Source: Sequoia Equities

CITY OF BEAVERTON, OR

HOUSING NEEDS ANALYSIS REPORT

May 2023

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INTRODUCTION

The Beaverton community faces an increasingly wide range of housing needs and increasing challenges in meeting them. Beaverton has one of the most ethnically diverse populations in the region and state and also offers a wide, and in many ways, balanced, range of housing choices, from typical individual homes on their own lots to large apartment complexes and everything in between.

While many types of housing exist in Beaverton, a large number of people have difficulty in finding the housing they need at a price they can afford. In addition, a wide variety of factors, including historic and continuing racist or other discriminatory practices, rapidly escalating home prices and rents, limited homes outfitted to promote accessibility, and a lack of homes that meet the needs of multi-generational or other large households create additional barriers for many people.

This document summarizes the results of the Beaverton Housing Needs Analysis (HNA) currently being conducted for the 2022 to 2042 period. The HNA is a component of the Housing Beaverton Project, a comprehensive study of housing needs, buildable lands, and potential policies and strategies to address current and future housing in the Beaverton community. This document summarizes key findings from the following components of the HNA and associated work:

- Methodology and Data Sources
- Equitable Housing Need Estimate (Current Housing Needs)
- Buildable Lands Inventory
- Projected Housing Needs
- Residential Land Need Comparison

These topics are described in greater detail in a series of more detailed reports and memoranda which are included as appendices to this summary. This analysis places a strong emphasis on equitable outcomes for the community's current and future residents.

METHODOLOGY AND POLICY FRAMEWORK

Cities in Oregon are required to periodically update their analyses of current and future housing needs. In the Portland Metro region, this is done every six (6) years. These analyses need to be consistent with state administrative rules and statues. Key guiding rules include:

- **Population projections**. Cities in the Metro area rely on the Metro coordinated population forecasts to identify the number of projected people and households expected within the 20-year planning period.

- **Breakdown of housing needs**. Cities must identify the types and price ranges of needed housing. They also must estimate the amount of land needed for housing in each of the City's zoning designations.

- **Housing measures**. To the extent that a City finds that it does not have enough land to accommodate the types of housing identified in the HNA, it must describe how it will address those gaps.

In addition to addressing state requirements, the City of Beaverton has placed a strong emphasis on addressing the following issues related to current and future housing needs:

- **Equity and housing inequality**. The City of Beaverton and its community members and leaders have placed a strong focus on diversity, equity, and inclusion in its planning and other community initiatives over many years. The HNA continues this work by applying an equity lens to the housing analysis.

- **Housing need vs. housing demand**. This analysis recognizes that the housing market is more effective at meeting the demand for some types of housing and households than others. For example, there may be a demand for higher-priced housing for more affluent households in Beaverton. However, this analysis differentiates between essential housing "needs" and "wants or preferences," particularly the wants or preferences of higher-income households who are easily able to meet their housing needs from a financial perspective.

- **Quantitative and qualitative data**. Certain types of demographic and housing information can be quantified. Other information is more qualitative in nature. This analysis includes both quantitative data (e.g., number of households in different demographic and income groups) and qualitative information (e.g., the self-identified needs of different groups in the community, based on their lived experiences).

In conducting this analysis, the project team reviewed and utilized a wide range of information sources, including but not limited to the following:

- Metro population forecasts
- US Census data, including Decennial data American Community Survey five-year estimates
- Real estate data such as RMLS, CoStar and similar data sources
- Washington County Leading with Race study
- Housing stakeholder interview results
- Community engagement activity findings

The methodology and framework for the analysis is described in more detail in Appendix A to this report.

EQUITY AND HOUSING INEQUALITY

As explained in the City's Diversity, Equity, and Inclusion (DEI Plan), "the City of Beaverton uses race as a primary lens for our diversity, equity and inclusion work" while acknowledging that intersectionality will allow other marginalized identity groups to also enjoy benefits of increased equity in the community. The HNA continues this work by applying an equity lens to the housing analysis and by considering the following indicators of successful outcomes for "Housing and Livability" identified in the DEI Plan: Homelessness, Affordable housing, Homeownership, Anti-displacement, and Quality of housing and tenant protections.

The HNA work acknowledges the long history of racist land use and housing practices that have impacted disadvantaged populations in Beaverton over time. This includes both intentional and unintentional racist policies like exclusive zoning, mortgage subsidies or incentives, real estate practices like deed restrictions, and outright discrimination in appraisals and lending practices. The cumulative history of exclusion is still represented geographically in communities across the country. It can be seen where certain groups of people are over- or underrepresented, what types of housing are prevalent in those areas, and in income, racial, and ethnic segregation. Beaverton is far from alone in this legacy but acknowledges that the local impacts of this history are still present on the ground and should be addressed on a local level to the greatest extent possible.

## RECENT POPULATION AND DEMOGRAPHIC TRENDS

Following are some key findings from the demographic analysis of Beaverton's residents:

- **Beaverton's growth is roughly on par with the County and State.** Since 2000, Beaverton has grown by roughly 23,200 people, or 31% in 22 years. In contrast, Washington County and the

state experienced population growth of 35% and 24% respectively over this period. (US Census)

- **Beaverton's housing growth has kept pace with its population growth, but not with job growth and overall demand.** The city added roughly 10,760 new housing units since 2000, representing 33% growth in the housing stock. This number of new units is slightly higher than the estimated growth in new households. However, there is a long-noted shortage of housing relative to job creation and general demand in Washington County. This shortage puts upward pressure on rents and prices as households compete for available units. The pace of development has been a major determinant of population and household growth.

- **Beaverton's population is aging.** People aged 55 years and older were the fastest growing age group in Beaverton between 2000 and 2020, consistent with state and national trends. Still, an estimated 86% of the population is under 65 years of age.

- **Beaverton is becoming more and more diverse.** Beaverton has greater racial and ethnic diversity than both Washington County and the state. The city is 62% white, with 38% Asian, Black, Indigenous, and other or multiple races (also referred to as BIPOC), and 18% Hispanic or Latine. The community grew more diverse between the 2000 and 2020 Census, with the White share of the population falling from 78.5% to 62%. See the accompanying chart for information about Beaverton's demographics and home ownership trends for specific groups.

These trends are expected to continue into 2042. The non-Hispanic white population is projected to continue to diminish in share of population from 62% to 55%, as other racial and ethnic groups are projected to grow at a higher rate. The Latine population (which can include those
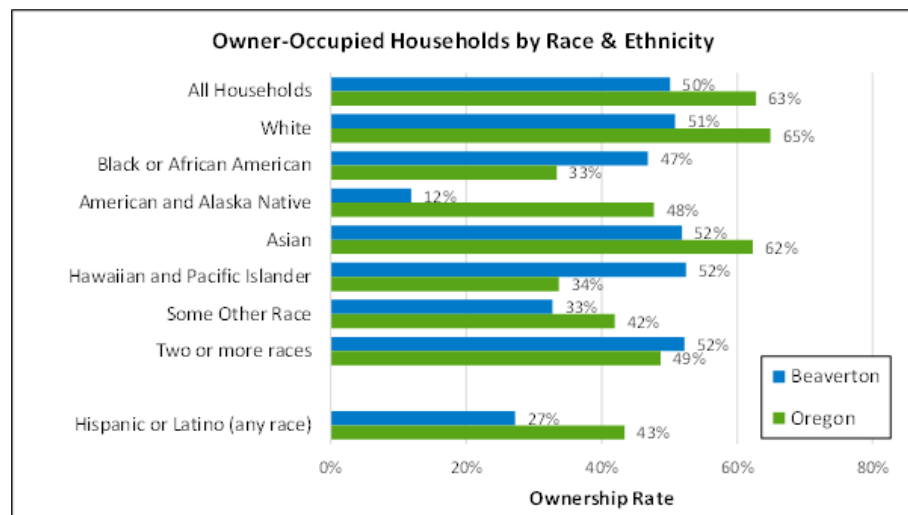
Source: US Census, Johnson Economics
Census Tables: B25003A-H (2020 ACS 5-year)

of other racial categories) is forecast to grow to nearly one quarter of the population by 2042. Asian populations and those identifying as "two or more races" are also expected to grow at a faster rate than the white population.

- **Households of color tend to have larger than average household size.** For example, the average size of Hispanic and Latine households was 3.5 persons in 2010 (the most recent year with relevant data), while the average household size in Beaverton is 2.4 persons.

- **People with a disability account for an estimated 12% of Beaverton's population.** Older residents are more likely to report a disability, including nearly a third of those over 65 of years.

- **Most non-White racial and ethnic categories have a lower median household income than the overall median.** Beaverton's median household income was $78,000 in 2020, meaning

that 50% of households make more than this and 50% earn less. Hispanic/Latine residents (of any race), Native Americans, and those of an uncategorized other race have a lower median income than other racial/ethnic categories.

CHARACTERISTICS OF THE HOUSING MARKET

Below are key findings from the profile of current housing stock and market indicators in Beaverton. This profile forms the foundation to which current and future housing needs are compared.

- **Beaverton's existing housing stock is relatively diverse.** A majority of existing housing units (54%) are in some form of attached housing—this includes 34% in multi-dwelling structures of 5 or more units (typically apartments) and 21% in other types of attached homes (e.g., duplexes, triplexes, fourplexes, and townhomes). Meanwhile, stand-alone homes on their own lots (referred to here as single-detached housing units) represent an estimated 43% of housing units, and mobile homes provide an additional 1%. In Washington County as a whole, where 61% of housing is single-detached or manufactured homes.

- **Beaverton has an equal share of homeowner households (50%) and renter households (50%)**. Beaverton has a larger share of renters than the county (39%) and the state (37%).

- **Homeownership costs increased significantly in Beaverton, consistent with national trends.** Median sales prices for homes in Beaverton nearly doubled between 2015 and 2022, from about $260,000 to $518,500.

- **Beaverton has experienced low rental vacancy and climbing rental rates.** For most of the last two decades, Beaverton's rental vacancy has regularly fallen below 5%. Meanwhile, average rents have climbed steadily since 2011. The average rent in Beaverton has nearly doubled over that period, increasing to roughly $2.00/square foot, or an average of $1,600/month.

- **More than one-third of Beaverton's households have housing affordability problems.** Thirty-five percent of Beaverton's households are cost-burdened (i.e., paid more than 30% of their income on rent or homeownership costs). Renters are more likely to be cost-burdened (46% of renters). In fact, an estimated 21% of renters are spending 50% or more of their income on housing and are considered severely rent-burdened.

CURRENT HOUSING NEED

Following is a brief snapshot of the HNA's current housing need estimates. Current housing needs, population and demographic trends, and housing market information is described in more detail in Appendix B of this report.

- While the total number of existing housing units exceeds the number of households in Beaverton, **there is a mismatch between demand and the housing which is currently available**, in terms of what households can afford.

- **There is currently a need for more ownership housing at lower price points**, while the middle to upper end of the market is well supplied. This is because most housing in Beaverton is clustered at higher property values, which leaves many households underserved. These trends are illustrated in the accompanying chart.
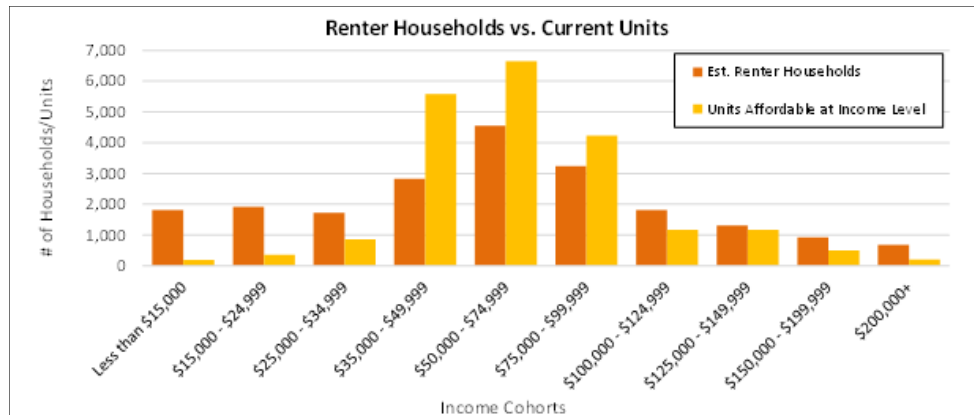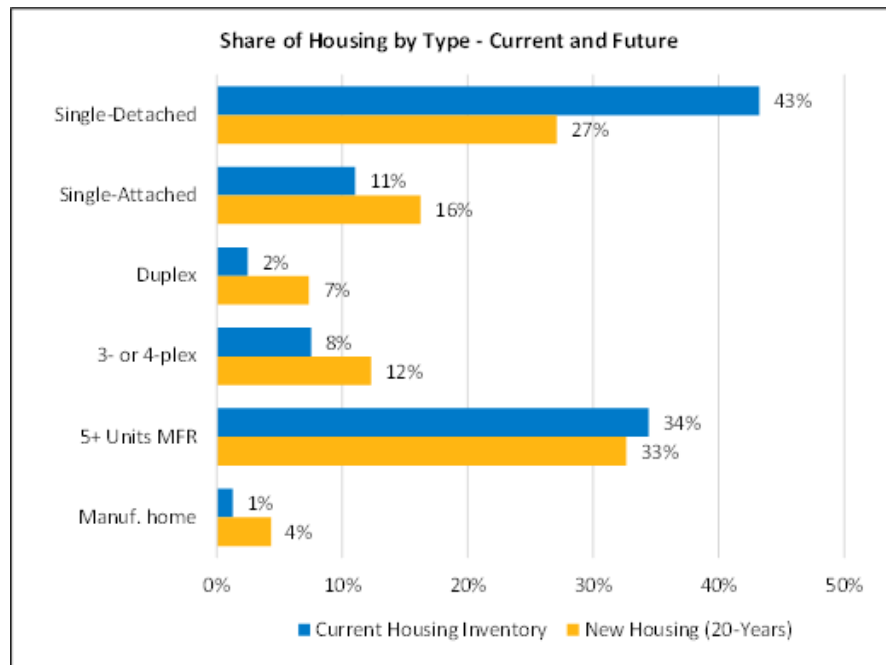

Source: US Census, Johnson Economics, 2020

- **For rental housing, the greatest unmet need is found at the lowest end of the income scale**, where it is estimated that thousands of current renters pay more than 30% of their income in housing costs.

- **Most households in Beaverton cannot afford the homes that have recently sold in the City.** The median sale price of homes sold within the last 12 months was $518,500, and 77% of recent sales in took place above the $400,000 price level. Homes in this range should be mostly affordable to households earning at least $100,000 per year, or an estimated 37% of local households. This means that the bulk of housing supply on the current for-sale market is likely too expensive for most of Beaverton's households (nearly two-thirds).

- **Neighborhoods vulnerable to future gentrification and displacement correspond with areas of lower median household income and BIPOC households.** Most notably, these are the central and southeastern parts of the city. This analysis, drawn from the Anti-Displacement and Gentrification Toolkit prepared for DLCD, provides context for where unmet housing needs are most acute across the community. Neighborhoods vulnerable to displacement may need more intervention to meet housing needs, as compared to other areas where market forces are adequately meeting the demand for housing.

OVERALL FUTURE HOUSING NEED

Below is a summary of the overall housing need in Beaverton in 2042. Following that is a summary of the needs of various income segments and specific populations. Future housing needs are described in more detail in Appendix C of this report.

- **Beaverton's population is projected to grow by over 19,000 people by 2042.** Population projections from Metro indicate a projected growth from 98,215 in 2022 to 118,215 total people in 2042. This would be growth of 19% over the 2022 population and reflects an annual growth rate of 0.9%.

- **Beaverton needs nearly 9,900 new housing units to accommodate the projected growth.** This number of units would be needed to house the future households, which are projected to grow by 9,229. This would be a growth in housing units of 23% over 20 years.

- **More middle housing and a smaller share of single-detached homes are anticipated to be needed.** The forecast calls for increased development of "middle housing" types—including single-attached housing (townhomes), duplexes, triplexes, and fourplexes—which are projected to account for 36% of new units. Single-detached homes are projected to account for 27% of new units. This compares to the city's current housing stock, which is 21% middle housing and 43% single-detached units. These projected needs are illustrated in the accompanying chart.

Source: US Census, Johnson Economics, 2022

- **The housing forecast includes a shift toward more ownership units.** To achieve greater homeownership equity going forward, a greater share of the projected 9,887 new units is forecasted to be ownership units (53%), and fewer to be rental units (47%). This means a forecast of roughly 5,200 new ownership units and 4,700 new rental units, reflecting a shift from the current 50/50 split of rental vs. ownership housing.

- **The share of multi-dwelling units are projected to stay relatively constant.** The current housing stock includes 34% of units in multi-dwelling structures with 5 or more units. New needed units are projected to be 33% multi-dwelling.

EQUITABLE HOUSING NEEDS BY INCOME AND PRIORITY POPULATION

Beaverton's future housing need is not evenly distributed among the diverse and growing population in Beaverton. The Contextualized Housing Needs report considers the needs of specific populations—including priority populations. "Priority populations" in this work include groups that face historic and ongoing disadvantages due to systemic inequities rooted in access to power and decision-making, especially those impacted by limited housing choice and racism. Specifically, the City of Beaverton strives to lead with racial equity. Priority populations includes Black people, Indigenous people, People of Color, Low Income People, People with Disabilities, People Experiencing Homelessness, and Immigrants and Refugees.

Below is a summary of the housing needs for various income segments and priority populations in Beaverton. In some cases, these needs are summarized with qualitative, rather than quantitative, analysis.

Housing Needs by Income Group

» **Extremely Low-Income Households** – *Defined as earning less than 30% of the Area Median Income (AMI).*

- o **Total Need**: **1,349** new housing units by 2042 (14% of overall need).

- o **Cost Burden**: Roughly 90% of existing homeowners and 97% of renters in this income group are cost-burdened and may need additional support to retain their housing or obtain more affordable housing. Extremely low-income households often include people who are unhoused or precariously housed.

- o **Affordability Need**: Housing with rents (including utility costs) less than $800 per month; home prices less than $150,000.

- o **Availability**: Roughly 3% of existing rental and 4% of existing for-sale housing is affordable to extremely low-income households. Rental housing types that meet this need are rare and small, such as micro-unit rentals. Ownership housing types that meet this need are rare and very limited but may include older manufactured housing and mobile home parks.

- o **Meeting Future Need**: New market-rate construction will not generally meet this need. Further, the market may reduce the supply of housing affordable at this level through redevelopment of older, unregulated housing or removal of mobile home parks.

» **Very Low-Income Households** – *Defined as earning between 30% and 50% of the AMI.*

- o **Total Need**: **668** new housing units by 2042 (7% of overall need).

- o **Cost Burden**: Roughly 78% of existing homeowners and 95% of renters in this income group pay more than 30% of their income in housing costs.

- o **Affordability**: Housing with rents (including utility costs) less than $1,200 per month; home prices less than $225,000.

- o **Availability**: Roughly 7% of existing rental and 7% of existing for-sale housing is affordable to very low-income households. Rental housing that meets this need is limited and only available as micro-units, studio apartments, and older, very small apartment units. Ownership housing that meets this need is rare and may only exist as older, manufactured housing, in mobile home parks, and older, small condo units.

- o **Meeting Future Need**: New market-rate construction will not generally meet this need. Further, the market may reduce the supply of housing affordable at this level through redevelopment of older, unregulated housing or removal of mobile home parks.

» **Low Income Households** – *Defined as earning between 50% and 80% of the AMI.*

- o **Total Need**: **1,136** new housing units by 2042 (11% of overall need).

- o **Cost Burden**: Roughly 54% of existing low-income homeowners and 78% of low income renters pay more than 30% of their income in housing costs.

- o **Affordability Need**: Housing with rents (including utility costs) less than $1,700 per month; home prices less than $350,000.

- o **Availability**: Roughly 65% of existing rental and 32% of existing for-sale housing is affordable to low-income households. Rental housing that meets this need is limited and tends to be available in older apartment complexes and small, middle housing rentals. Ownership housing to meet this need is limited and found in manufactured housing, small condominiums units, and older multiplex housing types.

> *New market-rate construction will not fully or equitably meet the need for housing for people with low incomes, especially for larger households.*

- o **Meeting Future Need**: New market-rate construction will not fully or equitably meet this need, especially for larger households. Additionally, the market may reduce the supply of housing affordable at this level through redevelopment or remodels of older, unregulated housing.

» **Middle Income Households** – *Defined as earning between 80% and 120% of the AMI.*

- o **Total Need**: **3,211** new housing units by 2042 (32% of overall need).

- o **Cost Burden**: Roughly 37% of existing middle-income homeowners and 43% of middle income renters pay more than 30% of their income in housing costs.

- o **Affordability Need**: Housing with rents (including utility costs) less than $2,200 per month; home prices less than $475,0000.

- o **Availability**: Roughly 85% of existing rental and 64% of existing for-sale housing is affordable to middle income households. Rental housing that meets this need is typically readily available in high-amenity apartment complexes, multiplex and single-dwelling rentals. Ownership housing to meet this need is typically available in condominiums, townhomes and multiplexes, and older single dwelling housing types.

- o **Meeting Future Need**: New market-rate construction will partially meet this need. When supply is limited for these households, they may rent or purchase lower cost housing and put additional pressure on the supply of housing that could be affordable to lower income households.

» **Upper Income Households** – *Defined as earning greater than 120% of the AMI.*

- o **Total Need**: **3,522** new housing units by 2042 (36% of overall need).

- o **Cost Burden**: N/A

- o **Affordability Need**: These households can afford housing with rents (including utility costs) over $2,200 per month and home prices greater than $475,000.

- o **Availability**: More than 90% of existing rental and 75% of existing for-sale housing is affordable to upper income households. Rental housing that meets this need is typically readily available in high-amenity apartment complexes, large townhomes and multiplex units, and large single-dwelling rentals. Ownership housing to meet this need is typically available in condominiums, townhomes and multiplexes, and single-dwelling housing types.

- o **Meeting Future Need**: New market-rate construction can meet much of this need, though prices for new single-dwelling homes may be towards the upper end of what this group

can afford. When supply is limited for these households, they may rent or purchase lower cost housing and put additional pressure on the supply of housing that could be affordable to lower income households.

Housing Needs by Specific Population

» **People of Color** – *This is a general descriptor that includes people of many different backgrounds and experiences. For purposes of this summary, People of Color includes the following: Asian, Black or African American, Hispanic or Latine, Native American and Alaskan Native, Native Hawaiian and Pacific Islander, and Some Other Race.*

  o **Overall Need:** The largest shares of communities of color in Beaverton are people who identify as Asian (12%), people who identify as Hispanic or Latine (18%), and people who identify as Two or More Races (12%).

  Due to historic and ongoing systemic racism, people of color have disproportionately unmet housing needs and limited housing choice. Redlining and other forms of segregation and disinvestment in communities of color have also resulted in lower generational wealth than white communities, which negatively impacts access to homeownership. Other facets of systemic racism outside of housing such as education, employment, health, and criminal legal systems may impact people of color's ability to access housing to meet their needs.

  Without intervention, the housing market alone will not compensate for historic inequities in access to housing, especially homeownership.

  o **Meeting Future Need:** Without intervention, the housing market alone will not compensate for historic inequities in access to housing, especially homeownership.

  o **Increasing Homeownership:**

    ▪ People of Color are less likely to own the homes they occupy than white people. Asian homeownership rates in Beaverton are closest to the overall average though there is much variation within this broad racial group. Latine and Native American homeownership rates are the lowest of all racial and ethnic groups in Beaverton.

    ▪ People of Color have historically been excluded from homeownership by racist policies and practices. On-going barriers for some people of color include lower incomes, not having good credit history, lack of collateral, loan denial disparities, culturally specific barriers to banking, lack of familiarity with US banking systems, and immigration-related barriers to making long-term housing commitments.

    ▪ **To meet more equitable homeownership goals in Beaverton in the future, the estimated new housing needs are calculated to intentionally increase homeownership rates for People of Color who currently are below the median homeownership rate.** Among new units, an increased share of 53%, or roughly 5,225 units, should be ownership units to help rebalance this deficit. Ownership housing for first-time homebuyers and people who have been historically excluded from homeownership will need to be lower in cost compared to current market-rate housing.

- o **Large and Multigenerational Households**
  - ▪ People of Color households tend to have larger average household size than the white household average. Nationally, Asian, Black, and Latine people are more likely to live in multigenerational households compared to white people. Multiple immigrant groups in Washington County noted living in multigenerational households or with multiple families.
  - ▪ People of Color are projected to have a much higher share of children and young people than white people. **Larger households and multigenerational households may need larger homes or specific housing types that accommodate the greater number of household members.** Prior engagement suggests that these households may have difficulty finding units of an appropriate size and design for their household needs.
- o **Affordability**
  - ▪ While the median annual household income in Beaverton is $77,700, Latine and Native American median household incomes are substantially below that. The median income of Asian and Pacific Islander households is estimated to be above the overall median though there is much variation within this broad racial group.

» **People with a Disability** – *There are many different types of disabilities, and their impact of housing needs are varied. Generally, ambulatory, self-care, or independent living disabilities have the greatest impact on housing needs. People over 65 years old are more likely to report a disability with over 30% of the Beaverton population aged 65 years and old reporting at least one disability. However, because Census data tends to undercount the unhoused population, there may be more residents with disabilities in Beaverton than reflected in these data.*

- o **Overall Need:** Approximately **1,190** new housing units by 2042 (12% of overall need) will need to have accessibility considerations for people with varying disabilities and needs.
- o **Housing Types/Features:**
  - ▪ **People with ambulatory disabilities** may need housing options with access for wheelchairs, walkers, or scooters.
  - ▪ **People with self-care or independent living disabilities** may require additional safety precautions around the home for when they cannot always be monitored.
  - ▪ **People with cognitive disabilities** may need housing options such as the ability to live with family or in group housing.
- o **Availability**: Prior engagement suggests that there are insufficient available units that are accessible, and that many properties are not accessible in all common areas. It also suggests that housing should be as flexible/customizable as possible to adapt to each person's needs and constructed/retrofitted in a way that accommodates the most people possible; that it should provide convenient parking for those with disabilities; and that many of those with disabilities also need affordable housing.

» **Seniors** – *Those aged 55 years and older.*

- o **Overall Need:** The greatest impact of age on housing needs in the near future and the next three decades is a growing need for housing appropriate for seniors. Approximately 30% of the Beaverton's total population is over the age of 55 today. The age cohort over 55 years of age grew the most in terms of population share between 2000 and 2020. This

growth exceeds historic population trends and means that housing options meant to serve seniors generally remain significantly underbuilt.

o **Housing Types/Features:** Housing needs for seniors range from smaller-sized units, housing units accessible to people with mobility difficulties, co-housing communities, and retirement communities to continuing care and assisted living facilities.

o **Meeting Future Need:** The market can provide senior housing for those with sufficient savings or income to afford independent living, assisted living, or continuing care facilities. Low-income seniors may not be able to afford these options, and may have limited funds to adapt their existing housing to meet their needs.

» **People Experiencing Homelessness** – People experiencing homelessness encompasses a broad range of experiences and situations. It is difficult to accurately count all people who are experiencing homelessness, and it is generally presumed that this population is undercounted by most methods.

o **Overall Need:** One analysis estimated that 653 individuals and family units in Beaverton were experiencing homelessness as of mid-2020, including people who are unsheltered, in temporary shelters, or otherwise temporarily or unstably housed. The most recent January 2022 point-in-time count found 808 people experiencing homelessness in Washington County overall, including the following:

Beyond immediate needs for safe shelter options, people who are unhoused or precariously housed need access to transitional housing, supportive services, and deeply affordable housing in the long term.

▪ 72% were in temporary shelter while 28% were unsheltered.
▪ Approximately 26% of those individuals were children under the age of 18.
▪ 31% of those individuals are considered "chronically homeless."

o **Shelter Needs:** Based on prior engagement, needs for individuals experiencing homelessness include:

▪ Access to safe shelter
▪ A quiet, safe place to rest
▪ Outdoor green space
▪ Secure storage space for belongings
▪ Proximity to services and transit
▪ Private personal spaces (within a shelter)
▪ Community gathering space (within a shelter)

o **Housing Needs:** Beyond immediate needs for safe shelter options, people who are unhoused or precariously housed need access to transitional housing, supportive services, and deeply affordable housing in the long term.

» **Immigrants and Refugees**

o **Housing Needs:** Immigrants, especially undocumented immigrants and mixed-status families face particular housing challenges because of their immigration status. Many undocumented people are not eligible for federally subsidized affordable housing.

o   Households with language or cultural barriers may have greater difficulty navigating the US financial and credit system, housing laws, and tenant rights. These barriers can make these households less likely to become homeowners and more vulnerable to eviction.

COMPARISON OF HOUSING NEED AND LAND SUPPLY

This section compares the results of the housing need projection with the Buildable Lands Inventory (BLI), which estimates the remaining residential lands in the city that can accommodate housing growth. The BLI estimates the amount of residential land that has room for development and is not constrained by natural resources or other features and estimates that land's capacity to accommodate new housing units. Key findings of the comparison include the following which are described further in Appendix D.

- **There is a surplus of buildable land to accommodate projected housing needs.** The analysis estimates a total remaining land capacity of 14,987 units of different types within the study area. This compares to the projected total need for 9,887 new housing units by 2042. This reflects a surplus capacity of 5,100 units (581 acres of residential land).

- **The analysis finds sufficient land capacity for housing at all densities** to accommodate the 20-year growth forecast. However, the surplus of land capacity for low-density housing is estimated to be larger than the surplus capacity for medium-density or high-density housing.

- **The Cooper Mountain and South Cooper Mountain plan areas account for 56% of the available capacity**. Cooper Mountain is planned for a diverse mix of housing—roughly 43% Single Detached, 26% Attached/Middle Housing, and 30% Multi-dwelling units.

- While the total land capacity is sufficient to accommodate the need for future housing units, **this does not mean that the market will deliver the housing that is needed by Beaverton's residents**. As summarized in the previous section, middle- and lower-income households, people of color, seniors, people with disabilities, immigrants and refugees will all need interventions in the housing market to meet the identified housing needs. This is a primary focus of Beaverton's Housing Production Strategy, which is aimed at providing opportunities to current and future Beaverton residents to increase equitable outcomes to the greatest extent possible.

HOUSING MEASURES

Given the findings noted above regarding the comparison of land need and supply, the City does not need to adopt any measures to directly address any imbalances in the need for and supply of land in different zoning designations. However, the City will consider a variety of other measures and strategies to address the types of housing needs identified in the HNA. Many of these strategies will be further evaluated and addressed in the Housing Production Strategy (HPS), which is a follow-up to the HNA. In addition, the City has identified the following regulatory strategies as part of the HNA process:

- **Improve the feasibility of developing higher density housing in high density and mixed use zones** by removing density limitations, and allowing form based controls such as floor area ratio and building height to control the density of development.

- **Adopt changes to parking standards** as part of the process of implementing state and regional requirements associated with the recent Climate Friendly and Equitable Communities (CFEC) legislation and administrative rules. The City also should reassess its parking requirements for mixed use zones after implementing the CFEC changes to see if further reductions should be considered.

- Consider implementing a variety of possible development code amendments to **make future housing more physically accessible** to people with disabilities or mobility challenges. These could include implementing "visitability" requirements for a certain percentage of ground-floor units, require a percentage of fully accessible units in publicly funded projects, and/or require elevators in multi-story buildings.

- Implement changes to the development code that **encourage and/or incentivize development of housing with more bedrooms to increase opportunities for larger and multi-generational households**. These could include modifying off-street parking requirements, providing density bonuses for projects with larger units, allowing accessory dwelling units with townhomes, and/or legalizing alternative housing types of on wheels.

These measures are described in more detail in Appendix E and also will be further evaluated as part of the Housing Production Strategy process.

JOHNSON
ECONOMICS

APPENDIX A

HNA PROJECT METHODOLOGY

To   **City of Beaverton**

From **Brendan Buckley**

       Johnson Economics

Re   **Methodology Framework for Projected Housing Needs**

Date **7/29/2022**

As discussed in our recent project team meeting, this memo lays out the framework and key issues associated with our proposed approach to completing our 20-year forecast of housing need in the City of Beaverton. As emphasized throughout the project, the forecast is expected to apply a strong equity approach, highlighting the unique housing access barriers that historically disadvantaged populations face, and in particular people of color, but also lower-income households, renters, those with disabilities, and other marginalized groups.

In our recent meeting to discuss these issues, the City re-emphasized that the main focus of the estimates of both current and future housing need should be on these underserved groups, as well as on moderate-income ("workforce") households to some degree. While more privileged groups (i.e., high-income households) will be included in overall estimates of need, there will be less emphasis on the specific needs of these segments as they are presumed to be served by the current and anticipated real estate market. The analysis will differentiate between essential housing "needs" and "wants or preferences," particularly the wants or preferences of higher-income households who are easily able to meet their housing needs from a financial perspective.

The following proposed framework for our methodology is meant to ensure that these concerns are addressed in the coming phases of work, which include a revised report on "current need" and the 20-year projections of growth and need to come.

Total Population Growth

As required by statute, communities in the Metro area are required to use the latest coordinated housing forecast provided by Metro as the basis for their projected future growth (OAR 663-032-0030). The latest forecast by city and county was adopted by ordinance in February 2021. That forecast provides estimates for 2020, 2030, and 2045 as shown below for the City of Beaverton city limits:

City of Beaverton	Population Estimate	Households Estimate
2020	99,490	39,895
2030	114,525	47,544
2045	119,156	51,262

Source: www.oregonmetro.gov/2040-distributed-forecast

* The US Census estimates from 2020 differ from these estimates somewhat (pop: 97,494; households: 40,240). The Metro forecast was formulated prior to the release of 2020 Census data.

This forecast will be used to estimate the total population and households in 2042, based on the annual growth rate through 2045. In this case, the 2042 estimates for Beaverton are a population of 116,605 and 49,743 households.

Equitable Future: While state statute requires that Metro forecasts of total population be used, cities have flexibility to design their own methodology to determine the break-down of the housing needs it implies within that population.

The proposed approach would determine the housing need for key subgroups in the community (see below) and base the 2042 need on an equitable housing future. In other words, the snapshot of 2042 will assume that a housing mix and affordability levels are achieved in the future and will discuss what would be needed to get from here to there. (*Note that discussion housing strategies and tools is included in a future phase of this project, and not the HNA document itself. However, this analysis will lay the groundwork for identification and analysis of those strategies.*)

Break Down of Growth by Subpopulations

As part of its prior round of population forecasts adopted in 2016, Metro provided projections of growth to 2060 by race/ethnicity, gender, and age.[1] An equivalent breakdown by subpopulation has not yet been provided for the 2045 forecast cited above.

The following figure shows a snapshot of what this forecast looks like from the 2016 document. These forecasts are provided for the entire 7-county Portland-Vancouver-Hillsboro MSA:

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[1] Population Forecast to 2060: Metropolitan Area Population Forecast by Race/Ethnicity, Gender, Age (April 2016) www.oregonmetro.gov/2060-growth-forecast

Figure 1: Example of Forecasted Growth by Race/Ethnic Categories

TOTAL	2010	2015	2020	2025	2030	2035	2040	2045
white	1,732,586	1,782,173	1,849,005	1,899,483	1,939,040	1,964,088	1,978,657	1,988,004
black	70,278	74,628	81,351	87,583	93,522	98,747	103,448	107,856
Nat. Am.	26,361	28,631	33,756	38,195	42,309	45,973	49,595	53,480
Asian	141,317	158,903	188,041	213,033	237,459	260,473	283,854	308,666
pacific isl.	13,623	15,143	17,217	19,073	20,865	22,530	24,148	25,770
Hispanic	241,844	283,022	349,829	414,432	480,905	546,090	612,398	681,869
all races	2,226,009	2,342,500	2,519,200	2,671,800	2,814,100	2,937,900	3,052,100	3,165,646

Source: www.oregonmetro.gov/2060-growth-forecast

Figure 2: Example of Forecasted Growth by Race/Ethnic Categories and Age

Hispanic FEMALE	2010	2015	2020	2025	2030	2035	2040	2045	2050	2055	2060
0-4	14,358	12,268	15,921	18,883	21,244	22,626	23,671	24,995	26,960	29,072	30,834
5-9	13,635	15,065	13,747	17,105	19,999	22,261	23,683	24,845	26,281	28,293	30,460
10-14	12,067	14,560	16,960	15,276	18,553	21,325	23,637	25,199	26,506	28,000	30,080
15-19	10,522	13,155	16,786	18,754	16,978	20,113	22,946	25,429	27,159	28,540	30,115
20-24	9,051	11,855	15,871	18,974	20,827	18,887	22,095	25,131	27,816	29,633	31,115
25-29	10,493	10,786	15,386	18,716	21,668	23,301	21,462	24,935	28,234	31,032	32,979
30-34	10,869	11,815	13,522	17,582	20,784	23,553	25,264	23,652	27,333	30,729	33,625
35-39	9,712	11,570	13,273	14,692	18,681	21,782	24,590	26,421	24,927	28,659	32,106
40-44	7,244	10,110	12,410	13,941	15,320	19,243	22,365	25,242	27,139	25,684	29,444
45-49	5,417	7,527	10,712	12,880	14,379	15,714	19,647	22,815	25,738	27,659	26,238
50-54	4,059	5,594	7,934	10,997	13,130	14,591	15,938	19,893	23,090	26,026	27,967
55-59	2,839	4,136	5,797	8,055	11,070	13,168	14,633	16,003	19,957	23,152	26,091
60-64	1,992	2,861	4,229	5,814	8,019	10,960	13,038	14,513	15,898	19,819	23,000
65-69	1,195	2,023	2,968	4,258	5,792	7,929	10,810	12,877	14,358	15,746	19,623
70-74	752	1,209	2,073	2,953	4,186	5,654	7,728	10,534	12,571	14,036	15,415
75-79	530	743	1,217	2,000	2,813	3,954	5,334	7,306	9,966	11,926	13,347
80-84	359	499	732	1,123	1,795	2,490	3,491	4,720	6,492	8,862	10,658
85-89	199	293	425	592	888	1,396	1,936	2,729	3,715	5,155	7,065
90-94	94	131	199	273	373	550	867	1,216	1,736	2,395	3,385
95-99	26	49	74	97	126	164	242	386	551	801	1,128
100+	3	10	19	21	25	29	38	56	88	126	185
	115,417	136,260	170,252	202,985	236,649	269,692	303,414	338,893	376,515	415,346	454,862

Source: www.oregonmetro.gov/2060-growth-forecast

For the 20-year growth forecasts for the City of Beaverton, we propose using this Metro-wide forecast to derive assumed growth rates for each of these subpopulations. The individual growth rates will be applied to the estimated breakdown of these race/ethnic groups (and age groups) in Beaverton as of the baseline year of 2022. The current distribution of these groups in the population differs city to city, so if the Metro-wide forecasted growth rate by subgroup is applied, the beginning point and end point will differ from other cities and the region.

This proposed approach will allow us to determine the relative growth and size of these groups within the total 2042 population estimate. We propose using this methodology to forecast the relative growth by race/ethic groups and age groups.

There are some alternative forecasts of growth for these subgroups including from the Census, State of Oregon, and PSU. These forecasts of demographic change are for a wider geography (nation or state), or in the case of PSU explicitly exclude the Metro area.

Household Income Groups: The Metro 2060 forecast discussed above does not include projections by household income. Johnson Economics typically uses forecasted data from Claritas, a private third-party source of market data compiled through a combination of surveys, Census block group data, and proprietary analysis to help develop projections of households in different income groups. One product Claritas provides is a breakdown of past, present, and future households by income and age-of-householder cohort. This data set provides an estimate of household income change over the next five years, which we extrapolate farther into the future. This method includes some uncertainty, but we believe is as or more sound as any other alternatives we have previously identified.

Presentation of Results (Quantified)

The results of projections will be presented keeping in mind the equity approach and the idea of essential "needs" vs. non-essential "wants." We propose to present the findings on housing need in two ways:

1. Quantify the needs of identified subgroups, based on findings of how large those populations/# of households for these subgroups. The findings will be explicit (for example, "this group is expected to grow by this many households and will need this many units in 2042). This will be presented by racial category, and Latine ethnicity. Housing need for those with disabilities and the elderly will similarly be quantified.

2. Quantify need by income level, and the type of housing generally affordable at that income level. The income segments will be based on the State income limits posted annually by the Oregon Housing and Community Services for each County.[2] These estimates are used to determine eligibility for various affordable housing programs, as well as allowable rent levels for those programs. The income categories used ("low income", "extremely low income", etc.) conform to HUD definitions.

   The following table is an example of how these findings might be presented (numbers are placeholders only). As discussed, all income levels are included, as all need must eventually be quantified in the HNA, but the priority of discussion will be those in the lower and middle income ranges. The findings of common housing types in the right column will be used for further quantification of the housing types needed.

