APPENDIX C

ALTERNATIVE LAND USE STUDY

DATE: APRIL 2021



DATE: April 5, 2021

TO: PCC Facilities Plan Project Team

FROM: Lorelei Juntunen, Matt Craigie, James Kim SUBJECT: Alternative Land Use Study – Market Scan

This memorandum is one of two documents that constitute the **Alternative Land Use Study** for the PCC Facilities Plan project. In this document, we examine the estimated need for affordable housing among PCC students and in the communities that surround PCC campuses. The other document is a **Context Scan** that describes the suitability of each campus to accommodate affordable housing.

1. Purpose

As part of a larger facilities plan, Portland Community College (PCC) has asked ECONorthwest to study the potential for new development at PCC campuses, with a specific focus on affordable housing. PCC is interested in a better understanding of the need for affordable housing among PCC students and in the communities that surround PCC campuses, as well as which of its four campuses is most appropriate for accommodating affordable housing projects. This memorandum addresses these questions by analyzing the need for affordable housing in the communities surrounding PCC campuses and also the estimated need among PCC students. An examination of PCC campus capacity for new development can be found in the companion Context Scan document.

The Market Scan involved analyses of data specific to the communities that surround each PCC campus and student-level data provided by PCC. Data from the surrounding communities focuses on population and demographic characteristics that inform housing demand, such as population forecasts, household size, and the number of cost-burdened households. The purpose of this study is to illustrate the landscape of need for affordable housing within PCC "campus communities" and within its student population.

The Facilities Plan will consider multiple alternative land uses, including affordable housing, wraparound services, and other supportive uses like commercial space where appropriate. The Market Scan focuses primarily on housing for several reasons.

First, housing is likely to be the highest and best use of developable properties at PCC campuses. PCC is not pursuing housing for revenue generation, but would partner with affordable housing developers. For these developers, retail tenants generate much less income (on a per square foot basis) than residential tenants do. Although mixed-use developments that co-locate housing and retail uses are desirable for some residents, retail competes for space with the need for housing that is affordable to lower-income households.

Second, retail space is harder to fill because it requires commercial tenants who can sign up for long-term leases. Vacancies in retail space can reduce the appeal of a place. Moreover, pandemic-induced economic shifts observed during 2020 have resulted in sharp increases in retail vacancies and a drop in retail rents. Other ground floor uses, like resident support services or partner offices, may be more viable as part of affordable housing at PCC.

The need for affordable housing is dire in the communities that PCC operate in and among PCC students. Restoring housing stability will be critical to proving an atmosphere that PCC students

can thrive in. Therefore, the Market Scan focuses on understanding the need for affordable housing among PCC students and the communities that surround PCC campuses.

2. Background

The Market Scan for alternative land uses on PCC campuses seeks to clarify the level of need for affordable housing from both community members and PCC students. It answers one of the key questions for the Alternative Land Use Study:

What is the demand for new development in the communities that surround each of the four PCC campuses? And in particular, what is the nature of demand for affordable housing in these communities and with students that attend each campus?

Housing affordability has been and continues to be a critical issue nationwide. Housing prices and apartment rents are increasing faster than household incomes, and a growing share of the population is becoming overburdened with housing costs, particularly among households with low- or middle-incomes. An influx of higher-income households to certain cities and regions, rising construction costs, other constraints on new housing supply, and limited support from federal and state governments have resulted in a shortage of housing units.¹

In Oregon, new housing production has not kept up with the state's recent strong economic and population growth. Between 2012 and 2019, 95 housing units were produced for every 100 new households in Oregon. In comparison, 106 housing units were produced for every 100 new households in the U.S.² Housing production needs to exceed household formation to reduce the existing shortage of housing.

Addressing the need for affordable housing is critical to improving life outcomes. Because housing costs are major expenses that determine households' monthly budgets, households that cannot afford high rents often have little choice but to move to neighborhoods with lower rents that may be farther away from job centers and amenities and have higher rates of poverty. Economic research has shown intergenerational poverty can be reduced by enabling families to move to lower-poverty neighborhoods.³ Moreover, since overpriced housing is one of the drivers of rising homelessness, increased housing production is a key component of the solution to homelessness.⁴

The solution to housing affordability relies on a concerted effort from multiple market and non-market actors. State and federal agencies can provide housing vouchers or incentivize the

¹ Joint Center for Housing Studies of Harvard University. America's Rental Housing 2020. January 2020.

² Based on U.S. Census American Community Survey (ACS) 1-Year Estimates for 2012 and 2019, Tables DP02 and DP04.

³ Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment. *American Economic Review* 106, no. 4 (2016): 855-902.

⁴ ECONorthwest. Homelessness in Oregon: A Review of Trends, Causes, and Policy Options. March 2019.

development of low-income housing. Local governments can make more land available for the development of affordable housing and higher density housing by changing zoning laws and creating development incentives. The expertise of real estate developers, general contractors, and architectural and engineering firms is also needed. Finally, private businesses, government entities, and local institutions with underutilized land in highly desirable places can make them available for much needed housing development.

2.1 What do we mean by 'affordable housing'?

Definitions for "affordable housing" can vary greatly and are often tied to Median Family Income (MFI). This study defines affordability as the relationship between market housing price and household income such that the monthly housing costs (including utilities and other costs) for a single-family dwelling or an apartment unit are no more than 30% of gross household income. Transportation costs are not included. This is an imperfect, but frequently used definition of housing affordability. Housing affordability is, therefore, a function of income and housing costs for each individual household, which can vary substantially given the unique circumstances of a household and dwelling unit.

MFI is a standard measure of income that varies depending by geography and family size and is derived from U.S. Census data. The Department of Housing and Urban Development (HUD) establishes MFI thresholds that are dependent on the size of the household for programs it administers.

Exhibit 1 provides an overview of the relationship between current income ranges and affordable housing costs for the Portland-Vancouver-Hillsboro Metropolitan Statistical Area (MSA), which is the geographic unit the HUD uses for its programs. The estimates are based on a 4-person household. The MFI can be adjusted for households of other sizes.

Exhibit 1. Portland-Vancouver-Hillsboro Metropolitan Statistical Area (MSA) Median Family Income and Affordability Ranges, 2020

Source: ECONorthwest; HUD FY2020 Income Limits

	Income Range	Affordable monthly housing costs
2020 MFI, 4-person household	\$92,100	\$2,303
High (120% or more of MFI)	>\$110,520	>\$2,763
Moderate (80%-120% of MFI)	\$73,680 - \$110,520	\$1,842 - \$2,763
Low (50-80% of MFI)	\$46,050 - \$73,680	\$1,151 - \$1,842
Very Low (30%-50% of MFI)	\$27,630 - \$46,050	\$691 - \$1,151
Extremely Low (Less than 30% of MFI)	<\$27,630	<\$691

In the U.S. and in Oregon, at least 45% of renters are cost-burdened, or spending more than 30% of their gross income on housing costs.⁵ In the Portland-Vancouver-Hillsboro MSA, 4 out of 5 households earning less than 50% of MFI were cost-burdened. The cost-burden rate was 53% among households earning 50% to 80% of MFI and 19% among households earning 80% to 100% of MFI. In 2018, there were about 74,000 renter households in the MSA earning less than 30% of MFI, but only 20,000 rental units were affordable to them.⁶

Households that pay more than 30% of gross annual income on housing costs are commonly referred to as "cost-burdened" or "moderately cost-burdened." Households that pay more than half of their gross income on housing costs are "severely cost-burdened."

Is this Market Scan Comparable to Statewide Housing Planning Efforts?

Oregon's Statewide Land Use Planning Goal 10 requires each city to periodically develop a Housing Needs Analysis (HNA), which must tie twenty years of projected household growth to units of varying densities, and then determine whether there is adequate land inside the city's urban growth boundary to accommodate those units. Goal 10 directs cities to plan for "...housing that meets the housing needs of households of all income levels." Oregon's statewide land use planning system requires one of the most comprehensive approaches to planning for housing in the country.

In line with the aims of Goal 10, the Market Scan includes **projected need** to account for household growth over the next 20 years and across income levels. However, its estimates of housing need go beyond projected need by estimating historical **underproduction** of housing units and **unhoused need** among individuals experiencing homelessness. However, given the methods used and the geographies analyzed, this study is not directly comparable to HNAs produced for cities within the PCC district.

3. Approach

This Market Scan explores the demand for affordable housing at three levels. First, we analyzed housing need at the **PCC District level**. Although PCC does not have the ability or responsibility to plan for housing needs across its district, the housing demand at the regional level serves as a context for PCC's future investments. A regional perspective is especially important because PCC's students come from many places and outside the neighborhoods located near PCC's campuses and even outside the PCC District.

Next, we analyzed housing need at each of the **four campuses**: Cascade, Rock Creek, Southeast, and Sylvania. The result of this analysis shows the housing need among households that live near the campuses. The need is disaggregated by household income.

For the district analysis and campus community analysis, three components of housing need are identified. **Projected need** is the need for housing over the next twenty years and includes all types of housing for all levels of household income. **Underproduction** is the existing need for housing based on the current shortage of housing among those who are housed. There is a

⁵ Based on 2019 ACS 1-year estimates, Table B25070.

⁶ National Low Income Housing Coalition. The Gap: A Shortage of Affordable Homes. March 2020.

shortage of housing when there are insufficient number of units – including vacant units and non-primary residences – that are needed for a healthy circulation of households in a regional market. Underproduction has a greater effect on lower-income households, since they often lack sufficient resources to compete for housing with higher-income households. Its observable outcomes are overcrowding and cost-burdening among those who are housed. **Unhoused need** is the need for housing based on the number of people experiencing homelessness. Underproduction and unhoused need make up currently existing housing need. All three components of housing need are presented across household income categories. Please refer to the Appendix of this memorandum for more detail on the methodology.

Finally, we estimated the housing need among **PCC** students based on data from PCC and national surveys and studies related to student housing instability. Although PCC's data does not specifically measure housing instability, information on the Federal Pell Grant program eligibility and student demographics allowed us to estimate the number of vulnerable students who would benefit from an affordable housing program. Also, findings from a national survey of community college students are used to generate low and high estimates of housing need among PCC students.

4. The Need for Affordable Housing in Relation to PCC Campuses

There is a current shortage of about 40,000 dwelling units in the PCC District. There also are about 9,000 individuals in the district who recently experienced homelessness. Based on population projections, another 147,000 new dwelling units will need to be added to the supply of housing in the PCC District over the next 20 years. In total, almost 196,000 new units are needed to meet current and future housing demand in the PCC District. 29% of these units are needed for households earning less than 50% of MFI, which was \$46,050 in 2020.

In the vicinity of PCC's four campuses 6,800 dwelling units are needed today to address underproduction and homelessness. Of these, 55% (3,800 units) need to be affordable to households earning less than 50% of MFI. 17,900 new units are also needed to accommodate future growth in population around the campuses.⁷

Near the Southeast Campus, where the residential population is the greatest, 3,000 new units are needed today to address underproduction and homelessness, and 6,300 new units are needed to accommodate future growth in population. 31% of the 9,300 units are needed for households earning less than 50% of MFI. Among the four campuses, the Southeast Campus faces relatively greater underproduction and unhoused need.

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⁷ The vicinity of each campus is defined by census tracts that fall within a 5-minute driving distance. More detailed explanation is provided in the Appendix.

4.1 Region: PCC District

Across the PCC District, 49,100 units are needed today to meet currently existing need. Most of the current need is related to underproduction, and the remainder are units needed for persons experiencing homelessness, noted as 'unhoused need' below.

Of the nearly 196,000 housing units needed in the PCC District, about 13% (24,800 units) are needed within a five-minute driving distance from one of PCC's four campuses.

Exhibit 2. Housing Units Needed by Location

Source: ECONorthwest; PSU, 2020-2070 Coordinated Population Forecasts; U.S. Census Bureau, 2014-2018 ACS 5-year estimates; HUD, 2019 PIT count

Location	Projected Need	Underproduction	Unhoused Need	Total
PCC District	146,747	40,070	9,075	195,893
All Campuses	17,898	5,858	978	24,734
Cascade Campus	4,423	1,630	317	6,371
Rock Creek Campus	3,025	564	18	3,606
Southeast Campus	6,255	2,514	494	9,263
Sylvania Campus	4,195	1,150	149	5,494
All Campuses as Share of PCC District	12%	15%	11%	13%

About half of the projected need in the PCC District should be affordable to households earning less than 120% of the MFI. In contrast, about half of units for underproduction and nearly all of units for unhoused need should be affordable to households earning less than 50% of the MFI, which was \$46,050 in 2020. Across the district, a total of 28,000 units are needed to address currently existing need among households that earn less than 50% of MFI as identified by underproduction and unhoused need. In places near the four PCC campuses, the current existing need among households that earn less than 50% of MFI is 3,755 units.

