</i> : Achievement of the statewide average four-year public institution participation rate (1.63%)	The Low Model Goal (1.63%) is a 51% improvement over the present average four- county Kitsap Region rate (1.08%)
2. <i>Medium Projection Model</i> : Achievement of the average rate of Washington's branch campus counties (1.72%)	The Medium Model Goal (1.72%) is a 59% improvement over the present average four- county Kitsap Region rate (1.08%)
3. <u>High Projection Model</u> : Achievement of a participation rate equivalent to the average of Washington's peer community/technical college state (1.90%)	The High Model Goal (1.90%) is a 76% improvement over the present average four- county Kitsap Region (1.08%)

All build on the region's present public four-year institution participation rate as the base projection. In each model the difference, the increment, between the present rate and the low, medium, or high projections, would be accomplished by the higher education centers.

The three projections for the years indicated, in FTE students, are depicted on the next chart:

⁴ "Moving the Blue Arrow: Pathways to Educational Opportunity, 2008 Strategic Master Plan for Higher Education in Washington," December 2007, p. 27.



The medium projection for the year 2025 was used for calculating facility requirements and cost estimates. The 2025 medium projection is highlighted on the next graph.



According to the projection, the annual shortfall by that year will be about 1600 FTEs, or about 2000 students. The numbers distribute in the region on the basis of about 66% for the Olympic College District, and 33% for Peninsula.

As mentioned above but worthy of repetition here, these figures are considered conservative for several reasons, among them emerging Department of Defense workforce higher education policies and the establishment of the new GI-Bill, both of which will have important if presently indeterminate effects on enrollments in the region. As they materialize the Medium projection could be affected accordingly. Assistance with college in exchange for public service also has

been promoted as a policy initiative by the incoming administration. Should this policy materialize the effects on enrollments throughout the state could be dramatic.

Capital Cost Estimates

Capital cost estimates were developed with several questions in mind. One was whether there should be one or two higher education/university centers, i.e., should there be one regional center or should there be two proportionately sized centers, one in each of the community college districts. Another was whether the center or center's should be campus-based or stand-alone off-campus structures. Cost estimates were prepared for all of these alternatives, using essentially two separate costing models, one utilized for community college campus-based facilities; the other directed to free-standing structures using a modified version of the branch and university campus standards. All of the estimates also include funds for enhanced distance learning capabilities directed to the satellite campuses and the Jefferson Higher Education Center at Port Hadlock. Space to accommodate students in programs presently offered in the region largely by private colleges and universities (mainly in Kitsap County) also is included in the estimates.

The campus-based and off-campus based alternatives involve different FTE-to-space relationships and costs-per-square foot. An adjusted version of the HECB's costing model for university and branch campus facilities was used to estimate costs for the stand-alone, or off-campus, model, which, involving such matters as site acquisition, space for parking and other support elements, and different utilization patterns, more closely mimicked stand-alone centers than community college campus based facilities (such as the CWU-Highline University Center).

The SBCTC model was used to estimate capital costs for the campus-based model. In this case, important cost differences ("savings") emanated from the potential for joint use of such campus resources as libraries, daycare centers, parking, etc. and the absence of any need for site acquistion. The Assignable Square Foot (Net Square Foot) to FTE ratio also is different by virtue of different utilization patterns in such facilities, i.e., the use by both community college students (usually during the day, as in the case of the CWU-Highline experience) and university students (late afternoon and evening.) To say there are important cost differences between the two would be an understatement.

As noted, it is important that the centers be augmented with enhanced distance learning capacities linking them to the present community college satellites in Poulsbo, Bangor, and Shelton, in the case of Olympic College, and Fort Worden and Forks, in the case of Peninsula College. The Jefferson Higher Education Center would need to be part of any solution. The potential for collorative programming between the two campuses also is an important consideration, and both, along with the JHEC, should be present in the network in broadcasting and receiving capacities. Again, the cost estimates include these enhancements.

Cost for the respective options for the Low, Medium, and High projections, respectively, are:

LOW PROJECTION (State Average Participation Rate)	Regional HEC	Peninsula District HEC	Olympic District HEC
Estimated Cost w/D.E. Enhancement – Off-Campus (Stand Alone) Facility	100,975,683	34,358,352	65,331,672
Estimated Cost w/D.E. Enhancement - Campus Based Facility	53,026,133	18,065,688	34,301,780

MEDIUM PROJECTION (Branch Campus County Average)	Regional HEC	Peninsula District HEC	Olympic District HEC
Estimated Cost w/D.E. Enhancement Off-Campus Stand Alone Facility	119,400,402	39,137,460	80,262,942
Estimated Cost w/D.E. Enhancement - Campus Based Facility	62,675,578	20,568,615	42,106,961

HIGH PROJECTION (Peer State Average)	Regional HEC	Peninsula District HEC	Olympic District HEC
Estimated Cost w/D.E. Enhancement Stand Alone Facility	147,446,220	44,922,696	102,479,568
Estimated Cost w/D.E. Enhancement - Campus Based Facility	77,363,805	23,598,474	53,765,331

The following table focuses on differences at the "bottom line" among the alternatives. The offcampus version in each case is about 50% more expensive than the on-campus arrangement.

Cost Difference Between Off-Campus Based and Community College Campus Based					
LOW PROJECTION YEAR 2025	Single HEC	Two HEC: PC	Two HEC: OC		
Cost Difference Between Campus Based and Stand Alone	47,949,550	16,292,664	31,029,892		
MEDIUM PROJECTION YEAR 2025					
Cost Difference Between Campus Based and Stand Alone	56,724,826	18,568,845	38,155,981		
HIGH PROJECTION YEAR 2025					
Cost Difference Between Campus Based and Stand Alone	70,082,415	21,324,222	48,714,237		

Higher education centers (and university centers) are still relatively new (as are community college bacclauareates), and questions about their cost effectiveness are natural. These are not unique to the present situation – questions about the unit costs of branch campuses persist, although these institutions progressively demonstrate their value and effectiveness with each passing year. This also is the case with university centers. It takes time to mature. So it is with higher education centers; a little time may be needed before such questions can be definitively or conclusively answered, but the auguries are good. They begin with differences in the amount of the investment. Simply put, these centers promise a lot of bang for a buck.

Cost estimates based on space standards and cost calculation formulae, such as those described above, are important for planning and decision purposes, but in the event, a public college or university building will cost as much as the buyer (the state) pays for it, i.e., the funding that is provided in the enacted capital budget. Here the subject turns to real dollars as

distinct from estimates emanating from standards. The cost data on the following table are actual costs in the sense they are amounts spent in recent years for community college campus-based higher education centers in Washington and university facilities on comprehensive university campuses. The comprehensive university costs are from the 2007-09 capital budget for the respective institutions. All are stated in 2007 dollars (the base cost figures for the HECs were incurred in the years indicated; Highline, \$30.5 million, 2005; Yakima, \$18.5 million, 2003; and Lynnwood, \$16.5 million, 2002; WWU and CWU figures are 2007; again, all are restated in 2007 dollars).

	Highline HEC	Yakima Deccio Center	Lynnwood HEC	EWU Hargraves Hall	WWU Miller Hall	CWU Dean Hall
GSF	80,000	65,920	51,247	45,000	134,190	72,650
Cost (Millions) (\$ 2007)	\$31.9	\$21.7	\$20	\$12.2	\$58	\$25.4
Cost/GSF	\$398	\$329	\$390	\$271	\$432	349
ASF*	52,000	42,848	33,310	29,250	87,158	47,352
FTE Capacity**	1268	1045	812	148	442	240
Cost/FTE at Capacity	\$25,157	\$29,765	\$24,630	\$82,432	\$131,222	\$105,833

* Efficiency factor of 0.65 (i.e., ASF = 0.65 GSF)

** 41/ASF per FTE for HECs; 197/ASF per FTE for Regional Universities

Taking these numbers to the next step for comparison purposes, if one were to use the average per FTE costs at capacity of the three HECs (\$26,517) as a cost description figure for these institutions, and the average of the three regional universities (\$106,496) as the figure for those institutions and branch campuses, and apply them to a hypothetical 800 FTE sized facility, the differences would be 4 to 1:

Cost of Hypothetical HEC Facility (FTE @\$20,560) for 800 FTEs	Cost of Hypothetical Comprehensive University or Branch Campus Facility (FTE @ \$106,496) for 800 FTEs
\$21.2 million	\$85.2 million

These comparisons reflect the fact that different types of institutions have different missions, and these, in turn, drive different costs. University missions as residential institutions with comprehensive undergraduate and graduate curricula, and strong research responsibilities, along with architectural attributes, engender distinctive facility costs. Higher education centers have different missions and utilization patterns. They also rely on the participation of universities to make things work. These differences drive the numbers. When viewed as pragmatic solutions to higher education participation problems, they not only stand out as a pretty good deal, their potential as cost-effective higher education policy instruments is impressive.

Conclusions and Recommendations

The special roles and nature of higher education/university centers were aptly summarized in a report prepared by the Everett Center:

The typical mission of a university center is to attract and coordinate advanced degree programs from a variety of public and private baccalaureate institutions for the purpose of providing educational opportunity to place-bound students, for whom educational options are limited.⁵

Some are located on a community college campus. Others may be located in a downtown facility. Some are supported through public funding. Others support themselves through fees assessed to participating institutions and in-kind support from a host.

Participating institutions usually utilize the curriculum required on their home campus, and staff the classes with faculty [that travel] from the home campus and/or adjunct faculty found locally. In some cases, video-conferencing and online delivery are utilized. From the array of participating institutions, students are admitted to the institution of their choice, pursuing the institution's degree program but are often able to take advantage of the wide variety of courses offered by other partner institutions. The universities provide advising, library access, and other services to the enrolled students, sometimes through the coordinated services of the university center.

University centers are seen as efficient models of delivering education because they utilize existing degree programs and take advantage of blending the offerings of different institutions in order to provide more options. [Schedules] are non-traditional (evenings, weekends, video-conference) thus making good use of existing facilities.

Higher education centers are innovative configurations in this country's store of postsecondary education models. The visits to centers in this and other states led to impressions about what is needed to make them successful. The list is not long:

- A powerful visible presence in the community
- A strong advocacy role with respect to community postsecondary education interests
- A clear economic development dimension in the mission
- Multi-institution participation
- State-of-the-art technology
- Responsive scheduling
- Effective advisory structures
- A high-level director, and
- Contractual and other authority to attract and enlist providers.

⁵ University Center of North Puget Sound, "Report to the Legislature," June 29, 2007, submitted by Dr. David Beyer, President of Everett Community College.

The Kitsap Economic Development Alliance report, "From Dream to Reality" (April 2008) offered some others and closed with this observation about the importance of the last entry on the list: "First, a center relies on the willingness of universities to participate. Second, it requires that partner universities [be] sufficiently committed to [the center's students] that they alter campus-based policies regarding resident requirements, dual enrollments, and prerequisites. And third, [there must be] an innovative funding model that can provide incentives to partnering institutions while retaining local advocacy."

Each is vital; the likelihood of success, growth, and vitality will be affected by the extent to which they are present. Thus, they influence the recommendations of the report. These are respectfully presented in the paragraphs that follow.

1. THERE SHOULD BE TWO HIGHER EDUCATION CENTERS OPERATED IN A COORDINATED, COLLABORATIVE MANNER IN THE KITSAP REGION, ONE IN THE OLYMPIC COMMUNITY COLLEGE DISTRICT; THE OTHER IN THE PENINSULA COLLEGE DISTRICT.

A single higher education center, which almost certainly would be located in the Bremerton-Silverdale area, the population core of the region, would work for Kitsap County but would prove insufficient to the needs of a region so large, and especially so for Jefferson and Clallam Counties. About one-third of the population resides in these two counties (Peninsula College District); about two-thirds reside in Kitsap and Mason counties (Olympic College District), most in Kitsap County. People who live in the northern counties would not be likely to make the drive southward on a regular basis (the distance between Port Angeles and Bremerton is about the same as the distance between Chehalis and Seattle, but without the I-5 freeway [which may not be a bad thing].) The projected participation levels for the region would be adversely affected, and the participation rate goals outlined in this report would not be accomplished. Were a single facility located in Bremerton, a fall-off in participation from the northern counties could be expected to amount to 200-300 FTEs -- possibly more.

Some of this loss might be mitigated with distance education programs at Peninsula's home and satellite campuses at Fort Worden and Forks, and at the JHEC; these resources need to be strengthened in any case, but much of this is possible, indeed happening, now, and the average four-year institution participation rates of these two counties still is only 0.96%, about 60% less than the average rate for the state as a whole. While the cost of the single facility would be reduced proportionately because of the enrollment fall off, so also will be its efficacy as a regional solution.

The presence of two community college districts in the region is both a positive and complicating consideration. Each has its own campus, service area, governing board, campus, administration and staff, baccalaureate programs, and satellite campuses. The two districts divide naturally within the region, and this division needs to be taken into account. Separate higher education centers comprise the best-fitting solution.

At the same time it is important to remember that the study's focus is on the entire four-county 5,000 square mile region. Cooperative and coordinated programming services between the two districts and the JHEC are essential, so much so that this is treated in a separate recommendation below.

Thus, two higher education centers operating in a collaborative and cooperative manner are recommended, one in each community college district, and each proportionately sized to its district's projected enrollment levels, i.e., a year 2025 level of 520 FTE in the Peninsula District, and 1074 in the Olympic District, plus space for an additional 300 non-public FTEs (divided proportionately among them) in the two facilities.

2. THE HIGHER EDUCATION CENTERS SHOULD BE LOCATED ON THE OLYMPIC AND PENINSULA COLLEGE CAMPUSES.

When it comes to site, there are really only two options: establish the centers as stand-alone buildings located off-campus or as campus-based facilities located on each community college campus.

The stand-alone (off-campus) option raises questions of governance and cost. Starting with the first, should there be new governing boards for the higher education centers or should they come within the purview of existing governing boards? The answer seems fairly obvious. A separate independent governing board could complicate planning, cooperation, and collaboration, possibly leading to unnecessary duplication and undue conflict. An independent governing board also would not fit well in Washington with its present complement of institutional governing boards and general reluctance to establish new ones. It would seem unwise to introduce another board in either district. Hence, it is recommended that the existing community college boards be the managing authorities.

Cost is a significant consideration in the choice between the on-campus and off-campus alternatives. The estimated costs for the campus-based facilities (Medium Projection) are \$20.5 million for the Peninsula College Higher Education Center and \$42.1 million for the Olympic College Higher Education Center. The estimated costs of stand-alone centers (off-campus) are \$39.1 million for Peninsula and \$80.2 million for Olympic. The cost difference between the two forms is \$18.5 million in the case of Peninsula and \$38.1 million in the case of Olympic.

Another cost factor that shapes the totals, accounts for some of the difference, and buttresses the argument for campus-based facilities is the pattern of increased utilization in the on-campus specie. This allows application of community college space planning and cost standards (41 ASF/FTE) for the campus version versus 75 ASF/FTE for the stand-alone version and related construction costs of \$525 versus \$548/GSF. The ratio of 75 ASF/FTE, used here for the stand-alone facility, itself represents a substantial reduction from the standard of 375 ASF/FTE employed in research university calculations and the 197 ASF/FTE used for the regional universities. Viewed in this manner, a building designed for a comparable number of students (FTEs) at a research university would need to be about nine times the size of the higher

education center building. That of a comprehensive university would need to be four times the size of the center building.

The cost differences that would be experienced by not utilizing community college campuses, especially when there is a willingness at both institutions to host higher education centers, are simply too great. Unless substantial supplementary funding were to emanate from some non-state source to share the costs, the on-campus alternative will be compelling.

Finally, other benefits to an on-campus location also are important. These include the potential for more effective transfer policies and articulation and with all that this entails, as well as the efficiencies gained through the sharing of support services and campus amenities. The opportunity for adjustments in scheduling as enrollments grow through such measures as the use of hybrid [blended] delivery modes that would free up classrooms as demand increases, and coordinating courses on campus in other existing facilities, carry additional potential for accommodating growth without further capital improvements.

Thus, two campus-based higher education centers -- each planned to accommodate their proportionate shares of projected FTE enrollments for the respective districts, supplemented by enhanced distance education capacities to extend the programs to satellite campuses, and to the Jefferson Higher Education Center (along with the inclusion of the Jefferson Higher Education Center (along with the college, and the inclusion of the community college baccalaureate programs, present and future, are the components of the case with the stronger argument.

3. THE ORGANIZATION OF EACH OF THE TWO CENTERS SHOULD ACCORD WITH DISTRICT NEEDS, HISTORICAL RELATIONSHIPS WITH PUBLIC AND INDEPENDENT FOUR-YEAR INSTITUTIONS, AND OTHER REGIONAL CONDITIONS AND NEEDS.

A higher education center employing a multi-university presence with a lead public university appears more congruent with extant circumstances in the region, including the Navy College, than a community college-single university partnership. The institutions already providing programs there and the range of needed programs, especially in Kitsap County, which probably exceeds the program inventories of any of the comprehensive universities, militates against a single comprehensive university, especially if it were an exclusive partnership.

While both of the research universities – the University of Washington and Washington State University – have programs in a range suited to that identified as needed in the region, this

advantage in terms of a single university presence would be offset by their higher costs of upper-division and graduate instruction (research university costs average 28% greater at the upper-division level, and 112% greater at the graduate level than those of the comprehensive universities. [See the table]). This may be changing, but there also seems to be a general reluctance on their part to extend campus-based programs off the home and branch campuses except through distance education.

The University of Washington-Tacoma branch has natural links to Olympic College and Kitsap County and could be present in a participant role, perhaps a lead university capacity. Unit costs and program inventory are considerations that would need to be considered – UW-T average upper-division costs are about 30% greater than the average of such costs at the comprehensive universities. There also would be a price (tuition) difference for students.

Nevertheless, the appeal of a research university to residents and employers in the region is undeniable. And in view of these universities' involvement in the state's branch campus program (all of which are branches of one or the other research university) including them in what could be an evolving process leading to a branch campus carries certain logic.

The existing providers and the students in their programs, nearly 1000 (estimated at about 300 FTEs), especially in Olympic College's District, also need to be considered. Their presence has been taken into account in the space and cost estimates of this report.

	Upper- Division	Grad uate
UW All Campuses		\$23,754
Seattle	\$13,948	
Bothell	\$15,847	
Tacoma	\$13,167	
WSU All Campuses		\$21,552
Pullman	\$11,319	
Spokane	\$11,319	
Tri-Cities	\$12,149	
Vancouver	\$12,364	
Average RU Cost/FTE	\$13,006	\$23,089
CWU	\$9,764	\$13,301
EWU	\$9,822	\$9,782
TESC	\$11,035	\$7,768
WWU	\$10,338	\$13,032
Average CU Cost/FTE	\$10,147	\$10,859
% Difference RU/CU	28%	112%

The CWU university center model that operates in six localities in Central Washington and the Puget Sound region tends to be exclusionary in matters relating to the use of the higher education center. The present students and programs could not be accommodated in the center should this exclusion apply. Still, this model, identified as a "single university-community college partnership," could fit in other situations where neither the numbers are great nor the list of needed programs expansive. A multi-institution presence, again with a "lead" university (as

distinct from a "single partner university") is the preferred model for the HECs in the Kitsap Region.

The resources and roles of other participants in the solution – the Jefferson Higher Education Center, the satellite campuses of Olympic at Poulsbo and Shelton and the satellite campuses of Peninsula at Fort Worden and Forks also need to be included, as does the potential for sharing programs in a collaborative manner between the two parent campuses. Finally, community colleges have been authorized to offer baccalaureate programs as part of the state's pilot initiative. Peninsula and Olympic College are among them. This authority should be factored into the equation and the range of authorized programs expanded if necessary, especially when providers for crucially needed programs cannot be attracted to the locality.

4. INTER-DISTRICT COOPERATION IN SUCH MATTERS AS PROGRAM NEED ASSESSMENT, PLANNING, AND SCHEDULING IS ESSENTIAL. THIS WILL REQUIRE CONTINUING CONVERSATIONS AND COMMUNICATIONS BETWEEN THE PRESIDENTS OF THE TWO DISTRICTS AND THEIR HIGHER EDUCATION CENTER DIRECTORS, AND CLOSE RELATIONSHIPS BETWEEN THE GOVERNING BOARDS. A REGIONAL ADVISORY COMMITTEE ALSO WOULD BE AN IMPORTANT CONTRIBUTOR TO THE REGION-WIDE PERSPECTIVE.

Most of the aspects of this recommendation are evident in the wording. The study proviso called for a regional perspective. A major finding is that the area is too spacious to be served by a single center located in the southeastern corner, even with a substantially increased distance education capacity. Thus, two centers have been recommended. It would be a mistake, however, to lose sight of the regional dimension in favor of two districts and two higher education centers operating in isolation of each other.

Such measures as regular meetings and conversations between the institutional presidents and the center directors, periodic joint meetings of the governing boards (and perhaps an inter-board committee to attend to such matters) could keep everybody on the same page. A regional advisory committee composed of residents of both districts would add an essential and welcome perspective.