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[2] Source: https://www.oregon.gov/ohcs/compliance-monitoring/Pages/rent-income-limits.aspx

Figure 2: Example of Findings of Housing Need by Income Segments

Household Income Segment		Income Level (Rounded)*	Afford. Rent Range	Afford. Price Range	Owner Units	Renter Units	Total	Share	Common Housing Product
Upper Income	> 120% AMI	> $128,000	$2,100 +	$475k +	100	100	200	20%	Single-family detached
Middle Income	80% - 120% AMI	$85k - $128k	$1,600-$2,100	$330k-$475k	100	100	200	20%	Single-family detached; Townhomes; Small homes; New apts
Low Income	50% - 80% AMI	$53k - $85k	$1,100-$1,600	$225k-$330k	100	100	200	20%	Market apts; Manuf. homes; Plexes; Aging SFR
Very Low Income	30% - 50% AMI	$32k - $53k	$800-$1,100	$150k-$225k	100	100	200	20%	Aging rentals; Govt-subsidized; Voucher; M.H.
Extremely Low Income	< 30% AMI	< $32,000	<$800	<$150k	100	100	200	20%	Govt-subsidized; Voucher; Manuf. Homes
TOTAL:					*500*	*500*	*1,000*	*100%*	

NOTE: The presentation of findings in the Current Housing Need report will be tailored to match the presentation of the projected need described above. Therefore, current need will also be quantified by subgroup, and income group.

Presentation of Results (Qualitative, with Equity Focus)

Additional discussion will be added to the quantified results to provide context and focus findings on the issue of equity. We propose this takes the form of discussing the qualitative needs of different groups in the community, based on their lived experiences. This discussion will be added to the Current Housing Need report, and the ultimate findings of current and future needs will call back to this information. Not all qualitative information can be factored in to quantified results, but we will attempt to see if any findings indicate that more or less of any specific types of housing are needed, and this might be reflected in the quantified results. For example, one finding might be that there is a need for greater homeownership levels among people of color in Beaverton, given that historically they have been discriminated against in the housing lending and buying markets and have been unable to build the same levels of intergenerational wealth, in comparison to their white counterparts.

A primary source will be the Washington County Leading with Race study. The long-form report provides specific commentary on housing circumstances among different racial subgroups. A summary discussion of this material will be added to the report. There is also on-going outreach to the community taking place during this project. This information can be integrated in future version of the report, or perhaps added as an appendix. If this outreach points to any substantive changes to the forecast, those changes can be made before the end of the project.

We have and will continue to seek other studies and sources of commentary on the unique housing needs of marginalized groups and will add any relevant qualitative data we find from that review as well.

The main takeaway is that the report will be organized and presented as a report on equity. Other data and projections for the City's entire population will be included to meet the needs of a Goal 10 HNA but will be downplayed as needed to maintain the focus on equity.

Source: Sequoia Equities

HOUSING BEAVERTON PROJECT

APPENDIX B
CURRENT HOUSING NEEDS
EQUITABLE HOUSING NEED ESTIMATE

March 2023

TABLE OF CONTENTS

I. INTRODUCTION

This analysis is undertaken as part of the Housing Beaverton Project, a comprehensive study of housing needs, buildable lands, and potential policies and strategies to address current and future housing in the Beaverton community. This report is one of a series of reports of background data and analysis. Not all data and context are included in each report and therefore the analysis may refer to other products from this project.

This report outlines current housing conditions within the City of Beaverton, and estimated housing needs based on local demographic and household trends. This analysis places a strong emphasis on equitable outcomes for the community's current and future residents. Future phases of this analysis will project future housing need and compare them to the inventory of buildable residential land in the city.

Data Limitations
The study area used in this analysis is the current Beaverton city boundary.

This analysis relies on the synthesis of quantitative data from a range of sources, attempting to provide the best estimates possible given the limitations of data availability, accuracy, and the scope and resources of this project. All sources of data on the scale of a large city will be incomplete and feature some margin of error. The information, estimates, and forecasts presented in this report necessarily reflect these limitations.

The primary data sources used in generating this forecast were:

- 2020 Decennial Census
- US Census American Community Survey
- Metro Urban Growth Report
- Metro RLIS
- Portland State University Population Research Center
- Point-In-Time Homeless Census
- McKinney-Vento data
- Oregon Housing and Community Services

- Oregon Employment Department
- IRS Migration Data
- City of Beaverton
- Washington County
- Census Employment Dynamics
- Regional Multiple Listing Service
- Zonda Market Research
- Claritas Spotlight[1]
- Other sources as appropriate.

This analysis relies heavily on Census data from both the 2020 Decennial Census, and the annual American Community Survey (ACS). These remain the best sources of data available on many demographic and housing subjects. At the same time, all Census data feature some margin of error, and it is important to understand and acknowledge this issue when reviewing and interpreting the data.

The Decennial Census, which endeavors to be a count of all people and households in the country, is considered the most reliable source of demographic data. The Census Bureau believes that the margin of error in the 2020 Census for key counts such as population is statistically indistinguishable from zero, on the macro level.

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[1] Claritas Spotlight is a third-party company providing data on demographics and market segmentation. It licenses data from the Nielson Company which conducts direct market research including surveying of households across the nation. Nielson combines proprietary data with data from the U.S. Census, Postal Service, and other federal sources, as well as local-level sources such as Equifax, Vallassis and the National Association of Realtors. Projections of future growth by demographic segments are based on the continuation of long-term and emergent demographic trends identified through the above sources.

However, the Post Enumeration Survey and Demographic Analysis conducted by the Census Bureau to evaluate the accuracy of the 2020 Census did find that some groups were undercounted:

> "The results show that the 2020 Census undercounted the Black or African American population, the American Indian or Alaska Native population living on a reservation, the Hispanic or Latino population, and people who reported being of Some Other Race.
>
> On the other hand, the 2020 Census overcounted the Non-Hispanic White population and the Asian population. The Native Hawaiian or Other Pacific Islander population was neither overcounted nor undercounted according to the findings.
>
> Among age groups, the 2020 Census undercounted children 0 to 17 years old, particularly young children 0 to 4 years old. Young children are persistently undercounted in the decennial census."
>
> -US Census Bureau[2]

The other limitation of the 2020 Census is the release schedule of data sets, which takes place over several years following the year of the Census. Thus far, data has been released on: Population; Race; Latine[3] ethnicity; number of Households; number of Housing Units; and Group Quarters population. While these are key baseline data sets utilized in this analysis, any additional nuance on demographics and housing from the 2020 Census are not yet available, with the next data release expected in 2023.

Despite the limitations, the 2020 Census is relied upon here as the best available source for the key indicators listed above in Beaverton, as of 2020.

For more detailed data sets on demographics and housing, this analysis relies on the American Community Survey (ACS), which features a much higher margin of error on all tables than the Decennial Census. The ACS is a survey of a representative sample of households which the Census uses to make estimates generalized to the population of the relevant geography. This analysis relies whenever possible on the most recent 2020 ACS 5-year estimates. The 5-year estimates have a lower margin of error than the ACS 1-year estimates.

Generally, the ACS data features smaller margins of error for larger groups (i.e., total population or total households), but larger margins of error for smaller subgroups (i.e., individual age cohorts, or racial categories). For this reason, the estimate of an indicator for the White population (the largest racial subgroup in the study area) will generally have a lower margin of error than the same indicator for a small racial subcategory, which might have a very large margin of error, despite being from the same ACS data set. These data challenges underscore the need for better, locally- collected data to better understand differences that Census data cannot provide. They also make a case for supplementing quantitative data with qualitative data, or other local data sets where possible, to add context to uncertain data.

Demographic changes and increasing diversity in Beaverton have brought about changes in how people define themselves and how they categorize others. As we work with data sets, like the Census, that collect data at the national level using standardized racial and ethnic categories, we recognize that those standardized categories limit the subjectivity and flexibility of self-identification among residents. In addition, the US Census has changed its categories and definitions of racial and ethnic

[2] "Census Bureau Releases Estimate of Undercount and Overcount in US Census," Census Bureau, March 10, 2022. www.census.gov/newsroom/press-releases/2022

[3] "Latine" is a gender-neutral or non-binary alternative to the term "Latino" which is traditionally is both a plural but also a male descriptor. Latine adopts the letter "e" from the Spanish language as a representation of gender neutrality and is used to describe all people.

groups over time, further complicating the discussion of trends for these populations. It is important to take limitations into account as we assess all data presented in this report whether from the Census, or other sources as cited.

II. HOUSING THROUGH AN EQUITY LENS

The City of Beaverton community has placed a strong focus on diversity, equity, and inclusion in its planning and other community initiatives over many years. These efforts are embodied in the Beaverton Diversity, Equity, and Inclusion Plan (DEI Plan), which was adopted in 2015 and updated in 2019. Beaverton helped fund and was a steering committee member for the Leading with Race: Research Justice in Washington County[4] project completed in 2018.

The Leading with Race study provides information on eight separate racial and ethnic groups in the County, using extensive outreach to members of these groups to get personal feedback on their experiences (see Section III). The DEI Plan cites this study as the groundwork behind the 2019 update.

As the DEI plan explains, "the City of Beaverton uses race as a primary lens for our diversity, equity and inclusion work" while acknowledging that intersectionality will allow other marginalized identity groups to also enjoy benefits of increased equity in the community. Some key points regarding using race as a primary lens:

- "[A]cross history race has been a basis for exclusion and discrimination. In order to repair the legacy of institutional racism and dismantle the infrastructure that it was built on, we must face this reality head on."

- "Beaverton has seen a dramatic demographic shift over the past several decades and is now celebrated as one of the most diverse cities in Oregon…. In order to be a responsive local government and move forward successfully as the community we are today, we must increase access and opportunities for historically underrepresented communities to play an integral role in shaping our future."

- "Tragically, research shows that in the US and Beaverton specifically, race remains one of the most powerful predictors of wellbeing and success. Across indicators of health, education, housing, income, poverty, criminal justice and more, people of color face systemic disparities that prevent them from thriving at the same rates as the White community."

Beaverton Diversity, Equity, and Inclusion Plan (2019)

For this analysis, the equity lens is applied to housing, the focus of this project. The DEI Plan defines equity as "[w]hen structural barriers that have historically disadvantaged certain groups are removed and everyone has access to the opportunities and tools they need to thrive. Equity is measured in outcomes and is achieved when one's identity can no longer predict their success" (page 26).

Different communities have defined equitable housing differently, but most definitions involve creating the opportunity for all persons, regardless of social markers (like race, ethnicity, or gender)

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[4] Coalition of Communities of Color. 2018. Leading with Race: Research Justice in Washington County. Portland, Oregon: Coalition of Communities of Color.

or historic disadvantage, to live in the housing types and neighborhoods they prefer, with equal homeownership rates, and similar housing opportunities for homeowners and renters.

Equitable Housing in this Analysis

The DEI Plan lays out goals and indicators of success for "Housing and Livability" include improving outcomes for such issues as:

- Homelessness
- Affordable housing
- Homeownership
- Anti-displacement
- Quality of housing and tenant protections
- City planning and policies

This memo discusses an assessment of current demographic and housing conditions, and an assessment of current housing need. This analysis is an early step of the larger Housing Beaverton Project. Later phases of this project will include discussion and recommendations on specific policies, code language, and strategies the community might adopt to help address some of the disparities or issues identified. The separate Buildable Land Inventory will provide additional insight into the availability, capacity, and suitability of remaining residential lands in the city to address findings of need. The Contextualized Housing Needs Assessment prepared later in this phase also will provide additional details about the disparate housing impacts, conditions and needs of a full range of Beaverton residents based on additional community engagement efforts and further review of previous local plans and studies.

The analysis presented in this report provides background and estimates related to the above Equitable Housing factors when possible. Unfortunately, many Census data sets are not disaggregated by race, meaning that this data is not available for each of the Census racial and ethnic categories. Other Census data sets that are disaggregated by race may have very large margins of error, especially for those racial subgroups that have a relatively small sample size. This report tries to note these data limitations, and the reader should remain aware of them.

III. EQUITABLE HOUSING NEEDS

This section discusses the history of discriminatory housing policies in Beaverton and the region that impact equitable housing and the profile of current need to this day. The discussion includes specific challenges and housing needs of different groups in the community, as identified in the Leading with Race study. The testimonies gathered through the outreach of that project help provide a qualitative narrative of housing need in the community. Subsequent sections of this report add additional quantitative context to this narrative.

This discussion reflects the extensive past work completed by the City of Beaverton, Washington County and other partners. The Housing Beaverton Project includes additional on-going outreach to many of these communities that will continue to inform the project in later phases.

A.   A LEGACY OF HOUSING AND OWNERSHIP INEQUALITY

A memo[5] prepared by city staff in 2021 summarizes the long history of racist land use and housing practices that have impacted disadvantaged populations in Beaverton over time, beginning with seizing of lands from Indigenous peoples, exclusion of Black residents in particular dating from the founding the State of Oregon, the Homestead Act, and related federal acts. During this period, White settlers dispossessed the Indigenous peoples of their lands in Washington County and severely limited the size of the Black population. The impacts of these policies are seen to this day as these groups make up a small percentage of the population compared to other groups in Beaverton and Washington County as a whole.

Restrictions on property ownership and voting eligibility lasted well into the 20th Century in Beaverton (as in many Oregon communities). The City of Beaverton's charter limited voting rights to landowners, excluding women, Indigenous peoples, low-income people, and other disadvantaged groups. It also established a poll tax and other obstacles to voting. The local restrictions were removed from the charter in the early 20th century, but nationally some voting restrictions were not lifted until the Voting Rights Act of 1965.

In the early 20th Century, the State of Oregon further placed restrictions on who could own property, explicitly excluding immigrant "aliens" from owning land or running businesses. A common practice was placing racist covenants, conditions, and restrictions (CC&Rs) on property deeds to prevent racial minorities and other disadvantaged groups from buying property in certain areas. Many of these (now unenforceable) CC&Rs remain on property deeds across the country. In Beaverton, three subdivisions built in the 1930s and 1940s were found to have these types of restrictions.

As federal laws began to dismantle some of these explicit practices by the middle of the 20th Century, a range of other public and private controls were employed to enforce segregation and ownership inequality, including in Beaverton. These types of measures included new approaches to zoning that segregate different types of residential uses. The newer zoning laws helped perpetuate earlier discriminatory zoning approaches established in the early 1900s. To this day, new residential zoning schemes are often designed, consciously or not, to protect single-family neighborhoods from rental housing specifically or other dense forms of housing that might serve lower-income people, people of color, or other residents with specific housing needs and challenges. (Please see the footnote for a link to more detail on this history.)

This cumulative history of exclusion is still represented geographically in communities across the country. It can be seen where certain groups of people are over- or underrepresented, what types of housing are prevalent in those areas, and in income, racial, and ethnic segregation. Beaverton is far from alone in this legacy but acknowledges that the local impacts of this history are still present on the ground and should be addressed on a local level to the greatest extent possible.

B.   HOUSING JUSTICE

The Leading with Race study provides insight into the current housing situation and needs of eight racial and ethnic subgroups in Washington County: Native American, African, African American, Asian and Asian American, Latine, Middle Eastern and North African, Native Hawaiian and Pacific Islander, and Slavic/Russian Speaking peoples. The study included extensive outreach to these groups,

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[5] "History of Racist Land Use and Housing Practices in Beaverton." City of Beaverton Community Development Department, June 23, 2021.
https://content.civicplus.com/api/assets/c833a56c-6404-4ed4-a7c4-2d3783e54b55?cache=1800

demographic profiles, and snapshots of sub-county areas, including the Beaverton area. (The study drew demographic data from the ACS 2011-2015 data).

The following is a summary of comments and findings on the housing circumstances of the groups focused on in the study, which do not all correspond exactly to the racial and ethnic categories used by the US Census, but which are used elsewhere in this report. The follow summary presents these groups in alphabetical order, and all content is from the Leading with Race study. The cited dates and timeframes are due to the timing (2018) and data availability of that report.

African Communities

- Housing justice for African communities means ensuring pathways to employment, economic prosperity, and affordable housing especially for larger family homes, and redressing houselessness.

- Focus group participants identified these barriers to potential homeowners:
    - Being Black
    - Not having a good credit history
    - Lack of income

- Another issue pointed out by the focus groups was the difficulty and costliness of trying to find affordable housing for large-sized African families.

- Unaffordable housing increases the risk of homelessness in the African community. To cope with this, families and communities try to provide shelter for members who have been evicted or displaced.
    - Considering how African families provide shelter to members who are homeless, data regarding the proportion of Black/African people who are homeless may be conservative in estimates.

- Lack of Islamic banking is also a big issue for people within the African community, as their beliefs forbid them from taking out loans that charge an interest rate.

- Although fewer African homeowners are generally less burdened by mortgages, etc., they bear additional costs such as travel to culturally specific resources and services.

- With increasing rents, inadequate incomes, and unemployment, Africans are finding it more difficult to pay for housing, the single biggest expense in a typical household budget, which keeps many in poverty.

- Sub-Saharan African families were 317% more likely to be in poverty compared to a White person, and 167% more likely than all families in Washington County (ACS, 2011-2015).

- Like many other minority communities, a sizable proportion of African families are cost-burdened by rent, meaning they may reduce expenditures on necessities like food and healthcare to make up for it.

African American Community

- Less than half of African Americans in Washington County own their homes, compared to 60% of all households.

- High income African Americans were most likely (86%) to have their loan applications denied compared to high income White people nationwide.

- Analysis of the Washington County Fair Housing Plan 2012 found that very few African Americans even attempt to purchase homes in Washington County.

  - In 2009, only 69 loans originated from African American households.

- The history of mortgage redlining remains an issue within the African American community. By refusing to make loans in certain neighborhoods, these written and unwritten policies forced many Black households to remain renters and denied them wealth-building opportunities. It also ensured that whole neighborhoods would remain majority-renter with less property investment by owners.

- African American residents are seen as vulnerable to displacement from gentrification of neighborhoods, either through market forces or policies such as urban renewal.

- The African American community in Beaverton stated that there still is a need for better data surrounding the impacts of racist housing practices.

- Houselessness is also in issue within this community. Washington County records that over 11.4% of people in shelters and 5.4% of people on the streets or "doubled up" were African American. In comparison, African American people only made up 3% of the county's population.

  - The unaffordability of rent and unemployment were the top two reasons for homelessness.

- In 2015, African American students in Washington County were 150% more likely to experience housing instability compared to White students.

- 1 in 4 African American people are food insecure, indicating that these households are faced with a tradeoff in basic needs such as housing, healthcare, and food.

Asian and Asian American Communities

- Focus group participants of various Asian nationalities and ethnicities tended to identify high housing costs and lack of affordable housing as a concern and top priority for the community.

- Though there is a lot of variation among segments of the Asian community, Asian homeownership is lower than White homeownership at the aggregate level.

- Families and households in different Asian communities are usually multigenerational and are larger than the average White and countywide household, which also increases the preference for homeownership.

- Housing cost burdens are a big issue for Asians in Washington County.

  - Vietnamese homeowners were 47% more likely than White homeowners to spend at least one-third of their income on housing.

- o   Chinese homeowners are 33% more likely than White homeowners to spend at least half of their income on housing costs.

- Immigration is a big barrier to homeownership for people in the Asian community. Long immigration wait times leads large portions of the community to see themselves merely as a labor force dampening their willingness to commit to a significant financial investment such as homeownership.

- Asian communities overall are 25% more likely to be in poverty than White residents in the county. Migration patterns suggest that a lot of Asians cluster to urban areas where there is a higher cost of living, meaning that higher incomes may be offset by these added costs, including housing. These two facts put people in the Asian community at risk of houselessness to an extent.

Latine Community

- Two out of three Latine residents in Washington County are renters.

  - o   Racial differences in loan denials, lower average incomes, expensive home loans, and a systematically higher risk of foreclosure are some of the reasons for differential Latine and White homeownership.

- Loan denial disparity rates (Latine vs. White):

  - o   Upper income Latine households were 125% more likely to have their loans denied than White households.

  - o   Middle income Latine households were 151% more likely to have their loans denied than White households.

  - o   Lower income Latine households were 78% more likely to have their loans denied than White households.

- Between 2007 and 2013, median home values reported by Latine owners had declined by 25.8%, comparatively White homeowners' median home value declined by only 20.3% during the same time.

- Median rents in Washington County increased by 27% between 2012 and 2015. During the same period, monthly earnings of the Latine community only grew by 17%.

- Latine home buyers were more likely to have high-cost mortgages for home purchases during the "housing boom" of the early 2000's.

- 58% of Latine renters spent more than 30% of their income on monthly rent.

- Like some other minority communities, Latine community members share the benefits of families living together. When community members become unable to financially support stable housing, other community/family members try to help support each other.

  - o   Overcrowding becomes an issue as it puts Latine families at risk of eviction.

- Latine students were 100% more likely to be houseless compared to White students in 2015. Housing insecure Latine students grew by 8% between 2012 and 2015, the same growth rate as the general Latine student population in that time period.

Native American Community

- Native Americans are facing increased housing costs while there is a relative lack of access towards financial services, such as loans, to help with the burden. Even if they have access to the relevant financial services, they usually incur a higher cost than usual.

- Termination of 60 Native American tribes in 1953 by the federal government displaced over 4,000 Native Americans in Oregon, fueling migration to urban areas in Washington County and Portland.

- In Washington County, only 1 out of 3 Native American owned their homes. Comparatively, 2 out of 3 White residents are homeowners in the county (ACS, 2011-2015).

- Native Americans applicants were 41% more likely than similar middle income White applicants, and 149% more likely than similarly low-income White applicants to have their loan applications denied.

- Native American applicants' denial rates increased substantially in 2000 – 2009, the primary reason cited being too high of a debt-to-income ratio, lack of collateral, and poor credit history.

- 39% of Native homeowners are spending at least 1/3 of their monthly income on mortgage and housing related costs. In comparison, only 25% of White homeowners and all County homeowners spend as much on the aforementioned cost (ACS, 2011-2015).

- During the housing boom of early 2000's in Washington County, 23% of loans to Native Americans were high priced and risky. Even after lending activity declined in the following years, Native Americans continues to have higher rates of these risky loans.

- Almost 2 out of 3 Native Americans in Washington County are renters (ACS, 2011 – 2015) and they are more likely to spend more than half their income on rent.
  - 54% of Native renters were cost burdened compared to 49% of White renters.

- The share of Native Americans on food stamps has increased from 16.2% to 26.8% (ACS, 2006 - 2010, 2011 – 2015).
  - This suggests that there is rising food insecurity as Native families must negotiate a tradeoff in basic needs such as housing, food, and healthcare.

- 16% of Native students in 2015 were housing insecure, meaning they "lacked a fixed, regular, and adequate nighttime residence" (Oregon Department of Education).

Middle Eastern and North African Communities

- Middle Eastern and North African communities are more likely to be renters than the average Washington County resident and their White counterparts. Thus, they worry about disruptions such as rent increase, delayed repairs, or no-cause evictions.

- According to community feedback, high-income community members are driving the higher homeownership rate of some segments observed in the data.

- Focus group participants identified loan interest rates being incongruous to the Islamic faith as a barrier to homeownership in the community.

- Another barrier is financial institutions being reluctant to provide homeownership loans to potential homeowners because of a lack of credit history and what the banks consider a satisfactory stream of income and employment.

- More than one-third of Middle Eastern and North African homeowners spent more than one-third of their monthly income on housing costs such as mortgages and taxes.

- Community members point out a shortage of rental housing that meets the needs of families such as large affordable units. Gentrification and unaffordable housing units along the Southwest corridor has been a concern to Middle Eastern and North African renters.

- Unaffordable housing increases risk of homelessness in the Middle Eastern and North African community and puts pressure on familial and communal networks to provide support during housing instability.

- As with other minority groups, many community members find that rent is a burden thar forces tradeoffs with food, healthcare and other necessities.

Native Hawaiian and Pacific Islander Communities

- Rising housing prices, low-wage jobs, inequitable income, and lack of literacy surrounding US financial systems limit people from the Pacific Islander community's ability to stabilize a "home base".

- Focus group participants prioritized financial literacy for community members unfamiliar with the US system. They spoke about how the US financial system is fundamentally different from the communal and collective values of their heritage.

- Pacific Islanders are more likely to be renters in comparison to White households.

- A lot of Pacific Islander households cope with the housing crisis by moving from place to place or doubling up with other families.

  o This strategy of communal living puts them in danger of eviction and further displacement.

- Gentrification has destabilized Pacific Islander students in Portland as they are forced to move across school districts as their families are displaced.

- Rising home prices and predominantly low wage employment experienced by community members also lead to less time for parental involvement in their children's academic and cultural development.

Slavic and Russian-Speaking Communities

- The Slavic/Russian speaking population in Washington County were 8% less likely to be homeowners and 14% more likely to be renters compared to White residents.

- They were 44% more likely to be severely cost-burdened, with at least half of their income spent on housing. Similarly, renters in the community were 22% more likely to be severely cost-burdened by rent.

- Focus groups from the community note increasing median rents and utility costs as a main concern.

- The focus group also advocated for rent regulation, tenant rights, and for awareness surrounding these in Slavic/Russian languages.

- Some participants who live in public housing in Washington County were also concerned about poor living conditions especially air conditioning and ventilation.

C. SUMMARY OF KEY THEMES

The Leading with Race study reinforces that every segment of the community has a unique lived experience. Each part of the community features its own resources and challenges.

However, there are some common themes that arise from the outreach and data on these communities related to the housing needs of these racial and ethnic groups.

1) These communities are more likely to be renters than homeowners when compared to their White neighbors. There are systemic reasons that contribute to this imbalance such as past and embedded exclusionary policies, discriminatory lending policies, and challenges to affording down payments and house payments.

2) Many of these groups tend to have larger than average households, either because they are multigenerational, or because these groups network to assist other family or community members in need. Having larger or crowded homes can increase the threat of eviction, as well as cramped and substandard living conditions.

3) The affordability of housing is a major concern. A higher share of renters in these groups are rent burdened, and many report that high housing costs crowd out spending on other necessities such as food, transportation, and health care. The rapidly rising prices of homes for sale in Beaverton and across the region make them increasingly less affordable over time.

4) Households with language or cultural barriers may have greater difficulty navigating the US financial and credit system, housing laws, and tenant rights. These barriers can make these households less likely to become homeowners and more vulnerable to eviction.

These findings, combined with quantitative data, help inform the types of housing and affordability levels needed by Beaverton households (see Section IV). The geographic distribution of these households and other indicators of housing insecurity in Beaverton are discussed in Section VI.

IV. DEMOGRAPHY OF HOUSING NEED

This section presents a quantified estimate of housing need for Beaverton households and key subgroups. In keeping with the requirements of a Goal 10 Housing Needs Analysis, this analysis includes an estimate of the housing needs for the entire population, stratified by income segment, and estimates the current housing inventory in the city by housing type. However, the main focus of this analysis is on those groups for whom the housing need and the deficit of appropriate housing is most acute.

A. HOUSING NEEDS VS. PREFERENCES

The term "needed housing" can mean different things depending on a household's level of income and other relative advantages/disadvantages. Some households live in inadequate housing that doesn't meet their immediate needs, while households with more resources will find it easier to attain housing that meets their immediate needs and can think in terms of choice and preferences.

Generally, households in lower income groups are most likely to be cost-burdened and spend a larger share of their income on housing. Many do not have the resources to purchase a home and are long-term renters either by necessity or choice. Most of these households must think of housing in terms of "needs" rather than "preferences". They are often forced to compromise on basic requirements such as affordability, number of bedrooms, location relative to work or other daily destinations, neighborhood safety, and community infrastructure.

For higher income households, the housing market in a growing city or region will supply new housing at a high price point that is attainable to them. It is more accurate to say that many in higher income segments can afford to think of housing in terms of "preferences" rather than simply "needs." These households have the means to make choices among locations, housing types and sizes. A large proportion of the new housing being provided by homebuilders and developers will be more expensive housing suitable for these households.

The focus of this analysis is on the housing needs of the community, particularly among those who may not currently have those needs met. There is less emphasis on the preferences of households with the resources to meet their current needs, though all of the community is included in the quantified results presented below. It is assumed that the housing market will continue to meet the needs of more advantaged households, and that they will generally have the resources to navigate it.

B. HOUSING AFFORDABILITY

This analysis takes into account the average amount that owners and renters tend to spend on housing costs. For instance, lower income households tend to spend more of their total income on housing, while upper income households spend less on a percentage basis. In this case, it was assumed that households in lower income bands need housing costs to be no more than 30% of gross income (a common measure of affordability[6]). It is assumed that higher income households pay a decreasing share of their gross income towards housing costs, down to 20% for the highest income households, as confirmed by Census data (Table B25106, ACS).

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[6] Spending 30% or less on housing costs is a common measure of "affordability" used by U.S. Department of Housing and Urban Development (HUD) and others, and in the analysis presented in this report. Housing costs include rent or mortgage payment, utilities, insurance, and taxes if applicable.

While the Census estimates that most low-income households pay more than 30% of their income for housing, this is an estimate of current *need*. It assumes that low-income households need (or demand) units affordable to them at no more than 30% of income, rather than units that represent a cost burden. It is also important to remember the many upfront costs that can come from moving to a new rental or ownership unit, including deposit, multiple months of rent, down payment and initial repairs.

C.   ESTIMATE OF CURRENT HOUSING DEMAND BY INCOME SEGMENT

The profile of current housing conditions in Beaverton is based on the 2000 and 2020 Census, with key indicators forecasted to 2022, using the demonstrated annual growth rate between the 2010 and 2020 Census. The data used in this section draws from the detailed data on demographics and housing in Beaverton presented in Appendices A and B.

FIGURE 4.1: CURRENT HOUSING PROFILE (2022)

CURRENT HOUSING CONDITIONS (2022)			SOURCE
Total 2022 Population:	99,110		US Decennial Census 2020
- Estimated group housing population:	895	(0.9% of Total)	US Decennial Census 2020
Estimated Non-Group 2022 Population:	98,215	(Total - Group)	
Avg. HH Size:	2.38		US Census ACS 2020
Estimated Non-Group 2022 Households:	41,267	(Pop/HH Size)	
Total Housing Units:	43,267	(Occupied + Vacant)	Census 2020 + permits
Occupied Housing Units:	41,267	(= # of HH)	
Vacant Housing Units:	2,000	(Total HH - Occupied)	
Current Vacancy Rate:	4.6%	(Vacant units/ Total units)	

Sources: Johnson Economics, City of Beaverton, U.S. Census

*This table reflects population, household and housing unit projections shown in Figure 3.1

We estimate a current population in Beaverton of roughly 99,000 residents, living in 41,267 households plus 895 individuals living in group living situations. The average household size is 2.4 persons[7].

There are an estimated 43,267 housing units in the city, indicating an estimated vacancy rate of 4.6%. (The estimate of vacant units comes out to 2,000 units exactly, but this is coincidental, and this number is expected to fluctuate constantly with the housing market). This includes units vacant for any reason, not just those which are currently for sale or rent.

Following the establishment of the current housing profile, the current housing demand was determined based upon the age and income characteristics of current households for the population

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[7] The assumed share of the population living in group quarters and the average household size are held constant from the 2020 Decennial Census.

as a whole. Information about housing needs of specific population groups is found in subsection (D) of this section.

The analysis considered the propensity of households in specific age groups and income levels to either rent or own their home (tenure) to derive the current demand for ownership and rental housing units and the appropriate housing cost level of each. This is done by combining data on tenure by age and tenure by income from the Census American Community Survey (tables: B25007 and B25118, 2020 ACS 5-yr Estimates).

As noted above, the analysis takes into account the average amount that owners and renters tend to spend on housing costs. Lower income households tend to spend more of their total income on housing, while upper income households spend less on a percentage basis. In this case, it was assumed that households in lower income bands need housing costs at no more than 30% of gross income to be affordable. Higher income households pay a decreasing share down to 20% for the highest income households.

Figure 4.2 presents an estimate of current housing demand equal to the estimated number of households in the study area (41,267). The breakdown of tenure (owners vs. renters) reflects data from the 2020 ACS.

FIGURE 4.2: ESTIMATE OF CURRENT HOUSING DEMAND (2022)

Ownership				
Price Range	# of Households	Income Range	% of Total	Cumulative
$0k - $80k	900	Less than $15,000	4.4%	4.4%
$80k - $130k	829	$15,000 - $24,999	4.1%	8.4%
$130k - $180k	1,036	$25,000 - $34,999	5.1%	13.5%
$180k - $250k	1,873	$35,000 - $49,999	9.2%	22.7%
$250k - $340k	2,811	$50,000 - $74,999	13.7%	36.4%
$340k - $420k	2,689	$75,000 - $99,999	13.1%	49.5%
$420k - $460k	2,550	$100,000 - $124,999	12.5%	62.0%
$460k - $510k	2,147	$125,000 - $149,999	10.5%	72.5%
$510k - $670k	3,082	$150,000 - $199,999	15.1%	87.6%
$670k +	2,546	$200,000+	12.4%	100.0%
Totals:	**20,464**		**% of All:**	**49.6%**

Rental				
Total Housing Costs	# of Households	Income Range	% of Total	Cumulative
$0 - $400	1,815	Less than $15,000	8.7%	8.7%
$400 - $700	1,919	$15,000 - $24,999	9.2%	18.0%
$700 - $900	1,718	$25,000 - $34,999	8.3%	26.2%
$900 - $1300	2,827	$35,000 - $49,999	13.6%	39.8%
$1300 - $1700	4,547	$50,000 - $74,999	21.9%	61.7%
$1700 - $2100	3,247	$75,000 - $99,999	15.6%	77.3%
$2100 - $2300	1,806	$100,000 - $124,999	8.7%	85.9%
$2300 - $2500	1,311	$125,000 - $149,999	6.3%	92.2%
$2500 - $3400	927	$150,000 - $199,999	4.5%	96.7%
$3400 +	686	$200,000+	3.3%	100.0%

				All Households
Totals:	**20,803**		**% of All:** 50.4%	**41,267**

Sources: Census, JOHNSON ECONOMICS
Census Tables: B19037, B25007, B25106, B25118 (2020 ACS 5-yr Estimates)

The estimated home price and rent ranges presented in Figure 4.2 are irregular because they are mapped to the Census income level categories. For instance, an affordable home for those in the lowest income category (less than $15,000) would have to cost $80,000 or less.[8] Affordable rent for

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[8] **Home price assumptions:** The affordable price level for ownership housing shown in Figure 4.2 assumes 30-year amortization, at an interest rate of 5% (though this rate has been lower until recently, and has now spiked higher than 5%, this assumption in line with historic norms), with 10% down payment. These assumptions are designed to represent prudent lending and borrowing levels for ownership households. The 30-year mortgage commonly serves as the standard. In the 2000s, down payment requirements fell significantly, but standards have tightened somewhat since the 2008/9 credit crisis. While 20% is often cited as the standard for most buyers, it is common for homebuyers, particularly first-time buyers, to pay significantly less than this using available programs.

someone in this category would be $400 or less, based on the assumption that households *need* to spend no more than 30% of income on housing costs. The higher housing cost estimates for upper income households represents housing "preferences" or "choice" more than need, as previously discussed.

Figure 4.2 is based on a synthesis of Census data sets to arrive at an estimate of propensity to rent or own by income segment. To do this, the following Census sets from the 2020 ACS were used: tenure by the age of the householder, tenure by household income, age of household-by-household income, and housing costs as a percentage of household income by tenure. These data sets combined can be used to estimate the propensity of households in different age and income segments to either rent or own their home.

Census data all features a margin of error, which is transferred to these results. In general, in Beaverton, the 2020 ACS data has a margin of error of roughly 2.0% for number of households, but a margin of error closer to 4.5% for estimates of tenure for those households. With any Census data set, as one looks at smaller individual line items, the cited margin of error increases. Consequently, the findings presented in Figure 4.2 also feature a margin of error. The estimated housing demand in the table represents the best estimate from a range of imprecise sources, and therefore despite the apparent precision of the estimates, may best be considered a guide to rough distribution of demand from different income groups.

Figure 4.3 presents an estimate of the current housing demand broken down by the estimated number of households in the major affordability income bands as defined by Oregon Housing and Community Services (OHCS) for households in Washington County. This applies the OHCS rates to the average local household size of 2.4 persons. These income bands are updated annually and used to determine eligibility for various state and federal housing programs and set the allowable rent levels for this program. It is important to note that the median income level in Washington County on which these income levels are based is higher than the estimated median income in Beaverton.

For reference, and the purposes of the Goal 10 Housing Needs Analysis, the table includes all income levels including middle- and upper-income households. However, most housing programs and strategies are aimed at those designated "low income" or less, meaning they earn less than 80% of the Area Median Income (AMI). This group makes up an estimated 47% of local households, but 59% of renter households. An estimated 27% of households earn "very low income" or lower, and an estimated 13% or nearly 5,300 households are estimated to be extremely low income. These estimates are based on the estimated demand by income band presented in Figure 4.2, and therefore carry a similar margin of error.

Interest rates are subject to disruption from national and global economic forces, and therefore impossible to forecast beyond the short term. The 5% used here is roughly the average 30-year rate over the last 25 years. The general trend has been falling interest rates since the early 1980s, and the average 30-year mortgage interest rate remained lower than 5% for over a decade. However recent inflation has caused the Federal Reserve to raise its key rate, causing mortgage rates to climb above 6% for the first time since 2008. While forecasting these trends is impossible, many economists expect the inflation to be transitory, and the general long-term decline in interest rates to reestablish itself.

FIGURE 4.3: ESTIMATE OF CURRENT HOUSING DEMAND BY AFFORDABILITY LEVEL (2022)

Household Income Segment	Income Level (Rounded)		Afford. Rent Range	Afford. Home Price Range	Owner Units	Renter Units	Total Units	Share of Units	Common Housing Product
Upper Income	> 120% AMI	> $107,000	$2,200 +	$475k +	9,573	4,197	13,770	33%	Single-detached homes; Townhomes, Condominiums
Middle Income	80% - 120% AM	$71.5k - $107k	$1,700-$2,200	$350k-$475k	3,826	4,401	8,227	20%	Single-detached homes; Townhomes; Small homes; New apartments
Low Income	50% - 80% AMI	$45k - $71.5k	$1,200-$1,700	$225k-$350k	3,084	4,917	8,001	19%	Market apartments; Manufactured homes; Plexes; Aging single-detached
Very Low Income	30% - 50% AMI	$27k - $45k	$800-$1,200	$150k-$225k	2,061	3,237	5,298	13%	Aging/substandard rentals; Government-subsidized; Voucher
Extremely Low Inc.	< 30% AMI	< $27,000	<$800	<$150k	1,920	4,051	5,971	14%	Government-subsidized; Voucher; Shelter; Transitional
TOTAL:					**20,464**	**20,803**	**41,267**	**100%**	

Sources: OHCS, Claritas., Census, JOHNSON ECONOMICS

D.   ESTIMATE OF CURRENT HOUSING DEMAND BY RACIAL AND ETHNIC CATEGORIES

The following figure breaks down the estimated demand for rental and owner units shown in the table above by racial and ethnic categories. As noted, there is a margin of error to these data so these numbers will not be as exact as they appear, but a guide to the general distribution of demand.

Households of color in 2010, the most recent year with relevant Census data, tend to have larger average household size than the average of all households (Figure 4.4). White households had an average household size slightly smaller than the citywide average, while all other groups were estimated to have an average household size larger than the average. All of these figures fall within the margin of error, but the general trend seems clear. (See Appendix A, Part G. for more data on racial and ethnic demographics.)

FIGURE 4.4: AVERAGE HOUSEHOLD SIZE BY RACIAL AND ETHNIC CATEGORY, 2010 (BEAVERTON)
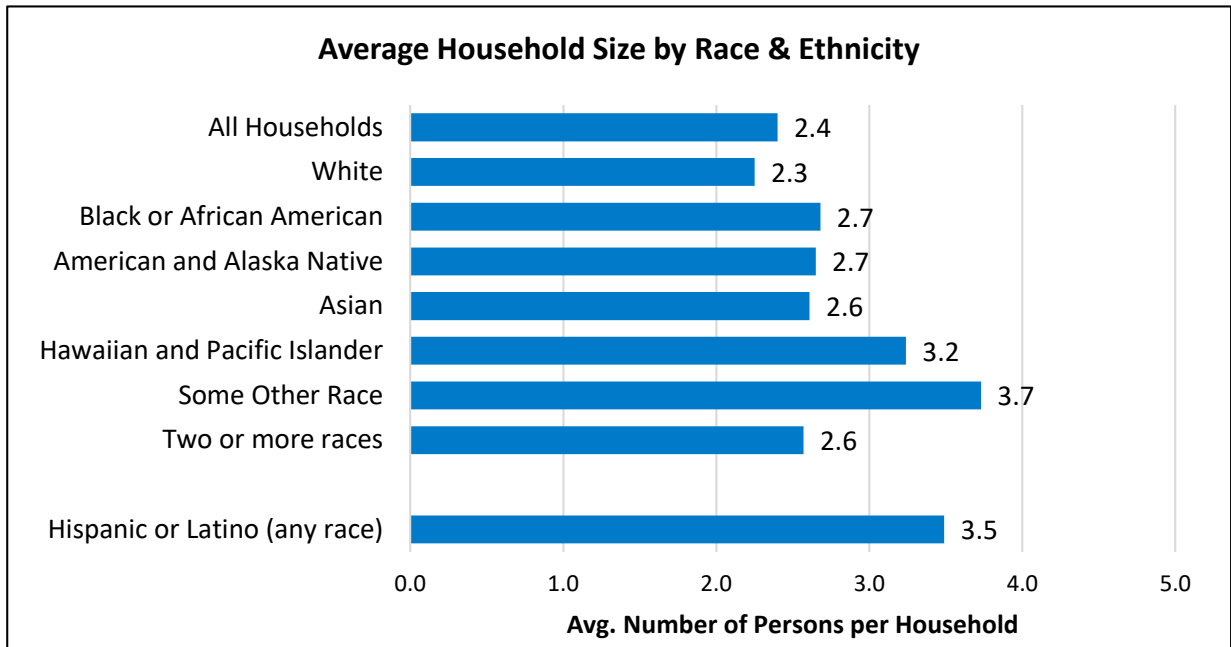
Average Household Size by Race & Ethnicity

Category	Avg. Number of Persons per Household
All Households	2.4
White	2.3
Black or African American	2.7
American and Alaska Native	2.7
Asian	2.6
Hawaiian and Pacific Islander	3.2
Some Other Race	3.7
Two or more races	2.6
Hispanic or Latino (any race)	3.5

SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: P17A-H, (2010, most recent available from Decennial Census)

Figure 4.5 presents estimated homeownership by race in Beaverton and statewide, from ACS data.

