

Southeast King County Higher Education Needs Assessment and Operating Plan

FINAL REPORT

Submitted to the Washington Student Achievement Council (WSAC)

by the

Western Interstate Commission for Higher Education (WICHE)

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Executive Summary

Background

In Fiscal Year (FY) 2017, the Washington Student Achievement Council (WSAC) received funding from the Washington Legislature through a budget proviso to complete a higher education needs assessment for southeast King County, defined as rural suburban cities such as Covington, Enumclaw, Maple Valley, and Black Diamond, as well as urban and rural portions of unincorporated King County. The Western Interstate Commission for Higher Education (WICHE) conducted the assessment with support from their subcontractor, the National Center for Higher Education Management Systems (NCHEMS).

Key Findings

Data analyses from a variety of state and national sources, stakeholder interviews, and feedback from the project's Advisory Committee of local leaders revealed the following key findings.

Southeast King County

- The population is projected to grow and become increasingly diverse in the coming years.
- Among the working-age population, southeast King County has the highest proportion of adults with some college credit, but no degree in King County (28 percent).
- Median income is average compared to the rest of King County.
- Most adults in southeast King County (85 percent) commute outside their area of residence for work.
- Public transit options are limited and most area residents commute by car, with commute times averaging over 31 minutes.

Educational Landscape

- The rate of college attendance among area high school students is close to the state average, with the highest number of students attending Green River College.
- Central Washington University attracts the largest number of transfer students from area two-year institutions, followed by the University of Washington Tacoma.
- Western Governors University (WGU) Washington currently enrolls over 300 undergraduate students residing in southeast King County and also enrolls transfers from Green River College, Highline College, and Renton Technical College.

Economic Landscape

- The county-wide economic landscape is important to consider given the high percentage of southeast King County residents who commute to work. In King County, current and projected occupational demands suggest key sectors for high-paying jobs are information technology (IT) and nursing.
- In southeast King County, specifically, high-demand workforce areas are in nursing (with particularly high demand for registered nurses), teaching, and the less-well-paying retail and hospitality sectors.

Suggested Features and Principles of a Local Postsecondary Option

Principles

- Demand is for the provision of services, not for a new institution.
- Local response needs to be driven by local demand, not institutional supply.
- The solution must be responsive to changing workforce demands.
- Travel considerations make local access important.

Features

- Adult students are likely to be the primary audience.
- Program offerings should be flexible.
- Distance/hybrid options should be considered.
- The solution should not be limited to one provider.

Suggested Approach

Based on the considerations described above, the project team suggests that a small-scale, multiple-provider center operating on a cohort-based model (in which students progress through an academic program as a group) will meet the postsecondary education needs of southeast King County. The total annual base operating cost for the proposed model is estimated to be approximately \$653,250.

Recognizing the relatively small overall size of the population of southeast King County, as well as capacity challenges of existing providers, the team strongly recommends pursuing an incremental approach to implementation by confirming local demand in advance of full-scale investment. By completing each of the four suggested steps below in sequence, gradual investments can be made to confirm local demand and need, leading to the creation—over time—of a center that is well-positioned to meet local needs and operate in a sustainable fashion.

1. Confirm lead partner | Estimated Cost: staff time for WSAC, SBCTC or similar entity
2. Obtain funding for a site manager, clerical support, and base operating and marketing costs | Estimated Cost: \$250,000

3. Run pilot cohort recruitment phase | Estimated Cost: Dependent on partner's contributions of space, staff time, and course provision.

Candidate programs for exploring local interest include:

- Nursing, including a Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) program and a Licensed Practical Nurse (LPN) to RN program
 - Teacher preparation programs
 - IT certifications
 - Behavioral health pathways
4. Expand as demand dictates | Estimated Base Cost: \$653,250 per year

Introduction

In Fiscal Year (FY) 2017, the Washington Student Achievement Council (WSAC), a cabinet-level state agency charged with advancing educational opportunities and attainment in Washington, received funding from the Washington Legislature through a budget proviso to complete a higher education needs assessment for southeast King County and to prepare a program and operating plan to meet the higher education needs identified in the assessment. WSAC identified the Western Interstate Commission for Higher Education (WICHE) as the agency contractor with the skills and resources necessary to conduct the assessment in the timeframe specified in the budget proviso. WICHE is a regional, interstate compact whose membership includes the 15 western states and the U.S. Pacific Territories and Freely Associated States. WICHE and its members work to improve access to higher education and ensure student success.

WICHE subcontracted with the National Center for Higher Education Management Systems (NCHEMS)—a private nonprofit 501(c)(3) organization whose mission is to improve strategic decision making in higher education for states and institutions in the United States and abroad—to conduct portions of the assessment and to assist with the development of the operating plan. NCHEMS has considerable experience in conducting these types of assessments, having conducted them in more than 20 states and regions across the country.

Objectives

In line with the budget proviso passed by the Washington Legislature in FY 2017, the objectives of this work are to complete a higher education needs assessment for southeast King County, Washington (defined as rural suburban cities such as Covington, Enumclaw, Maple Valley, and Black Diamond, as well as urban and rural portions of unincorporated King County), and to prepare a program and operating plan to meet the higher education needs identified in the assessment.

Background

Prior to the 2016 legislative session in which the Washington Legislature passed the budget proviso that charged WSAC with conducting a higher education needs assessment in southeast King County, several pertinent research studies and policy initiatives were conducted that together formed the foundation for this effort.

For the past three years, the City of Covington has been exploring the possible development or enhancement of postsecondary educational opportunities in the area, including exploring partnerships and researching options with industry and postsecondary collaborators. In response to this growing interest, WSAC produced a brief titled, “Covington, Washington: Characteristics Related to Postsecondary Needs (A Brief Overview).”¹ This brief provided basic data about the City of Covington including population, the economy, and education. As it was not designed to be a full-

scale assessment of higher education needs, it did not analyze data about Covington and the surrounding areas or provide recommendations, though it does provide useful baseline information about the city.

In 2010, the Washington State Department of Transportation produced a report that assessed the feasibility of commuter rail service between Maple Valley/Black Diamond and Auburn, via Covington on the BNSF Railway Stampede Pass line.² The Washington Legislature requested this analysis through a budget proviso in the transportation budget. This assessment analyzed service using self-propelled diesel-multiple unit (DMU) rail cars and includes an estimate of the expected capital and operating costs, projections of ridership, and an analysis of institutional issues.³ Legislation was subsequently amended to require an evaluation of the potential demand for service, the business model, and capital needs for launching and running the line, as well as the need for improvements in switching, signaling, and tracking.⁴ The report's objective data on the future of commuter rail and the ability of local residents to access workplace and higher educational opportunities proved to be useful for the higher education needs assessment.

In November 2013, WSAC adopted the 2013 Roadmap report that set two aggressive educational attainment goals to be achieved by 2023:

- All adults in Washington, ages 25–44, will have a high school diploma or equivalent.
- At least 70 percent of Washington adults, ages 25–44, will have a postsecondary credential.⁵

To accomplish these goals, WSAC identified strategies for achieving three primary objectives: ensuring access, ensuring learning, and preparing for future challenges.⁶ In December 2015, WSAC adopted an update to the 2013 Roadmap, the first progress report since its initial adoption.⁷ The 2015 update showed progress on three key measures: high school completion, postsecondary enrollment, and postsecondary completion.⁸ In two years, there had been modest progress toward the three goals, with improvements in the economy likely impacting the decline in postsecondary enrollment.⁹ Although the state is only just beginning to monitor progress toward the Roadmap's goals, the Roadmap has defined how the state views and advances its higher education agenda since 2013. As such, this assessment will consider state perspectives to the extent possible and appropriate.

Overview of Southeast King County

As of the 2010 Census, the total population of the state of Washington was 6,724,540.¹⁰ As the most populous county in the state of Washington, King County's population was 1,931,249.¹¹ In other words, about 29 percent of the total population of the state of Washington lives in King County.

Moreover, the county's population is projected to continue this pattern of growth. Washington's Office of Financial Management—which forecasts state population by county—projects that the population of King County will grow 20 percent by 2040, as shown in Table 1.

Broken down by age group, these projections indicate that King County's older population—aged 65 and above—will grow at the most dramatic rate. While the percentage growth of this age group is high, the overall number of people in this category (477,754 by 2040) is relatively small compared to the working-age population (ages 25–64), which is projected to reach over 1.2 million by 2040 (see Table 2).¹²

Table 1. King County Percent Change in Projected Population

Age Group	Percent Change				
	2015–20	2015–25	2015–30	2015–35	2015–40
0–14	4.2	7.4	10.0	12.7	16.0
15–19	0.3	5.2	8.8	12.0	14.5
20–24	-0.4	0.1	5.5	9.1	12.5
25–34	1.3	8.2	7.8	10.3	14.4
35–44	3.4	2.8	4.2	10.8	10.1
45–54	-1.2	-2.6	0.3	-0.8	0.7
55–64	6.2	4.9	3.7	2.0	5.1
65+	21.8	44.8	65.2	79.1	89.5
25–64	2.3	3.3	4.1	5.8	7.8
Total	4.8	9.1	13.1	16.8	20.2

Table 2. King County Projected Population by Age Group

Age Group	Projected Population					
	2015	2020	2025	2030	2035	2040
0–14	353,105	368,029	379,212	388,503	397,987	409,718
15–19	115,198	115,597	121,156	125,336	129,059	131,863
20–24	142,056	141,466	142,164	149,887	154,943	159,867
25–34	307,967	312,098	333,243	332,052	339,680	352,444
35–44	297,886	308,116	306,145	310,257	330,015	328,015
45–54	291,292	287,693	283,631	292,236	289,103	293,204
55–64	253,178	268,776	265,600	262,444	258,229	265,985
65+	252,100	307,039	365,051	416,445	451,560	477,754
25–64	1,150,323	1,176,683	1,188,619	1,196,989	1,217,027	1,239,648
Total	2,012,782	2,108,814	2,196,202	2,277,160	2,350,576	2,418,850

Boundaries

The authorizing budget proviso for this assessment defines the study area as “southeast King County,” which WSAC further clarified in the Study Plan of Action as referring to “rural suburban cities such as Covington, Enumclaw, Maple Valley, and Black Diamond, as well as urban and rural portions of unincorporated King County.”

Public Use Microdata Area (PUMA)

With this guidance, the project team selected Public Use Microdata Area (PUMA) 11615 defined by the U.S. Census Bureau for southeast King County as a guideline for the boundaries of their data analysis. This geographic area—highlighted in blue in Figure 1—is built upon Census tracts and defined by Washington's State Data Center to include Covington, Enumclaw, and Maple Valley. Black Diamond and adjacent areas of unincorporated King County are also included within PUMA 11615's boundaries, making PUMA 11615 an appropriate reflection of the study area.

Figure 1. King County Public Use Microdata Areas (PUMAs)

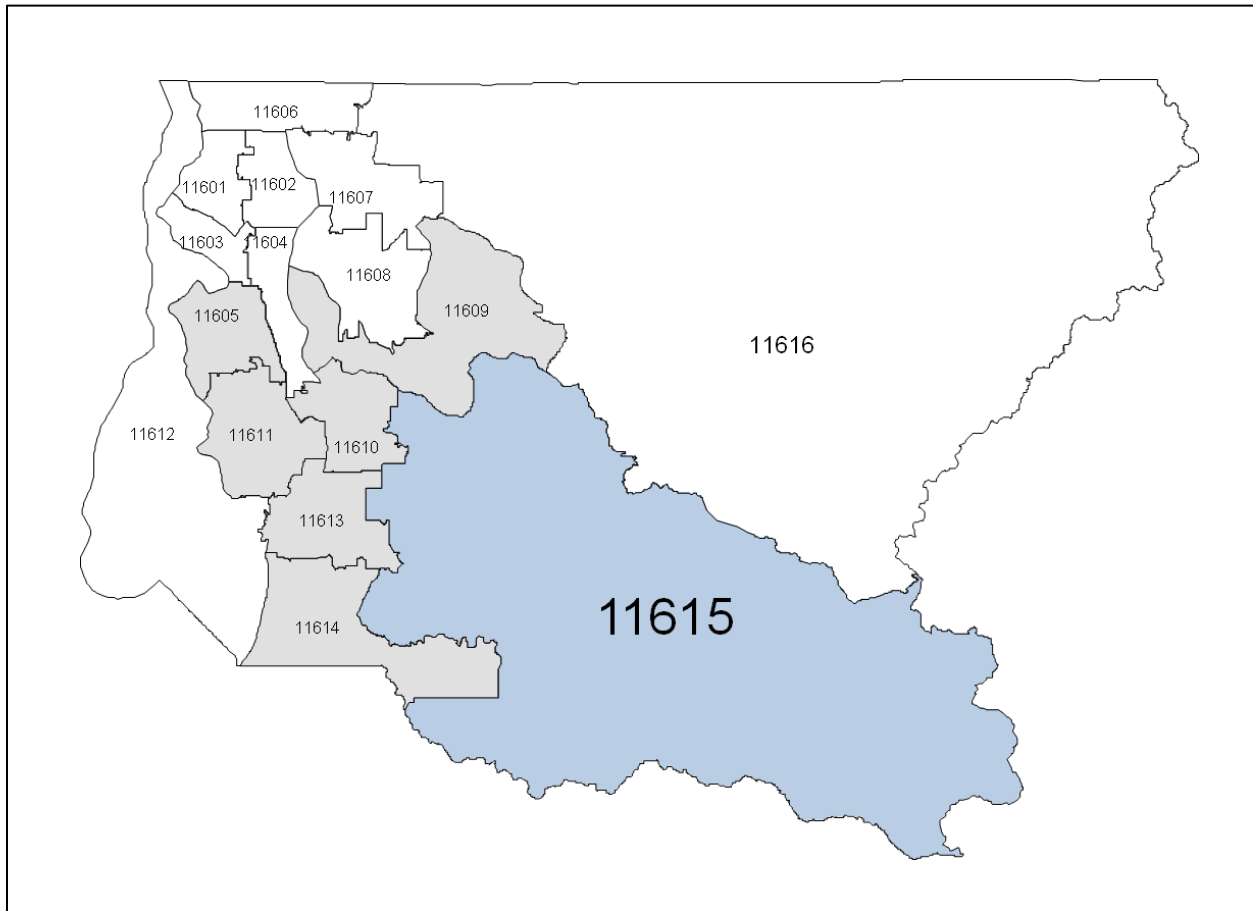


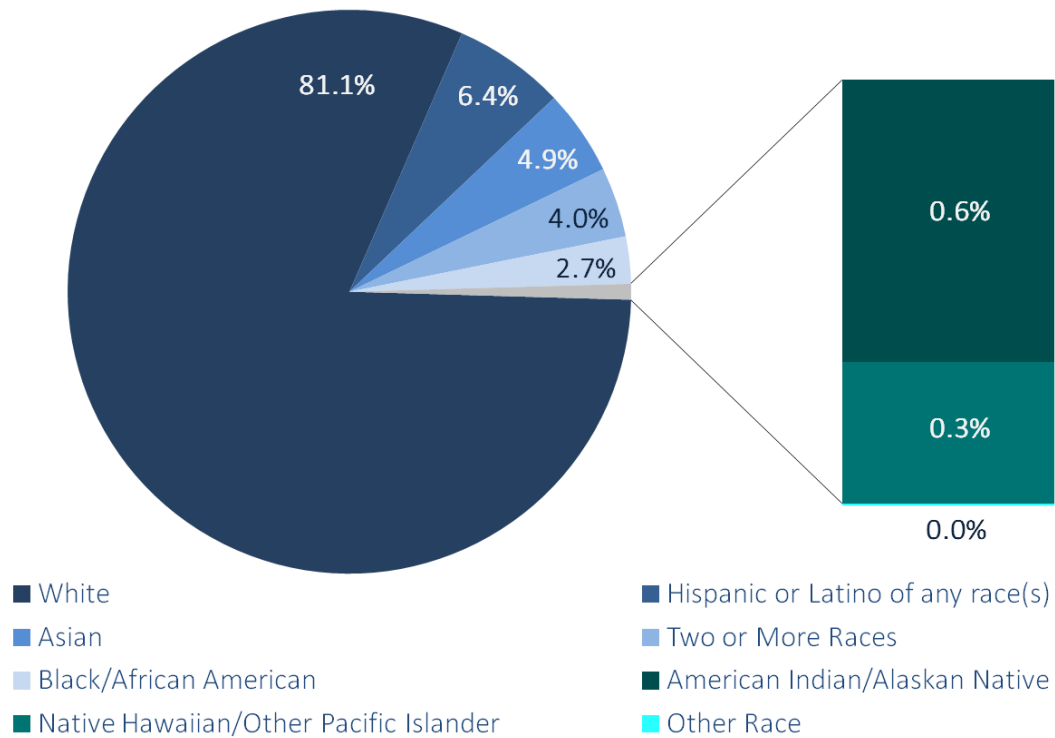
Table 3. King County Public Use Microdata Areas (PUMAs)

PUMA	Description
11601	Seattle City (Northwest)
11602	Seattle City (Northeast)
11603	Seattle City (Downtown)
11604	Seattle City (Southeast)
11605	Seattle City (West)—Duwamish and Beacon Hill
11606	King County (Northwest)—Shoreline, Kenmore and Bothell (South) Cities
11607	King County (Northwest)—Redmond, Kirkland Cities, Inglewood and Finn Hill
11608	King County (Northwest Central)—Greater Bellevue City
11609	King County (Central)—Sammamish, Issaquah, Mercer Island and Newcastle Cities
11610	King County (Central)—Renton City, Fairwood, Bryn Mawr and Skyway
11611	King County (West Central)—Burien, SeaTac, Tukwila Cities and White Center
11612	King County (Far Southwest)—Federal Way, Des Moines Cities and Vashon Island
11613	King County (Southwest Central)—Kent City
11614	King County (Southwest)—Auburn City and Lakeland
11615	King County (Southeast)—Maple Valley, Covington and Enumclaw Cities
11616	King County (Northeast)—Snoqualmie City, Cottage Lake, Union Hill and Novelty Hill

Feedback from local stakeholders, however, suggested that it would be valuable to incorporate data from the surrounding PUMAs, as the western edges of the southeast King County PUMA do not correspond to widely observed geographic boundaries, such as county or city lines. Consequently, WICHE collected demographic data for all PUMAs in King County (listed in Table 3)—with attention paid to the adjacent PUMAs highlighted in grey in Figure 1—to provide additional context to the assessment.