5. EACH HIGHER EDUCATION CENTER SHOULD HAVE A UNIVERSITY PRESENT IN A LEAD UNIVERSITY CO-PARTNER CAPACITY.

Interest in having a "Lead University" partner is strong. The difference between a "lead university" and a "partner university" as the terms are used in this report is in their application. Lead university refers to an "anchor" or "flag" institution in a multi-institution consortium. "Partner University" applies to the single university-community college relationship, such as CWU-Des Moines. Still another term, "Provider University," refers to other institutions offering programs in the higher education center.

The lead university is envisioned as a co-partner with the host community college in efforts to attract and enlist other university participants. It many respects the lead university could be an

important draw for other institutions. A lead university would not be expected to provide all of the needed programs, but it would provide some. It also would have an emissary located at the center as a permanent office. The lead university could have a right of first refusal to provide a program, but there should be no provision in any agreement between the host community college and the lead university that would preclude the presence of other institutions at the center if their presence would enhance student access and participation. The lead university also should be encouraged to lend its imprimatur to the center. The notion of an identified presence also extends to the participating or providing universities. Their names and emblems prominently displayed at and on the facility would be important symbols and would provide assurance of a commitment and substance that are vital to a center's appeal.

The enlistment of provider universities should be a collaborative process between the copartners that could proceed on the basis of a Request for a Statement of Interest (RSI) to universities in Washington. Independent universities should be included in the RSI process. Universities from other states also could be candidates. Washington university responses to the RSI also could be encouraged by the HECB, which, in any case, should have responsibility to review and pass on the centers' plans. The HECB could use its "bully pulpit" to good effect in this regard by encouraging Washington universities in the public and independent sectors to offer needed programs in the centers. Directors of higher education centers in other states, most notably Virginia, South Carolina, and Oklahoma, state that the interest and assistance of the statewide board, especially in such matters as encouraging institution participation, is always helpful and sometimes crucial.

Once chosen, if the lead (or for that matter, a participating) university cannot provide the program or declines to do so, the community college should proceed with a Request for Proposals (RFP) to obtain the needed program and have authority to contract to acquire the program services using higher education center FTE and other funding (e.g., proceeds from space rentals, etc.) In the event these efforts prove unfruitful, it also should have the authority to proceed with planning and program proposals to offer the needed baccalaureate programs itself

Again, decisions about the institutions that would serve in the lead university capacity should begin with the host community college. As a starting point, based on observations formed in the development of this report, Western Washington University would seem to be an attractive candidate at Peninsula College. Washington State University would seem to be an attractive candidate for the lead university role in an Olympic College higher education consortium. Western and the UW-Tacoma also are attractive candidates for lead or participating university in the Olympic District consortium. But there is no further reason to assume that these should be the only candidates.

6. ADMINISTRATION OF THE CENTER SHOULD BE THE RESPONSIBILITY OF THE HOST COMMUNITY COLLEGE AND THE LEAD UNIVERSITY CO-PARTNERSHIP. THE HOST COMMUNITY COLLEGE IN COOPERATION WITH THE LEAD UNIVERSITY SHOULD BE RESPONSIBLE FOR MANAGING THE CENTER,

ENLISTING OTHER INSTITUTION PROVIDERS, AND, WITH THE ADVICE OF THE REGIONAL ADVISORY COMMITTEE, IDENTIFYING PROGRAM NEEDS.

A co-partnership between the lead university and the host college should describes the administrative model. The details concerning individual and shared responsibilities should be addressed in memoranda of understanding and operating agreements. As a general rule, the host community college should be responsible for maintaining the facility, although there should be cost sharing between it and the universities in matters such as equipment, cleaning, and interior maintenance that are jointly used. It also should be authorized to charge lease rentals for dedicated space and consortium membership fees to participating non-public institutions and to use the proceeds to offset operating costs and as incentives and contracts for programs to attract providers. Consideration also could be given to an agreed percentage of tuition revenues or to a percentage of course or credit hour charges for non-public institution participants.

Each of the participating universities should be responsible for the academic content of its programs, graduation requirements, and other matters concerning quality and adherence to standards.

The host, lead, and participating institutions should approach matters related to articulation and transfer collaboratively and aggressively. Lower-division students in the host institution's programs are likely to comprise a prime enrollment and participation source. Facile movement between the lower- and upper-division components should be a permanent high priority for the centers and those who operate programs within them.

7. FTE FUNDING AT THE UPPER-DIVISION AND GRADUATE LEVELS AT THE AVERAGE RATE OF THE COMPREHENSIVE UNIVERSITIES SHOULD BE PROVIDED AS OPERATING APPROPRIATIONS TO THE HIGHER EDUCATION CENTERS. IT SHOULD BE AUGMENTED WITH INCOME FROM SPACE RENTALS AND OTHER SOURCES.

Budget authority for the host institution would provide the flexibility the HEC would need to attract providers and build a program inventory and for planning and rotating programs in accordance with changing needs.

There is precedent in the state funding provided to the Everett Station University Center, which receives direct FTE funding support through the SBCTC budget and Everett Community College, and the Jefferson Higher Education Center, which receives state funding through Peninsula College and the HECB. Also in view of these examples, a blended budget model that would include direct funding to the host college to manage the facility and FTE funding to the lead and participating public universities for students in the programs they provide could be considered.

8. THE HIGHER EDUCATION CENTER DIRECTOR SHOULD BE A HIGH LEVEL PERSON WITHIN THE COMMUNITY COLLEGE WHO REPORTS TO THE HOST INSTITUTION PRESIDENT AND THE LEAD UNIVERSITY CO-PARTNER.

The director would have important responsibilities for interactions with the universities and leaders in the community and, as a general rule, should be equal in status to the provosts of participating universities, with authority to administer the center. The emphasis here is on administrative functions – enlisting participants, negotiating contracts, representing the center in memoranda of understanding, scheduling, publicity, etc. As noted above, responsibility for program content and standards should remain with the providing institutions. The director should have a direct reporting line to the president of the host community college and serve at the pleasure of the president and the governing board.

9. THE BACCALAUREATE AND MASTER'S PROGRAM INVENTORIES FOR EACH OF THE HIGHER EDUCATION CENTERS SHOULD FOCUS ON THE FIELDS IDENTIFIED IN THE STUDY, PREVIOUS ASSESSMENTS OF EMPLOYER AND REGIONAL NEEDS IDENTIFIED AS IN THE REPORT AND THE HECB'S LIST OF HIGH DEMAND PROGRAMS AND PROGRAMS IN STEM FIELDS. COOPERATION AND COORDINATION SHOULD BE STRESSED AND ADDRESSED THROUGH COOPERATIVE PLANNING, CONVERSATIONS, STAFF INTERACTIONS, SCHEDULING, AND COMMUNICATIONS BETWEEN THE TWO CENTERS.

At the bachelor's level the programs considered to be in great need are the Health Sciences, Education, Computer and Information Sciences, Engineering, Business, Natural Resources and Conservation, Biological Sciences, Math and Statistics, the Physical Sciences, and Public Administration. Those deemed to be needed at the master's level are essentially the same. The HECB's list of high demand programs features science, technology, engineering, mathematics, and the health sciences. The STEM fields are science, technology, engineering, and mathematics. There is strong agreement between local and state interests in these program areas, and they are identified as high priority fields for the respective institutions in the operations plan that follows. Planning with respect to specific programs should proceed accordingly, directed to the definition of majors within these fields, taking into consideration programs presently available, and aiming for funding for state subsidized FTEs in high demand/STEM programs at the centers during the 2009-2011 biennium.

10. THE BACHELOR PROGRAMS OF THE RESPECTIVE COMMUNITY COLLEGES SHOULD BE INCLUDED IN THE HIGHER EDUCATION CENTER PROGRAM INVENTORIES.

The list of such programs should be allowed to increase in accordance with evidence of need at the center and the willingness and capacity of universities to provide them. Such programs should be an option for the host college's baccalaureate efforts, especially if other qualified providers cannot be brought into to offer them at the center.

11. AS WITH OTHER ENDEAVORS OF THIS TYPE, THE KITSAP HIGHER EDUCATION CENTERS MAY PROVE TO BE AN INTERIM SOLUTION SHOULD ENROLLMENT AND PARTICIPATION RATES EXCEED PROJECTED LEVELS OR AT A POINT WHERE THE HIGHER EDUCATION CENTER NEEDS TO BECOME MORE COMPREHENSIVE. THE HECB SHOULD CONSIDER A PROCESS FOR EVALUATING THE CENTERS IN A TIMELY FASHION, ASSESSING THE NEED AND APPROVING TRANSITIONS FROM ONE STAGE TO THE NEXT ON AN ORDERLY AND PREDICTABLE BASIS. The argument for this recommendation is pretty straightforward. In its policy paper on higher education and other centers the HECB has established some standards to guide institution transitions. It also has identified the Kitsap Higher Education region solution as a component of its "Delivery System Design Project," and it has review and approval authority over new bachelor and graduate programs in public institutions. All of these come into play in the present situation, as does the Board's interest in a cost-effective approach to baccalaureate education needs in other areas. There is time, and there is a rather clear need, to create a process for these initiatives to develop and grow in an orderly manner.

As envisioned here, the process would include consultation with the SBCTC, Washington's public universities, and others to ensure that change would be predictable, collaborative, in accordance with established criteria, based solidly on need, and manageable. This recommendation is intended to take the HECB 2006 policy paper to its next logical step with a process though which change can occur.

12. THE STUDY DIRECTIVE CALLS FOR PROGRAM AND OPERATING PLANS FOR THE HIGHER EDUCATION CENTERS. IN THE FORMAL OR DETAILED SENSE, SUCH PLANS WILL NEED TO AWAIT THE HEC'S INAUGURATION, BE DEVELOPED BY CENTER AND INSTITUTION STAFF, AND GO THROUGH THE INSTITUTIONAL AND STATE REVIEW PROCESSES. PLANS AT THAT LEVEL OF DETAIL WOULD BE PREMATURE AT THIS STAGE. WHAT CAN BE PRODUCTIVELY OFFERED HERE ARE RECOMMENDATIONS ON PRINCIPLES AND STAGES THAT CAN BE CONSIDERED BY THE INSTITUTIONS AS EVENTS UNFOLD. THEY ARE NOT INTENDED TO BE PRESCRIPTIVE; RATHER, THEY ARE OFFERED AS GUIDES OR BENCHMARKS. THOUGH PRESENTED IN THE MANNER OF TWO CENTERS THAT PROCEED IN TANDEM, WHICH IS THE RECOMMENDED APPROACH, BUDGET UNCERTAINTIES MAY REQUIRE A SEQUENCED ORDER WITH ONE CENTER ADVANCING A STEP AHEAD OF THE OTHER. IF STAGING CANNOT BE AVOIDED, OLYMPIC COLLEGE CENTER SHOULD RECEIVE THE FIRST PRIORITY FOR CAPITAL FUNDING, WITH PENINSULA FOLLOWING IN THE NEXT BIENNIUM. IN ANY CASE, BOTH DISTRICTS SHOULD BE ALLOWED TO PROCEED SIMULTANEOUSLY WITH THE OTHER, I.E., NON-CAPITAL, ASPECTS OF THE PROGRAM, ESPECIALLY WITH HIGH DEMAND AND **STEM** PROGRAMS, LOCATING ACTIVITIES AND PROGRAMS IN OTHER SPACE ON CAMPUS WHILE THE CAPITAL PROCESS PROCEEDS.

The recommended principle features of a program and operating plan for the Kitsap Region higher education centers include the following:

- Initial biennium⁶ operating funds should be sought by and provided to each of the colleges for their higher education centers in the recommended amount of \$250,000 for a director and assistant to commence the program planning, start-up, and the facility design processes.
- Strong community support for the higher education centers exists in each district. The colleges should be encouraged to call upon these resources as the centers develop.

⁶ All other things equal, the "initial biennium" is intended to be 2009-11.

They also should be authorized to seek and accept gifts, grants, and contracts for their higher education centers, and to provide in-kind services in matching grant programs.

- FTE funding should be sought and provided in the operating budgets of each of the institutions while the construction process unfolds to allow the centers to proceed with program planning, enlist providers, and accommodate HEC classes in other campus facilities on a space available basis. High demand and STEM programs fields should be pursued as a program priority.
- Authorization and capital funds for the first phase of the capital process should be sought and provided during the initial biennium. Recommended funding for the first phase of the capital development process (planning and design) should be approximately \$2.0 million for Peninsula College, and \$4.0 million for Olympic College.
- The capital construction process should continue in the standard fashion during the second and third biennia, with construction funds appropriated and apportioned accordingly. Occupancy should be planned for early in the third biennium. Lead universities should be identified and involved, program-providing universities should be aligned, and the first full HEC program schedule should have been promulgated and be in place by this point.
- Operations funding should key on the Medium Projection level of 990 upper-division and graduate FTEs in the Olympic College HEC, and 500 upper-division and graduate FTEs in the Peninsula College HEC by 2015. Graduated interim enrollment goals should approximate the following and commence with the Low Projection during the start-up years of the initial biennium, shift to the Medium Projection during the second biennium, and accord with the Medium Projection as the enrollment goals thereafter to year 2025, adjusted in accordance with changes in objective circumstances and experience:

Year	Peninsula HEC	Olympic HEC
2010	440	760
2011	442	770
2012	452	780
2013	460	800
2014	470	850
2015	501	991

The efforts to identify lead universities and program providers and proceed with program planning for baccalaureate development should be guided by a program plan focused on the fields identified as those in greatest need for the respective centers. These are listed in terms of their relative weight on a 1-10 scale on the following table. Those with the highest scores, more than 7.0 are highlighted on the table. STEM fields are highlighted in the program field column. These are the logical high priority candidates:

Program Field	Olympic H	EC	Peninsula HEC	
Degree Level	Bachelor's	Master's	Bachelor's	Master's
Public Administration	4.1	3.5	4.8	4.8
Physical Sciences	6.1	4.7	4.9	4.3
Natural Resources & Conservation	7.0	5.3	6.4	4.9
Math & Statistics	6.1	5.4	5.8	5.3
Health Professions	8.5	5.3	8.4	7.4
Engineering	6.3	5.9	7.6	6.6
Education	7.6	7.4	7.8	7.9
Computer & Information Sciences	8.5	5.3	7.7	6.3
Business	7.6	5.8	7.0	6.6
Biological Sciences	6.9	5.8	5.8	5.2

> In chronologically arranged tabular form, these principles align as follows:

Year	Action	HEC	Host Institution	SBCTC	HECB	Legislative/Ex ecutive
2009	Submit request for \$250K start- up funding		Request	Approve	Review	Authorize and Appropriate
	Hire director	Issue SOI for Lead University	Authorize			
	Program list	Identify programs, including high demand and STEM fields, and prepare program list and master program plan; establish HEC Advisory Committee	Approve		Review	
2010	Submit request for FTE funding, including funding for high demand and STEM programs, as part of		Approve	Approve	Review	Authorize and Appropriate
	supplemental budget					
-------------	---	---	--	---------	--------	------------------------------
	Capital Design Funds for HEC		Approve	Approve	Review	Authorize and Appropriate
	Enlist initial High Priority program providers	Issue RFPs for programs	Approve	Review	Review	
2011- 12	Construction & Operations (FTE) Funding Request in Biennium Budget	Prepare & Submit Budgets	Approve	Approve		Authorize and Appropriate
	Enlist Program providers	Issue RFPs for programs	Approve			
	Commence HEC Construction			Approve		
	Commence HEC Operations in Host Campus Buildings	Manage HEC Schedule and operations.	Approve			
2013- 14	Commence and Normalize HEC Operations in HEC facility	Manage HEC Operations	Serve as fiscal agent and overseer			

The background and supporting material for these findings and recommendations is presented in the chapters of the full report; these are places readers are encouraged to visit.

INTRODUCTION

A Legislative proviso to the Higher Education Coordinating Board [HECB] appropriation in the 2008 Supplemental Budget called upon the Board to develop a program and operating plan for a higher education center in the Kitsap Region of Washington.

The study aligns with the HECB's 2008 statewide strategic master plan, which provides a 10year framework for improvement in all levels of higher education in Washington.⁷ The plan's goals devolve from expected population growth (37% by 2030), an aging population (over age-65 sectors expected to increase 72%), and an increase in the demographic diversity of the population (39% increase). The goals may be paraphrased as:

Goal 1: Increase education attainment.

Goal 2: Promote economic growth, prosperity, innovation, and opportunity, and

Goal 3: Monitor and fund higher education on the basis of results

The Strategic Plan's strategies include developing and expanding facilities, technology, and distance learning, all of which are relevant to the study proviso. Beyond this, the plan specifies fulfilling needs in high-demand fields, promoting student enrollment in STEM fields (Sciences, Technical, Engineering, and Math), and focusing on workforce development, among others. Perhaps most important in the immediate sense, the HECB's implementation plan identifies completion of a program and operating plan for a new Kitsap Region higher education center by December 2008 as one of its elements. Stated a little differently, the Kitsap Higher Education Study, the present study, is an integral and impending part of the HECB's Strategic Plan Implementation Program.

The questions of interest in the study are:

What is a higher education center? What is the need for a higher education center in the region? What form or forms of higher education center should be employed to provide services to a region comprising four large counties and two substantial peninsulas? How many students should be anticipated? What programs should be offered? How can a comprehensive range of programs be provided? And What are the likely costs and what actions need to be taken to meet the need?

⁷ Ann Daley, Executive Director, Higher Education Coordinating Board, "Moving the Blue Arrow," PowerPoint presentation to the Kitsap Study Advisory Committee, September 2008.

The organization of the report proceeds from this list. The major findings are summarized and the recommendations were presented in the opening chapter. The remainder of the report opens with a discussion of higher education/university center models, reviewing examples in this state and others. The next section focuses on population, demographic, and economic characteristics and the higher education resources that are presently available and serving the region. Attention is directed then to enrollment projections. This is followed by a chapter devoted to evidence of the types of programs, bachelor and masters programs for the most part, that may be needed and on incentives and other approaches to attract the participation of institutions of higher education, principally universities, to provide bachelor's and master's programs in the center. This chapter is followed by a section devoted to estimated facility costs. As the major findings and recommendations are by now apparent, the main body of the report is devoted essentially to the supporting information.

Acknowledgements

Although previous work and studies that have focused on the evidence of need in Kitsap County are reviewed and expanded to the four-county region in the present study, this is not another in what is becoming an impressive accumulation of need assessments. In one sense the call for a higher education center in the study mandate presumes agreement on the need for a center. This is an acceptable presumption because need for a center has been so extensively demonstrated by the previous work and studies. Most notably these include the reports, Kitsap Learns: Needs Assessment for Education. Workforce. & Economic Development.⁸ and the Kitsap Economic Development Alliance [KEDA] research and action report, From Dream to Reality: Spelling Out Kitsap County's Need for Increased Access to Baccalaureate Degrees.⁹ There have been others. These, for example, were predated (August 2004) by a report prepared for Olympic College by the Puget Sound Division of the Social and Economic Sciences Research Center of Washington State University, Unmet Demand for Higher Education in Kitsap and North Mason Counties by Paul Stern and Dave Pavelchek. All have been reviewed and taken into account during the preparation of this report. Their only significant limitation, if one wishes to call it so, is their focus of on Kitsap County. Now it can be stated that the earlier work accords well with much that has been learned more recently.

A lot of people provided information and helped in other ways with this endeavor. The study proved to be a rather technical endeavor, so a partial list may begin with members of the HECB staff, especially Ann Daley, Randy Spaulding, and Jim Reed, whose expertise in higher education matters is both broad and profound. At the SBCTC, Charlie Earl, Jan Yoshiwara, and Tom Henderson provided helpful advice and suggestions throughout. At OFM, Irv Lefberg, Carol Jenner, and Deb Wallace provided guidance on demographics, population change, and

⁸ Prepared by Charlotte Garrido of WSU and Diane Fish of Olympic College, February 2007.

⁹ The draft version of this report, dated April 2008, is the version referenced here and elsewhere in the present report.

enrollment growth, and Rich Struna and Marc Webster provided information and clarification on aspects of capital and operations budgets, while also maintaining an appropriate distance from the study. Presidents David Mitchell and Tom Keegan, respectively, of Olympic and Peninsula College, and Peninsula College Operations Officer Sandra Wall, participated in numerous conversations and served on the advisory committee for the study, and, in the case of Olympic College, provided the site and amenities for the meetings. Elected officials who both served on the advisory committee and participated in interviews (and in some case sponsored the authorizing legislation), include Senators Phil Rockefeller and Derek Kilmer, and Representatives Lynn Kessler, Kathy Haigh, and Larry Seaquist, and Mayors Bozeman, Quade, and Kordonowy, respectively of Bremerton, Poulsbo, and Bainbridge Island. Their service, questions, and advice are greatly appreciated.

Gratitude also is extended to the other members of the advisory committee, the many people, between 75 and 100 who participated in interviews, depending on how one defines interviews, tribal leaders and representatives, employers, and residents, among others. The publisher and staff of The *Kitsap Sun*, the four county economic development councils, the chambers of commerce, representatives of the Navy, and area school districts not only agreed to be interviewed but also helped to get word out on the on-line survey links, encouraged people to participate, and were instrumental to the success of those efforts. And to all of those who helped but are not mentioned here, and there certainly are more who are not than who are, Thank You. While the work would have been much more difficult, and probably not nearly as relevant without their help, it should go without saying that no one but the members of the study team – William Chance, Richard Lutz, and James Furman -- are responsible for errors or omissions.

WHAT IS A HIGHER EDUCATION CENTER?