FIGURE 4.5: HOME OWNERSHIP BY RACIAL AND ETHNIC CATEGORY (BEAVERTON)

Owner-Occupied Households by Race & Ethnicity

Category	Beaverton	Oregon
All Households	50%	63%
White	51%	65%
Black or African American	47%	33%
American and Alaska Native	12%	48%
Asian	52%	62%
Hawaiian and Pacific Islander	52%	34%
Some Other Race	33%	42%
Two or more races	52%	49%
Hispanic or Latino (any race)	27%	43%

SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: B25003A-H, (2020 ACS 5-year)

The data from Beaverton feature greater margins of error than the statewide data due to sample size, and data for the smaller groups within Beaverton feature even greater margin of error. However, the more reliable citywide 2020 ACS data show that the city does have a low homeownership rate (50%) relative to the county of state. Therefore, the lower rates of homeownership shown above relative to the state reflect that difference.

Families of color are less likely to own the homes they occupy based on statewide data. On a generalized level, this includes all non-White racial subgroups. Asians report a homeownership rate close to the average, however, as the Leading with Race study found, there is much variation among each of these subgroups and it is misleading to assume that all households in a given category are accurately represented by the average figure.

Figure 4.6 presents an estimate of the housing demand presented in Figure 4.2 and 4.3, broken down by the estimated demand from racial and ethnic categories.
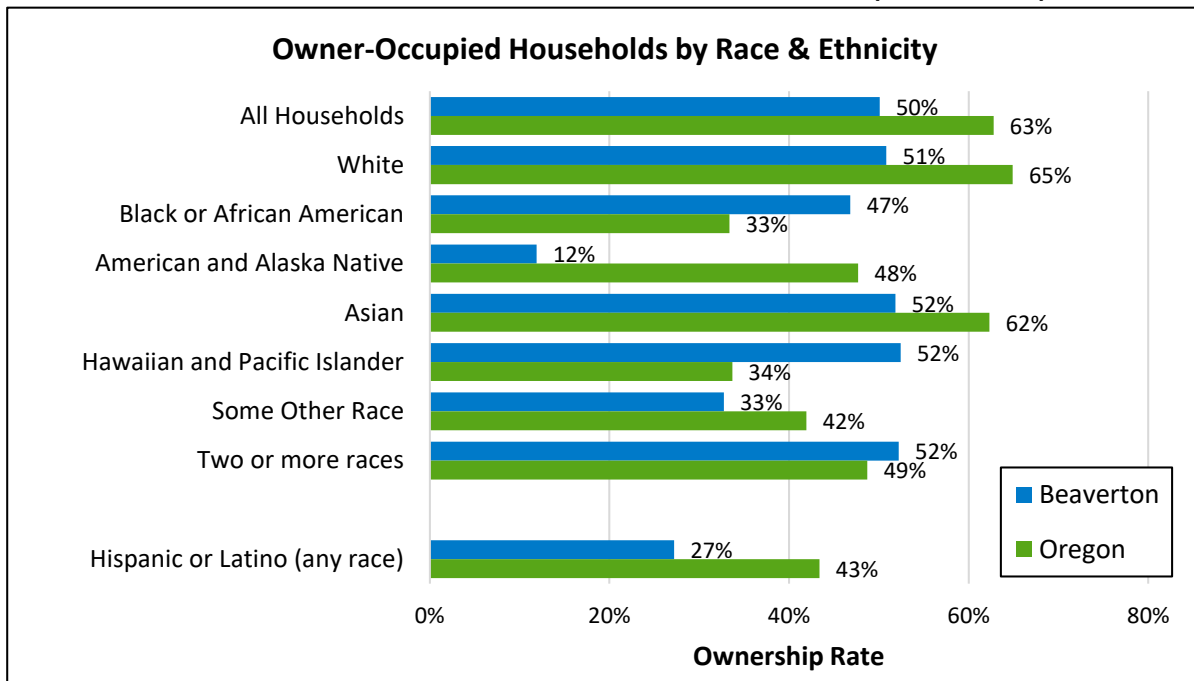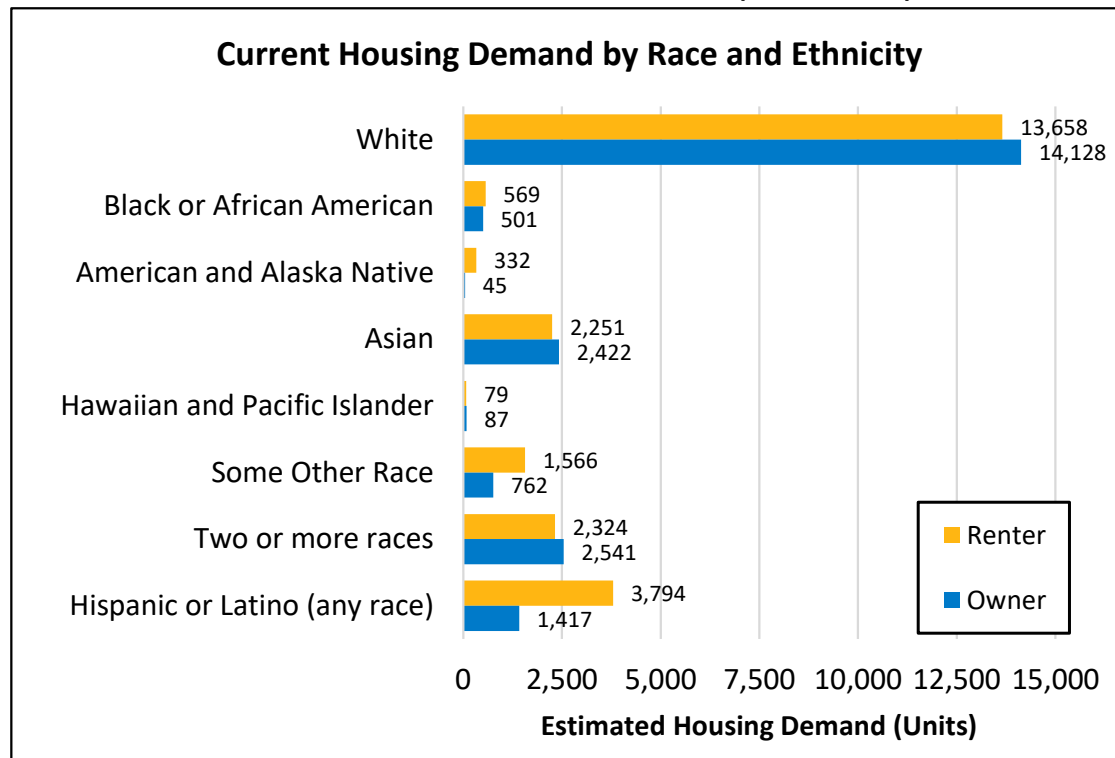
FIGURE 4.6: TENURE BY RACIAL AND ETHNIC CATEGORY (BEAVERTON)

SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: P17A-H, (2010), B25003A-H, (2020 ACS 5-year)

As with the estimate of total demand, this represents the current tenure of households, but not an equitable housing balance. Historic government policies and subsidies have almost exclusively benefited White homeowners, which has resulted in much higher rates of homeownership among this group. At the same time, discrimination and barriers have resulted in lower rates of homeownership for people of color and, nationally, that gap is increasing, not decreasing. Lower incomes, educational attainment, access to generational wealth, and discrimination in lending are some of the factors that have suppressed homeownership in communities of color. In that sense, it does not represent a complete picture of current housing needs. However, the next step in this

process will be to estimate future housing needs. In that step of the process, we will describe the types of housing needed by specific groups to create a more equitable future. In addition, strategies or incentives that help create more opportunities for these groups to own their homes and build wealth through property ownership will be an important component of equitable housing to evaluate during the policy and strategy elements of this study.
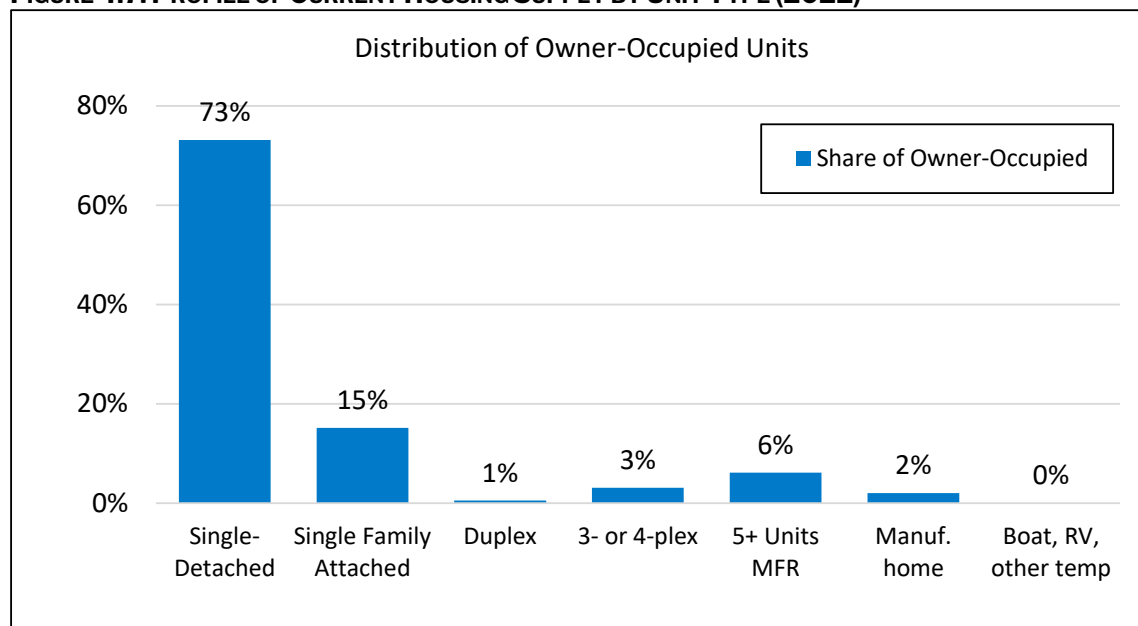
E.   ESTIMATE OF CURRENT HOUSING INVENTORY

The profile of current housing demand (Figure 4.2) represents the estimated income levels of current households and the housing they can afford. In reality, the current housing supply (Figures 4.7 and 4.8 below) differs from this profile, as we know many community members are housing-cost burdened (requiring more than 30% of gross income).

A profile of current housing supply in Beaverton was estimated based on permit data from the City of Beaverton and Census data from the most recently available 2020 ACS, which provides a profile of housing types (single-detached, attached, manufactured home, etc.), tenure, housing values, and rent levels (as presented in Appendix B of this report). The 5-year estimates from the ACS were used.

- An estimated 49.8% of housing units are ownership units, while an estimated 50.2% of housing units are rental units. This is very similar to the current tenure split in the community. The profile shown in Figure 4.2 estimated a slightly higher demand for owner units but the differences are well within the margin of error. The inventory includes vacant units.

- 73% of ownership units are single-detached homes, and an additional 2% are manufactured homes. Fourteen percent of rental units are either single-detached homes or manufactured homes, while 62% are in structures of 5 units or more.

- Of total housing units, an estimated 43% are single-detached homes, and 1% are manufactured homes. Nineteen percent are some sort of attached unit type.

FIGURE 4.7: PROFILE OF CURRENT HOUSING SUPPLY BY UNIT TYPE (2022)
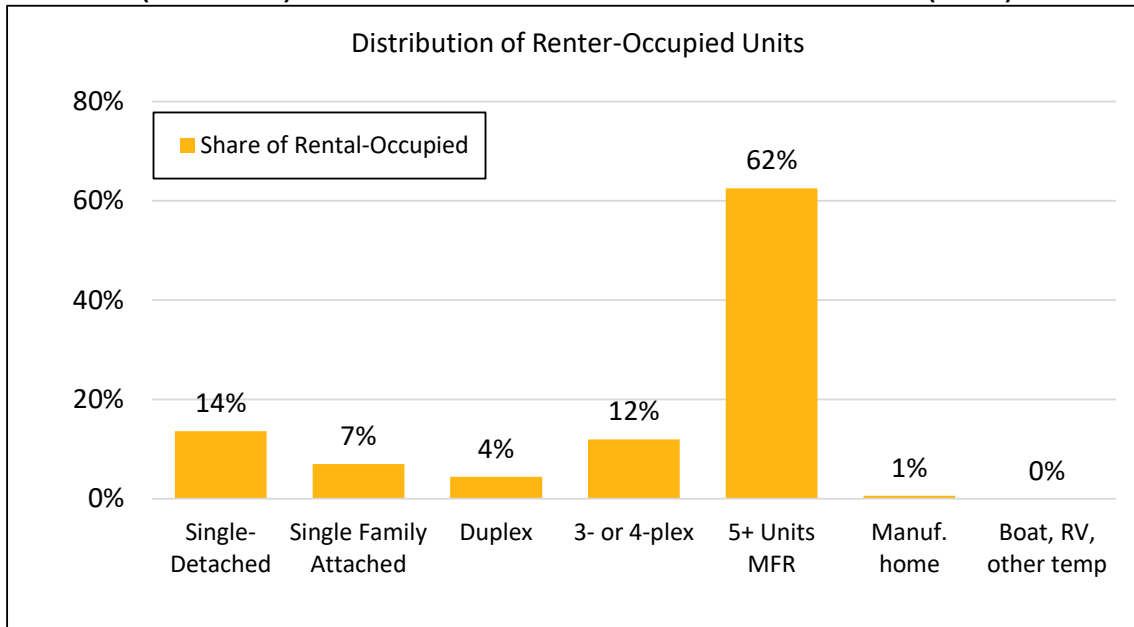
Distribution of Owner-Occupied Units

(Continued below)

Distribution of Renter-Occupied Units

■ Share of Rental-Occupied

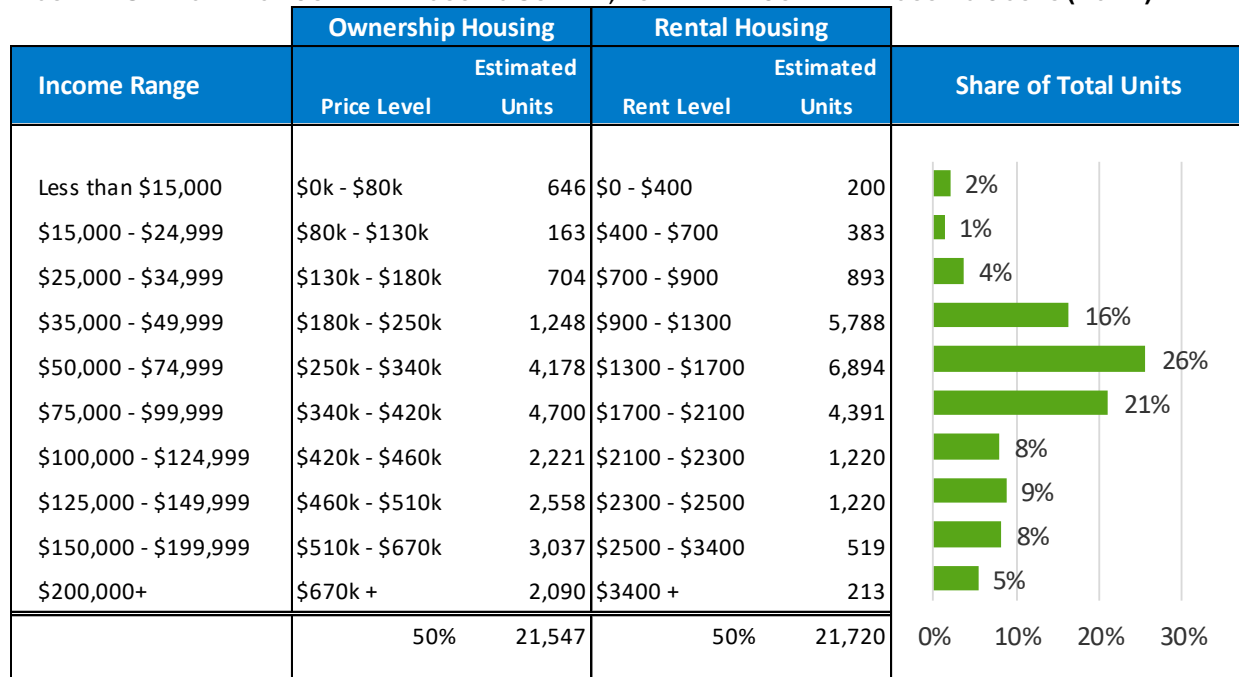|						
14%	7%	4%	12%	62%	1%	0%
Single-Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Manuf. home	Boat, RV, other temp

Sources: US Census, PSU Population Research Center, JOHNSON ECONOMICS
Census Tables: B25004, B25032, B25063, B25075 (2020 ACS 5-yr Estimates)

- The estimated affordability of different unit types is an approximation based on Census data on the distribution of housing units by value (ownership) or gross rent (rentals), using the same assumptions of ability to pay by income band used to determine demand (see discussion of Figure 4.2).

- Communities often harbor some low-cost units, despite the general perception of housing cost inflation and unaffordability for lower-income households. The inventory at the lowest end of the rental spectrum includes subsidized affordable housing units for very low income people. Other sources of low-cost rentals can be renters who have long-term arrangements or good deals from family, friends, or landlords who trust them as tenants. That can amount to lower rents over time than is typically seen at apartment complexes offering new units.

- Ownership housing found at the lower end of the property value spectrum generally reflects older, smaller homes, or homes in poor condition on small or irregular lots. **It is important to note that these represent estimates of current property value or current housing cost to the owner, not the current market pricing of homes for sale in the city.** These properties are currently estimated to have low value but will likely eventually sell for a higher price, meaning higher housing costs, and/or may be candidates for redevelopment.

- In addition, there are many homeowners, generally older who have paid off their mortgage, which greatly reduces their actual housing costs. Other long-term owners may have mortgage payments but bought their homes at a much lower price point many years prior and may have a low housing payment despite the estimated current value of the property.

FIGURE 4.8: PROFILE OF CURRENT HOUSING SUPPLY, ESTIMATED CURRENT HOUSING COSTS (2022)

Income Range	Ownership Housing		Rental Housing		Share of Total Units
	Price Level	Estimated Units	Rent Level	Estimated Units	
Less than $15,000	$0k - $80k	646	$0 - $400	200	2%
$15,000 - $24,999	$80k - $130k	163	$400 - $700	383	1%
$25,000 - $34,999	$130k - $180k	704	$700 - $900	893	4%
$35,000 - $49,999	$180k - $250k	1,248	$900 - $1300	5,788	16%
$50,000 - $74,999	$250k - $340k	4,178	$1300 - $1700	6,894	26%
$75,000 - $99,999	$340k - $420k	4,700	$1700 - $2100	4,391	21%
$100,000 - $124,999	$420k - $460k	2,221	$2100 - $2300	1,220	8%
$125,000 - $149,999	$460k - $510k	2,558	$2300 - $2500	1,220	9%
$150,000 - $199,999	$510k - $670k	3,037	$2500 - $3400	519	8%
$200,000+	$670k +	2,090	$3400 +	213	5%
	50%	21,547	50%	21,720	0% 10% 20% 30%

Sources: US Census, PSU Population Research Center, JOHNSON ECONOMICS
Census Tables: B25004, B25032, B25063, B25075 (2020 ACS 5-yr Estimates)

▪ Most housing in Beaverton is found in price and rent levels affordable to those earning at least $50,000 per year. There is little housing available to those in lower income segments. As noted, the units available at the lowest end of the income spectrum are likely to be a combination of subsidized affordable rentals, manufactured homes, aging or substandard units.

COMPARISON OF CURRENT HOUSING DEMAND WITH CURRENT SUPPLY
A comparison of estimated current housing demand (Figure 4.2) with the existing supply (Figure 4.5) identifies the existing discrepancies between demand and the housing which is currently available. The estimated number of units outnumbers the number of households by an estimated 2,000 units. Figures 4.9 and 4.10 present the estimated number of households in given income ranges and the estimated supply of units currently valued (ownership) or priced (rentals) within those income ranges.

In general, there is currently a need for more ownership housing at lower price points, while the middle to upper end of the market is well supplied (Figure 4.9). This is because most housing in Beaverton is clustered at higher property values, which leaves some households underserved.

FIGURE 4.9: COMPARISON OF OWNER HOUSEHOLD INCOME GROUPS TO ESTIMATED SUPPLY AFFORDABLE AT THOSE INCOME LEVELS (2022)
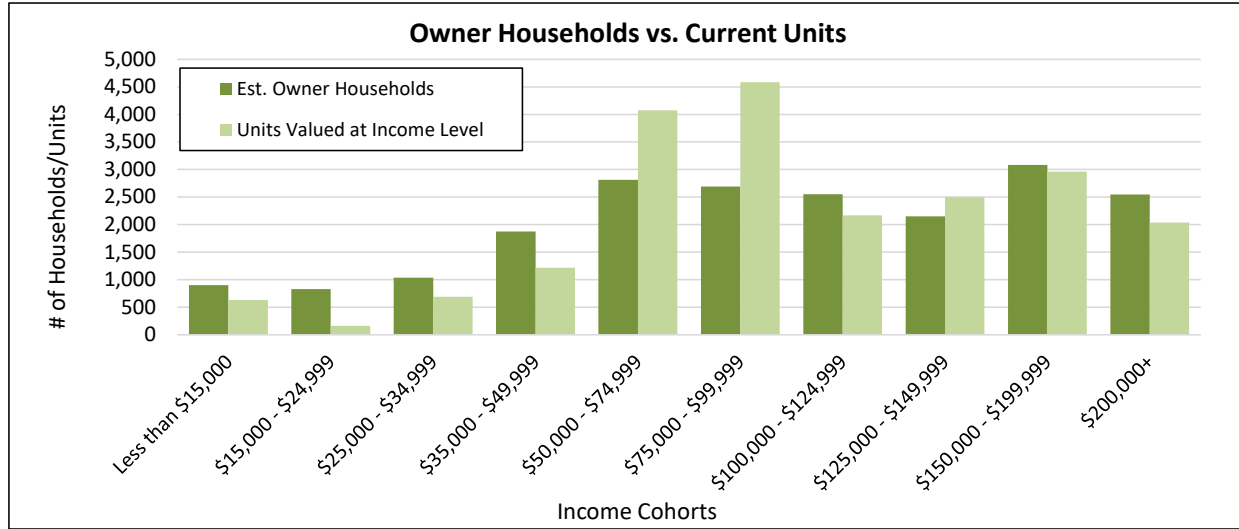
Sources: Census, JOHNSON ECONOMICS

The analysis finds that the current market rates for most rental units are in the $1,100 to $2,000/month range (Figure 4.10). Therefore, this is where most of the rental unit supply is currently clustered. However, the greatest unmet need is found at the lowest end of the income scale, where it is estimated that thousands of current renters pay more than 30% of their income in housing costs. Rentals at the most expensive levels generally represent single-detached homes for rent.

FIGURE 4.10: COMPARISON OF RENTER HOUSEHOLD INCOME GROUPS TO ESTIMATED SUPPLY AFFORDABLE AT THOSE INCOME LEVELS (2022)
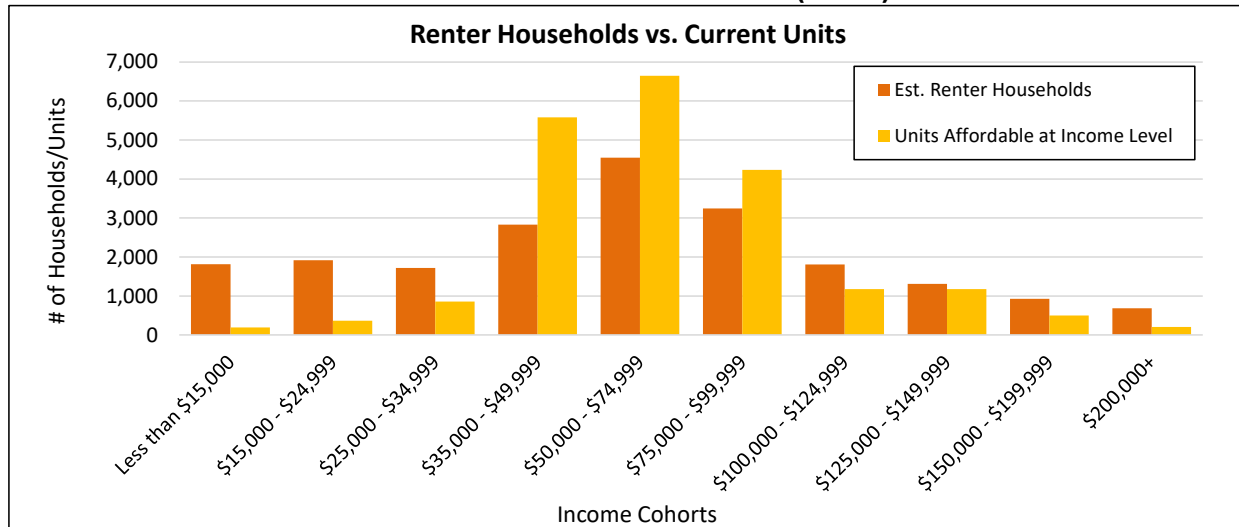
Sources: Census, JOHNSON ECONOMICS

The home value and rent segments which show a "surplus" in Figures 4.9 and 4.10 illustrate where estimated current property values and market rent levels are clustered in Beaverton. Housing prices and rent levels will tend to congregate around those levels. These levels will be too costly for many low-income households (i.e., require more than 30% in gross income) to afford, while other groups face structural barriers such as past and persistent discrimination in housing that may also make the available housing difficult to attain.

HOME SALE PRICES

It is important to note that the figures presented in the prior section represent estimates of current property value or current housing cost to the owner, not the current market pricing of homes for sale in the city. For instance, a household living in a manufactured home that has been paid off over many years may have relatively low housing costs. This indicates that one owner household is living in a "lower value" unit. It does **not** indicate that units at this price point are available on the current market.

If this hypothetical household were to sell their home, it would sell at a higher price reflecting inflation and current achievable market prices. For this reason, many of the lower value or lower rent units found in the previous section may offer lower housing costs to the current occupant but would become higher-priced units when they are sold or become vacant.

For reference, this section summarizes the recent home sales data from Appendix B to indicate housing costs for new entrants into the market. Over the prior 12 months:

- The median sale price was $518,500.
- The average (mean) sale price was $538,000.
- 45% of sales were priced between $400,000 and $599,000.
- 32% of sales were priced at $600,000 or more.
- 23% of sales were priced below $400,000, and only 8% were priced below $300,000.

Affordability: As indicated, 77% of recent sales in Beaverton took place above the $400,000 price level. Homes in this range should be mostly affordable to households earning at least $100,000 per year, or an estimated 37% of local households. Roughly 63% of households earn less than $100,000 per year, meaning that the bulk of housing supply on the current for-sale market is likely too expensive for most of these households. In assessing future housing needs and strategies to address them in subsequent memos, these latter households' needs will be the focus of our work.

ADDITIONAL HOUSING NEEDS CONSIDERATIONS

This section of the report has focused on the comparison of rental and ownership housing for people in different income levels to the current housing inventory. However, in further identifying future housing needs and in formulating policies and strategies that will help address the more nuanced needs of people in Beaverton, deficits identified for low-income households or disadvantaged racial or ethnic groups, other factors previously described in this report will need to be considered, including but not limited to the following:

- Promoting home ownership opportunities for people of color and others who have faced historical housing discrimination will be important in addressing and reversing the intergenerational wealth gap experienced by these community members.
- Building housing that meets the growing needs of seniors and people with physical or other disabilities will be essential. This will include housing that is physically accessible to people with mobility challenges, as well as housing that is coupled with, or in close proximity to needed services.
- Both rental and ownership housing will be needed for larger households and intergenerational households.
- Transitional and permanent supportive housing is needed for people who are experiencing and/or facing homelessness and likely goes beyond the amount indicated by data on homelessness, given that those numbers typically underestimate the size of that population.

- Institutional and structural barriers to obtaining needed housing will need to be addressed (e.g., discriminatory lending practices).
- Better local data is needed to more accurately reflect the housing needs of communities of color and other groups where high margins of error associated with housing data make it challenging to accurately measure demographic conditions and needs.

V. GEOGRAPHY OF HOUSING NEED

This section presents additional geographical context of housing needs in Beaverton and the distribution of households that may be more vulnerable to displacement. This section (along with additional maps of key metrics presented in Appendix C) is meant to show where unmet housing needs may be most acute across the community and provide additional context to the quantified findings presented in the prior section.

The methodology used here was drawn from the Anti-Displacement and Gentrification Toolkit Project, prepared for DLCD in 2020 by a team at Portland State University. The toolkit lays out a methodology for determining the conditions within the city's Census Tracts based on a number of metrics, which are compared to citywide averages. The number of metrics met by each Census Tract helps determine the "neighborhood typology" representing the danger of gentrification and displacement.

While no methodology is perfect, this analysis has followed the steps as outlined in the PSU Toolkit and adopted its metrics and definitions of neighborhood typologies. This document cannot recreate the detailed discussion of methodology presented in the Toolkit. Please refer to the original project[9] for more detail on all of the material presented below.

A. NEIGHBORHOOD METRICS

The Toolkit recommends the following key questions and indicators to examine for each Census Tract. The results are compared to the average citywide measure for that indicator.

FIGURE 5.1: KEY QUESTIONS AND INDICATORS OF NEIGHBORHOOD TYPOLOGY

Income Profile	Vulnerable People	Precarious Housing	Housing Market Activity	Neighborhood Demographic Change
Where do low-income people live?	Where do BIPOC and vulnerable people live?	Where is precarious housing located?	Is the housing market "hot"?	What are changes in neighborhood characteristics?
• Low-income households • Household income	• BIPOC population • Limited English proficiency • Persons with disabilities • Female-headed households • 65 years and older	• Multi-family housing • Housing units built before the 1970's	• Median rent • Rent change • Median home value • Home value change	• Change in BIPOC • Change in educational attainment • Change in homeownership • Change in household income

Source: Anti-Displacement and Gentrification Toolkit, PSU, DLCD (2020)

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[9] "Anti-Displacement and Gentrification Toolkit Project," L. Bates Ph.D, M. Zapata Ph.D., S. Sung. Toulan School of Urban Studies and Planning at Portland State University, 2020.

The following is a summary of how these indicators are defined and measured, and the Census data sources used for each:

- Low-income households: % of population living in poverty (Table S1701, ACS 2020 5-Year Estimates)

- Household income: Median household income (Table S1903, ACS 2020 5-Year Estimates)

- BIPOC population: % of population in non-White racial categories and/or Latine category (Table P2, 2020 Decennial Census)

- Limited English proficiency: % of households with limited English proficiency (Table S1601, ACS 2020 5-Year Estimates)

- Persons with disabilities: % of population with one or more disabilities (Table S1810, ACS 2020 5-Year Estimates)

- Female-headed households: % of households with female head of household, no spouse (Table B11001, ACS 2020 5-Year Estimates)

- 65-years and older: % of population that is 65 years and older (Table S0101, ACS 2020 5-Year Estimates)

- Multi-family housing: % of housing units that are located in properties of 5 or more units (Table B25024, ACS 2020 5-Year Estimates)

- Housing units built before the 1970's: % of housing units that were built prior to 1970 (Table B25034, ACS 2020 5-Year Estimates)

- Median rent: Median gross rent (Table B25064, ACS 2020 5-Year Estimates)

- Rent change: % change in median gross rent from 2010 to 2020 (Table B25064, ACS 2010 and 2020 5-Year Estimates)

- Median home value: Median home value (Table B25075, ACS 2020 5-Year Estimates)

- Home value change: % change in median home value from 2010 to 2020 (Table B25075, ACS 2010 and 2020 5-Year Estimates)

- Change in BIPOC: % change in BIPOC population from 2010 to 2020 (Table P2, 2010 and 2020 Decennial Census)

- Change in educational attainment: % change in population aged 25 or older, with a bachelor's degree or higher from 2010 to 2020 (Table S1501, ACS 2010 and 2020 5-Year Estimates)

- Change in homeownership: % change in ownership households as a share of all households from 2010 to 2020 (Table B25003, ACS 2010 and 2020 5-Year Estimates)

- Change in household income: % change in median household income from 2010 to 2020 (Table S1903, ACS 2010 and 2020 5-Year Estimates)

B.   NEIGHBORHOOD TYPOLOGIES

The results of each indicator are compared to city averages to determine if the indicator represents greater or lesser household vulnerability, housing market change, etc. If the indicator falls on the side of greater vulnerability or displacement risk, the tract is considered to qualify for that subject. The following is a summary of the qualifications by subject group. (See the Toolkit, pages 24-26).

1) **Income profile:**   Tract is low income if meets both of 2 criteria.

2) **Vulnerable People:**   Tract has vulnerable populations if meets 2 or more of 5 criteria.

3) **Precarious Housing:**   Tract has precarious housing if meets either of 2 criteria.

4) **Housing Market Activity:** Tract has a "hot market" if meets 3 or more of 4 criteria.

5) **Demographic Change:** Tract is experiencing high change if meets 3 or more of 4 criteria.

The Toolkit provides the following Neighborhood Typologies based on the results of these indicators in each Census Tract.

FIGURE 5.2: TRACT LEVEL NEIGHBORHOOD TYPOLOGY: CHARACTERISTICS & RISKS OF DISPLACEMENT

	Income Profile	Vulnerable People	Precarious Housing	Housing Market Activity	Neighborhood Demographic Change
Green Affordable and vulnerable	Low	Yes	Yes	No	--
Yellow Early gentrification	Low	Yes	Yes	Yes	No
Orange Active gentrification	Low	Yes	Yes	Yes	Yes
Red Late gentrification	High	Yes	No	Yes	Yes
Blue Becoming exclusive	High	No	No	Yes	Yes
Purple Advanced exclusive	High	No	No	High value and rent	No

Source: Anti-Displacement and Gentrification Toolkit, PSU, DLCD (2020)

The following definitions of the Neighborhood Typology are quoted from the Toolkit:

[The] first three neighborhood types are designated as low-income neighborhoods. Depending upon their housing market activities and demographic changes, their stages of gentrification are differentiated. All of them have vulnerable people to displacement and precarious housing to be easily targeted to gentrification. Indeed, these neighborhoods need extra care by considering various combinations of housing supply production and preservation to mitigate the displacement risks for vulnerable people.

Green: Affordable and Vulnerable

The tract is identified as a low-income tract, which indicates a neighborhood has lower median household income and whose residents are predominantly low-income compared to the city average. The neighborhood also includes precariously housed populations with vulnerability to gentrification and displacement. However, housing market in the neighborhood still remains stable with no substantial activities yet. At this stage, the demographic change is not under consideration.

Yellow: Early Gentrification

This type of neighborhoods represents the early phase in the gentrification. The neighborhood is designated as a low-income tract having vulnerable people and precarious housing. The tract has a hot housing market, yet no considerable changes are found in demographics related to gentrification.

Orange: Active Gentrification

The neighborhoods are identified as low-income tracts with high share of vulnerable people and precarious housing. Also, the tracts are experiencing substantial changes in housing price or having relatively high housing cost found in their housing markets. They exhibit gentrification related demographic change.

The latter three neighborhoods on the table are designated as high-income tracts. They have a hot housing market as they have higher rent and home value with higher appreciation rates than the city average. They also do not have precarious housing anymore. However, Late Gentrification type still has vulnerable people with experiences in gentrification related demographic changes. The last two neighborhood types show the exclusive and affluent neighborhoods.

Red: Late Gentrification

This type of neighborhood does not have predominantly low-income households, but still has populations vulnerable to gentrification. Their housing market exhibits the high housing prices with high appreciations as they have relatively low share of precarious housing. The neighborhoods experienced significant changes in demographics related to gentrification.

Blue: Becoming Exclusive

These neighborhoods are designated as high-income tracts. Their population is no longer vulnerable to gentrification. Precarious housing is not found in the neighborhoods. However, the neighborhoods are still experiencing demographic change related to gentrification with hot housing market activities.

Purple: Advanced Exclusive

The neighborhoods are identified as high-income tracts. They have no vulnerable populations and no precarious housing. Their housing market has higher home value and rent compared to the city average, while their appreciation is relatively slower than the city average. No considerable demographic change is found in the neighborhoods.

- Anti-Displacement and Gentrification Toolkit, (Pg. 27-28)

## B. NEIGHBORHOOD TYPOLOGIES IN BEAVERTON

The methodology described above was applied to the 44 Census Tracts that underly Beaverton's current city boundaries. Census tracts do not exactly match municipal boundaries, and many extend beyond. The following map shows the color-coded Neighborhood Typologies applied to these tracts.

It is important to note that the table of potential results provided by PSU and shown in Figure 5.2 do not include all potential permutations of results for the five subject groups. The results for some Tracts resemble the profile of a typology as presented in Figure 5.2 but differ in one or a few of the

indicators. In those cases, we have made our best determination as to which typology most closely matches the results.

Those areas shown in green and yellow are estimated to still be the most affordable, but either vulnerable to or staring gentrification that will enhance the threat of displacement to vulnerable residents, and replacement of precarious housing stock with higher cost housing. Those tracts in orange and red are estimated to be in the process of active gentrification, and blue and purple are judged to be exclusive neighborhoods either due to advanced gentrification, or these are areas of new housing that have always been expensive.
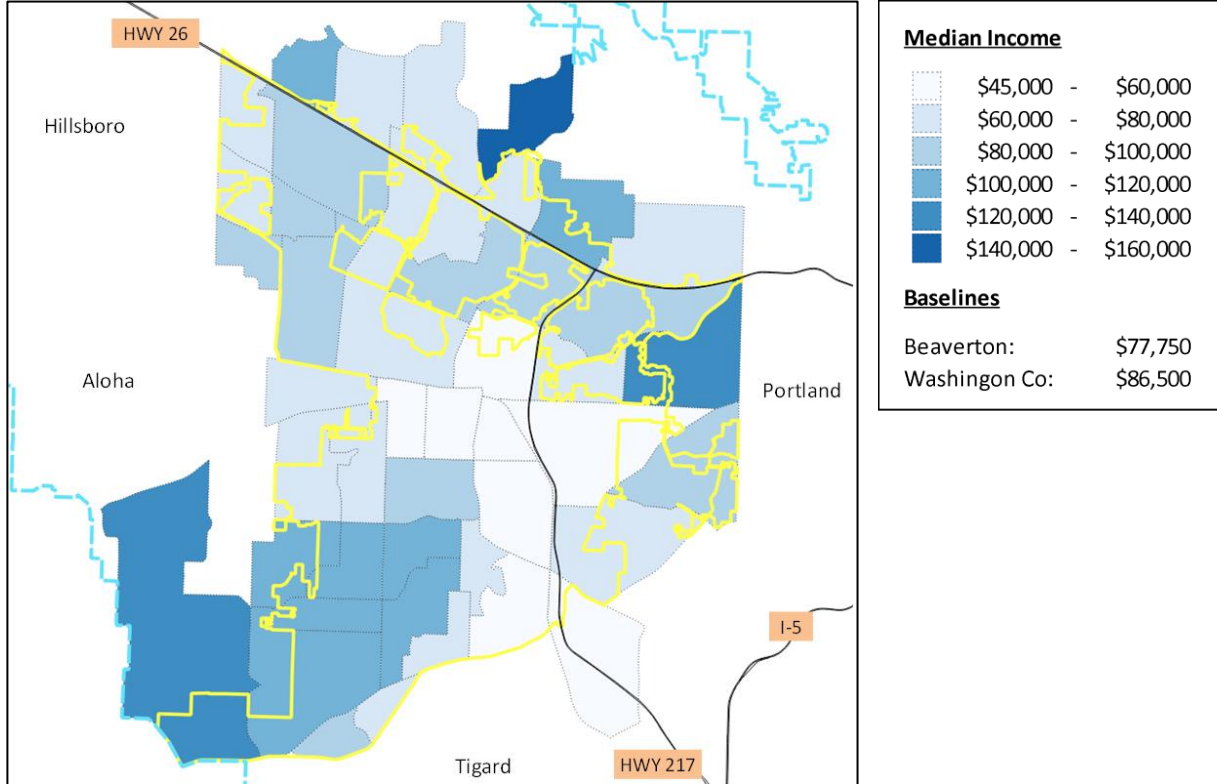
FIGURE 5.3: NEIGHBORHOOD TYPOLOGIES, BEAVERTON BY CENSUS TRACT
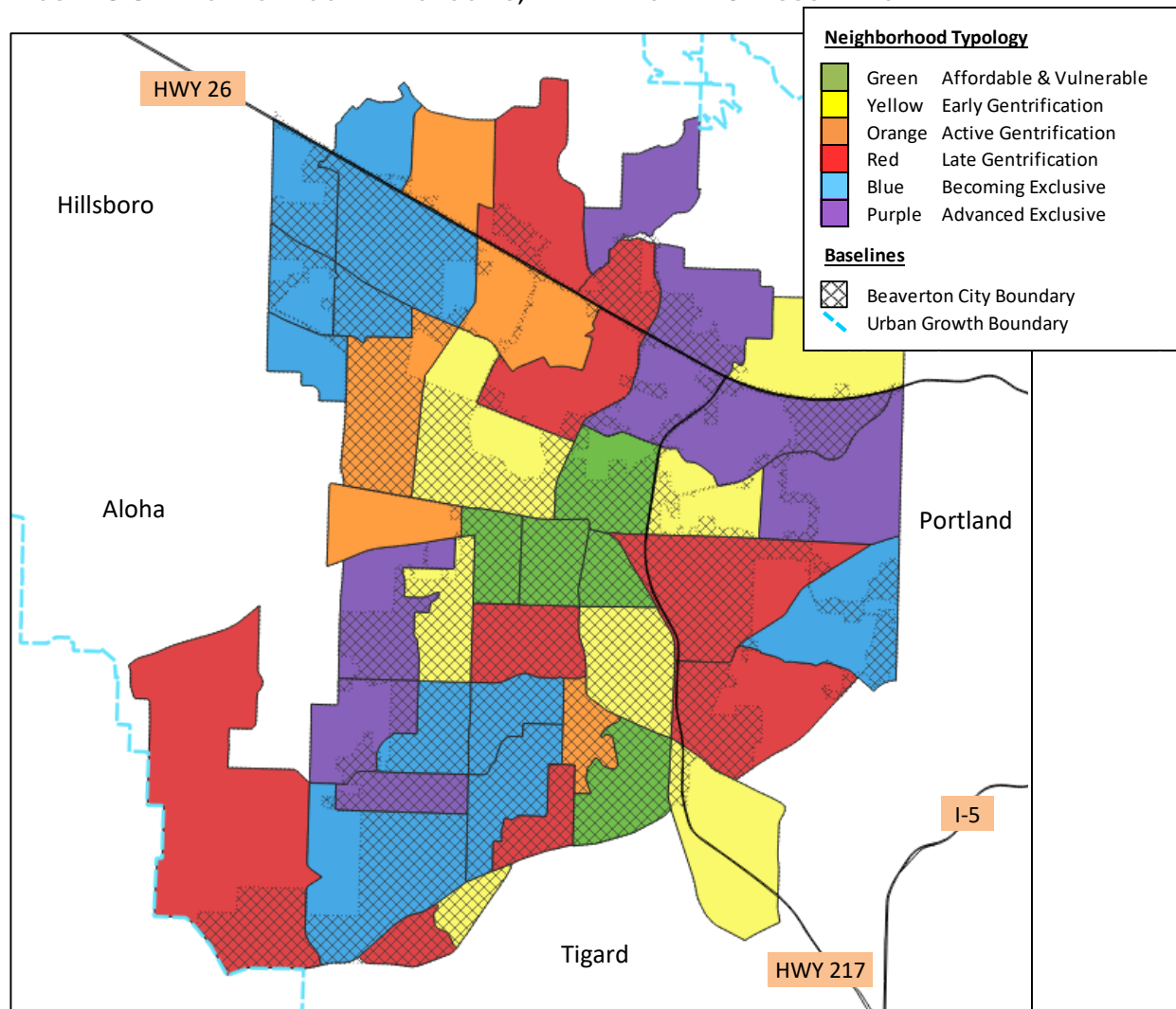
Source: PSU and Johnson Economics

Appendix C presents additional mapping of the individual indicators that went into the composite presented above. However, the two examples reproduced on the next page show that the areas most vulnerable to future gentrification and displacement correspond with areas of lower median household income and BIPOC households. Most notably, these are the central and southeastern parts of the city. (See Appendix C for additional indicators.)