An analysis of American Community Survey (ACS) data for the region reveals several key facts about southeast King County in relation to the surrounding areas, King County, Washington State, and the nation.¹³ For example, as shown in Figure 2, the population of southeast King County is 81 percent White—a significantly higher percentage than King County (71 percent), the state of Washington (64 percent), and the United States (63 percent). In fact, southeast King County is among the least diverse areas within King County; only the northeast portion of the county—encompassing Snoqualmie City, Cottage Lake, Union Hill, and Novelty Hill—has a less diverse demographic makeup.¹⁴

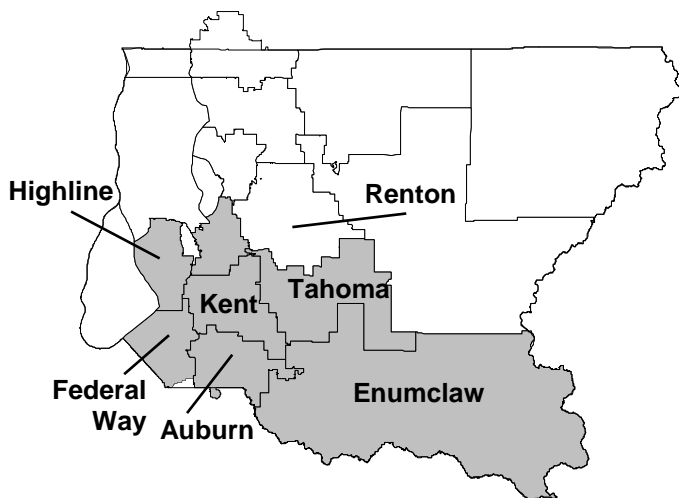
Figure 2. Southeast King County Demographics



School Districts

To identify K–12 school districts to be included in the analysis, WICHE overlaid school district maps with the PUMA boundaries. Those districts that were fully or partially inside the PUMA boundaries, as well as those most closely surrounding the area, were included. Highlighted in grey in Figure 3, these districts are: Auburn, Enumclaw Federal Way, Highline, Kent, Renton, and Tahoma.

Figure 3. King County School Districts



Regional and state trends suggest increasing diversification within school districts.¹⁵ Data from the Office of the Superintendent of Public Instruction reveal that each of the area's school districts has enrolled an increasingly diverse student body over the past five years. Table 4 presents a brief overview of the dominant trends in enrollment in relation to race/ethnicity in the seven school districts in and around southeast King County.¹⁶

Table 4. Percent Change in Enrollment (2011–2015) by Race/Ethnicity

School District	White	Hispanic/Latino of any race(s)	Two or More Races
Auburn	-11.3%	7.8%	4.0%
Enumclaw	-5.3 %	4.1%	1.6%
Federal Way	-8.0%	5.6%	2.4%
Highline	-4.1%	4.4%	-2.0%
Kent	-7.7%	4.3%	2.6%
Renton	-5.7%	4.0%	5.0%
Tahoma	-6.0%	2.9%	3.3%

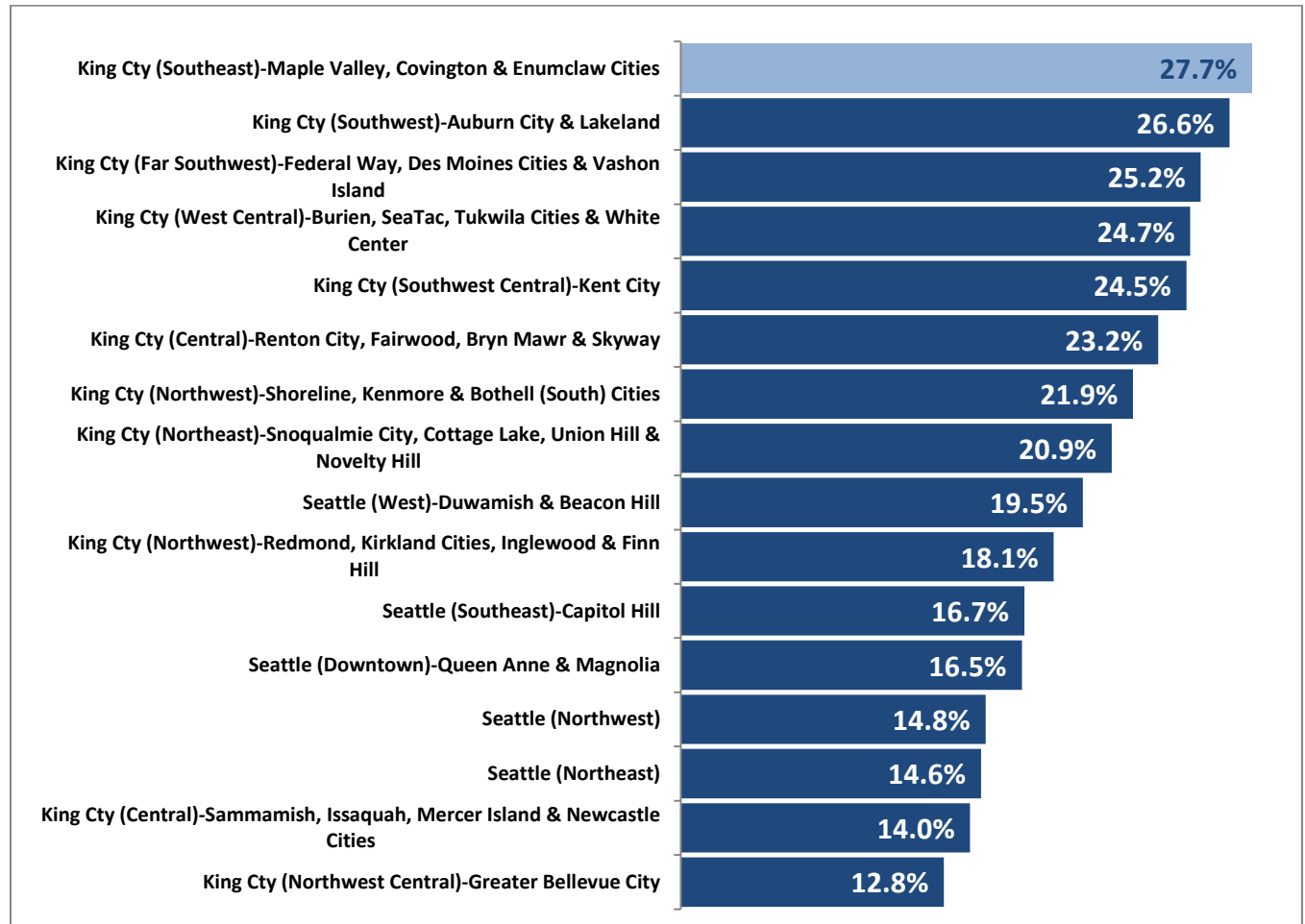
Educational Attainment

The educational attainment levels of the working-age population (25–64) in southeast King County break down somewhat differently than those of the county, state, and the country. The percentage of adults with less than a high school degree (5 percent) is lower than that of King County as a whole (7 percent), Washington (9 percent) and the United States (12 percent).¹⁷

However, southeast King County has a higher proportion of adults with some college credit, but no degree than any other area in King County, as depicted in Figure 4. Though the population of southeast King County is relatively small in comparison to the county as a whole, 28 percent of the area's working-age population, or more than 18,500 people, has some college credit, but no degree. This population is of prime importance to any endeavor focused on providing additional opportunities for higher education in the area.¹⁸

Because the WSAC Roadmap looks specifically at the 25–44 age group, it is also instructive to see how educational attainment breaks down among this group. In southeast King County, it is very similar to the larger 25–64 age group, varying by less than a percentage point in most educational attainment categories. The greatest variation occurs in the category of people with some college, but no degree who comprise 25 percent of the 25–44 age group and 28 percent of the 25–64 age group. However, among the 25–44 age group in all of King County, southeast King County's 25 percent is still the highest proportion of residents with some college, but no degree.¹⁹

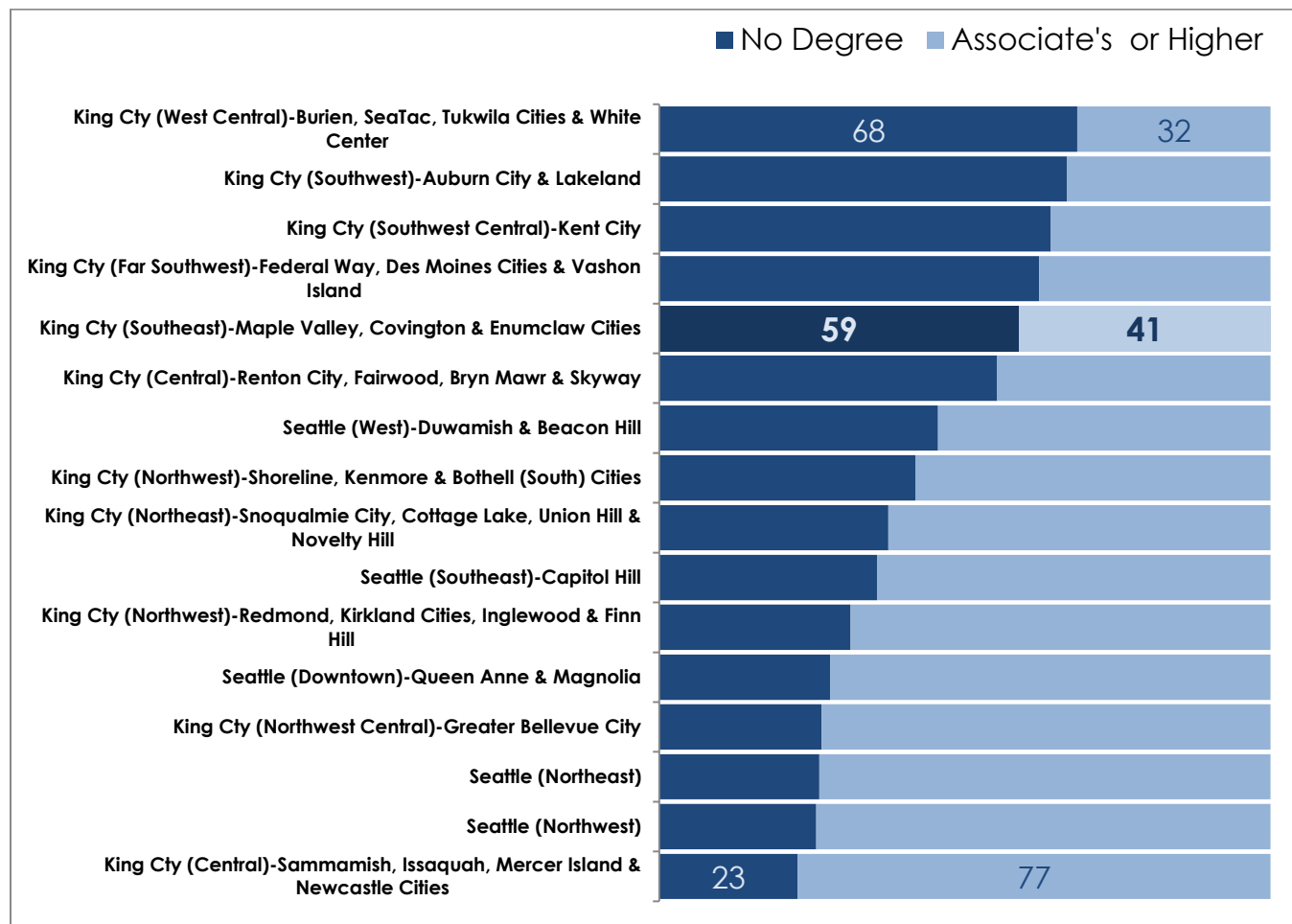
Figure 4. Percent of Population with Some College, No Degree in King County PUMAs (Age 25–64)



Overall, 59 percent of southeast King County's working-age population—totaling nearly 39,400 working-age adults—does not hold a postsecondary degree, compared with 41 percent for the county as a whole.

Further, compared to the surrounding areas in King County, southeast King County has the fifth-lowest percentage of degree-holders among their working-age population. This puts southeast King County 11 percentage points ahead of its neighbors in southwest King County in terms of degree attainment, but 36 percentage points behind northeast Seattle (see Figure 5). However, it should be noted that the Census data used here do not capture sub-associate's degree credentials such as certificates and apprenticeship completions.²⁰

Figure 5. Percent of Total Population with a Degree in King County PUMAs (Age 25–64)



Income and Earnings

In terms of median income, Washington state and King County fare relatively well compared with the rest of the nation, and southeast King County is no exception to this trend. In fact, southeast King County has a higher median wage/salary income than King County as a whole—as depicted in Table 5.²¹

Table 5. Median Wage/Salary Income for Population (Age 25–64), 2012–2015

Geography	Median Wage/Salary	90% Margin of Error (+/-)*
United States	\$36,865	\$0
Washington	\$40,961	\$0
King County	\$49,154	\$1,080
Southeast King County	\$52,083	\$1,567

*Replicate Weights Methodology used to calculate 90% Margins of Error. In some cases, this method fails and yields an MOE of zero. In such cases, Design Factor Methodology should be used but error will be small when sample size is large.

Because of the area's high median income—and accompanying high cost of living—it is perhaps most useful to compare income data within the county. Here, southeast King

County ranks sixth among the 16 PUMAs in the county in terms of median wage/salary income for its working-age population (see Table 6).²²

Table 6. Median Wage/Salary Income for Population (Age 25–64) for King County, 2012–2015

King County Public Use Microdata Areas	Median Wage/Salary	90% MOE (+/-)
King County (Central)—Sammamish, Issaquah, Mercer Island and Newcastle Cities	\$81,923	\$4,186
King County (Northeast)—Snoqualmie City, Cottage Lake, Union Hill and Novelty Hill	\$65,548	\$4,676
King County (Northwest Central)—Greater Bellevue City	\$65,538	\$3,771
King County (Northwest)—Redmond, Kirkland Cities, Inglewood and Finn Hill	\$61,442	\$2,274
Seattle City (Downtown)—Queen Anne and Magnolia	\$55,298	\$4,317
King County (Southeast)—Maple Valley, Covington and Enumclaw Cities	\$52,083	\$1,567
Seattle City (Northeast)	\$49,413	\$3,790
Seattle City (Southeast)—Capitol Hill	\$48,404	\$4,720
Seattle City (Northwest)	\$47,916	\$3,198
King County (Northwest)—Shoreline, Kenmore and Bothell (South) Cities	\$47,396	\$3,319
Seattle City (West)—Duwamish and Beacon Hill	\$43,541	\$2,487
King County (Central)—Renton City, Fairwood, Bryn Mawr and Skyway	\$41,666	\$2,140
King County (Southwest)—Auburn City and Lakeland PUMA, Washington	\$40,337	\$1,734
King County (Far Southwest)—Federal Way, Des Moines Cities and Vashon Island	\$37,500	\$3,665
King County (Southwest Central)—Kent City	\$36,707	\$2,451
King County (West Central)—Burien, SeaTac, Tukwila Cities and White Center	\$31,745	\$2,427

However, it is possible that median family income may obscure the economic situation of those within the study area who do not have a college degree, as discussed in the preceding section. Accordingly, WICHE parsed the data further to examine the median salaries of the working-age population by educational attainment level. As Table 7 shows, the median wage/salary income for the population with some college, but no degree (\$37,500) is much lower than the median for southeast King County (\$52,083).²³

While this analysis provides a general idea of income level by educational attainment for the area, it is important to point out that the margin of error associated with the data given the small sample size for this geographic area is relatively high.

Table 7. Median Wage/Salary Income for Some College, No Degree Population (Age 25–64), 2012–2014

King County Public Use Microdata Areas	Median Wage/Salary	90% MOE (+/-)
King County (Southwest)—Auburn City and Lakeland	\$54,274	\$9,776
Seattle City (Downtown)—Queen Anne and Magnolia	\$50,421	\$3,242
Seattle City (West)—Duwamish and Beacon Hill	\$41,562	\$2,677
Seattle City (Southeast)—Capitol Hill	\$40,625	\$1,440
King County (Central)—Sammamish, Issaquah, Mercer Island and Newcastle Cities	\$38,320	\$6,471
King County (Southeast)—Maple Valley, Covington and Enumclaw Cities	\$37,500	\$4,080
King County (Central)—Renton City, Fairwood, Bryn Mawr and Skyway	\$37,500	\$2,838
King County (Far Southwest)—Federal Way, Des Moines Cities and Vashon Island	\$35,937	\$1,923
King County (West Central)—Burien, SeaTac, Tukwila Cities and White Center	\$35,636	\$4,677
King County (Northwest Central)—Greater Bellevue City	\$35,295	\$5,176
Seattle City (Northwest)	\$34,817	\$4,348
King County (Southwest Central)—Kent City	\$33,984	\$4,973
King County (Northwest)—Redmond, Kirkland Cities, Inglewood and Finn Hill	\$33,333	\$4,059
Seattle City (Northeast)	\$33,333	\$3,021
King County (Northwest)—Shoreline, Kenmore and Bothell (South) Cities	\$31,250	\$4,279
King County (Northeast)—Snoqualmie City, Cottage Lake, Union Hill and Novelty Hill	\$30,253	\$3,889

Further breaking down these data by income group, it becomes evident that southeast King County's population of people with some college, but no degree may be struggling financially, with more than 40 percent earning less than \$30,000 annually and more than 60 percent earning less than \$48,000. Nonetheless, a greater percentage of southeast King County's some college, no degree population falls into higher income brackets than their peers across the county as whole (as shown in Table 8). The comparatively high income levels of the southeast King County some college, no degree group may make it more challenging to recruit them back to school, particularly during a period of economic recovery.²⁴

Table 8. Percent of Population (Age 25–64) with Some College, No Degree by IPEDS Income Group

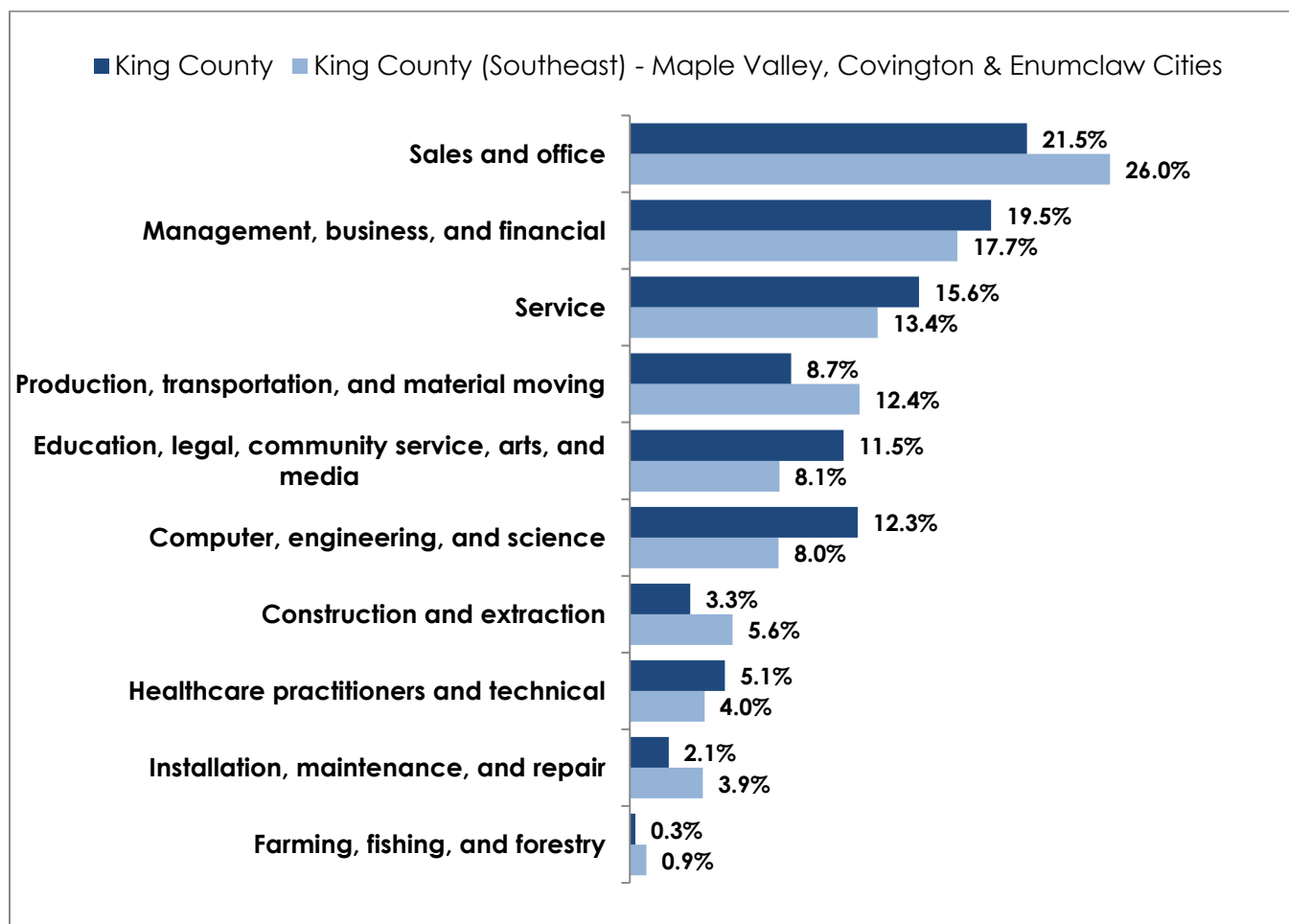
	\$0–\$30,000	\$30,001–\$48,000	\$48,001–\$75,000	\$75,001–\$110,000	\$110,001+
United States	58.4	19.6	14.0	5.7	2.4
Washington	56.5	18.5	15.2	6.9	2.9
King County, Washington	53.3	18.7	16.0	7.7	4.2
Southeast King County	40.6	20.9	20.5	10.6	7.4

Occupational Employment

Census data provide a general sense of occupation types within a specific geographic area, and do not offer a fine-grained picture of regional employment. Specifically, these data describe broad categories of work that people perform on the job—for example, “sales and office”—rather than identify specific industries in which people are employed. The data are designed to describe the kind of work people perform on the job, rather than their industry of employment.