Exhibit 3. Housing Units Needed by Affordability Category, PCC District

Source: ECONorthwest; PSU, 2020-2070 Coordinated Population Forecasts; U.S. Census Bureau, 2014-2018 ACS 5-year estimates; HUD, 2019 PIT count; HUD, FY 2018 Income Limits; OHCS, EHA and SHAP data

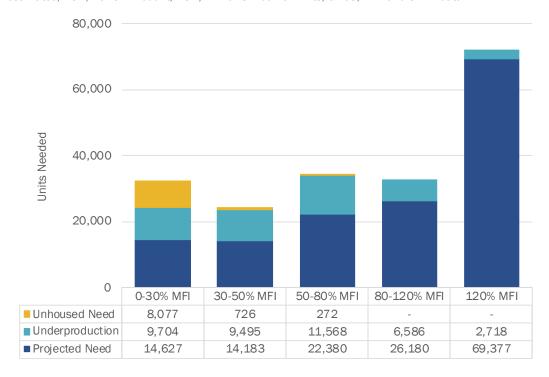
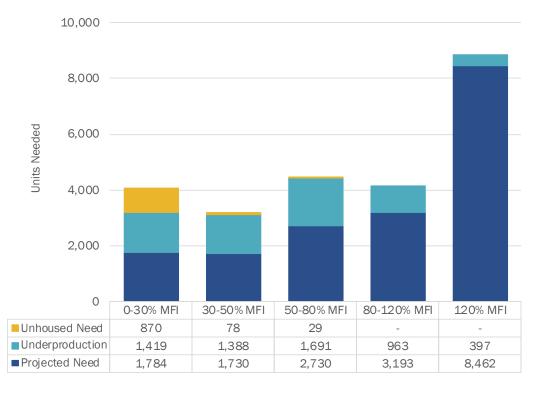


Exhibit 4. Housing Units Needed by Affordability Category, All PCC Campuses



4.2 PCC Campuses

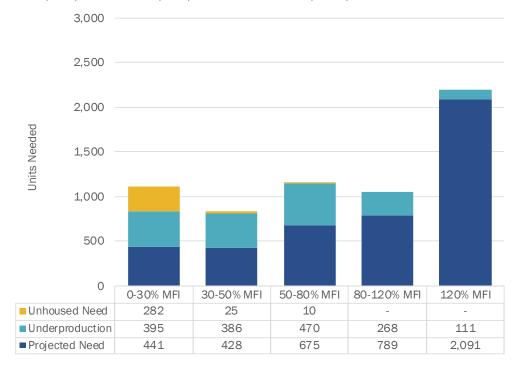
Cascade Campus

There is a need for 6,371 housing units within a five-minute driving distance from Cascade Campus. About 2,000 (or 31%) of the need for affordable units around the campus is concentrated among households earning less than 50% of MFI. To address currently existing need (underproduction and unhoused need) among households that earn less than 50% of MFI, 1,100 new, incomerestricted units will need to be built.

To ensure that housing targeted at households earning certain incomes are actually occupied by the targeted population, they must be regulated and "income-restricted." Periodic review of household incomes is necessary to make sure the units are available to those who qualify for them.

Compared to other campuses, housing need around Cascade
Campus is slightly skewed toward unhoused need. Unhoused need
across the campuses makes up about 4% of the total housing need. Near Cascade Campus, unhoused need makes up about 5% of the total housing need.

Exhibit 5. Housing Units Needed by Affordability Category, Cascade Campus

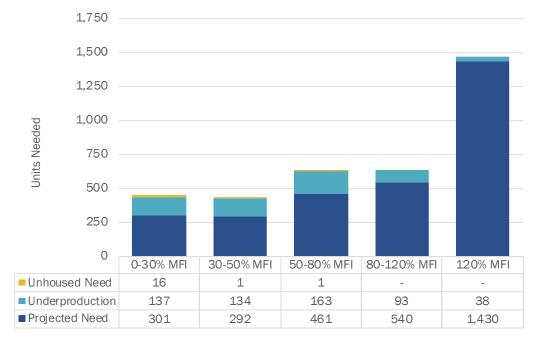


Rock Creek Campus

There is a need for 3,606 housing units within a five-minute driving distance from Rock Creek Campus. 24% (880 units) of the need for affordable units around the campus is concentrated among households earning less than 50% of MFI. To address currently existing need (underproduction and unhoused need) among households that earn less than 50% of MFI, 300 new, income-restricted units will need to be built.

Compared to other campuses, housing need around Rock Creek Campus is more related to the projected need, which is based on population growth. Projected need across the campuses makes up 72% of the total housing need. Near Rock Creek Campus, projected need makes up 84% of the total housing need. Moreover, unhoused need makes up less than 1% of the total housing need near Rock Creek Campus.

Exhibit 6. Housing Units Needed by Affordability Category, Rock Creek Campus

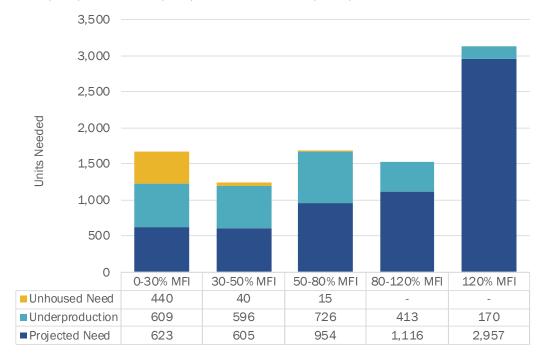


Southeast Campus

Of PCC's four campuses, the Southeast Campus has the largest quantity of needed housing units within a five-minute drive (9,263 units in total, or 37% of all campuses). Nearly one-third (31%) of these needed units should be affordable to households earning less than 50% of MFI. To address currently existing need (underproduction and unhoused need) among households that earn less than 50% of MFI, about 1,700 new, income-restricted units will need to be built.

Compared to other campuses, housing need around Southeast Campus is skewed toward underproduction and unhoused need. Underproduction across the campuses makes up 24% of the total housing need, whereas it makes up 27% of the need around Southeast Campus. Unhoused need across the campuses makes up about 4% of the total housing need, whereas it makes up about 5% of the need around Southeast Campus.

Exhibit 7. Housing Units Needed by Affordability Category, Southeast Campus

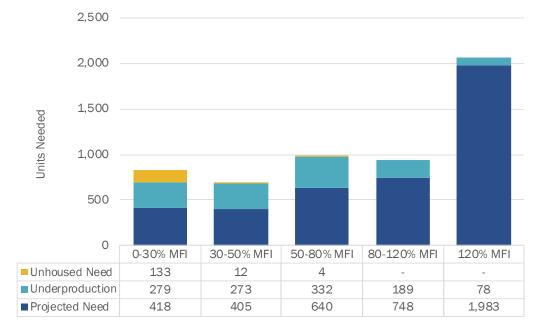


Sylvania Campus

There is a need for 5,494 housing units within a five-minute driving distance from Sylvania Campus. Twenty-eight percent (1500 units) of the need for affordable units around the campus is concentrated among households earning less than 50% of MFI. To address currently existing need (underproduction and unhoused need) among households that earn less than 50% of MFI, about 700 new, income-restricted units will need to be built.

Compared to other campuses, housing need around Sylvania Campus is slightly skewed toward projected need. Projected need across the campuses makes up 72% of the total housing need. Near Sylvania Campus, projected need makes up 76% of the total housing need.

Exhibit 8. Housing Units Needed by Affordability Category, Sylvania Campus



5. The Estimated Need for Affordable Housing Among PCC Students

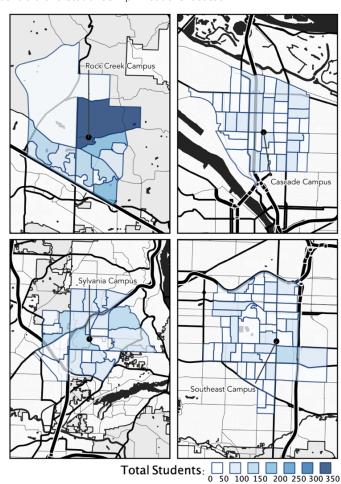
PCC students live in many places across the PCC District. Students also come from outside the PCC District. Only 7,000 students live within a 5-minute driving distance from one of PCC's four campuses. Because many students live in places far from PCC campuses, and because PCC cannot serve students' housing needs outside its properties, PCC is interested in focusing efforts on students' need for affordable housing near or on its campuses.

About 13.2% of PCC students live near one of the four campuses (see Exhibit 9): 4.0% near Southeast Campus, 3.6% near Cascade Campus, 3.0% near Sylvania Campus, and 2.6% near Rock Creek Campus. Among those who live near a campus, about half attend their nearest campus.

One way to estimate housing need among students is by looking at household income of students, a proxy for which is Federal Pell Grant eligibility or receipt. About 32% of credit students at PCC receive Federal Pell Grants.8 Although Pell Grant participation alone does not indicate housing insecurity, it is an indicator of income and other financial resources that would be available to cover housing costs. It is also important for addressing racial inequality since 45% of Pell Granteligible students identify as BIPOC (Black, Indigenous, People of Color)9. In comparison, about 35% of students in the overall population identify as BIPOC.

Exhibit 9. Distribution of PCC Student Population Around Campuses, Based on Zip+4 Data and Census Blocks

Source: ECONorthwest; Portland Community College Note: Students are aggregated into census block groups in which the centroid of a student's Zip+4 code is located.



⁸ "Demographics." Portland Community College. Accessed February 1, 2021. https://www.pcc.edu/about/quick-facts/demographics.html.

⁹ Based on PCC 2019-2020 student data.

Housing need can also be determined by estimating overcrowding and homelessness among students. A national survey of 33,000 students in 70 community colleges in 24 states showed 17% of students were doubled-up – living in overcrowded conditions – and 14% of students experienced homelessness in the 12 months preceding the survey. About half (51%) of the students were identified as housing insecure, meaning they could not pay their full rent or mortgage amount, doubled-up, or unhoused. On the west coast, 15% of students experienced homelessness and 59% of students were housing insecure. According to a student news article in 2019, 14% of PCC students were homeless and 40% experienced housing insecurity. ¹⁰

A range for housing need can be calculated based on the information above. At the low end, 31% of PCC students can be estimated to have experienced overcrowding (17%) or homelessness (14%). Also, 32% of students were Pell Grant recipients. At the high end, 59% of PCC students may be housing insecure. Based on this range, **2,140 to 4,080 students are estimated to live near a PCC campus and be in need of affordable housing.**

Exhibit 10. Estimated Housing Need Among PCC Students by PCC Campus Neighborhood

Source: ECONorthwest analysis of student-level data provided by PCC; Goldrick-Rab, Richardston, and Hernandez (2017).

See appendix for methodology.

Location	Overcrowding	Homelessness	Overcrowding + Homelessness	Housing Insecurity
PCC District	7,400	6,100	13,600	25,800
All Campuses	1,170	970	2,140	4,080
Cascade Campus	320	270	590	1,120
Rock Creek Campus	240	190	430	820
Southeast Campus	350	290	640	1,220
Sylvania Campus	270	220	480	920

In comparison, about 40,300 students attend one of the four campuses. Thus, **one in ten students who attend one of the four campuses live near a campus and face housing insecurity**. However, housing need among students varies across campuses. About 20% of students who attend Southeast Campus live near it and face housing insecurity. The ratio of housing need to student population is 13% for Cascade Campus and 7% each for Rock Creek Campus and Sylvania Campus.

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¹⁰ Hill, James. "School is back in session and there's plenty to talk about for the 2019-2020 year." Portland Community College. September 2019. https://www.pcc.edu/news/2019/09/school-is-back/.

6. Summary of Findings and Implications

In this section, we summarize our findings and present our observations about those findings. Key findings from our research include:

- Housing Need in the PCC District: There are 40,000 underproduced housing units and 9,000 individuals experiencing homelessness. New, income-restricted units are needed to reduce housing cost-burden among lower-income households.
- Student Need in the PCC District: An estimated 13,600 to 25,800 PCC students who live
 in the PCC District could be in need of housing support. Overcrowding, homelessness,
 and unaffordable rents are common among community college students.