During the site visits, interviews, and meetings that were part of the study, the question: "What is a higher education center?" occurred frequently. In fact it arose too often to ignore. When asked what their impressions of a center might be, the people being interviewed frequently referred to small temporary buildings into which cables for the transmission of distance education might be strung or to converted store-fronts in malls or downtown sections of town. These were images not likely to be enthusiastically supported by people whose hopes for the education attainment and economic future of their communities were more than a little dependent upon a substantial higher education presence. A branch campus of a major university or a locally based public four-year university were more on the order of what they had in mind, and for some the alternatives offered here may seem less than optimal. Because of this, and the probability that their conception of a higher education center is not the same as what the HECB and the research team have in mind, some early discussion of higher education centers is essential. "Off-campus" education (a term that now seems quaintly arcane) has come a long way in recent years and some things have changed greatly, so much so that 'off-campus' has lost a lot of its definitional precision.

Two years ago, the HECB brought the higher education center concept to the forefront¹⁰ as a significant public investment and policy issue in a September 2006 paper directed to the orderly growth of higher education in off-campus locations.¹¹ The Board classified higher education establishments in Washington into four types: (1) teaching sites, (2) higher education centers, (3) system branch campuses, and (4) four-year colleges or universities.¹² Implicit in this is a pattern of progression from one form to another should service area needs dictate, leading to this statement in the policy paper, "Establishing a new four-year college or university campus represents a substantial investment of state resources and requires significant planning. Prior to consideration of transition to or creation of a four-year college, an institution may first operate as a center or branch campus to ensure that student, employer, and community demand exists." The statement implicitly recognizes the possible interim nature (between nothing and a branch

¹⁰ As noted later, the concept probably debuted in Washington in a 1997 HECB report on North Snohomish, Island, and Skagit County higher education needs report for the Legislature. It was reinforced a year later in a HECB report on Okanogan and Jefferson Counties. The present University Center at Everett Station and The Jefferson Higher Education Center in Port Hadlock are descendents of the recommendations of these studies.

¹¹ The last two of these are combined In the Board's policy paper; which was directed to off-campus endeavors and new institutions; thus, three rather than four types are defined in that document.

¹² HECB, "Classification of Off-Campus Teaching Sit

or traditional campus) of higher education centers and the importance of allowing indicators of need and demand to develop and mature.

One characteristic of the Washington approach is the presence of a local community college in all of the arrangements, frequently leading to the placement of the center on the community college campus or a substantive role for the college in the management of the center. Thus, Washington community colleges are involved as a host institution or managing authority, or both, in all of the public higher education and university centers presently operating in Washington.¹³

This is not unique to this state, but it is important to recognize that Washington has invested extensively in its community college system, placing it in the top tier of states in this regard, and that it has pursued a long-standing policy of a community college or site within commuting distance of every resident. Because of this, the following statement was used as a working hypothesis: in effect community colleges are the state's "higher education agents" in communities where theirs is the only local public institution, as is the case throughout the four-county Kitsap Region. The presence and importance of Olympic and Peninsula Colleges should not and probably cannot be overlooked or dismissed. A corollary argument is that this role should be clarified and strengthened.

In addition to the higher education needs regional higher education centers are intended to address there is one in particular that is worthy of emphasis. This is their affinity to the needs of older students, people who may be place-bound by work or other considerations, and whose numbers do not always influence campus planning; yet, this is an expanding crowd. The Ardmore, Oklahoma Higher Education Center Executive Director, Steven Mills, spoke of it in these terms:

Because the typical student of today does not fit old traditional criteria, colleges are challenged to change their business models to accommodate current student needs. . . Adult learners now at least equal or outnumber traditional college students. . . and their percentage increases greatly for students attending classes in facilities away from the main campus.

[Thus] contemporary students' educational needs no longer relate to those [solutions] established decades ago for traditional students in residential campus

¹³ The Riverpoint Higher Education Park in Spokane is viewed as a collaborative effort involving WSU and EWU on an off-campus urban site. By statute, WSU is the institution with governing authority for the campus. The Chancellor of the Community College of Spokane is a member of the Planning and Coordinating Council. The Riverpoint Park campus is not defined as a higher education or university center, rather, as a two university partnership, although it should be noted that many of its purposes, principally bringing university programs to an urban center are similar. If it were to be defined as a higher education or university center rather than a two institution collaborative, it would be an example of one in Washington that does not have a community college in a host, governing, or managing authority role.

settings: college and university administrators [need to] look to different facilities, different delivery methods, and different organizational structures to attract and retain students. Determining how to provide a convenient setting with flexible scheduling, a variety of programs that address local employment needs, adequate academic support services, and high standards of quality, has become the challenge of universities wishing to grow and provide leadership in the [21st] century.¹⁴

While they share a common purpose, it also is apparent that the types of higher education/university centers vary; indeed, it can be argued that no two types or arrangements are alike.¹⁵ The HECB's point about arrangements that can involve two institutions or a consortium of institutions is important, as should be an appreciation that some arrangements may work better in some settings than others. In other states, some higher education centers have their own governing or managing boards; others rely on the governance structure of the participating institutions. The terms describing these relationships in the present report are "Two-Institution ," which in this state comprises a partnership between a host community college and a single participating university (such as CWU's university centers at Highline, Edmonds, Yakima Valley, and others), and "Multi-Institution" partnerships involving a number of participating institutions in a consortium that is either managed by the host or proximate community college (such as the University Center at Everett Station).

In its policy paper and list of 2005-06 University Center Partnerships on CTC campuses, in the Kitsap Region the HECB identifies Old Dominion, Western Washington University, and St. Martin's University in partnership with Olympic College. For Peninsula College, WWU and City University are listed (these are discussed in later in this report.) In each of these cases, the organization is essentially one wherein the host institution, in these cases Olympic and Peninsula Colleges, provide sites for the universities offering the upper-division programs to do so on the community college campuses. The Colleges' present involvement in these endeavors is on the order of a broker or facilitator.

¹⁴ "Considering the Governance of the Ardmore Higher Education Center: a Position Paper on Changing the Business Model of the Ardmore Higher Education Center," draft provided by the author, pp. 1-2.

¹⁵ No reasonably accurate count or catalog of such institutions has been found so far. Directors of centers who were interviewed during the study often asked for this information. The Ardmore, Oklahoma HEC website contains links to 16 centers. This was the most extensive list found. Yet it is clearly incomplete.. None of Washington's ten centers [according to the HECB's count] are represented on it. For those who may be interested, perhaps the best place to begin is with the individual websites of the statewide higher education agencies (e.g., the Washington HECB), many of which identify those that operate in their state. The Centers that were visited during the present study were CWU's Des Moines University Center, CWU's Yakima University Center, the Jefferson County University Center, the Sloan Higher Education Center at Ft. Lewis, the Navy College at Everett, the University Center at Everett Station, the Aberdeen Maryland Higher Education Center, the Roanoke Virginia Higher Education Center.

Several centers were visited during the study. Among them are the Roanoke (Virginia) Higher Education Center (a multi-institution arrangement managed by an independent appointed governing board); the Aberdeen, Maryland, Higher Education Center (a multi-institution consortium of public institutions managed by an appointed board of trustees), and the University Center at Greenville South Carolina (a multi-institution consortium governed by a board of directors composed of participant institutions. These will be revisited briefly at various points below. There are others. But with the exception of the Aberdeen Higher Education Center, which is similar in type to the University Center at Everett Station, the two examples described next fit best with the higher education and political cultures of Washington State. These are CWU at Des Moines (a two-institution partnership between a university and a community college); and the University Center at Everett Station (a multi-institution consortium under the administrative management of Everett Community College).

In concurrence with the adage that a picture is worth a thousand words, the descriptions that follow are dotted with photographs of buildings and interiors, many of which are taken from the websites of the respective institutions.

Central Washington University - Des Moines, at Highline Community College -- A Two Institution Partnership between a University and a Community College

Central Washington University in Des Moines¹⁶ is one of six such CWU university centers, located for the most part in localities in which Central has an established presence in offcampus programming.¹⁷ The other five are CWU- Pierce County (at Pierce College), CWU-Wenatchee (at Wenatchee Valley College), CWU-Lynnwood (At Edmonds Community College), CWU-Yakima (at Yakima Valley College's Deccio Higher Education Center) and CWU-Moses Lake (at Big Bend Community College). According to the university's description, "the centers offer upper division (300- and 400-level) and graduate-level coursework leading to baccalaureate and master's degrees. Day and evening classes are offered to accommodate the needs of time- and place-bound students. The centers are designed for students who have completed their Direct Transfer Agreement (DTA) associate degree or who are major-ready."

CWU-Des Moines is the largest and newest of the university center facilities. It is officially designated [the name on the building] as the "Higher Education Center" on Highline's campus.

¹⁶ The HECB classifies two, CWU at Des Moines and CWU at Lynnwood, as University Centers. The other four are classified as off-campus "Teaching Sites." Central types all six as "University Centers."

¹⁷ During an interview at a higher education center that was not a CWU university center the director noted that CWU is the only public four-year institution that views these programs as part of its role. The others, according to this respondent, have their hands full dealing with demand for on-campus courses and programs. Central, accordingly, was in this person's view the easiest to work with and the most responsive to invitations to bring courses and programs to the center.

The building, which opened spring, 2005, comprises 80,000 gross square feet, of which 53,040 are assignable [net] square feet. Most of the assignable square feet are shared by the institutions in the form of classrooms. Part, 12,085 SF, is dedicated to CWU faculty and administrative offices. The project cost was approximately \$30 million (about \$32 million in 2007 dollars).

Central at Des Moines and CWU at Lynnwood are good examples of the type of facilities that modern higher education and university centers involve.



CWU- Des Moines (CWU photo)



CWU at Lynnwood (CWU Photo)

Although CWU at Des Moines is the example pursued here, obviously both are substantial edifices. The bachelor and master's degree programs provided at Des Moines (Highline CC campus), all offered by CWU, are listed as:

CWU Programs at Highline:¹⁹

BS Accounting
BS Business Administration
BAEd Early Childhood Education/Elementary Education
BAEd Elementary Education/Science Education Minor at
Green River
BS Electronics Engineering Technology
BS Industrial Technology
BAS Industrial Technology
BS Interdisciplinary Studies: Social Sciences
BAS Information Technology and Administrative Management
BA Law and Justice
BA Psychology
BAS Safety and Health Management
BS Safety and Health Management
MS Engineering Technology
MEd Master Teacher

This list, comprising the Des Moines' Center's bachelor's program inventory, is the most extensive of the CWU university centers. According to Central, CWU at Lynnwood (Edmonds Community College campus) offers:

- B.S. in Business Administration/Accounting
- B.A.Ed. Elementary Education (TESL Minor)
- B.A.S. Information Tech. and Administrative Management
- B.S. Interdisciplinary Studies: Social Science
- B.A. Law & Justice
- B.A. Mathematics: Teaching Secondary
- BAS and BS in Safety & Health Management
- Master's of Professional Accountancy.

CWU at Yakima offers:

BAEd Elementary Education/TESL Minor BS Interdisciplinary Studies - Social Sciences BA Law and Justice

In all, 38 separate bachelor programs are offered at the six centers. These cluster into six program fields or disciplines, as shown on the following chart:

¹⁹ In an e-mail response to the discussion draft of this report, CWU identified the present number of offerings at the Des Moines Center as 13 Bachelor's and three master's programs. The above list was taken from the web site. The revised figures are used in the summation and recommendations chapter.



With respect to enrollment, the information on the following table is updated from the HECB's September 2006 summary²⁰ of activities of centers and teaching sites in Washington State:

University Center/Teaching Sites	Programs
CWU at Des Moines	13 Bachelor's and 3 Master's
CWU at Lynnwood	11 Bachelor's and 1 Master's
CWU at Moses Lake (Teaching Site)	1 Master's
CWU Pierce County (Teaching site)	2 Bachelor's
CWU at Wenatchee (Teaching Site)	1 Bachelor's and 1 Master's
CWU at Yakima (Teaching Site)	2 Bachelor's

The total FTE enrollment according to OFM [HEER data] for fall, 2007 is 1086.1. Some disagreement between this total and more recent figures provided by Central is apparent (e.g., for fall, 2007, the OFM HEER reports list 442.2 FTEs at Des Moines; CWU [below] reports 547.5 for that term.) The HEER data provide information on the distribution by course level and are presented here accordingly. The revised figures are reported below the table.

²⁰ "Classification of Off-Campus Teaching Sites, September 2006," *op. cit.*, Appendix. .Program figures updated by CWU in a November 2008 e-mail communication.

Site	Headcount	Course Level <100	Course Level 100-200	Course Level 300/400	Course Level 500/600+	FTE
CWU- Des Moines	620	0.00	0.53	423.27	18.40	442.20
CWU - Lynnwood	596	0.00	2.93	368.87	0.10	371.60
CWU – Moses Lake	4	0.00	0.00	1.40	0.00	1.40
CWU – Pierce	97	0.00	0.00	60.00	0.00	60.00
CWU – Wenatchee	74	0.00	0.00	53.47	0.60	54.07
CWU – Yakima	247	0.00	0.00	149.53	7.00	156.53
Total	1,638	0.00	3.47	1,056.53	26.10	1086.10

Central Washington University Off-Campus Enrollments Source: OFM HEER, Fall 2007

According to these figures, 97.2% of the enrollments are at the "bachelor's" level, 300/400 level courses. About 2.5 percent are at the graduate level. The FTE to Headcount ratio is 66%; that is, about 1.33 students (headcount) convert to one FTE.²¹

More recent annualized data, in this case for the 2007-08 academic year, provided by Central identify the following as the total state-funded student Average Annual enrollments by site.²²

Site	НС	FTE
Des Moines	625	512.2
Lynnwood	604	462
Pierce County	120	113.8
Moses Lake	31	17.6
Wenatchee	92	75.9
Yakima	189	163.8
Total	1661	1345.3

²¹ The principal budget driver in Washington is student credit hours (SCH). These convert to full-timeequivalents on the basis of 15 undergraduate (100 to 400 level courses) credits to one FTE and 10 graduate credits (500 and above) to one FTE.

²² CWU Institutional Research, "State-Funded Enrollments by Site, Headcount and FTE, Academic Year 2007-2008"

According to these figures, the Headcount-FTE ratio is about five to four, suggesting a fairly high average credit hour load. Also according to these numbers, enrollments at the university centers represent about 15% of Central's total FTE count (8,995.3) and about 17% of its headcount (9,658). The center's enrollment range (FTE) is from a low of 17.6 at Moses Lake to a high of 512 at Des Moines.

The CWU university centers vary in size and space, and some operate in other community college buildings, although the Des Moines and Lynnwood Centers and Yakima's Deccio Center are dedicated higher education centers. Their size ranges between 80,000 square feet (Des Moines) and 7,000 square feet (Wenatchee). The average for the six is 46,528 square feet. The Deccio Higher Education Center at Yakima comprises 65,920 gross square feet and cost \$18.5 million (estimated at approximately \$24 million in 2008 dollars).²³ The cost of the Lynnwood facility, which opened in 2002, (51,247 GSF) was \$16.5 million, according to Central.

CWU UC	Host Institution	Building	Opened	GSF	ASF	CWU SF	Project Cost
Lynnwood	Edmonds CC	Snoqualmie Hall	Fall 2002	51,247	31,917	5,065	\$16.5 million
Des Moines	Highline CC	Higher Education Center	Spring 2005	80,000	53,040	12,085	\$30 million
Pierce	Pierce College	Olympic Building	Winter 2004	10,000	N/R	5,700	\$350,000
Moses Lake	Big Bend CC	Advanced Technology Education Center	Winter 2005	65,000	N/R	9,600	\$600,000
Wenatchee	Wenatchee Valley College	Higher Education Center	Spring 2006	7,000	4,380	N/R	\$2,15 million
Yakima	Yakima Valley CC	Deccio Higher Education Center	Fall 2003	65,920	N/R	N/R	\$18.5 million

Source: CWU "University Centers Capital Projects 2002-2006

Total shared, CWU, and HCC, space is 43,205 square feet. Total cost was \$30,330,000, of which CWU contributed \$12,500,000 and HCC \$17,830,000. The Legislative budget note pertaining to funds for the design and preparation of construction for the CWU/Highline Higher Education Center in the 2001-03 capital budget states that:

Funding is provided to design and prepare construction documents for a shared 111,230 GSF facility with modern technologies for classrooms, science, and computer labs including a stand-alone center for child care on the Highline Community College campus. The joint project adds capacity to serve 400 full-time equivalents (FTE) lower-division [community college] students and 900 FTE upper-

²³ This information is taken from a CWU summary, "University Centers Capital Projects 2002-2006," which was subsequently provided by the Center staff via e-mail following the campus visit.

division students and enables Central Washington University to vacate leased space at the former Glacier High School in Des Moines.

The main campus-based Senior Administrator of the University Centers' program, Assistant to the Provost, oversees the operations of the Centers. A Site Director at each center has responsibilities or day-to-day operations at the site. Center staff complements, some may be part-time staff, vary in number in accordance with the size of the program. Des Moines, with 16 staff members, is the largest, followed by Lynnwood, with 12. The remaining four range between one (Moses Lake) and five (Wenatchee). The Yakima center lists two, and Pierce County one.²⁴

According to the CWU Des Moines Operating Agreement, which describes the joint arrangements between Central and Highline Community College, an operations committee composed of three members appointed from each institution by the president oversees "the operation of the Higher Education Center and the coordination of academic programs, courses, support services, policies, and procedures."

With respect to program articulation, "When possible CWU will enter into articulation agreements with HCC for programs offered at the HEC." A subcommittee is responsible for coordinating library resources between the two institutions. Each institution provides its own enrollment, financial aid, and other student services.

With regard to the facility itself, the agreement provides that as the building is on HCC land, Highline will include it in its space inventory. The agreement makes it clear that this is HCC "owned," i.e., HEC space, and it "will not be available for use by any non-HCC or non-CWU activities unless agreed to by both institutions." Also according to the operating guidelines, CWU has first priority for offering upper division and graduate programs that the two institutions agree are needed in the service area. If CWU is not able to offer the needed courses and programs, Highline may work with other four-year institutions to provide them, but these must be provided "in Highline Community College buildings other than the Higher Education Center." The reasons for the exclusionary clause are not clear from the text of the agreement, but it probably impedes the presence of other universities in the endeavor.²⁵

²⁴ The information source is the individual Center websites.

²⁵ "Higher Education Center Terms of Agreement and Operating Guidelines for Central Washington University and Highline Community College," August 24, 2006, Section II.A. 2. This observation is not intended as a criticism of either of the partner institutions. Rather it is offered as a possible explanation for limited four-year institution participation in these centers. Others are noted elsewhere in the report, e.g., pressure to meet home campus demand, institutional cultures, etc. At the same time, one of the conclusions is that such exclusionary provisions should not apply in the recommended Kitsap Region centers.

The range of the program inventories at these centers may relate to the general absence of other participating universities (WSU provides distance education courses and EWU provides what appears to be an intermittent Master of Social Work program at Yakima's Deccio Center) the two appear to be the only two non-CWU universities operating at the respective sites). This may not be a problem in the communities in which these centers operate, where the program inventory may accord with local needs, and where Central has a long and established presence, but based on the evidence of programs deemed to be needed in the Kitsap Region the extant CWU university center inventories probably would be insufficient if this model were to operate in its present form there.

One of the stated advantages of Central's university center program is in the shared construction costs: the two partners participate in joint planning and design arrangements and split the capital costs in their respective budgets, although, of course, most of these funds come out of the same state capital budget, and the costs for the state are the same as they would be were there a single appropriation for the building.

Students are funded at average FTE rates as part of Central's operations budget. That is, the state-funded FTE dollars are not separately budgeted for each center but are included in the total count for the university, which can allocate them to the main campus and the separate centers in accordance with demand. The model seems to work well as a way to ameliorate the effects of enrollment swings and target funds to where they are most needed.²⁶ Campus and Center tuition charges also are similar. Maintenance of the facility, grounds keeping, security services, etc. are responsibilities of the host campus. Arrangements for sharing costs are identified in the inter-institutional agreement, as are the guidelines for space sharing, coordination, equipment maintenance, etc.

Finally, Central also participates in at least two other partnerships: one is the University Center at Everett Station, where it offers a BAS in Information Technology and Administrative Management, a BS in Interdisciplinary Studies – Social Sciences, and an MS in Engineering Technology; the other partnership is with Green River Community College, where it offers a BA in Elementary Education program.

The University Center at Everett Station -- a Multi-Institution Partnership Managed by a Community College

The University Center at Everett Station, formerly the North Snohomish, Island, and Skagit Counties Higher Education Consortium, came out of an HECB study²⁷ that recommended

²⁶ E-mail exchange between Marc Webster, OFM, and William Chance, October 20, 2008.