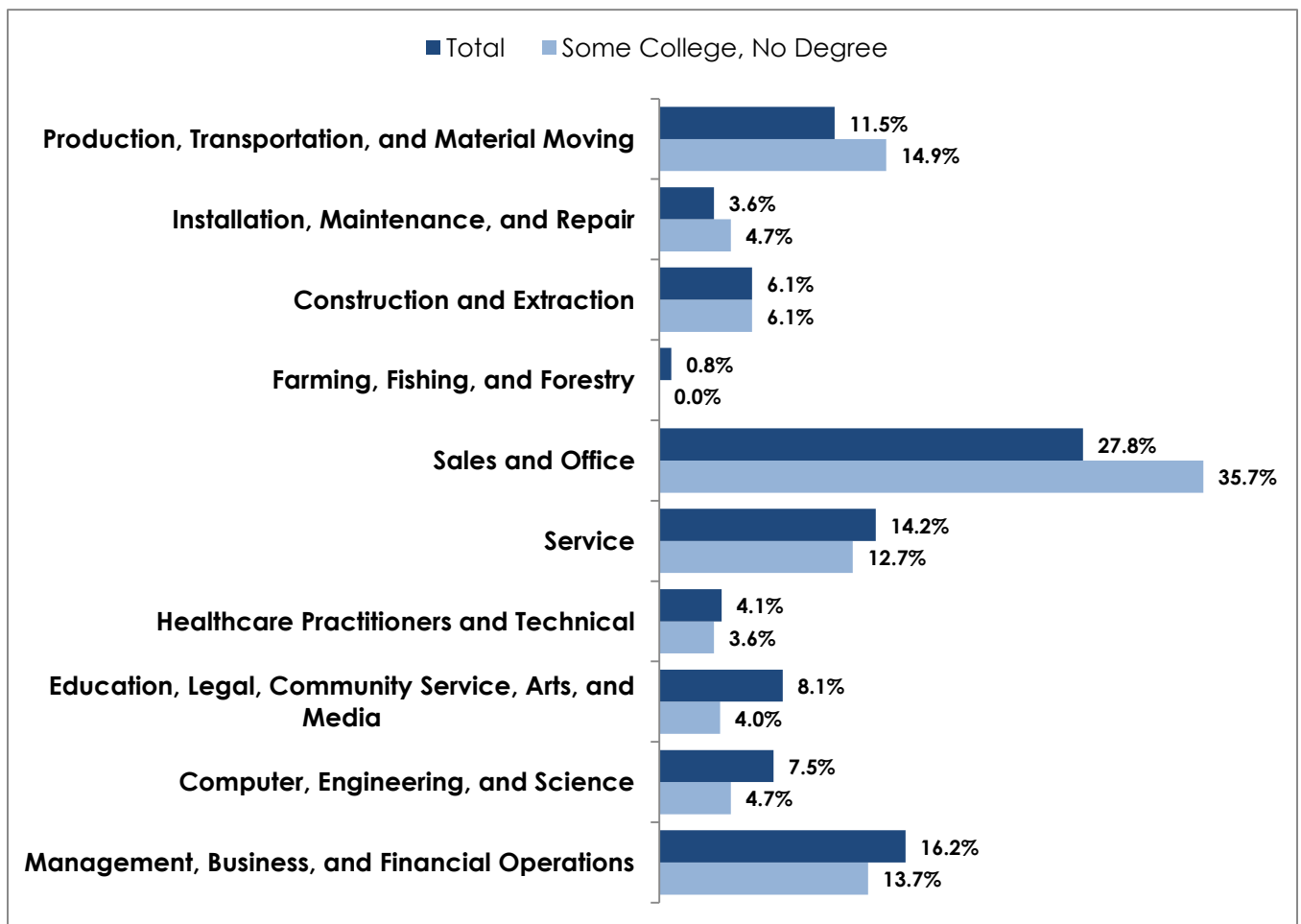
With this caveat in mind, the data show that a majority of southeast King County's workforce is employed in sales and office work (26 percent), followed by management, business and financial occupations (18 percent), and then service jobs (13 percent) and production, transportation, and material moving (12 percent). This breakdown of occupational categories tracks fairly closely with county, state, and national figures, though southeast King County has a lower percentage of residents employed in education, legal, community service, arts and media jobs than King County as a whole, as well as a higher proportion of residents in the production, transportation, and manual moving occupational category (see Figure 6). In fact, the study area is home to the largest proportion of sales and office workers in the county.²⁵

Figure 6. Occupational Employment (16 and Above) by Percent in King County and Southeast King County



When these data are further broken down to examine the some college, no degree segment of southeast King County's population, this trend is particularly pronounced. More than 35 percent of the area's some college, no degree population hold sales and office jobs, compared to 27.8 percent of the overall working-age population (see Figure 7). Meanwhile, fewer in the some college, no degree group hold management, business, and financial operations jobs — the area's next largest area of employment. Perhaps unsurprisingly, the some college, no degree group also outstrips the general population in proportion employed in production, transportation, and material moving occupations.²⁶

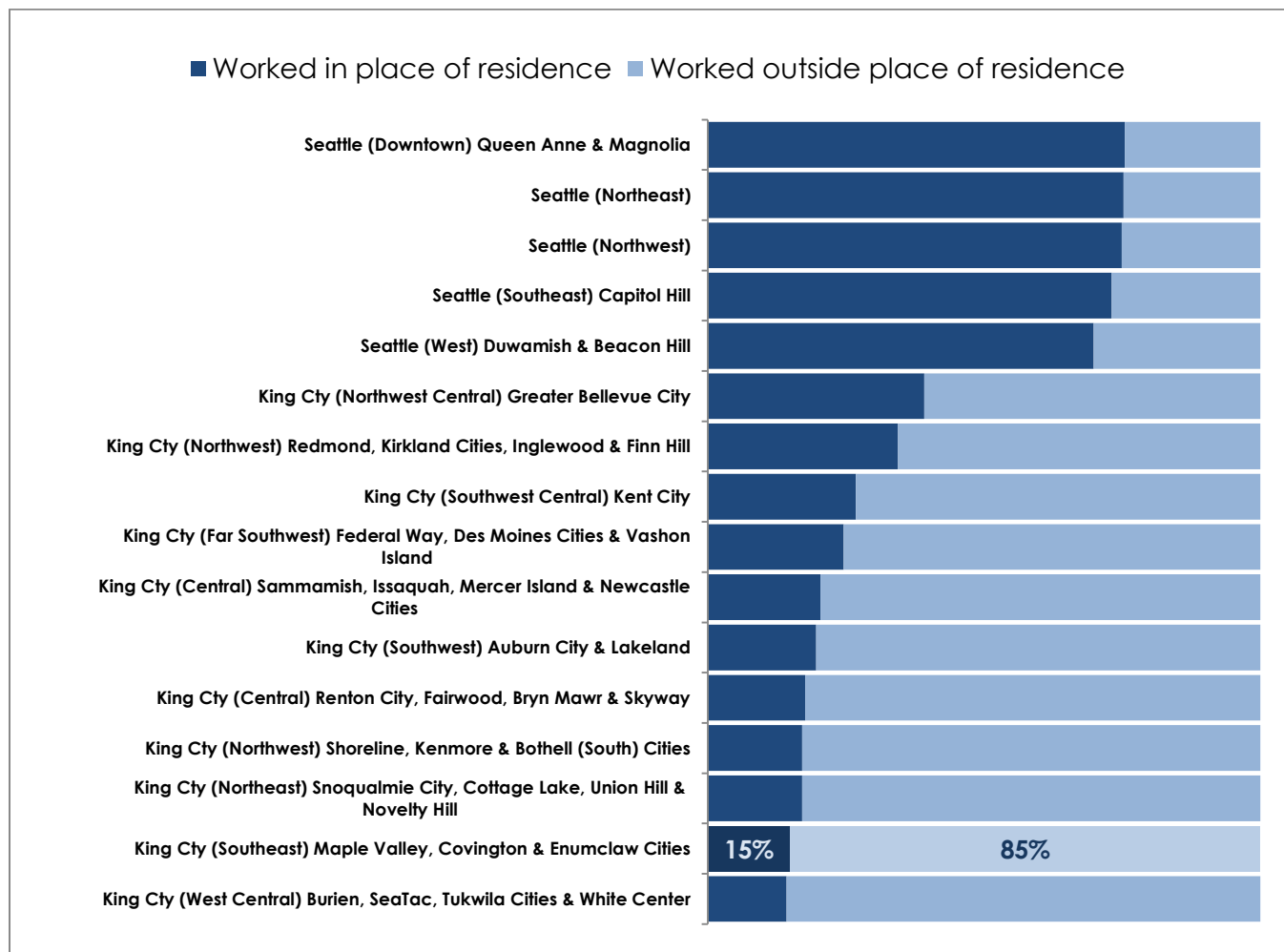
Figure 7. Occupational Employment (16 and Above) by Percent in Southeast King County by Education Level



Commuting

While nearly all of southeast King County's residents work within the county, a very significant proportion—85 percent—work outside their place of residence (see Figure 8).²⁷ This suggests that southeast King County operates largely as a so-called “bedroom community” where people reside, but do not work. This is a trend which, unsurprisingly, is marked in areas of King County farther from Seattle's downtown core and dramatically decreases within the city itself. A notable exception is southeast King County's near neighbor Kent, where 27 percent of the area's residents work where they live.²⁸

Figure 8. Percent of Population Working Outside Place of Residence



Unfortunately, commuting patterns are not available at the sub-county level, which does not allow for an analysis of where exactly southeast King County residents are commuting for work. However, anecdotal evidence and larger traffic patterns suggest that many of these people commute to downtown Seattle.

This interpretation is further supported by the research of University of Washington Tacoma professor of Urban Studies Ali Modarres, who has analyzed commuting modes and times for the region, summarized in Table 9. His research shows that in southeast King County, the dominant mode of commuting is personal vehicle—with nearly 94

percent of area residents commuting by car, truck, or van. In addition, the average commute time is over 31 minutes, confirming that area residents are largely traveling outside their local area for work.

Table 9. Commuting in Southeast King County PUMA

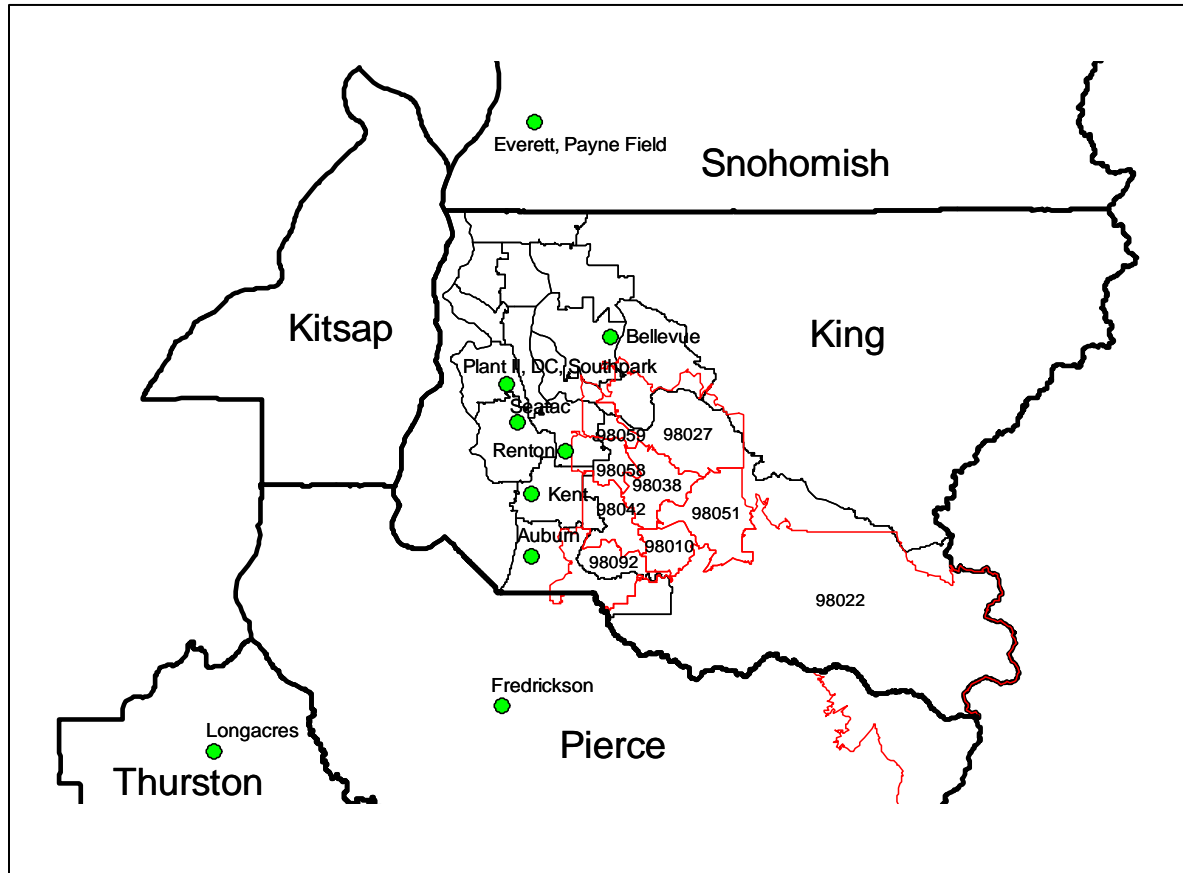
Means of transportation to work	Mean Travel Time to Work (Minutes)	Standard Deviation (Minutes)	Sample Size
Car, truck, or van	31.54	19.87	52,854
Bus or trolley bus	75.24	37.46	978
Subway or elevated	79.66	10.26	379
Railroad	76.62	13.90	817
Walked	7.55	3.34	489
Other methods	17.66	13.80	839
Total	32.86	22.03	56,356

In the absence of granular data on commuting patterns, the project team obtained data on commuting patterns within specific occupational fields.

Boeing Employees

The Society of Professional Engineering Employees in Aerospace (SPEEA), IFPTE Local 2001, is a professional aerospace labor union representing more than 22,650 engineers, technical workers, pilots, and other professionals in the aerospace industry. The union represents employees at The Boeing Company and shared the commuting patterns of its members in southeast King County.

Figure 9. Boeing Facilities and Southeast King County Zip Codes



Of SPEEA members residing in zip codes that correspond to southeast King County (outlined in red on the map in Figure 9), more than 25 percent work at the Renton Boeing facility, and another 15 percent work in the Renton area. A significant proportion also commute to Marginal Way, with 13.8 percent commuting to the Development Center just south of Seattle, and 12.6 percent commuting to Plant II which sits just inside the Seattle city limits. Meanwhile, 11.6 percent of southeast King County SPEEA members work in Kent and 8.2 percent in Auburn. The remaining 13 percent of SPEEA members who reside in southeast King County work at various other locations farther from their zip code of residence; for example just over 9 percent work in the Everett area (either in Everett or at Payne Field). Table 10 further describes how many employees from each southeast King County zip code commute to various Boeing locations.