Campus level findings

- Southeast Campus: Housing need is the greatest around the Southeast Campus for two reasons. The residential population is the greatest near the Southeast Campus. More importantly, housing need related to underproduction and homelessness is greater near the Southeast Campus. To address currently existing need (underproduction and unhoused need) among households that earn less than 50% of MFI, about 1,700 new, income-restricted units will need to be built. An estimated 640 to 1,220 PCC students who live near Southeast Campus are in need of affordable housing. They make up 10% to 20% of the student population in Southeast Campus.
- Cascade Campus: Similarly, housing need near Cascade Campus is skewed toward unhoused need. 1,100 new, income-restricted units are needed to address currently existing need among households that earn less than 50% of MFI. An estimated 590 to 1,120 PCC students who live near Cascade Campus are in need of affordable housing. They make up 7% to 13% of the student population in Cascade Campus.
- Sylvania Campus: 700 new, income-restricted units are needed near Sylvania Campus. An estimated 480 to 920 PCC students who live near Sylvania Campus are in need of affordable housing. They make up 4% to 7% of the student population in Sylvania Campus.
- Rock Creek Campus: Housing need near Rock Creek Campus is more influenced by future population growth than homelessness, compared to the other three campuses. 300 new, income-restricted units are needed. In comparison, an estimated 430 to 820 PCC students who live near Rock Creek Campus are in need of affordable housing. They make up 4% to 7% of the student population in Rock Creek Campus.

Exhibit 11. Comparison of Housing Need Estimates

Source: ECONorthwest analysis of student-level data provided by PCC; PSU, 2020-2070 Coordinated Population Forecasts; U.S. Census Bureau, 2014-2018 ACS 5-year estimates; HUD, 2019 PIT count; PCC; Goldrick-Rab, Richardston, and Hernandez (2017). See appendix for methodology.

Location	Currently Existing Need for Housing Units Among Households Earning Less Than 50% of MFI	Overcrowding + Homelessness Among Students	Housing Insecurity Among Students
PCC District	28,000 units	13,600 students	25,800 students
All Campuses	3,800 units	2,140 students	4,080 students
Cascade Campus	1,100 units	590 students	1,120 students
Rock Creek Campus	300 units	430 students	820 students
Southeast Campus	1,700 units	640 students	1,220 students
Sylvania Campus	700 units	480 students	920 students

Exhibit 12. Summary of Estimated Housing Needs Near Each Campus



- Housing Insecurity Among Students
- Overcrowding and Homelessness Among Students

Appendix

Methods in Detail

The Market Scan analyzes data at three levels to establish the landscape of demand for affordable housing. These levels are:

- A regional analysis provides an overview of the demand for affordable housing across PCC's taxing district.
- 2. A **campus community analysis** assesses demand for affordable housing in places near PCC's four campuses.
- A student-level analysis estimates the demand for affordable housing among PCC students.

Because much of the data used in the analysis comes from U.S. Census Bureau, the selected geographies are based on the geographies used for the Census Bureau. Namely, for the regional analysis, census tracts that are completely or partially within PCC's taxing district boundaries were selected. This boundary encompasses all of Washington County, a segment of Multnomah County, and small portions of Clackamas County, Columbia County, and Yamhill County.

For the campus community analysis, ECONorthwest analyzed driving distances from each of the four campuses and selected census tracts that are reachable within 5 minutes of driving time, or about 2 miles. However, if more than 90% of a census tract is outside the driving distance, it was removed from the campus community analysis.

PCC provided anonymized data that included ZIP+4 codes for students in academic year 2019-2020. The 9-digit ZIP+4 Code is comprised of five digits that represent destination post office or delivery area and four digits that indicate specific delivery route. Census blocks that intersected with the center point of the delivery route were assumed to be the dwelling location of students. Census blocks aggregate to census tracts.

For the district analysis and campus community analysis, there are three components of housing need identified.

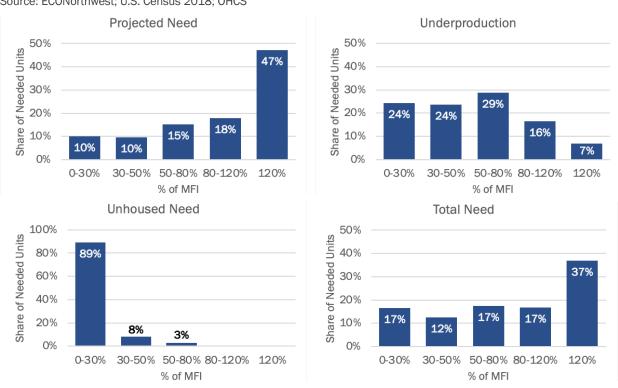
- 1. **Projected need** is the demand for housing over the next twenty years. This estimate is derived from population forecasts provided by Portland State University Population Research Center, an average household size of 2.5 people, and an average of 1.14 dwelling units per household. Projected need includes all types of housing for all levels of household income.
- 2. Underproduction is the existing demand for housing based on current shortage of housing among those who are housed. Past underproduction of housing units has resulted in a very tight housing market where there are not enough vacant units and non-primary residences that allow for a healthy circulation of households in a regional housing market. Underproduction affects lower-income households more because they lack sufficient resources to compete for housing with higher-income households.

3. **Unhoused need** is the demand for housing based on the number of people experiencing homelessness. Cities and counties conduct biannual snapshots of individuals and families who are unhoused on a given night. This data called Point-in-Time (PIT) counts are reported to HUD. Because these numbers are known to undercount the actual number of people experiencing homelessness, they are increased by a factor (60%) to produce more realistic estimates.¹¹

Housing need is then distributed across various income groups to depict a clearer picture of housing need across income groups. The distribution of projected need is assumed to match current distribution of household incomes in Multnomah County, Washington County, and Clackamas County. The distribution of underproduction is based on the income distribution among cost-burdened households in the three counties. The income distribution among unhoused populations is based on Oregon Housing and Community Services (OHCS) administrative data from Community Action Agencies that receive state Emergency Housing Assistance (EHA) and State Housing Assistance Program (SHAP) funds. ¹² Exhibit 13 illustrates the distribution of housing need by for each of the three components of housing need and for the total housing need.

Exhibit 13. Distribution of Housing Need by Component of Housing Need





¹¹ The 60% factor is based on a 2016 research by Wilder Research titled *Homelessness in Minnesota: Findings from the 2015 Minnesota Homeless Study*.

¹² These numbers are based on the first 3 quarters of fiscal year 2020 only.

Housing need among students is determined by estimating the number of students who are eligible for the Federal Pell Grant program. Although Pell Grant eligibility alone does not indicate housing insecurity, it is an indicator of income and other financial resources that would be available for housing costs. Housing need is also determined by estimating overcrowding and homelessness among students. A national survey of 33,000 students in 70 community colleges in 24 states showed 17% of students were doubled-up and 14% of students experienced homelessness in the 12 months preceding the survey. About half (51%) of the students were identified as housing insecure, meaning they could not pay their full rent or mortgage amount, doubled-up, or unhoused. In the West region, 15% of students experienced homelessness and 59% of students were housing insecure.

The findings from the survey are likely applicable to PCC. Housing shortage in the Portland metropolitan area is not as dire as it is in other major cities on the west coast but is certainly worse than many other cities in rest of the nation. Slightly less than half (47%) of the data in the survey represented students attending community colleges in the West region. 28% of the sampled students attended community colleges with more than 20,000 students, 44% were white, 56% were under 25 years old, and 42% received the Pell Grant. In comparison, PCC has more than 40,000 credit students, 54% of its students identify as white, 56% of credit students were under 25 years old, and 32% of credit students received the Pell Grant. 14

Data Sources

The following data sources were used in this analysis.

- The American Community Survey (ACS) is the most comprehensive publicly available data source for demographic information in the US and is administered to about three million households on a rolling basis each year. The data are released annually as oneyear and five-year estimates on a wide range of demographic, socioeconomic, and household characteristics.
 - In this memorandum, we use ACS five-year estimates, which are pooled samples across five-year ranges. The 2014-2018 estimates used in this analysis include households that were surveyed in years 2014 to 2018. The larger sample size for the five-year estimates enables us to look at smaller geographic areas with more confidence that the sample data represents the population. However, five-year estimates have the disadvantage of being an average across five years, meaning they are not representative of a single year in the sample range, but rather, an average of all five years within the sample range.
- Student data from PCC. PCC provided ECONorthwest with student and course-level data for the 2005-06 through 2019-20 academic years. These data included all credit, non-

¹³ Goldrick-Rab, Sara, Jed Richardson, and Anthony Hernandez. Hungry and Homeless in College: Results from a National Study of Basic Needs Insecurity in Higher Education. March 2017. https://hope4college.com/wp-content/uploads/2018/09/Hungry-and-Homeless-in-College-Report.pdf.

¹⁴ "Demographics." Portland Community College. Accessed February 1, 2021. https://www.pcc.edu/about/quick-facts/demographics.html.

credit, and continuing education courses students had taken and also included student demographic characteristics, such as race, ethnicity, gender, birth date, Pell Grant eligibility, and the zip code of the student's residence.

The number of students living within a five-minute drive of each PCC campus was estimated using student zip codes and zip+4 codes provided in the student data. About a third of student observations were missing zip+4 data in the 2019-20 academic year. These students were allocated to existing zip+4 codes based on their zip code and the distribution of other students across zip+4 codes. Overall, ECONorthwest allocated over 95 percent of PCC's total enrolled students in 2019-20. After allocation, zip+4 codes were organized into census block groups to estimate the distribution of students living near PCC campuses. Note that students with out-of-state zip codes, students who took only community education courses, and students with invalid or missing zip codes (less than 1 percent of observations) were excluded from ECONorthwest calculations.

- Portland State University Population Research Center is directed by the Oregon State Legislature to regularly generate an account of current population trends and population forecasts. The data is generated for each county in Oregon. The process includes developing demographic models using historic and recent data, gathering information about existing and planned housing, and making assumptions about future housing and population change.
- Point-in-Time (PIT) count is a snapshot of individuals experiencing homelessness on a single night in a community. It records the number and characteristics (e.g., race, age, veteran status) of people who live in emergency shelters, transitional housing, rapid rehousing, Safe Havens, or PSH; as well as recording those who are unsheltered. In addition, the Housing Inventory Count (HIC) estimates the number of beds available. HUD requires that communities and Continuums of Care (CoC) perform the PIT count during the last ten days of January on an annual basis for sheltered people and on a biennial basis for unsheltered people. Though the PIT count is not a comprehensive survey, it serves as a measure of homelessness at a given point of time and is used for policy and funding decisions.
- OHCS Emergency Housing Assistance (EHA) and State Homeless Assistance Program (SHAP) administrative data is based on data collected by Community Action Agencies that receive the state funds. EHA program provides flexible, short-term funding to prevent and reduce homelessness. SHAP provides operational support for emergency shelters and related services for individuals and families experiencing homelessness. The funds can be used for street outreach, shelters, and data collection. OHCS receives quarterly reports from Community Action Agencies on the clients served through these programs.



DATE: March 9, 2021

TO: PCC Facilities Plan Project Team

FROM: Lorelei Juntunen, Matt Craigie, James Kim, Angelica True

SUBJECT: Alternative Land Use Study - Context Scan

This memorandum is one of two documents that constitute the **Alternative Land Use Study** for the PCC Facilities Plan project. In this document, we examine the capacity of PCC campuses to accommodate non-school related development, in particular affordable housing. The other document is a **Market Scan** that describes the demand for affordable housing in relation to PCC campuses.

1. Purpose and Background

As part of a larger facilities plan, Portland Community College (PCC) would like to have a better understanding of their campus's suitability for the development of affordable housing. The school has been asked by both internal leadership and external partners to consider how it could contribute to solutions to the affordable housing crisis that is affecting the Greater Portland Region. One potential solution would be for PCC to accommodate affordable housing on surplus land at their campuses. PCC is already pursuing this idea; the school is currently working with Home Forward, the local housing authority, on an affordable housing project at their NE Portland Metropolitan Workforce Training Center.

The purpose of this study is to inform PCC about which of their campuses might be suitable for future affordable housing development. Questions explored in this study include:

- How do affordable housing developers evaluate and select suitable sites for their affordable housing projects?
- How suitable is each of the four PCC campuses for an affordable housing project?
- If PCC were to support an affordable housing project at one of their campuses, which specific sites could adequately accommodate a project?

This document is organized as follows:

- **2. Framework and Methods.** A description of our approach to this report's technical analysis and a summary of our discussions with affordable housing developers.
- 3. Evaluation of PCC Campuses. Using criteria established through prior research and conversations with affordable housing developers, we assess each of the four PCC campuses.
- 4. Summary of Findings. A summary of the key takeaways.
- Appendices. There are three appendices to this report. They describe (A) land use regulations applicable to each campus, (B) additional job-related analyses, and (C) sitelevel diagrams indicating hypothetical sites at each campus.

The Facilities Plan will consider multiple alternative land uses, including affordable housing, wraparound services, and other supportive uses like commercial space where appropriate. The Market Scan focuses primarily on housing for several reasons.