Figure 5.4: MEDIAN INCOME (BEAVERTON)

Median Income

$45,000	-	$60,000
$60,000	-	$80,000
$80,000	-	$100,000
$100,000	-	$120,000
$120,000	-	$140,000
$140,000	-	$160,000

Baselines

Beaverton: $77,750
Washingon Co: $86,500

Source: 2020 5-Year ACS, Johnson Economics

Figure 5.5: BIPOC SHARE OF POPULATION (BEAVERTON)

BIPOC Share of Population

0%	-	10%
10%	-	20%
20%	-	30%
30%	-	40%
40%	-	50%
50%	-	60%
60%	-	70%

Baselines

Beaverton: 38%
Washingon Co: 25%
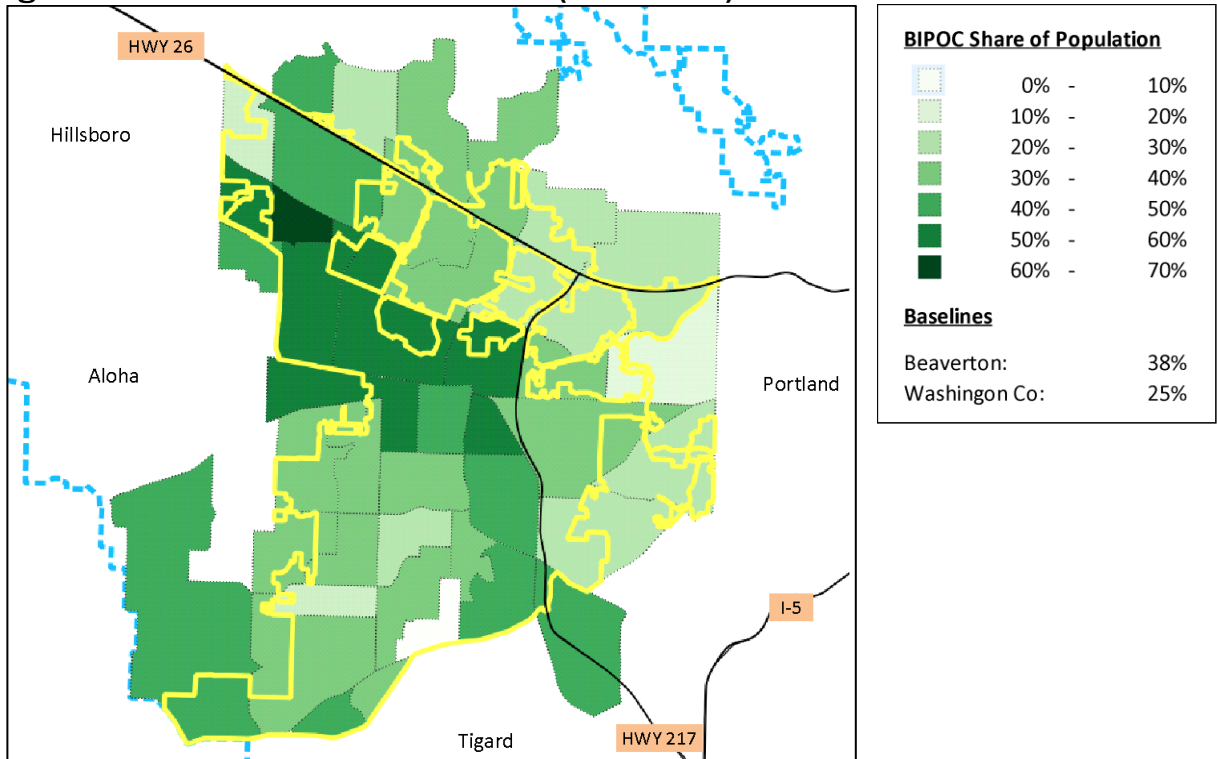
Source: 2020 5-Year ACS, Johnson Economics

C.   IMPLICATIONS OF THE GEOGRAPHY OF HOUSING NEED

Understanding the distribution of different household types, and housing conditions, can help inform discussion of policies, strategies, and programs in subsequent phases of this project. As there are different segments of the housing market that may need more intervention to meet housing needs, there also might be particular neighborhoods that need intervention more than other areas where market forces are adequately meeting the demand for housing and are not exacerbating barriers for people who already face challenges in obtaining the housing they need.

The findings of qualitative, quantitative, and geographic housing conditions in Beaverton presented in this report will form the foundation for determining what an equitable housing mix would look like at the end of the 20-year planning period. This vision of an equitable future will guide the projections of *future* housing need, and recommended strategies and tools to help achieve it.

APPENDIX A: CITY OF BEAVERTON DEMOGRAPHIC DATA

This Appendix provides an overview of demographic conditions in Beaverton. Most of the indicators presented here factor into the estimate of housing need presented in the report. Some data is presented primarily for informational purposes. The reader should keep in mind the limitations on the accuracy of Census and ACS data described at the beginning of the report.

Numbers can tell one story about the community, but it is important to note that qualitative accounts of the lived experiences of residents and subgroups impart a more nuanced story. Past projects such as Leading with Race and additional public outreach to be conducted throughout the Housing Beaverton Project will build greater context around housing needs.

SUMMARY

The following table Figure A.1 presents a profile of City of Beaverton demographics from the 2000 and 2020 Census. It also reflects the estimated population of the city as of 2022, which is forecasted from the 2020 Census estimate using the demonstrated annual growth rate since between the 2010 and 2020 Census.

- Beaverton is a city of nearly 100,000 people located in Washington County on the central western side of the Portland metropolitan area.

- Based on estimated population, Beaverton is the 7th largest city in the state by population. Beaverton is the 4th largest city in the Metro area, though similar in size to Hillsboro and Gresham. Beaverton's population is roughly 15% that of neighboring Portland.

- Between 2000 and 2020, Beaverton grew by over 21,000 people, or growth of 28%. In contrast, Washington County and the state experienced population growth of 35% and 24% respectively over this period. (US Census)

- Beaverton was home to an estimated 41,300 households in 2022, an increase of roughly 10,500 households since 2000. The percentage of families has fallen slightly from 61% of all households in 2000 to 59.5% in 2020. The city has a smaller share of family households than Washington County (67%) and the state (63%).

- Beaverton's estimated average household size is 2.4 persons. This is within the margin of error of the Washington County average of 2.5 and the statewide average of 2.5.

- As noted in the discussion of data limitations in the introduction to the report, a performance audit of the 2020 Census concluded that on a national level it undercounted the Black or African American population, Native populations living on a reservation, the Latine population, as well as those identifying as "some other race." The non-Latine White and Asian populations were overcounted. Children were also likely undercounted. The magnitude of or corrections for these flawed counts are not provided, so cannot be corrected in this analysis. These noted flaws of the Decennial Census should be considered when referring to figures in the following charts, as well as the standard margins of error found in all Census and ACS data.

FIGURE A.1: BEAVERTON DEMOGRAPHIC PROFILE

POPULATION, HOUSEHOLDS, FAMILIES, AND YEAR-ROUND HOUSING UNITS					
	2000 (Census)	2020 (Census)	Growth 00-20	2022 (Est.)	Growth 20-22
Population[1]	75,918	97,494	28%	99,110	2%
Households[2]	30,830	40,240	31%	41,267	3%
Families[3]	18,829	23,953	27%	24,564	3%
Housing Units[4]	32,507	42,288	30%	43,267	2%
Group Quarters Population[5]	916	880	-4%	895	2%
Household Size (non-group)	*2.43*	*2.38*	*-2%*	*2.38*	*0%*
Avg. Family Size	*3.07*	*2.94*	*-4%*	*2.94*	*0%*
PER CAPITA AND MEDIAN HOUSEHOLD INCOME					
	2000 (Census)	2020 (Census)	Growth 00-20	2022 (Proj.)	Growth 20-22
Per Capita ($)	$25,419	$41,002	na	$43,010	5%
Median HH ($)	$47,863	$77,745	na	$81,609	5%

SOURCE: Census, PSU Population Research Center, and Johnson Economics

Census Tables: DP-1 (2000, 2020); DP-3 (2000); S1901; S19301

1 From US Census, forecasted to 2022 using prior 10-year growth rate

2 2022 Households = (2022 population - Group Quarters Population)/2022 HH Size (based on 2020 ACS 5-Year)

3 Ratio of 2022 Families to total HH is based on 2020 ACS 5-Year data.

4 2022 units are the '20 Census total plus units permitted '20 through early '22 (source: Census, City)

5 Ratio of 2022 Group Quarters Population to Total Population is kept constant from 2020.

A. POPULATION GROWTH
Since 2000, Beaverton has grown by roughly 23,200 people, or 31% in 22 years. This was lower than the estimated countywide rate of growth, meaning that some other parts of Washington County grew faster over this period.

The PSU Population Research Center estimates that the population of Beaverton fell between 2020 and 2021 by roughly 175 people. This estimate may be due to the exceptional impacts of Covid on household relocation which included many households moving out of dense population centers. There has been a reversal of this trend over the past year in many urban areas, as the threat of Covid has diminished and life and work has returned to normal for many people. The events of the last two years are important, but this analysis assumes that this was an exceptional event, and the housing conditions over the 20-year planning period are more likely to look like "normal" times.

B. HOUSEHOLD GROWTH & SIZE
As of 2022, the city has an estimated 41,300 households. Since 2000, Beaverton has added an estimated 10,500 households. This is an average of roughly 475 households annually during this

period. The growth since 2000 has roughly kept pace with the growth in new housing units, which have been permitted at the rate of roughly 490 units per year.

There has been a general trend in Oregon and nationwide towards declining household size as birth rates have fallen, more people have chosen to live alone, and the Baby Boomers have become "empty nesters." While this trend of diminishing household size is expected to continue nationwide, there are limits to how far the average can fall.

Beaverton's average household size of 2.4 people is statistically the same as in Washington County.

Figure A.2 shows the share of households by the number of people for renter and owner households in 2020 (latest data available), according to the Census. Renter households are more likely to have a single occupant. Owner households are more likely to have two or more persons.

FIGURE A.2: NUMBER OF PEOPLE PER HOUSEHOLD, CITY OF BEAVERTON
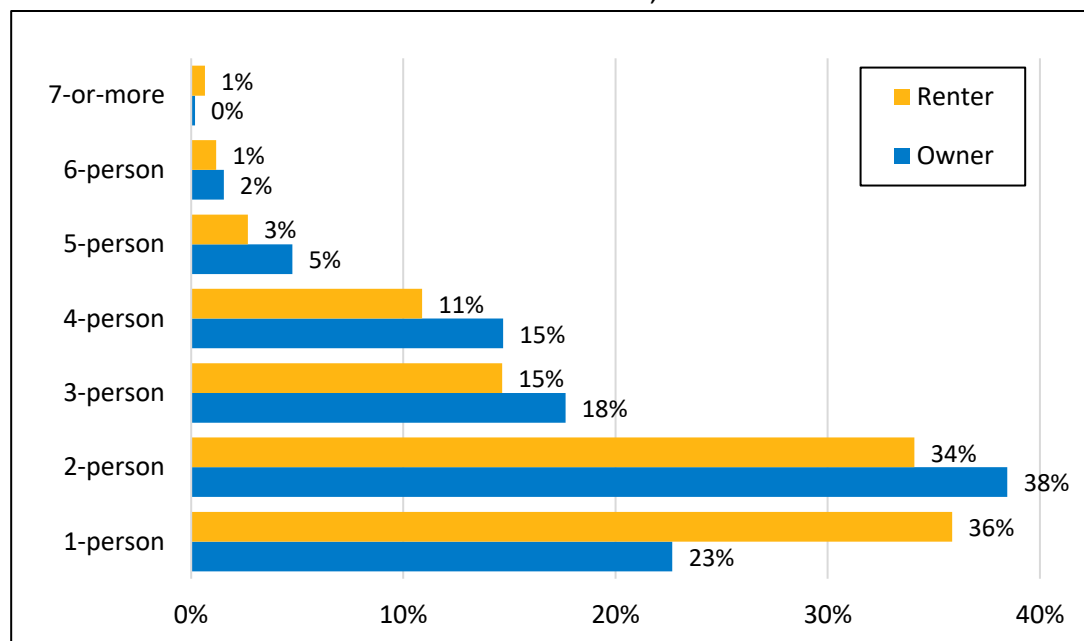
SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: B25009 (2020 ACS 5-yr Estimates)

C. FAMILY HOUSEHOLDS

The percentage of households in Beaverton that are family households was essentially unchanged between 2000 and 2020, at about 60%. The total number of family households in Beaverton is estimated to have grown by 5,735 since 2000. The Census defines family households as two or more persons, related by marriage, birth or adoption and living together. In 2020, family households in Beaverton had an average size of 2.9 people.

D. GROUP QUARTERS POPULATION

The City of Beaverton has an estimated group quarters population of 0.9% of the total population, or 895 persons. Group quarters include such shared housing situations as nursing homes, prisons, dorms, group residences, military housing, or shelters. For the purposes of this analysis, these residents are removed from the estimated population total before determining the amount of other housing that is needed for non-group households.

In Beaverton, roughly half of people who live in group quarters are estimated to live in nursing homes/assisted living facilities, while the other half are found in "noninstitutional facilities" which the Census defines as "...including emergency and transitional shelters for people experiencing homelessness, soup kitchens that offer meals to people experiencing homelessness, targeted non-sheltered outdoor locations, group homes intended for adults, residential treatment centers for adults, and workers group living quarters and job corps centers."

These living situations are counted separately from other households. For the purpose of this analysis, one distinction is that group quarters living situations are often on land that is zoned "non-residential," such as commercial or institutional land. This analysis includes the needs of this group and the homeless population, who may or may not occasionally use temporary group housing. (The local homeless population is discussed in more detail in a following section.)

E. HOUSING UNITS

Data from the City of Beaverton and the US Census indicate that the city added roughly 10,760 new housing units since 2000, representing 33% growth in the housing stock. This number of new units is slightly higher than the growth in new households estimated during the same period (10,500), This is consistent with a conclusion that the pace of new housing development largely determined the pace of new household growth. In Washington County, there is a long-noted shortage of housing relative to job creation and general demand. This shortage puts upward pressure on rents and prices as households compete for available units with little oversupply to soften prices. Generally, where units are added in Beaverton, demand will fill them, and therefore the pace of development has been a major determinant of population and household growth.

As of 2020, the city had an estimated housing stock of roughly 43,300 units for its roughly 41,300 estimated households. This translates to an estimated vacancy rate of 4.6%. This estimated vacancy rate includes housing units vacant for any reason, such as rental units between tenants, homes for sale or recently sold but not reoccupied, second homes or vacation homes that are not the primary residence of the owner, and short-term rental units.

The overall vacancy rate can obscure the fact that some housing types, unit sizes, locations, etc. might have much lower vacancy than the broad number suggests. For example, two broad surveys of rental properties in the Metro area conducted by Multifamily NW and Costar estimate that rental vacancy is closer to 3% (discussed more below).

It is also important to note that the presence of vacant units can be misleading because many households still face structural obstacles to accessing those "available" units. For instance, the units might not be affordable for lower income residents; might not be accessible for seniors or others with disabilities; or might deny housing to some people, such as excluding those with any criminal history.

Residential Permits: An average of 340 units have been permitted annually since 2010, with 67% being multi-family units.

**FIGURE A.3: HISTORIC RESIDENTIAL PERMITS, CITY OF BEAVERTON**
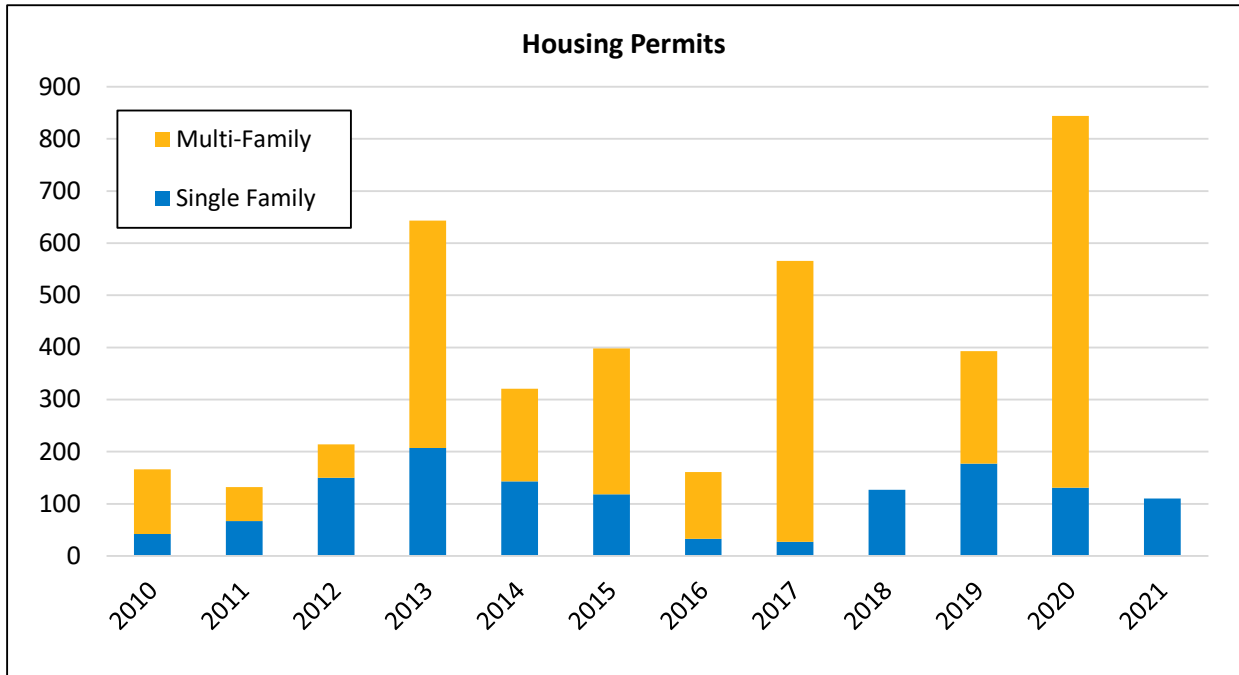
SOURCE: City of Beaverton

F. AGE TRENDS

The following figure shows the share of the population falling in different age cohorts between the 2000 Census and the 2020 Census. As the chart shows, there is a general trend for people under 55 years of age to fall as share of total population, while cohorts older than 55 years of age have grown in share. This is in keeping with the national trend caused by the aging of the Baby Boom generation (born 1945 to 1965, and aged 57 to 77 at the time of this report).

FIGURE A.4: AGE COHORT TRENDS, 2000 - 2020
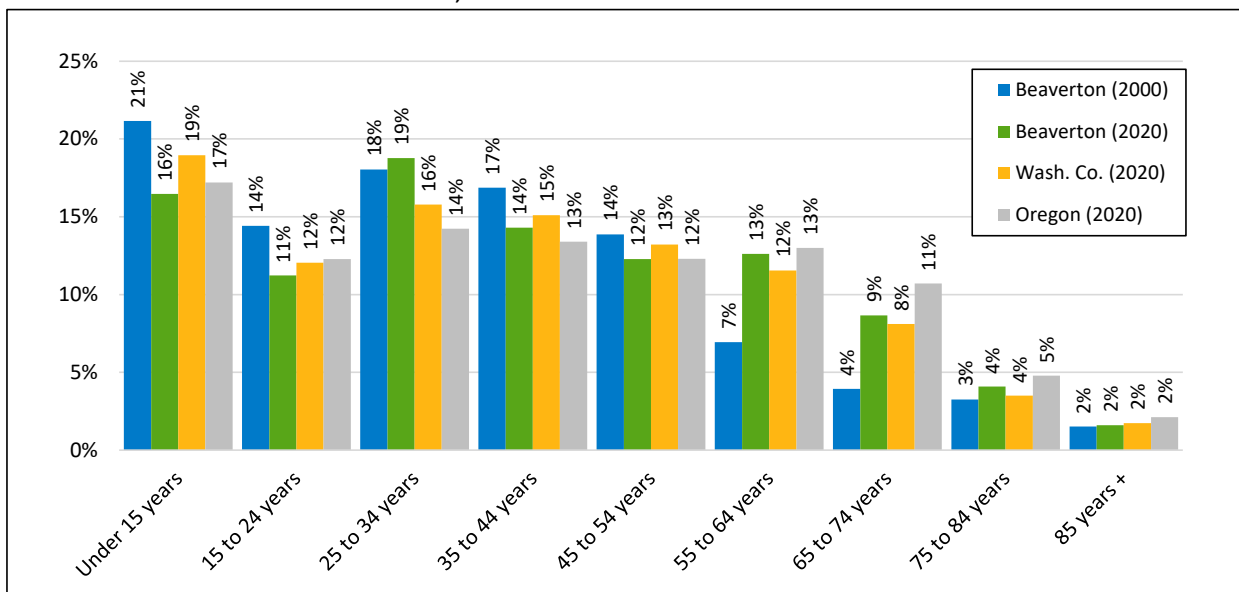
SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: DP1 (2000); S0101 (2020 ACS 5-yr Estimates)

- Beaverton has a smaller share of children, and slightly greater share of residents over aged 55 than the county, though close within the margin of error. The statewide population trends somewhat older than Beaverton with smaller shares in middle age groups. These trends have implications for the size, types, and costs levels of housing that will be needed by Beaverton residents in the future.

- The cohorts that grew the most in share during this period were those aged 55 to 74 years. Still, an estimated 86% of the population is under 65 years of age.

- In the 2020 ACS, the local median age was an estimated 37 years, compared to 40 years in Oregon.

The greatest impact of age on housing needs in the near future and the next three decades is a growing need for housing appropriate for seniors. The cohort of population between 55 years of age and 80 years of age remains one of the largest and far outnumbers the generations that preceded it. This means that housing options meant to serve seniors generally remain significantly underbuilt statewide. This includes housing such as retirement communities, continuing care and assisted living facilities, smaller-sized "move down" units, accessible units for those with mobility challenges, and co-housing communities.

At the same time, as aging community members transition into new housing types, it should free up some existing housing as new owner or rental opportunities for other households. Despite the aging trend discussed above, the largest single cohort in Beaverton (19%) remains those aged 25 to 35 years, which is the middle of the Millennial generation (born 1980 to 2000[10]). Much of this generation is currently in what has traditionally been the family-formation and first-time homebuying phase of life. The trend of rising home prices and low housing inventory have challenged first-time buyers for over a decade. Renter households have experienced similar challenges. (Market trends are discussed more below.)

Figure A.5 presents the share of households with children, and the share of population over 65 years for comparison. Compared to state and national averages, Beaverton has a slightly lower share of households with children. At 14%, the share of population over 65 in Beaverton is lower than the state and national figures, but might be close when margin of error is considered.

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[10] The definition of the Baby Boom generation (B. 1945-1965) is generally agreed upon. The determining years of the Millennial generation are less settled depending on the source, with the starting year generally falling in 1980 or early 1980's and the ending year anywhere from the mid-1990's to early 2000's. The concept of distinct "generations" is entirely an artificial construct, with births taking place every year on a continuum and nothing to distinguish the children of the "last year" of one generation, from the children of the "first year" of the next generation. Nevertheless, the concept of generations remains a useful shorthand for discussing birth rate trends, particularly when discussing large increases in certain age groups reflecting when the national birthrate was elevated. This is true of the Baby Boom and Millennial generations which are larger than other living generations, and therefore have greater impact on population, household, and housing trends.

FIGURE A.5: SHARE OF HOUSEHOLDS WITH CHILDREN/ POPULATION OVER 65 YEARS (BEAVERTON)
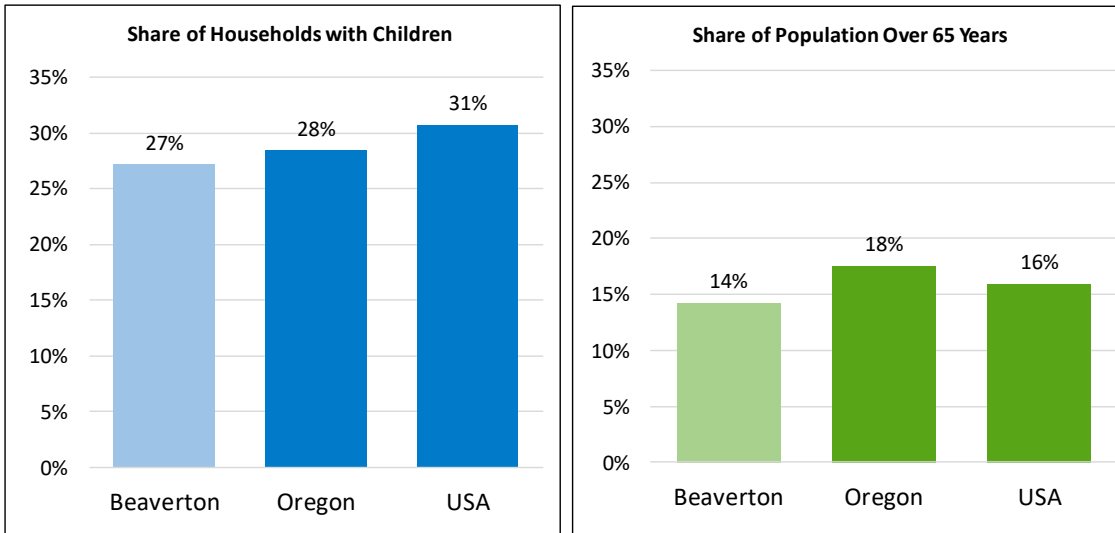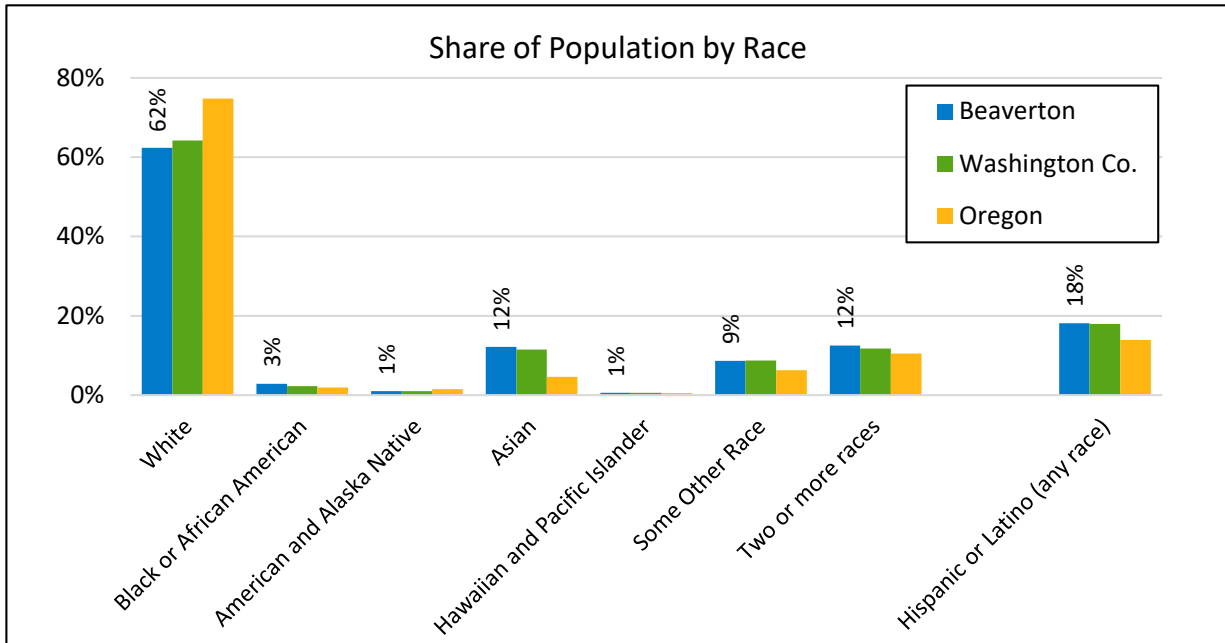

SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: B11005; S0101 (2020 ACS 5-yr Estimates)

G. RACE/ETHNICITY TRENDS

The following figure presents the distribution of Beaverton's population by race and Hispanic ethnicity. Summarizing Census data related to this topic can be both challenging and confusing several reasons. First, the US Census treats race and ethnicity separately. Specifically, the Census categorizes people with Hispanic or Latino ethnicity (generally referred to as Latine in this document) separately. Secondly, the Census includes separate categories for "Some other race" and "Two or more races" adding further confusion to the breakdown of racial categories. Finally, the Census categories do not necessarily reflect how many people of color self-identify. All these factors should be considered when reviewing the data in this section of the report.

SOURCE: US Census, JOHNSON ECONOMICS LLC
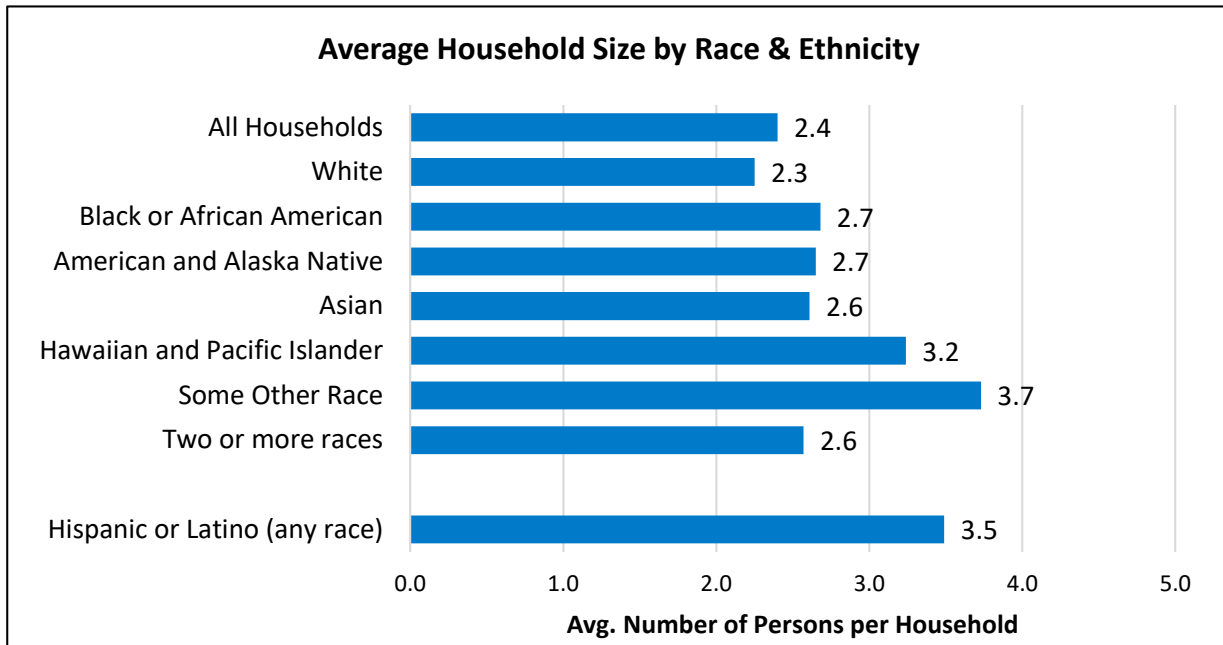Census Tables: P1, P2 (2020)

Beaverton has greater racial and ethnic diversity than both Washington County and the state. The city is 62% white, with 38% Asian, Black, Indigenous, and other or multiple races (also referred to as BIPOC in other sections of this report), and 18% Hispanic or Latine. The community grew more diverse between the 2000 and 2020 Census, with the White share of the population falling from 78.5% to 62%. Washington County is 64% White , and Oregon is 75% White .

Those identifying as Asians and Hispanic/Latine make up the largest share of communities or color in Beaverton. The share of the Beaverton population identifying as Hispanic or Latine (who may also fall under any of the racial categories) has grown from 7% to 18% of the population, indicating roughly 17,700 people as of the 2020 census.

Beaverton, as the county and state, have very low numbers of Black, Native, or Pacific islander population relative to national figures.
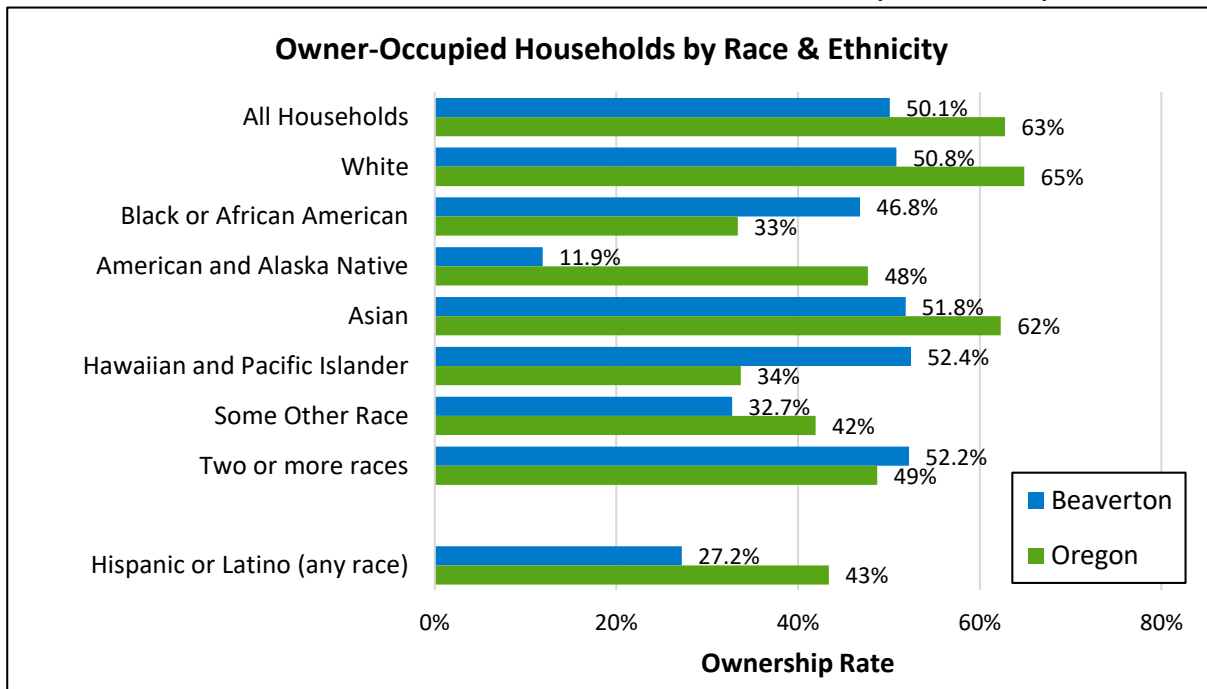
Households of color in 2010, the most recent year with relevant data, tend to have larger average household size than the average of all households (Figure A.7). This indicates a need for larger housing units on average among these households if these differences remain in 2022. These trends are also supported by national data from 2020.

FIGURE A.7: AVERAGE HOUSEHOLD SIZE BY RACIAL AND ETHNIC CATEGORY, 2010 (BEAVERTON)

Average Household Size by Race & Ethnicity

	Avg. Number of Persons per Household
All Households	2.4
White	2.3
Black or African American	2.7
American and Alaska Native	2.7
Asian	2.6
Hawaiian and Pacific Islander	3.2
Some Other Race	3.7
Two or more races	2.6
Hispanic or Latino (any race)	3.5

SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: P17A-H, (2010, most recent available from Decennial Census)

FIGURE A.8: HOME OWNERSHIP BY RACIAL AND ETHNIC CATEGORY (BEAVERTON)

Owner-Occupied Households by Race & Ethnicity

	Beaverton	Oregon
All Households	50.1%	63%
White	50.8%	65%
Black or African American	46.8%	33%
American and Alaska Native	11.9%	48%
Asian	51.8%	62%
Hawaiian and Pacific Islander	52.4%	34%
Some Other Race	32.7%	42%
Two or more races	52.2%	49%
Hispanic or Latino (any race)	27.2%	43%

Ownership Rate

SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: B25003A-H, (2020 ACS 5-year)

Figure A.8 presents estimated homeownership by race in Beaverton and statewide, from ACS data. The data from Beaverton feature greater margins of error than the statewide data due to sample size,

and data for the smaller groups within Beaverton feature even greater margin of error. For this reason, the statewide data might provide a better estimate of homeownership disparities among racial and ethnic groups than the local data.

Households of color are less likely to own the homes they occupy based on statewide data. On a generalized level, this includes all non-White racial subgroups. Asians report a homeownership rate close to the average, however, as the Leading with Race study found, there is much variation among each of these subgroups and it is misleading to assume that all households in a given category are accurately represented by the average figure.
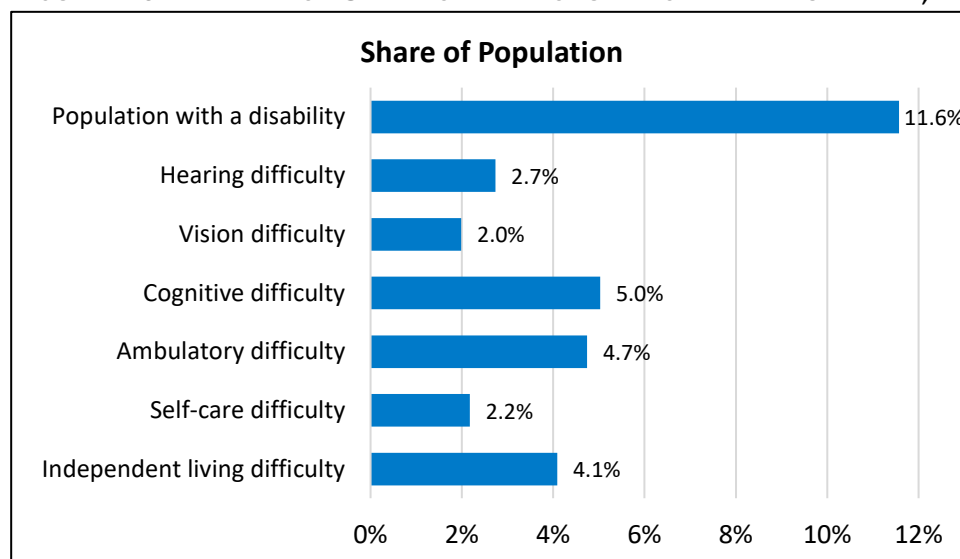
Historic government policies and subsidies have almost exclusively benefited White homeowners, which has resulted in much higher rates of homeownership among this group. At the same time, discrimination and barriers have resulted in lower rates of homeownership for people of color and, nationally, that gap is increasing, not decreasing. Lower incomes, educational attainment, access to generational wealth, and discrimination in lending are some of the factors that have suppressed homeownership in communities of color. Strategies or incentives that help create more opportunities for these groups to own their homes and build wealth through property ownership will be an important component of equitable housing to evaluate during the policy and strategy elements of this study.