Table 10. Southeast King County Commuters to Boeing Facilities

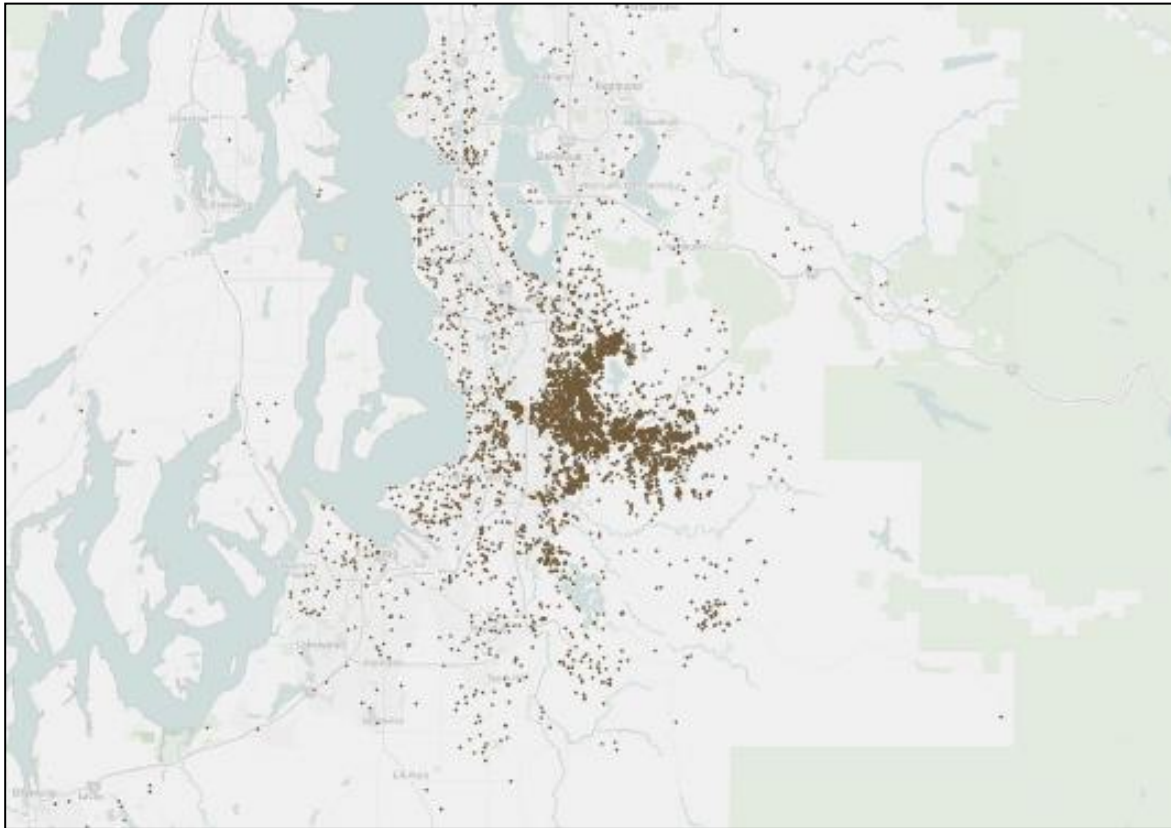
Boeing Location	ZIP 98010	ZIP 98022	ZIP 98027	ZIP 98038	ZIP 98042	ZIP 98051	ZIP 98058	ZIP 98059	ZIP 98092	SE King County Commuters	%	Cumulative %
Renton	14	27	34	95	102	9	143	114	49	587	26	26
Renton area	10	16	25	54	64	10	83	58	29	349	15	41
DC	6	10	21	56	69	6	66	49	34	317	14	55
Plant II	4	10	29	33	51	4	66	59	33	289	13	67
Kent	3	5	17	35	69	6	53	37	41	266	12	79
Auburn	2	24	7	27	35	3	13	9	68	188	8	87
Everett	3	1	16	16	18	2	23	56	6	141	6	93
Payne Field	1	1	15	3	10	0	21	10	10	71	3	96
South Park	0	0	2	5	4	0	4	3	4	22	1	97
Bellevue	0	0	4	5	3	2	3	2	2	21	1	98
Fredrickson	0	5	0	2	4	0	1	0	4	16	1	99
Longacres	1	0	1	5	2	0	1	2	2	14	1	100
Grand Total	44	99	171	338	434	42	477	400	284	2,289	100	

Kent School District Employees

The Kent School District has also conducted an internal analysis of its employees' commuting patterns. This analysis—in conjunction with employee feedback—revealed that commuting can play a critical role in retaining teachers in an environment that is competitive for high-quality teachers. Most Kent School District teachers live in the area, however, a significant number commute from farther away — including a contingent from southeast King County.

Figure 10 depicts Kent School District employees' area of residence on a map of the region. While the map shows that the school district's employees are most strongly clustered in the general vicinity of the district boundaries, it also demonstrates the wide variation in commuting patterns among employees.

Figure 10. Commuting Distances for Kent School District Employees



Traffic

Qualitative interviews revealed that traffic was an issue of concern across the study area, rendering commuting times that on paper appeared to be manageable into serious—and at times prohibitive—commitments in practice. In interviews, several employers cited commuting times as a critical issue in retaining their workforce.

The most recent report on traffic in the area from the Puget Sound Regional Council (PSRC) comes from February 2011 and details the region's long-term vision for transportation through 2040. The report notes that southeast King County included four areas identified by the Washington State Department of Transportation as “bottlenecks” (places where the physical attributes of a roadway change in a manner that impacts the flow of traffic) or “chokepoints” (where congestion occurs because of traffic interference and/or roadway configuration). Nonetheless, the southeast King County area was not identified as containing any “transit-congested corridors” or any “key arterials,” and the area does not figure prominently in proposed long-term changes related to congestion management.²⁹

Finally, the Washington Department of Transportation, which maintains a permanent traffic recorder in Covington, recorded a 27.5 percent increase in annual average daily traffic volume over the past decade.³⁰ This increase in traffic volume further supports

the narrative that traffic acts as a significant barrier to commuting — whether it be to work, higher education, or other destinations.

Public Transportation

Southeast King County is serviced by limited public transportation options. The area does not fall within the Sound Transit district nor do the planned expansions that were part of the Sound Transit 3 plan approved in the November election, as these will only affect the western edges of the area in neighboring Kent and Auburn.³¹ A 2010 Washington Department of Transportation study explored the feasibility of implementing commuter rail service in southeast King County by connecting Maple Valley and Black Diamond to Auburn's Sounder Transit station via Covington. The study concluded, however, that though the project was theoretically feasible, none of the agencies authorized to provide such services were interested and the upfront capital costs were a significant barrier.³² Ultimately, no such plan was put in motion.

Southeast King County is served by King County's Metro bus service, including rural local routes and rural intercity routes that connect Kent and Auburn with Black Diamond, Covington, Enumclaw, and Maple Valley. The 2011 PSRC study referenced above notes that the bus service was generally sufficient to meet area needs and it did not operate at overly high capacity with the exception of service between Black Diamond and Covington to Kent during peak hours.

However, interview subjects were in strong agreement that the existing bus service does not enable easy access to the nearest postsecondary options in the region (Green River College and Renton Technical College), much less to four-year institutions such as the University of Washington and the University of Washington Tacoma. Those interviewees cited both the lack of coverage in bus service and infrequent service as barriers to more usage. This impression is supported by the commuting pattern data in Table 9, which shows that the small number of area residents who do commute by bus or train face an average commute length of more than 77 minutes. Moreover, King County Metro's plans include only a modest increase in service to this region between 2016 and 2025.³³

As it currently stands, public transportation is not a viable option for commuting to existing higher education providers for many residents of southeast King County.

Postsecondary Landscape

In general, students in southeast King County seeking postsecondary education and training can choose from a range of options that includes community and technical colleges, public and private colleges and universities, and a tribal college. Two local, public postsecondary institutions—Green River College and Renton Technical College—include southeast King County in their service areas. Highline College, a public community college, is also nearby geographically—the three schools' enrollment is described in Table 11. All three also offer online options, with Green River College

enrolling 10 percent of its in-state students fully online, Highline College 13 percent, and Renton Technical College 9 percent.³⁴

Table 11. Postsecondary Institutions Geographically Adjacent to the Study Area³⁵

Type	Postsecondary Institution	2014–15 Enrollment
Public Two-Year	Green River College*	11,895
Public Two-Year	Renton Technical College*	6,635
Public Two-Year	Highline College	10,346
Public Two-Year	All Community and Technical Colleges	292,395

*Statutory service area includes southeast King County

Washington's public and private four-year colleges and universities are also an option for students. Though none are physically located in southeast King County, some are relatively proximate in cities such as Seattle and Tacoma, while several also offer off-site locations in nearby areas such as Renton and Des Moines, as well as online courses.

The region is also served by the Muckleshoot Tribal College and WGU Washington — a nonprofit, private university offering online, competency-based degree programs which was legislatively endorsed in Washington in 2011. Table 12 shows enrollment for public baccalaureate colleges and universities in Washington, while Table 13 shows enrollment for longstanding private and tribal colleges in the state. While not listed in their entirety, 49 degree granting private institutions, both non- and for-profit, are also authorized to operate in Washington — these include institutions such as Antioch University and the University of Phoenix.

Table 12. Public Baccalaureate Colleges and Universities in Washington³⁶

Postsecondary Institution	2014–15 Enrollment
Central Washington University	15,957
Eastern Washington University	15,907
The Evergreen State College	5,085
University of Washington Bothell	6,043
University of Washington Seattle	50,584
University of Washington Tacoma	5,546
Washington State University	32,423
Western Washington University	16,807

Table 13. Continuously Exempt Institutions* in Washington³⁷

Postsecondary Institution	2014–15 Enrollment
Bastyr University	1,291
City University of Seattle	3,229
Cornish College of the Arts	777
DigiPen Institute of Technology	1,032
Fuller Theological Seminary**	3,981
Gonzaga University	8,282
Heritage University	1,493
Northwest College of Art & Design	114
Northwest School of Wooden Boat Building	98
Northwest University	818
Northwest Indian College	967
Pacific Lutheran University	3,742
Saint Martin's University	2,180
Seattle Institute of Oriental Medicine	50
Seattle Pacific University	4,695
Seattle University	7,422
University of Puget Sound	2,983
Walla Walla University	2,153
Western Governors University Washington	10,000
Whitman College	1,653
Whitworth University	2,948

* Continuously exempt institutions are exempt from state authorization and review.

** Includes students in all locations (Arizona, California, Colorado, Texas, Washington, and online)

Community and Technical Colleges

Washington's community and technical colleges focus on three main areas: basic education for adults, workforce education, and academic transfer.³⁸ Though students may attend any institution that meets their needs, regardless of their area of residence, the state legislature has established defined "service areas" for each institution as described in RCW 28B.50.040. These service areas generally align with county and school district boundaries. Two two-year institutions in the area (Green River College and Renton Technical College) have service areas that include southeast King County.

As currently defined in statute, Green River College's service area is the 10th district which includes "the boundaries of the common school districts of Auburn, Black Diamond, Renton, Enumclaw, Kent, Lester and Tahoma, King County, and the King County portion of Puyallup Common School District No. 3." Renton Technical College serves the 27th district, which encompasses Renton, Kent, Auburn, Tahoma and Enumclaw School Districts and the central and south portions of the Seattle School District.

In addition, the analysis includes Highline College's numbers given its geographic proximity to the northwestern portions of southeast King County and because it enrolls a

significant number of students from southeast King County school districts (as enumerated in the following section on enrollment trends).

Four-Year Public Institutions

The four-year public institutions serving the area are: Central Washington University, Eastern Washington University, The Evergreen State College, the University of Washington, Washington State University, and Western Washington University. These are not, as noted above, located in the study area, though there are some programs offered in and around the service area as well as online.

For example, The Evergreen State College offers programs in partnership with the Muckleshoot Tribal College in southeast King County. Central Washington University offers degrees at an off-site location in Des Moines (about 25 miles from southeast King County) through a partnership with Highline College, and Washington State University's Global Campus offers over 20 fully online undergraduate and graduate degree programs.

An overview of online enrollment of the public four-year institutions' is presented below in Table 14. However, these data are drawn from the Integrated Postsecondary Education Data System (IPEDS) which can only identify student location at the state level. Therefore, it is unclear if any of these students are physically located in southeast King County. However, the table provides some context as to the extent of the online offerings at Washington's public four-year institutions.

Table 14. Distance Education Enrollments at Public Four-year Institutions (2014)³⁹

Postsecondary Institution	Undergraduate Enrollment, Fully Online Students (in Washington)	Percent of Total Enrollment
Central Washington University	1,455	12%
Eastern Washington University	291	2%
The Evergreen State College	0	0%
University of Washington Bothell	7	0%
University of Washington Seattle	535	1%
University of Washington Tacoma	28	1%
Washington State University	2,067	7%
Western Washington University	143	1%

Other Institutions

WGU Washington is a fully online, competency-based institution that is legislatively endorsed. Though fully online, WGU Washington provided data on the number of students enrolled who reside in southeast King County. Based on an analysis of zip codes aligned with the southeast King County region, 306 undergraduates and 112 graduate students from the area were enrolled in the institution as of October, 2016. The bulk of undergraduate students are enrolled in the Business College, while the Teachers

College is most popular among southeast King County graduate students, as shown in Table 15.⁴⁰

Table 15. WGU Washington Enrollment of Students Residing in Southeast King County (October 2016)

	Undergraduate	Graduate	Total
Business College	143	36	179
Health Professions College*	45	10	55
Information Technology College	59	3	62
Teachers College	59	67	126
Total	306	116	422

*See Appendix F for a complete listing of the programs offered.

WGU Washington also provided data on students based on their city of residence, which provides an even more targeted look at their enrollment in southeast King County in Table 16. The total numbers here are smaller than those in the table above because they refer only to students residing within the city limits of Black Diamond, Covington, Enumclaw, Maple Valley, and Ravensdale, but not to students residing in unincorporated areas of the county or in zip codes that overlap slightly with adjacent cities such as Kent and Auburn.⁴¹

Table 16. WGU Washington Enrollment of Students by City of Residence (October 2016)

	Undergraduate					Graduate					Total
	Business College	Health Professions College	Information Technology College	Teachers College	Total	Business College	Health Professions College	Information Technology College	Teachers College	Total	Grand Total
Black Diamond	3	1	4	0	8	0	0	0	3	3	11
Covington	13	4	4	7	28	5	0	1	5	11	39
Enumclaw	9	0	1	12	22	1	0	0	13	14	36
Maple Valley	25	8	10	6	49	6	2	1	7	16	65
Ravensdale	2	1	1	0	4	0	0	0	1	1	5
Total	52	14	20	25	111	12	2	2	29	45	64

While the Muckleshoot Tribal College is not currently accredited, it offers several programs through partnerships with other institutions as well as Occupational Skills Training and a GED testing center and GED program. The Tribal College uses a cohort-based model – identifying community needs and bringing in partner institutions to provide relevant programming as needed while Tribal College staff provide on-site

support to students. The Muckleshoot Tribal College enrolls more than 300 students across all its programs (credit, noncredit, and adult basic education).⁴²

Data from WSAC show that no private, state-authorized institutions currently offer degree programs in the cities of Black Diamond, Covington, Enumclaw, and Maple Valley, though schools exempt from state authorization requirements may conduct activities in the area. However, in the nearby cities of Kent and Auburn, Antioch University—a private four-year institution in Seattle—does offer programs.⁴³ Antioch offers programs in Education, Special Education, Experienced Educators, and Teacher Preparation as well as Endorsements in Environment and Sustainability, Education, and Library Media. Meanwhile, Pima Medical Institute, a private, for-profit two-year institution, offers a Veterinary Technician program in Kent.

Private nonprofit Seattle University also offers programs to enhance current teacher credentials including endorsements in math and special education, in addition to a dual endorsement in English language learners (ELL) and Literacy through the Puget Sound Education Service District.⁴⁴

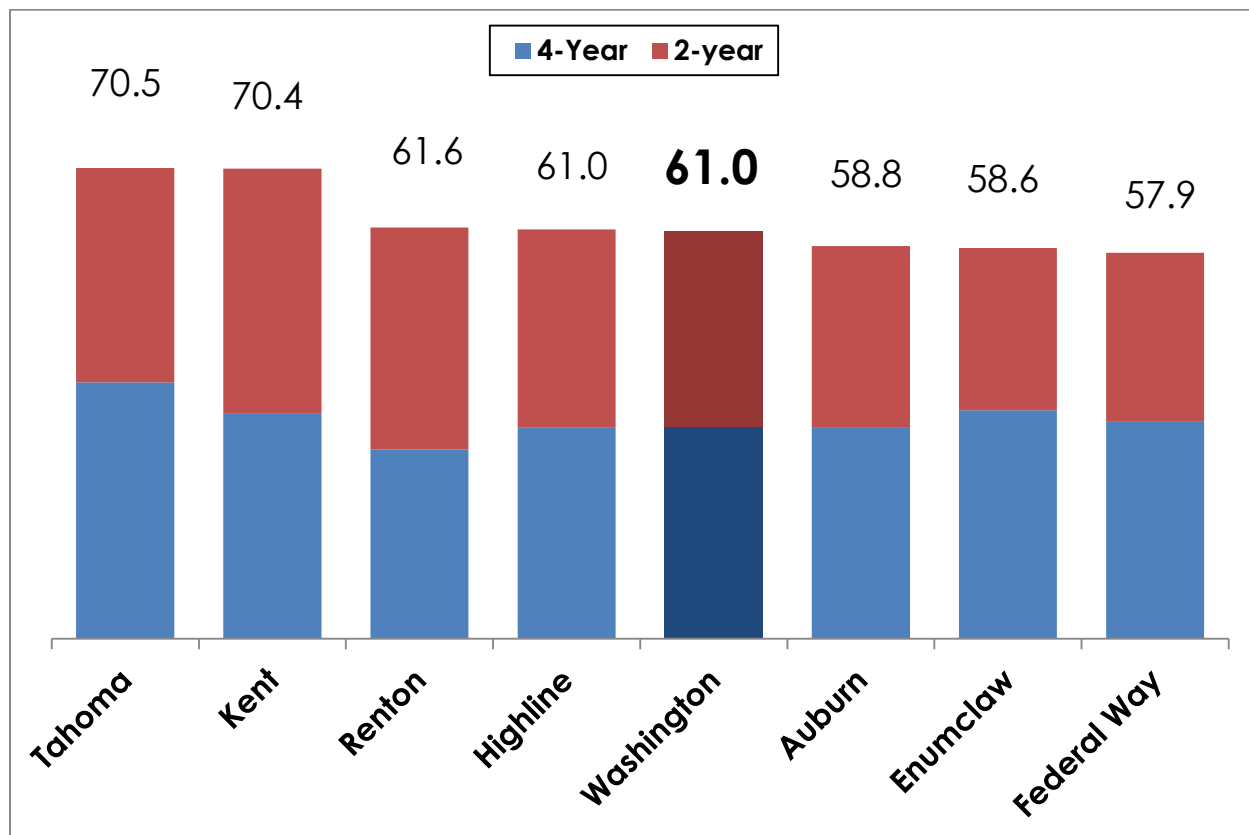
Postsecondary Enrollment Trends

An analysis of college participation rates of high school graduates in King County reveals that rates of college enrollment by students in southeast King County (61 percent) are similar to those observed statewide (see Figure 11).

In fact, some area school districts boast significantly higher college attendance rates than the state average. In 2014, Tahoma and Kent sent 70.5 and 70.4 percent of their graduates on to postsecondary education respectively, well above the state average of 61 percent. Renton and Highline are just slightly above the state average (by a margin of less than one percentage point). Meanwhile, Auburn (58.8 percent) and Enumclaw (58.6 percent) fall just below the state average. The lowest college participation rate in the area belongs to Federal Way at 57.9, just 3.1 percentage points below the state average.

Though the breakdown between students attending two- versus four-year institutions is relatively consistent across the area, the percentage of students from the Renton School District who attend four-year institutions (28.3 percent) is slightly lower than that of both the state as a whole (31.7 percent) and the average of the six surrounding districts (33.7 percent).⁴⁵

Figure 11. King County High School Graduate College Participation Rates by District and Sector, 2014



Additional data from Washington's Education Research and Data Center demonstrates that most public high school graduates from these seven districts attended in-state, public institutions, ranging from a low of 65 to 73 percent of Enumclaw college-goers attending public institutions of some kind to a high of 87 percent among Renton's college-goers.⁴⁶

Tables 17 through 23 show where students attended college immediately out of high school by school district for the most recent year available, 2014. These tables describe where approximately 80 percent of the college-going high school graduates matriculated. The remaining 20 percent of students attended a wide variety of institutions, so the list of institutions up to the cumulative 80 percent figure captures the institutions that are most commonly attended by area students.⁴⁷

Green River College was the primary destination of students from the Auburn (41.7 percent), Kent (28.9 percent), Enumclaw (41.5 percent), and Tahoma School Districts (37.3 percent). Of the students who participated in postsecondary education in the Federal Way and Highline School Districts, the largest percentage (36.8 and 32.1 percent, respectively) attended Highline College. Meanwhile, just over 32 percent of students from Renton School District attend Bellevue Community College. For the most part, these results mirror national research that indicates students tend to choose postsecondary options based on geographic proximity, with students typically opting to

attend nearby institutions.⁴⁸ An important note regarding these data is that they do not break down attendance to the branch campus level; for example, a student attending the University of Washington main campus in Seattle and a student attending the University of Washington Tacoma are both listed as attending the University of Washington.