First, housing is likely to be the highest and best use of developable properties at PCC campuses. PCC is not pursuing housing for revenue generation, but would partner with affordable housing developers. For these developers, retail tenants generate much less income (on a per square foot basis) than residential tenants do. Although mixed-use developments that co-locate housing and retail uses are desirable for some residents, retail competes with the need for housing that is affordable to lower-income households.

Second, retail space is harder to fill because it requires commercial tenants who can sign up for long-term leases. Vacancies in retail space can reduce the appeal of a place. Moreover, pandemic-induced economic shifts observed during 2020 have resulted in sharp increases in retail vacancies and a drop in retail rents. Other ground floor uses, like resident support services or partner offices, may be more viable as part of affordable housing at PCC.

The need for affordable housing is dire in the communities that PCC operate in and among PCC students. Restoring housing stability will be critical to proving an atmosphere that PCC students can thrive in. Therefore, the Context Scan focuses on understanding the need for affordable housing among PCC students and the communities that surround PCC campuses.

2. Framework and Methods

This study evaluates whether PCC campuses, and specific sites on those campuses, are suitable for affordable housing development meaning attractive to affordable housing developers and the stakeholders that support their projects. This memo can be considered a preliminary site selection process for affordable housing projects.

With this focus on site selection, understanding the perspective of an affordable housing developer and the site criteria that they value will help us evaluate PCC campuses and individual sites. As a first step we have talked with local affordable housing developers to identify and confirm the elements that are important for their site selection decisions. As a second step, we have used the input from developers (along with information gained from previous and related work) to establish a list of affordable housing site selection criteria. Each PCC campus is then evaluated on each criterion. As a final step in this analysis, Walker Macy has provided a preliminary analysis of select sites at each PCC campus, examining them for their fit with typical affordable housing project site requirements.

2.1. What do we mean by 'affordable housing'?

Definitions for "affordable housing" can vary greatly and are often tied to Median Family Income (MFI). This study defines affordability as the relationship between market housing price and household income such that the monthly housing costs (including utilities and other costs) for a single-family dwelling or an apartment unit are no more than 30% of gross household income, and if the costs are higher than 30%, they're not affordable. Transportation costs are not included. This is an imperfect, but frequently used definition of housing affordability. Housing

affordability is, therefore, a function of income and housing costs for each individual household, which can vary substantially given the unique circumstances of a household and dwelling unit.

MFI is a standard measure of income that varies depending by geography and family size and is derived from U.S. Census data. The Department of Housing and Urban Development (HUD) establishes MFI thresholds that are dependent on the size of the household for programs it administers.

Exhibit 1 provides an overview of the relationship between current income ranges and affordable housing costs for the Portland-Vancouver-Hillsboro Metropolitan Statistical Area (MSA), which is the geographic unit the HUD uses for its programs. The estimates are based on a 4-person household. The MFI can be adjusted for households of other sizes.

Exhibit 1. Portland-Vancouver-Hillsboro Metropolitan Statistical Area (MSA) Median Family Income and Affordability Ranges, 2020

Source: ECONorthwest; HUD FY2020 Income Limits

	Income Range	Affordable monthly housing costs
2020 MFI, 4-person household	\$92,100	\$2,303
High (120% or more of MFI)	>\$110,520	>\$2,763
Moderate (80%-120% of MFI)	\$73,680 - \$110,520	\$1,842 - \$2,763
Low (50-80% of MFI)	\$46,050 - \$73,680	\$1,151 - \$1,842
Very Low (30%-50% of MFI)	\$27,630 - \$46,050	\$691 - \$1,151
Extremely Low (Less than 30% of MFI)	<\$27,630	<\$691

In the U.S. and in Oregon, at least 45% of renters are cost-burdened, or spending more than 30% of their gross income on housing costs. In the than 30% of gross annual Portland-Vancouver-Hillsboro MSA, 4 out of 5 households earning less than 50% of MFI were cost-burdened. The cost-burden rate was 53% among households earning 50% to 80% of MFI and 19% among households earning 80% to 100% of MFI. In 2018, there were about 74,000 renter households in the MSA earning less than 30% of MFI, but only 20,000 rental units were affordable to them.²

Households that pay more income on housing costs are commonly referred to as "cost-burdened" or "moderately costburdened." Households that pay more than half of their gross income on housing costs are "severely cost-burdened."

As this analysis is focused on factors related to the supply of affordable housing, rather than demand factors like household characteristics, we do not further examine low-income households. To better understand demand site factors, please refer to the companion memorandum, the Market Scan.

¹ Based on 2019 ACS 1-year estimates, Table B25070.

² National Low Income Housing Coalition. The Gap: A Shortage of Affordable Homes. March 2020.

2.2. How do affordable housing developers evaluate potential

project sites?

Affordable housing developers have similar, but different, site needs than for-profit developers. To understand an affordable housing developer's perspective, we interviewed two with experience in affordable housing development in the Portland region. These conversations and previous work on affordable housing projects have helped us identify several important factors for siting of affordable housing projects. The following is a summary of our interviews and research regarding affordable housing site selection.

The approach to site selection for affordable housing projects varies from "site first" to "target population first." Affordable housing developers find and evaluate potential sites for their projects in several different ways. Sometimes candidate sites are presented to them for their consideration. This "site first" situation can arise when strategic partners, like institutions, have surplus land or when property owners seek to sell select properties. In this case, developers evaluate the merits and issues of the property to see if it matches up with their business model. It is important to note that not all offered sites, even if they are offered "for free," are selected for a project. Other criteria, such as site costs, access to partner services, and others must also be considered and weighed.

The "target population" approach describes an affordable housing site selection process where developers seek out a property that best meets the need of a select and targeted To inform this work we spoke with two affordable housing developers that are active in the Portland region:

Jonathan Trutt. Jonathan is a Director at Home Forward, the housing authority for the City of Portland. Jonathan and the Home Forward team have deep experience as a public agency providing affordable housing, including a project underconstruction at PCC's Metro Center in Northeast Portland.

Jessica Woodruff. Jessica is the Director of Development at Community Development Partners (CDP). Jessica has decades of experience in affordable housing. She recently took at position at the for-profit CDP after leading a development team at REACH, another prominent affordable housing developer in the Portland region.

household type. Different types of households that live in affordable units have different needs. Household types could range from those having experienced houselessness, families, gender-restricted housing, to "workforce housing.3" With this approach, developers seek out sites that meet specific needs of the target population and accommodate development specific needs for each project. For example, a select household type may call for siting a project near service provider locations. Another example would be the fact that the specific project type calls for a threshold number of units for it to be financially viable. The target population approach also informs unit types, sizes, and configuration, as well as neighborhood fit.

With both cases, multiple criteria are used to determine if a site matches the needs of the affordable housing project. Again, not all sites—even "free sites"—are selected.

³ The exact definitions and the regulations around housing restrictions varies from jurisdiction to jurisdiction.

• Transit access is a cornerstone for siting affordable housing projects. Across most types of affordable housing, developers are looking for sites that offer ease of access to businesses where their residents can work, urban amenities like grocery stores and restaurants where their residents can shop, and parks and open spaces for recreation—basically all of the essential elements of a neighborhood that, together, offer a high quality of life.

The developers that we spoke with emphasized the importance of being close to transit lines. Although they recognize that many affordable housing residents own private vehicles, having transit options means that car ownership (and the financial burden associated with it) is not be a requirement for getting around. In this way, access to transit, or better put, the access that transit affords an affordable housing resident, is a cornerstone of the package of necessary factors needed to help support upward mobility. Without transit access, or with poor transit service, affordable housing residents may either be left with few options to get to work or places to shop and recreate; or they will be reliant on private transportation or relatively expensive taxis or ride-shares.

• Access to jobs, urban amenities, and services is another key factor in supporting affordable housing residents. Intentional siting of affordable housing with convenient access to job centers – via transit, bike, or walk – is likely to buoy and stabilize low-income households, as they are less likely to be burdened by long and time-consuming commutes. Although, it is not guaranteed that residents will find employment nearby, siting near employment areas, downtowns, and other job dense areas raises the chances of local employment. In some cases, affordable housing developers work with partners to identify work opportunities for residents that are conveniently located and matched with resident skill sets.

Access to urban amenities—parks, open space, cafes, restaurants, etc.—is another factor for siting housing projects, whether they are affordable or market rate. Convenient access to these amenities is considered central to providing a stable and quality living arrangement.

The importance of access to services, such as health care providers, clinics, pharmacies, and job training centers varies depending on the target population for the affordable housing project and the partner and ownership model for the project. In most cases, affordable housing developers have service departments that integrate resident services into the project. However, there are also generally strong ties between affordable housing developers and service providers. The level of need for services is largely tied to the target income bracket of the household the project serves; with lower income households generally needed for focused services and/or stronger links to outside providers. Basic services that are wrapped into many affordable housing projects include eviction prevention, food security programs, information and referral services, and career planning. More advanced services for select households can include case management for mental health issues. For affordable housing projects for the lowest income households and for those experiencing homelessness, convenient access to

service providers and their partner networks is a primary driver for project site selection.

- Affordable housing providers also weigh local financial incentives and policy tools when selecting a site. Local financial incentives and policy tools such as tax incentives, density bonuses, lower parking requirements, and other flexible development standards can help an affordable housing project become financially feasible. In some cases, these programs even tip the balance of feasibility, becoming crucial for project viability.
- Site-specific characteristics and qualities inform affordable housing project viability, scale, and development program. Like all new real estate projects, the actual site characteristics and qualities inform and shape the type, scale, and program of the affordable housing project. For example, smaller sites will need to consider more compact designs with either less parking or integrated parking. Sites with slopes or other natural features might require more site work which could add costs and affect feasibility.
- Non-spatial criteria, such as committed and long-term partnerships, are also crucially important for affordable housing site selection. The affordable housing developers that we spoke with talked about how their partnerships with funders, general contractors, service providers, and operators are crucially important to site selection. Alignment of organizational goals and values allows developers to better provide long-term, life-altering housing projects. Affordable housing development is complex and comes with multiple risks. To get projects on the ground—and, importantly, to maintain those projects and provide excellent services to resident households—affordable housing developers look for partners that complement their core skills of development and asset management. They also look for partners that share their commitment to the project in the long-term; developers recognize that getting a project built is only the first step to achieving their core mission of housing stability and upward mobility.

2.3. How can we evaluate the suitability of PCC campuses for affordable housing?

The broad purpose of this study is to understand to what extent PCC campuses are suitable locations for affordable housing. To do so, an evaluation of each campus based on a set of affordable housing site selection criteria is necessary. This exercise is inherently qualitative; affordable housing developers weigh multiple criteria and, in many cases, select sites opportunistically as long as their key project needs are met. Therefore, to evaluate each campus, we use a qualitative scoring method and score each campus relative to the others.

Evaluation Criteria

Our research and interviews highlighted several criteria that are central to affordable housing site selection. Exhibit 2 below describes spatial-linked neighborhood-level selection criteria. These criteria help developers find an area of a region to consider for a project. We use these criteria to evaluate each of the four PCC campuses for affordable housing suitability in the next section of this memorandum.

Exhibit 2. Neighborhood-Level Affordable Housing Site Selection Criteria (Spatial-Linked Criteria)

Source: ECONorthwest

Neighborhood-Level Criteria	Description	Priority
Transit Access	 Access to/from location via transit (buses, trains, etc.) Transit quality varies. High frequency transit is preferred. Transit access is a priority for all affordable housing projects 	High
Access to jobs	 Access to job centers and employment areas Can vary by resident household type Developer partnerships can inform this criterion, e.g., locating near a partner job training site 	High
Access to services	 Services can range from career support and anti-eviction services to case management for addiction or mental health Many basic services are wrapped into affordable projects Service needs vary by resident household type 	Varies by resident household needs
Area urban amenities	Convenient access to parks, open space, grocery stores, restaurants, and general services	Medium

Site-specific criteria are essential for project site selection. Without meeting these criteria, affordable housing projects are unlikely to be viable at the selected site. Note that our scope of work permits us to only consider these criteria at a high level for PCC sites and we have not ranked individual PCC properties against these criteria. During the pre-development process, an affordable housing developer would conduct due diligence to evaluate detailed site characteristics and qualities included in Exhibit 3.