H. PEOPLE WITH A DISABILITY

An estimated 12% of the population of Beaverton, or 11,300 people, report having some form of disability. This is somewhat lower than the statewide rate of 14%, but higher than the Washington County rate of 10%. (The Census reports these statistics for the "non-institutionalized population.")

The following figure presents Census estimates of the types of disability reported among Beaverton residents. Any type of disability could impact the type of housing that may be appropriate for a resident, but those with the greatest impact on needed housing type are generally an ambulatory, self-care, or independent living disability.

FIGURE A.9: BEAVERTON SHARE OF THE POPULATION WITH DISABILITY, BY TYPE

Share of Population

Category	Share
Population with a disability	11.6%
Hearing difficulty	2.7%
Vision difficulty	2.0%
Cognitive difficulty	5.0%
Ambulatory difficulty	4.7%
Self-care difficulty	2.2%
Independent living difficulty	4.1%

SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: DP02, (2020 ACS 5-year)

Those with an ambulatory disability often need units with expanded access for wheelchair, walker, or scooter. Those with self-care or independent living disabilities may require additional safety precautions around the home to protect a resident who cannot always be directly monitored. The largest subset is those with a cognitive difficulty, defined as "having difficulty remembering, concentrating, or making decisions." These individuals may need a range of housing from independent living in the general housing market, to needing to live with family or group housing situation in order to ensure they meet their daily needs.

FIGURE A.10: BEAVERTON POPULATION WITH A DISABILITY, BY AGE

Share of Population with Disability by Age

Age	Share
Total population	11.6%
Under 18 years	5.5%
18 to 64 years	9.0%
65 years and over	31.8%
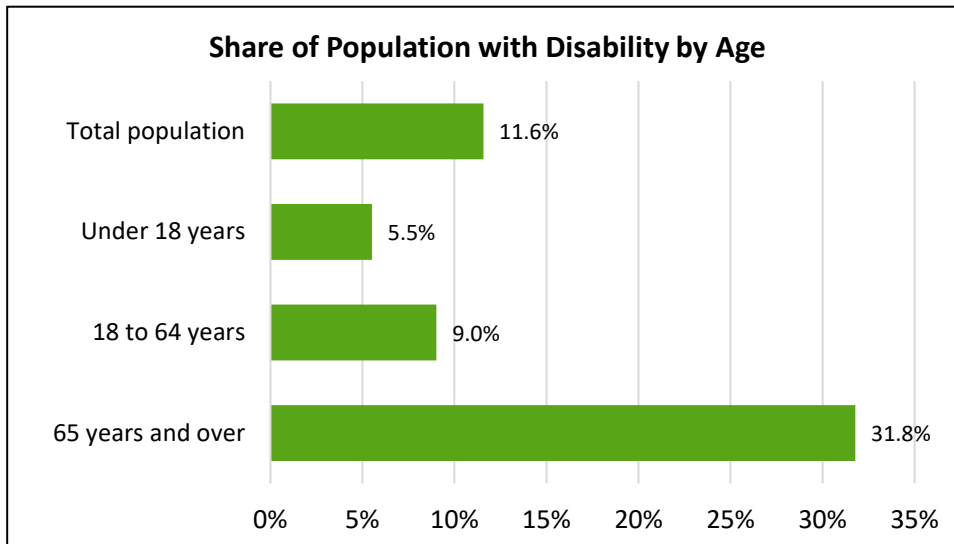
SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: DP02, (2020 ACS 5-year)

Older residents are more likely to report a disability, including nearly a third of those over 65 of years. Of those aged 18 to 64 years, 9% of the local population reports a disability, and 6% of children. Because Census data tends to undercount the homeless population, there are likely more residents with disabilities in Beaverton than reflected in these data, given that a larger share of homeless individuals tend to have some forms of disabilities compared to the population as a whole.

I. INCOME TRENDS

The following figure presents data on Beaverton's income trends, between 2000 and 2022 (estimated).

**FIGURE A.11: BEAVERTON INCOME TRENDS, 2000 – 2022**

PER CAPITA AND MEDIAN HOUSEHOLD INCOME					
	2000 (Census)	2020 (Census)	Growth 00-20	2022 (Proj.)	Growth 20-22
Per Capita ($)	$25,419	$41,002	na	$43,010	5%
Median HH ($)	$47,863	$77,745	na	$81,609	5%

SOURCE: Census, PSU Population Research Center, and Johnson Economics

Census Tables: DP-1 (2000, 2020); DP-3 (2000); S1901; S19301

- Beaverton's estimated median household income was $78,000 in 2020 meaning 50% of households make more than this, and 50% earn less. This is 10% lower than the Washington County median of $86,600, but nearly 40% higher than the statewide median of $56,000.

- Beaverton's per capita income was roughly $41,000 in 2020.

- Median income grew an estimated 61% between 2000 and 2020, in real dollars. Inflation was an estimated 69% over this period, so the local median income somewhat trailed inflation.

- The minimum wage in Oregon ($13.50) is well below what is estimated as a living wage in Washington County. The estimated living wage differs based on number of earners and household size, but even for a single earner with no dependents, the minimum wage is estimated to be nearly 40% lower than the necessary living wage ($21.60). For households with children or other dependents, this gap only grows.[11]

Figure A.12 presents the estimated distribution of households by income as of 2020.
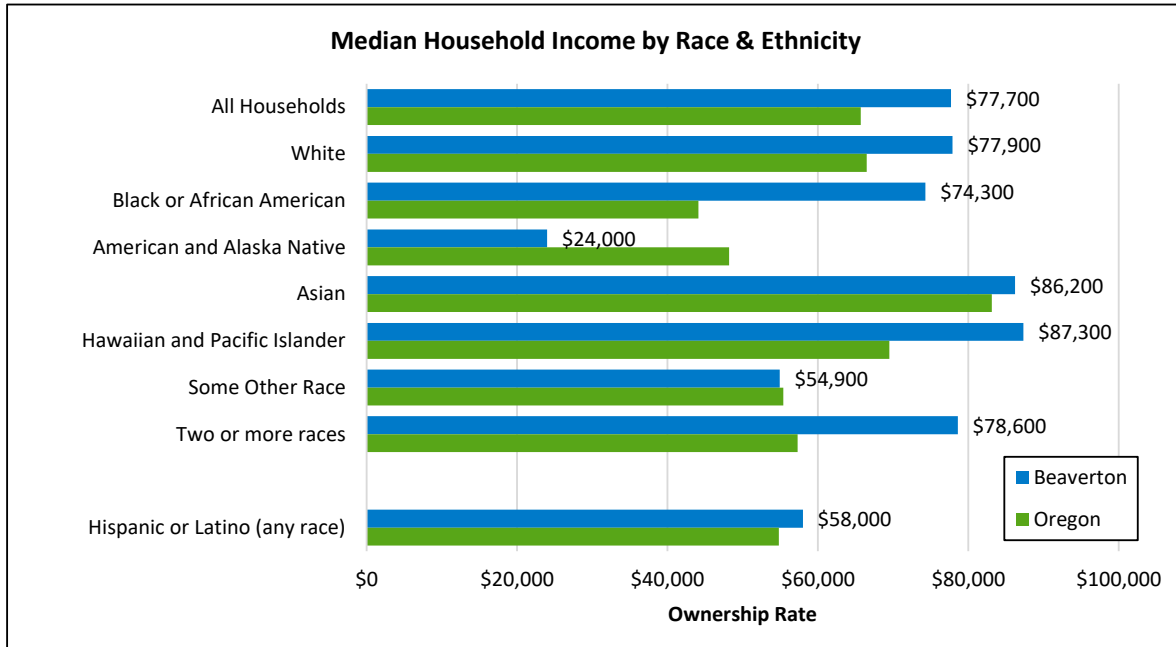
FIGURE A.12: HOUSEHOLD INCOME COHORTS, 2020
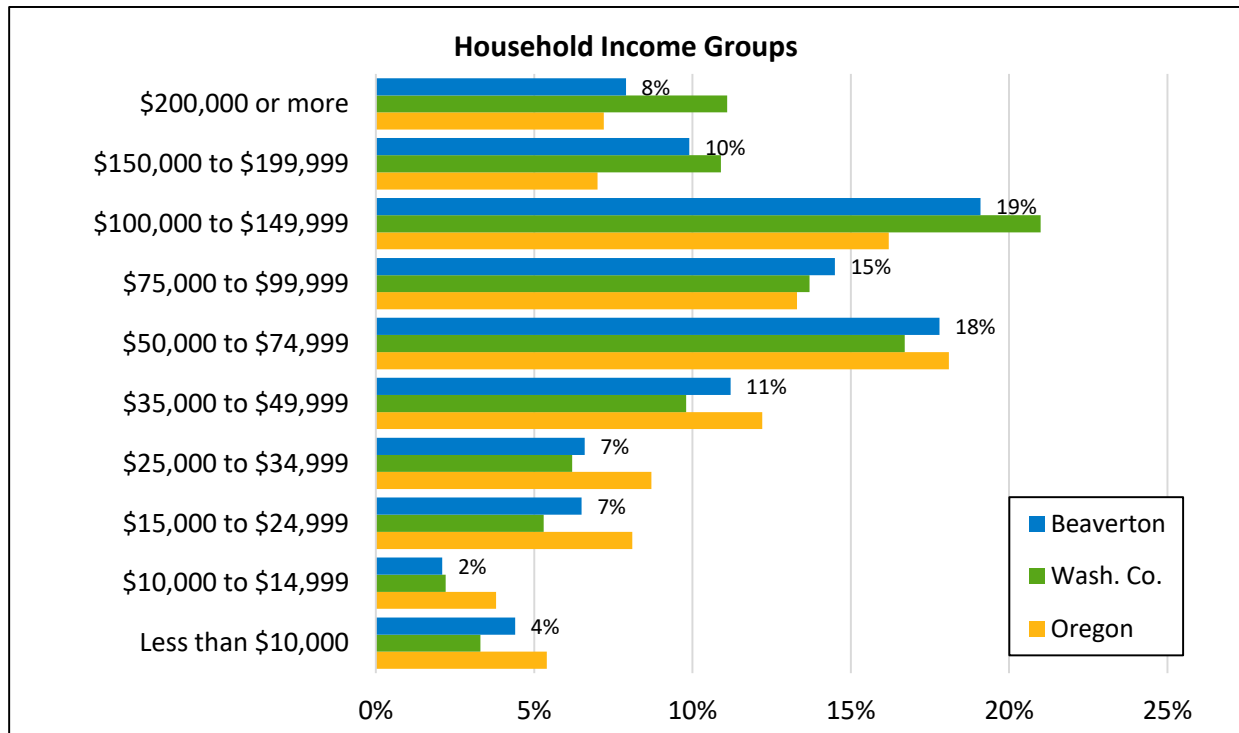
SOURCE: US Census, Census Tables: S1901 (2020 ACS 5-yr Est.)

- The 2020 median income in Beaverton was estimated at $77,750.

- 27% of households earn more than $100k per year.

- 13% of households earn less than $25k per year.

- Washington County has a higher share of households earning more than $100k per year (43%) than Beaverton. The state has a smaller share of higher income households, and a greater share of low-income households.

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[11] Living Wage Calculator, Massachusetts Institute of Technology, www.livingwage.mit.edu/

Figure A.13 presents the median household income by racial group. Hispanic/Latine residents (of any race), Native Americans and those of an uncategorized other race have a lower median income than other categories. Most non-White racial and ethnic categories have a lower median household income than the overall median.

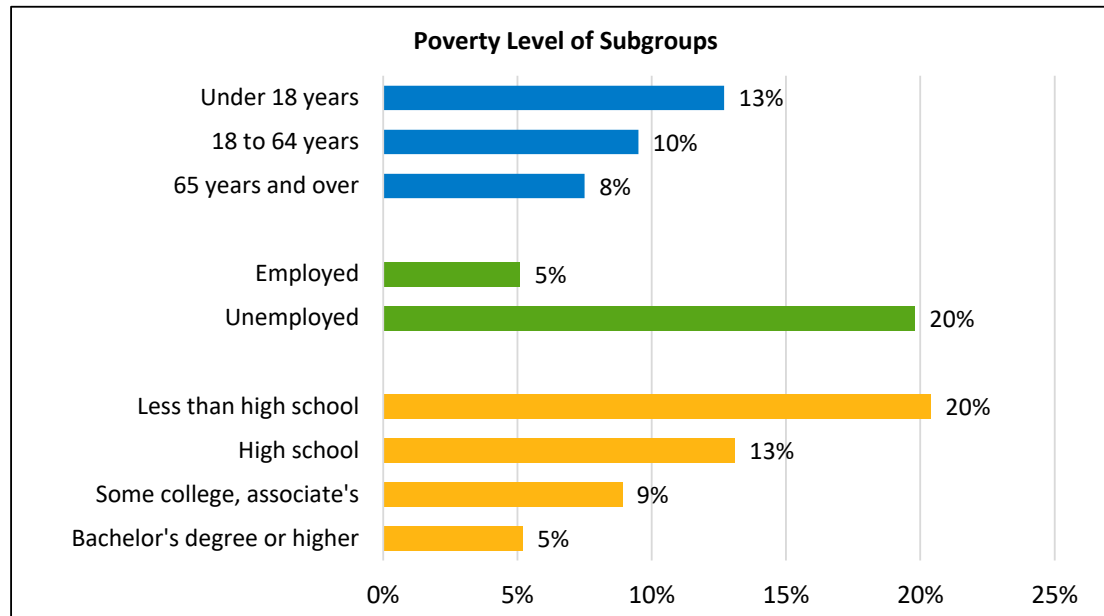**FIGURE A.13: MEDIAN HOUSEHOLD BY RACE AND ETHNICITY, 2020 (BEAVERTON & OREGON)**

Median Household Income by Race & Ethnicity

Category	Value
All Households	$77,700
White	$77,900
Black or African American	$74,300
American and Alaska Native	$24,000
Asian	$86,200
Hawaiian and Pacific Islander	$87,300
Some Other Race	$54,900
Two or more races	$78,600
Hispanic or Latino (any race)	$58,000

Legend: ■ Beaverton ■ Oregon

X-axis: $0, $20,000, $40,000, $60,000, $80,000, $100,000 — **Ownership Rate**

SOURCE: US Census; Tables: S1903 (2020 ACS 5-yr Est.)

J. POVERTY STATISTICS

According to the US Census, the official poverty rate in Beaverton is an estimated 10% over the most recent period reported (2020 5-year estimates).[12] This is roughly 9,600 individuals in Beaverton. In comparison, the official poverty rate in Washington County is 8.5%, and at the state level is 12.4%. In the 2016-2020 period:

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[12] Census Tables: S1701 (2018 ACS 5-yr Estimates)

FIGURE A.14: POVERTY STATUS BY CATEGORY (BEAVERTON)

Poverty Level of Subgroups

Category	Percent
Under 18 years	13%
18 to 64 years	10%
65 years and over	8%
Employed	5%
Unemployed	20%
Less than high school	20%
High school	13%
Some college, associate's	9%
Bachelor's degree or higher	5%

SOURCE: US Census; Tables: S1701 (2020 ACS 5-yr Est.)

- The Beaverton poverty rate is low among all groups, but highest among children at 13%, and lowest among those over 65 years of age at 8%.

- For those without a high school diploma, the poverty rate is 20%.

- Among those who are employed the poverty rate is 5%, while it is 20% for those who are unemployed.

K. EMPLOYMENT LOCATION TRENDS

This section provides an overview of employment and industry trends in Beaverton that are related to housing.

The City of Beaverton is part of a larger Washington County employment cluster that includes some of the largest high-tech industries found in the state. Many of the highest-paying job opportunities are in Beaverton, nearby Hillsboro to the west, and central Portland to the east. The City of Beaverton surrounds the main Nike campus which provides thousands of the state's highest paying jobs. However, the city and surrounding area also includes tens of thousands of jobs in every industry sector, at all wage levels. Housing is needed for all of these households.

Beaverton shares a long and irregular border with its neighbors and there is a widespread blending of residents and employees among Metro-area jurisdictions. It is very common for households to hold jobs outside of their community of residence, and to move among cities for other services such as schooling, medical care, shopping, or recreation. Beaverton, being more centrally located than many Metro communities, likely experiences even more of this cross traffic and housing market blending than many other cities.

Given these shared relationships among Metro-area cities, it can be difficult to pin down what "local" housing needs are. Are employees of local companies who live outside of Beaverton part of the city's

housing need? Does that mean that a Beaverton resident who works outside of the city is part of the housing need of the city where they work? Is it an indicator that more economic development is needed to bring suitable employment to the city, so that residents do not have to commute as far?

This analysis generally assumes that the city's current housing needs are based on the demographic characteristics of people and households within Beaverton. The following data is included for informational purposes, as part of the community's current profile related to incomes and opportunity.

Commuting Patterns: The following figure shows the inflow and outflow of commuters to Beaverton according to the Census Employment Dynamics Database. These figures reflect "covered employment" as of 2019, the most recent year available. Covered employment refers to those jobs where the employee is covered by federal unemployment insurance. This category does not include many contract employees and self-employed and therefore is not a complete picture of local employment. The figure discussed here is best understood as indicators of the general pattern of commuting and not exact figures.

Given the age of this data, it does not reflect the changes to commute patterns that occurred during the recent pandemic. During this time, many workers transitioned to working remotely from home. Due to this, the number of necessary commute trips fell dramatically, and some households made new location decisions based upon no longer being tethered to a physical employment location. This analysis assumes that some Covid-related impacts will be shorter lived (for example, that population growth will revert to the historical average), however changes to work and commute behavior are likely to be longer-lasting. Until more recent commute data is available the magnitude of these changes is unknown.

FIGURE A.15: COMMUTING PATTERNS (COVERED JOBS), BEAVERTON
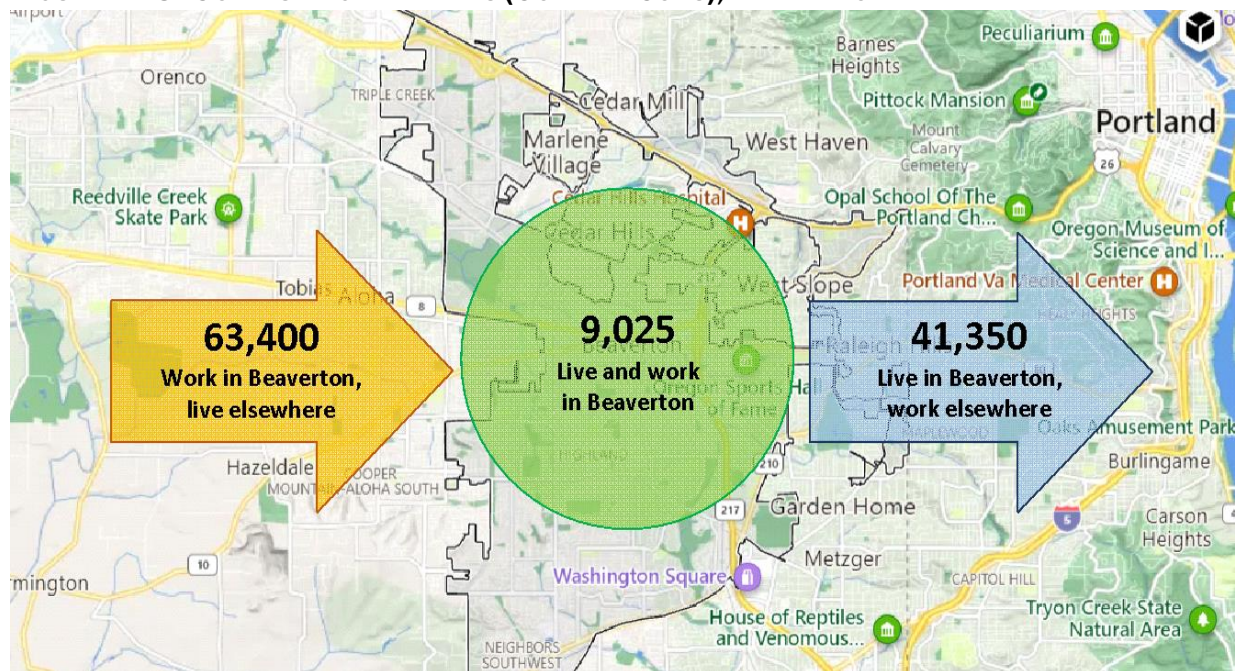
Source: US Census Longitudinal Employer-Household Dynamics

As of 2019, the most recent year available, the Census estimated there were roughly 72,400 covered employment jobs located in Beaverton. Of these, an estimated 9,025 or 12.5%, are held by local residents, while over 63,400 employees commute into the city from elsewhere. This general pattern is fairly common among many communities in the Metro area. The most common homes of local workers commuting into the city are Portland, Hillsboro and Aloha. Similarly, of the estimated 50,350 employed Beaverton residents, 82% of them commute elsewhere to their employment. The most common destinations for Beaverton commuters are Portland, Hillsboro, and Tigard.

APPENDIX B: CURRENT HOUSING CONDITIONS DATA

This section presents a profile of the current housing stock and market indicators in Beaverton. This profile forms the foundation to which current and future housing needs will be compared.

A. HOUSING TENURE

The Census estimates that Beaverton has an equal share of homeowner households and renter households. The 2020 ACS estimates that 50% of occupied units were owner occupied, and 50% renter occupied. The ownership rate has risen somewhat since 2000 (48%), but this is within the margin of error.

At 50% of households, Beaverton has a larger share of renters than the county (39%) and the state (37%). The tenure balance is closer in comparison to neighboring large cities of Hillsboro and Portland, while Tigard has a much higher home ownership rate.

FIGURE B.1: ESTIMATED HOMEOWNER AND RENTER HOUSEHOLDS, BEAVERTON AND COMPARISONS, 2020
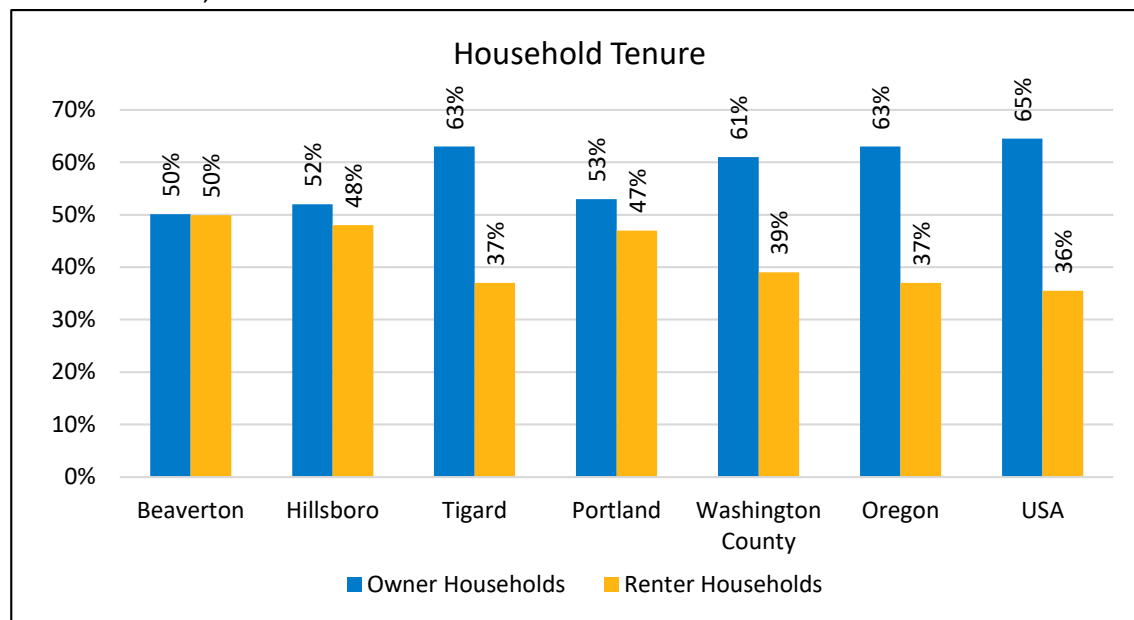
SOURCE: US Census
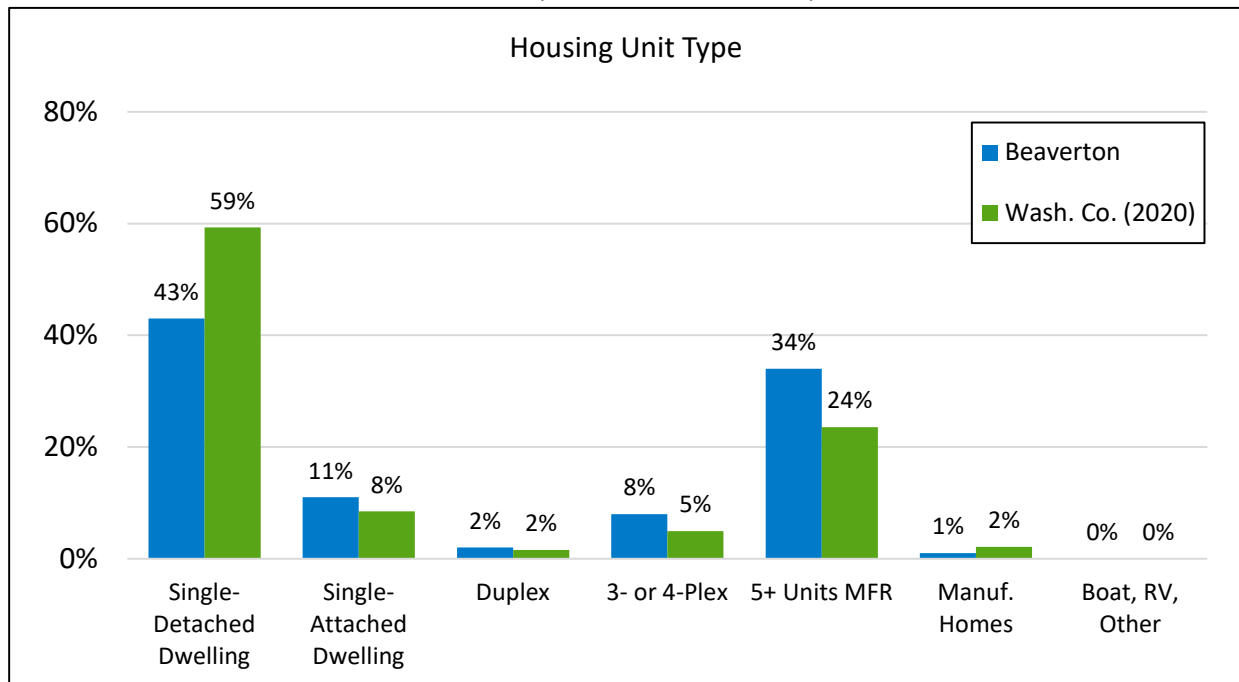Census Tables: B25003 (2020 ACS 5-yr Est.)

B. HOUSING STOCK

As shown in Figure B.1, Beaverton had an estimated 43,267 housing units in 2020, with a vacancy rate of 4.6% (includes ownership and rental units). The housing stock has increased by roughly 10,760 units since 2000, through annexation and new housing development.

Figure B.2 shows the estimated number of units by type in 2022 based on the US Census and recent permitting data from the City of Beaverton.

- Single-detached homes represent an estimated 43% of housing units, and mobile homes provide an additional 1% of housing. The remaining majority of housing (54%) is some form of attached housing.
- Units in larger apartment complexes of 5 or more units represent 34% of units, and other types of attached homes represent 21% of units. (Attached housing generally includes townhomes and some 2 to 4-plexes which are separately metered and share a common wall or walls.)
- Beaverton has a greater variety of housing types compared to the county as a whole, where a higher 61% of housing is single-detached homes or manufactured homes. 39% of county housing is some attached type.

**FIGURE B.2: ESTIMATED SHARE OF UNITS, BY PROPERTY TYPE, 2022**

SOURCE: US Census, Johnson Economics
Census Tables: B25032 (2020 ACS 5-year Estimates)

C.   NUMBER OF BEDROOMS

Figure B.3 shows the share of units for owners and renters by the number of bedrooms they have. In general, owner-occupied units are much more likely to have three or more bedrooms, while renter-occupied units are much more likely to have two or fewer bedrooms. Very few studios or one-bedroom units are estimated to be owner-occupied.

Number of Bedrooms
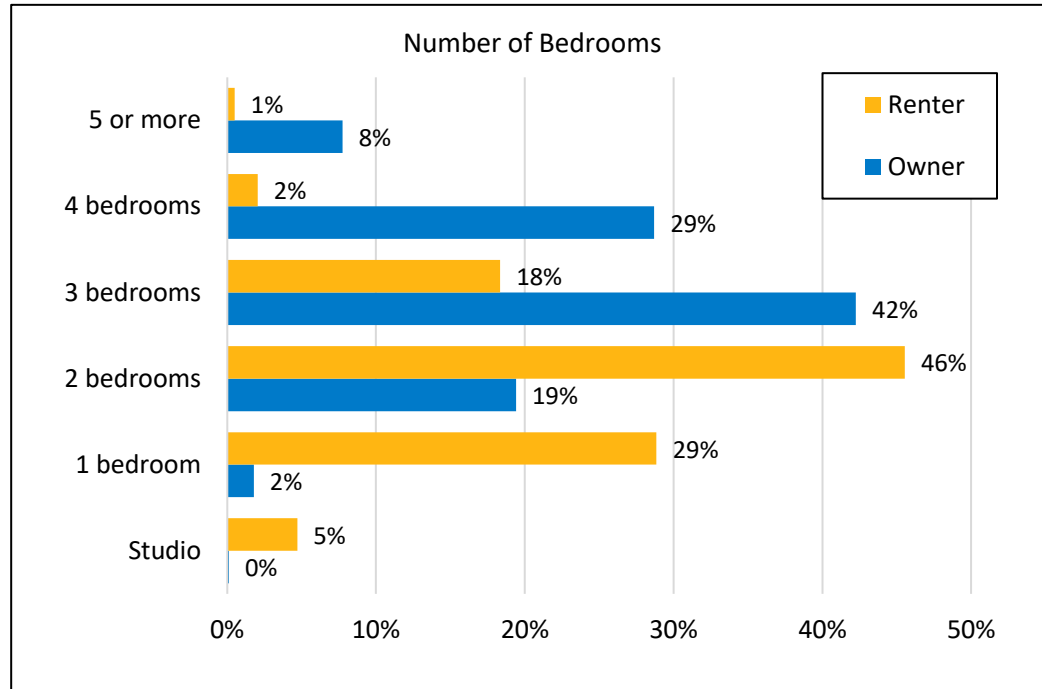
SOURCE: US Census
Census Tables: B25042 (2020 ACS 5-year Estimates)

D. UNIT TYPES BY TENURE

As Figure B.4 and B.5 show a large share of owner-occupied units (73%) are detached homes, which is related to why owner-occupied units tend to have more bedrooms. Renter-occupied units are much more distributed among a range of structure types. About 14% of rented units are estimated to be detached homes or manufactured homes, while the remainder are some form of attached unit. Nearly 63% of rental units are in larger apartment complexes.

FIGURE B.4: CURRENT INVENTORY BY UNIT TYPE, FOR OWNERSHIP AND RENTAL HOUSING
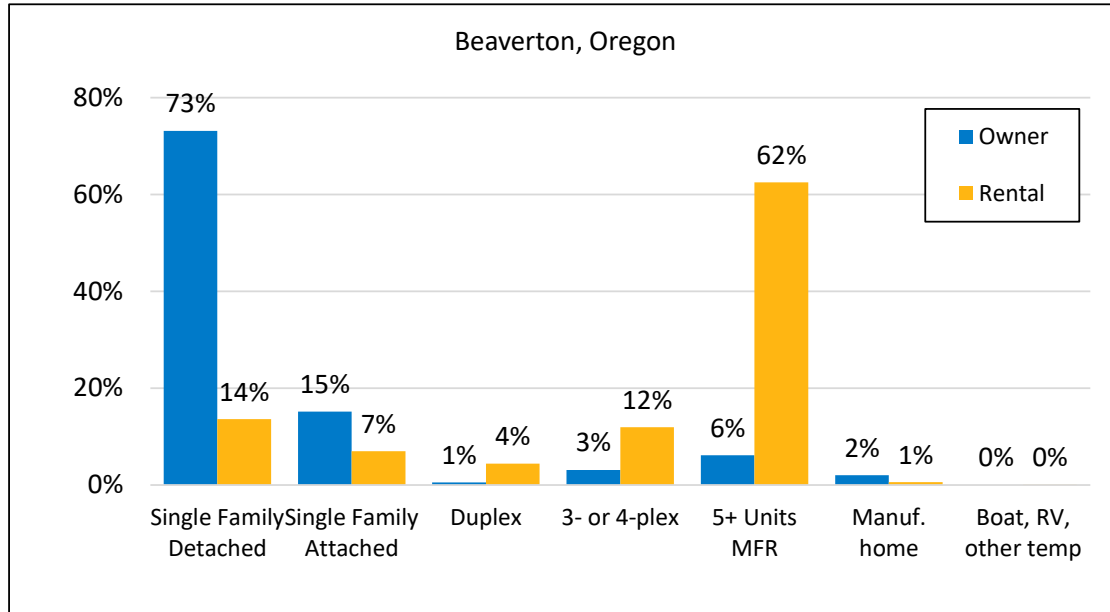
OWNERSHIP HOUSING

OWNERSHIP HOUSING								
	Single Family Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Manuf. home	Boat, RV, other temp	Total Units
Totals:	15,758	3,264	108	669	1,318	429	0	21,547
Percentage:	73.1%	15.2%	0.5%	3.1%	6.1%	2.0%	0.0%	100%

RENTAL HOUSING

RENTAL HOUSING								
	Single Family Detached	Single Family Attached	Duplex	3- or 4-plex	5+ Units MFR	Manuf. home	Boat, RV, other temp	Total Units
Totals:	2,950	1,508	960	2,596	13,573	127	6	21,720
Percentage:	13.6%	6.9%	4.4%	12.0%	62.5%	0.6%	0.0%	100%

Sources: US Census, Johnson Economics, City of Beaverton

FIGURE B.5: CURRENT INVENTORY BY UNIT TYPE, BY SHARE

Beaverton, Oregon

- Owner
- Rental

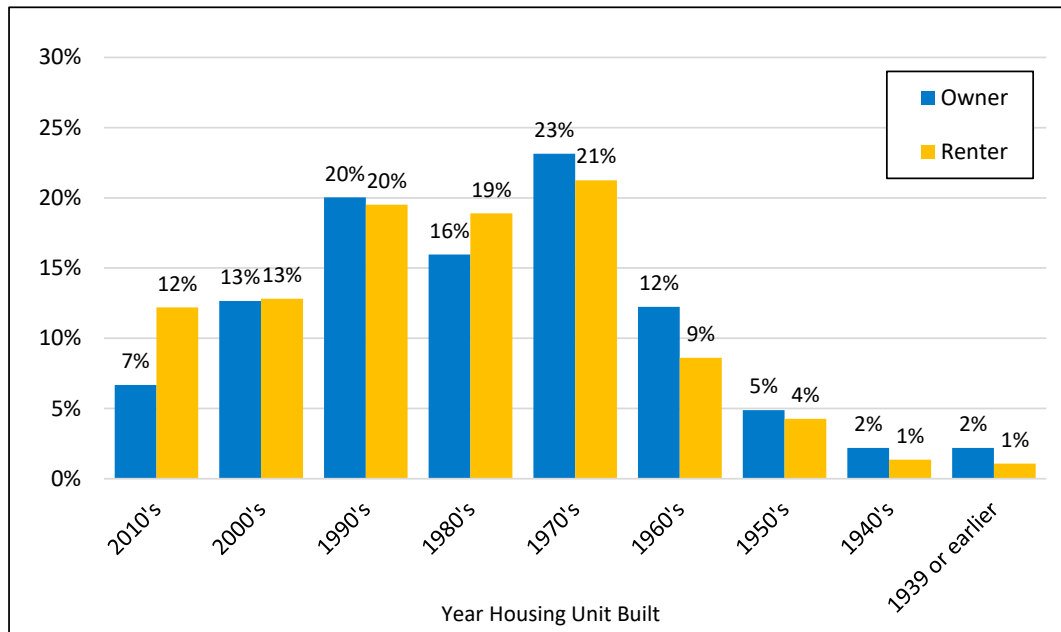| Unit Type	Owner	Rental
Single Family Detached	73%	14%
Single Family Attached	15%	7%
Duplex	1%	4%
3- or 4-plex	3%	12%
5+ Units MFR	6%	62%
Manuf. home	2%	1%
Boat, RV, other temp	0%	0%

Sources: US Census, Johnson Economics

E.   AGE OF HOUSING STOCK

Beaverton's housing stock reflects the pattern of development over time (Figure B.6). Nearly 60% of the city's housing stock was built in the 1970s through the 1990s. An estimated 18% was built prior to 1970, and an estimated 22% has been built since 2000. In the last decade, more rental housing has been built than ownership housing.

FIGURE B.6: AGE OF UNITS FOR OWNERS AND RENTERS

- Owner
- Renter

Year Housing Unit Built	Owner	Renter
2010's	7%	12%
2000's	13%	13%
1990's	20%	20%
1980's	16%	19%
1970's	23%	21%
1960's	12%	9%
1950's	5%	4%
1940's	2%	1%
1939 or earlier	2%	1%

SOURCE: US Census
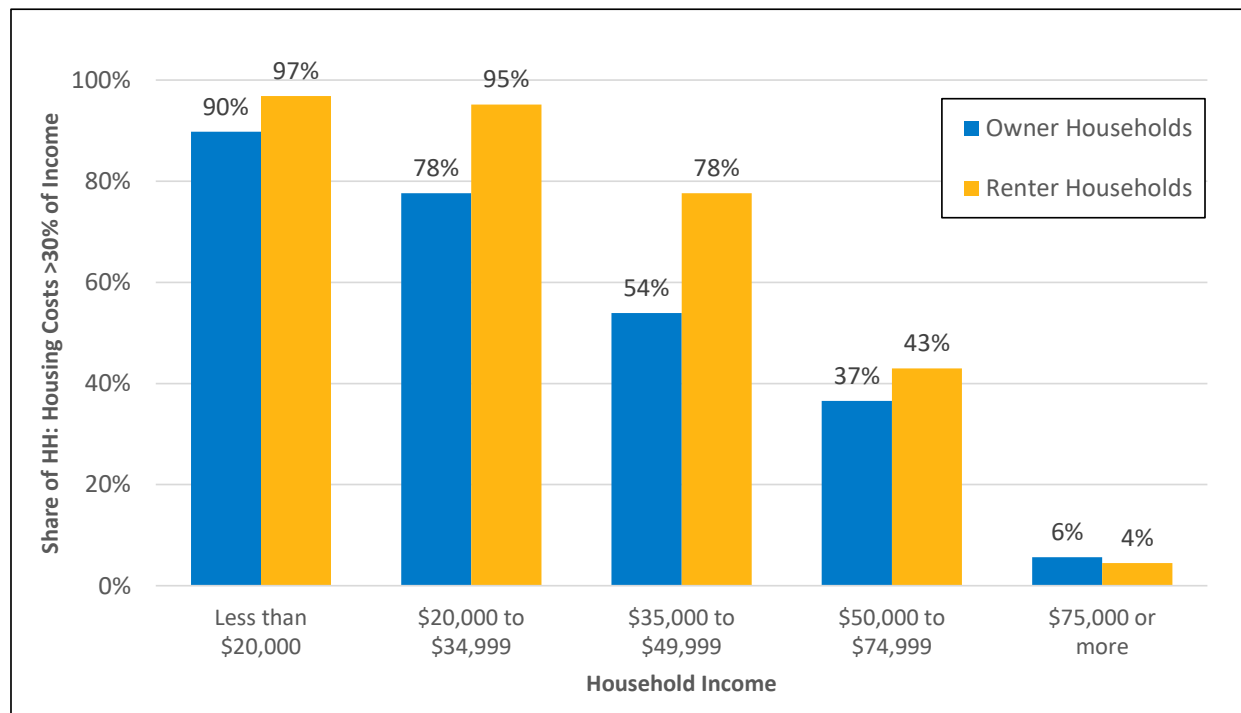Census Tables: B25036 (2020 ACS 5-year Estimates)

F. HOUSING COSTS VS. LOCAL INCOMES

Figure B.7 shows the share of owner and renter households who are paying more than 30% of their household income towards housing costs by income segment. (Spending 30% or less on housing costs is a common measure of "affordability" used by U.S. Department of Housing and Urban Development (HUD) and others, and in the analysis presented in this report.) Housing costs include rent or mortgage payment, utilities, insurance, and taxes if applicable.