Table 17. Auburn School District: High School Graduate College-Going Counts by Institution, 2014

Institution	College-Going Count	Percent	Cumulative Percent
Green River College	188	41.7	41.7
University of Washington	79	17.5	59.2
Washington State University	34	7.5	66.7
Central Washington University	30	6.7	73.4
Highline College	30	6.7	80.0
Other Institutions	90	20.0	100.0

Table 18. Enumclaw School District: High School Graduate College-Going Counts by Institution, 2014

Institution	College-Going Count	Percent	Cumulative Percent
Green River College	51	41.5	41.5
Central Washington University	17	13.8	55.3
University of Washington	16	13.0	68.3
Washington State University	11	8.9	77.2
Western Washington University	8	6.5	83.7
Other Institutions	20	16.3	100.0

Table 19. Federal Way School District: High School Graduate College-Going Counts by Institution, 2014

Institution	College-Going Count	Percent	Cumulative Percent
Highline College	248	36.8	36.8
University of Washington	187	27.8	64.6
Washington State University	71	10.5	75.2
Green River College	38	5.6	80.8
Other Institutions	129	19.2	100.0

Table 20. Highline School District: High School Graduate College-Going Counts by Institution, 2014

Institution	College-Going Count	Percent	Cumulative Percent
Highline College	175	32.1	32.1
University of Washington	128	23.4	55.5
South Seattle Community College	80	14.7	70.1
Washington State University	44	8.1	78.2
Western Washington University	27	4.9	83.2
Other Institutions	92	16.8	100.0

Table 21. Kent School District: High School Graduate College-Going Counts by Institution, 2014

Institution	College-Going Count	Percent	Cumulative Percent
Green River College	271	28.9	28.9
University of Washington	167	17.8	46.7
Highline College	133	14.2	60.9
Bellevue Community College	99	10.6	71.4
Washington State University	80	8.5	80.0
Other Institutions	188	20.0	100.0

Table 22. Renton School District: High School Graduate College-Going Counts by Institution, 2014

Institution	College-Going Count	Percent	Cumulative Percent
Bellevue Community College	160	32.6	32.6
University of Washington	110	22.4	55.0
Renton Technical College	79	16.1	71.1
Washington State University	32	6.5	77.6
Western Washington University	18	3.7	81.3
Other Institutions	92	18.7	100.0

Table 23. Tahoma School District: High School Graduate College-Going Counts by Institution, 2014

Institution	College-Going Count	Percent	Cumulative Percent
Green River College	103	37.3	37.3
Bellevue Community College	38	13.8	51.1
University of Washington	36	13.0	64.1
Washington State University	34	12.3	76.4
Western Washington University	21	7.6	84.1
Other Institutions	44	15.9	100.0

Existing Postsecondary Programs

Data from the preceding section demonstrate that, overall, students in southeast King County who wish to enter a postsecondary program have reasonable options available to them, given that they enroll in postsecondary programs at a rate close to or higher than the state average.

Overall, these institutions offer area students a relatively robust set of postsecondary opportunities. Appendix F describes the available local offerings—defined for the purposes of this report as those offered by Renton Technical College and Green River College, as well as WGU Washington's online offerings and programs offered by the Muckleshoot Tribal College—for the 2015–16 academic year, including available degrees and programs.

However, analysis of the available degrees and programs does show breaks in pathways offered locally for the nursing profession – which is particularly significant given the high demand for the profession outlined in the subsequent section on workforce needs. Green River College offers a program in Licensed Practical Nursing (LPN) and a Nursing Assistant certificate; Renton Technical College offers a Nursing Assistant certificate and an associate's degree of applied science transfer degree in nursing that leads to registered nursing licensure. Yet the only bachelor's degree in nursing available in the immediate area is through WGU Washington, which is offered online only. Therefore, a brick-and-mortar pathway to a bachelor's in nursing is not available in the immediate study-area landscape, even though this is one of the most in-demand degrees in the regional economy.

However, there are programs relatively close to the study area. Highline College currently has a Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) agreement with the University of Washington Tacoma, assuring an RN-to-BSN pathway for Highline RN graduates. If the cohort from Highline is sufficiently large, the program will be taught on the Highline campus. However, this location is further away and may pose difficulties for accessibility, particularly for working adults. Bellevue College in Bellevue, Washington—about 30 miles north of southeast King County—also offers an RN-to-BSN program, yet represents a significant commute for southeast King County residents.⁴⁹

Postsecondary Transfer Patterns

The State Board for Community and Technical Colleges (SBCTC) provided data on transfer patterns from the local public two-year institutions, including public as well as nonprofit and for-profit private institutions. However, the data do not include WGU Washington (described in a separate table). Among this group, Central Washington University enrolls the most students transferring out of Green River College and Highline College, while the primary destination for Renton Technical College students is the private for-profit University of Phoenix. The University of Washington Tacoma is a close second in transfer numbers for Green River College and Highline College; it also enrolls the highest number of Renton Technical College students among public four-year institutions. The full list of transfer destinations for students from Green River College, Highline College, and Renton Technical are described in Figures 12, 13, and 14 respectively.

Consistent with Renton Technical College's mission of primarily offering workforce-oriented degree and certificate programs—many of which are not designed to transfer to traditional baccalaureate programs—Renton has a significantly smaller overall number of transfer students than community colleges such as Green River and Highline which are designed to serve students who seek to transfer to four-year institutions.

Figure 12. Number of Students Transferring from Green River College (Academic Year 2014–2015)

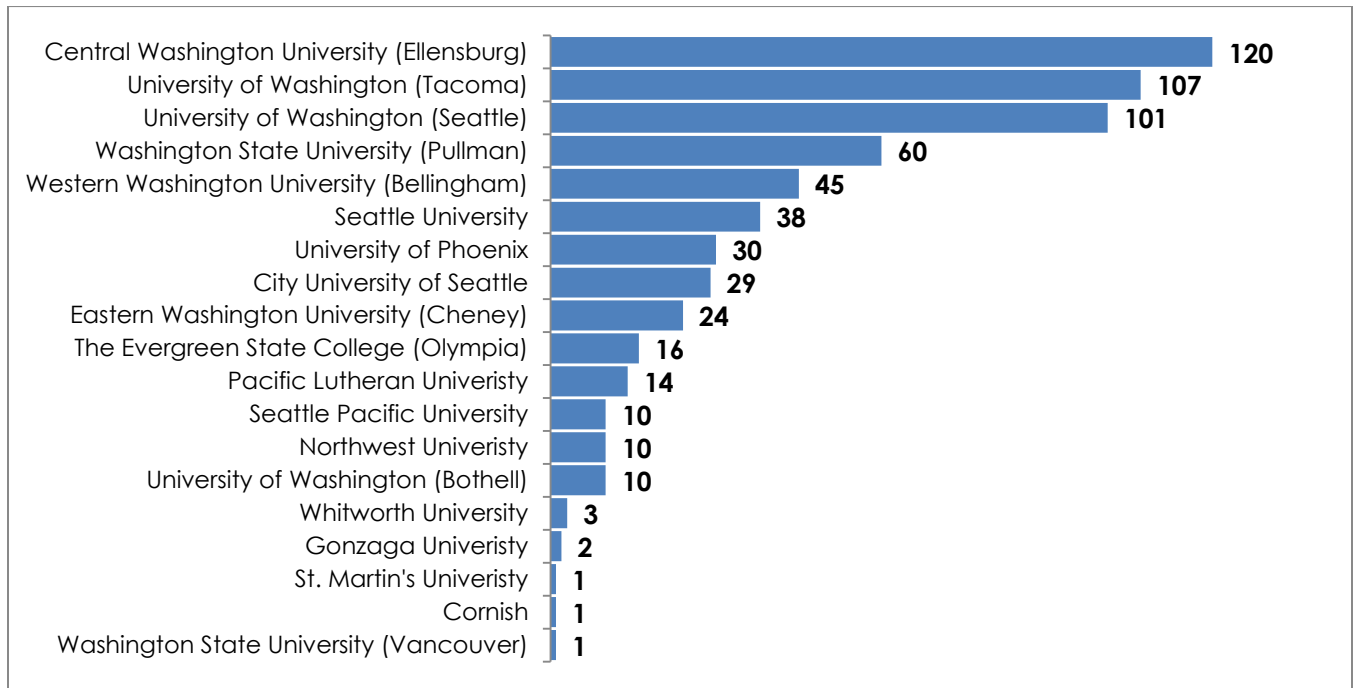


Figure 13. Number of Students Transferring from Highline College (Academic Year 2014–2015)

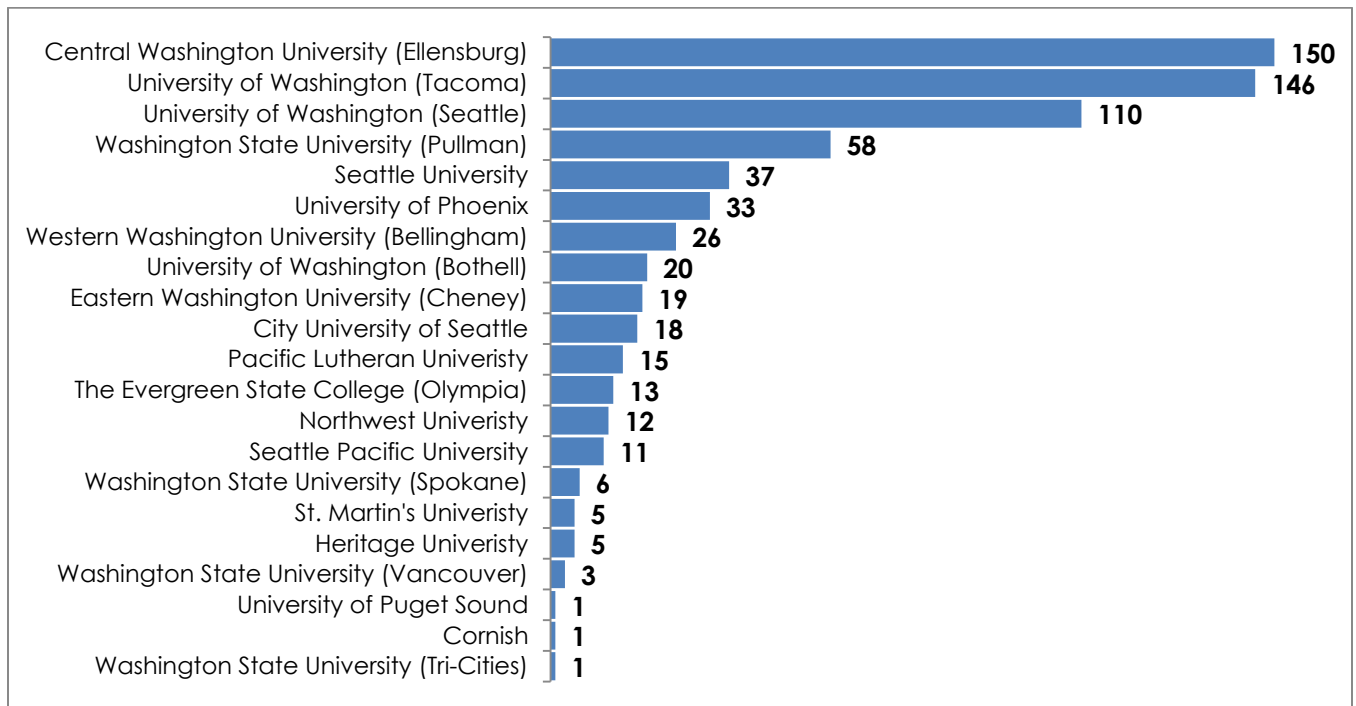
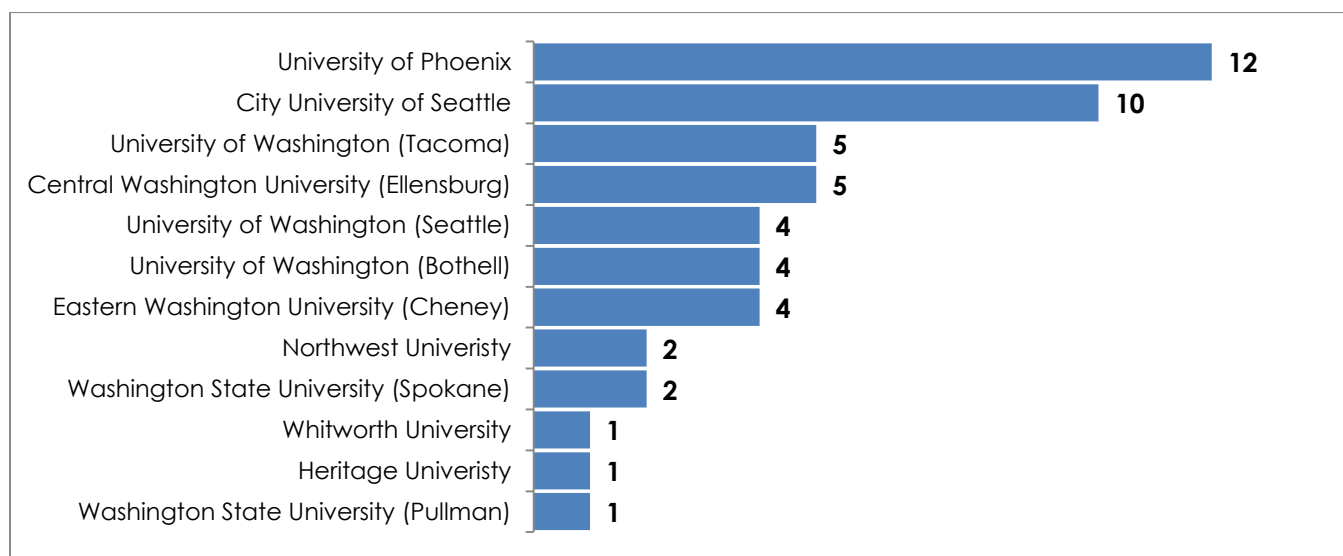


Figure 14. Number of Students Transferring from Renton Technical College (Academic Year 2014–2015)



WGU Washington also enrolls many area transfer students, although their data were from August 2016 and are therefore not directly comparable to the SBCTC data from academic year 2014–2015. Nonetheless, it is evident that WGU Washington functions as a major transfer destination for local students, particularly from Green River College. Moreover, the cumulative graduate numbers indicate that WGU Washington offers a viable completion option for area community and technical college students (see Table 24).

Table 24. WGU Washington Student Transfer Institutions, August 2016

Institution Transferred From	Active WGU Students	New Students Over Previous 12 Months	Cumulative Graduates
Green River College	143	36	179
Highline College	45	10	55
Renton Technical College	59	3	62
Total	382	183	128

Economic Demand and Workforce Needs

King County

Because many area residents commute to work, this analysis considered workforce demands and projections for King County as a whole in addition to area-specific data. Washington’s Employment Security Department collects data on employer demand and produces employment projections by county. A review of King County’s data reveals that IT-focused jobs currently top the list of high-demand jobs and come with a

robust median annual wage. The demand for RNs is the fourth-highest, and they too command a healthy wage. Interestingly, the top six in-demand jobs are rounded out by retail salespeople (#5) and customer service representatives (#6), both of which have significantly lower median annual wages. For example, the median annual wage for a software developer is more than \$85,000 higher than that of a retail salesperson, which may in part be reflective of the part-time nature of much retail employment. A list of the top ten in-demand occupations in King County in October 2016 is available in Table 25.⁵⁰

Table 25. Top Occupations Advertised Online for King County, October 2016

Rank	Job Title	Median Annual Wages
1	Software Developers, Applications	\$113,555
2	Computer Occupations, All Other	\$87,752
3	Marketing Managers	\$144,009
4	Registered Nurses	\$88,717
5	Retail Salespersons	\$27,672
6	Customer Service Representatives	\$36,475
7	Web Developers	\$110,560
8	First-Line Supervisors of Office and Administrative Support Workers	\$57,278
9	Network and Computer Systems Administrators	\$91,984
10	Computer Systems Analysts	\$93,572

Looking to the future, the Employment Security Department's projections for King County indicate that present trends are likely to continue, with job growth dominated by high-skill professions such as professional services, information, health services, and education. Meanwhile, hospitality and retail jobs are also projected to grow over the coming years.

At the other end of the spectrum, manufacturing and natural resources jobs are projected to decline and remain stagnant respectively (see Table 26). Ultimately, this suggests that southeast King County residents will be increasingly likely to require postsecondary credentials for employment.⁵¹

Table 26. King County Long-Term Industry Projections

Industry	2014–2019	2019–2024
Professional and Business Services	3.1%	2.5%
Information	2.8%	2.4%
Education and Health Services	2.1%	2.0%
Leisure and Hospitality	2.0%	1.6%
Retail Trade	2.3%	1.2%
Other Services	1.6%	1.2%
Government	1.3%	0.9%
Wholesale Trade	2.0%	0.8%
Construction	3.0%	0.5%
Transportation, Warehousing and Utilities	2.1%	0.4%
Financial Activities	0.7%	0.3%
Natural Resources and Mining	0.0%	0.0%
Manufacturing	-0.4%	0.0%

Southeast King County

Despite the significant proportion of the workforce that commutes outside southeast King County for employment, many area stakeholders hope to shift this balance over time by generating economic demand and ensuring the region has a high-skill workforce in place to meet this demand.

In meeting with stakeholders across southeast King County, it became clear that—despite the specificity of the geographic area—economic trends and employer needs still vary significantly. For example, Enumclaw's major industries include dairy farming, manufacturing, and insurance.⁵² Meanwhile, Covington's primary industries are healthcare, hospitality, and retail. The Muckleshoot Tribe is also a leading area employer, with a workforce of over 2,400.⁵³

High-Need Occupations

To assess high-need occupations in southeast King County, WICHE and NCHEMS developed supply and demand data using Burning Glass demand data and by comparing the number of job postings for various occupations with the number of degrees produced in fields that prepare students for those occupations. Stakeholder interviews further informed the analysis. Overall, many interview subjects felt that there was a sense of unmet need locally in the fields of nursing, teaching, and IT, which tracks well with the data from King County as a whole.