Exhibit 3. Site-Specific Criteria for Affordable Housing Selection Source: ECONorthwest

Site-Specific Criteria	Description	Priority
Zoning and Development Standards	 Local land use policies must align with the type, scale, and design of the project Regulations can include land use designations and zoning, development standards, as well as other locally adopted policies In general, land use policies that allow for multifamily housing are required. 	Essential. For a more detailed discussion on land use regulations at each campus, please refer to Appendix A.
Site size and shape	 Site size and shape will determine the scale and orientation of a project Smaller sites are generally more challenging, although it depends on the developer's business model and preferred scale In many cases, sites that allow for 80 to 100 units are preferred. 	Varies depending on proposed development type and scale.
Site characteristics	Sites with minimal site work are preferred. Extra site work—flattening slopes, mitigating wetlands, etc.— adds to the overall project cost.	Varies depending on development type and scale, as well as the site characteristics themselves.
Incentives and policy tools	 Financial incentives and affordable housing policies can make the difference for new affordable housing projects. 	Varies. Stronger policy tools and financial incentives can spur investment.

3. Evaluation of PCC Campuses

Below we provide a campus-by-campus assessment that evaluates PCC campuses *relative to the other campuses* using the neighborhood-level affordable housing site selection criteria listed in Exhibit 2.4 For each campus, we provide a performance summary and present analysis on four metrics: Access to Transit, Walkshed, Total Jobs within a Quarter Mile, and Access to Amenities and Neighborhood Services.

Each criterion was evaluated for each campus on the following scale. These qualitative estimates are intended to be comparative between the campuses. Moreover, this high-level ranking method is not definitive advice about where investments should be focused. It should be assumed that individual developers will have their own perspectives and criteria weights. We are simply proposing that one campus, relative to the other campuses, might score better or worse than the others. Even with some low scores, a campus could be a suitable location for affordable housing. However, those low scores would indicate deficiencies that should be considered when pursuing a project at that campus.

- *High.* (Symbol lacktriangle) The campus fully meets the criterion.
- *Medium*. (Symbol ①) The campus meets the criterion in some ways but not completely or in a way that is considered below average.
- *Low*. (Symbol ○) The campus does not meet the criterion in any substantive way.

⁴ Note that because "Access to services" varies in importance from project to project, we have not included it as a sole criterion. Instead, we have adapted the criterion "Access to amenities" to include access to neighborhood services (e.g., clinics and pharmacies). Access to more intensive resident services is not included in this assessment.

Exhibit 4 provides a short guide to the different analyses conducted to evaluate each campus.

Exhibit 4. Analysis Guide

Source: ECONorthwest

Access to Transit



ECONorthwest used general transit feed specification (GTFS) data from TriMet to map how far one could travel by transit from each campus up to 60 minutes of travel time. Darker blue indicates longer travel times. Lighter blue indicates shorter ones. Thus, the greater area of light blue around a campus, the better the access. ECONorthwest ran the analysis for three different times of day: morning, midday, and evening. The data accounts for pre-COVID travel times. Current COVID pandemic travel times are likely to be different.

Neighborhood-level criteria assessed: Transit access

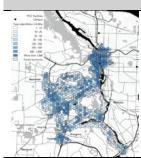
Walkshed: Transit Stations



Using ArcGIS Online, ECONorthwest mapped the 20-minute walkshed for transit stations for each campus. A walkshed shows how far the average person might conceivably travel on foot to reach a transit station. Each band of green represents a walk time of five minutes, with the darkest color green indicating a total walk time of 20 minutes.

Neighborhood-level criteria assessed: Transit access

Total Jobs within a Quarter Mile



ECONorthwest mapped the number of jobs within quarter-mile hex areas surrounding each campus. ECONorthwest overlaid the transit isochrone (showing jobs accessible within a 20-minute transit commute) to examine the number of transit-accessible jobs surrounding each campus. Darker blue indicates a greater number of jobs in that hex area.

Neighborhood-level criteria assessed: Access to jobs

Walkshed: Access to Amenities and Neighborhood Services



ECONorthwest mapped the locations of amenities and services using the Google Places API that fell within the 20-minute walkshed of each campus. The types of amenities and services assessed were: banks, bars / night clubs, bicycle stores, churches, doctor's offices, gyms, hospitals, libraries / book stores, movies, parks, personal care providers, police stations, post offices, restaurants, schools, stores and shopping centers, tourist attractions, and other amenities.

Each band of green represents a walk time of five minutes, with the darkest color green indicating a total walk time of 20 minutes.

Note that some symbols on the map may represent more than one instance of that particular type of amenity, but that not all instances are shown to avoid crowding on the map. The total amenity count is shown in the table to the right of each map.

Neighborhood-level criteria assessed: Access to services, Area urban amenities

3.1. Cascade Campus

The Cascade Campus scores highly on all three affordable housing selection criteria. The campus is ranked "high" on access to transit, jobs, and amenities and services.

Exhibit 5. Summary of Performance on Neighborhood-Level Affordable Housing Site Selection Criteria, Cascade Campus

Source: ECONorthwest

Criteria	Description	Assessment
Transit	Of the four campuses, the Cascade Campus has the best transit access.	
Jobs	The Cascade Campus has access to more jobs than any other campus.	
Amenities and Neighborhood Services	The Cascade Campus has superior access to a full range of amenities and neighborhood services.	
Key: High	Medium O Low	

Transit

The Cascade Campus is very well connected by public transportation.

Exhibit 6. Access to Transit, by Time of Day, Cascade Campus Source: ECONorthwest. TriMet GTFS, OpenStreetMap, OpenTripPlanner.

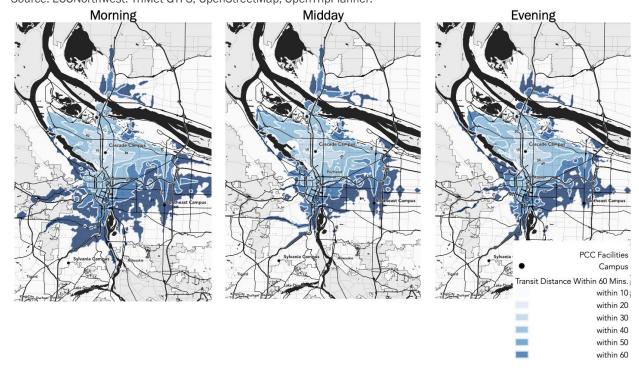
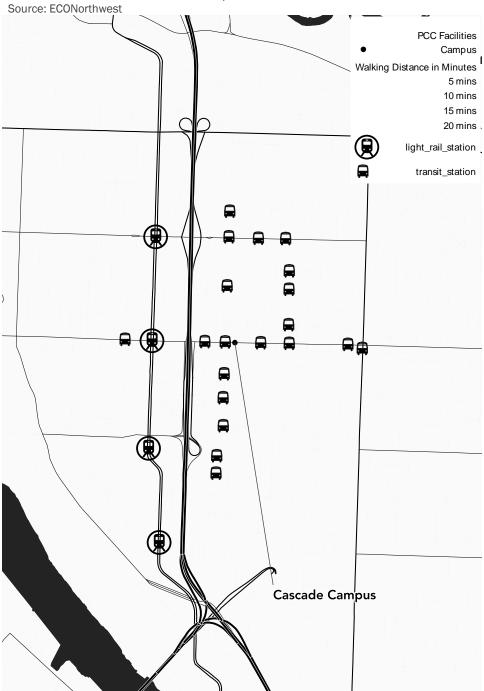


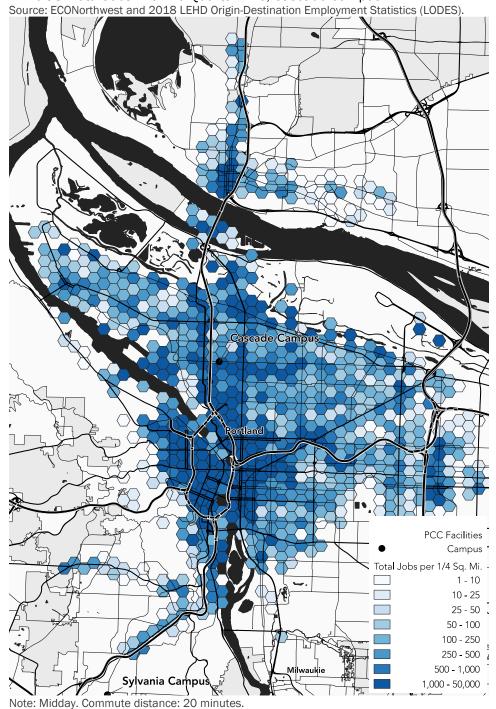
Exhibit 7. Walkshed, Cascade Campus



The Cascade Campus has ample access to transit within walking distance of the campus regardless of the time of day. There are several frequent service bus lines including the 4, 35, 44, and 72. The MAX Yellow line is also nearby.

Jobs

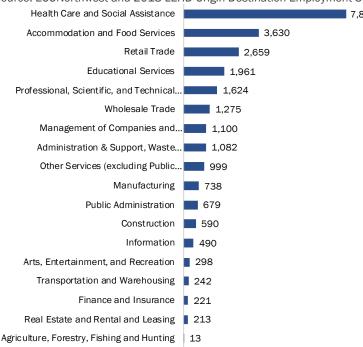
Exhibit 8. Total Jobs Within a Quarter Mile, Cascade Campus



The Cascade Campus has access to jobs in the downtown Portland core and also clusters of jobs in North Portland and into Vancouver.

Exhibit 9. Access to Jobs, by Sector, Cascade Campus

Source: ECONorthwest and 2018 LEHD Origin-Destination Employment Statistics (LODES).



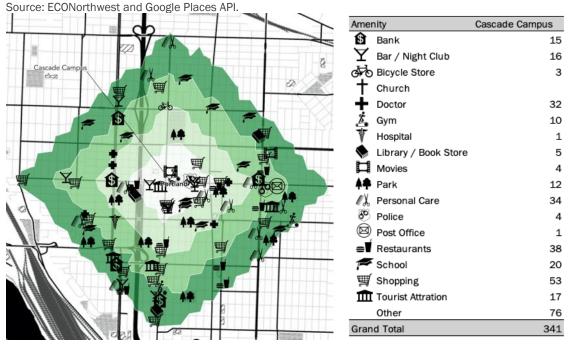
The largest job sector accessible from the Cascade Campus is the Healthcare and Social Assistance sector. Many jobs in this sector are relatively high-paying.

Note: Midday. Commute distance: 20 minutes.

Amenities and Neighborhood Services

Within walking distance of the Cascade Campus is the amenity-rich area of Southeast Portland. The area has many shopping and restaurant options, multiple tourist attractions, and access to medical and personal care services.

Exhibit 10. Access to Amenities and Services, Cascade Campus



3.2. Rock Creek Campus

The Rock Creek Campus performs low on all three selection criteria.

Exhibit 11. Summary of Performance on Neighborhood-Level Affordable Housing Site Selection Criteria, Rock Creek Campus

Source: ECONorthwest

Criteria	Description	Assessment
Transit	Rock Creek has below	0
Jobs	average access to transit,	0
Amenities and Neighborhood Services	jobs, and amenities and neighborhood services compared to its peer campuses.	0
Key: High	Medium O Low	

Transit

The Rock Creek Campus has low transit access as shown in Exhibit 12 and Exhibit 13.

Exhibit 12. Access to Transit, by Time of Day, Rock Creek Campus

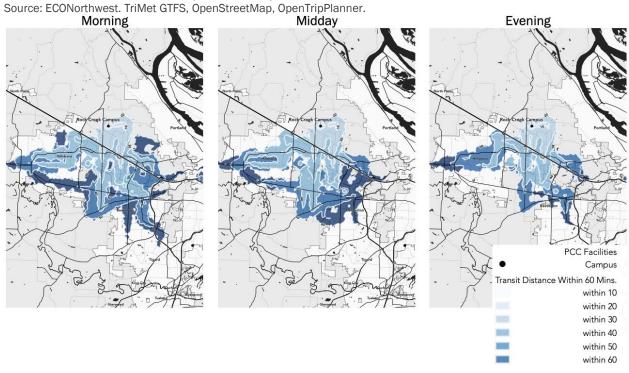
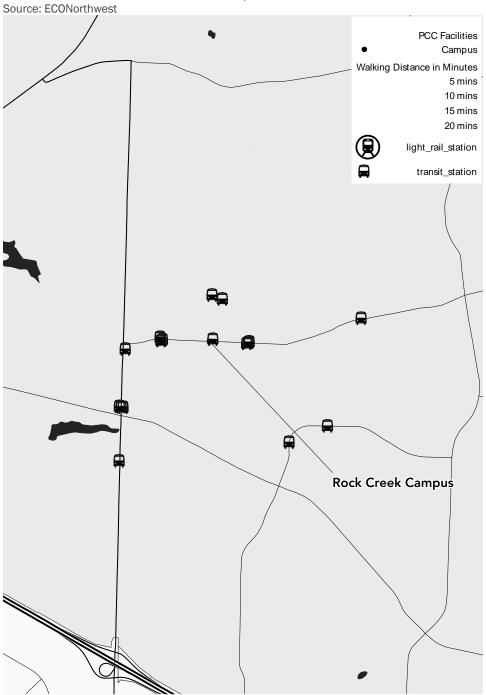


Exhibit 13. Walkshed, Rock Creek Campus



There are few transit stations accessible within the walkshed of Rock Creek Campus. There are three bus lines accessible, the 47, 52, and 67. All three lines run frequently with service to the Rock Creek Campus.