²⁷ This was a study of the higher education needs study of Snohomish, Island, and Skagit Counties, February 1997. An HECB study completed a year later, a study of higher education needs in Okanagan and Jefferson Counties, 1998 led to the Jefferson Higher Education Center, one of Washington's smaller higher education centers. The JHEC is located in the Shold Business Park and Community Learning

creation of a higher education center based on a multi-institution consortium model. The names attributed to the center can be a little confusing. Initially called the North Snohomish, Island, and Skagit Counties Higher Education Consortium (NSIS), now it is known as the University Center at Everett Station, the title that probably will apply until it relocates to Everett Community College's campus, whereupon it will be known as The University Center of North Puget Sound, a title it sometimes uses now, albeit perhaps in a transitional manner (this title is frequently shortened to "The University Center"). According to the descriptive material available at the University Center's website,

The University Center [at Everett Station] is a product of 1997 state legislation that formed the North Snohomish-Island-Skagit (NSIS) Consortium of higher education institutions to create a flexible and innovative means for expanding higher education opportunities for residents of the three counties. The NSIS Consortium was committed to providing opportunities for place-bound residents whose work and family commitments precluded travel to a distant university. Instruction is delivered in various formats including web-based distance education, two-way interactive video, technology supported classrooms and combinations of these. In 2005, the legislature [designated] Everett Community College manager of the University Center and in 2009, the University Center will move into the new Undergraduate Center in Gray Wolf Hall on the main campus

Western Washington University was the original fiscal agent for the Consortium. Thus it began as a center that was neither located on nor managed by a community college. In 2005 the Legislature shifted this responsibility to Everett Community College. In spring 2009 it will relocate to the Everett Community College campus.

Although it operates in an attractive and modern facility, the University Center was never intended to be a permanent fixture at Everett Station. In its November 30, 2005 Preliminary Report to the Legislature, "Higher Education Opportunity in the NSIS Region," which was submitted in response to ESSHB 1794 (2005), Everett Community College noted that the station facility was intended "to serve as an interim hub to be used until a permanent facility was located or built." It has been in operation there since the 2000-02 academic year, a move that was made possible by a 1999 appropriation of \$1 million to the HECB for equipment, "which enabled the NSIS Consortium to tailor leased space at Everett Station into a high quality

Center in Port Hadlock. The facility has two classrooms, which are available to educational providers without charge. One room is equipped with 21 dual-core networked P4 computers, all with flat panel monitors, and connected to a color laser printer. Additionally, both classrooms are equipped with video teleconferencing capabilities. Classes are conducted in each room by in-person faculty, as well as various interactive distance learning modalities. Education providers include Peninsula College, Washington State University, Western Washington University, Chapman University at Bangor, Old Dominion, Southern Illinois University at Bangor, and the Northwest school of Wooden Boatbuilding. This description is taken from the JEC website. The JHEC is funded with a state appropriation to the HECB, which, in turn, has designated Peninsula College as the fiscal agent.

educational facility for participating colleges and universities. The 2001 Legislature provided . . . an operating budget to staff and operate Everett Station and to pay rent to the city. . . "²⁸

The legislation enacted in 2005 directed Everett Community College to provide a timeline and cost estimates to relocate the center from Everett Station to the Everett Community College campus. Again, the Center presently expects to move into the new university center building – Gray Wolf Hall -- under construction on the EvCC campus in spring, 2009.²⁹

The College's report to the Legislature, again, "Higher Education Opportunity in the NSIS Region," cogently summarizes the advantages of locating the center on a community college:

Relocating the University Center will enhance programs and support services offered to students, maximize use of buildings, technologies, and other resources, create efficiencies in administration and support, and increase space utilization. Such a move will make advanced study more visible and available to a large community college population, as well as others. The disadvantages to this plan are that it moves the University Center from a downtown transportation hub and from spaces in which significant investments have already been made.³⁰

For the moment the University Center at Everett Station is the focal point. It occupies a floor and a half of the centrally located and modern Everett Transit Station. Its website is unusually generous with both interior and exterior photographs. The interior shots typify many of the "smart classrooms" and amenities that characterize the higher education centers that were visited in this and other states and abundantly help to provide illustration here.

²⁸ See p. 41.

²⁹ See also the June 15, 2007 Everett Community College press release: "Everett Community College has named its new Undergraduate Education Center Gray Wolf Hall. Opening in 2009, Gray Wolf Hall will be home to the University Center of North Puget Sound and classes in the humanities, social sciences and communications." The present facility at Everett Station will continue to be an option for University center classes, as well as for other Everett Community College programs. Because of high-tech equipment degradation, these will be "low-tech" classes.

³⁰ Neither of the disadvantages mentioned in the quote are likely to apply to the Kitsap situation.



University Center at Everett Station Photo



Administration Office Entrance - University Center at Everett Station Photo



Computer Lab - University Center at Everett Station Photo



Classroom – University Center at Everett Station Photo



Student Lounge - University Center at Everett Station Photo

In a June 29, 2007, report to the Legislature, the Center tackled the question: "What is a 'University Center.' The mission statement is informative:

The typical mission of a university center is to attract and coordinate advanced degree programs from a variety of public and private baccalaureate institutions for the purpose of providing educational opportunity to place-bound students, for whom educational options are limited.³¹

³¹ University Center of North Puget Sound, "Report to the Legislature," June 29, 2007, submitted by Dr. David Beyer, President of Everett Community College. The report also offers a sample list of other UCs in the U.S. that includes Macomb University Center, MI, North Harris Montgomery University Center TX, Northwestern Michigan College University Center, MI, Southwest Virginia Higher Education Center, VA, University Center of Greenville, SC, University Center of Lake County, IL, University Partnership, Loraine

The description continues with the following observations, quoted in full here:

Some are located on a community college campus. Others may be located in a downtown facility. Some are supported through public funding. Others support themselves through fees assessed to participating institutions and in-kind support from a host.

Participating institutions usually utilize the curriculum required on their home campus, and staff the classes with traveling faculty from the home campus and/or adjunct faculty found locally. In some cases, video-conferencing and online delivery are utilized. From the array of participating institutions, students are admitted to the institution of their choice, pursuing the institution's degree program, but are often able to take advantage of the wide variety of courses offered by other partner institutions. The universities provide advising, library access, and other services to the enrolled students, sometimes through the coordinated services of the university center.

University centers are seen as efficient models of delivering education because they utilize existing degree programs and take advantage of blending the offerings of different institutions in order to provide more options. Delivery modes are sometimes non-traditional (evenings, weekends, video-conference) thus making good use of existing facilities.³²

The Everett center is administered by an executive director and 4.75 regular employees of Everett Community College, supplemented by 3-6 part-time temporary hourly employees for evening and weekend reception and technical support (the center operates Monday through Saturday until eight PM). Six public universities – Central, Eastern, and Western Washington Universities, The Evergreen State College, the University of Washington - Seattle, and Washington State University – and one independent institution, Hope International University, offer programs through the University Center. The delivery modes include on-site classroom, online, and teleconferencing.

Institution	Program
CWU	MS Engineering Technology BAS Information Technology and Administrative Management
	BS Interdisciplinary Studies – Social Sciences
EWU	Master of Social Work
TESC	BA Liberal Arts (Tulalip Reservation-Based Bachelor's Degree
UW-Seattle	Adult Nurse Practitioner – Rural

County, OH, and Virginia Beach Higher Education Center, VA. Other and more descriptive information is contained in the earlier 2005 report.

³² Ibid.

WSU ³³	Certificate in School Psychology (Collaboration with EWU)
	Certificate in Construction Project Management
	MS Engineering Management
	BA Business Administration – Entrepreneurship
	BA Business Administration – Management and Operations
	BA Business Administration – Management and Information Systems
	BA Criminal Justice
	BA Human Development
	BA Humanities
	BA Social Sciences
	BA Women's Studies
WWU	BA and Post-Baccalaureate in Elementary Education
	BA Human Services
	BA Planning and Environmental Policy
	BS Environmental Science
	MA Rehabilitation Counseling
HIU	BS Human Development
	BS Business Administration

Not all of these programs are available on-site all of the time. Those reported for Fall Term, 2008 are:

Fall 2008 Programs at the University Center at Everett Station³⁴

Institution	Program	Mode
CWU	BAS Information Technology and Administrative Management	Hybrid: in-person, ITV, and online
CWU	BS Interdisciplinary Studies – Social Science	Hybrid: in-person, ITV, and online
WWU	BA Human Services	In-person; small amount of online
WWU	BAE Elementary Education	In-person
TESC	BA Liberal Arts	In-person on the Tulalip Reservation
EWU	MSW Social Work	In-person

³³ The bachelor degree programs offered by WSU are offered through WSU's Distance Degree Program. The University Center promotes these options and provides information, referral, and testing services, but it does not sponsor the programs, per se.

³⁴ From an October 7, 2008 e-mail message from Executive Director Kerlin.

HIU	BS Human Development	Hybrid: online and in-person
HIU	BS Business Administration	Hybrid: online and in-person
WSU/EWU	Certificate: School Psychologist	ITV
CWU	MS Engineering Technology	ITV
WSU	Engineering Management	ITV

The Center presently occupies about 22,000 gross square feet [GSF], 13,650 of which are assignable for education use, and which staff consider sufficient for about 225 FTE.

In its 2005 report, the College identified the planned space on the Everett campus – Undergraduate Education Center [UEC], or Gray Wolf Hall -- as sufficient for approximately 350 FTE (this would be in addition to the 250 FTE in Everett's partnership program with Western that was already included in the planned facility). The decision to expand the UEC to accommodate the University Center was made during the design stage of the new building. This was one of three alternatives for the Center's location then under consideration [(1) Acquire and renovate the downtown Broadway Center (at an estimated cost of \$20,250,000) for 40,000 GSF/26,000 assignable or net square feet, ASF); (2) Construct a new stand-along facility (at an estimated cost of \$19,100,00 for 30,000 GSF/20,400 ASF), and (3) Increase the size of the UEC (at an estimated cost of \$14,540,451 for 25,000 GSF/17,500 ASF).]³⁵

The magnitude of the present endeavor is impressive, but it has not been easy getting there. Staff members report that there has been a lot of pushing and pulling, and, as discussed in more detail later, problems with maintaining the high tech equipment under the community college system formula. In 2007, the Center staff presented a list of "preferred and present popular programs," based on analyses of need, interest, and demand. These are the following:³⁶

University Center's Program Plan Including Present and Needed Programs
Business/Management
Education
Human Services/Social Work
Interdisciplinary Arts/Sciences
Nursing

³⁵ November 30, 2005, "Preliminary Report," op. cit. pp.26-28. The expanded UEC option budget would cover the costs of 15 classrooms and labs, 15 offices, furniture and technology, site acquisition, parking, and design, construction, and other incidental costs.

³⁶ UCNPS, June 29, 2007, op. cit. p. 11.

 Applied Sciences
Environmental Science/Policy
Engineering/Technologies/Biosciences
Communications

Its present operating budget, included in the SBCTC/Everett Community College budget, is sufficient for about 250 FTEs at \$6300/FTE, a figure intended to be comparable to the average upper-division FTE cost of the state's regional/comprehensive universities, although the Center utilizes 10-15% for expenses associated with staffing, technical support, equipment, and some marketing. One advantage of localized HEC funding FTE funding is that it takes pressure off of the universities to "cannibalize" their own FTE allocations, which was a problem with the original NSIS concept. These funds are appropriated for the purpose of supporting the enrollment of students in degree programs offered by public institutions through the University Center."³⁷ They do not apply to those of independent institutions. Center staff members also note that:

Several existing programs are built on a self-support model, which utilizes a fee structure rather than a regular tuition rate. As self-support programs they have a higher tuition and fee rate for students and are vulnerable to discontinuation if the program does not meet its expenses in a given year, thus placing the students in jeopardy. In addition to attracting new degree programs, the University Center has addressed the issue of transforming some of these programs to a state-support model.³⁸

Western Washington University's programs in Elementary Education and Human Services were the subject of these efforts, and in fall 2007, the change had been made.

With respect to the future, along with the move, the Center is working on new programs and partnerships. Requests for programs [RFPs] in business administration, communications, nursing, engineering, and a secondary education credential in science and math also have been issued, but these have not yet borne fruit.

The presence of independent institutions in the partnership is an important concern. The University Center rents/leases space to these organizations in an EvCC facility near Boeing. Everett Community College is the site of Embry Riddle University's bachelor's and master's degree programs that articulate with the College's lower-division programs and are aimed at the aerospace industry in the region. These include:

³⁷ UCNPS, June 29, 2007, op. cit., p. 14.

³⁸ UCNPS June 29, 2007, p. 14. Note that the Jefferson Higher Education Center at Port Hadlock also receives state funding for operations through the HECB budget. The HECB passes these funds through to Peninsula College, which serves as fiscal agent for the Center.

- BS in Aviation Maintenance Management
- BS in Professional Aeronautics
- BS in Technical Management Logistics, Occupational Safety and Health, and Professional Valuations
- Master of Aeronautical Science
- Master of Science in Technical Management

University of Phoenix Bachelor and Master's degree in Business Administration also are planned for offering on the EvCC campus.³⁹

Finally, planning for a branch campus in the area has contributed an aspect of uncertainty for the Center. While not exactly on hold, the Center also is not being aggressively expanded. The 2007 report closes with this observation about its future role as events proceed:

We have expressed our desire to work with the planners for offerings through the University of Washington and trust that collaboration will bring greater benefits to the residents of this region. The efforts of the University Center and the branch campus are capable of serving the residents of this region in different and unique ways. It will take some time for the branch campus to develop and mature in its ability to meet the complex educational needs of the region and the state. In the meantime, the University Center is providing immediate services and programs, and will continue to build programs complimentary to the science and technology focus of the proposed branch campus.

Funding and Other HEC Issues

Funding streams for higher education/university centers around the nation vary. Some were established with local funds; most required state funding. In some cases facility maintenance and upgrade funds continue to be provided from local sources; all of the centers (except for those on military bases) require some state funding for operations. In the Washington examples, both receive FTE funding support from the state. In the case of CWU at Des Moines, state capital funding to the two partner institutions was the crucial fund source for the new facility. At the Everett Center, which is leased, both local and state funding went into the renovation of the terminal building, and state funding was the major source for equipping it. State funds are the principal source for the new Gray Wolf building on the Everett Community College campus, into which the Everett Center is scheduled to move in 2009. Also in the case of the Everett facility, state FTE funding (250 FTEs @ the average comprehensive university upper-division rate) is provided to Everett Community College through the SBCTC budget. A similar funding stream, although less, provides operations funds for the Jefferson Higher Education Center, in this case through the HECB budget to Peninsula College, which is the fiscal agent for the JHEC.

³⁹ Idem. p. 18

Equipment maintenance, especially high tech equipment, is a problem. In its present location the Center is experiencing degradation in the quality of its equipment. Staff members report that the funding method does not provide sufficiently for the repair and replacement of high quality technology equipment, which is essential when operating a program that uses ITV, etc. The move to the Everett campus is seen as a saving grace because it includes funding for new equipment. In about four years, however, staff members worry that they will be in a similar situation again.

The problem also applies to other aspects of operations. The funds allocated to the original NSIS implementation for space, furniture and equipment, for example, in the words of one observer, "appear to have been huge compared to what was allocated to the square footage for the impending move the campus." This has led to the view that the dollar formula for university level facilities is more generous than what is formulated for community college facilities. In this person's opinion "there needs to be recognition of the need for differentiated funding."⁴⁰ There may be a need to position these centers as slightly different animals, somewhere between the university and community college funding formulas, in the sense that they span and serve both systems .

In other cases, different centers display different funding systems and budgets. Harford Community College is the parent of the Aberdeen (Maryland) Higher Education Center, (a relationship the director lauds because it has helped with articulation and transfer issues, and because the college always has been supportive of the center's mission.) The college has provided the operating budget for the center since it started. It also provides in-kind support for computer services, maintenance, security, housekeeping and grounds, marketing, finance and accounting, etc. By incorporating these services into larger institution contracts, the charges to the center are considered minimal.⁴¹

Lately Maryland's higher education centers (there are several, called Regional Higher Education Centers – RHEC) have been petitioning the higher education board to provide state funding directly, as each is focused on priorities in the state higher education plan. If the petition is accepted, each will receive \$200,000 in base funding, plus an incentive amount in the form of a fixed amount per FTE. The objective is a more constant revenue stream that can be used to offer incentives and eliminate room rental charges for participating institutions. Presently room rental charges and fees to participating (partner) institutions comprise the major revenue sources for the center.

⁴⁰ These comments are based on interviews and follow-up conversation with Center staff. Although anonymity was not requested, it is provided as a matter of SOP. Hence, although these quotations are used, they are not attributed to particular individuals.

⁴¹ Conversations with Director Teri Morris, including an October 2008 e-mail exchange with William Chance.



Aberdeen, Maryland HEAC

The Greenville South Carolina University Center operates on an annual budget of \$2.2 million, exclusive of bond repayment and overhead costs. The total budget, including these costs, is \$3.6 million. The Center houses 78 degree programs for about 2200 headcount students. The \$2.2 million budget includes \$1.5 million from the state, \$525,000 from participating institutions, and the rest in the form of miscellaneous income. All of the bond repayment and overhead costs are also paid with state funds, in this case directly appropriated to Greenville Technical College, which is the landlord (and which is located in the other anchor store location, at the far end of the mall in the picture).



Greenville, South Carolina University Center



Greenville University Center Mall Interior

At the Ardmore (Oklahoma) Higher Education Center, the annual operating budget utilizes state funds (42%, or \$728,903) and Tuition, Fees, and Other Revenues (58%, or \$1,016,314). All of the participating universities are public institutions (East Central University, Murray State University, Southeastern University, and Oklahoma State University – Oklahoma City). There are no consortium membership fees, but institutions pay \$26/CH, which is charged to the students as part of the tuition. The institutions use the same tuition rates on the home campus but include certain campus fees that are about the same as the \$26 per credit hour charge. The campus fees are not passed on to Center students, so the credit hour charge replaces it. Tuition costs at the Center are sometimes less than those for students on campus. If an institution were to charge \$65 per credit hour tuition and \$35 for campus fees, for a total of \$100/credit hour, the Center would charge the \$65 credit hour charge plus the \$26 Center fee, for a total of \$91/credit hour.⁴²

The Roanoke (Virginia) Higher Education Center budget is based on 51% state support, 44% rent revenue and local support (Roanoke County \$11K), and 5% from smaller items such as revenues from phone service, IT services, soft drink vending, library, testing.

Attracting partners is a problem for many multi-university centers, some more than others. State FTE funding is an important aspect for addressing this problem, but it is not the only one, although, again, each seems to operate a little differently from the others.

In the Roanoke Center, great store is placed in the array of services/benefits the center provides to participating institutions in addition to physical space in the facility (an eight story Art Decco

⁴² Conversations with Director Fred Baus during a July 2008 site visit and follow up e-mail exchanges between him and William Chance, October 2008.

fully renovated building in downtown Roanoke). These include assertive outreach programs, help with public relations and marketing, academic and student support services, information technology support, and security and parking, among others.

The President of the Center expressed himself at some length on the incentive matter. His observations merit repeating here. In his words,

"Initially a few key institutions were persuaded to join the Center and others we wanted as members saw a benefit to being in the group rather than being left out. Some feared the competition would be increased by locating in one place, and the privates were afraid that the publics (particularly the community college) would take all the business because of lower tuition, but as more institutions entered the partnership, "being in" became more attractive that 'being out. Now that we have run for a few years all of that is behind us and everyone has seen how the single location has improved business for everyone. Visibility is another feature that is attractive to members. The building and its purposes in serving the region have a high public profile and all the members benefit from that visibility. And I also do not underestimate the draw of "doing the right thing" among the institutions; many have an outreach commitment to which a project of this nature has great appeal.

Finally in our case political considerations play a part in the incentive to belong. At first members of the State legislature and local government officials from our region who strongly backed the concept along with business leaders (some of whom also served as members of the boards of visitors of our potential member institutions) teamed up to convince presidents that their institutions needed to participate in the Center. Their influence was very important to recruiting members (particularly among the state supported institutions).⁴³

⁴³ Conversations during the site visit and subsequent e-mail exchanges between President Tom McKeon and William Chance.



Roanoke Higher Education Center

For the Director of the Ardmore Higher Education Center, the subject of incentives to attract participation is "The \$64,000 question." Some of this is settled by state Regents' policy, which identifies some institutions as partners and provides a process that can allow non-partner institutions to provide programs the partners cannot or will not provide. The absence of "Big-Name" or Flagship partners is a problem for the Center. The Director feels these are important even if they provide only a few programs.

The best incentives, he suggests, are related to money and technology. In his view, if institutions (which in this case are public universities) can come to the center and have little or no overhead and operate their programs in a nice facility with state-of-the-art technology, where they do not pay rent or have heavy administration costs, and where there are plentiful classrooms, that may be enough. Local marketing and student recruitment services provided by the center also are important incentives. Supportive policies from the statewide board or regents as ways to encourage institution participation in the center, however, are considered essential.⁴⁴

⁴⁴ E-mail exchange Steven C. Mills and William Chance, September 2008.



Ardmore Oklahoma Higher Education Center

Other challenging issues also might be mentioned. One concerns faculty. In a recent Chronicle of Higher Education article, David Evans writes, "My university has a large adult-education program located at 14 sites across lowa. It is staffed largely by adjunct instructors, partly because of the geographical and programmatic distribution of the sites, partly for financial reasons, and partly because using adjuncts seems to be standard - and, therefore, unquestioned - operating procedure. I would like to employ more full-time faculty members in this program. Some of them could and should come from our home campus; if our programs on campus and at the sites are indeed comparable, it makes sense for instructors to overlap more than they do now. Any staff restructuring, however, would require creating multiple new full-time positions that have teaching at our off-campus sites as their primary responsibility.⁴⁵

In a thoughtful paper prepared as a contribution to the present study, Lisa Lange, herself an adjunct faculty member, offers these observations, first about adult learners and then about adjunct faculty:

The adult learner is defined as an adult 25 years old or older returning to school. These students often display several characteristics:

- Work full or part time
- Attend classes part-time

⁴⁵ "Defining and Recruiting a New Model Faculty," October 3 2008.