Current employer demand at the county and local levels, as well as projections from the Washington State Registered Nurse Supply And Demand Projections from the

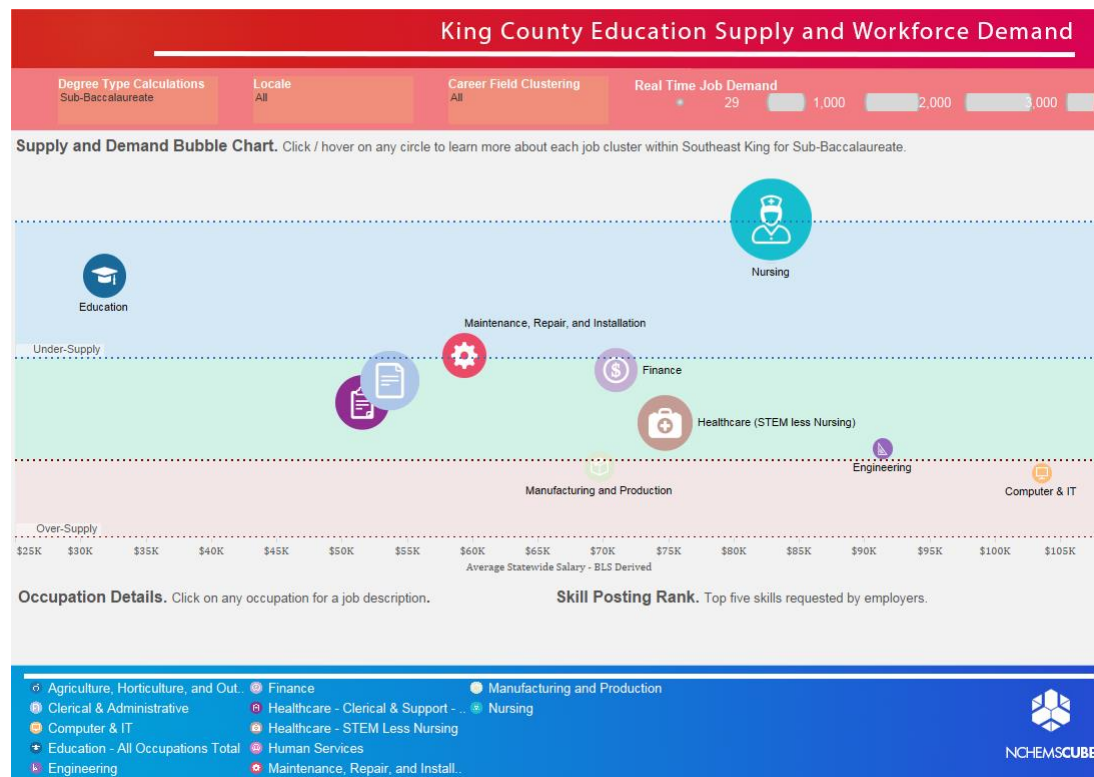
Center for Health Workforce Studies and stakeholder interviews bear out the demand for RNs in particular.⁵⁴

Teaching demand is further supported by stakeholder interviews, as well as by statewide data such as the Office of Superintendent of Public Instruction's 2015 survey of teacher shortages, which revealed that 29 percent of respondents had unfilled classroom teacher positions and that 44 percent were unable to fill their open positions with fully certified teachers who met job qualifications.⁵⁵ However, as teaching positions are not typically posted on public online job sites, the Burning Glass data were not able to identify demand here.

Finally, there is clearly demand in IT fields in King County (likely clustered in Seattle) which would be of interest to area residents who are amenable to commuting. However, analysis of the Burning Glass data—which are based on the location of the employers—did not reveal an unmet demand for IT professionals in southeast King County specifically.

The Burning Glass analysis is presented in Figures 15 and 16, separated by employer demand for jobs with sub-baccalaureate credential requirements (Figure 15) and for those with baccalaureate requirements (Figure 16).

Figure 15. Southeast King County Supply and Demand: Sub-baccalaureate



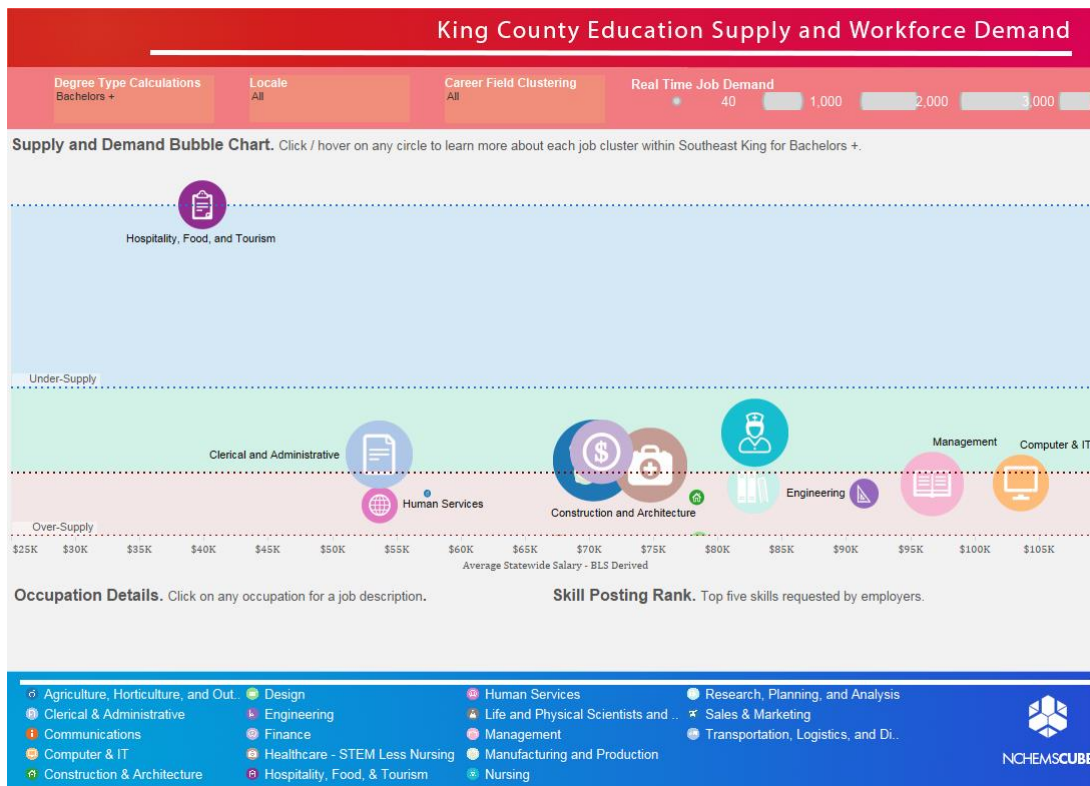
As shown in the figure above, there is a marked undersupply of people with sub-baccalaureate credentials in nursing — which could be both licensed practical nurses (LPNs) as well as RNs with associate's degrees in Nursing (ADNs). Stakeholder interviews suggest that RNs are in the greatest demand, though that there is also a significant demand for LPNs in southeast King County specifically. The demand for education professionals at the sub-baccalaureate level also shows up as exceeding supply, however these jobs—for example, teacher's aides and paraprofessionals—are relatively low paying. Although healthcare services make up one of southeast King County's key industries, supply and demand appear to be well-matched for non-nursing health professions at the sub-baccalaureate level.

At the baccalaureate level, as shown in Figure 16, the job cluster that is in shortest supply compared to the demand is Hospitality, Food, and Tourism — the area's other main industry. As shown, this job cluster is low paying, even at the bachelor's level. While the data do not reveal a current undersupply of baccalaureate-level nurses, this could reflect the fact that job postings may describe the minimum credentials required for an RN (a licensed nurse with an ADN) though employers might prefer applicants with a bachelor's degree.

Stakeholder interviews suggest that RNs as a group are in demand, but those with BSNs are preferred; furthermore, there is an increasing shift towards hiring RNs with this qualification as well as supporting current employees to pursue an RN-to-BSN pathway. Bachelor's-level credentials are becoming increasingly important for nursing applicants to be competitive. Additional factors that may lead to an increase in demand for baccalaureate-level nurses are projected retirement waves linked to workforce cohorts aging out, the continuing impact of the Affordable Care Act, and evolving nursing preparation requirements.⁵⁶

Local considerations also suggest that in the future demand may be on the rise in this geographical area. Specifically, MultiCare Health System, which describes itself as a “not-for-profit health care organization with more than 10,000 employees and a comprehensive network of services throughout Pierce, South King, Thurston and Kitsap counties,” is building a new 58-bed hospital in Covington.⁵⁷ This new facility and the surrounding medical services that are expected to emerge in the coming years will likely increase the demand for baccalaureate-level nurses and RNs as well as other medical professionals. Interviews revealed a competitive environment when hiring qualified nurses and other medical professionals, and the expectation is that this trend will continue in the near future.

Figure 16. Southeast King County Supply and Demand: Baccalaureate



Assessment of Need

In sum, demographics are shifting in southeast King County. The population of the area has been steadily growing, and this trend is projected to continue. Simultaneously, southeast King County is growing more diverse as shown by data trends in the area's school districts.

While income levels for residents of southeast King County are comparable to those of residents in surrounding areas, levels of degree attainment are below their neighbors. While historically this may not have been a challenge for the area given the relatively strong economic performance of the area's some, college, no degree group, as living-wage jobs are increasingly likely to require a postsecondary credential this disparity will be something for local and state leaders to consider.

Both quantitative and qualitative data show that local postsecondary education options are serving traditional-age students. On the other hand, the large number of people in southeast King County with some college credit, but no degree suggests that this is a gap that needs to be addressed. Furthermore, WSAC's 2015 Roadmap Update has identified postsecondary recruitment, retention, and completion for working-age adults areas requiring further progress.⁵⁸

Healthcare employment, specifically nursing, is an area that emerged as a current and growing need in southeast King County. Covington, in particular, already serves as a hub for medical services, but with the new hospital under construction, it is reasonable to expect that more RNs and those with BSN degrees will be desired even more than they are now, yet local access to brick and mortar BSN programs is limited. Stakeholder interviews suggest that the available BSN completion programs at Highline and Bellevue are too far away for working RNs looking to complete a BSN. Teaching also appears to be a field with high levels of demand, as well as IT jobs for those willing to travel outside southeast King County for work. Though WGU Washington offers programs in each of these areas and Green River College and Renton Technical College offer some relevant pathways, southeast King County still lacks a brick-and-mortar structure that can support the efforts of the area's older residents to complete their credentials.

Options for Consideration

Based on analysis of quantitative and qualitative data, several key principles and features have emerged that inform the recommendations for a postsecondary education solution for southeast King County.

Principles

The following are the four key guiding principles that arose from the needs assessment.

- **Demand is for the provision of services, not for a new institution.** Data analysis suggests that there is insufficient need for a new postsecondary institution in southeast King County. There is an argument to be made, however, for the provision of services, particularly around healthcare professions (specifically nursing) and adult degree completion programs.
- **Local response needs to be driven by local demand, not institutional supply.** It is clear that for any model to be successful in this area, local demand must drive the solution. The solution should not hinge on what postsecondary institutions would like to offer without regard to what programs the area needs.
- **The solution must be responsive to changing workforce demands.** The workforce in southeast King County is changing. Historically, workers in the community have commuted, but now there is significant interest in changing that dynamic. As such, any realistic solution must be able to respond to shifts in workforce demands.
- **Travel considerations make local access important.** Traffic is a community-wide concern, and it negatively affects travel times. Given that the expected demand for postsecondary options is among adults, traffic and commuting must be considered as adults will tend to access postsecondary institutions in the evenings when traffic is at its worst, thus making local access vital to success.

Features

The following features will promote alignment of a local postsecondary solution with the area's needs and help to ensure sustainability over the long term.

- **Adult students are likely to be the primary audience.** Both quantitative and qualitative data suggest that the need for postsecondary education options is greatest among working-age adults. Therefore, the solution needs to be built around what works best to serve this group.
- **The solution must be flexible.** The solution must be flexible to be successful. Southeast King County must be able to identify the needs of its residents, find providers, and facilitate the offering of educational options. Moreover, local leaders must be prepared to do this repeatedly over time as some needs are filled and new ones emerge.
- **Consider distance/hybrid options.** Given the traffic challenges and the recommended target audience of working-age adults, distance/hybrid (combination of online and face-to-face instruction) options should be considered.
- **The solution should not be limited to one provider, but there should be one provider per program at the facility.** To provide the appropriate diversity of program offerings, more than one provider will be required as no institution will be able to offer the array of programs likely to be needed. However, there should be one provider per program at the facility to avoid unnecessary complexity and confusion for students as well as potential conflicts of interest for student services providers and advisors.
- **The provision of appropriate support services will be a key to success.** Particularly considering that working-age adults are the primary audience, the provision of appropriate on-site support services will be integral to a successful solution. Simply offering classes near their place of residence or work without access to advising, a registrar, a bursar, and other services, will be a set-up for failure.

Delivery Models

WSAC asked the project team to consider higher education options that included: a branch campus, a university center, a private university, and an online learning center. The project team narrowed down this initial list using data on existing needs for postsecondary options in the study area as well as extensive consultation with the Advisory Committee and WSAC staff. The relatively modest magnitude of the demonstrated need—together with its pronounced slant towards older students and the associated costs and administrative burden of building a new campus—led all those consulted to suggest that the local demand in this area was not sufficient to warrant a branch campus or a brick-and-mortar private university.

Further, given the strong network of existing public providers within reasonable proximity, it is not clear that a private provider should lead the effort. However, private institutions could be valuable partners in a university center model through program offerings as well as by continuing to provide online programs to area residents. Moreover, the public institutions in the surrounding area have expressed a potential willingness to collaborate on offerings in the area. To date, private providers have not approached the community outside of WGU Washington's guidance as a member of the Advisory Committee.

Thus, the project team focused primarily on the idea of a university center—in different configurations—as well as an online learning center as a potential solution. Ultimately, the project team deemed these two forms of higher education delivery the most responsive and cost-effective ways to meet the area's needs. After a scan of university center models in Washington and across the country and in consultation with the Advisory Committee, the project team identified the following three options as the most promising.

- **One Facility, Multiple Institutions**

This model could function in a variety of ways as outlined below. Best practice suggests, however, that each program offered should have only one provider, thereby discouraging intra-center competition for students and promoting cohesion among providers.

- A “2+2 model,” as is common in Washington, whereby a local community college partners with a four-year institution to offer students the opportunity to complete a four-year degree at the location of the center. A nearby example of this would be Highline College's partnership with Central Washington University's center at Highline College “Central Washington University - Des Moines,” which offers several bachelor's degree programs in fields including teaching and business administration, as well as three master's programs.
- A single facility that houses multiple providers, such as the Everett University Center in Everett, Washington. This configuration relies on a host institution—in this case currently Washington State University—with multiple providers offering a greater diversity of programming than a single provider would have the capacity to provide. The Everett University Center is housed on the campus of Everett Community College and offers classes from Washington State University, Western Washington University, Hope International University, University of Washington Bothell, Eastern Washington University, The Evergreen State College, and Central Washington University. The Everett University Center provides course

offerings through a variety of modalities, including face-to-face instruction, hybrid courses, and online-only courses.⁵⁹

- **One Facility, One Institution**

A single facility could host a single institution offering a select set of programs and/or classes at a location that is more convenient for area students. Green River College's Kent Station and Enumclaw campuses are two examples of this approach. The Kent Station location in particular could serve as a potential model for a local entity, given that it operates in a downtown commercial/retail space and offers a number of classes and student support services on site.

- **Online Learning Center**

The idea of a physical presence to support fully online programming was also suggested as an option. This structure is far less common, although there are some interesting models. For example, in Illinois the University Center of Lake County offers fully online degree completion programs targeted at adult students. The center supports online programs by providing a facility with computers that students may use to do their coursework, a preadmission advisor well-versed in the online programs offerings, and proctoring services.⁶⁰

An even less-costly model involving distance education might be to pursue a marketing and recruitment partnership with a fully online provider, such as WGU Washington, and providing minimal space only for enrollment and administrative functions.

For planning purposes, a path from one option to another other might be workable. For example, starting with an online learning center and, over time, expanding it into one of the other two options.

Evaluation of Options

The principles and features identified in the preceding section provide a set of criteria for evaluating the different delivery models outlined above. While the matrix presented in Figure 17 is only a rough evaluation of potential options, it provides a quick visual reference for examining how each of the three most promising delivery models respond to the area's key needs.

This preliminary analysis is limited in that it does not weight the different factors. For example, whether or not a program has robust student support services might not make a difference if the program is not financially sustainable. Therefore, project planners may want to consider weighting certain criteria more heavily as they move farther along in the process.

Figure 17. Options Matrix

	One Facility, Multiple Institutions	One Facility, One Institution	Online Learning Center
Locally Accessible	If located in a southeast King County hub, this would provide increased access to the community.	If located in a southeast King County hub, this would provide increased access to the community.	If located in a southeast King County hub, this would provide increased access to the community.
Flexible Program Offerings	Would offer maximum flexibility in program offerings.	Would be restricted to what the provider has available.	Theoretically flexible, would depend on offering institution(s). However, minimal infrastructure needed would enhance flexibility.
Adequate Student Support services	If there was a single provider of student support services, this consistency could support students through to degree completion.	Would allow for clear responsibility in provision of services (though likely would be less robust than on home campus).	Could provide student support services for online learners such as guidance through the collegiate process and proctoring. However, unclear who would function as provider.
Designed for Adult Learners	Flexibility in offerings would be a positive for adult learners, would also allow for completion programs in a variety of fields.	Would likely not fully meet the needs of the local population with some college, but no degree.	Depending on programs could be a good option; however, adult learners would benefit from on-the-ground support to succeed.
Financially Sustainable	Could be a challenge to attract and retain a number of providers willing to offer programs, as well as to supply students for a range of programs on a consistent basis.	Could be relatively low cost to operate, however, would need to ensure that offerings were in appropriate demand locally.	Should be the lowest cost option to implement given minimal infrastructure needs.

Color Key	Solidly meets criterion	Somewhat meets criterion	May meet the criterion	Does not meet the criterion
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Financial Models

Of course, the selection of a delivery model will depend largely on its long-term sustainability. Indeed, the fundamental question for moving this endeavor forward is: How will a higher education solution be funded? This question will need to be asked at several junctures to address startup infrastructure costs, ongoing maintenance, and ongoing operating costs. The following list outlines the anticipated costs that would need to be addressed.

- **Physical space:** This could be in the form of a purchased, rented, or donated facility. To date, there has not been an offer of reduced-cost space from any area entities. While the City of Covington envisions contracting with a developer to construct a downtown civic space that might offer a location, the current plan is for the city's developer to lease space to tenants at market rate.
- **Parking:** Given the propensity of local residents to use their own vehicles to commute to work, a space with adequate parking will be required. To be good neighbors, care will be needed not to impinge on the parking expectations of other local businesses as students can be expected to spend many hours at a time at the center.
- **Equipment/Technology Provider:** The location would need to be outfitted with appropriate technology for course offerings, as well as the necessary support to ensure that it functions properly when needed.
- **Site Management:** A space would need management of some kind for coordinating participating entities and providing building services.
- **Teaching:** Faculty compensation will be a critical component of the decision-making process and may differ based on location and mode of instruction (online, hybrid, or face-to-face). This question will be especially critical if a nursing program of some kind is implemented, as there is already a shortage of nursing faculty in the area.
- **Student Services:** The provision of student services and what portion of these are offered on-site and/or remotely from a host campus will also factor into overall costs. For example, certain services such as bill payment and course scheduling, may be easy to provide on-site (as is the case at the Green River College Kent Campus), but others, such as disability services, are more likely to be delivered remotely.
- **Recruitment (Cohort Building):** Perhaps most importantly for long-term sustainability, a local entity must be responsible for creating student cohorts to fill programs offered at the higher education location. A steady stream of students will be required for any option to be able to operate over time. The Muckleshoot Tribal College offers a promising model for this approach. Its staff actively surveys community needs and then identifies and brings in programs to meet these needs. For example, as the Muckleshoot Tribe was working on building out its K–12 school, the tribal college partnered with Antioch College to offer teacher preparation programs. Currently, it offers programs in early childhood education in partnership with Green River College and in tribal management with Northwest Indian College to meet the tribe's workforce needs.