Jobs

Most job clusters are not accessible within a 20-minute commute of the Rock Creek Campus as shown in Exhibit 14.

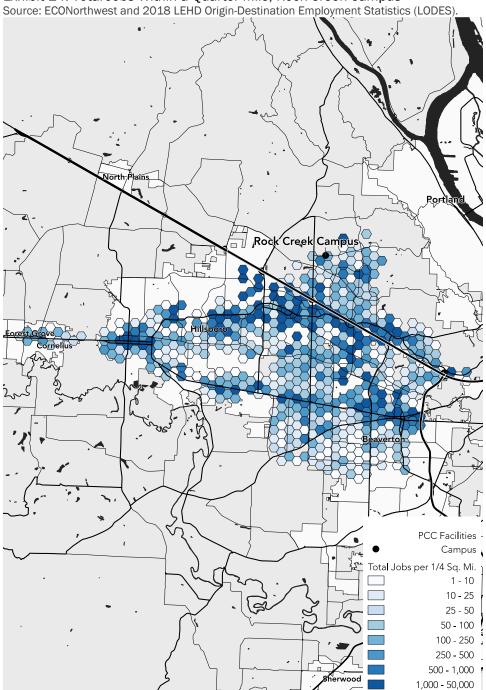
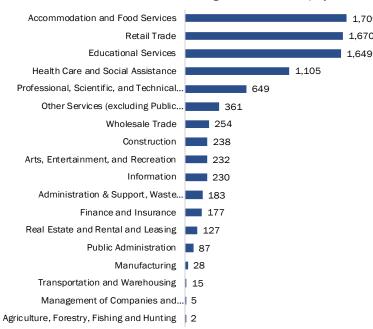


Exhibit 14. Total Jobs Within a Quarter Mile, Rock Creek Campus

Note: Midday. Commute distance: 20 minutes.

Exhibit 15. Access to Jobs, by Sector, Rock Creek Campus

Source: ECONorthwest and 2018 LEHD Origin-Destination Employment Statistics (LODES).



Jobs in Accommodation and Food Services are most prevalent around the Rock Creek Campus, followed by jobs in Retail Trade and Educational Services.

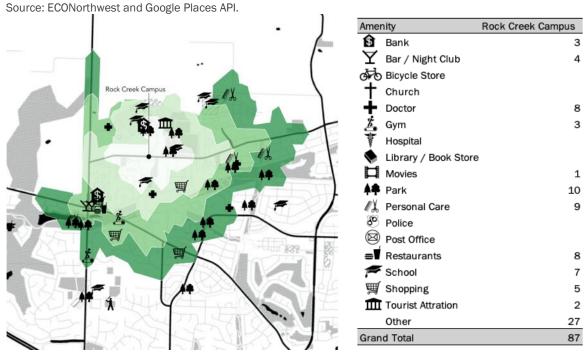
Jobs in these sectors tend to be lower paying, which is one factor that led to Rock Creek Campus' low qualitative score in the Access to Jobs metric.

Note: Midday. Commute distance: 20 minutes.

Amenities and Neighborhood Services

The Rock Creek Campus has relatively low access to amenities and services with parks and personal service providers being the most prevalent amenities and services around the campus.

Exhibit 16. Access to Amenities and Services, Rock Creek Campus



3.3. Southeast Campus

The Southeast Campus performs well across the board on all three affordable housing selection criteria. The campus scores lowest in terms of access to jobs relative to other campuses.

Exhibit 17. Summary of Performance on Neighborhood-Level Affordable Housing Site Selection Criteria, Southeast Campus

Source: ECONorthwest

Criteria	Description	Assessment
Transit	 The Southeast Campus has exceptional transit access to areas across East Portland, the Columbia Corridor, and down to Clackamas. 	
Jobs	 The Southeast Campus has above average access to job centers and jobs across a range of industries. 	•
Amenities and Neighborhood Services	The Southeast Campus has access to plentiful amenities and neighborhood services.	
Key: High (Medium O Low	

Transit

As shown in Exhibit 18 and Exhibit 19, the Southeast Campus has ample transit access at all hours of the day.

Exhibit 18. Access to Transit, by Time of Day, Southeast Campus
Source: ECONorthwest. TriMet GTFS, OpenStreetMap, OpenTripPlanner.

Morning

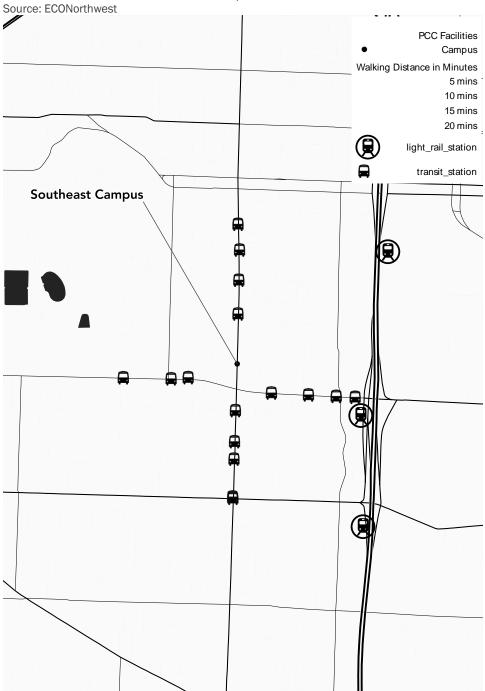
Midday

Evening

PCC Facilities
Campus
Transit Distance Within 60 Mins.
within 10
within 50
wit

ECONorthwest

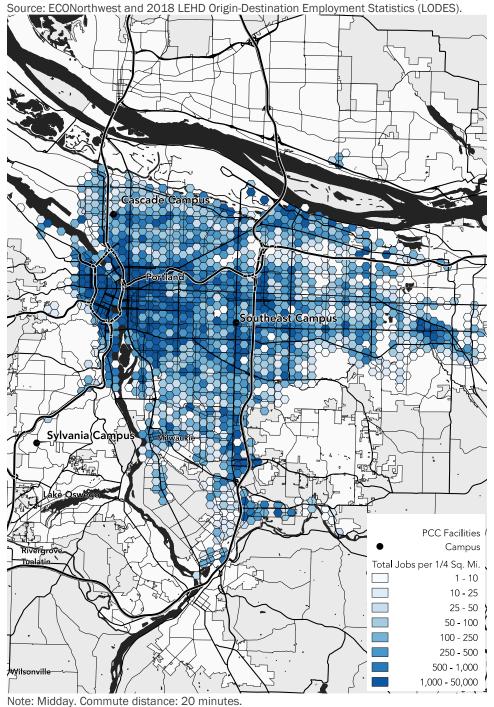
Exhibit 19. Walkshed, Southeast Campus



Access to transit at the Southeast Campus is high. The Southeast Campus has access to many frequent service bus lines, including the 15, and the 72. The 2 and 9 bus lines are also easily accessible as well as the Green MAX line.

Jobs

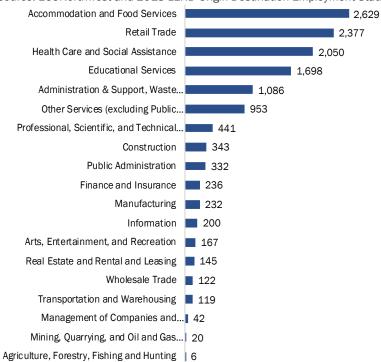
Exhibit 20. Total Jobs Within a 60 Mile Drive Time, Southeast Campus



The Southeast
Campus has access
to jobs in downtown
Portland, and jobs
are reasonably highly
concentrated in other
areas accessible
from the Southeast
Campus.

Exhibit 21. Access to Jobs, by Sector, Southeast Campus

Source: ECONorthwest and 2018 LEHD Origin-Destination Employment Statistics (LODES).



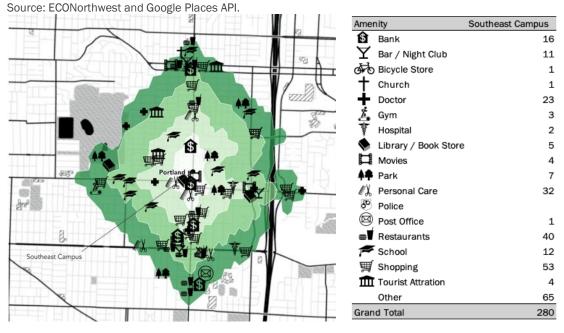
However, the two largest job sectors accessible from the Southeast Campus (Accommodation and Food Services and Retail Trade) tend to be relatively low-paying.

Note: Midday. Commute distance: 20 minutes.

Amenities and Neighborhood Services

The area around the Southeast Campus is amenity-rich, with many shopping options and restaurants within walking distance of the campus. The campus also as ample access to medical services and providers of personal services.

Exhibit 22. Access to Amenities and Services, Southeast Campus



3.4. Sylvania Campus

The Sylvania Campus performs moderately in terms of access to jobs and transit but has access to relatively fewer amenities and services than other campuses.

Exhibit 23. Summary of Performance on Neighborhood-Level Affordable Housing Site Selection Criteria, Sylvania Campus

Source: ECONorthwest

Criteria	Description	Assessment
Transit	Transit access is moderate compared to other campuses	•
Jobs	Although one can reach downtown Portland—a (pre-COVID) concentrated job center—Sylvania has access to fewer total jobs than other campuses.	
Amenities and Neighborhood Services	There is comparably less access to amenities and neighborhood services than other campuses.	0
Key: High	1 Medium ○ Low	

Transit

The Sylvania Campus has moderate transit access as shown in Exhibit 24 and Exhibit 25. Transit access could improve in the next decade, pending funding for and construction of TriMet's Southwest Corridor Light Rail Project, which would add light rail stations near the Sylvania Campus with access to downtown Portland and the southwest Metro area.

Exhibit 24. Access to Transit, by Time of Day, Sylvania Campus

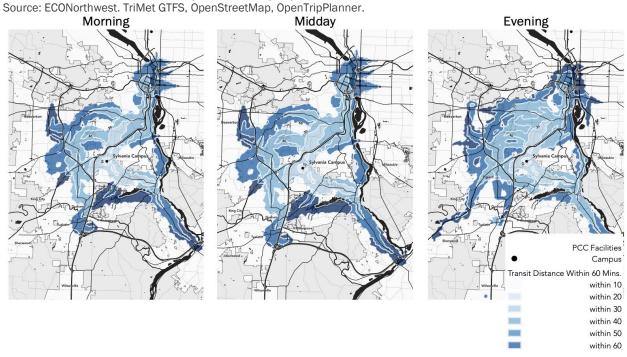
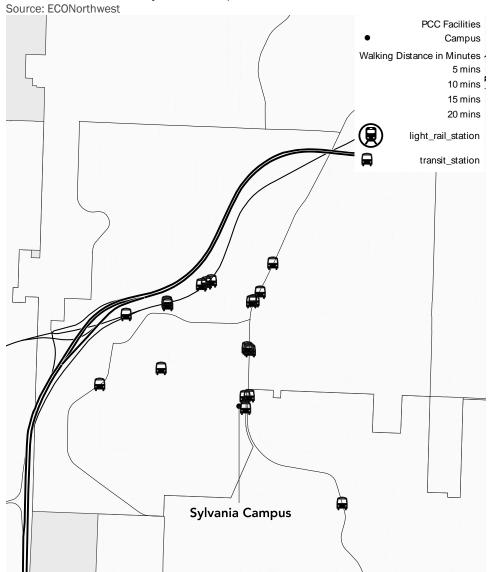


Exhibit 25. Walkshed, Sylvania Campus

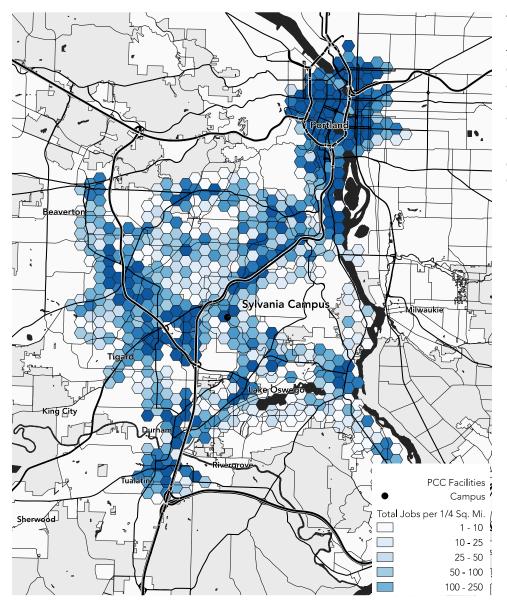


Access to transit at the Sylvania Campus is reasonably consistent regardless of the time of day. There are several frequent service bus lines accessible from the Sylvania Campus, including the 12, 44, and 96. Bus lines with less frequent service including the 38, 64, and 78 are also accessible.