- Financially independent of their parents
- Have dependants
- First-generation college attendees

Lange also comments on adjunct faculty. Community colleges and universities increasingly rely heavily on adjunct faculty to reduce costs. For her, however, this trend can have a detrimental effect on student achievement, actually increasing costs for schools (it is less expensive to retain students than to replace them.) She lists issues associated with contingent and adjunct faculty as the following:

- No office space to meet with students.
- No work space to create or keep materials.
- Lack of mailboxes, phones, email, or voicemail.
- No payment for keeping office hours.
- No input into decision-making bodies such as hiring, curriculum, and governance.
- Ever-changing workloads and schedules from term to term
- Inability to tell students what courses he or she will be teaching, if any, in the future.
- Commuting from school to school to teach courses, therefore not being available before or after classes for questions or discussions.⁴⁶

In effect, the system depends on part-time students being taught by part-time faculty, many of whom, in both categories, also have day jobs. Done well it works well, in no small part because both groups are composed of adults with serious education goals and standards. But it is not always easy, and flexibility, new approaches, methods, and expectations are required to make it all work.

And so it goes. With some understanding of what a higher education center is, of those that seem to be working well, and of some of the challenges they all face, attention can return to the Kitsap Region. Based on what has been learned, the options under consideration have narrowed to these:

- 1. A single higher education/university center for the region with distance education links between colleges, to satellite campuses, and to the Jefferson Higher Education Center.
- 2. Separate higher education centers located respectively in each community college district, with distance education links between each other, to satellite campuses, and to the JHEC.

⁴⁶ "Outline of Research on Best Practices," September 2008.

3. Campus based or stand alone centers (off-campus locations), with distance education enhancement to connect campuses, centers, and satellites

In fewer words, the options are these:

Single HEC	District-Based HEC
On-Campus Located	On-Campus Located
Stand-Alone (Off-Campus Located)	Stand-Alone (Off-Campus Located

ON THE MATTER OF NEED: THE GEOGRAPHIC, DEMOGRAPHIC, AND ECONOMIC CHARACTERISTICS OF THE KITSAP REGION

The study region comprises Kitsap, Mason, Jefferson, and Clallam Counties. This includes all of the Kitsap Peninsula and a good part of the Olympic. A number of localities are involved, including Bainbridge Island, Port Orchard, Bremerton, Silverdale, Poulsbo, Bremerton, Port Townsend, Port Angeles, Forks, and Shelton, Washington, among others. Most of what follows will be familiar to residents and others interested in the future of the region, and especially the role of higher education in that. The material here is on the order of a reprise.

With a land area of nearly 5,000 square miles (actually, 4,910)⁴⁷ the Kitsap Region compares with the state of Connecticut, which spans 5,543 square miles, about 600 square miles more (if water area is included; 4,845 square miles, or about 75 square miles less, if only land area is counted).

If the Kitsap Region were a state, it would rank just below Connecticut on a national list of states organized by land area, but above Delaware and Rhode Island (which together total slightly more than 4,000 square miles). Viewed another way, the Kitsap Region is larger than Delaware and Rhode Island combined (4,034 square miles.) One could add the U.S. Virgin Islands (737 square miles) and still be about 140 square miles shy of the Kitsap total.⁴⁸

Unlike Connecticut, Delaware, and Rhode Island, however, the Kitsap Region is partially divided by one of the contiguous United States' fiords, the Hood Canal, which separates the Olympic and Kitsap peninsulas in their entirety. The Hood Canal Bridge, which must open periodically to allow the passage of Naval and other vessels, links the two, albeit not always on a predictable schedule.

The region also is blessed with a mountain range, the Olympic Mountains, which cannot be crossed directly except by air or on foot (although the Olympics can be driven around in the north and south). On the east side, Puget Sound separates Kitsap, Jefferson, and Clallam Counties from the metropolitan I-5 corridor. Thus, the Kitsap Region is not only vast, it also is internally divided and externally separated by geographic and natural impediments. People who live in the region realize that while the beauty can be impressive, the features that contribute to it complicate both the provision of higher education services and access to them.

⁴⁷ According to OFM data, the land area of Clallam County is 1739 square miles, Jefferson County, 1814 square miles, Kitsap County, 396 square miles, and Mason County, 961 square miles.

⁴⁸ During the interviews, one person manifesting a rather cosmopolitan view suggested the Kitsap Region is the size of Iceland. This was a bit of an overstatement, as Iceland, with a land area of 39,756 square miles, is about the size of Kentucky, or about eight times the size of Kitsap, but it was a nice thought.

The region and peninsula namesake, Kitsap County, is the population center, but this is a little misleading as in many respects the region is really two: Clallam and Jefferson Counties in the north, and Kitsap and Mason Counties in the south, each comprising a separate community college district, which, as will be argued later, also is a consideration crucial to a workable baccalaureate access solution.⁴⁹ The distance between Bremerton, the site of Olympic College, and Port Angeles, the site of Peninsula College (according to a MapQuest estimate) requires a drive of about one hour and 40 minutes, presumably in daylight on a dry day, suggesting by its duration the nature of the drive. By comparison, the estimated driving time from Yakima Valley Community College to Wenatchee Valley College is one hour and 56 minutes, about 16 minutes longer; one passes by Central Washington University on the trip; Central, of course, is one of the state's comprehensive regional universities. And as noted above, Central also has university centers at both of these community colleges.

With a year 2007 total population of 396,500 [OFM estimate] the area qualifies as a sizable population center, although the numbers are not evenly spread. The individual county numbers, the percent population change from 2006, each county's rank among the counties of the state, and population density (density figures are from the Census Bureau and apply to 2006 estimates), are the following:

County	2007 Estimate	% Chg. Since 2000	Rank	Persons/ Square Mile
Kitsap	244,800	5.53	6	585.8
Clallam	68,500	6.73	18	37.1
Mason	54,600	10.52	21	51.4
Jefferson	28,600	8.75	27	14.3
Total	396,500	6.63	N/A	N/A
State	6,488,000	10.0	N/A	88.6

The 2007 population estimates for major localities in the region and the percent change between the 2000 Census [OFM Forecasting Division, 6/27/07] are listed on the following table:

Locality	2007 Pop. Est.	% Chg. From 2000	
Clallam County	68,500	6.7	
Forks	3,175	1.7	
Pt. Angeles	19,010	3.3	

⁴⁹ Peninsula College's district is composed of Clallam and Jefferson Counties; Olympic College's district comprises Kitsap and Mason Counties.

Sequim	5,330	22.9
Clallam Unincorporated	40,985	6.9
Jefferson County	28,600	8.7
Pt. Townsend	8,865	6.3
Jefferson Unincorporated	19,735	9.8
Kitsap County	244,800	5.5
Bainbridge Island	23,080	13.6
Bremerton	35,810	-3.8
Pt. Orchard	8,350	8.5
Poulsbo	7,560	10.9
Kitsap Unincorporated	170,000	6.3
Mason County	54,600	10.5
Shelton	8,895	5.3
Mason Unincorporated	45,705	11.5
State of Washington	6,488,000	10.0

Only Mason County exceeds the statewide growth rate in these estimates. Although variances in published estimates between OFM and the Census Bureau sometimes can be a little confusing because of different date ranges (the estimates of population change provided by the Census Bureau apply to the period April 1, 2000 to July 31, 2006), the Census summaries provide useful information on county profiles for purposes of comparison.⁵⁰ The Census figures and the estimates of population change for the state as a whole are shown on the next table:

Jurisdiction	Census Estimate of Pop. Chg. 2000-2006
Clallam	9.7
Jefferson	11.3
Kitsap	3.7
Mason	13.2
Washington	8.5

Source: Census, State and County QuickFacts

In this case all of the counties except for Kitsap exceed the statewide growth rate.

Taking another view, OFM's projections of general population growth for the period 2000 to 2030 for the four counties are as follows:

⁵⁰ U.S. Census Bureau, State and County Quick Facts.

	2000	2005	2010	2015	2020	2025	2030	% Chg.
Clallam	64,179	66,800	73,723	78,014	83,145	88,196	92870	45
Jefferson	26,299	27,600	33,815	38,161	43,014	47,945	52,778	101
Kitsap	231,969	249,400	296,494	316,624	347,255	371,972	396,879	71
Mason	49,405	51,900	66,794	75,649	85,360	95,348	105,257	113
Region Total	371,852	386,700	470,826	508,448	558,744	603,461	647,784	74
State Total	5,894,121	6,256,400	7,372,751	8,042,721	8,713,386	9,379,550	10,026,660	70

Total Resident Population for Growth Management Data Source: Office of Financial Management

The year 2000-2030 change is shown in graphic form on the next chart:



The population of the region is projected to increase 74% over the next 20 years, from slightly over 370,000 in 2010 to nearly 650,000 in 2030. In this case, three of the four counties (Kitsap, Mason, and Jefferson -- Clallam is the exception) exceed the State's projected growth rate. Mason leads the pack in this respect, and, as shown on the following line graph will displace Clallam for second place among the four around 2015. Kitsap County, which presently accounts for about 63% of the population of the region,

displays the steepest projected growth curve among the four. Kitsap County's population alone is expected to approximate 400,000 by 2030.


Kitsap County leads the four in population under age-18, with nearly a quarter of its total in that age group. But the resident population in all four counties is aging, as is the state's, as shown on the following chart. The age 65-85+ years in all cases represents the group in which the greatest percentage increase is expected, exceeding 100% in the state and all counties except for Clallam. In OFM's medium growth management projection the "prime" college age group, in this case defined as 20-49 years, is increasing between 18 and 39 percent, depending on the county (Jefferson is 39%; Kitsap's is 18%)). The figure for the state as a whole is 24 percent. Bremerton, the region's largest city, ranks 25th in size among cities of the state.



Bremerton also is part of one of Washington's 12 Metropolitan Statistical Areas, Bremerton-Silverdale. With a 2000 Census population of 231,969 (the most recent year for which MSA population data are published), the Bremerton- Silverdale MSA, since the Seattle-TacomaBellevue-Everett MSA is treated by the Census Bureau as a one mega-area, Bremerton-Silverdale ranks as the fourth largest MSA in Washington (seventh if the Seattle-Tacoma-Belevue-Everett mega MSA is divided.).

•		0	
MSA	2000	Rank	Rank
	Рор.	in WA	in US
Seattle-Tacoma-Bellevue	3,043,878	1	15
Seattle-Bellevue-Everett*	2,343,058	N/A	
Tacoma*	700,820	N/A	
Portland-Vancouver	1,927,881	2	25
Spokane	417,939	3	107
Bremerton-Silverdale	231,969	4	176
Yakima	222,581	5	182
Olympia	207355	6	189
Kennewick-Pasco-Richland	191822	7	201
Bellingham	166,814	8	224
Mt. Vernon-Anacortes	102,979	9	365
Wenatchee	99,219	10	375
Longview-Kelso	92,948	11	391
Lewiston, ID-WA	57,961	12	531

Metropolitan Statistical Areas in Washington 2000 Population and Rankings

*Metropolitan Divisions

Source: Census Bureau, "Population in Metropolitan and Micropolitan Statistical Areas: 1990 and 2000"

Census data also offer a few glimpses of some of the important metrics (Figures for 2006.

Population/Demographic/Economic Category	Clallam	Jefferson	Kitsap	Mason	State
Persons Under Age 18	19.0%	16.9%	24.2%	20.8%	23.9%
Person 65 and Older	22.1%	22.4%	11.8%	16.8%	11.5%
High School Graduates (age 25+)	85.5%	91.6%	90.8%	83.7%	87.1%
Bachelor's Degrees and Higher (age 25+)	20.8%	28.4%	25.%	15.6%	27.7%
Median Value of Owner Occupied Homes	\$133,400	\$171,900	\$152,100	\$132,300	\$168,300
Median Household Income (2004)	\$40,391	\$42,965	\$52,503	\$43,368	\$48,438
Per Capita Money Income (1999)	\$19,517	\$22,211	\$22,317	\$18,056	\$22,973

Percent Chg. Private Non-Farm Employment 2000-2005	13.5%	0.6%	13.3%	12.4%	2.2%
Total Number of Firms (2002)	6,000	3,578	17,192	3,367	N/A
Manufacturer's Shipments (in \$1000)	268,054	162,195	267,059	326,638	N/A
Wholesale Trade Sales (in \$1000)	N/A	18,328	499,919	112,000	N/A
Retail Sales (\$1000)	601,935	168,308	2,266,877	268,476	N/A
Retail Sales Per Capita	\$9,108	\$6,172	\$9,507	\$5,244	\$10,757
Accommodations and Foodservices Sale (\$1000)	92,332	31,762	235,184	31,526	N/A
Federal Spending 2004 (\$1000)	540,901	210,761	2,917,450	314,262	N/A

Source: Census Bureau State and County QuickFacts

In its Strategic Plan, the HECB, citing OFM figures in reference to the aging population, notes that about 12 percent of the state's workforce will "age-out" over the next ten years. Retirements are expected to heavily affect such professions as Nursing, Education, Social Services, Personnel Management, Civil Engineering, Transportation Services, Government, Machinists/Technicians, Computer/Mathematical, and Legal fields, most of which also rank highly among the employment needs of Kitsap area employers.

The recent (2006) employment patterns for each of the four Kitsap Region Counties are summarized respectively in the Commerce Department's Bureau of Economic Analysis and Pacific Northwest Region Economic Analysis Project's figures, which are ranked on the following tables by employment totals.⁵¹

⁵¹ Employment, 2001-06, *www.pnreap.org/Washington*

Kitsap County Employment Patterns, 2006 and 2001-06, Ranked by Number Employed			
EMPLOYMENT FIELD	#	%	% CHG. 2001-06
Retail Trade	16,036	12.4	3.2
Federal Civilian	15,047	11.6	1.6
Health Care & Social Assistance	12,652	9.8	2.9
Federal Military	11,741	9.1	-2.4
Local Government	11,224	8.7	2.3
Construction	8,237	6.4	3.9
Professional & Technical Services	7,830	6.1	3.3
Accommodation & Food Services	7,690	5.9	3.4
Other Services, except Public Administration	7,085	5.5	2.3
Real Estate	6,177	4.8	8.6
Administrative & Waste Services	5,854	4.5	6.9
Finance & Insurance	3,616	2.8	3.3
Arts, Entertainment & Recreation	3,015	2.3	4.3
State Government	2,262	1.8	0.8
Manufacturing	2,151	1.7	3.6
Wholesale Trade	2,059	1.6	6.1
Information	2,034	1.6	0.3
Education Services	1,832	1.4	7.3
Transportation & Warehousing	1,387	1.1	1.7
Forestry, Fishing, & Related	571	0.4	2.4
Farm Employment	470	0.4	-0.5
Management of Companies & Enterprises	213	0.2	0.2
Utilities	161	0.1	-3.5
Mining	128	0.1	3.3
Total	129,472		

Federal Civilian and Military together comprise the largest employment sector in Kitsap County (about 26,700, according to the table, although other estimates, such as Employment Security's 1999 Employment Trends, are less). The Naval Submarine Base at Bangor and the Undersea Warfare Center employ about 5,000. People on active duty in the military in the area number nearly 16,500. School districts employ nearly 5,500. Defense contractors (Johnson Controls, Lockheed Martin, GEC Marconi, Raytheon and Northrop Grumman) report about 1,500. Manufacturing (about 900), Services, including health and retail employer, (nearly 5,500), and government (about 3,500) round out the employment sectors in this part of the Kitsap region.

The Defense presence in Kitsap County is worthy of further comment. The Kitsap Economic Development Alliance reports that nearly 54 percent of the county's economic activity "is directly

and indirectly linked to the personnel and procurements of these bases," employing 46,935 and yielding \$1.756 billion in labor earnings.⁵²

Also according to *Kitsap Learns*, the U.S. Navy occupies most Department of Defense installations in Kitsap County, forming a "fleet concentration area," that includes the following facilities and functions:

- Puget Sound Naval Shipyard and Intermediate Maintenance Facility (PSNS & IMF) is the Pacific Northwest's largest naval shore facility. It is also a significant Washington State industrial installation and a world-class maintenance facility for the U.S. Navy.
- Naval Base Kitsap was formed in 2004 by merging together the Bremerton and Bangor Naval bases. Bremerton provides world-class facilities, programs, and services to support personnel and logistics readiness, while Bangor is a homeport for the TRIDENT Submarine Launched Ballistic Missile System. Their industrial activities include submarine overhauls, modernization and corrective maintenance, assembly and processing missiles and components as well as training military and civilian personnel on the latest military technologies.
- Naval Hospital Bremerton commands five branch medical clinics and Fleet Hospital Bremerton. The command also oversees the Occupational Health/Industrial Hygiene operation, the Alcohol Treatment Department and provides a Family Practice teaching program.
- Navy Region Northwest coordinates base operating support for forces throughout the states of Washington, Oregon, Idaho, and Alaska.
- Naval Undersea Warfare Center Division Keyport is IT-oriented. The base provides test and evaluation, in-service engineering, maintenance, and repair, fleet readiness, and industrial support for undersea warfare systems, countermeasures, and sonar systems.
- Naval Sea Systems Command (NAVSEA) commands, engineers, builds, and supports America's fleet of ships and combat systems.
- Fleet and Industrial Supply Center (FISC) Puget Sound is one of seven centers under the Commander, Fleet and Industrial Supply Centers (COMFISCS) and the Naval Supply Systems command that delivers combat capability through logistics.³⁹

Continuing with *Kitsap Learn*s, these require a highly skilled workforce for weapons, navigation, information technology, engineering and more – and employ some 5000+ contractors on any given day. This report notes that more than 500 people associated with these industries are

⁵² Kitsap Learns.

enrolled [in 2006-07] in a four-year apprenticeship course in partnership with Olympic College. Upon completion, apprentices receive an Associate degree plus a Journeyman's license. The Naval engineering facility also contracts for all military construction such as piers, building and upgrades; and employs construction trades, structural engineers, planners and estimators, architects and designers, and heavy equipment operators.

While on the subject of the Navy, one Advisory Committee members noted that it is more than simply an employer; it is that, but it also is both an important player and a unique feature of the West Sound landscape because of the numbers of students and universities involved with it and because it has a developed higher education administration infrastructure (which divides into two distinct streams, one for the general Navy population and one for the shipyard). The Navy has assertive policies regarding personnel and workforce higher education aimed specifically at military families and civilian shipyard workers. Its higher education presence is both a major asset and an important potential source of higher education administrative capability.

Recent changes in Navy workforce education policies are likely to have a dramatic affect on projected baccalaureate education needs for the area. This will couple with the new GI-Bill [2009], which also is expected to heavily influence demand and participation, so much so the projected enrollments (outlined below) in Kitsap County could prove conservative. Moreover, and whatever else, the Navy is an important component of the higher education support system. The area has remarkable strengths in local businesses, civic groups, and existing educational institutions. The Navy is among them. Combined they can represent an important resource for a higher education center.

Next to Retail Trade, the largest single employment sectors in Kitsap County, Health Care and Social Assistance and Local Government, round out the list of top employment sectors in the County.

Mason County's employment patterns are similar in some ways and different in others.⁵³ In this case, Local Government and Retail Trade are the leading sectors. Health Care and Social Assistance place seventh. The list of largest employers in Mason County begins with the Little Creek Casino Hotel (696), followed closely by the Shelton School District (675) and the Washington Corrections Center (581). Mason General Hospital (495), Wal-Mart (420), and Mason county government (411) are next in order. Manufacturing includes Simpson Timber (400), Olympic Panel Products (360), and Olympic Fabrication (59). Natural resource industries include Taylor Shellfish (400) and Mason County forest Products (170). The largest health

⁵³ Employment figures for the bottom five sectors on the Mason County table are not separated but are presumably contained in the "Unreported" category, fourth from the top, for reasons that are not clear at the time of writing.

services sector employers report nearly 700 workers. The top 50 employers in Mason County employ more than 8,000 people.⁵⁴

EMPLOYMENT SECTOR	# EMPLOYED	% of TOTAL	% CHG. 2001-06
Local Government	4,035	18.8	4.4
Retail Trade	2,368	11.1	3.8
Manufacturing	2,248	10.5	4.3
Unreported	1,875	8.8	0.4
Construction	1,586	7.4	5.6
Other Services, except Public Administration	1,450	6.8	3.6
Health Care & Social Assistance	1,323	6.2	3.1
Accommodation & Food Services	1,238	5.8	6.4
Real Estate	1,078	5.1	9.0
State Government	951	4.4	-1.6
Wholesale Trade	701	3.3	10.0
Finance & Insurance	625	2.9	2.8
Farm Employment	473	2.2	9.4
Arts, Entertainment & Recreation	402	1.9	6.1
Transportation & Warehousing	327	1.5	-0.98
Education Services	240	1.1	5.46
Federal Military	177	0.8	-0.43
Information	163	0.8	3.2
Federal Civilian	73	0.3	-6.6
Utilities	33	0.2	6.4
Forestry, Fishing, & Related	NOT REPORTED		
Mining	NOT REPORTED		
Professional & Technical Services	NOT REPORTED		
Management of Companies & Enterprises	NOT REPORTED		
Administrative & Waste Services	NOT REPORTED		
Total	21,366		

Mason County Employment Patterns, 2006 and 2001-06, Ranked by Number Employed

Turning to Clallam County, employment features Health Services (Olympic Medical Center, nearly 1,000; Forks Hospital, 250), Education (school districts, nearly 1,000; Peninsula College, more than 500), Corrections (Clallam Bay Corrections Center, more than 400), Government (Port Angeles City, 250; Tribal Councils and Tribes, 375; Olympic National Park 270, about half is seasonal); and State Government Agencies, about 200. Private employers include the Retail

⁵⁴ Source: Comprehensive Economic Development Strategy for the Columbia-Pacific Region: Comprehensive Economic Development Strategy for the Columbia-Pacific Resource Conservation & Economic Development District (Mason, Grays Harbor, Pacific, and Wahkiakum Counties.