As one would expect, households with lower incomes tend to spend more than 30% of their income on housing, while incrementally fewer of those in higher income groups spend more than 30% of their incomes on housing costs. Of those earning less than $20,000, an estimated 90% of owner households spend more than 30% of income on housing costs. An even higher percentage of renters in this income category (97%) spend more than 30% of income on housing costs. As income increases, owner households are more likely to have "affordable" housing costs, while a greater share of renters at lower income levels are cost burdened.

In total, the US Census estimates that over 35% of Beaverton households pay more than 30% of income towards housing costs (2020 American Community Survey, B25106).

FIGURE B.7: SHARE OF HOUSEHOLDS SPENDING MORE THAN 30% ON HOUSING COSTS, BY INCOME GROUP

Sources: US Census, JOHNSON ECONOMICS
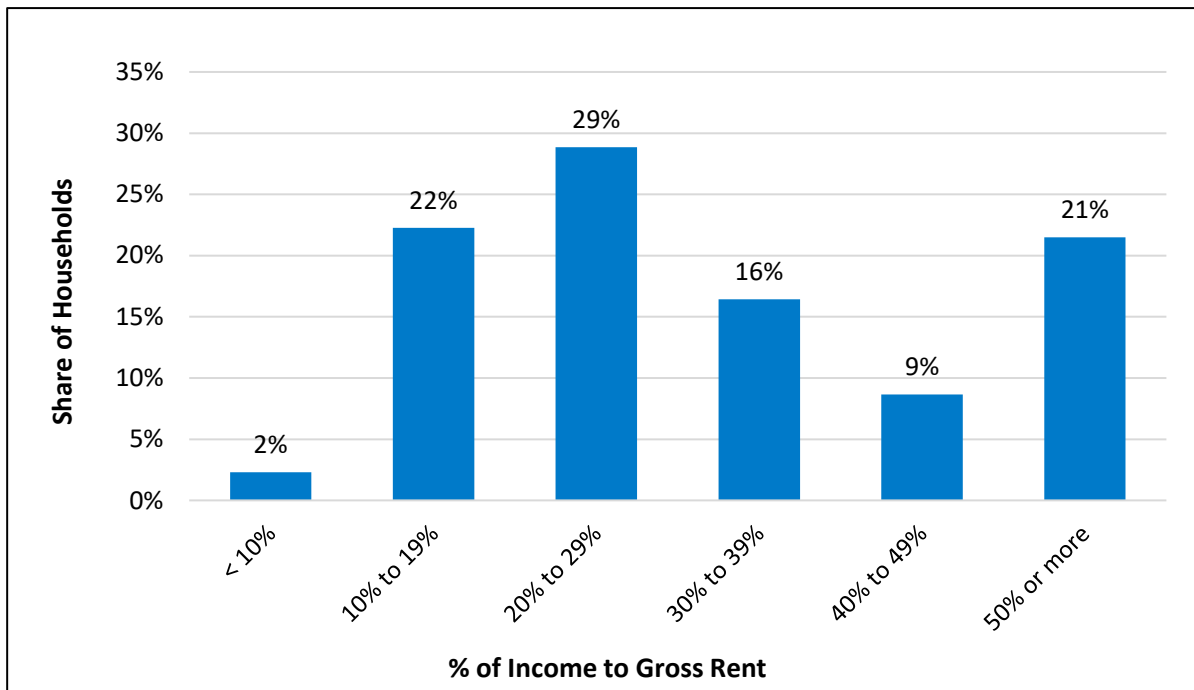Census Table: B25106 (2020 ACS 5-yr Estimates)

Housing is generally one of a household's largest living costs, if not the largest. The ability to find affordable housing options, and possibly build wealth through ownership, is one of the biggest contributors to helping lower income households save and cultivate wealth. Over time, owning housing and providing it to members of the next generation in a family is a key contributor to building intergenerational wealth.

As discussed in prior sections, communities of color tend to have lower homeownership rates and a lower median income than the average. Residents of color lag significantly behind their White residents in terms of their historical ability to build intergenerational wealth due to housing discrimination and other factors that have significantly reduced homeownership rates. Helping to alleviate the housing affordability crisis in the community will disproportionately help communities of color while benefiting all households.

The following figure shows the percentage of household income spent towards gross rent[13] for local renter households only. This more fine-grained data shows that not only are 46% of renters spending more than 30% of their income on gross rent, but an estimated 21% of renters are spending 50% or more of their income on housing and are considered severely rent-burdened.

Renters are disproportionately lower income relative to homeowners. In Beaverton, homeowners report a median income of $106,000, compared to $59,000 for renters (2020 ACS). Housing cost burdens are felt more broadly for these households, and as the analysis presented in a later section shows, there is a need for more affordable rental units in Beaverton, as in most communities. Renters also can face disproportionately rising housing costs compared to homeowners. The cost of both owner and rental housing has increased significantly in Beaverton in the last decade. However, once homeowner has secured a fixed rate mortgage, much of their housing cost is fixed. In comparison, housing rental costs can continue to rise for most renters.

FIGURE B.8: PERCENTAGE OF HOUSEHOLD INCOME SPENT ON GROSS RENT, BEAVERTON RENTER HOUSEHOLDS

Sources: US Census, Johnson Economics
Census Table: B25070 (2020 ACS 5-yr Estimates)

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[13] The Census defines Gross Rent as "the contract rent plus the estimated average monthly cost of utilities (electricity, gas, and water and sewer) and fuels (oil, coal, kerosene, wood, etc.) if these are paid by the renter (or paid for the renter by someone else)." Housing costs for homeowners include mortgage, property taxes, insurance, utilities and condo or HOA dues.

G. PUBLICLY ASSISTED HOUSING

According to data from Oregon Housing and Community Services, Beaverton is home to nearly 2,000 subsidized affordable units across more than 100 separate properties (Figure B.9). These are properties that are funded through HUD programs, tax credits and other programs which guarantee subsidized rents for qualified households.

80% of these units are intended for family households, and an additional 13% are intended for elderly households. The remainder are intended for special populations such as people with a disability, agricultural workers and veterans.

The high share of renters who pay over 30% of their income towards housing costs indicates that there is an ongoing need for rental units at the lowest price points. The Washington County Housing Services maintains an on-going waitlist for public housing and Section 8 vouchers. The waitlist must be closed periodically due to the perpetual strong demand.

FIGURE B.9: SUBSIDIZED LOW INCOME HOUSING PROPERTIES, BEAVERTON

|	# of Properties	# of Units	Share of Units
Agricultural Worker	1	48	2%
Developmentally Disabled	3	36	2%
Elderly	4	254	13%
Ex- or Released Offender	0	0	0%
Family	101	1,569	80%
Homeless	2	14	1%
Physically Disabled	1	5	0%
Substance Use Disorder	0	0	0%
Veterans	1	20	1%
Workforce	1	5	0%
Total:	*108*	*1,951*	*100%*

Sources: OHCS, Johnson Economics

Agricultural Worker Housing: Beaverton is currently home to one property dedicated to agricultural workers with 48 units. Many farm businesses in the region provide some temporary or permanent housing for their workers outside of incorporated cities as well. This population may also be served by other available affordable units. Also, these households often report a large household size including multi-generational families, and cohabitating acquaintances. These large households may have need for larger units or single-detached homes.

Homelessness: The Census does make a multi-faceted effort to include the homeless population in the Decennial Census count, by attempting to enumerate these individuals at service providers, and in transitory locations such as RV parks or campgrounds, as of the official Census data (4/1/20). It is difficult to make an accurate count of this population, and it is generally presumed that the homeless are undercounted in the Census.

The most recent (January 2022) Point-in-Time count of people experiencing homelessness and households experiencing homelessness in Washington County[14] found 808 homeless individuals in 571 households on the streets, in shelters, or other temporary and/or precarious housing.

- An estimated 72% of individuals were in some sort of temporary shelter, while 28% were unsheltered.
- The total included 171 children (under age 18), all of whom were sheltered, and 44 youth (aged 18-24) of whom 12 were unsheltered.
- 61% of those counted identified as men, 38% women, and 1% transgender or gender non-conforming.
- 24% of those counted were Hispanic or   Latine, compared to 18% in the general population.
- 250 individuals, or 31%, were counted as "chronically homeless".[15]
-      Figure 4.11 shows the reported racial breakdown of homeless individuals in the 2022 count.

FIGURE B.11: RACE OF HOMELESS INDIVIDUALS VS. POPULATION, WASHINGTON COUNTY (2022 P.I.T. COUNT)
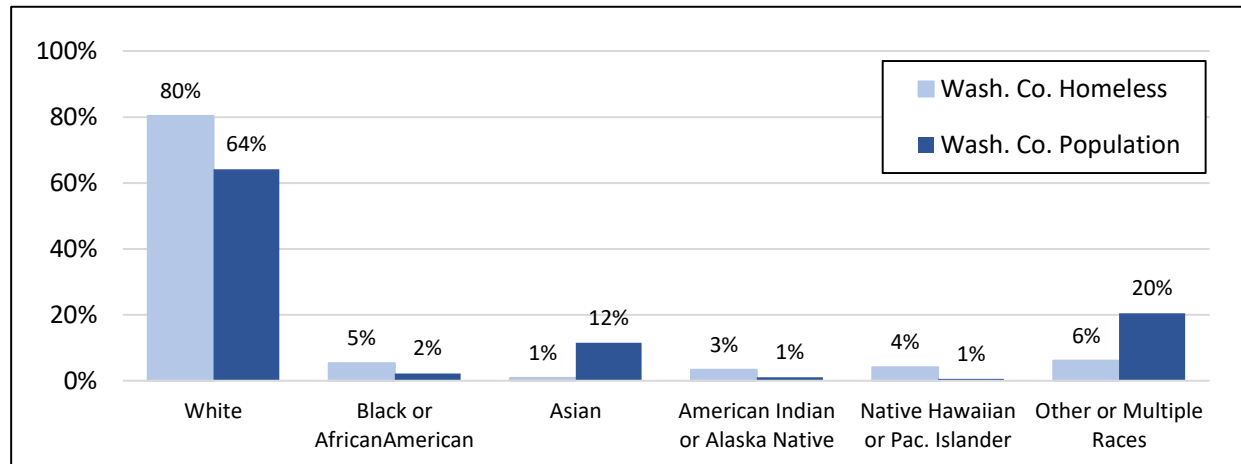
Sources: Washington County, Johnson Economics

While the Point-in-Time count is one of the few systematized efforts to count homelessness across the country in a regular, structured way, it is widely thought to undercount the population of homeless individuals and households. People who are doubled up, couch surfing, or experiencing domestic violence may not always be accurately represented in data gathering. In addition to the impossibility of finding all unsheltered individuals experiencing homelessness, the count is conducted in late January, when homeless counts are likely near their lowest of the year due to inclement weather. It also relies on self-reporting. A 2017 study conducted by Portland State University estimated more than 38,000 homeless individuals in the tri-county metro area at that time. Given that Washington County is one of only three counties in the estimate, it most certainly had well more than 808 homeless individuals by that estimate.

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[14] Figures are for the entire County

[15] HUD defines "chronically homeless" as an individual with a disability as defined by the McKinney-Vento Assistance Act, who has been in uninhabitable conditions for more than 12 mo. or on four separate occasions in the last three years; or has been in institutional care for less than 90 days; or a family with an adult head of household who meets this definition.

A recent analysis prepared for OHCS to test a potential approach for preparing Housing Needs Analyses on a regional basis included estimates of the homeless population in Oregon communities, including Beaverton. The approach utilizes a combination of data from the bi-annual Point-in-Time count and from tracking of homeless school-aged children in keeping with the McKinney-Vento Act. The analysis estimates 653 homeless households in Beaverton as of mid-2020. These include households that are unsheltered, in temporary shelters, or staying with friends or relatives. These households are a component of current and future housing need.

An analysis of the ability of current and projected housing supply to meet the needs of low-income people and the potential shortfall is included in the following sections of this report.

H.   MARKET CONDITIONS (FOR-SALE HOUSING)

This section presents home sales data from the Regional Multiple Listing Service (RMLS) for the prior 12 months (June 2021 to June 2022).

There were 2,300 home sales in Beaverton over this period, or an average of 192 sales/month. Attached units and condominiums make up a significant share of home sales (32%).

- The median sale price was $518,500.
- The average (mean) sale price was $538,000.
- The average price per square foot was $311/square foot
- The median square footage was 1,600 square feet

FIGURE 4.12: BEAVERTON HOME SALES (12 MONTHS)
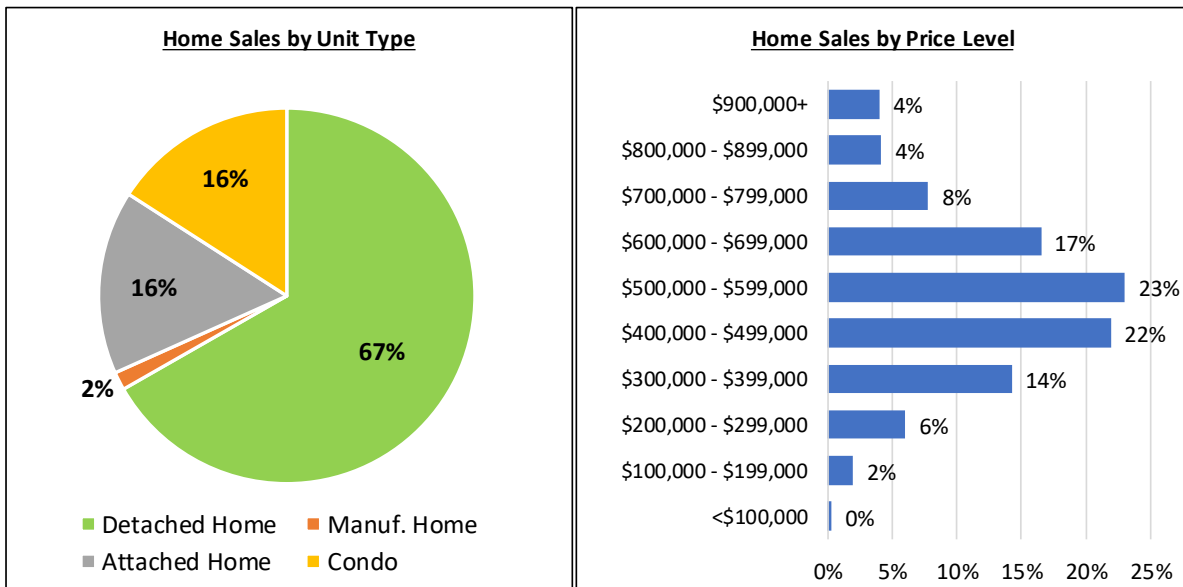
Sources: RMLS, JOHNSON ECONOMICS

- A home affordable to the median-income household in Beaverton (roughly $80,000), would cost around $350,000.
- 85% of total sales were priced more than $350,000, and 55% of total sales were priced at $500,000 or more.
- Only 15% of total sales were priced below $350,000.

Currently, RMLS tracks 175 active listings, or less than one month of for-sale inventory at the average rate of the prior 12 months.

Home prices in Beaverton have doubled since 2015, from $260k to $518k. Since positive home price growth returned in 2012, home price growth has averaged 10% per year, and was an estimated 15% per year in each of the last two years.

FIGURE 4.13: MEDIAN HOME SALE PRICE (2010-2022)
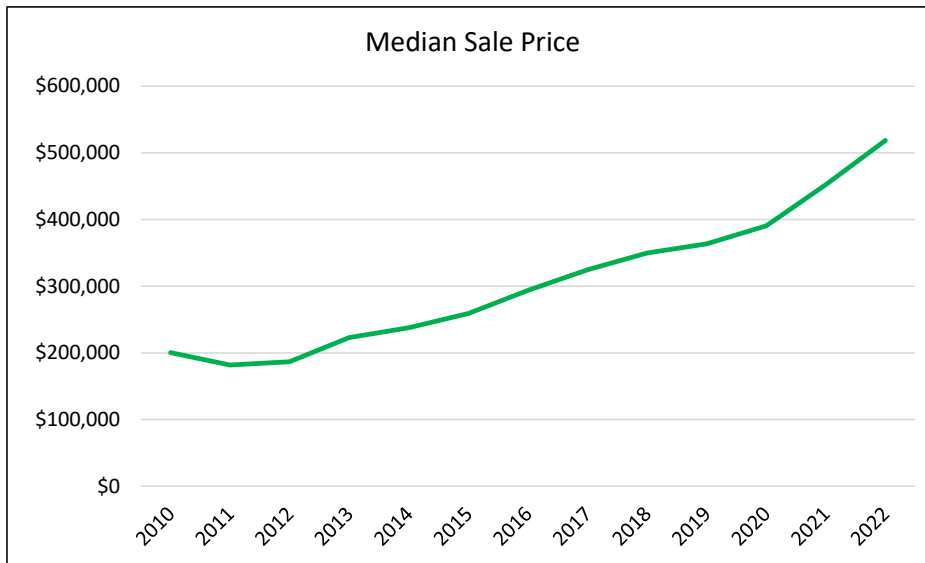
Sources: RMLS, JOHNSON ECONOMICS

I.   MARKET CONDITIONS (RENTAL HOUSING)

Beaverton has experienced low rental vacancy for most of the last two decades, regularly falling below 5% vacancy according to data from CoStar. The following figure shows that rental vacancy in the area has been low for most years following the financial crisis of 2008/9. Tracked vacancy is now below 4%, meaning more limited choice for renting households, and units which become available are absorbed quickly.

FIGURE 4.14: RENTAL VACANCY IN BEAVERTON (2000-2022)
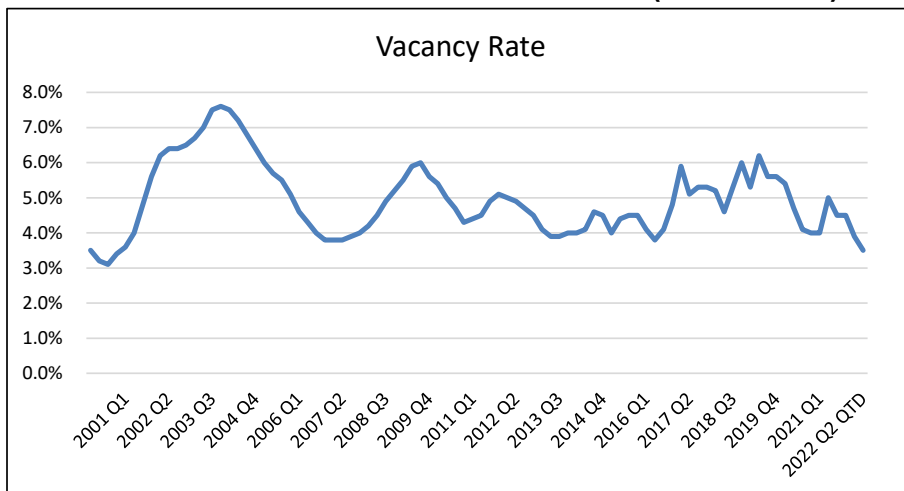
Source: CoStar, Johnson Economics

Average rents have climbed steadily since 2011. The average rent in Beaverton has nearly doubled over that period, increasing to roughly $2.00/square foot, or an average of $1,600/month.

FIGURE 4.15: AVG. RENT/SQ.FT. BEAVERTON (2000-2022)
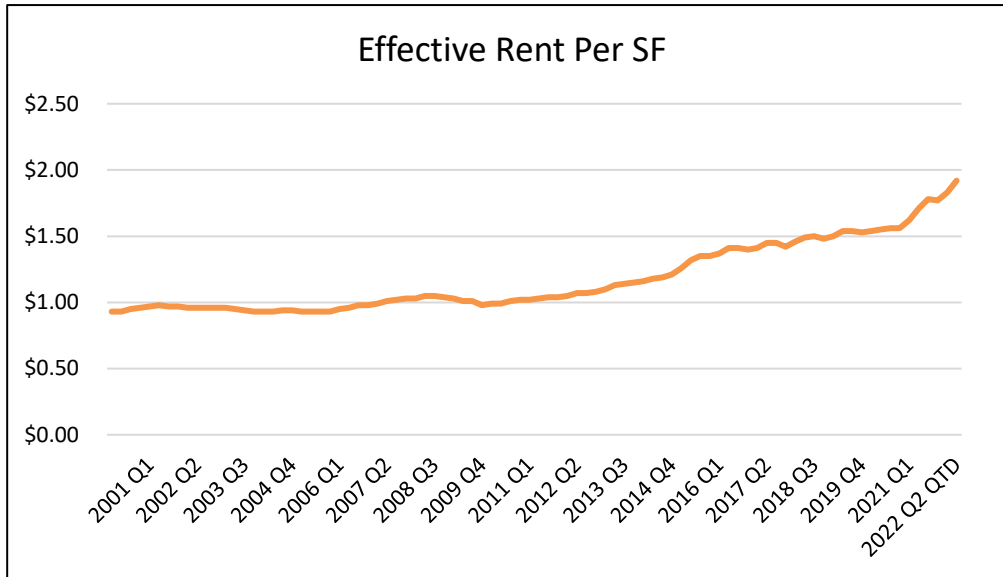
Source: CoStar, Johnson Economics

The following figure presents the average annual rent growth since 2001. Rent growth has been positive since the prior recession. After the growth rate fell to near 0% at the outset of the COVID pandemic, it quickly reversed and has seen growth of roughly 13% by early 2021, and another 13% by early 2022.

FIGURE 4.16: ANNUAL RENT GROWTH RATE BEAVERTON (2000-2022)
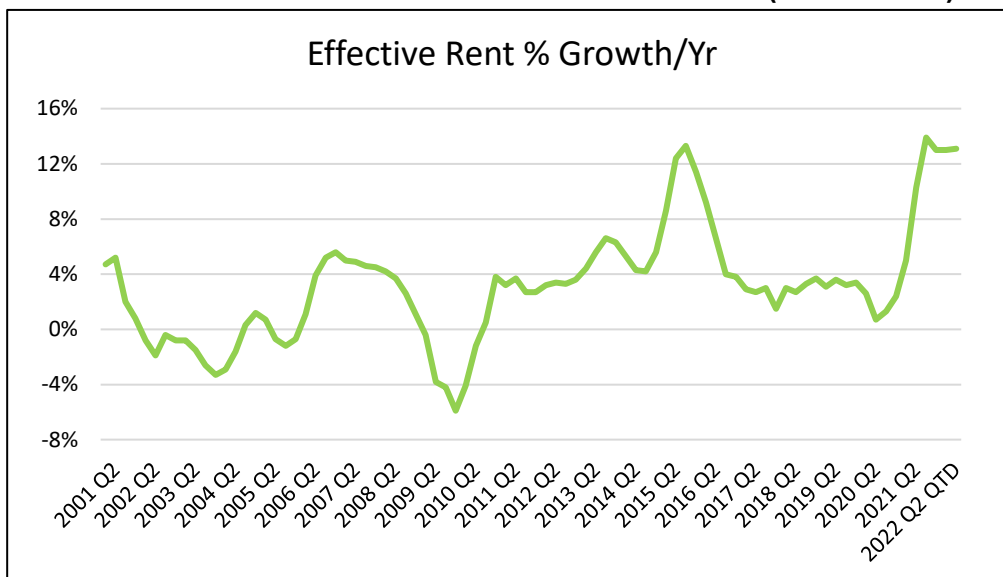
Source: CoStar, Johnson Economics

APPENDIX C: EQUITY MAPPING (CITY OF BEAVERTON)

The Beaverton community has prioritized planning and outreach in recent years on issues related to diversity and equity in the community on issues related to housing and land use. The community's emphasis on DEI issues related to housing extends to this project.

Section V of the HNA report presented an analysis of Census Tracts in Beaverton, using a methodology drawn from the Anti-Displacement and Gentrification Toolkit Project, prepared for DLCD in 2020 by a team at Portland State University.

The toolkit lays out a methodology for determining the conditions within the city's Census Tracts, based on a number of metrics, which are compared to citywide averages. The number of metrics met by each Census Tract helps determine the "neighborhood typology" representing the danger of gentrification and displacement. The Neighborhood Typologies were presented in Section V.

However, to determine the integrated picture represented by the Typologies, data on a number of individual indicators were taken from the Census. This section presents a number of maps that present some of those individual indicators. This Appendix is included for reference as many of these indicators present patterns that may be useful in understanding the distribution of vulnerable populations, and implications for equitable housing among the neighborhoods.

Census Tract data uses 2020 Tracts, and data from the 2020 5-year ACS. Tracts do not conform exactly to city boundaries which are super-imposed on the maps. The following table presents the indicators that are included in the maps and provides the values for these indicators in Beaverton as a whole, and in Washington County, to compare to the tract-level values.

Indicator	Beaverton	Washington Co.
BIPOC Share of Population	38%	25%
Hispanic or Latino Share of Pop.	18%	18%
Non-English Spoken at Home	26%	25%
Female Head of Family Household	10%	10%
Population with a Disability	12%	10%
Median Income	$77,745	$86,626
Housing Costs >30% of Income	35%	32%
Homeownership Rate	50%	61%
Housing Built Before 1970	18%	18%
% of Units in MFR of 5+ Units	34%	24%

Source: 2020 Census, 2020 5-Year ACS, Johnson Economics
Note: BIPOC means Black, Indigenous and other People of Color in Beaverton.

The following pages present Census Tract maps for each of these indicators.

A. BIPOC SHARE OF POPULATION (BEAVERTON)

BIPOC Share of Population

0%	-	10%
10%	-	20%
20%	-	30%
30%	-	40%
40%	-	50%
50%	-	60%
60%	-	70%

Baselines

Beaverton:	38%
Washingon Co:	25%
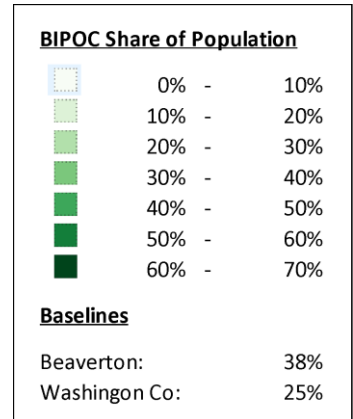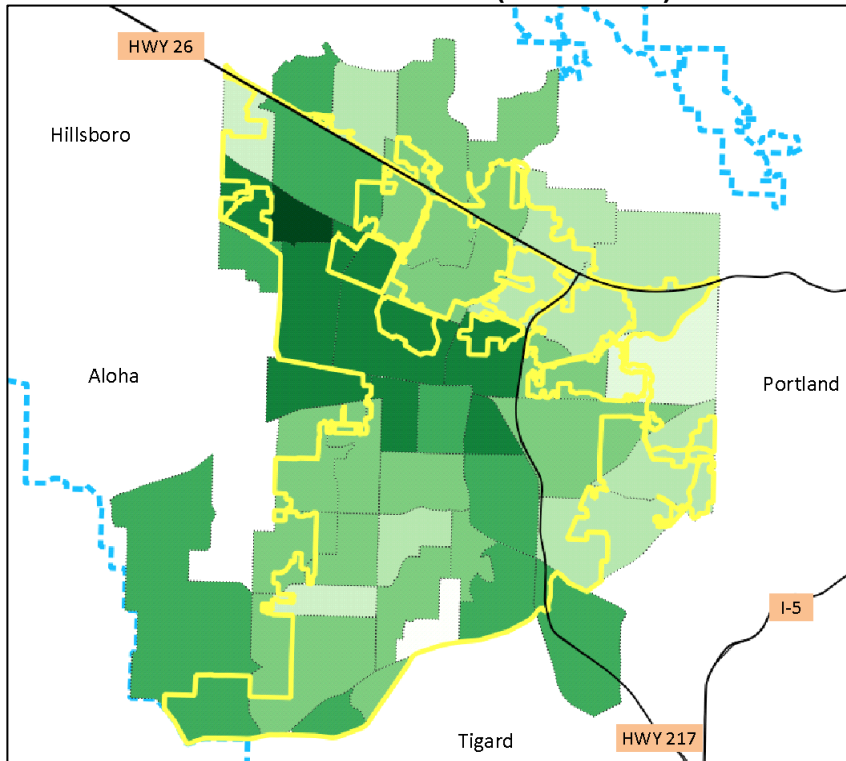
Source: 2020 Census, Johnson Economics

B. HISPANIC OR LATINE SHARE OF POPULATION (BEAVERTON)

Hispanic/Latino Share of Pop.

0%	-	10%
10%	-	20%
20%	-	30%
30%	-	40%

Baselines

Beaverton:	18%
Washingon Co:	18%
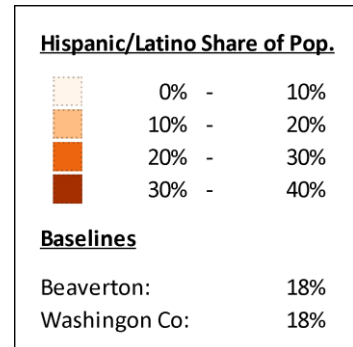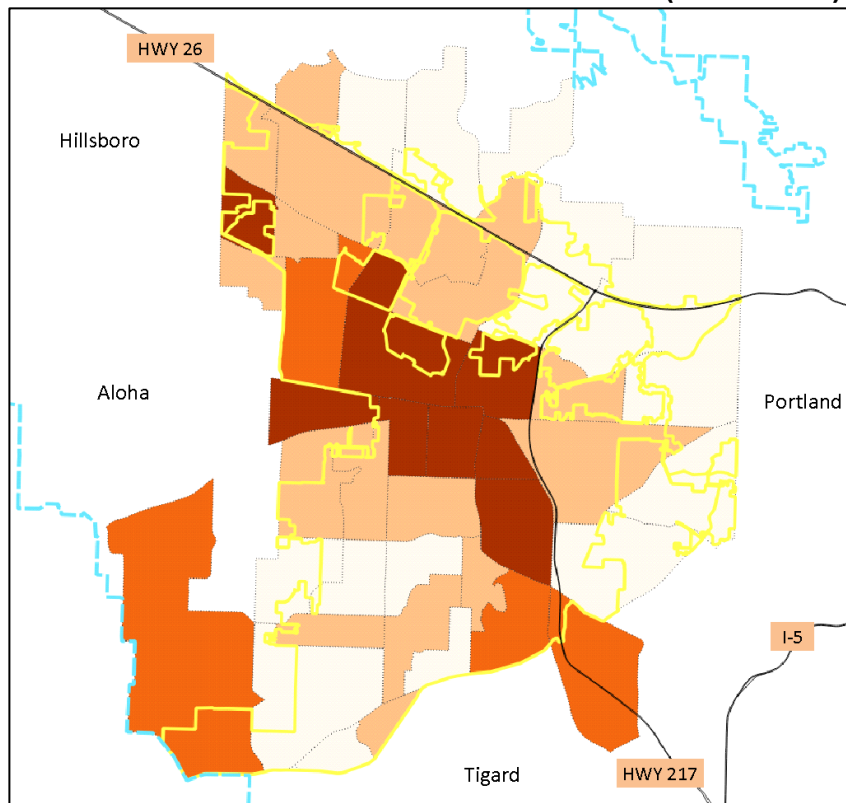
Source: 2020 Census, Johnson Economics

C. Non-English Language Spoken at Home (Beaverton)

Non-Eng. Spoken at Home

0%	-	10%
10%	-	20%
20%	-	30%
30%	-	40%
40%	-	50%

Baselines

Beaverton:	26%
Washingon Co:	25%
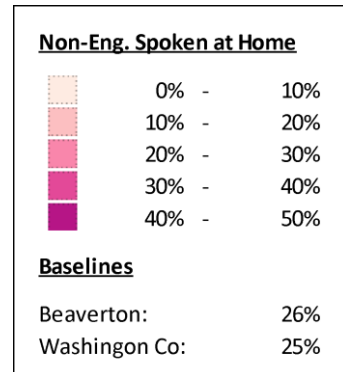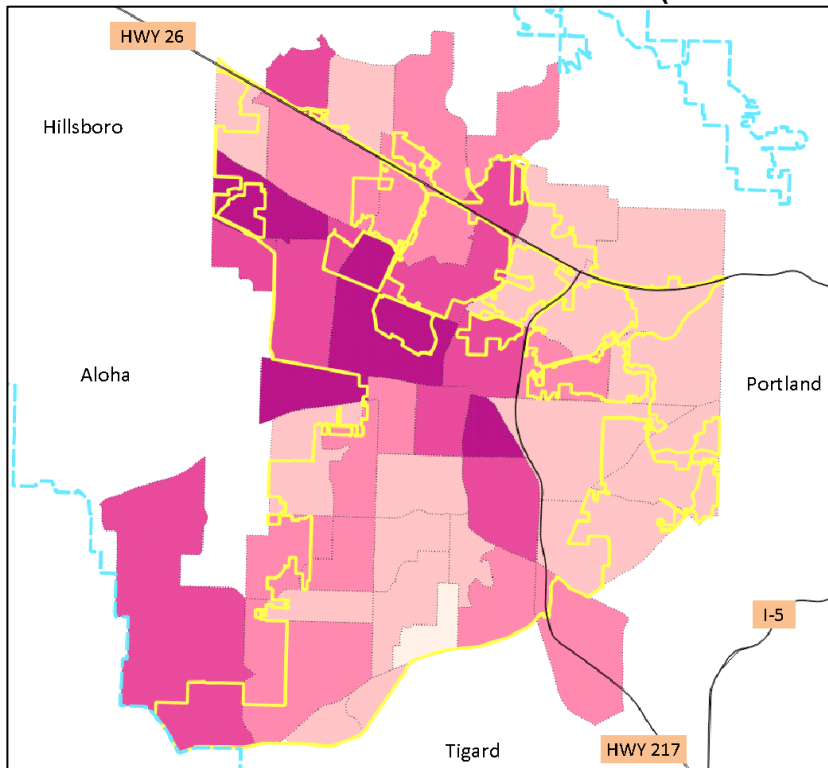
Source: 2020 5-Year ACS, Johnson Economics

D. Female Head of Family Household (Beaverton)

Female Head of Family HH

0%	-	5%
5%	-	10%
10%	-	15%
15%	-	25%

Baselines

Beaverton:	10%
Washingon Co:	10%
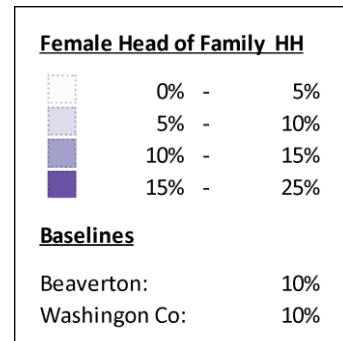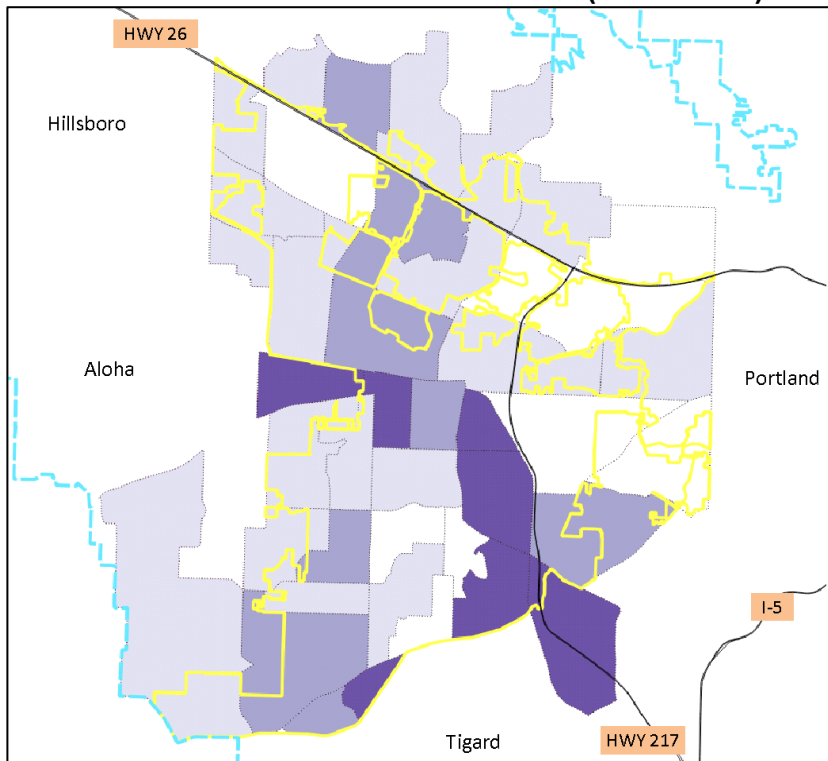
Source: 2020 5-Year ACS, Johnson Economics

E. SHARE OF POPULATION WITH A DISABILITY (BEAVERTON)

Population with Disability

0%	-	5%
5%	-	10%
10%	-	15%
15%	-	20%
20%	-	25%

Baselines

Beaverton:	12%
Washingon Co:	10%
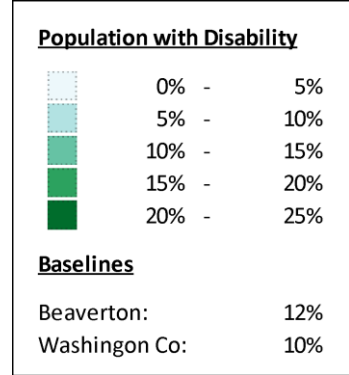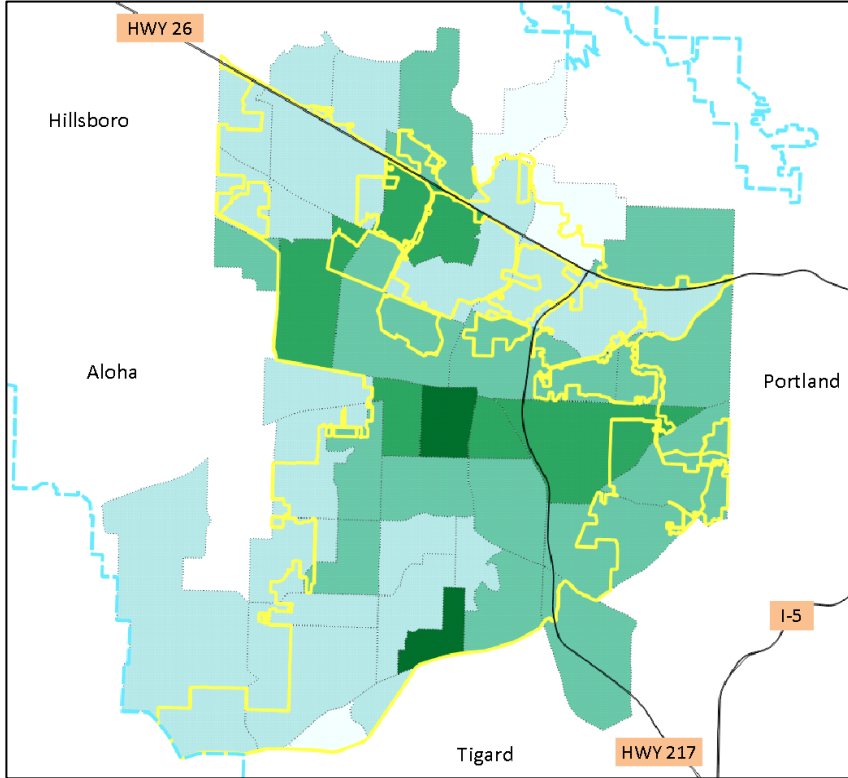
Source: 2020 5-Year ACS, Johnson Economics

F. MEDIAN INCOME (BEAVERTON)

Median Income

$45,000	-	$60,000
$60,000	-	$80,000
$80,000	-	$100,000
$100,000	-	$120,000
$120,000	-	$140,000
$140,000	-	$160,000

Baselines

Beaverton:	$77,750
Washingon Co:	$86,500
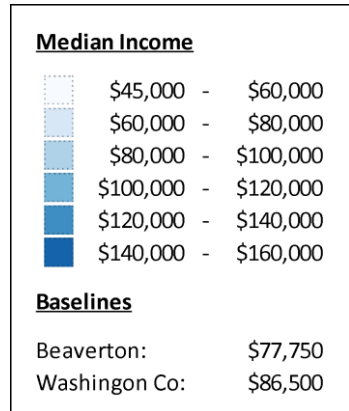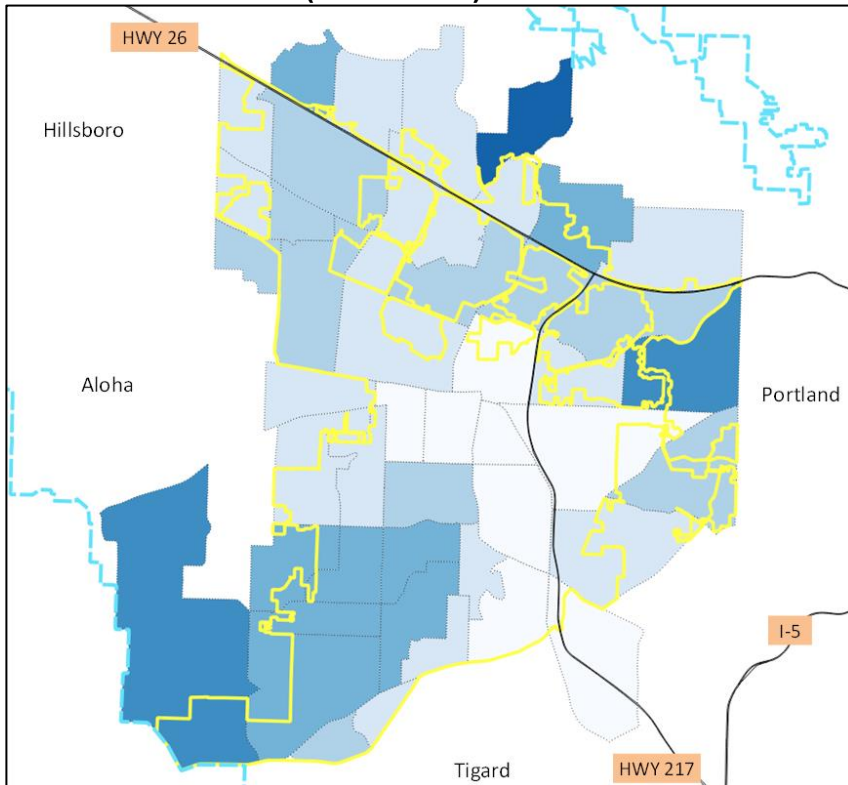
Source: 2020 5-Year ACS, Johnson Economics