Jobs

Exhibit 26 and Exhibit 27 present metrics to assess the Sylvania Campus for access to jobs. Qualitatively, the Sylvania Campus scores medium on job access relative to other campuses. Although downtown Portland is accessible from the Sylvania Campus, the concentration of jobs accessible from the Sylvania Campus outside of the downtown area is not high.

Exhibit 26. Total Jobs Within a Quarter Mile, Sylvania Campus Source: ECONorthwest and 2018 LEHD Origin-Destination Employment Statistics (LODES).



The Sylvania Campus is within a 20-minute transit commute of downtown Portland and job clusters in Beaverton, Tigard, and Tualatin.

However, job concentration outside of these clusters is reasonably low.

Note: Midday. Commute distance: 20 minutes.

Exhibit 27. Access to Jobs, by Sector, Sylvania Campus

Source: ECONorthwest and 2018 LEHD Origin-Destination Employment Statistics (LODES).



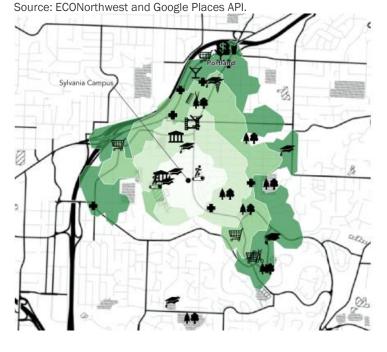
By job sector, jobs in Educational Services are most prevalent around the Sylvania Campus, followed by jobs in Health Care and Social Assistance and jobs in Finance and Insurance.

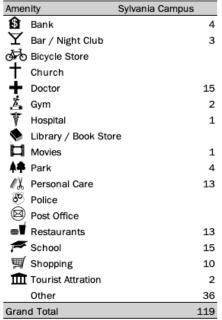
Note: Midday. Commute distance: 20 minutes.

Amenities and Neighborhood Services

The Sylvania Campus has relatively low access to amenities and services with schools and medical offices being the most prevalent amenities and services around the campus.

Exhibit 28. Access to Amenities and Neighborhood Services, Sylvania Campus





4. Summary of Findings

This section summarizes the campus-by-campus assessments presented in earlier sections. Exhibit 29 shows the campuses and their relative qualitative rankings on neighborhood-level affordable housing site criteria.

Exhibit 29. Summary of Performance on Neighborhood-Level Affordable Housing Site Selection Criteria, by PCC Campus

Source: E	ECONorthwest
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	Assessment		
Criteria	Transit	Jobs	Amenities and Services
Cascade	•	•	•
Rock Creek	0	0	0
Southeast		0	
Sylvania	0	0	0
Key: High	O _{Medium}	O _{Low}	

Out of all the campuses, the Cascade Campus scored highest across all three metrics, indicating that it has many characteristics attractive to affordable housing developers. The Southeast Campus also scored highly but had relatively less access to jobs than the Cascade Campus. The Rock Creek Campus scored the lowest across all three metrics. The Sylvania Campus scored second lowest with medium access to jobs and transit and low access to amenities and services.

As discussed in the Framework and Methods section, these rankings are relative to each other and, in many respects, are judgement calls. Individual developers that are scoping specific affordable housing projects will have their own criteria and ranking of those criteria. What the findings say is that in relation to one another, some campuses score better or worse than others.

For example, despite low scores, this analysis does not mean that Rock Creek is a "bad" place to site affordable housing. However, those scores should inform PCC and affordable housing developers about the potential challenges that would be faced by affordable housing residents there. Because transit access and access to jobs is relatively lower at the Rock Creek Campus and there are few urban amenities and neighborhood services within close reach, residents of an affordable housing development there would have to travel farther afield to access jobs, work, and recreation locations. Longer travel times, especially commutes, put time pressure on households. An affordable housing resident, say a single working parent, taking the bus to a daycare facility and then to work and back again in the evening is going to have less time to focus on family activities, job training, etc. As a result, their ability to strive for better and more higher paying work will be impacted and their quality of life will suffer. At the Rock Creek Campus, it is possible that these challenges could be ameliorated through placement of targeted services or programs for residents.

Every affordable housing project should be developed with thorough intentionality, robust partnerships, and with a detailed due diligence phase. The PCC campuses offer a remarkable prospect to link two of the primary pillars that support upward mobility—a quality education with stable and affordable housing. As our region continues to face a real and impactful affordable housing crisis, new affordable housing developments at any of the PCC campuses could offer a life-changing opportunity for those that need it the most.

Appendix A: Land Use and Regulatory Context

This section summarizes allowable land uses with respect to housing on each of PCC's four campuses. Residential development is allowed on most PCC campuses, with the exception of the Rock Creek Campus. Exhibit 30 provides a summary of allowed residential uses and assesses the viability of residential development by campus.

Exhibit 30. Summary of Allowed Residential Uses on PCC Campuses

Campus Name	Residential Uses Allowed?	Zones Allowing Residential Use	Notes
Cascade	√	CI2	
Rock Creek	×	N/A	Current land use regulations state that multifamily housing is not permissible. However, conversations with Washington County indicate that a zoning variance is possible. Additional discussion with the County regarding the details of the variance is needed.
Southeast	√	CI2	
Sylvania	✓	CI2	

Source: APG

The majority of PCC's campus land is base zoned as Campus Institutional 2 (CI2). This relatively new zoning designation was created by the City of Portland in 2017-18 as part of an update to the City's Comprehensive Plan. The CI2 zone is intended to improve the master planning and review processes for institutional uses.

Under this designation, colleges are generally allowed to expand as an allowed use but will be required to develop an approved Transportation Impact Analysis in accordance with the City's Transportation Demand Management Plan.

Residential uses including household (single-family, duplexes, multifamily, etc.) and group living (dormitories, fraternities, sororities, etc.) are allowed in the CI2 zone. Note also that the entire CI2 zone is treated as a single site, regardless of ownership. This affects the calculation of Floor to Area Ration (FAR), among other things.

Below we discuss zoning considerations for residential uses in greater detail for each PCC campus.

Cascade Campus

The Cascade Campus encompasses just over 16 acres in the Humboldt Neighborhood of Northeast Portland. The Cascade Campus's base zoning is the Campus Institutional 2 (CI2)

zone. Portions of the campus along N Killingsworth Street and N Albina Avenue are also regulated by the Centers Main Street (CI2m) overlay and a portion of the southern part of the campus is regulated by an Impact Mitigation Plan (IMP). The IMP will remain in place until the improvements in the plan are completed or December 31, 2023, whichever comes first.

The base CI2 zone allows for most residential uses including household (single-family, duplexes, multifamily, etc.) and group living (dormitories, fraternities, sororities, etc.). The Centers Main Street (CI2m) overlay is designed to encourage a greater mix of commercial and residential uses.

Portions of the Cascade Campus also fall in the IMP overlay, a type of bond-approved master plan. However, the IMP expires soon, and additional clarity is needed to understand whether new development can be approved under IMP standards after the expiration date. PCC may be able to elect which standards apply (CI2 or IMP).

Exhibit 31 below shows a zoning map for the Cascade Campus.

Exhibit 31. Zoning Map of Cascade Campus Source: Walker Macy

Cl2 Zoning (Campus Institutional Zone) IMP Roundar Main Street Overlay floor within 100' of transit street) RM2 121812 CI2 ZONING Piedmont Conservation District Historic Buildings Major Transit Priority Streets Campus Boundary Vacated Streets (triggers superblock irements for public plaza/atrium, open space) Entire site is in Killingsworth Pedestrian District main street overlay PIEDMONT CONSERVATION R2.5

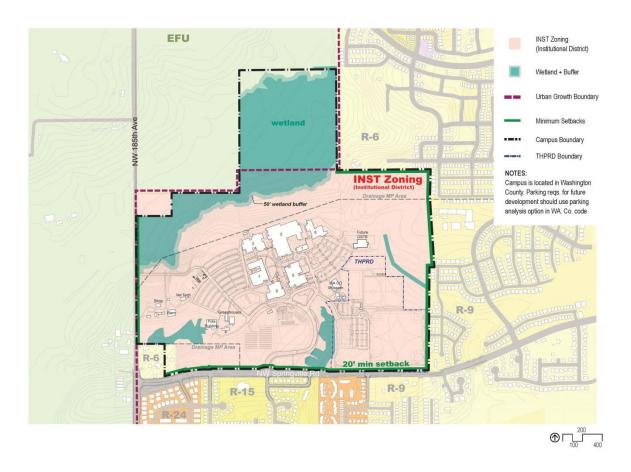
Rock Creek Campus

The majority of the Rock Creek Campus lies in Washington County's Institutional (INST) District. Two small portions of the northern section of the campus are located in an Exclusive Farm Use (EFU) zone and are outside the urban growth boundary (UGB).

Residential uses are not permitted in either of these zones. However, recent conversations with Washington County indicate that a zoning variance or similar mechanism could allow multifamily housing—and affordable housing specifically—to be developed. Further conversation with Washington County would be needed to identify a viable path for affordable housing development.

Exhibit 32 below shows a zoning map of the Rock Creek Campus.

Exhibit 32. Zoning Map of Rock Creek Campus Source: Walker Macy



Southeast Campus

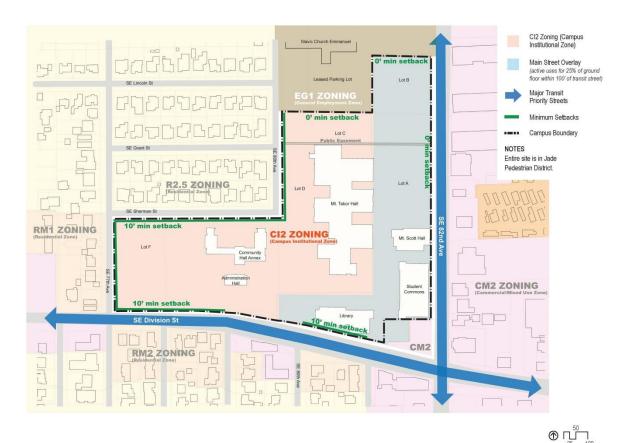
The base zone for the Southeast Campus is the Campus Institutional (CI2) zone. A portion of the eastern part of the campus is located in the Centers Main Street (CI2m) overlay.

Residential uses including household (single-family, duplexes, multifamily, etc.) and group living (dormitories, fraternities, sororities, etc.) are allowed in the CI2 zone.

Exhibit 33 below shows a zoning map for the Southeast Campus.

Exhibit 33. Zoning Map of Southeast Campus

Source: Walker Macy



Sylvania Campus

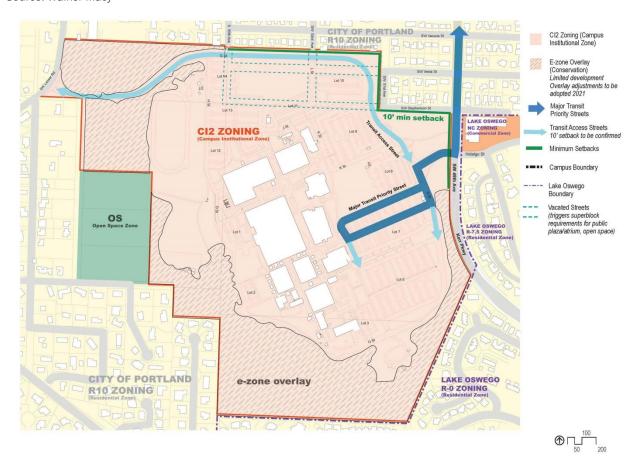
The Sylvania Campus's base zone is the Campus Institutional (CI2) zone. Portions of the western part of the campus fall into the Conservation (CI2c) overlay. Certain land uses are restricted in the CI2c overlay to limit impacts on natural resources.

Residential uses including household (single-family, duplexes, multifamily, etc.) and group living (dormitories, fraternities, sororities, etc.) are allowed in the CI2 zone.

Exhibit 34 below shows a zoning map for the Sylvania Campus.