Sector (Wal-Mart, 425; Safeway, 395; Costco 165; Forks Outfitters, 90; Albertson's, 90, Pacific Office Equipment, 43; QFC, 68); Manufacturing (Nippon Paper, 242; K-Ply, 166; Interfor Pacific, 91; PORTAC, 101); Health Services (Crestwood Convalescent, 100; Sherwood Assisted Living, 116; Port Angeles Care Center, 90), and Entertainment (7 Cedars Casino, 370), along with other industries. The Battelle Marine Science Lab is a scientific research center that employs about 100.⁵⁵

In terms of employment sectors, Retail Trade and Local Government lead, followed closely by Health Care and Social Assistance.

EMPLOYMENT SECTOR	# EMPLOYED	% TOTAL	% CHG. 2001-06
Retail Trade	5,238	14.2	0.2
Local Government	4,974	13.5	1.3
Health Care & Social Assistance	3,326	9	-2.7
Construction	3,199	8.7	11.7
Accommodation & Food Services	2,830	7.7	1.6
Other Services, except Public Administration	2,562	6.9	6.1
Professional & Technical Services	1,948	5.3	3.8
Manufacturing	1,872	5.1	5.8
Real Estate	1,809	4.9	11.3
State Government	1,244	3.4	-3.0
Administrative & Waste Services	1,156	3.1	3.1
Forestry, Fishing, & Related	1,085	2.9	1.1
Finance & Insurance	1,079	2.9	3.6
Transportation & Warehousing	762	2.1	1.2
Arts, Entertainment & Recreation	759	2.1	4.3
Wholesale Trade	587	1.6	4.6
Federal Military	577	1.6	2.7
Information	474	1.3	10.8
Federal Civilian	428	1.7	-4.9
Farm Employment	415	1.1	-1.7
Education Services	331	0.9	12.7
Management of Companies & Enterprises	196	0.5	3.7
Mining	89	0.2	2.3
Utilities	32	0.1	6.7
Total	36.972		

Clallam County Employment Patterns, 2006 and 2001-06, Ranked by Number Employed

⁵⁵ These figures are updated and others provided in the Clallam Economic Development Council's "2007 Clallam Community Profile."

Jefferson County employment by sector is displayed on the next table. Health Care and Social Assistance comprise the leading sector, followed by Local Government and Retail Trade.

EMPLOYMENT SECTOR	# EMPLOYED	% TOTAL	% CHG. 2001-06
Health Care & Social Assistance	1,875	12.1	3.3
Local Government	1,662	10.7	0.2
Retail Trade	1,501	9.7	1.9
Accommodation & Food Services	1,408	9.1	-0.4
Other Services, except Public Administration	1,120	7.2	2.8
Professional & Technical Services	1,050	6.8	3.4
Real Estate	886	5.7	10.5
Manufacturing	804	5.2	5.0
Arts, Entertainment & Recreation	574	3.7	4.4
Administrative & Waste Services	551	3.6	-0.4
Finance & Insurance	363	2.3	7.4
Forestry, Fishing, & Related	327	2.1	-1.2
State Government	314	2.03	2.0
Education Services	308	1.1	-1.3
Wholesale Trade	268	1.7	3.5
Information	252	1.6	14.0
Transportation & Warehousing	195	1.3	2.1
Farm Employment	193	1.3	1.1
Federal Civilian	158	1.0	-0.6
Federal Military	105	0.7	-1.9
Mining	83	0.5	5.1
Utilities	73	0.5	1.4
Construction	1,431	0.2	4.5
Management of Companies & Enterprises	NOT REPORTED		
Total	15,501		

Jefferson County Employment Patterns, 2006 and 2001-06, Ranked by Number Employed

The leading employment sectors in the four counties together (generally involving more than 5% of the employment force, except for "Other Services" (which is a catchment for a number of small service sectors, and which therefore is not listed) are shown on the following table, which also lists the percentage for each sector. The patterns are displayed graphically on the chart that follows the table.

	Jefferson	Clallam	Kitsap	Mason
Health Care	12.1	9	12.65	6.19
Local Government	10.72	13.45	8.67	18.8
Retail Trades	9.68	14.16	13.03	11.08
Accommodation	9.08	7.65	5.94	6.36
Professional Services	6.77	5.27	6.05	N/R
Construction	4.53	8.65	6.36	7.42
Federal Civilian			11.62	
Federal Military			9.07	
Manufacturing	5.19	5.06	4.29	10.52
Real Estate	5.72	4.89	4.77	5.05



The needs for specific bachelors and masters programs that were identified through the survey research of this and other studies correspond with these employment patterns, but other needs

also are important. These tend to be stated in more general terms than workforce needs, and their association with higher education is often more inferential than explicit. While needs for higher education services derive from such obvious factors as population growth and economic considerations associated with professional and workforce matters, they also concern social wealth and well being. A question of who benefits most from higher education, society, the economy, or the individual, is continuing and perhaps emblematic, but it would be difficult to argue that any single interest accrues benefits to the disadvantage of another. The following observation is quoted from the higher education report prepared for Washington Learns, the Governor's 2006 blue ribbon education study committee:

With attention, commitment, and effort, Washington could regain its place and prevail in the global race, and that would be a good thing, but it could win that race and lose another at home. A strong case for assertiveness in higher education policy can be made in global and other economic competition terms, but it is not the only one. Higher education contributes not only an economic return but also carries societal benefits as well, bringing proceeds that accrue both to the individual and to the public. . .

The benefits of education include a private dimension (increased earnings over the course of a lifetime), and they contain others that are less direct: "an educated public can help keep health care costs down (college grads take better care of themselves), raise levels of economic development (they create more jobs and companies), and increase tax receipts (they make more money and pay more taxes),"⁵⁶ to say nothing of the importance of an educated public to the civic culture and success of this democracy.⁵⁷

At the initial Kitsap Study Advisory Committee meeting,⁵⁸ a member raised a question about whether the study would address the social needs dimension, noting a high incidence of teen suicides in the region (Kitsap County Department of Heath indicate the rates for that county are below state average rates). Her point pertained to the importance of education and education opportunity for young people in the region. A larger point concerned the importance of higher education to the full spectrum of elements that define the economic and social health in the region. The 2006 *Washington Learns* report outlined a list of correlations between higher education and various social and economic phenomena. These relationships apply more or less to every state and locality in the country and certainly no less to the Kitsap Region. The list, although eclectic, emerges whenever the subject turns to the social and individual benefits of higher education.

⁵⁶ Jon Gertner, "Forgive Us Our Student Debts," New York Times Magazine, June 11, 2006.

⁵⁷ NORED, "*making the grade*, , ,," op. cit., p. 50.

⁵⁸ September 11, 2008 at Olympic College.

- Males with some college (57%) or a bachelor's degree or above (59%) remain economically active from birth for a greater portion of their lives than those with less than a high school degree (49%) (Bureau of Labor Statistics).
- While 24.4% of families living below the poverty level have less than a high school diploma, this is the case with 2.4% of those with a bachelor's degree or above. (Census).
- Among men aged 22-49 who are unable to work, 6% have not graduated from high school; 0.4% have a bachelor's degree or above (Bureau of Labor Statistics).
- 73.8% of those with a bachelor's or higher degree have visited a dentist within the past year, compared with 38% of those with less than a high school degree. (NCHS).
- Although infant mortality rates are also associated with race and ethnicity, they decrease proportionately with education attainment for all reported racial and ethnic categories (NCHS).
- Two-thirds of those with a bachelor's degree or higher regularly wear seatbelts while driving, compared with 39% of those without a high school degree. The figure for high school graduates is 41%, and for those with some college, 51%. (American Journal of Public Health)
- Of those women who were unmarried and had a child in the past year, 45.6% had not finished high school, 30.3% had graduated from high school, 19% had some college, and 6.1% had a bachelor's degree or higher. (Census).
- 25% of those with less than high school knew that it was the Supreme Court, rather than Congress or the President that determines if a law is unconstitutional; 78% of those with a bachelor's degree or more knew this (NCES).
- 73% of those with a bachelor's degree or above; 55% of those with some college; and 36% of those with a high school diploma knew what the first ten amendments to the U.S. Constitution are called, compared with 7% of those who had dropped out of high school (NCES).
- 52% of those with a bachelor's or above; 44% of those with some college; 33% of high school graduates; and 19% of those without a high school diploma performed an ongoing community service during the year (NCES).
- 91% of those with a bachelor's or above; 80% of those with some college; 68% of high school graduates; and 51% of those without a high school diploma voted in a recent national or state election. (NCES).
- 67.2% of those with a bachelor's or above; 56.9% of those with some college; 40.4% of high school graduates; and 29.9% of those without a high school diploma report they do volunteer work, with the amount of hours volunteered each week rising progressively with attainment level. (Independent Sector Survey).
- 71% of male offenders and 83% of female offenders in the Washington prison system score at less than the 9th grade level on basic skills tests. 50% of offenders were unemployed prior to incarceration (Washington Department of Corrections).

- 87.1% of the adults in Washington have a high school diploma, compared with 32% of the Washington State prison inmates (Washington Department of Corrections).
- Less than 20% of Washington's offender population have a verified high school diploma (Washington Department of Corrections).
- 85.5% of Temporary Assistance for Needy Family recipients have 12 or fewer years of education (Department of Social and Health Services).

The associations with higher education depicted in these cut lines tell a story that may be more eloquent than compendia of tables of data, especially in a region such as Kitsap that is likely to be underserved in most aspects of higher education.

Before leaving the subject, when commenting on this list as it appeared in the draft version of the report, one resident described it as "dry and unappealing in terms of social factors." With specific reference to Olympic College and Bremerton, she continued with this, "You have not mentioned the impact this would have on the local public school systems. It would of course be of enormous value to teachers for upgrading their skills, plus providing a non-school system center for peer exchange" i.e. a center located outside the school system where teachers, and college faculty, could meet and exchange thoughts, opinions, and experiences. And then she added this, "You have not mentioned what the impacts on Bremerton would be: increased demand for inexpensive housing, more health services [etc.] Although Olympic College is a commuter school, young adults interested in attending Olympic for 4+ years are likely to desire to live in the community."⁵⁹ She is right.

⁵⁹ E-mail to William Chance, 11/2/08. Anonymity was promised to all who commented, and this promise is being honored. The writer will know who it was who took the time to convey these and similar opinions.

HIGHER EDUCATION SERVICES IN THE REGION

The listing of available higher education services in the Kitsap Region begins with the two community colleges directly serving the area: Olympic in Bremerton, and Peninsula in Port Angeles. There are no public or private baccalaureate-granting institutions campuses located in the four-county region, and few other Washington institutions than the two local community colleges are considered within reasonable communing distance for those living there, although the Central Washington University partnership with Pierce College and the UW Tacoma branch may be partial exceptions, partial in the sense the many consider the commute off-putting, if not sometimes daunting .

In one of these cases, program limitations also may be a consideration. According to its website, Central offers two programs -- a BA in Law and Justice and a BAEd in Elementary Education, at the CWU-Pierce County University Center on the Pierce College campus.

For its part, the UW-Tacoma lists these bachelors, masters, and other programs,

- o B.A., Business Administration
- o M.B.A., Business Administration
- Masters of Education
- Environmental Science
- o B.S., Environmental Science
- B.A., Computing and Software Systems
- B.S., Computing and Software Systems
- B.S., Computing Engineering and Systems
- o M.S., Computing and Software Systems
- o Interdisciplinary Arts and Sciences
- o B.A., Interdisciplinary Arts and Sciences
- M.A., Interdisciplinary Studies
- Bachelor of Science in Nursing (RN to BSN)
- o Master of Nursing
- o Bachelor of Arts in Social Welfare (BASW)
- Master of Social Work (MSW)
- B.A., Urban Studies

The Evergreen State College and South Sound Community College in Olympia may be other exceptions to the commuting barrier, in this case mainly for residents of Shelton and southern Mason County.

Both Olympic College and Peninsula College offer bachelor's programs as part of the state's pilot test program. Olympic offers a home-based BS in Nursing degree; Peninsula has a BAS in Applied Technology (and has students in Olympic College's Nursing program, which take some courses on the Peninsula campus). Both of the region's community colleges participate in partnerships of one form or another with universities. They also have extension or satellite sites,

most of which do not involve bachelor and masters degree programs. Peninsula College, for example, has extension centers at Forks and Port Townsend, neither of which provides bachelor or master's degrees.

Olympic College has an extension campus in Poulsbo, described as a 39,000 square foot facility on a 20 acre campus. It opened in January 2004. The campus is considered convenient for students from Bainbridge Island and the northern part of the Kitsap Peninsula. While credit and non-credit courses are available, offerings do not extend to the bachelor's or master's degree levels.



Olympic College's Poulsbo Extension campus (Olympic College Photo)

Olympic College's Shelton (OCS) satellite campus is located on 27-acre campus in that city. OCS provides a variety of programs from GED preparation classes to vocational, technical and transfer degrees. Associates of Arts and Sciences and Associate of Technical Arts (ATA) programs are available at this facility. Bachelor's and masters programs are not offered.

Olympic College also is a participating institution at Naval Base Kitsap, at which Associate degree and certificate programs are provided at Bangor and Bremerton. These appear to be designed especially for military personnel and their spouses, although other civilians are welcome. Certain base security issues must be addressed and followed, but the programs are open to all who qualify.

With respect to upper-division and graduate programming, a full listing of existing programs derived from a survey conducted as part of the present study indicates that the principal mode is distance education: Online, Interactive Television, Teleconferencing, or Correspondence, although In-Class Instruction also is represented. Most are hybrids in the sense that they involve two or more of these modes.

Ten institutions report active bachelor, masters, and a few doctoral programs in the area. Four, Peninsula College (27), Olympic College (35), WSU (103), and WWU (207), are Washington public institutions, accounting for 372 of the 958 total headcount enrollments (headcount enrollments are listed in parentheses). About one-third of the public institution enrollments, 103 at WSU, are exclusively On-line programs.

The remaining six institutions are City University (152), Education Consortium Chapman (173), St. Martin's (15), Southern Illinois (45), Old Dominion (156), and Goddard College (90). It appears that 45 bachelor's, 18 masters, and two doctoral programs are available. The rest are certificate or endorsement programs. The St. Martin's program concerns a mechanical engineering degree offered in partnership with St. Martin's University (Olympia) on the Olympic College campus. Olympic also has partnered with the University of North Dakota [UND] to offer four-year engineering degrees starting Fall, 2008. These will be online upper-division programs, with the four-year degree awarded by UND.

KITSAP REGION HIGHER EDUCATION CENTER REPORT

Olympic/Kitsap	Peninsula Degree/Advanced Deg	ree Offerir	igs						
Major	Degree	Tead	ching	Mode		Tim	ie Offe	ered	Present Enrollment
		Interactive Distance Education	In-Class	Online	Correspondence	Daytime	Evening	Weekend	
City University									
Appl. Psychology	BA Applied Psychology		х	x					4
Education	BA in Education		x				x	x	53
Accounting	BS in Accounting		x	х			х	х	9
Business Admin.	BS in Business Admin.		x	х			x	x	17
Computer Systems	BS in Computer Systems		x	х			x		1
Education	MED Ldrshp/Princ. Cert		х					х	6
Education	Master in Teaching		x			x		x	13
Education	MED - Guidance & Counseling.		х					х	8
Tech. Mgmt.	MS in Tech. Mgmt		х	x			x		1
Psychology	MA in Counseling Psychology		х				x	x	21
Project Mgmt	MS in Project Management		х	x			x	x	5
Business Admin.	MBA		x	x			x		14
Washington State University									
Business Administration -Entrepreneurship	Bachelor's			x		x	x	x	0
Business Administration -Management & Operations	Bachelor's			х					5
Business Administration - Management Information Systems	Bachelor's			x					3
Criminal Justice	Bachelor's			x					4
Human Development	Bachelor's			x					4
Humanities	Bachelor's			x					5

KITSAP REGION HIGHER EDUCATION CENTER REPORT

Bachelor's			x					22
Bachelor's			x					0
Bachelor's			Х					4
Master's			Х					2
Certificate			Х					
Certificate			Х					1
Certificate			Х					1
Certificate			х					
Teaching Endorsement			Х					
Teaching Endorsement			х					
Teacher requirement			х					2
			х					5
BS		х	х			Х		15
ВА		Х	Х			Х		14
ВА		х	х		х	Х		10
ВА		х	х			х		27
ВА		х	Х			Х	Х	17
ВА		х	х			х		15
MS		х	х			х		22
МА		х	Х			х		25
МА		х	х			х		28
BSN		x	х		x			35
BS		x				x		15
BS		х	x				х	45
BAS		x	x			x	x	27
	Bachelor's Bachelor's Bachelor's Master's Certificate Certificate Certificate Certificate Certificate Teaching Endorsement Teacher requirement BA BS BS	Bachelor'sImage: second se	Bachelor'sImage: second se	Bachelor's x Bachelor's X Bachelor's X Master's X Certificate X Certificate X Certificate X Certificate X Certificate X Certificate X Teaching Endorsement X Teaching Endorsement X Teacher requirement X BA X BS X	Bachelor's x Bachelor's x Bachelor's x Bachelor's x Master's x Certificate x Certificate x Certificate x Certificate x Certificate x Certificate x Teaching Endorsement x Teaching Endorsement x Teaching Endorsement x BA x	Bachelor's x x x Bachelor's X X X Bachelor's X X X Master's X X X Certificate X X X Teaching Endorsement X X X Teacher requirement X X X BA X X X	Bachelor's x x x Bachelor's x x x Bachelor's x x x Master's x x x Certificate x x x Teaching Endorsement x x x Teacher requirement x x x BS x x x BA x x x <td>Bachelor's x</td>	Bachelor's x

Old Dominion University								
Accounting	BSBA	x			х	x	x	15
Civil Engineering Technology -Construction Engineering -Structural Design -Surveying & Site Development	BSET	x	x	x	x	x	x	4
Communication -Professional Communication	BS	x	x		x	x	x	7
Computer Science	BSCS	х	х		х	x	х	2
Electrical Engineering Technology -Computer Technology -Electrical Systems	BSET	x	x	x	x	x	x	4
Criminal Justice	BS	x	Х		х	x	x	4
General Engineering Technology -Electromechanical Systems	BSET	x	x		x	x	x	0
Health Sciences -Human Services minor -Management minor	BSHS	x	x		x	x	x	5
Human Services	BS	х			х	x	x	7
Interdisciplinary Studies -Professional Writing -Teacher Preparation (Pre K-6)	BS	x			x	x	x	10
Information Systems	BSBA	х	х		х	x	x	1
Finance	BSBA	х	х		x	x	x	7
Management	BSBA	х	х		х	x	x	7
Marketing	BSBA	х	х		х	x	x	5
Mechanical Engineering Technology -Manufacturing Systems/Manufacturing Sys Design -Nuclear Engineering Technology	BSET	x	x	x	x	x	x	6
Nursing (RN to BSN)	BSN	х	Х		х	х	х	3

MS Licensure plus MS Ed MEM MSN	x x x x		X X X		x	x	x	0
Licensure plus MS Ed MEM	x x x		x		X	X	X	0
Licensure plus MS Ed MEM	x		X					
MEM	x		V		х	x	x	51
MSN			X	х	x	x	x	4
	x		x		x	x	x	1
MS	x		x		x	x	x	3
PhD	х		х		x	x	x	3
PhD	x		х		x	x	x	2
BA Ed		x		s		x		75
ВА	х	x				x	x	25
BS	x	x				x	x	22
ВА		x	x	s		x		65
MEd		x				x		20
Creative Writing	MFA		x	x				60
Interdisciplinary Arts	MFA		х	<u> </u>				
	MS PhD PhD BA Ed BA BS BA MEd Creative Writing Interdisciplinary Arts	MS x PhD x PhD x PhD x BA Ed BA X BS x BA x BA x BC x BA x BA x BA x BA x BA x MEd x MEd x MFA	MSxPhDxPhDxPhDxBA EdxBAxBAxBSxBAxMEdxCreative WritingMFAInterdisciplinary ArtsMFA	MSxXPhDxXPhDxXPhDxXBA EdxXBAxxBAxxBSxxBAxxCreative WritingMFAx	MSxXPhDxXPhDxXPhDxXBA EdxxBAxxBSxxBAxxBAxxCreative WritingMFAx	MSxXxPhDxXxPhDxXxPhDxXxBAXXxBSxXxBAxxxImage: Second seco	MSxXxxPhDxXXxxPhDxXXxxPhDxXXxxBAXXXXXBSxxXXxBAxxXXXBAxxXXXMEdxxXXXCreative WritingMFAxxX	MSxXXxxxPhDxXXxxxPhDxXXxxxPhDxXXxxxBAXXXXxxBAxxxxxxBAxxxxxxBAxxxxxxBAxxxxxxMEdxxxxxxCreative WritingMFAxxxx

Western Washington University offers three extended education and summer programs in partnership with Olympic: a Bachelor of Arts in Elementary Education (grades K-8 with a Washington State Certification), a Bachelor of Arts in Human Services, and a Masters of Education in Educational Administration.