G. HOUSEHOLDS WITH HOUSING COSTS >30% OF GROSS INCOME (BEAVERTON)

Housing Costs >30% of Income

0%	-	20%
20%	-	30%
30%	-	40%
40%	-	50%
50%	-	55%

Baselines

Beaverton:	35%
Washingon Co:	32%
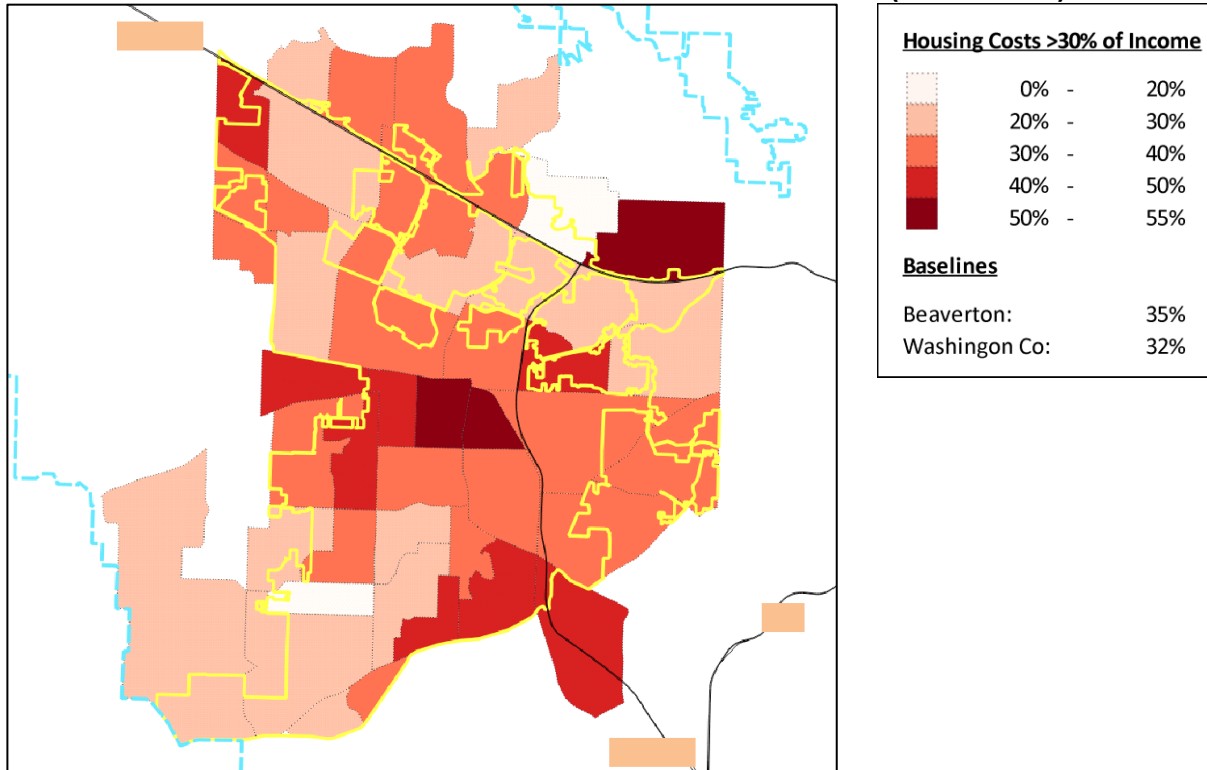
Source: 2020 5-Year ACS, Johnson Economics

H. HOMEOWNERSHIP RATE (BEAVERTON)

Homeownership Rate

0%	-	20%
20%	-	40%
40%	-	60%
60%	-	80%
80%	-	90%

Baselines

Beaverton:	50%
Washingon Co:	61%
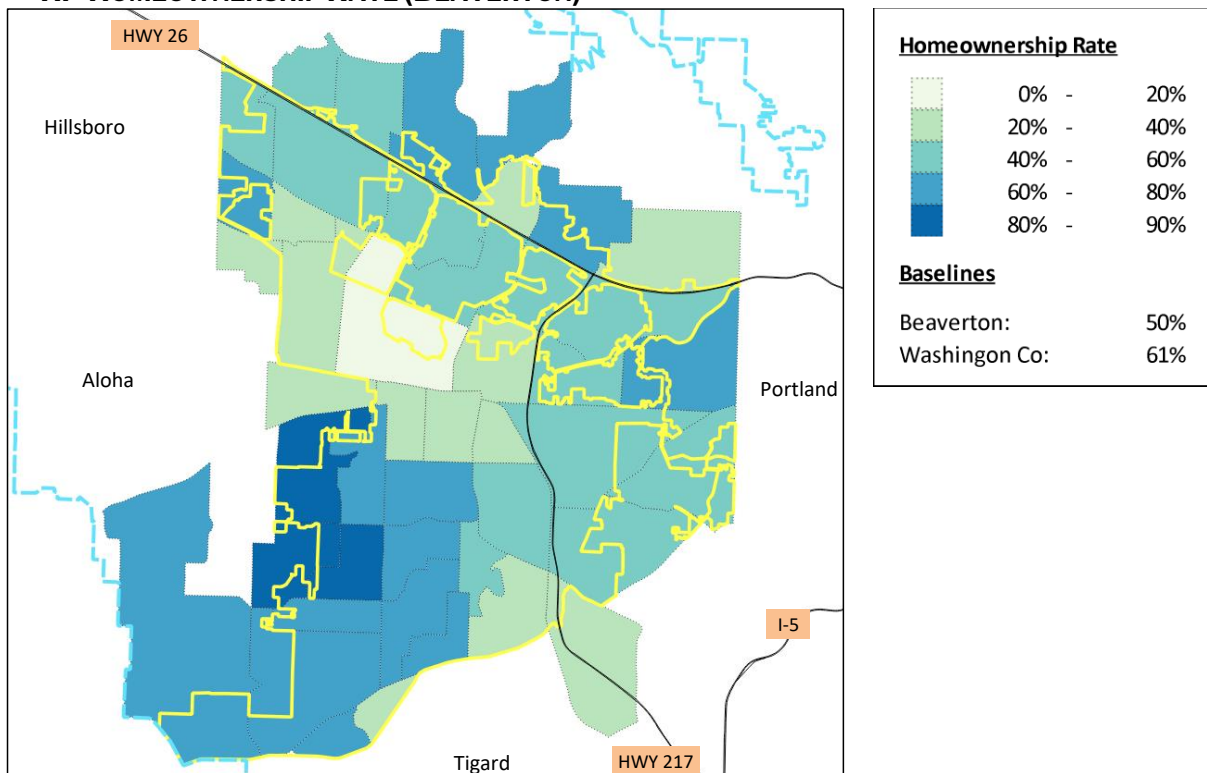
Source: 2020 5-Year ACS, Johnson Economics

I. SHARE OF HOUSING BUILT BEFORE 1970 (BEAVERTON)
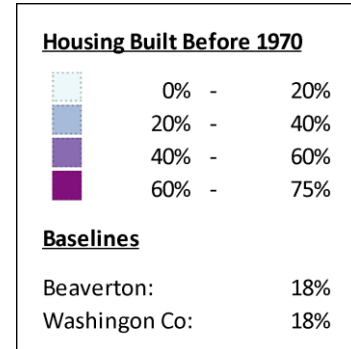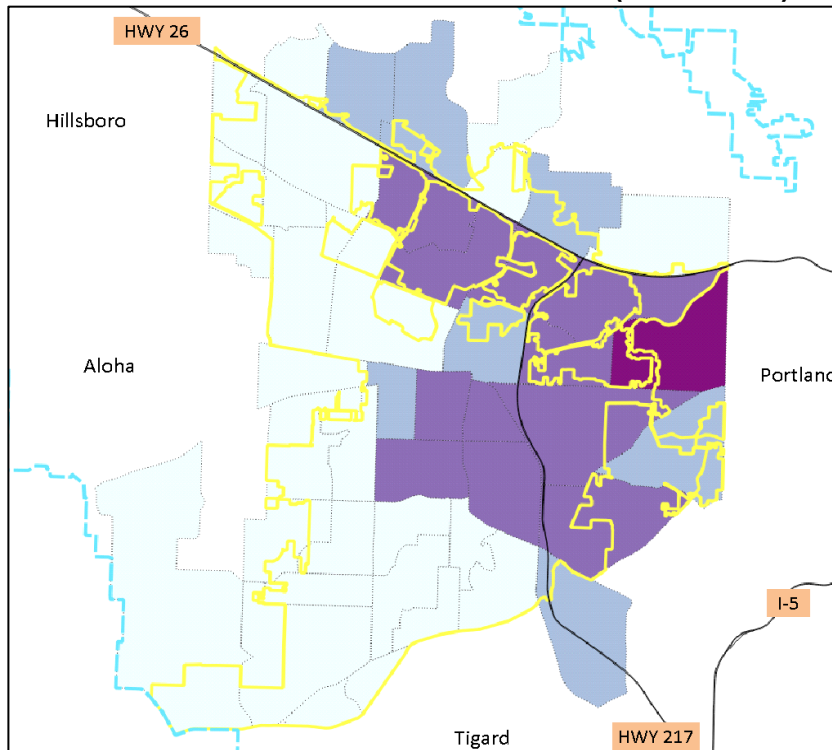
Source: 2020 5-Year ACS, Johnson Economics

J. SHARE OF HOUSING UNITS IN BUILDINGS OF 5 OR MORE UNITS (BEAVERTON)
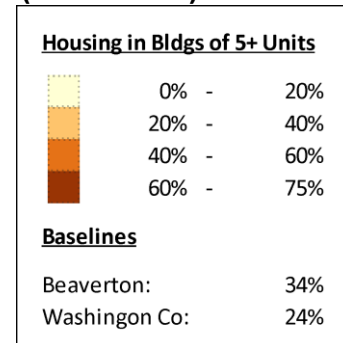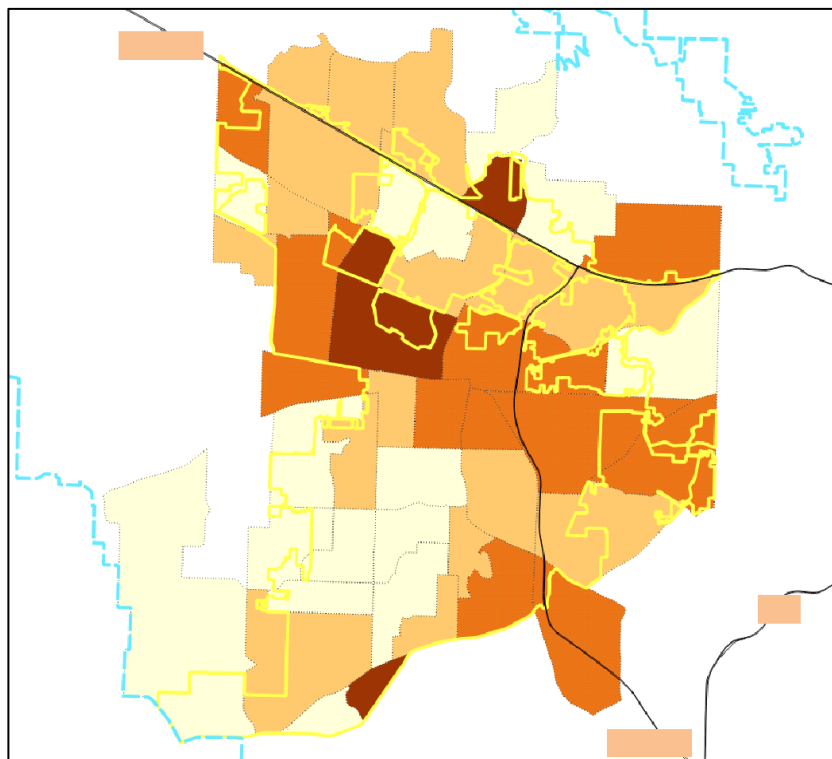

Source: 2020 5-Year ACS, Johnson Economics

Source: Sequoia Equities

HOUSING BEAVERTON PROJECT

APPENDIX C
PROJECTED FUTURE HOUSING NEEDS

March 2023

TABLE OF CONTENTS

INTRODUCTION

This analysis is undertaken as part of the Housing Beaverton Project, a comprehensive study of housing needs, buildable lands, and potential policies and strategies to address current and future housing in the Beaverton community. This report is one of a series of reports of background data and analysis. Not all data and context are included in each report and therefore the analysis may refer to other products from this project.

This report presents an estimate of 20-year housing needs within the City of Beaverton, based on local demographic and household trends. This analysis places a strong emphasis on equitable outcomes for the community's current and future residents.

I. PROJECTED POPULATION AND HOUSING GROWTH - 2042

A. TOTAL PROJECTED GROWTH

This section presents a forecast of population, household, and housing unit growth over the 20-year planning period (2022-2042). The current figures are based on the 2022 estimates presented in Section IV. From that foundation, future growth is estimated using the projected growth rate for Beaverton from the most recent Metro coordinated forecast (Feb. 2021). Statute requires that growth forecasts for cities within Metro agree with the coordinated forecast.[1] The administrative rule also specifies that:

> "The population forecast… is a prediction which, although based on the best available information and methodology, should not be held to an unreasonably high level of precision…."

> -OAR 660-032-0030(5)

Precise figures are presented below, reflecting the specificity of the Metro forecast, and serving the technical requirements of a Housing Needs Analysis. However, the reader is encouraged to think of these projections as rough estimates, subject to change due to many variables over the planning period.

Figure 1.1 presents a summary of projected growth in population, households, and housing units by 2042. Figure 1.2 (following page) presents in more detail the sources and assumptions behind these numbers.

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[1] ORS 195.036; OAR 660-032-0030

FIGURE 1.1: SUMMARY OF PROJECTED GROWTH, BEAVERTON (2022 - 2042)

	2022	2042	Growth	% Growth
Total Population:	99,110	118,215	19,106	19%
Households:	41,267	50,496	9,229	22%
Housing Units:	43,267	53,154	9,887	23%

Sources: Metro, Census, JOHNSON ECONOMICS LLC

- Based on the Metro projections, there will be an estimated 118,215 total people in 2042. This would be growth of over 19,000 people over the 20-year period, or 19% growth over the 2022 population (Figure 1.1).
- The number of households is projected to grow to 50,496 by 2042. This would be 22% growth from 2022, or 9,229 additional households. The household growth rate outpaces population growth because the average household size is projected to fall from 2.4 to 2.3 persons, meaning more households would accommodate the same population.
- The estimated households do not include the population living in group living situations, which is assumed to hold constant at 0.9% of the population, or 1,067 people by 2042. Some examples of group living situations include dormitories, some nursing facilities, and prisons. The housing needs of these populations is included in the forecast of future housing types presented below.
- To accommodate the projected number of households (Metro), Beaverton would add nearly 9,900 new housing units to its housing inventory, a growth of 23%, over 20 years.

The coordinated population forecast adopted by Metro in 2021 includes a forecast for population and number of households in Beaverton in 2030 and 2045. This analysis uses these forecasts to estimate Beaverton's population and number of households in 2042, summarized in Figure 1.2. From these estimates, an estimate of the total number of housing units to accommodate these households is derived including an assumed stabilized vacancy rate of 5%.[2]

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[2] 5% vacancy is considered stabilized by many large rental property management companies. It represents the level at which a property has healthy occupancy while still offering some availability and unit choice to new renters and allowing for normal unit turnover. Likewise, some vacancy in the for-sale housing market is healthy to provide inventory and choice for homebuyers. In reality, vacancy will fluctuate over the planning period. This estimate reflects an idealized view of the number of units needed to serve the projected number of households, plus some vacancy.

FIGURE 1.2: PROJECTED FUTURE POPULATION AND HOUSING PROFILE, BEAVERTON (2042)
SUMMARY OF SOURCES AND METHODOLOGY

PROJECTED FUTURE HOUSING CONDITIONS (2022 - 2042)			SOURCE
2022 Population (Minus Group Pop.)	98,215	2020 Census + growth at 2020-2020 annual rate	US Census
Projected Annual Growth Rate	0.9%	Metro Coordinated Forecast (2021)	Metro
2042 Population (Minus Group Pop.)	117,148	(Total 2042 Population - Group Housing Pop.)	
Estimated group housing population:	1,067	0.9% of total pop. (Held constant from 2020)	US Census
Total Estimated 2042 Population:	**118,215**	Metro Coordinated Forecast (2021)	Metro
Estimated Non-Group 2042 Households:	**50,496**	Metro Coordinated Forecast (2021)	Metro
New Households 2022 to 2042	9,229		
Avg. Household Size:	2.3	Projected 2042 pop. / 2042 households	US Census
Total Housing Units (2042):	**53,154**	Occupied Units plus Vacant	
Occupied Housing Units:	50,496	(= Number of Non-Group Households)	
Vacant Housing Units:	2,658	(= Total Units - Occupied Units)	
Projected Market Vacancy Rate:	5.0%	Stabilized vacancy assumption	

Sources: Metro, Census, JOHNSON ECONOMICS LLC (estimated housing units, including vacant and occupied units)

B. PROJECTED HOUSEHOLD GROWTH BY INCOME AND TENURE

Figure 1.3 presents the total forecasted households in 2042 (Figure 1.1), broken down by income group and owners/renters. The 2042 estimate includes both current and future households (50,496). The analysis considered the propensity of households at specific age and income levels to either rent or own their home, to estimate the future need for ownership and rental housing units, and the affordable cost level of each. The projected distribution is for *all* 2042 households and therefore includes the current households, in addition to new households.

FIGURE 1.3: PROJECTED OCCUPIED FUTURE HOUSEHOLDS (2042)

OWNERSHIP				
Price Range	# of Households	Income Range	% of Total	Cumulative
$0k - $80k	1,134	Less than $15,000	4.4%	4.4%
$80k - $130k	1,048	$15,000 - $24,999	4.1%	8.5%
$130k - $180k	1,335	$25,000 - $34,999	5.2%	13.7%
$180k - $250k	2,407	$35,000 - $49,999	9.4%	23.1%
$250k - $340k	3,665	$50,000 - $74,999	14.3%	37.3%
$340k - $420k	3,364	$75,000 - $99,999	13.1%	50.4%
$420k - $460k	3,227	$100,000 - $124,999	12.6%	63.0%
$460k - $510k	2,627	$125,000 - $149,999	10.2%	73.2%
$510k - $670k	3,771	$150,000 - $199,999	14.7%	87.9%
$670k +	3,115	$200,000+	12.1%	100.0%
Totals:	**25,694**	**50.9% of Households**		

RENTAL				
Rent Level	# of Households	Income Range	% of Total	Cumulative
$0 - $400	2,188	Less than $15,000	8.8%	8.8%
$400 - $700	2,315	$15,000 - $24,999	9.3%	18.2%
$700 - $900	2,035	$25,000 - $34,999	8.2%	26.4%
$900 - $1300	3,344	$35,000 - $49,999	13.5%	39.8%
$1300 - $1700	5,338	$50,000 - $74,999	21.5%	61.4%
$1700 - $2100	3,901	$75,000 - $99,999	15.7%	77.1%
$2100 - $2300	2,104	$100,000 - $124,999	8.5%	85.6%
$2300 - $2500	1,605	$125,000 - $149,999	6.5%	92.0%
$2500 - $3400	1,134	$150,000 - $199,999	4.6%	96.6%
$3400 +	839	$200,000+	3.4%	100.0%
Totals:	**24,802**	**49.1% of Households**		

All Households	50,496

Sources: Census, Claritas, JOHNSON ECONOMICS

Incomes and housing costs in Figure 1.3 are presented in current 2022 dollars. Because of the impossibility of predicting variables such as interest rates 20 years into the future, assumptions were kept constant from those used to estimate current housing affordability (Appendix B). The price levels presented here use the same assumptions regarding the amount of gross income applied to housing costs, from 30% for low-income households down to 20% for the highest income households.

Home price assumptions: The assumptions behind the affordable price level for ownership housing shown in Figure 1.3 are also held constant from the estimate of current housing: 30-year amortization, at an interest rate of 5% (though this rate has been lower until recently, and has now spiked higher than 5%, this assumption is in line with historic norms), with 10% down payment. These assumptions are designed to represent prudent lending and borrowing levels for ownership households. The 30-year mortgage commonly serves as the standard. In the 2000s, down payment requirements fell significantly, but standards have tightened somewhat since the 2008/9 credit crisis. While 20% is often cited as the standard for most buyers, it is common for homebuyers, particularly first-time buyers, to pay significantly less than this using available programs.

The projections of new population and households, including income and tenure projections, form the basis for the projections of *new* 20-year housing discussed in the following section. Before these basic growth projections, derived from Metro forecasts, are translated into a forecast of new housing types, this analysis applies an equity lens to identify the housing needs of the key groups that are a focus of this analysis.

II. EQUITABLE HOUSING NEEDS - 2042

This section presents a quantified estimate of housing need for Beaverton households and key subgroups. In keeping with the requirements of a Goal 10 Housing Needs Analysis, this analysis includes an estimate of housing to accommodate the entire forecasted population in 2042, stratified by income segment, and by housing type.

However, the main focus of this analysis is on those groups for whom the housing need and the deficit of appropriate housing is most acute as a result of current economic conditions and current and past discriminatory practices which have resulted in reduced access to different types of housing and less accumulation of intergenerational wealth for people of color. As noted in Section IV, the focus of this analysis is on the housing *needs* of the community, particularly among those who may not currently have those needs met. There is less emphasis on the *preferences* of households with the resources to meet their immediate needs, though all of the community is included in the quantified results presented below. It is assumed that the private housing market will continue to meet the needs of more financially advantaged households, and that they will generally have the resources to navigate it with minimal assistance or supportive policies by the City.

This section discusses some of the factors that will impact the types of housing most needed in the coming decades. This discussion is followed by a quantified estimate of future housing by type that can help meet these needs.

A. EXPANDED HOMEOWNERSHIP OPPORTUNITIES FOR NON-WHITE HOUSEHOLDS

As discussed in Section IV, some racial and ethnic groups (Black, Indigenous, Latine, and those of an unspecified "other" race) have a disproportionately lower homeownership rate than non-Hispanic white households or the citywide average, according to Census data (see Appendix B). At the same time, some non-white groups have a higher estimated homeownership rate. The City recognizes that both intentional and unintentional racist policies like exclusive zoning, mortgage subsidies or incentives, real estate practices like deed restrictions, and outright discrimination in appraisals and lending practices have resulted in disproportional benefits in homeownership for a privileged subset of households – namely non-Hispanic white and higher-income households – while systematically excluding, segregating, and denying opportunity to low-income households and people of color.

To meet the goal of providing more equitable homeownership opportunities in Beaverton in the future, the estimates of owner vs. renter need presented in Figure 1.3 reflect a policy goal that racial groups with lower rates of ownership should have a more equal homeownership rate going forward. Those groups that had a higher homeownership rate relative to the non-Hispanic white population were assumed to maintain that higher rate.

To be clear, the more equitable homeownership rate assumption is applied to the households added to the city between 2022 and 2042 in these racial categories. It is not assumed that new housing stock over the next 20 years will be able to remedy all the accumulated historic inequities experienced by the current population. However, the mix of new housing recommended below, along with recommended policies and housing production strategies resulting from the broader Housing

Beaverton Project, will be aimed at providing opportunities to current and future Beaverton residents to increase equitable outcomes to the greatest extent possible.

Partially due to the policy goal of greater home ownership equity going forward, the share of ownership households in Beaverton is projected to increase slightly from just less than 50% to 51%. This is a minor shift but will translate to an increase in ownership opportunities as a proportion of all units built between 2022 and 2042.

Projected Growth of Racial and Ethnic Groups: The growth of population and households by race and ethnicity was projected using forecasts prepared by Metro for the seven-county Portland-Vancouver-Hillsboro Metropolitan Statistical Area (MSA). The MSA includes five counties in Oregon and two in Washington and is currently estimated at 2.5 million people. In 2016, Metro prepared forecasts of how the region would grow in 5-year increments through 2060 by racial group, age, and gender.[3]

Despite the broad regional approach, this is the most localized estimate of growth by subgroup available for the Beaverton area, and therefore it is used in this analysis to approximate how the groups might grow in number and share of population by 2042. The Metro methodology did not include the population identifying as an "unspecified other race", or "two or more races." Growth rate assumptions for those categories were drawn from a separate US Census forecast through 2030 that was national in scope. Figure 2.1 presents the forecasted growth over the planning period for the Metro region.

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[3] "Population Forecast to 2060, Metro Area Population Forecast by Race/Ethnicity, Gender, Age", Metro Research Center, April 2016.
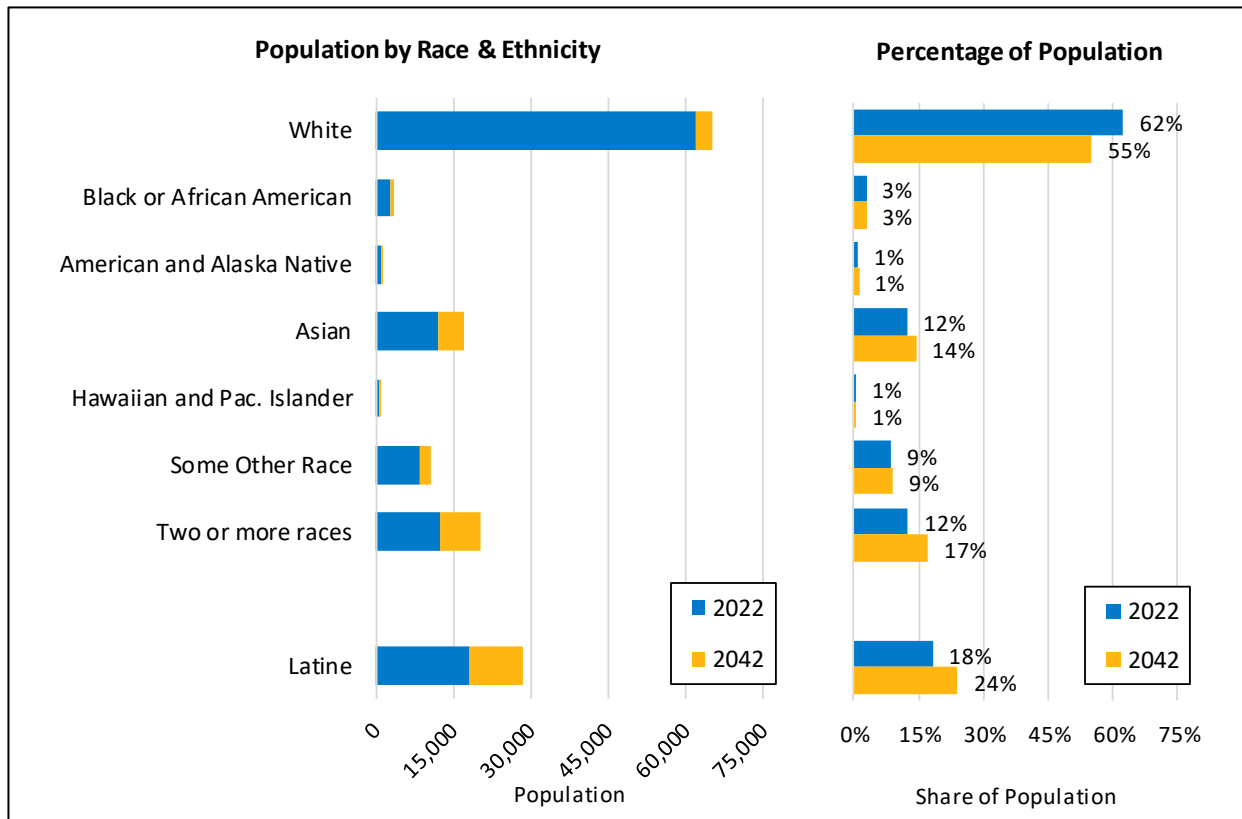
Sources: Metro, Census, JOHNSON ECONOMICS LLC

- The non-Hispanic white population is projected to remain the largest overall racial category but is expected to continue to diminish in share of population from 62% to 55%. This is an annual growth rate of 0.3%. Other racial groups are forecast to grow at a much faster annual rate.
- Those identifying as "two or more races" are expected to grow at the fastest annual rate (2.9%), growing from 12% to 17% of the population.
- The Latine population (which can include those of other racial categories) is forecast to grow at 2.7%, growing to nearly one quarter of the population by 2042.
- The Asian population is expected to grow at 2.0% per year, to 14% of the population.
- The remaining groups are expected to grow at slower rates, and remain a relatively small, but important share of the total population.

As noted in Section IV, households of color tend to have larger average household size than the average of all households (Census 2010 data, most recent available). White households had an average household size slightly smaller than the citywide average, while all other groups were estimated to have an average household size larger than the average. All of these figures fall within the margin of error, but the general trend seems clear. (See Appendix B for more data on racial and ethnic demographics.)

Similarly non-white groups tend to have a different age profile than the non-Hispanic white population. The Metro 2060 forecast provides estimates of growth of racial and ethnic groups by age

(excluding those of an unspecified other race, or two or more races). The white population in Beaverton has the highest median age of all groups, and this is expected to persist into the future. The median age for the white population is forecast to grow from roughly 39 years to 47 years over that time, as the youngest Baby Boomers age into their 70s and 80s, and the similarly large Millennial generation ages in to their 40s and 50s.

Other racial groups are also expected to age over the coming decades, but all non-white groups are younger on average than the non-Hispanic white population. By 2040, the median age of the Asian and Indigenous population is expected to be 42 years and 37 years for the Black and Pacific Islander populations. The Latine population is expected to be the youngest on average, with a median age of roughly 32 years, over 30% lower than the white population.

Figure 2.2 shows the projected distribution of the white and non-white populations by 2040, according to the Metro forecast. The distribution of the white population (in blue) is skewed towards the older age cohorts, relative to the non-white population. The non-white population is projected to have a much higher share of children and young people, to go with larger households. While all types of households and families will continue to be represented across all races, the aging white population will likely begin to skew more towards one and two person households as children leave the home.

Sources: Metro, JOHNSON ECONOMICS LLC

Homeownership Rate: As noted in this report, Beaverton features a lower overall homeownership rate (50%) than comparative regions such as Washington County (61%), Metro area (62%), or State of Oregon (63%). Beaverton's rate is closer to, but still lower than, those of other large cities in the Metro area such as Portland (53%), Hillsboro (53%), and Gresham (55%).

The higher prevalence of renters in Beaverton implies both fewer homeownership opportunities for residents, and a greater prevalence of rental opportunities. A higher proportion of rental units is a benefit for the types of households who tend to rent their homes, including lower-income households, certain racial groups, and certain family types such as single parents, provided they are available at affordable price points. In this sense, the city might be considered more equitably balanced currently than some communities with a shortage of rental units.

Nevertheless, the 50/50 balance in Beaverton suggests that greater purchasing opportunities among groups experiencing barriers to homeownership should be a priority, while also continuing to provide affordable rental opportunities at all income levels.

As noted in the prior section, this analysis assumes a more equitable homeownership rate among those groups that have fallen behind due to historical barriers and racism (Black, Indigenous, Latine, and those an unspecified "other" race). It also assumes that non-white racial groups that have an estimated homeownership rate slightly higher than the white households will maintain that higher rate. However, the analysis does not assume that the homeownership rate will increase to a rate

comparable to the county or Metro area (a rate of 61-62%). To assume too great an increase in the ownership rate would likely benefit the traditional homebuying demographic to the detriment of traditional renter households.

What types of housing will be needed for increased homeownership opportunities? The type of housing needed for first-time homebuyers and those who have been historically disadvantaged should be lower in cost compared to prices for large single-detached homes typically built for higher income households. New single-detached homes are readily provided by the private real estate market and reflect the profit incentives and established practices of the homebuilding industry. Therefore, these new homes tend to serve the upper end of the market and reflect buyer "preferences" rather than "needs." This analysis assumes that this segment of the market will continue to be served by the private real estate industry and is not a necessary focus of public strategies or incentives.

Because market forces will incentivize larger and more expensive single-detached units, many of the new units needed by lower-income and non-traditional homebuyer segments will be attached housing types such as townhomes, multi-unit condo opportunities including cottage developments, and more plex types with two to four units. A plex unit can give a buyer the opportunity to live in one unit, while renting other units to help with financing the purchase, or under new state rules these developments can be subdivided into individual small lots to create multiple homebuyer opportunities. The pricing of these types of units is generally lower than single-detached housing and should face less competition from higher-income income buyers. An increased need for these "middle housing" types is reflected in the quantified housing need estimate that follows.

Homeownership Opportunity Needs: In order to reflect a goal of expanded homeownership opportunities for traditionally disadvantaged groups, an increased share of the projected *new* housing over the next 20 years should be appropriate for homeownership opportunities, particularly for first-time homebuyers or lower-income households. Therefore, among new units, **an increased share of 53%, or roughly 5,225 units, should be ownership units** to help rebalance this deficit (see Figures 2.4 and 2.5 below).

B.   MULTIGENERATIONAL HOUSEHOLDS

The proportion of Americans living in multigenerational families has seen a strong rise in recent years. According to Pew Research Center, over 59.7 million U.S. residents lived with multiple generations under one roof as of March 2021[4]. (Unfortunately, more local data on multigenerational households is not available). This is an increase of 2.2% from 2019, or over 1.3 million additional U.S residents living in multigenerational homes, compared to general population growth of 1.1% over the same period. Pew defines multigenerational families as those with two or more generations of adults aged 25 and older, or grandparent(s) living with their grandchildren; families of parents living with minor or college-aged children are excluded.

The number of Americans who live in multigenerational households has increased over four-fold since the 1970s, while the population grew by a much lower rate of 50%. Part of this growth has been driven by young adults, who, due to changing economic conditions, have been marrying later, delaying

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[4] Pew Research Center, 'The Demographics of Multigenerational Households'

homebuying, and staying in school longer compared to previous generations. In addition, increased life expectancy has enlarged the aging population that may live with relatives.

The Federal Reserve reports that in 2020, in the early stages of the pandemic, the number of households relative to the population "…showed a dramatic decline… as millions of Americans changed their living arrangements, many by remaining with or moving back in with parents and older relatives. These changes were particularly large among young adults, Black adults, and those without a college education." As of mid-2022 however, "…there has been a remarkable rebound…, driven in large part by a return to the pre-pandemic rates at which younger adults lived with parents or older family members. This rebound has been an important contributor to a huge increase in housing demand. "[5] Therefore, the Fed reports that the country is largely back to the pre-pandemic trend of slower, but still positive, growth in multigenerational households.

Household cost-savings and financial efficiencies are the top reasons cited for living in multigenerational homes. Pew found that the share of people in poverty is lower in multigenerational households compared to other types of households[6]. Multigenerational households have the potential to have more income-earners sharing housing, food, and transportation costs and/or providing childcare, which can help alleviate some of the cost-of-living burden on each individual member.

Pew also found that among America's major racial and ethnic groups, Asian, Black, or Latine people are more likely to live in a multigenerational household as compared to White families. When broken down in further detail, roughly 24% of the Asian population, 26% of all Black Americans, and 26% of all Latine Americans live in a multigenerational household, roughly twice the 13% share of the White American population who live in these households (data on other racial groups was not provided). A higher share of foreign-born Americans (26%) lives in a multigenerational household compared to native-born Americans (17%). As for demographics by gender, the research suggests that both men and women are equally likely to live in multigenerational households.

What types of housing will be needed for multigenerational households? Multigenerational households may have some distinct housing needs. These households may need larger units due to the greater number of household members. In some cases, the housing cost savings or presence of more income earners can allow these households to afford larger units such as single-detached homes. However, many multigenerational households may have limited financial resources, supporting elderly or disabled members and children on moderate or lower incomes. These households will need adequately sized rental units and middle housing types to meet their needs at lower cost.

Multigenerational homes often include some separation between generations, which may range from separate living and bath quarters to additional kitchens, to completely separate accessory units (e.g., in a basement or detached unit). Ideally, future units also should allow for adequate mobility and accessibility to account for wheelchairs and walkers in living spaces as the older family members continue to age. However, most multigenerational households cannot custom-build such a home and

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[5] Federal Reserve, **"**The Remarkable Recent Rebound in Household Formation and the Prospects for Future Housing Demand", Garcia, May 2022.
[6] Pew Research Center, 'Financial Issues Top the List of Reasons U.S. Adults Live in Multigenerational Homes'

must coinhabit a smaller traditional housing unit out of necessity, which can lead to cramped and substandard living conditions.

Public planning for this segment of the population might include increased regulatory flexibility and incentives to add accessory dwelling units (ADU's) to existing or new homes through expansion, conversion, or other renovations. These households might also be served by increased building of middle housing types (townhomes, plexes, etc.), which would allow multigenerational households to live adjacent to each other, but in separate units. Many of these households will also benefit from increased building of accessible units to serve aging family members.

The quantified housing need estimate presented below includes an increased need for middle housing, as well as some remaining, though reduced, need for single-detached housing that can help meet the needs of multigenerational households.

Multigenerational Housing Needs: The estimated rates of multigenerational households reported above for different racial and ethnic groups (source: Pew), were applied to forecasted growth in each of those groups in Beaverton, to determine that an estimated 18% of the total new forecasted households would be multigenerational households based on these national rates. An assumption that 18% of new total need for 9,900 new housing units should be appropriate for these households would indicate a need for **roughly 1,780 of the new units** over the next 20-years should be appropriate for multigenerational households.

C.   ACCESSIBLE UNITS

Residents with a Disability: According to the Census, an estimated 12% of Beaverton's population, or 11,300 people, currently report having some disability (see Appendix B), including those with multiple disabilities. A similar share of the 2042 population would indicate roughly 14,000 residents with a disability. Unfortunately, the Census does not provide data on the number of households, or average household size, of those with disabilities.

The following figure presents current Census estimates of the types of disability reported among Beaverton residents. Any type of disability could impact the type of housing that may be appropriate for a resident, but those with the greatest impact on needed housing type are generally an ambulatory, self-care, or independent living disability.

FIGURE 2.3: BEAVERTON SHARE OF THE POPULATION WITH DISABILITY, BY TYPE
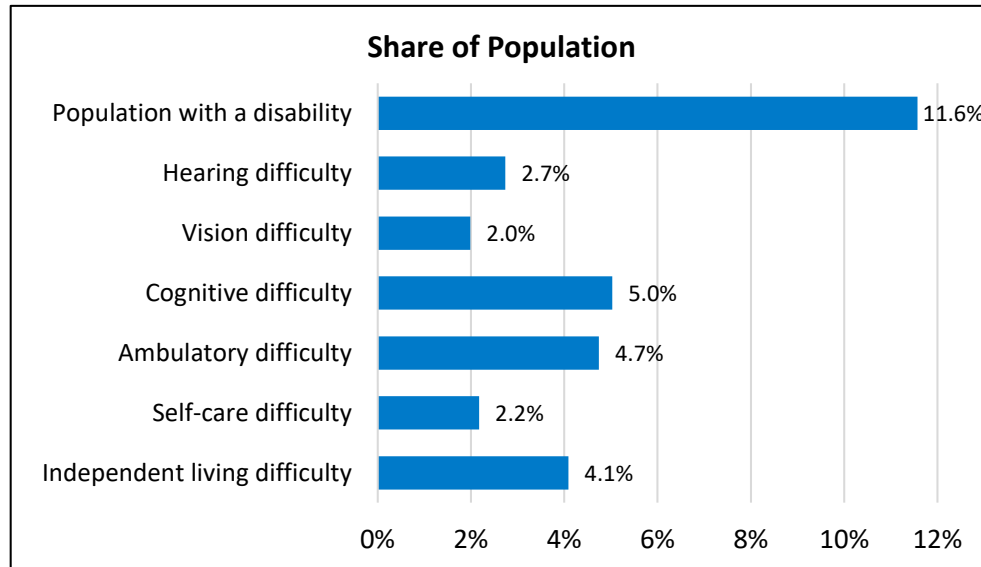
Share of Population

Category	Share
Population with a disability	11.6%
Hearing difficulty	2.7%
Vision difficulty	2.0%
Cognitive difficulty	5.0%
Ambulatory difficulty	4.7%
Self-care difficulty	2.2%
Independent living difficulty	4.1%

SOURCE: US Census, JOHNSON ECONOMICS LLC
Census Tables: DP02, (2020 ACS 5-year)

Those with an ambulatory disability often need units with expanded access for a wheelchair, walker, or scooter. Those with self-care or independent living disabilities may require additional safety precautions around the home to protect a resident who does not have a family member of caretaker with them at all times. The largest subset is those with a cognitive difficulty, defined as "having difficulty remembering, concentrating, or making decisions." These individuals may need a range of housing to ensure they meet their daily needs, depending on the severity of their disability. This may include independent living in the general housing market, to needing to live with family or in a group housing situation. (Needed housing types including accessible units are discussed in more detail below.)