Exhibit 34. Zoning Map of Sylvania Campus

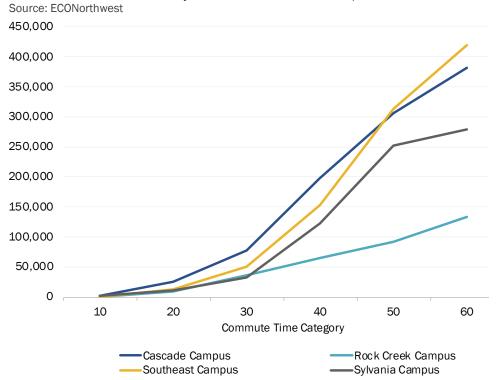
Source: Walker Macy



Appendix B: Additional Campus by Campus Comparative Analysis

The additional exhibits below offer a comparative look at job access for PCC's four campuses.

Exhibit 35. Access to Jobs, by Commute Time, PCC Campuses



Both the Cascade and Southeast Campuses have access to a large number of jobs within a 60-minute commute by transit from the campus. The Rock Creek Campus had access to the fewest number of jobs within a 60-minute commute time.

The types of jobs accessible from each campus also varied by sector as shown in Exhibit 36. Across all four campuses, the services sector was the largest.

Exhibit 36. Access to Jobs, by Sector, PCC Campuses

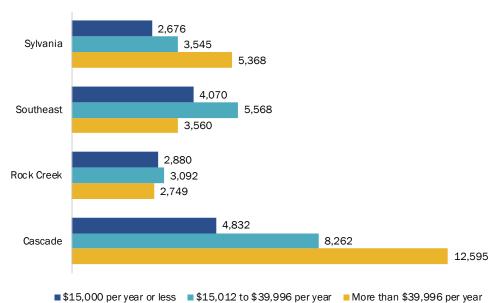
Source: ECONorthwest

Super Sector	Cascade Campus	Rock Creek Campus	Southeast Campus	Sylvania Campus
Construction and Resources	603	240	369	401
Finance, Insurance, and Real Estate	434	304	381	1,295
Manufacturing	738	28	232	74
Retail	2,659	1,670	2,377	899
Services	19,059	6,123	9,266	8,209
Wholesale Trade, Transportation, and Utilities	1,517	269	241	430
Public Administration	679	87	332	281
Total	25,689	8,721	13,198	11,589

Note: Midday. Commute distance: 20 minutes.

Exhibit 37. Access to Jobs, by Earnings, PCC Campuses

Source: ECONorthwest



Beyond the number of jobs, access to jobs that pay well is also an important consideration.

The Cascade Campus had the greatest number of jobs paying over \$39,996 per year.

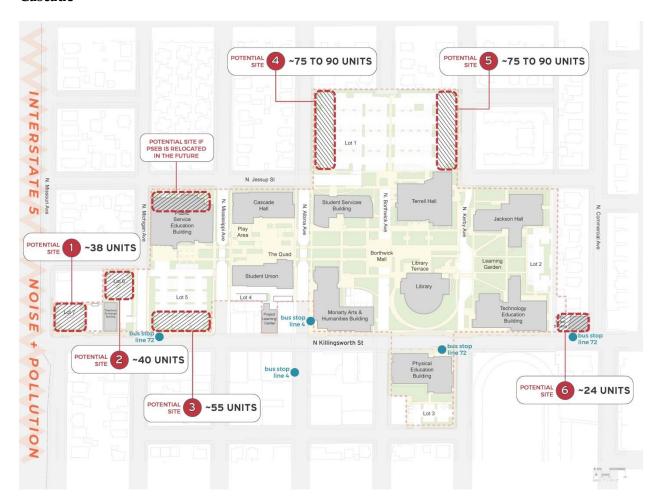
Note: Midday. Commute distance: 20 minutes.

Appendix C: Campus Housing Opportunity Site Analysis

On the following pages, Walker Macy has provided high-level site-specific analysis for potential affordable housing opportunity sites at each of the four campuses. Each campus analysis includes a map of potential sites, followed by a narrative description of each site.

This preliminary analysis of opportunity sites led to the selection of one priority site in the Facilities Plan for affordable housing partnership at each campus. Priority sites were selected based on college and campus needs, including parking and academic program needs. In the future, additional sites may be studied at PCC campuses with similar considerations of current and future land needs for the college to pursue its educational mission, as well as the potential for partnerships. In all cases, priority is given to current and future academic programming needs and associated land needs.

Cascade



Site 1: This small 9,000 sf site could accommodate up to 40 units. The frontage on Killingsworth might be attractive for ground floor uses. The site size means parking would not be provided unless it was structured, and its proximity to I-5 creates noise and air quality considerations.

Site 2: Like Site 1, this lot size allows for less than 40 dwelling units and no parking. The close proximity to I-5 has implications for noise pollution and air quality.

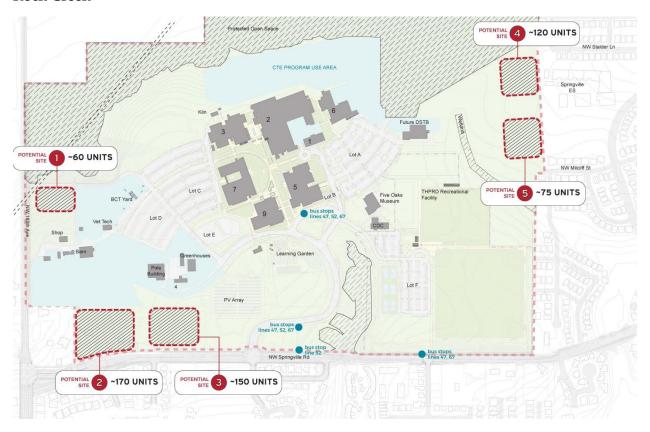
Site 3: This site is the most promising housing site on the campus with the potential for ground floor retail and 4 stories of housing above (approximately 55 units). If provided, parking would be shared and is tied to the future of PSEB. The frontage on Killingsworth St., with transit access and non-residential adjacent uses, makes the site more suited for ground floor active uses as well as a higher density development.

Site 4: This site is viable for an affordable housing project with the option of 75 to 90 units if shared parking is assumed. If tuck-under parking is provided, the unit count would reduce by 10 to 20%. Development of this site would require careful consideration of compatibility with the single family property owners to the North and West as well as potential future campus expansion on other parts of Lot 1.

Site 5: Like Site 4, this site is viable for an affordable housing project with the option of 75 to 90 units if shared parking is assumed. If tuck-under parking is provided, the unit count would reduce by 10 to 20%. Development of this site would require careful consideration of compatibility with the single family property owners to the North as well as potential future campus expansion on other parts of Lot 1.

Site 6: This small site could accommodate 24 units without parking. Its low capacity means that affordable housing development may be challenging on this site. With the frontage on Killingsworth, there may be potential for redevelopment to other uses (office, retail) and potentially a coordinated use with the historic house owned by PCC to the north.

Rock Creek



Site 1: This site could be viable for affordable housing with 60 du and room for 1 parking space/du. The site features a view to the agricultural and natural open spaces to the north and west. Developing this site would require the opening of the gated street connection to NW 185th. A constraint of the site is the visual impact of power transmission lines to the north.

Site 2: This site is viable for affordable housing with 170 du and 100 parking spaces. The location along NW Springville provides good vehicular and transit access and is less likely for future academic expansion by the campus. The north building would feature views of the campus agricultural lands, but the south building would be adjacent to a wide, surbuban arterial and housing across Springville.

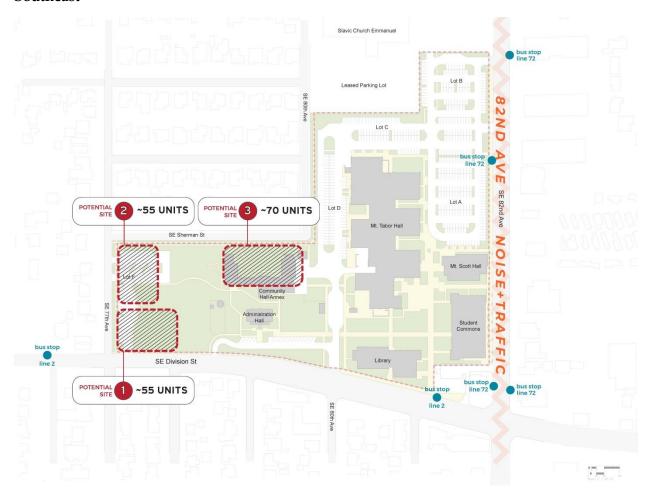
Site 3: This site is viable for affordable housing with 150 du and 110 parking spaces. Similar to Site 2, the location along NW Springville provides good vehicular and transit access and is less likely for future academic expansion by the campus. The north building would feature views of the campus agricultural lands, but the south building would be adjacent to a wide, suburban arterial and the housing across NW Springville.

Site 4: This is a promising site for affordable housing with 120 du and 80 parking spaces. Located on the east edge of campus, the site is less likely to be needed for academic expansion, could be accessed from the adjacent neighborhood on NW Stadler Lane, and has views of the

protected open space to the North and Springville Elementary School to the East. The site also would have easy access to the THPRD Recreation Facilities and trails.

Site 5: Similar to Site 4, this is a promising site for affordable housing with 175 du and 75 parking spaces. Located on the east edge of campus, the site is less likely to be needed for academic expansion, could be accessed from the adjacent neighborhood on NW Milcliff St, and has views of the protected open space to the North and Springville Elementary School to the East. The site also would have easy access to the THPRD Recreation Facilities and trails.

Southeast



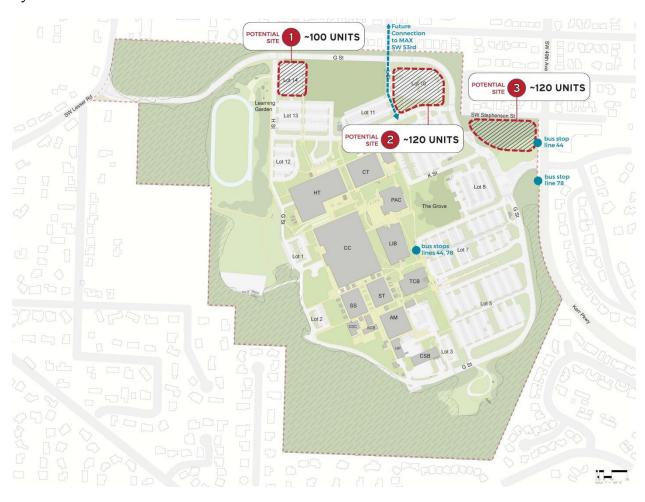
Site 1: This is a promising site for affordable housing with 55 du and 30 parking spaces. Located adjacent to the future Division Street rapid bus transit stop, it has potential for lower parking requirements as well as feasibility for ground floor retail. The west edge of campus is far from the academic core of campus and less likely to be used for future campus expansion.

Site 2: Similar to Site 1, this is a promising site for affordable housing with 55 du and 30 parking spaces. Located within walking distance of the Division Street rapid bus transit stop, it has the potential for lower parking requirements. With frontages along 77th and Sherman, the site

would be subject to less street noise than Site 1 and would require careful consideration of compatibility with the adjacent single family property owners.

Site 3: This is a promising site for affordable housing with 70 du and 40 parking spaces. The development of this site would require the relocation of the programs currently housed in the Community Hall Annex, such as the Child Development Center. It is located closer to academic buildings, but a less likely site for campus expansion. Development of this site would require careful consideration of compatibility with the single family property owners to the North.

Sylvania



Site 1: This site is viable for affordable housing with 100 units and 30 parking spaces. Parking available on site is not sufficient for the suburban context and would likely require shared parking with the other campus lots. The proximity to the learning garden and track would be welcome amenities to residents. The wooded area to the east would serve as a natural backdrop for the building, and existing mature trees could be preserved with development.

Site 2: This site is viable for affordable housing with 120 units and 50 parking spaces. Parking available on site, due to topographic constraints, would not be sufficient and would likely require shared parking with the other campus lots. The site benefits from views across L Street to the wooded area, and existing mature trees could be preserved with development. This site is conveniently located along a future shuttle connection to the SW Corridor MAX line along SW 53rd street.

Site 3: This is a promising site for affordable housing with 140 units and 80 parking spaces. Located on the edge of campus, it could potentially be accessed from SW Stephenson St or SW 49th Ave and is close to transit stops on SW 49th Ave. Development of this site could help define this entry to campus, and should be carefully sited and designed to create a positive "front door" area to the campus and to minimize impacts to the homes directly north of the site. Any potential development at this site should also strive to preserve existing groves of mature trees.