Peninsula College provides bachelor and masters degree programs via distance education in Port Townsend in association with partner universities.⁶⁰ Those announced for Fall 2008 are Criminal Justice, Multimedia Communications, Early Childhood Education, Chemical Dependency Counselor, Computer Applications, and Administrative Office Assistant. Finally, Peninsula has another extension site in Forks where academic, continuing education, and community service programs, along with distance learning courses are offered.

Programs offered through Peninsula in association with partner universities at The Jefferson Education Center in Port Hadlock include: MIT in Teaching; MA Counseling; BS Business Administration; BS Health Sciences; BS Information Systems & Technology; PhD in Community College Leadership.

Whatever else, these endeavors demonstrate a strong interest in higher education, sustained and supported by the individual aspirations and career goals of people who live and work there. Employer concerns also play a part, and among them, the Navy has demonstrated a strong commitment driven by its needs for highly educated personnel and the importance of higher education opportunity for family members, who are an important concern for a command dependent on maintaining a highly efficient force and support program. Many of these expressions of interest and support find voice as calls for expanded baccalaureate and masters programs.

⁶⁰ Partner institutions include WSU (Bachelor degrees six fields; Master in Agriculture); Western Washington University; Old Dominion University; Chapman University; Southern Illinois University (Bangor); and City University.

HIGHER EDUCATION PROGRAM AND SERVICE NEEDS

All recent studies have found strong interest in more higher education services in the region, especially among residents and employers. In the case of the present study, respondents to the residents' and employers' surveys conducted in August and September 2008 were enthusiastic in this respect. Ninety-five percent of the more than 400 residents who participated either Strongly Agreed or Agreed that more higher education services, especially those leading to a bachelors or masters degree, were needed. There were few who disagreed or offered no opinion.



In the case of employers, the question was asked a little differently, but the response patterns were similar. More than 80% disagreed with the statement that sufficient relevant bachelors and masters programs are offered in the region.



Most of the employers considered additional bachelor's or master's programs essential to their firm's future.



Perhaps not surprisingly, most, more than half, also identified bachelor's and master's degrees as the minimal qualifications for professional managerial positions.



While most recruit locally for these positions, most also report difficulty:





When asked about continuing education programs for employees, an area highly relevant to their needs, most, 71 percent of those responding, rated them inadequate.



These response patterns align well with what was learned from the interviews with employers contacted during the course of the study, as they do with descriptions in earlier reports.

The legislative mandate for the study called for a "review of [previous] assessments of employer needs." In its April 2008 report, "From Dream to Reality: Spelling out Kitsap County's Need for

Increased Access to Baccalaureate Degrees,"⁶¹ the Kitsap Economic Development Alliance noted the following:

- Eighty-five percent [84 firms] say it is difficult to find suitable applicants with four-year college degrees. Professions that require higher education are usually named as the hardest to fill engineers, planners, therapists, educators, and senior programmers, for example.
- A significant 52% of [99 responding] local businesses say their businesses would grow if a more educated workforce becomes available. Of those, 26 firms say an expansion requires baccalaureate degrees; 13 firms want graduate degrees.

An August 2004 telephone survey, "Unmet Demand for Higher Education in Kitsap and North Mason Counties conducted by the Social and Economic Sciences Research Center of WSU⁶² found that:

- Three-quarters (74%) of respondents strongly agreed with the statement that there should be a public college offering bachelor's degrees in Kitsap County.
- Most support Olympic College offering four-year degrees, with 69 percent strongly agreeing.

Most residents believe they are underserved in this regard, and there is some evidence to support this view. It includes education attainment, in this case the percentage of residents with a high school education and percentage of the population over age 25 with a bachelor's degree or higher. According to the Census Bureau, the four-county figures are:

	Clallam	Jefferson	Kitsap	Mason	WA. State
High School Graduates (age 25+)	85.5%	91.6%	90.8%	83.7%	87.1%
Bachelor's Degrees and Higher (age 25+) \mid	20.8%	28.4%	25.%	15.6%	27.7%

Source: Census, QuickFacts

Both Jefferson and Kitsap Counties surpass the state average in adults with a high school education. Clallam and Mason Counties fall short on this score. At the baccalaureate level, however, Jefferson County both leads and is the only one of the four with a score above the statewide average. Kitsap County is second, 2.7 percentage points below the state average, followed by Clallam and Mason, respectively.

⁶¹ Prepared by Charlotte Garrido, PhD., pp. 26-28.

⁶² By Paul Stern and Dave Pavelcheck, op. cit., p. ii.

If the present public institution participation rates for the four counties are guides, none are likely to catch up soon. According to OFM, public college participation rates for the four counties and their ranking among all counties of the state are:

Participation in Public Colleges, Fall 2006. Figures %. Source: OFM Higher Education Trends and Highlights						
	CTCs	Rank	Public Four-Year	Rank		
Clallam	5.16	2	1.03	33		
Jefferson	2.92	27	0.9	38		
Kitsap	3.62	16	1.46	18		
Mason	2.61	29	0.95	37		
State	3.69		1.63			

Viewed graphically the standings are these:



In order to reach the statewide average public four-year institution participation rate, the region would need to increase the present number attending by more than half.

Age and demographics are part of this, but the importance of proximity to seems inescapable. Clallam and Kitsap Counties, sites of the area's two community colleges, display respectable participation rates and rankings. Jefferson and Mason, although adjacent to the two higher performers, by contrast drop dramatically on both measures. The factor of proximity also may be evident in Kitsap County's lead among the four in four-year public institution participation. It has the highest public four-year participation rate of the four; It is the closest county to the bridge link to the UW-Tacoma branch and to the University of Washington.

	CWU	EWU	TESC	WWU	UW	UW-T	UW-B	WSU	WSU-S	WSU-TC	WSU-V	Total
Clallam	42	54	24	149	139	4	4	150	6	1	1	574
Jefferson	21	11	35	63	42		1	53	3	1	1	231
Kitsap	337	141	84	509	869	106	10	526	17	2	9	2,610
Mason	56	21	118	70	73	13		60	5	1	5	422
Total	456	227	261	791	1,123	123	15	789	31	5	16	3,837

The fall 2005-06 four-county enrollments in Washington's public universities and branch campuses were the following:

Source: OFM, HEERS, figures are FTEs.

Community college participation and transfers are important issues in any effort addressed to bachelors and masters degree programs, both because of their role in lower-division academic and technical programs transfer preparation, and, more recently, their role in baccalaureate programs. Both Olympic and Peninsula Colleges are participants in the state's community college baccalaureate pilot test effort. For a moment, however, the emphasis is on transfers.

A comment was made at one the advisory committee meetings to the effect that commuting considerations also were adversely affecting the region's community college transfer patterns -- that the presence of students from these institutions in public four-year universities was subpar. This may have been based on the comparative numbers presented in the regular HEERS reports. The fall, 2007 numbers of transfer students in four-year public institutions, ranked by the community/technical college totals, are these:

1	BELLEVUE	514
2	CLARK	403
3	PIERCE	387
4	COLUMBIA BASIN	379
5	GREEN RIVER	378
6	SPOKANE FALLS	372
7	HIGHLINE	340
8	SEATTLE CENTRAL	306
9	TACOMA	293
10	SOUTH PUGET SOUND	290
11	EDMONDS	277
12	WHATCOM	273
13	OLYMPIC	233
14	YAKIMA VALLEY	227
15	SHORELINE	225

16	NORTH SEATTLE	217
17	EVERETT	180
18	SPOKANE	173
19	SKAGIT VALLEY	166
20	CASCADIA	162
21	WENATCHEE VALLEY	147
22	LOWER COLUMBIA	110
23	SOUTH SEATTLE	105
24	CENTRALIA	97
25	BIG BEND	96
26	WALLA WALLA	92
27	GRAYS HARBOR	85
28	PENINSULA	63
29	LAKE WASHINGTON TC	6
30	RENTON TC	5
31	CLOVER PARK TC	4
32	BATES TC	3
33	BELLINGHAM TC	1

Olympic College ranks 13th; Peninsula College places 28th. The next table is a bit like comparing oranges and carrots, but as a rough index, by comparing the number of students in academic programs from each community/technical college district and the number in public four-year institutions, parity seems apparent in the performance of both Peninsula and Olympic Colleges:

	2007 Academic	Rank 2007 Academic	Rank 2007 Transfers in Public 4- Year
CC/CTC District	Enrollments	Enrollments	Institutions
SEATTLE DISTRICT	5054	1	1
BELLEVUE	4938	2	3
SPOKANE DISTRICT	4909	3	2
CLARK	3155	4	4
PIERCE DISTRICT	2916	5	5
GREEN RIVER	2593	6	7
SHORELINE	2506	7	15
COLUMBIA BASIN	2366	8	6
HIGHLINE	2284	9	8
ТАСОМА	2134	10	9
EDMONDS	2127	11	11
EVERETT	2051	12	16
OLYMPIC	2049	13	13
SOUTH PUGET SOUND	1608	14	10
YAKIMA VALLEY	1491	15	14
WHATCOM	1441	16	12
SKAGIT VALLEY	1386	17	17

WENATCHEE VALLEY	1048	18	19
CASCADIA	1045	19	18
LOWER COLUMBIA	980	20	20
WALLA WALLA	900	21	23
CENTRALIA	804	22	21
GRAYS HARBOR	676	23	24
PENINSULA	661	24	25
BIG BEND	607	25	22
LAKE WASHINGTON TC	426	26	26
RENTON TC	275	27	27
BELLINGHAM TC	124	28	30
BATES TC	105	29	29
CLOVER PARK TC	104	30	28

Rankings in FTEs, Data Sources HEERS and SBCTC Annual 2007-08 Enrollment Report

The point is that this popular view may be a bit overstated. Both districts appear to be holding their own in this regard. Any disparities that exist probably are attributable to commuting difficulties, a view substantiated by the residents who participated in the surveys. Commuting problems and the absence of needed programs in the region were the top two reasons given for not attending a four-year institution or not continuing on after community college.



Distance and commuting problems also were the leading reasons why they did not attend institutions located in Tacoma and Olympia, although in this case cost and financial considerations also rose in the ranking.



When those who indicated they had attended one of the community colleges but had not continued on were asked why, they cited need to work as the main reason. Distance and commuting difficulties took second place. The absence of desired or needed programs locally followed closely.



Perhaps the most telling indications of feelings on this matter are the answers to a question about the likelihood of enrolling if needed programs were offered in the region. More than 80% considered it Very Likely or Likely they or members of their household would do so.



In view of the expressed interest in local bachelor's and master's programs, residents and employers were queried about which programs were needed and which delivery modes would be acceptable.

They were asked to rate each of the 23 program fields utilized by NCES for instruction program classification⁶³ purposes (i.e. the "CIP Codes") in terms of whether they considered them to be of "Little Need," "Some Need," or "Great Need" in the region. Separate questions applied to the Bachelor's and Master's program levels, although the options were the same in both. The results for the fields considered to be in Great Need are displayed in the following graphs, starting with the employers' responses.

⁶³ National Center for Education Statistics, Classification of Instruction Programs, 2000 Edition.



The questions then turned to master's programs. Those considered by employers to be in "Great Need" are ranked on the next chart.



Residents, of whom there were about eight times as many respondents as employers participating in the surveys, indicated their preferences as follows, starting with the bachelor's programs considered to be in Great Need.



Residents ranked master's program fields considered to be in Great Need as follows:



Both groups agreed generally on the programs of greatest need in the region, i.e., the programs receiving the highest scores in the "Great Need" category, although the two differed on the size of the scores. This may be in part a function of the comparatively smaller number of employers (53) completing the survey, compared with the number of residents (438) who did so.

The bachelor degree fields the respective groups felt to be in greatest need are shown on the following graph. Business programs represented the field in which the scores for the two groups came closest to percentage agreement. As noted, this was the most important category for employers, but it ranked fourth, behind Health Sciences, Computer and Information Sciences, Education, and Engineering, in order, for residents.


A similar pattern emerges when the subject is master's programs, as suggesed by the bars and scores on the next graph.



A question of whether there should be one or two higher education centers located in the region arose during the study. Responses to the survey questions, accordingly, were organized by community college district. Though the preferred programs were generally the same, some differences in the rankings did occur.

Olympic District







Peninsula District









Peninsula and Olympic Responses Compared



The results of interviews with individuals throughout the region accord closely with these patterns. While a strong interest in a local four-year public university was virtually universal, people also ventured views on needed bachelor's and master's programs. Frequent references were to programs to support economic development, including the engineering, computer science, business, the "hard sciences," and clean or green technology industries were prominent concerns. Math and science programs, some suggested, would help keep young people in the area. Several mentioned a need for engineering programs, among them people associated with the Navy shipyard (who stressed the need for civil and mechanical engineering programs and stated that the shipyard would "hire every engineer who is out there") Others spoke of social needs, programs in general education, social work, and human services, concerns driven by the poverty rate and all it brings with it. References to the health sciences were frequent. Public administration and management were interests of members of the tribes who were interviewed (and who also stressed engineering, nursing, social and human services as needed program areas), as well as those of individuals working in or associated with government. The natural sciences, especially biology and forestry, also received frequent mention. Strong agreement was apparent on the need for programs at both the bachelor's and master's levels in these fields.

Questions about needed programs also evoked concerns about people with associate degrees who now are place-bound and as taxpayers experience the negative aspects of equity. Stated differently, if a person is a resident of the region, the feeling is there should be an opportunity to get a four-year degree in a public institution. Related to this was an observation that (aside from the baccalaureate programs of Olympic and Peninsula) there were no state-funded FTEs in the region. Access to programs was a theme as strong as many of the entries on the list.

With some concern for overkill (the study directive requires a review of previous assessments of employers' needs) others who have studied the situation report similarly. KEDA's top ten list of "Potential Degree Programs for Kitsap," in ranked order are:⁶⁴

- 1. Business
- 2. Computer Science
- 3. Engineering
- 4. Health
- 5. Education
- 6. Natural Resources
- 7. Social Sciences
- 8. Human Development
- 9. Math
- 10. Architecture and Urban Planning

⁶⁴ Charlotte Garrido, "From Dream to Reality . . ." op. cit., p.31

The same study reported that when asked "which three degree programs the respondents believed will expand Kitsap's future economy – whether related to their field or not" – the top four choices were"⁶⁵

- Business (Accounting, Finance, Management, Marketing), 34%
- Computer Science, 23%
- Health (e.g., Health Care Administration. Nursing, Pharmacy, Physician), 19%
- Engineering (Chemical, Civil, Electrical, Environmental, Mechanical), 18%

The earlier assessments of employer needs and the more recent research conducted during the present study agree on virtually all of the major dimensions. The patterns that form provide a mutually reinforcing agenda for the higher education center's program plan.

With these impressions established, attention now shifts to the subject of enrollments, the topic of the next section.

⁶⁵ Ibid.

ENROLLMENT PROJECTIONS

This section summarizes the results of the enrollment projections used in the study. The methodology centered on participation rates and was based in part on the model employed by OFM for the assessment of higher education needs in the Snohomish, Island, and Skagit County area (SIS).⁶⁶ Several of the assumptions of that research are utilized in these models. OFM's comments on projecting enrollment using the participation rate method bear quotation here:

A participation rate method is used in these projections. Participation rates are calculated using enrollment and population data at the most detailed level available for age group, gender, and class standing. The participation rate is the number of persons of a particular age-gender-class standing enrolled in higher education as a percent of all persons of that age-gender.

In the present case, the process begins with a baseline enrollment projection using the present (2006-07) level of participation in public four-year institutions for residents of the four study counties, Kitsap, Mason, Jefferson, and Clallam. Stated differently, if nothing were done to change it (e.g., new higher education center or centers in the region) this would continue to apply through the projection period (i.e., to the year 2040).

Three projections were developed, each founded on a different policy scenario or participation goal for the region:

1. Low Projection Model: Achievement of the statewide average four-year public institution participation rate (1.63%)	The Low Model Goal (1.63%) is a 51% improvement over the present average four-county Kitsap Region rate (1.08%)
2. Medium Projection Model: Achievement of the average rate of Washington's branch campus counties (1.72%)	The Medium Model Goal (1.72%) is a 59% improvement over the present average four-county Kitsap Region rate (1.08%)
3. High Projection Model: Achievement of a participation rate equivalent to the average of Washington's peer community/technical college state (1.90%)	The High Model Goal (1.90%) is a 76% improvement over the present average four-county Kitsap Region (1.08%)

⁶⁶ Appendix A, "Projected Enrollment for a University of Washington campus in the North Puget Sound Region, 2006.

In each model the difference between the present rate and the projected rate would be accomplished by the higher education center or centers.

The Present Public 4-Year Participation Rate (PPR) Projection

The enrollment projection models proceed from the following considerations:

- A. Use OFM Washington County Growth Management Population Projections: 2000-2030, 2007 Projections to determine projections to 2030 by five-year age increments for the four Kitsap Region counties.
- B. Determination of the population projections for the age 17-19 proportion, the most college-relevant age range of the OFM's 15-19 age group using the OFM *Forecast of the State Population by Age and Sex, 1990 to 2030, November 2007,* which provides forecasts by single age year.
- C. Development of population estimates for the age 17-24 and + age 25 (25-64) groups, first, for the Region as a whole (and for each of the four Kitsap Region counties), and, second, for each of the two community college districts (Olympic and Peninsula), using the fall, 2006 ("Current") four-year public institution participation rates associated with each county. With respect to the two district projections, the individual district county rates are used (the individual county rates are Kitsap 1.46%; Mason 0.95%; Clallam 1.03%; and Jefferson 0.90%). While the individual county rates drove the district projections, for information purposes the averaged rates for the two districts are:
 - 1. Olympic College District (Kitsap and Mason Counties) 1.20%
 - 2. Peninsula College District (Clallam and Jefferson Counties) 0.96%
- D. Extending the projections to 2040 (the OFM population projections extend to 2030) by using Census Bureau figures, assuming Washington's share will remain at its 2030 share of the national total, and that county populations will distribute similarly. Age distributions for 2040 also are based on those published by the Census Bureau (this also is an OFM SIS Model assumption).
- E. Application of the assumption that student participation in the community colleges will continue at the same level as present (another OFM SIS model assumption).
- F. Development of present enrollment projections by using fall, 2006 rates from OFM Higher Education Trends & Highlights, February 2007. (That report uses HEERS Fall 2006 FTEs divided by OFM April 1, 2006 Population Forecasts. Projections are in FTEs.)
- I. At the appropriate point, adding present participation in four-year undergraduate and graduate programs offered in the Kitsap region (public and private), based on the Summer, 2008 survey of institutions providing services conducted as part of the present study; it appears that slightly less than 1000 Headcount are involved. Since state funding FTE is not required for this component, the relevance is to facility capacity rather than per student funding support. However,

if a Headcount to FTE conversion were required (i.e., for space planning purposes), the assumption is that it would be about three to one (i.e., the headcount figures would convert to about approximately 333 FTEs, an assumption based on the observation the most are adults involved in evening, weekend, and distance education programs).

J. For the new projection models,

1. The regional undergraduate projections start with the difference between the present participation rate (PPR) projection and the respective participation rate of the projection models described below (Statewide Average Rate [SAR], 1.63%; Branch Campus County rate [BCR], 1.72%; and Comparative Community/Technical College States' rate [CCSR)], 1.90%.) The OFM SIS projection model, which introduced the peer state average approach, utilizes 100%, 75% and 50% as the High, Medium, and Low projections, respectively, in those forecasts. Although the 50% and 75% models are not used in the present case (they were considered), the 100% projection model is also the High projection for the present study.

2. The projections assume that 90% of the present student participation will continue to be met by existing 4-year public institutions (i.e., that 90% of those who now go to other Washington public four-year institutions will continue to do so; 10% of those who otherwise would go away will remain at home to attend if there is a new facility.) This also is based on an OFM SIS Model assumption.