Several Advisory Committee members noted that university centers are often required to charge higher tuition than their on-campus counterparts do in order to cover their operating costs, because they do not benefit from the economies of scale achieved

on full campuses. Therefore, a more geographically convenient option might not be as affordable.

There are exceptions to this trend, such as the Everett University Center, which enjoys additional state funding that covers the gap between regular tuition costs and the center's operating costs. However, this is a unique arrangement in the state of Washington and not one that could be guaranteed for a center in southeast King County, though such additional funding could help encourage the providers of needed programs to participate if secured.

Potential funding models to pursue include:

- **Primarily Locally-Funded:** It is possible that a municipality—such as a local city—could take the financial lead on a higher education project. However, this would be an unusual model, and the project team did not locate any models of university centers that are primarily city-funded. A number of local jurisdictions throughout Washington have pursued the idea of bringing a physical higher education presence to their jurisdiction. In fact, the neighboring city of Federal Way is pursuing its own higher education needs assessment and is in talks with the University of Washington Tacoma to provide such a presence as an economic driver. However, none of the jurisdictions have opted to take the lead in terms of funding a higher education presence, including Federal Way.
- **Primarily State-Funded:** Another approach would be to seek state funding for a project, as at the Everett University Center. While this would certainly contribute to long-term sustainability, it is unclear whether this would be a viable political option at this time.
- **Hybrid Model of Local and State Support:** An approach more grounded in risk sharing would be to pursue a joint model of local and state funding. As an example, the University Center of Southern Oklahoma in Ardmore, Oklahoma was launched by state statute in the 1970s and administered by the state's office of higher education. The center offers associate's, bachelor's, and master's programs through three public higher education institution partners. Yet, when the center outgrew its location in a local high school, the community was able to secure a maintenance endowment from a foundation as well as matching community gifts to fund the construction of a new building on property owned by the school district (which acts as the landlord).⁶¹ The center also created a foundation in 2006 in order to administer local scholarship programs and to manage capital campaigns for building improvements.

Program and Operating Plan

Based on the considerations described above, and weighting need and feasibility, the project team suggests establishing a small-scale, multiple-provider center operating on

a cohort-based model as the postsecondary education solution for southeast King County. This approach is described in “Proposed Program Model” below. However, recognizing the relatively small overall size of the population of southeast King County, as well as capacity challenges of existing providers, the team strongly recommends pursuing an incremental approach to implementation by confirming local demand in advance of full-scale investment. An outline of this strategy is presented in “Proposed Operating Plan” below.

Proposed Program Model

The proposed model is a modest center-style facility, featuring up to four classrooms fully equipped to deliver online or hybrid course offerings, three offices, and storage space. The center would be staffed by three FTEs, a full-time site manager, a student support staff person, and a clerical support staff person. The site would also pursue contract services — likely for IT support and potentially for other services such as marketing. The location should be in an area that functions as a transportation hub with adequate parking facilities and public bus options if possible.

The center should be managed by a “lead provider” — ideally a two-year institution that could manage student services throughout the student lifecycle and avoids conflicts of interest should multiple institutions offer programs at the center. Perhaps most critically, the site manager would be responsible for assessing community need and for identifying and matching cohorts and programs (similar to the Muckleshoot Tribal College model). Program offerings could be face-to-face, hybrid, or online. In addition, the center would be equipped to offer a range of programs as needed — for example shifting program offerings once a particular local need has been filled. Based on this structure, the costs are estimated in Table 27.

Table 27. Cost Estimates for Suggested Model

Cost Drivers	Cost/Unit	Assumptions	Total Cost/Year
Space	\$30/ft ²	4 Classrooms (600 ft ²)	\$138,450
		3 Offices (120 ft ²)	
		Storage (240 ft ²)	
		Non-assignable Space (35% of total space)	
Equipment and Technology	\$200,000/classroom/5 years of use	4 Fully Equipped Classrooms	\$160,000
		Equipment for Site Staff	
Personnel (Salary + benefits)	\$150,000	Site Manager	\$310,000
	\$60,000	Clerical Staff Person	
	\$100,000	Student Support Professional	
Contract Services	\$44,800	IT Support, Marketing Costs, ⁶² etc.	\$40,000 (IT) +\$120/student (Marketing)
TOTAL ONGOING BASE ANNUAL COSTS			\$653,250

Proposed Operating Plan

Ultimately the center model outlined in the program plan is straightforward and the key considerations will arise once implemented. Implementation will require the identification of local demand for specific programs, a lead provider, and the responsible entities for each of the major functions and their accompanying costs — outlined in Table 28.

Table 28. Operating Plan for Suggested Model

Role	Key Functions	Potential Responsible Entities
Landlord	Owns property, Maintains property	<ul style="list-style-type: none"> • City • Lead Provider
Technology Provider	Owns equipment, Maintains equipment	<ul style="list-style-type: none"> • Lead Provider
Site Management	Promotes site, Builds cohorts, Enlists providers, Schedules Facilities	<ul style="list-style-type: none"> • Lead Provider • State
Student Services	Enrollment, Bursar, Advising Financial Aid	<ul style="list-style-type: none"> • Lead Provider – ideally a two-year institution to mitigate conflicts of interest in advising if there are multiple four-year participants
Content Provider	Teaches courses	<ul style="list-style-type: none"> • Lead Provider • Multiple Additional Providers

As noted in the section introduction, the project team does not recommend making an immediate investment in a center facility, but rather taking an incremental approach. By completing each of the four suggested steps below in sequence, gradual investments could be made to confirm local demand and needs, which could lead to the creation of a center well-positioned, over time, to meet local needs and operate in a sustainable fashion.

Four Recommended Interim Steps

- 1) Confirm lead partner:** Identify and confirm a provider willing to act as lead provider. In the local context, the clear candidate is Green River College. However, due to the leadership transition currently underway at that institution, it is recommended that this process not be undertaken until the transition has been completed and new permanent leadership is in place.
Estimated Cost: Staff time of WASC, SBCTC, or similar entity who could function as conduit of startup funds.
- 2) Obtain funding for a site manager:** Secure funding to hire a provisional site manager to conduct community outreach and identify potential cohorts and their programs of interest. Also, explore employer partnerships. A part-time clerical staff person may also be needed, as well as a small operational budget

to cover costs such as those related to IT and marketing.

Estimated Cost: \$250,000

3) Run pilot cohort recruitment phase: Identify potential students for program(s).
Run initial programs (could be on-site at partner institution).

Estimated Cost: Dependent on contributions of space, staff time, and the provision of courses by the partner. If additional state FTE student support could be obtained—as at the Everett University Center—this would likely encourage the desired programs to participate.

Based on supply and demand data, stakeholder interviews, and Advisory Committee feedback, the following programs may be candidates for which to explore local interest.

- RN-to-BSN program: Explore partnerships with MultiCare and Valley Medical Center. There may also be demand for other nursing programs, such as LPNs, and for master's-level programs. However, the most pressing demand appears to be for a BSN completion program.
- Teacher preparation programs: Consider programs that offer relatively accelerated paths to certification such as Washington's "Route 1" alternative certification pathway which is designed for currently employed classified instructional employees with transferable associate's degrees seeking residency teacher certification with endorsements in specific fields. Another option could be a Master of Arts in Teaching (MAT) program, in which those with subject-matter specific degrees pursue teaching credentials in their fields, rather than a full two-year teacher education program (e.g., WGU Washington's Master of Arts in Teaching Mathematics).
- IT Certifications: Programs that award high-value certifications could be valuable for local adults who seek to obtain higher paying jobs outside the study area without having to complete a full degree program. For example, the Employment Security Data shows that the most in-demand skills in King County are dominated by IT-related competencies such as Java, SQL, C/C++, Linux, and Python.
- Behavioral Health: An Advisory Committee member suggested that the recommendations of the 2015 Adult Behavioral Health System Task Force established by the legislature indicate that programs focused on stackable credentials and bachelor's degrees in this sphere might be of increasing interest to the state in coming years as they address a shortage of behavioral health professionals.⁶³ Stakeholder interviews revealed there

is also a need for nurses with a specialty in mental health.

- 4) **Expand as demand dictates:** If demand is clearly demonstrated, pursue investments from multiple sources to implement the center model.
Estimated Cost: \$653,250

Appendix A. Methodology

The higher education assessment began in July 2016 and was completed in November 2016. The Western Interstate Commission for Higher Education (WICHE) managed all aspects of the higher education needs assessment and the development of the operating plan in collaboration with staff from the Washington Student Achievement Council (WSAC). The study was conducted in consultation with an Advisory Committee organized and convened by WSAC.

WICHE subcontracted with the National Center for Higher Education Management Systems (NCHEMS) — a private nonprofit 501(c)(3) organization whose mission is to improve strategic decision making in higher education for states and institutions in the United States and abroad — to conduct portions of the assessment and assist with the development of the operating plan. NCHEMS has considerable experience in conducting these types of assessments, having conducted them in more than 20 states and regions across the country.

WICHE also obtained assistance from Russell Poulin, Director, Policy and Analysis, of the WICHE Cooperative for Educational Technologies (WCET). Poulin helped analyze and assess the existing distance education landscape in southeast King County, as well as review emerging trends in distance education that may affect the region. WCET is the leader in the practice, policy, and advocacy of technology-enhanced learning in higher education.

Biographies of key WICHE and NCHEMS personnel are included in Appendix B, and a full list of the Advisory Committee is available in Appendix C.

Key Activities

To conduct the higher education needs assessment and develop the operating plan to meet the needs identified it identified, WICHE engaged in seven key activities as described below.

Coordinated and Convened the Advisory Committee

WSAC identified civic, business, and education leaders from southeast King County to serve on the Advisory Committee. The role of the Advisory Committee was to guide the work of the assessment, ensure the integrity of the process, and provide stakeholder input to WSAC and WICHE staff. WICHE worked with WSAC to coordinate and convene the Advisory Committee at key points during the project period as well as to consult with members on an as-needed basis. Advisory Committee meetings were held on the following days at corresponding locations located in or near southeast King County (meeting goals for each meeting are listed):

- **July 22, 2016 (City of Covington Offices, Covington)**
Meeting Goals
 - Introduce staff to Advisory Committee
 - Present and solicit feedback on study plan of action
 - Discuss role of Advisory Committee
 - Identify key regional stakeholders for interviews
 - Confirm upcoming dates
- **August 31, 2016 (City of Covington Offices, Covington)**
Meeting Goals
 - Provide project status update
 - Conduct focus group with Advisory Committee
 - Confirm upcoming dates and locations
- **October 6, 2016 (MultiCare Covington Medical Center, Covington)**
Meeting Goals
 - Provide project status update
 - Present preliminary quantitative data
 - Present qualitative data on the stakeholder interviews
 - Present features/principles that will guide the final recommendations
 - Confirm upcoming dates and locations
- **October 26, 2016 (Muckleshoot Tribal College, Auburn)**
 - Provide project status update
 - Present additional quantitative data
 - Present preliminary report
 - Solicit feedback on preliminary report
- **November 18, 2016 (City of Covington Offices, Covington)**
 - Provide an update on the WSAC meeting
 - Present proposed additions and modifications to the Preliminary Report
 - Solicit feedback from the Advisory Committee for inclusion in the Final Report

Hold Biweekly Meetings

To keep WSAC staff informed of progress toward achieving the project goals, WICHE met with WSAC staff every other week throughout the duration of the project via conference call (except when schedules did not permit). WICHE staff provided WSAC staff with an agenda prior to each meeting. Whenever possible, meetings occurred every other Thursday at 10:00 am PDT/11:00 am MDT and included the following staff members:

WICHE	WSAC
Joe Garcia, J.D. President	Randy Spaulding, Ph.D. Director of Academic Affairs and Policy
Demarée K. Michelau, Ph.D. Vice President, Policy Analysis and Research	Ellen Matheny, M.S., M.A. Assistant Director of Operations
Christina Sedney, M.P.P. Policy Analyst	Daryl Monear, Ph.D. Associate Director, Academic Affairs and Policy

Collect and Analyze Relevant Data

WICHE worked closely with NCHEMS to collect relevant data to inform the report. These data included:

- Factors outlined in RCW 28B.77.080
- Postsecondary enrollment trends
- College participation rates
- Postsecondary transfer patterns
- Existing postsecondary programs
- Needed postsecondary programs
- Strategies for promoting program participation
- Economic demand and workforce needs
- Demographic data
- Population changes
- Commute patterns for area residents to existing higher education options
- Commute patterns for area residents to employment

Specifically, WICHE and NCHEMS requested and received state-level data from the Washington Education Research and Data Center (ERDC), which was created by the Washington Legislature to, among other things, coordinate with other state agencies to compile and analyze education data. WICHE and NCHEMS also relied on other publicly available data, including the American Community Survey of the U.S. Census Bureau.

To assess economic demand and workforce needs, WICHE and NCHEMS considered data from the Workforce Training and Education Coordinating Board and the State Board for Community and Technical Colleges on the supply of and demand for workforce education, certificates, and associate's degrees. WICHE and NCHEMS also worked with Burning Glass to acquire real-time job market information for the region to further inform the analysis.

In addition, WICHE and NCHEMS conducted interviews with school district and postsecondary representatives, local employers, community development professionals, union leaders, and other relevant stakeholders to assess the needs of regional employers (see Appendix D for a list of interview subjects). Topics covered

included projected needs by program type, degree level, and current barriers to fulfilling area staffing needs (see Appendix E for interview protocols).

Finally, WICHE collect information from WSAC postsecondary institutions (e.g., Green River Community College, Renton Technical College, and WGU Washington) serving the study region about existing programs to compare against data indicating perceived and projected need (see Appendix F for postsecondary institutional program profiles).

Appendix B. Biographies of Key Personnel

WICHE/WCET

Joe Garcia was appointed President of WICHE in June 2016. He served as the Lieutenant Governor of Colorado and, since 2011, as the Executive Director of the Colorado Department of Higher Education. He had previously served on the WICHE Commission for nine years, including as chair in 2011. During his time as Lieutenant Governor and as the State Higher Education Executive Officer for Colorado, Garcia focused on increasing equity in outcomes for all students, particularly those from low income backgrounds and communities of color. Prior to being elected Lieutenant Governor, Garcia served as President of Colorado State University-Pueblo, which during his tenure was named the Outstanding Member Institution by the Hispanic Association of Colleges and Universities. He also served as President of Colorado's second largest community college, Pikes Peak Community College, where he was twice named President of the Year by the State Student Advisory Council. His previous public service positions included serving as a member of the Cabinet of Governor Roy Romer and as a White House appointee under President Bill Clinton at the Department of Housing and Urban Development. He also was employed in the private practice of law for 10 years at the law firm of Holme Roberts & Owen, where he became the first Hispanic partner in the 100-year history of the firm. Garcia earned his B.S. in Business at the University of Colorado-Boulder and his J.D. from Harvard Law School.

Demarée K. Michelau is the vice president for policy analysis and research at the Western Interstate Commission for Higher Education (WICHE). In this role, she manages WICHE's Policy Analysis and Research unit and oversees externally-funded projects related to adult learners, projections of high school graduates, college access and success, and the development of a multistate longitudinal data exchange. The author of numerous reports and policy briefs, she also has experience in a variety of higher education policy issues, including articulation and transfer, equity and attainment, accelerated learning options, college affordability, common academic standards, and K-16 reform. Previously, she worked for the National Conference of State Legislatures as a policy specialist. Michelau received her bachelor's degree in public law from Northern Illinois University and her master's degree and Ph.D. in political science from the University of Colorado at Boulder.

Russell Poulin organizes WCET's national policy and research activities, edits WCET's *Frontiers* blog, coordinates WCET's research efforts, and works on e-learning consortia issues. He represented the distance education community in the U.S. Department of Education's 2014 Program Integrity Negotiated Rulemaking process. Previously, he coordinated distance education activities for the North Dakota University System.

Christina Sedney is a policy analyst at WICHE, where she works on a variety of projects, ranging from state-level contracts to legislative tracking. She also manages WICHE's Adult College Completion Network, working to identify and share policy and practice solutions which help adults with prior college credit complete high-value credentials. Prior to WICHE, Christina directed written communications for the growth strategy and development team of the international nonprofit, Teach For All, and completed a fellowship with the Kenneth Rainin Foundation. She also served in multiple roles with the AmeriCorps program City Year, including as a classroom-based corps member and as a project manager for the Public Policy department. She holds a B.A. from the University of Virginia and a Master's in Public Policy from the University of California, Berkeley.

NCHEMS

Dennis Jones is the President Emeritus of the National Center for Higher Education Management Systems (NCHEMS). Jones has more than 40 years of experience in research, development, technical assistance, and administration in the field of higher education management and policy-making. A member of the NCHEMS staff since 1969, he assumed increasing levels of responsibility within that organization, becoming president in 1986. Under his leadership, and in collaboration with an extraordinarily talented staff, NCHEMS has achieved a position of preeminence as a leader in the development and promulgation of information-based approaches to policy-making in higher education.

Mr. Jones is widely recognized for his work in such areas as:

- Developing "public agendas" to guide state higher education policy-making
- Financing, budgeting, and resource allocation methodologies for use at both state and institutional levels
- Linking higher education with state workforce and economic development needs
- Developing and using information to inform policy-making

Mr. Jones has written many monographs and articles on these topics, has presented his work at many regional, national, and international conferences, and has consulted with hundreds of institutions and state higher education agencies on management issues of all kinds. Mr. Jones is a graduate of Rensselaer Polytechnic Institute and served as an administrator (in business and institutional planning) there for eight years prior to his joining the NCHEMS staff. He has served as an advisor to the U.S. Secretary of Education, the Lumina Foundation for Education, the National Center for Public Policy and Higher Education, and to numerous other associations, policy organizations, and state agencies.