PROJECTED ENROLLMENTS 2010-2040 USING PRESENT COUNTY PARTICIPATION RATES [PPR]

	2010 Pop.	At PPR	2015 Pop	At PPR	2020 Pop	At PPR	2025 Pop	At PPR	2030 Pop	At PPR	2035 Pop	At PPR	2040 Pop	At PPR
Kitsap (1.46)														
17-24	26,019	380	25,812	377	26,821	392	26,448	386	26,835	392	28,305	413	29,314	428
25-64	137,713	2,011	142,155	2,076	149,613	2,185	152,372	2,225	155,791	2,275	170,220	2,485	177,395	2,590
Total	163,732	2,390	167,967	2,453	176,434	2,577	178,820	2,611	182,626	2,666	198,525	2,898	206,709	3,018
Mason (0.95)														
17-24	5,121	49	5,066	49	5,516	52	5,669	54	6,116	58	5,981	57	6,194	59
25-64	26,954	256	30,561	290	32,709	311	34,335	326	35,241	335	35,969	342	37,485	356
Total	32,075	305	35,627	339	38,225	363	40,004	380	41,357	393	41,950	399	43,679	415
Jefferson (0.90)														
17-24	2,246	20	2,192	20	2,604	24	2,582	23	2,821	25	2,359	21	2,443	22
25-64	16,028	144	16,503	149	16,938	156	17,359	158	18,541	165	14,185	128	14,783	133
Total	18,274	164	18,695	168	19,542	180	19,941	181	21,362	190	16,544	149	17,226	155
Clallam (1.03)														
17-24	7,269	75	6,843	70	7,254	75	7,360	76	7,312	75	6,194	64	7,413	76
25-64	33,624	346	34,164	354	34,552	359	35,059	366	35,891	373	44,581	459	46,461	479
Total	40,893	421	41,007	424	41,806	434	42,419	442	43,203	448	50,775	523	53,874	555
GR. TOTAL	254,974	3,280	263,296	3,384	267,007	3,554	281,184	3,614	288,558	3,697	307,794	3,969	321,488	4,143

PROJECTED ENROLLMENTS USING PRESENT COUNTY PARTICIPATION RATES [PPR] FOR OLYMPIC COLLEGE AND PENINSULA COLLEGE DISTRICTS

OLYMPIC COLLEGE DISTRICT (KITSAP AND MASON COUNTIES)	2010		2015		2020		2025		2030		2035		2040	
	Pop.	At PPR	Рор.	At PPR	Pop.	At PPR	Рор.	At PPR	Рор.	At PPR	Рор.	At PPR	Рор.	At PPR
17-24	31,140	429	30,878	426	32,337	444	32,117	440	32,951	450	34,286	470	35,508	487
25-64	164,667	2,267	172,716	2,366	182,322	2,496	186,707	2,551	191,032	2,609	206,189	2,827	214,880	2,946
TOTAL	195,807	2,695	203,594	2,792	214,659	2,940	218,824	2,991	223,983	3,059	240,475	3,297	250,388	3,433
PENINSULA COLLEGE DISTRICT (CLALLAM AND JEFFERSON COUNTIES)														
	2,010	At PPR	2,015	At PPR	2,020	At PPR	2,025	At PPR	2,030	At PPR	2035*	At PPR	2040*	At PPR
17-24	9,515	95	9,035	90	9,858	99	9,942	99	10,133	101	8,553	85	9,856	98
25-64	49,652	490	50,667	503	51,490	515	52,418	524	54,432	538	58,766	587	61,244	612
TOTAL	59,167	585	59,702	593	61,348	614	62,360	623	64,565	639	67,319	672	71,100	710

LOW PROJECTION: Present Statewide Average Four-Year Public Participation Rate [SAR] (1.63%)

A. The low projection for the four-county region improves the present Kitsap Region county participation rate to the State Average Rate [SAR] (1.63%).

B. It assumes that 10% of those who presently go away to other public four-year institutions in Washington will remain at home if a local higher education/university center is established.

C. The increase (the "growth increment") comprises the planned enrollment figure for the higher education/university centers.

D. The total is presented both for the region as a whole and on a prorated basis for each of the two community college districts.

LOW PROJECTION: Statewide Average Participation Rate Model: Increases Present Four County Participation Rates to the Statewide Average Rate (SAR) (1.63%)

	2010	2015	2020	2025	2030	2035	2040
	Incr. Fr. PPR						
Kitsap (1.46)							
17-24	82	82	86	84	86	90	93
25-64	436	450	474	482	493	538	562
Mason (.95)							
17-24	40	39	44	45	48	47	48
25-64	209	237	254	266	274	280	291
Jefferso n (90)							
17-24	18	18	21	22	24	20	21
25-64	132	135	136	143	152	117	122
Clallam (1.03)							
17-24	52	53	52	52	52	44	52
25-64	237	241	240	247	252	313	327
FTE Total	1,207	1,255	1,307	1,341	1,380	1,449	1,515

	2010	2015	2020	2025	2030	2035	2040
	Incr. Fr. PPR						
Kitsap (1.46)							
17-24	82	82	86	84	86	90	93
25-64	436	450	474	482	493	538	562
Mason (0.95)							
17-24	40	39	44	45	48	47	48
25-64	209	237	254	266	274	280	291
OCD FTE Total	767	808	858	877	900	955	993
Jefferson (0.90)							
17-24	18	18	21	22	24	20	21
25-64	132	135	136	143	152	117	122
Clallam (1.03)							
17-24	52	53	52	52	52	44	52
25-64	237	241	240	247	252	313	327
PCD FTE Total	439	448	449	464	480	494	522

LOW PROJECTION: SAR (1.63%) For Each Community College District



MEDIUM PROJECTION: Difference Between Region Counties' Participation Rates and Average Rate for Counties with Branch Campuses [BCR] (1.72%)

A. The medium projection for the four-county region is the difference between the region counties' present rates and the average rate for counties with branch campuses (1.72%).

B. The branch campus county participation rate [BCR], 1.72%, is the average of the participation rates of the following branch campus counties [From the OFM February 2007 Enrollment Trends Report]:

- 1. Clark (1.43%)
- 2. Pierce (1.29%)
- 3. Snohomish (1.50%)
- 4. Spokane (2.15%)
- 5. Benton (2.12%)

6. King (1.81%)

C. It assumes that 10% of those who presently leave to attend other public four-year institutions will remain at home if a higher education/university center, or centers, is or are established.

MEDIUM PROJECTION: Increases Present Four County Participation Rates to the Average Rate of Counties with Branch Campuses (BCR) (1.63%)

	2010	2015	2020	2025	2030	2035	2040
	Incr. Fr. PPR						
Kitsap (1.46)							
17-24	106	105	110	108	110	116	119
25-64	560	578	609	619	633	692	721
Mason (.95)							
17-24	44	44	48	50	53	52	54
25-64	234	264	284	297	305	312	325
Jefferson (90)							
17-24	20	20	24	24	26	22	23
25-64	146	150	151	158	169	129	135
Clallam (1.03)							
17-24	58	59	58	59	58	50	59
25-64	267	272	271	279	285	354	369
FTE Increase	1,436	1,492	1,556	1,594	1,640	1,726	1,805

۱

	2010	2015	2020	2025	2030	2035	2040
	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR
Kitsap (1.46)							
17-24	106	105	110	108	110	116	119
25-64	560	578	609	619	633	692	721
Mason (.95)							
17-24	44	44	48	50	53	52	54
25-64	234	264	284	297	305	312	325
OC Dist. Total	944	991	1,051	1,074	1,101	1,171	1,219
Jefferson (90)							
17-24	20	20	24	24	26	22	23
25-64	146	150	151	158	169	129	135
Clallam (1.03)							
17-24	58	59	58	59	58	50	59
25-64	267	272	271	279	285	354	369
PC Dist. Total	492	501	504	520	538	555	586

MEDIUM PROJECTION [BCR] For the Two Community College Districts



HIGH PROJECTION: Public Four-Year PPR of 14 States with CTC Participation Similar to Washington [CCSR] (1.90%)

A. The comparison states in order of highest to lowest public four-year institution participation rates are California, Wyoming, Arizona, New Mexico, Iowa, Illinois, Kansas, Texas, North Carolina, Nebraska, Mississippi, Oregon, Minnesota, and Michigan (NOTE: Washington, which ranks fifth, is excluded from the calculation of the average) (Data Source: NCES, *Digest of Education Statistics, 2006, Table 202, "Total fall enrollment in degree-granting institutions, by control, level of enrollment, type of institution, and state or jurisdiction: 2005,"* and Census Bureau, "*Annual Estimates of the Population of the United States and States, and for Puerto Rico: April 1, 2000 to July 1, 2005*," using July 1, 2005 population figures.) [Based on an OFM SIS Model assumption.]

B. The projected enrollment is the difference between the four Kitsap region individual counties' participation rates, and 1.90%, the average public fouryear PR of the comparison states [CCSR]

C. Add 10% of those who would attend at other public four-years who will remain if a local higher education/university center is established.

HIGH PROJECTION: Increases Four Kitsap Region County Participation Rates to the Average of Washington's Peer Community College States (1.90%) [CCSR]

	2010	2015	2020	2025	2030	2035	2040
	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR
Kitsap (1.46)							
17-24	152	152	158	155	158	167	172
25-64	808	833	878	893	913	998	1,041
Mason (.95)							
17-24	54	53	58	60	64	63	65
25-64	282	319	343	359	369	377	392
Jefferson (90)							
17-24	24	24	28	29	31	27	27
25-64	175	180	182	190	202	155	162
Clallam (1.03)							
17-24	71	72	71	72	72	61	72
25-64	328	333	333	342	349	434	452
	1,895	1,966	2,052	2,100	2,159	2,280	2,383

	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR	Incr. Fr. PPR
Kitsap (1.46)							
17-24	152	152	158	155	158	167	172
25-64	808	833	878	893	913	998	1,041
Mason (.95)							
17-24	54	53	58	60	64	63	65
25-64	282	319	343	359	369	377	392
OC Dist. Total	1,296	1,358	1,437	1,468	1,504	1,604	1,669
Jefferson (90)							
17-24	24	24	28	29	31	27	27
25-64	175	180	182	190	202	155	162
Clallam (1.03)							
17-24	71	72	71	72	72	61	72
25-64	328	333	333	342	349	434	452
PC Dist. Total	599	609	615	632	654	676	714

HIGH PROJECTION for the Two Community College Districts





Relationship of Headcounts to FTEs

The difference between individual students ("Headcounts") and Full-Time Equivalent Students (FTEs) can be confusing. The projections identified above are stated in FTE terms. Officially, 15 credit hours are equal to one undergraduate FTE. At the graduate level the ratio is 10:1. Full-Time Equivalents are used as budget drivers to determine such matters as space, faculty-student ratios, and facility costs. As a general but not exclusive rule, headcounts will exceed FTEs (the exception is in some programs, for example in professional fields, students often take more than 15 hours, and the headcounts will be greater than the FTE counts). A rule-of-thumb relationship is three headcount students to two FTEs, although this can be no more than that (as noted earlier, the headcount to FTE ratio at CWU-Des Moines is about 5:4.) Applied to the Medium Range projection above, the 3:2 ratio difference is depicted on the next graph.



The next section, devoted to capital cost estimates, can proceed accordingly. These are based respectively on the three FTE projections described above and are developed for a single regional higher education/university center in both on-campus and stand-alone configurations, and in similar configurations for separate facilities in each of the community college districts

CAPITAL COST ESTIMATES

Capital cost estimates were developed with several questions in mind. The first was whether there should be one or two higher education/university centers, i.e., should there be one regional center, located probably in the Bremerton-Silverdale area, or should there be two such facilities, one located in each of the community college districts, probably in Bremerton and Port Angeles. In either case, the facility should be augmented with enhanced distance learning capacities linking them to the present community college satellites in Poulsbo, Bangor, and Shelton, in the case of Olympic College, and Fort Worden and Forks, in the case of Peninsula College. The Jefferson Higher Education Center also should be represented in this aspect of the solution.

The second major question was whether the center, or centers, as the case may be, should be stand-alone facilities, or whether they should be located on existing community college districts.

Since all are active alternatives, cost estimates for each were prepared using two separate costing models: a modified version of the HECB formula for universities and branch campuses, and the SBCTC drivers for community colleges. The two involve different ratios for the Assignable Square Feet (ASF, or Net Square Feet) per FTE, which is an important capital cost driver, and Gross Square Feet (GSF) per FTE.

An adjusted version of the HECB's costing model for university and branch campus facilities was used to estimate costs for the stand-alone model, which, involving such matters as a possible need for site acquisition, space for parking and other support elements, along with different utilization patterns and architectural attributes, more closely mimicked stand alone institutions than community college campus based facilities (such as the CWU-Highline University Center).

The SBCTC model was used to estimate capital costs for the campus-based model. In this case, cost differences emanated from the potential for joint use of such campus resources as libraries, daycare centers, parking, etc. and the reduced likelihood of need for site acquistion. The ASF:FTE ratio was different by virtue of the more intense use by community college students (usually during the day, as in the case of the CWU-Highline experience) and university students (late afternoon and evening.)

The point is there are important cost differences between the two, as will be shown, and these proved determinative of the recommendations.

Another question concerned which year to use in the calculations. Since 2040, the last year in the projection range, is still considerably out into the future (and is based on

derivations from Census rather than OFM projections), the projected FTE count for the year 2025, about 17 years out, was selected as the subject year for the estimates.

The first question, the single or two facility issue, is addressed on the next table. The assumptions that apply are:

- FTEs are based on Year 2025 projections.
- FTE count is projected State Funded FTEs + 300 non-state funded to accommodate non-public enrollments and programs.
- FTEs for the two facility option are distributed proportionately between the two districts.
- The community college campus ratio used is ASF/FTE = 41/FTE; the off-campus stand-alone ratio is 75/FTE.
- The cost distribution on the table entries is based on a review of 10 Comparable community college projects in the SBCTC System 2009-2011 Biennium Capital Budget Request.
- Cost estimates include increasing the distance education capacity \$300,000 for the single facility solution; \$150,000 each for the two facility solution. They assume 40 FTES would participate in this mode for the Olympic District, and 20 FTES for Peninsula.

2025 PROJECTIONS OFF-CAMPU	S (STAND ALONE) F	ACILITIES	
LOW PROJECTION YEAR 2025	Single HEC	Two HEC: PC	Two HEC: OC
Campus Sited FTEs (60 FTEs to Satellite D.E. [PC 20, OC 40] Not Included)	1,601	544	1,037
ASF at 75/FTE (Stand Alone Sited)	120,075	40,800	77,775
GSF at 1.53 ASF	183,715	62,424	118,996
Total Estimated Cost at \$548/GSF*	100,675,683	34,208,352	65,209,671
Total Estimated Cost at \$62,856/FTE**	100,632,456	34,193,664	65,181,672
Satellite Campus D.E. Enhancement	300,000	150,000	150,000
LOW PROJECTION Estimated Cost w/D.E. Enhancement	100,975,683	34,358,352	65,331,672
MEDIUM PROJECTION YEAR 2025	Single HEC	Two HEC: PC	Two HEC: OC
Campus Sited FTEs (60 FTEs to Satellite D.E. [PC 20, OC 40] Not Included)	1,894	620	1,274
ASF at 75/FTE (Stand Alone Sited)	142,050	46,500	95,550
GSF at 1.53 ASF	217,336.50	71,145.00	146,191.50
Total Estimated Cost at \$548/GSF*	119,100,402	38,987,460	80,112,942
Total Estimated Cost at \$62,856/FTE**	119,049,264	38,970,720	80,078,544
Satellite Campus D.E. Enhancement	300,000	150,000	150,000
MEDIUM PROJECTION Estimated Cost w/D.E. Enhancement	119,400,402	39,137,460	80,262,942
HIGH PROJECTION YEAR 2025	Single HEC	Two HEC: PC	Two HEC: OC
Campus Sited FTEs (60 FTEs to Satellite D.E [PC 20, OC 40] Not Included)	2,340	712	1,628
ASF at 75/FTE (Stand Alone Sited)	175,500	53,400	122,100
GSF at 1.53 ASF	268,515	81,702	186,813.00
Total Estimated Cost at \$548/GSF*	147,146,220	44,772,696	102,373,524
Total Estimated Cost at \$62,856/FTE**	147,083,040	44,753,472	102,329,568
Satellite Campus D.E. Enhancement	300,000	150,000	150,000.00
HIGH PROJECTION Estimated Cost w/D.E. Enhancement	147,446,220	44,922,696	102,479,568

COST ESTIMATES FOR CAMPUS-BASED FACILITIES											
LOW PROJECTION YEAR 2025	Single HEC	Two HEC: PC	Two HEC: OC								
Campus Sited FTEs (60 FTEs to Satellite D.E. [PC 20, OC 40] Not Included)	1,601	544	1,037								
ASF at 41/FTE (Campus Sited)	65,641	22,304	42,517								
GSF at 1.53 ASF	100,431	34,125	65,051								
Cost at \$525/GSF	52,726,133	17,915,688	34,151,780								
Design at 0.0946	4,987,892	1,694,824	3,230,758								
Construction at 0.8024	42,307,449	14,375,548	27,403,388								
Equipment at 0.0757	3,991,368	1,356,218	2,585,290								
Art at 0.00335	176,633	60,018	114,408								
Other at 0.0289	1,523,785	517,763	986,986								
Contract Administration at 0.0046	242,540	82,412	157,098								
Satellite Campus D.E. Enhancement	300,000	150,000	150,000								
TOTAL ESTIMATED COST LOW PROJECTION	53,026,133	18,065,688	34,301,780								
MEDIUM PROJECTION YEAR 2025	Single HEC	Two HEC: PC	Two HEC: OC								
Campus Sited FTEs (60 FTEs to Satellite D.E. [PC 20, OC 40] Not Included)	1,894	620	1,274								
ASF at 41/FTE (Campus Sited)	77,654	25,420	52,234								
GSF at 1.53 ASF	118,811	38,893	79,918								
Cost at \$525/GSF	62,375,576	20,418,615	41,956,961								
Design at 0.0946	5,900,729	1,931,601	3,969,128								
Construction at 0.8024	50,050,162	16,383,897	33,666,265								
Equipment at 0.0757											

	4,721,831	1,545,689	3,176,142
Art at 0.00335	208,958	68,402	140,556
Other at 0.0289	1,802,654	590,098	1,212,556
Contract Administration at 0.0046	286,928	93,926	193,002
Satellite Campus D.E. Enhancement	300,000	150,000	150,000
TOTAL ESTIMATED COST MEDIUM PROJECTION	62,675,576	20,568,615	42,106,961
HIGH PROJECTION YEAR 2025	Single HEC	Two HEC: PC	Two HEC: OC
Campus Sited FTEs (60 FTEs to Satellite D.E [PC 20, OC 40] Not Included)	2,340	712	1,628
ASF at 41/FTE (Campus Sited)	95,940	29,192	66,748
GSF at 1.53 ASF	146,788	44,664	102,124
Cost at \$525/GSF	77,063,805	23,448,474	53,615,331
Design at 0.0946	7,290,236	2,218,226	5,072,010
Construction at 0.8024	61,835,997	18,815,056	43,020,942
Equipment at 0.0757	5,833,730	1,775,049	4,058,681
Art at 0.00335	258,164	78,552	179,611
Other at 0.0289	2,227,144	677,661	1,549,483
Contract Administration at 0.0046	354,494	107,863	246,631
Satellite Campus D.E. Enhancement (For 60 FTEs)	300,000	150,000	150,000
TOTAL ESTIMATED COST HIGH PROJECTION	77,363,805	23,598,474	53,765,331

The next table summarizes each option's costs and the cost differences between off-campus based (Stand Alone) facilities and community college campus based facilities. The cost differences are substantial. In each case the off-campus facility cost estimate is significantly greater.

Cost Difference Between Off-Campus Based and Community College Campus Based			
LOW PROJECTION YEAR 2025	Single HEC	Two HEC: PC	Two HEC: OC
FTEs (60 FTEs to Satellite D.E. [PC 20, OC 40] Not Included)	1,601	544	1,037
Estimated Cost w/D.E. Enhancement – Off-Campus (Stand Alone) Facility	100,975,683	34,358,352	65,331,672
Estimated Cost w/D.E. Enhancement - Campus Based Facility	53,026,133	18,065,688	34,301,780
Cost Difference Between Campus Based and Stand Alone	47,949,550	16,292,664	31,029,892
MEDIUM PROJECTION YEAR 2025			
Campus Sited FTEs (60 FTEs to Satellite D.E. [PC 20, OC 40] Not Included)	1,894	620	1,274
Estimated Cost w/D.E. Enhancement Stand Alone Facility	119,400,402	39,137,460	80,262,942
Estimated Cost w/D.E. Enhancement - Campus Based Facility	62,675,576	20,568,615	42,106,961
Cost Difference Between Campus Based and Stand Alone	56,724,826	18,568,845	38,155,981
HIGH PROJECTION YEAR 2025			
Campus Sited FTEs (60 FTEs to Satellite D.E [PC 20, OC 40] Not Included)	2,340	712	1,628
Estimated Cost w/D.E. Enhancement Stand Alone Facility	147,446,220	44,922,696	102,479,568
Estimated Cost w/D.E. Enhancement - Campus Based Facility	77,363,805	23,598,474	53,765,331
Cost Difference Between Campus Based and Stand Alone	70,082,415	21,324,222	48,714,237

The cost difference between on-campus and off-campus facilities, 47.5% greater for the off-campus variant, are compelling, as is the geographic, demographic, and economic case for two community college district facilities with enhanced distance learning ties to satellite campuses, rather than a single regional center.

* * * * * * *

The report concludes at this point. Readers are reminded that the opening chapter contains the summaries of findings and recommendations. With all of that in mind, the narrative, the charts, tables, and graphs, and the findings, and the recommendations are presented respectfully for the consideration of the HECB and the residents of the Kitsap Region.