Appendix C. Advisory Committee

Bill Allison

Council Member
City of Maple Valley

Regan Bolli

City Manager
City of Covington

Catherine Calvert

Director of Curriculum and Instruction
Muckleshoot Tribal College

Deb Casey

Vice President of Student Affairs
Green River College

Cody Eccles

Associate Director
Council of Presidents

Rick Fehrenbacher

Director, Center for Digital Learning and Innovation
Seattle University School of New and Continuing Studies

Jean Floten

Chancellor
Western Governors University

Earl Gibbons

Vice Provost for Extended Education
Western Washington University

Darby Kaikkonen

Director of Policy Research
State Board for Community and Technical Colleges

Mark Lanza

Council Member
City of Covington

Joshua Lyons

Owner
Pinnacle Medical Wellness

Joseph Martin

Assistant Tribal Operations Manager
Muckleshoot Indian Tribe

Briahna Murray

Vice President
*Gordon Thomas Honeywell
Governmental Affairs*

Jenée Myers Twitchell

Special Advisor, Postsecondary Success and Advancement
University of Washington College of Education

Paul Pitre

Dean
*Washington State University
North Puget Sound at Everett*

Joe Potts

Principal
Kentlake High School

Angel Reyna

Vice President of Instruction
Renton Technical College

Antonio Sanchez

Assistant Director of Government
Relations
Central Washington University

Jim Schmidt

Senior Forecast Coordinator
*Washington State Office of Financial
Management Education Research
and Data Center*

Michael Wark

Director of External Relations
University of Washington Tacoma

**Washington Student Achievement Council
Staff**

Ellen Matheny

Assistant Director of Operations, Policy,
Planning and Research Division
Washington Student Achievement Council

Daryl Monear

Associate Director, Academic Affairs and
Policy
Washington Student Achievement Council

Randy Spaulding

Director of Academic Affairs and Policy
Washington Student Achievement Council

Appendix D. Interview Subjects

WICHE and NCHEMS interviewed the following individuals to inform the higher education assessment.

Government

Senator Joe Fain

47th Legislative District

Representative Pat Sullivan

47th Legislative District

Education

Byron Ford

Director for Instructional Support and Operations

Green River College – Kent Campus

Leslie Moore

Dean for Branch Campuses and Continuing Studies

Green River College – Kent Campus

Deb Casey

Vice President of Student Affairs

Green River College

Lauren Cline

Director of Nursing

Green River College

Angel Reyna

Vice President of Instruction

Renton Technical College

Jenée Myers Twitchell

Special Advisor, Postsecondary Success and Advancement

University of Washington College of Education

Employer/Workforce

Kevin Dull

Chief Human Potential Officer and Senior Vice President

MultiCare

Deann Edgers

Director, Professional Development & Education Interim Women's and Children's Services

UW Valley Medical Center

Moriah Martin

Chief Human Resources Officer

Kent School District

Chelsea Orvella

Legislative Director

Society for Professional Engineering

Employees in Aerospace (SPEEA),

International Federation of Professional and Technical Engineers (IFPTE) Local 2001

Stan Sorscher

Labor Representative

Society for Professional Engineering

Employees in Aerospace (SPEEA),

International Federation of Professional and Technical Engineers (IFPTE) Local 2001

Sheryl Ward

Manager of Inpatient Medical Care, Oncology

MultiCare

Community Development

Dan Catron

Associate Planner
City of Enumclaw

Richard Hart

Community Development Director
City of Covington

External Resource Experts

Jon Enriquez

Director, Research and Policy Analysis
Maryland Higher Education Commission

Paul Turman

System Vice President for Academic Affairs
South Dakota Board of Regents

Hilary Ward Schnadt, PhD

Associate Dean for Academic Services and Programs
University Center of Lake County

Appendix E. Interview Protocols

Education Subjects Interview Protocol

Introduction

In Fiscal Year (FY) 2017, the Washington Student Achievement Council (WSAC) received funding from the Washington Legislature to complete a higher education needs assessment for southeast King County and to prepare a program and operating plan to meet the higher education needs identified in the assessment. WSAC identified the Western Interstate Commission for Higher Education (WICHE) as the agency contractor with the skills and resources necessary to conduct the assessment in the timeframe specified in the budget proviso. WICHE is working with the National Center for Higher Education Management Systems to conduct the data collection and analysis. A key component of the assessment is to conduct interviews with key stakeholders in the education and business communities. We expect this interview to take about 45 minutes, and we appreciate you taking the time to speak with us today.

General

1. Currently, how well are the postsecondary education needs of the area being met?
2. Are the programs currently offered adequate for the area?
 - Why or why not?
 - Can you provide specific examples?
3. **[Postsecondary]** What is the demand for the programs you currently offer?
 - Who are the major employers of your students? Where do they go?
 - **[Community Colleges]** Who are the transfer partners?
 - **[K–12]** Are you satisfied with the postsecondary programs offered to your students? How accessible are these programs to students?
 - Where do most of your graduates go to college (e.g., privates, publics, community college, four-year institutions)?**[As employers]**
 - What type of employees are you having trouble hiring?
 - Are there appropriate continuing education opportunities available for your employees? Where do they go for that? Who is the provider?
4. What do you think happens to the students who aren't able to access their programs of choice?
5. What industry sectors are most important to southeast King County today and what sectors do you think will be important in the future?
6. If you had a magic wand, what higher education options, if any, would you like to see offered in the area?
 - How would these options be delivered?

7. What are the barriers, if any, to achieving this ideal scenario?

Community

1. Tell me about commuting barriers to current postsecondary education providers.
2. If your community is lacking a particular educational resource, how easy is it to get to another community that has it?
3. What do you think southeast King County will be like in 10 years? How would you like to see the area evolve over this timeframe?

Final Thoughts

1. What didn't we ask that we should have?

Business/Industry Subjects Interview Protocol

Introduction

In Fiscal Year (FY) 2017, the Washington Student Achievement Council (WSAC) received funding from the Washington Legislature to complete a higher education needs assessment for southeast King County and to prepare a program and operating plan to meet the higher education needs identified in the assessment. WSAC identified the Western Interstate Commission for Higher Education (WICHE) as the agency contractor with the skills and resources necessary to conduct the assessment in the timeframe specified in the budget proviso. WICHE is working with the National Center for Higher Education Management Systems to conduct the data collection and analysis. A key component of the assessment is to conduct interviews with key stakeholders in the education and business communities. We expect this interview to take about 45 minutes, and we appreciate you taking the time to speak with us today.

General

1. Currently, how well are the workforce needs of the area being met? How well are the workforce needs of your company being met?
2. Can you hire the kinds of workers that you need? What kinds are the most difficult to hire? How many do you typically hire in a year?
3. How is the higher education sector in the state contributing—or not—to meeting workforce needs?
 - o Which postsecondary institutions do you rely on to provide your educated workers?
4. What are the weaknesses and strengths of the college graduates that you do hire?
5. Do you always hire recent graduates or do you generally hire those with experience?
6. Do the programs currently offered locally produce graduates adequate for your employment needs or do you need to import talent?
 - o Can you provide specific examples?
7. Do your employees need additional academic opportunities for advancement within your organization?
 - o Are you satisfied with the postsecondary programs offered to your employees who need those opportunities?
 - o How accessible are these programs to your employees?
 - o What's missing?
8. What happens to the employees who aren't able to access the programs that they need?
9. What industry sectors are most important to southeast King County today and what sectors do you think will be important in the future?

10. What types of postsecondary qualifications—both program type and credential level—do you anticipate your employees will need over the next 10 years?
11. If you had a magic wand, what higher education options—if any—would you like to see offered in the area?
 - o How would these options be delivered?
12. What are the barriers, if any, to achieving this ideal scenario?

Economic Development

1. Have you been unable to attract/keep employees because of a lack of educational opportunities?

Community

1. Tell me about commuting barriers to current employment opportunities.
2. Tell me about commuting barriers to current postsecondary education providers.
3. If your community is lacking a particular educational resource, how easy is it to get to another community that has it?
4. What do you think southeast King County will be like in 10 years? How would you like to see the area evolve over this timeframe?

Final Thoughts

1. What didn't we ask that we should have?

Community Development Subjects Interview Protocol

Introduction

In Fiscal Year (FY) 2017, the Washington Student Achievement Council (WSAC) received funding from the Washington Legislature to complete a higher education needs assessment for southeast King County and to prepare a program and operating plan to meet the higher education needs identified in the assessment. WSAC identified the Western Interstate Commission for Higher Education (WICHE) as the agency contractor with the skills and resources necessary to conduct the assessment in the timeframe specified in the budget proviso. WICHE is working with the National Center for Higher Education Management Systems to conduct the data collection and analysis. A key component of the assessment is to conduct interviews with key stakeholders in the education and business communities. We expect this interview to take about 45 minutes, and we appreciate you taking the time to speak with us today.

General

1. Currently, how well are the workforce needs of the area being met?
2. Can companies in your community hire the kinds of workers that they need? What kinds are the most difficult to hire? Can they keep them?
3. How is the higher education sector in the state contributing—or not—to meeting workforce needs?
 - o Which postsecondary institutions do companies in your community rely on to provide your educated workers?
4. What are the weaknesses and strengths of the college graduates that your companies hire?
5. Do the programs currently offered locally produce graduates adequate for your area's employment needs or do you need to import talent?
 - o Can you provide specific examples?
6. What happens to the employees who aren't able to access the programs that they need?
7. What industry sectors are most important to southeast King County today and what sectors do you think will be important in the future?
8. What types of postsecondary qualifications—both program type and credential level—do you anticipate the area's employees will need over the next 10 years?

9. If you had a magic wand, what higher education options—if any –would you like to see offered in the area?
 - o How would these options be delivered?
10. What are the barriers, if any, to achieving this ideal scenario?

Economic Development

1. Has your community been unable to attract/keep employers because of lack of educational opportunities?

Community

1. Tell me about commuting barriers to current employment opportunities.
2. Tell me about commuting barriers to current postsecondary education providers.
3. If your community is lacking a particular educational resource, how easy is it to get to another community that has it?
4. What do you think southeast King County will be like in 10 years? How would you like to see the area evolve over this timeframe?

Final Thoughts

1. What didn't we ask that we should have?

Appendix F. Postsecondary Institutional Degree and Program Profiles

The following is a list of degrees and programs offered at the local postsecondary institutional providers.

Green River College

Bachelors of Applied Science

Aeronautical Science

Information Technology: Network Administration and Security

Information Technology: Software Development

Marketing and Entrepreneurship

Natural Resources in Forest Resource Management

Renton Technical College

Associate Degree of Applied Science Transfer (AAST)

Accounting Specialist

Anesthesia Technologist

Computer Science (Year Two of Computer Science Program)

Culinary Arts

Dental Assistant

Early Childhood Careers

Massage Therapy Practitioner

Medical Assistant

Ophthalmic Assistant

Pharmacy Technician

Registered Nurse, Associate's Degree

Surgical Technologist

Associate of Applied Science (AAS)

Accounting Paraprofessional

Administrative Office Management

Automotive Technology/ITEC

Band Instrument Repair Technology

Band Instrument Repair with Guitar Technology

Commercial Building Engineering

Computer Applications

Computer Network Technology

Computer Science (Year Two of Computer Science Program)

Construction Management

Culinary Arts

Dental Assistant

Early Childhood Careers

Engineering Design Technology
Entrepreneurship and Small Business Management
Executive Assistant
Ford ASSET
Industrial Engineering
Kitchen Major Appliance Repair Technology
Land Surveying Technician/Geospatial Science
Laundry Major Appliance Technology
Legal Assistant
Major Appliance and Refrigeration Technology
Massage Therapy Practitioner
Medical Assistant
Medical Coding Specialist
Ophthalmic Assistant
Pharmacy Technician
Precision Machining Technologies
Surgical Technologist
Welding

Bachelor of Applied Science (BAS)
Application Development

Certificate of Completion

Accounting Clerk
Accounting Paraprofessional
Applications Developer (Year One of Computer Science Program)
Auto Body Repair and Refinishing
Automotive Maintenance and Light Repair
Automotive Technology
Band Instrument Repair Technology
Band Instrument Repair with Guitar Technology
Basic Computer Applications
Basic Machining
Central Service Technician
Child Development Associate
Commercial Building Engineering
Computer Applications
Computer Applications – Accelerated
Computer Applications – Advanced
Computer Network Technology
Computer Numerical Control
Computer Science (Year Two of Computer Science Program)
Computer-Aided Drafting
Construction Management
Construction Trades Prep
Culinary Arts
Dental Assistant

Early Childhood Careers
Electrical Plant Maintenance
Engineering Design Technology
Entrepreneurship and Small Business Management
Field Surveying Technician
Guitar Repair Technology
Health Care Navigator
Industrial Engineering
Kitchen Major Appliance Repair Technology
Land Surveying Technician/Geospatial Science
Laundry Major Appliance Technology
Leadership in the Trades
Legal Assistant
Licensed Practical Nurse (LPN)
MA – Phlebotomy Technician
Major Appliance and Refrigeration Technology
Massage Therapy Practitioner
Medical Assistant
Medical Coding Specialist
Nursing Assistant – Certified
Office Assistant/Receptionist
Office Support Specialist
Pharmacy Technician
Precision Machining Technologies
Preventative Manufacturing Maintenance
Professional Baking
Property Maintenance for Multi-Family Residences
Refrigeration Technology, Domestic/Commercial
Revenue Management Specialist
Surgical Technologist
Veterinary Assistant
Welding

Western Governors University Washington

Baccalaureate Degrees

B.S. Accounting
B.S. Business Management
B.S. Business – Healthcare Management
B.S. Business – Human Resource Management
B.S. Business – Information Technology Management
B.S. Data Management/Data Analytics
B.S. Health Information Management
B.S. Information Technology
B.S. Information Technology—Network Administration
B.S. Information Technology—Security
B.S. Marketing Management
B.S. Nursing (RN to BSN)
B.S. Software Development

B.A. Interdisciplinary Studies (K–8)
B.A. Special Education (K–12)
B.A. Mathematics (5–9 or 5–12)
B.A. Science (5–9)
B.A. Science (Chemistry, 5–12)
B.A. Science (Physics, 5–12)
B.A. Science (Biological Science, 5–12)
B.A. Science (Geosciences, 5–12)

Graduate-Level Degrees and Education Endorsements

Post-Baccalaureate Teacher Preparation Program, Elementary Education (K–8)
Post-Baccalaureate Teacher Preparation Program, Mathematics (5–9 or 5–12)
Post-Baccalaureate Teacher Preparation Program, Science (5–9 or 5–12)
Post-Baccalaureate Teacher Preparation Program, Social Science (5–12)

M.A. Teaching, Elementary Education (K–8)
M.A. Teaching, English (5–12)
M.A. Teaching, Mathematics (5–9 or 5–12)
M.A. Teaching, Science (5–9 or 5–12)
M.A. Teaching, Social Science (5–12)

M.S. Curriculum and Instruction
M.S. Special Education (K–12)
M.S. Educational Leadership

M.A. English Language Learning (ELL) (PreK–12)

M.Ed. Instructional Design
M.Ed. Learning and Technology

M.A. Mathematics Education (K–6, 5–9, or 5–12)
M.A. Science Education (5–9)
M.A. Science Education (Chemistry, 5–12)
M.A. Science Education (Physics, 5–12)
M.A. Science Education (Biological Science, 5–12)
M.A. Science Education (Geosciences, 5–12)

Master of Business Administration (MBA)
MBA Information Technology Management
MBA Healthcare Management

M.S. Integrated Healthcare Management
M.S. Management and Leadership
M.S. Accounting
M.S. Cybersecurity and Information Assurance
M.S. Data Analytics
M.S. Information Technology Management

MBA Information Technology Management

M.S. Nursing—Education
M.S. Nursing—Leadership and Management
M.S. Nursing—Education (RN to MSN Option)
M.S. Nursing—Leadership and Management (RN to MSN Option)
M.S. Integrated Healthcare Management

MBA Healthcare Management

Endorsement Preparation Program in English Language Learning (ELL) (PreK–12)
Endorsement Preparation Program in Educational Leadership

Muckleshoot Tribal College

In partnership with The Evergreen State College

B.A. Reservation-Based, Community Determined Program

In partnership with Northwest Indian College

A.T.S. Chemical Dependency Studies

A.A.S. General Direct Transfer

B.A. Community Advocates and Responsive Education in Human Services

B.A. Tribal Governance and Business Management

In partnership with Green River College

Certificate in Early Childhood

Endnotes

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- ⁵ Washington Student Achievement Council, "The Roadmap," accessed on 22 October 2016, <http://www.wsac.wa.gov/the-roadmap>.
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- ¹⁰ United States Census, "2010 Census Interactive Population Search," accessed on 23 October 2016, <http://www.census.gov/2010census/popmap/ipmtxt.php?fl=53>.
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- ¹³ ACS 5-year estimates were used—reflecting 60 months of collected data— which allows for the geographic precision needed for this analysis.
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- ¹⁷ National Center for Higher Education Management Systems, "Educational Attainment of Population Age 25-64, 2010-14," Analysis of U.S. Census Bureau 2014 American Community Survey Five-Year Estimates; Table B1500 conducted July–December 2016.
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- ¹⁹ National Center for Higher Education Management Systems, "Educational Attainment of Population Age 25-44, 2010-14," Analysis of U.S. Census Bureau 2014 American Community Survey Five-Year Estimates; Table B15001 conducted July–December 2016.
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- ²¹ National Center for Higher Education Management Systems, "Median Wage/Salary Income for Population Age 25-64 by Education Level, 2012-14." Analysis of U.S. Census Bureau, 2012, 2013, and 2014 American Community Survey One-Year Public Use Microdata Samples conducted July–December 2016.
- ²² Ibid.
- ²³ Ibid.
- ²⁴ National Center for Higher Education Management Systems, "Distribution of Population Age 25-64 with Some College but No Degree by IPEDS Income Group - 2012-14." Analysis of U.S. Census Bureau, 2012, 2013, and 2014 American Community Survey One-Year Public Use Microdata Samples conducted July–December 2016.
- ²⁵ National Center for Higher Education Management Systems, "Occupational Employment for the Civilian Employed Population 16 Years and Over, 2010-14." Analysis of U.S. Census Bureau 2014 American Community Survey Five-Year Estimates; Table C24010 conducted July–December 2016.

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- ²⁶ National Center for Higher Education Management Systems, "Southeast King County Employment by Major Occupational Group, 2012-14 (Percent)." Analysis of U.S. Census Bureau, 2012, 2013, and 2014 American Community Survey One-Year Public Use Microdata Samples conducted July–December 2016.
- ²⁷ The U.S. Census Bureau defines "place of residence" as incorporated locations such as cities, towns, villages, or boroughs, as well as statistical counterparts of incorporated places which are delineated to provide data for settled concentrations of population that are identifiable by name but are not legally incorporated under the laws of the state in which they are located. A full definition is available at: http://www.census.gov/geo/reference/gtc/gtc_place.html.
- ²⁸ National Center for Higher Education Management Systems, "Workers 16 Years of Age and Over by Place of Work (Place Level), 2010-14," Analysis of U.S. Census Bureau 2014 American Community Survey Five-Year Estimates; Table B08008" conducted July–December 2016.
- ²⁹ Puget Sound Regional Council, "PSRC Transportation Monitoring: Congestion and Mobility Report-February 2011," accessed 21 October 2016, http://www.psrc.org/assets/3545/2Chapters_1-2.pdf.
- ³⁰ Washington State Department of Transportation, "2015 Annual Traffic Report," accessed 21 October 2016, http://www.wsdot.wa.gov/mapsdata/travel/pdf/Annual_Traffic_Report_2015.pdf.
- ³¹ Sound Transit, "Projects Map," accessed 21 October 2016, <http://soundtransit3.org/map#map>.
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