Older residents are more likely to report a disability, including nearly a third of those over 65 years. Of those aged 18 to 64 years, 9% of the local population reports a disability, and 6% of children. Due to the aging of the population discussed above, a greater share of the Beaverton population may need accessible housing units in the future.

According to the 2020 ACS, those with a disability are also more likely to live below the official Federal poverty level (14.5% vs. 10% overall) and have median earnings 33% lower than the general population ($27,600 vs. $41,500).

What types of housing will be needed for households affected by disabilities? Accessible housing units for those with disabilities will become increasingly important to meet the needs of current residents, as well as an aging population going forward. Comprehensive data on the current number of units designed for this population in Beaverton is not available, but it is almost certainly much lower than the prevalence of disability in the community (12%).

Most contemporary housing designs do not consider the needs for people with a disability to properly utilize the space. They cite difficulties in visiting the homes of able-bodied friends and relatives as

their houses do not accommodate devices such as wheelchairs. It is also the case that builders and developers often assume people with disabilities can easily adjust to the common designs of domestic spaces. The following are some characteristics of modern-day accessible housing design that are crucial in providing proper quality of life for people with disabilities.[7]

- Designing accessible housing starts from the location. Although homes designed for people with disabilities should be available throughout the city, accessible housing units are likely most helpful to the widest range of people if sited where, 1) there is a high density of services and amenities, 2) there are neighborhood multi-modal connections and usability, and 3) there can be ease of navigation regardless of mode of transportation. Common planning standards generally recommend that the site is between ¼ to ½ a mile away from important amenities in order to facilitate walking or other non-auto transport (e.g., the grocery store, pharmacy, banks, accessible sidewalks, transit stops, etc.) and outdoor recreational amenities (e.g., wheelchair accessible paths, public parks, etc.). Lastly, there must be ease of navigation, ideally accommodating people with a broad range of disabilities. For example, wayfinding systems throughout the sidewalks and parking lots using different materials can assist people with vision impairment in finding the correct way into a building. (Elements of locational equity are even more important for mobility-challenged residents.)

- The most important accessible element for the common space of residential buildings such as apartments and condominiums is clear floor space. Clear floor spaces allow for more turning space, which is helpful for people using mobility devices, which need to enter, turn around in, and exit rooms clear of furniture and door swings. Automatic doors should be installed in communal entries and exits, restrooms, and possibly even in resident spaces.

- Accessible units must meet the federal ADA requirements for adaptability (ADA 809.2). This includes the ability to retrofit a unit with such features as in-wall backing for grab bars in bathrooms, whether or not grab bars are yet installed. It is also recommended to use hard surfaced flooring instead of carpet to allow for ease of cleaning, increased durability, and lower risk of harboring allergens. Units should be laid out to ensure navigability early in the design process. Doorways should be wide enough to allow mobility devices, and hallways should be a minimum of 42 inches wide instead of the standard 36 inches.

- Another important design consideration is to eliminate the use of steps throughout the unit, especially in entrances to other rooms. If steps are to be used, there should be grab bars included to aid people with limited mobility.

- Kitchens should be L-shaped or straight-run instead of galley or U-shaped to allow for more flexibility and maneuverability in the kitchen, and specific appliance designs are recommended. Bathroom design should include textured, non-slip flooring as people with mobility aids or other instability are more likely to slip on a wet bathroom floor. Grab bars should be placed near toilets, in showers, tubs, etc. Including roll-in showers for people with wheelchairs is also recommended with handheld showerheads alongside a wall-mounted showerheads.

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[7] Many of the accessibility design standards discussed in this section come from recommendations by The Kelsey, a non-profit agency specializing in affordable accessible housing development, and specifically "Design Standards for Accessibility and Inclusion, First Edition," thekelsey.org/learn-center/design-standards/

- Units should be designed to cater to as many disabilities as possible, so that they might simultaneously have improvements for vision-impaired residents, and also wheelchair bound residents, so the unit is adaptable for current and future needs.

Accessible Housing Needs: The estimated need for accessible units is included in the quantified estimates of housing need presented below. These units should be considered a subset within the total housing need and can take the form of any of the full range of housing types. Applying the estimated prevalence of disabilities among the population (12%) to the projected number of new housing units would suggest that **roughly 1,190 of the new housing units should be accessible**.

D.   HOUSING AFFORDABILITY

For this analysis, it was assumed that households in lower income bands need housing costs to be no more than 30% of gross income (a common measure of affordability[8]). It is assumed that higher income households pay a decreasing share of their gross income towards housing costs, down to 20% for the highest income households, as confirmed by Census data (Table B25106, ACS).

While the Census estimates that most low-income households pay more than 30% of their income for housing, this analysis intends to establish an estimate of housing *need*. It assumes that low-income households need units that are affordable at no more than 30% of their income, rather than units that represent a cost burden.

Figure 2.4 presents an estimate of the projected profile of new units (9,887) over the next 20 years, broken down by the estimated number of households in the major affordability income bands, as defined by Oregon Housing and Community Services (OHCS) for households in Washington County. This applies the OHCS rates to the average local household size of 2.4 persons and presents figures in current 2022 dollars. These income bands are updated annually and used to determine eligibility for various state and federal housing programs and set the allowable rent levels for this program. It is important to note that the median income level in Washington County on which these income levels are based is higher than the estimated median income in Beaverton.

For reference, and for the purposes of addressing state requirements for a Goal 10 HNA, the table includes all income levels including middle- and upper-income households. However, most housing programs and strategies are aimed at those designated "low income" or less, meaning households that earn less than 80% of the Area Median Income (AMI). In addition, all households earning more than 120% AMI have been categorized here as upper income, with more stratification in the lower income ranges reflecting an emphasis on housing needs for lower income ranges.

Households that earn less than 80% of the Area Median Income (AMI) make up an estimated 32% of the projected new local households, but 40% of renter households. An estimated 21% of new households are projected to earn "very low income" or lower, and an estimated 14% or nearly 1,350 households are estimated to be extremely low income. These estimates are based on the estimated distribution of future households by income band presented in Figure 1.3.

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[8] Spending 30% or less on housing costs is a common measure of "affordability" used by U.S. Department of Housing and Urban Development (HUD) and others, and in the analysis presented in this report. Housing costs include rent or mortgage payment, utilities, insurance, and taxes if applicable.

As with the population and household projections presented in Section VI, the figures presented in Figure 2.4 should be considered rough estimates, or order of magnitude predictions, despite the apparent precision implied by the HNA methodology.

FIGURE 2.4: ESTIMATE OF NEW 20-YEAR HOUSING BY AFFORDABILITY LEVEL (2042)

Household Income Segment		Income Level (Rounded)	Afford. Rent Range	Afford. Home Price Range	Owner Units	Renter Units	Total Units	Share of Units
Upper Income	> 120% AMI	> $107,000	$2,200 +	$475k +	2,412	1,109	3,522	36%
Middle Income	80% - 120% AMI	$71.5k - $107k	$1,700-$2,200	$350k-$475k	1,526	1,685	3,211	32%
Low Income	50% - 80% AMI	$45k - $71.5k	$1,200-$1,700	$225k-$350k	533	603	1,136	11%
Very Low Income	30% - 50% AMI	$27k - $45k	$800-$1,200	$150k-$225k	299	369	668	7%
Extremely Low Inc.	< 30% AMI	< $27,000	<$800	<$150k	453	896	1,349	14%
TOTAL:					*5,223*	*4,663*	*9,887*	*100%*

Sources: OHCS, Census, Claritas, JOHNSON ECONOMICS

- Single-detached homes, townhomes, accessory dwelling units, duplexes, triplexes, quadplexes, housing with five-plus units (apartments, condominiums, cottage clusters), and manufactured home parks can theoretically provide adequate housing to all income levels. This is especially true because (aside from condominiums) the units can be either rental or homeownership units. All housing types would be found at a variety of sizes, configurations, and locations. They also are or will be present in Beaverton at different ages and conditions, with newer units or well-maintained units generally being more expensive and older units or units with deferred maintenance being available at lower price points. In addition, income support, rental assistance, or other available resources can make it possible for households with lower household income to inhabit housing types not typically considered housing that low-income households inhabit.
- Manufactured home parks tend to fulfill housing needs at lower income levels for both owners and renters. Mobile homes often represent some of the lowest-cost home ownership opportunities available in a community. Modern manufactured homes, built for placement on individual lots, have improved in quality over decades but can still be delivered at a lower price point than a home built on site.
- Government-subsidized housing tends to fulfill housing needs at the very lowest income levels. HUD programs such as public housing and Housing Choice Vouchers can serve those with little or no income, including those earning less than 30% AMI. Other types of affordable housing, such as tax credit units provided by non-profit housing developers, are often offered

to those with 50% or 60% of AMI, who are generally working class and not the extremely low income.

E.   PROJECTED NEW HOUSING UNITS BY TYPE AND TENURE

This section presents the forecasted number of new housing units to accommodate new households, with a recommended distribution of housing types. For the purposes of an HNA, this estimate includes all of the new units for households across the income spectrum. This forecast aims to integrate the equity needs discussed above via anticipating a shift in new housing need that differs from the current profile of housing found in Beaverton in 2022.

In general, this forecast calls for increased development of "middle housing" types, including single-attached housing, duplexes, triplexes, and fourplexes, and a diminished share of new single-detached homes to accommodate the forecasted households.

This forecast also reflects the need to increase homeownership opportunities for historically under-represented populations and lower-income households in general. Black, Indigenous, and People of Color households generally have much lower wealth. Most housing types can be ownership units.

To achieve greater homeownership equity going forward, a greater share of the projected 9,887 new units is forecasted to be ownership units (53%), and fewer to be rental units (47%). This means a forecast of roughly 5,200 new ownership units, and 4,700 new rental units (Figure 2.5).

FIGURE 2.5: ESTIMATE OF 20-YEAR HOUSING BY TENURE AND HOUSING TYPE (2042)

OWNERSHIP HOUSING								
Unit Type:	Single-Detached	Middle Housing			5+ Units MFR	Manuf. home	Total Units	% of Units
		Townhome	Duplex	3- or 4-plex				
Totals:	2,619	1,052	287	423	581	261	5,223	52.8%
Percentage:	50.1%	20.2%	5.5%	8.1%	11.1%	5.0%	100%	

RENTAL HOUSING								
Unit Type:	Single-Detached	Middle Housing			5+ Units MFR	Manuf. home	Total Units	% of Units
		Townhome	Duplex	3- or 4-plex				
Totals:	74	557	439	791	2,634	169	4,663	47.2%
Percentage:	1.6%	11.9%	9.4%	17.0%	56.5%	3.6%	100%	

TOTAL HOUSING UNITS								
Unit Type:	Single-Detached	Middle Housing			5+ Units MFR	Manuf. home	Total Units	% of Units
		Townhome	Duplex	3- or 4-plex				
Totals:	2,692	1,609	727	1,214	3,215	429	**9,887**	**100%**
Percentage:	27.2%	16.3%	7.3%	12.3%	32.5%	4.3%	100%	

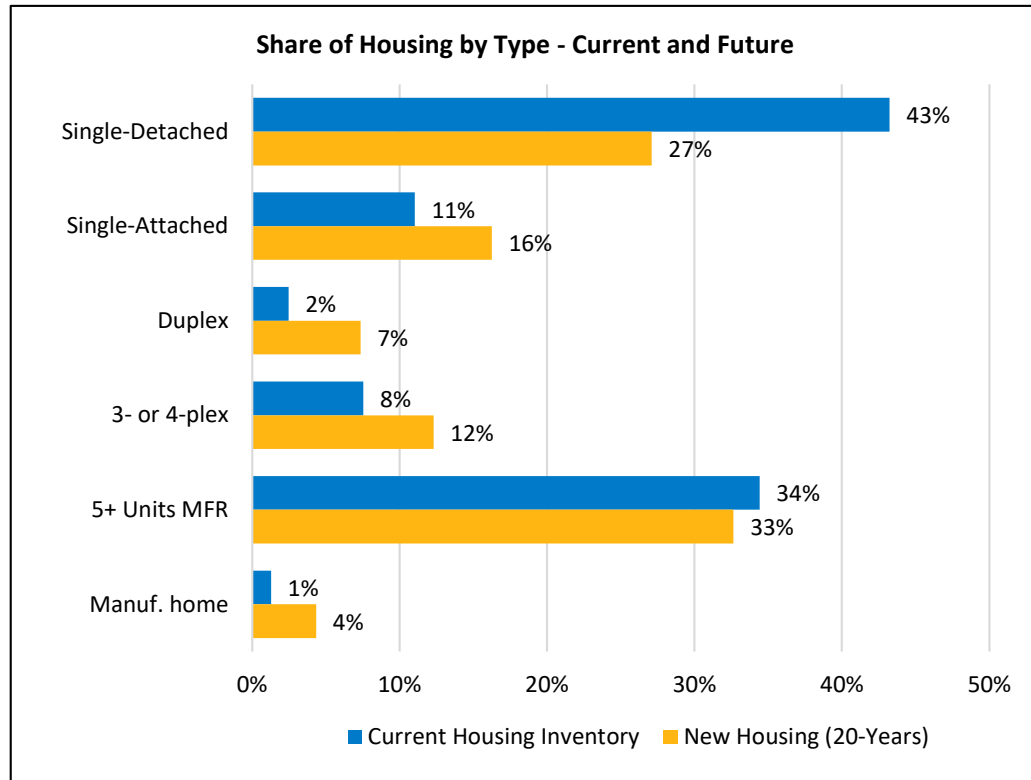Sources: Census, City of Beaverton, Johnson Economics

* Units are as defined in the Beaverton Development Code:

The estimates presented in Figure 2.5 take as a starting point the distribution of units permitted in Beaverton since 2000, from Census and City data. From that starting point, the share of new units forecasted to be the needed middle housing types (single-attached, duplex, tri- or four-plex, manufactured homes) is assumed to make up a larger share of units built going forward because middle housing types are now allowed in most of the city, and middle housing is an emphasis in the Cooper Mountain Plan as well.

- For these reasons, this forecast applied an assumption that, among future units, the share of middle housing types would increase by 15% over the current distribution.

- This increase is balanced mostly by a decline in the share of single-detached units, from roughly 40% of recent permits, to 27%.

- Ownership units are currently estimated to be 73% single-detached units. This forecast anticipates this share falling to 50% of ownership units, with an increased share in all other housing types, including multi-dwelling units (i.e. condominiums). Renter units are currently 14% single-detached, which is forecast to fall to under 2% of new units.

- The share of larger complexes (5+ units) is projected to fall within the new rental inventory, as more middle housing rentals are added. But properties of 5+ units are forecast to increase in the ownership inventory, as additional smaller, and lower cost homeownership opportunities such as condos, will be needed.

- Renters are expected to rent more types of middle housing, which tend to offer larger units for large households compared to apartment buildings. Middle housing might also provide greater locational equity between renters and owners by adding these units in traditional low-density, single-family neighborhoods. The share of renters in larger multi-dwelling properties is forecast to fall somewhat, from 63% to 57%, reflecting this shift.

- The share of manufactured homes within manufactured home parks[9] is expected to grow as this is an important source of both ownership and rental housing at lower price points. Particularly for low-income homeowners, this is often one of the lowest cost buying opportunities. The share of manufactured homes is assumed to grow by roughly 3% over the existing share.

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[9] Individual manufactured homes on standard lots are a subset of single detached units.

FIGURE 2.6: COMPARISON OF EXISTING DISTRIBUTION OF HOUSING TYPES (2022), AND FORECAST OF NEW UNITS BETWEEN 2022 AND 2042

Share of Housing by Type - Current and Future

Single-Detached: 43% (Current Housing Inventory), 27% (New Housing 20-Years)
Single-Attached: 11% (Current Housing Inventory), 16% (New Housing 20-Years)
Duplex: 2% (Current Housing Inventory), 7% (New Housing 20-Years)
3- or 4-plex: 8% (Current Housing Inventory), 12% (New Housing 20-Years)
5+ Units MFR: 34% (Current Housing Inventory), 33% (New Housing 20-Years)
Manuf. home: 1% (Current Housing Inventory), 4% (New Housing 20-Years)

■ Current Housing Inventory   ■ New Housing (20-Years)

Sources: Census, City of Beaverton, JOHNSON ECONOMICS

Figure 2.6 shows the difference between the current distribution of housing in Beaverton, and the forecasted distribution of new units between 2022 and 2042. Overall, the middle housing types are forecast to make up a combined 36% of new units, with multi-dwelling units representing an additional 33%. The share of needed manufactured homes is forecast to grow to meet the needs of low-income owners and renters. The diminished share of single-detached homes includes housing at all price points, including modest starter homes, smaller lot developments, and other lower-cost options.

The forecast of new 20-year housing will help inform the subsequent steps of the Housing Beaverton Project, including comparison to the remaining inventory of buildable residential land, and formulation of strategies and tools to facilitate and encourage development of the needed housing.

Source: Sequoia Equities

HOUSING BEAVERTON PROJECT

APPENDIX D
COMPARISON OF HOUSING NEED & LAND

March 2023

INTRODUCTION

This analysis is undertaken as part of the Housing Beaverton Project, a comprehensive study of housing needs, buildable lands, and potential policies and strategies to address current and future housing in the Beaverton community. This report is one of a series of reports of background data and analysis. Not all data and context are included in each report and therefore the analysis may refer to other products from this project.

This report presents a comparison of projected 20-year housing needs within the City of Beaverton (Appendix C), with the inventory of remaining buildable land within the City. This analysis places a strong emphasis on equitable outcomes for the community's current and future residents.

I. RECONCILIATION OF PROJECTED HOUSING & LAND SUPPLY - 2042

A. BUILDABLE LANDS INVENTORY

This section summarizes the results of the Buildable Lands Inventory (BLI), which is presented in detail in an accompanying memo to this report. The BLI provides an estimate of the remaining buildable residential lands within the city boundary, and an estimate of the capacity to accommodate new housing units.

The following table (Figure 1.1) presents the estimated new unit capacity of the buildable lands identified in the City of Beaverton. The table details the remaining land inventory by the City's zoning designations, including the residential zones, mixed use zones, and recent planning areas in the Cooper Mountain area. The inventory includes buildable acreage for vacant and partially vacant parcels.

- There is a total estimated remaining capacity of 14,987 units of different types within the study area.

- The City's current residential zones have a remaining capacity for 5,538 housing units of a range of types including low, medium, and high density.[1] This is 36% of the total estimated capacity.

- The City's mixed-use zones include a list of 14 designations, including multiple use districts in station areas, the regional center, and some commercial areas. These zones have an estimated capacity of 1,245 housing units, or 8% of available capacity. (Development of mixed-use zones is highly variable due to the range of uses allowed to the property owner, including non-residential uses. See BLI report for more information on assumptions.)

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[1] In this analysis, low-density residential (LDR) is defined as housing density of less than 8 units/net acre. Medium-density residential (MDR) is defined as supporting average density between 8 and 16 units/net acre. High-density residential (HDR) is defined as supporting average density of greater than 16 units/net acre. *These zoning categories do not correspond exactly to how they are defined in the City zoning code.* See additional discussion in this section (below).

- The Cooper Mountain and South Cooper Mountain plan areas have capacity for an additional 5,000 and 3,384 units of housing respectively, which is a combined 56% the estimated available capacity.

- According to the BLI report, Cooper Mountain is planned to have a mix of roughly 43% Single Detached, 26% Attached/ Middle Housing, and 30% Multi-dwelling units. (This assumption is applied in this analysis to estimate the breakdown of future units in these areas.)

- Figure 1.4 at the end of this section presents a map of Beaverton by major land use category.

FIGURE 1.1: ESTIMATED BUILDABLE LANDS CAPACITY BY ACREAGE AND NO. OF UNITS (2022)

Zone	Vacant and Partially Vacant Taxlots	Net Buildable Acres	Estimated Residential Density	Estimated Unit Capacity	Middle Hsg. Infill (3% of Existing Units)	TOTAL Unit Capacity
MR - Multi-Unit Residential	23	28.3	35	990	-	990
RMA - Residential Mixed A	116	29.0	17	493	260	753
RMB - Residential Mixed B	470	89.5	10	895	264	1,159
RMC - Residential Mixed C	1,630	301.3	7	2,172	277	2,449
County Designation	2	1.5	4	6	-	6
Residential Zones Total:	**2,241**	**449.6**	**10**	**4,556**	**802**	**5,358**
Mixed Use Zones	118	123.7	10	1,245	NA	1,245
Cooper Mountain Community Plan		1,240.0		5,000		5,000
South Cooper Mountain		464.0		3,384		3,384
GRAND TOTAL ALL ZONES:	**2,359**	**2,277**	**-**	**14,185**	**802**	**14,987**

Source: Beaverton Buildable Lands Inventory (2022), MIG/APG

B.   20-YEAR HOUSING GROWTH VS. REMAINING BUILDABLE LAND

The following table summarizes the forecasted housing to accommodate the next 20 years of growth in Beaverton. These are the results from Appendix C, re-presented here for reference.

FIGURE 1.2: SUMMARY OF FORECASTED HOUSING UNIT SUPPLY (2022-2042)

Unit Type:	Single-Detached	Middle Housing			5+ Units MFR	Manuf. home	Total Units	% of Units
		Townhome	Duplex	3- or 4-plex				
Totals:	2,692	1,609	727	1,214	3,215	429	**9,887**	**100%**
Percentage:	27.2%	16.3%	7.3%	12.3%	32.5%	4.3%	100%	

New Units Needed

Housing Unit Type	Housing Units
Single Detached	2,692
Townhomes	1,609
2 - 4 Units	1,941
5 or More Units	3,215
Manufactured Homes	429
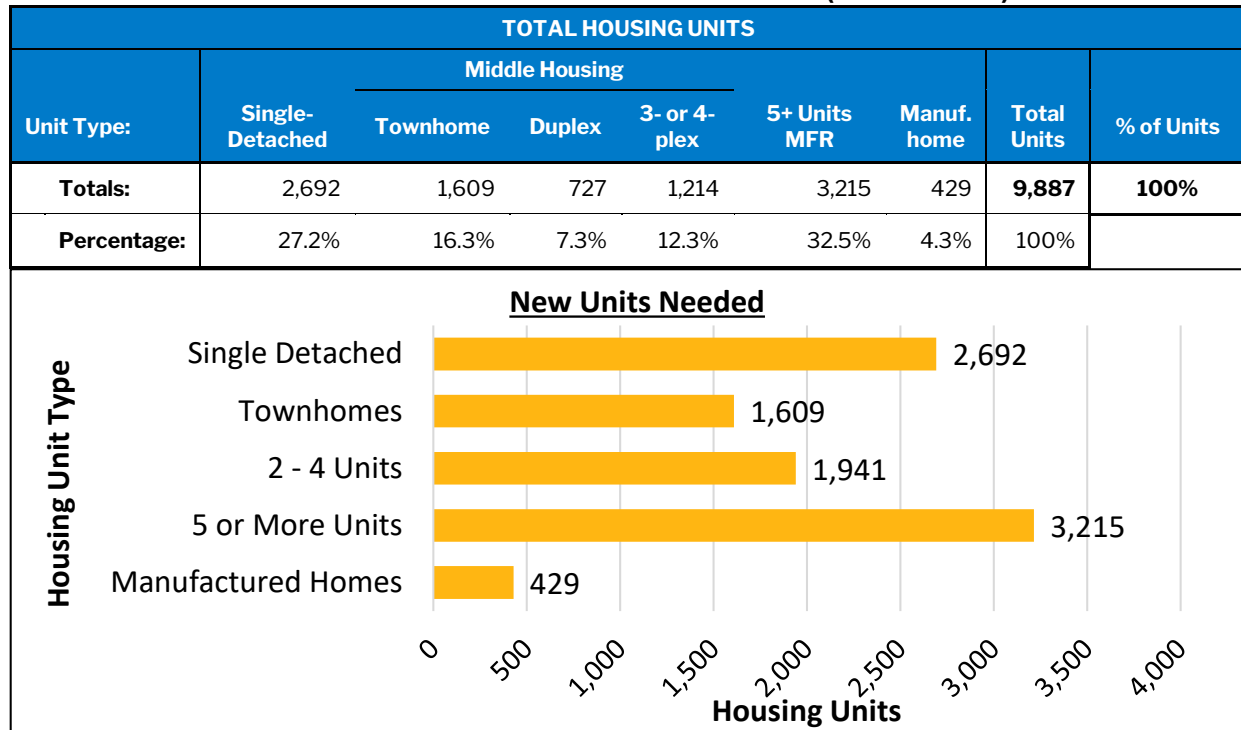
Sources: Census, Metro, City of Beaverton, Johnson Economics

The forecasted growth in local households over the next 20 years calls for nearly 9,900 new units to accommodate them. This is lower than the estimated total capacity of 14,987 units. Figure 1.3 below presents a comparison of the BLI capacity for new housing units, compared to the estimate for new unit need by 2042.

- This analysis breaks down need by general zoning category (low-density, medium-density, and high-density residential). In this analysis, low-density residential (LDR) is defined as housing density of less than 8 units/net acre. Medium-density residential (MDR) is defined as supporting average density between 8 and 16 units/net acre. High-density residential (HDR) is defined as supporting average density of greater than 16 units/net acre. (These density ranges are recommended by the voluntary housing types and density guidelines defined in the Simplified Urban Growth Boundary Method laid out in Oregon OAR 660-038-0040 and -0060, and reflecting the anticipated impacts from HB2001 on housing types in low density zones.)

FIGURE 1.3: COMPARISON OF HOUSING GROWTH (2022-2042) WITH LAND CAPACITY

WITHIN CITY LIMITS		SUPPLY		DEMAND		
		Land Inventory (Total)		Growth Rate (0.93%)		
Zoning Category	Typical Housing Type	Unit Capacity	Avg. Density (units/ac)	New Unit Need (2042)	Surplus	
					Units	Acres
Low-Density	Single-family detached; Some Townhomes & plex	5,783	7.0	2,779	3,004	429
Med-Density	SF attached; Manufact. home; 2-4 Plexes	5,122	10.0	3,892	1,230	123
High-Density	Multi-family apartments	4,082	30.0	3,215	867	29
	TOTALS:	*14,987*	*10.2*	*9,887*	*5,100*	*581*

Sources: MIG/APG, Johnson Economics

- The results find sufficient capacity for housing at all densities to accommodate the 20-year growth forecast. However, the surplus of land capacity for low-density housing is estimated to be larger than the surplus capacity for medium-density or high-density housing.

- The total excess available capacity is estimated to be 5,100 units above the forecasted 20-year growth, with a surplus of 581 acres of residential land, assuming average densities listed in Figure 1.3.
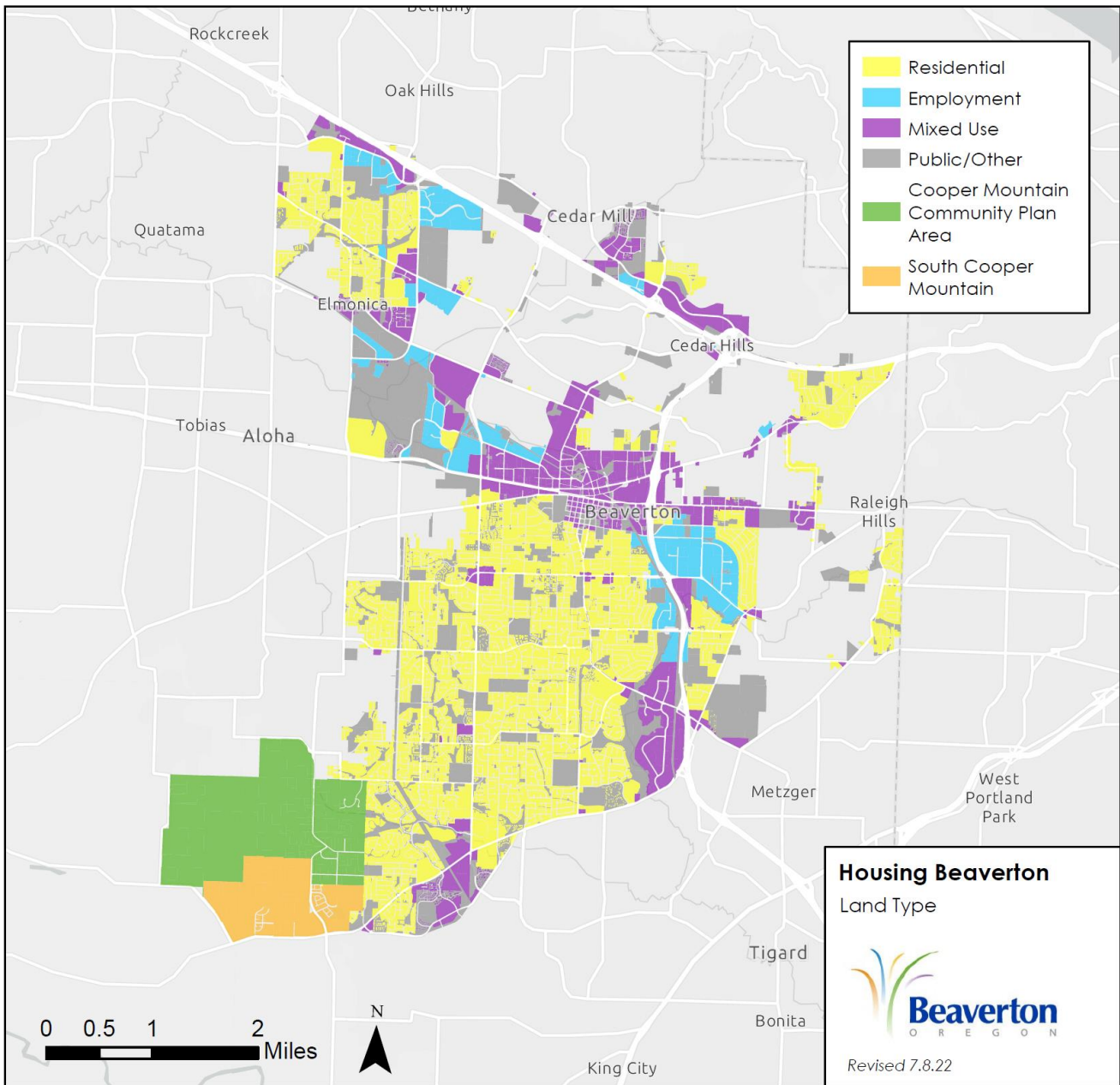
Source: Beaverton Buildable Lands Inventory (2022), MIG/APG

memo

to   Housing Beaverton Project Team

from   Kate Rogers and Matt Hastie, MIG|APG

re   Housing Beaverton Project

       Measures to Accommodate Needed Housing – Task 5

date   April 10, 2023

Introduction

The purpose of this memorandum is to identify options for changes to the City of Beaverton Development Code (BDC) to address housing and residential land needs identified as part of the Housing Beaverton Project—including the Current and Future Housing Needs Projections findings and various engagement activities. City of Beaverton staff provided direction to the project team to focus on the following key housing needs and sections of the BDC:

- Multiple Use Zones
- Accessible Housing
- Multigenerational Housing

City staff's direction is further identified below, followed by results of the project team's research and recommendations for potential code changes.

Multiple Use Zones

City Direction:

- **Purpose:** City staff are aware that Beaverton's multiple-use zones have provisions that can prevent more intense, mixed-use development, possibly including low maximum floor-area ratios, low maximum heights, and excessive setbacks.
- **City direction:** Identify issues with Beaverton's multiple use zones in encouraging needed housing, including multi-dwelling/apartments and condominiums. Identify strategies for how to get more apartments/multi-dwelling housing. Include examples from other cities in Oregon, including suburban cities, or cities in other states that have clear and objective standards that would work in the Oregon context.
- **Considerations:** The Better Red Project, led by Tri-Met, will include analysis of Beaverton's mixed-use zones, but city staff have not been updated about the timeline.

RESEARCH AND FINDINGS

BDC ANALYSIS:

The City of Beaverton has 14 Multiple Use Zones (including in the Downtown Design District). The following Multiple Use Zones allow residential uses:

1. RC-BC Beaverton Central
2. RC-OT Old Town
3. RC-MU Mixed Use
4. RC- DT Downtown Transition
5. RC-E Downtown Regional Center - East District
6. OI-WS Washington Square Regional Center Office Industrial District
7. C-WS Washington Square Regional Center Commercial District
8. TC-MU Town Center Multiple Use District
9. TC-HDR Town Center High Density Residential District
10. SC-MU Station Community Multiple Use District
11. SC-HDR Station Community High Density Residential District
12. SC-S Station Community Sunset District

Table 1 below presents a summary of the land use and development standards that apply to residential uses (specifically, multi-dwellings) in these Multiple Use Zones.

Table 1. Summary of Beaverton's Multiple Use Zone Standards

Zone	Standalone Multi-Dwelling Allowed?	Max. Building Height	Max. Density (Applies to residential-only projects.)	Max. FAR (Applies to mixed-use only.)	Min. Setback
RC-BC Beaverton Central	Yes	120'	None	None	• Front, Street side/rear: with ground-floor residential 6'; without 0' • Interior side/rear: 0' • Abutting property zoned residential and/or RC-DT: 10' side, 20' rear
RC-OT Old Town	Yes	60'	None	None	• Front, Street side/rear: with ground-floor residential 6'; without 0' • Interior side/rear: 0' • Abutting property zoned residential and/or RC-DT: 10' side, 10' rear
RC-MU Mixed Use	Yes	75' (up to 120' allowed with discretionary review)	None	None	• Same as RC-BC
RC- DT Downtown Transition	Yes	60'	60 du/ac	None	• Front, Street side/rear: with ground-floor residential 10'; without 0' • Interior side/rear: 0' • Abutting property zoned residential: 10' side, 20' rear
RC-E Downtown Regional Center - East District	Yes	80'	40 du/ac	Up to 1.70, if 80% or more of floor area is residential.	• Front, Side, Rear: None • Side/Rear abutting Residential zone: 20'
OI-WS Washington Square Regional	Only permitted above a non-	60'	-	None	• Front: 10'

Zone	Standalone Multi-Dwelling Allowed?	Max. Building Height	Max. Density (Applies to residential-only projects.)	Max. FAR (Applies to mixed-use only.)	Min. Setback
Center Office Industrial District	residential use; at least 15% of ground-floor must be commercial space with street frontage.				• Side: 10' • Rear: None • Side/Rear abutting Residential zone: 75' if property is developed with residential, otherwise 20'
C-WS Washington Square Regional Center Commercial District	Only permitted above a non-residential use (same as OI-WS)	60' (for res. above commercial)	-	None	• Front: None • Side: 10' • Side/Rear abutting Residential zone: 20'
TC-MU Town Center Multiple Use District	Yes PUD required for phased projects or sites >5 acres	60'	40 du/ac	1.00	• Front, Side, Rear: None • Side/Rear abutting Residential zone: 20'
TC-HDR Town Center High Density Residential District	Yes PUD required for phased projects or sites >5 acres	50'	36 du/ac	0.60	• Front, Side, Rear: None • Side/Rear abutting Residential zone: 20'
SC-MU Station Community Multiple Use District	Yes	100' for sites within 1,320' of LRT station; 60' beyond 1,320' Within 50' of a residentially zoned property: max. height of abutting district	None	2.00 within 1,320 feet of LRT station platform, 1.00 beyond 1,320 feet	• Front, Side, Rear: None • Side or rear yards abutting residential shall equal the abutting district's rear yard setback.

Zone	Standalone Multi-Dwelling Allowed?	Max. Building Height	Max. Density (Applies to residential-only projects.)	Max. FAR (Applies to mixed-use only.)	Min. Setback
SC-HDR Station Community High Density Residential District	Yes	100' for sites within 400' of LRT station; 60' beyond 400'	None Except within 120 feet of Washington County R5 zoning, the maximum residential density is 12 units per acre	1.20 within 400 feet of LRT station platform, 1.00 beyond 400 feet	• Front, Side, Rear: None • Side or rear yards: Same note as SC-MU
SC-S Station Community Sunset District	Yes PUD is required	120'	None	None	• Front, Side, Rear: None • Side/Rear abutting Residential zone: 20'

NOTES AND DISCUSSION

Use Permissions

- Most MU zones allow both standalone multi-dwelling structures and mixed-use residential buildings.
- Ground-floor residential uses are not permitted in the OI-WS and C-WS zones; residential is only permitted on the second story and above. However, the Purpose statements for these zones indicate that the focus of these zones is on office, employment, and commercial uses, rather than residential uses.
- Planned Unit Development (PUD) review is required in the SC-S zone. This conflicts with ORS 197.307(4), which requires clear and objective standards for housing, because PUD is a discretionary review and there is no clear and objective review path for housing in the SC-S zone.
- Recommendation: Remove the requirement for PUD review for the SC-S zone. The City of Beaverton recently updated its PUD provisions for the South Cooper Mountain Community Plan Area to no longer require PUD within that area.

Maximum Density

Residential density (for residential-only development) is limited in the following Multiple Use Zones:

- RC-DT – 60 units/acre
- RC-E and TC-MU – 40 units/acre
- TC-HDR – 36 units/acre
- SC-HDR – None, except density is limited to 12 units/acre within 120 ft of the Washington County R-5 zone. Note, however, that this only appears to apply in one or two limited areas that are already developed.

In all other Multiple Use Zones, residential density is not limited. Further, density is not limited for residential uses that are part of a mixed-use development.

The density allowance of 60 units/acre in the RC-DT zone may result in buildings of up to 4 or 5 stories.[1] The density allowances of 36-40 units/acre in the RC-E, TC-MU, and TC-HDR zones may result in housing that falls somewhere between garden apartments and taller podium structures. In the RC-E zone, the maximum height allowance is 80 feet, which may not be achievable with a density of 40 units/acre; however, mixed-use residential would not be subject to maximum density and could be built up to 80 feet.

Maximum Floor Area Ratio (FAR) and Building Height

FAR only applies to residential uses when they are part of a mixed-use development—either in the same building or on the same site. Standalone multi-dwelling developments will only be subject to maximum density (if applicable in the zone), not maximum FAR.

Many of Beaverton's Multiple Use Zones do not limit FAR. The following zones do apply maximum FAR standards:

- RC-E

---

[1] https://jhparch.com/density

- o   Up to 1.70 FAR, if 80% or more of floor area is residential. (Lower maximum FAR applies if there is less residential floor area, per BDC 20.25.20.)
  - o   Maximum height is 80 ft.
- TC-MU
  - o   Max. FAR is 1.00
  - o   Max. height is 60 ft.
- TC-HDR
  - o   Max. FAR is 0.60
  - o   Max. height is 50 ft.
- SC-MU
  - o   Max. FAR is 2.00 within 1,320 feet of LRT station platform (max. height 100 ft)
  - o   1.00 beyond 1,320 feet (max. height 60 ft).
- SC-HDR
  - o   Max. FAR is 1.20 within 400 feet of LRT station platform (max. height 100 ft)
  - o   1.00 beyond 400 feet (max height 60 ft)

The TC-HDR zone stands out as having a fairly low FAR limit (0.60) for a mixed-use zone. If a building were to be constructed up to the maximum height (50 feet—likely 4 stories), the structure would only be allowed to cover 15% of the site. Even a 2-story building would only be allowed to occupy 30% of a site area.

Similarly, in the TC-MU zone where maximum FAR is 1.00—to meet the maximum height of 60 feet (i.e., 5 stories), a building could only cover 20% of the site. The same calculations apply in the SC-MU and SC-HDR zones in areas farther from an LRT station.

Lessons from Example Codes

There are various ways of regulating density and building bulk in mixed-use zones, as summarized in Tables 2 – 4 on the next pages. The City of Portland (Table 2) relies on maximum FAR and does not limit residential density in its Commercial/Mixed Use zones. However, Portland's FAR limits are generally higher than Beaverton's—especially when bonuses for things such as inclusionary housing and affordable commercial space are factored in—even though their height limits are comparable in the CM2 and CM3 zones. Hillsboro (Table 3) does not limit FAR, and only limits maximum density in certain lower-intensity zones. In most of Hillsboro's Urban Center zones (which implement the Amberglen Plan District), neither height nor density applies; instead, height and bulk of taller buildings is regulated by bulk plane angles to limit the height of buildings at the perimeter of the site. The City of Gresham (Table 4) limits residential density in some of its Corridor and Civic Neighborhood zones, but only limits FAR in its lower-intensity Civic Neighborhood Residential Mid-Rise zone, and exempts residential-only development.

> **Recommendations – Density and FAR:**
>
> One approach would be to remove density limitations, and to allow form based controls such as FAR and building height to control. This may better enable higher-density developments with smaller dwelling units, which could fit into the same size building as a development with fewer, larger units. Also, FAR limits should be increased in some zones to achieve built outcomes that are consistent with the City's goals for the Multiple Use zones.
>
> As an alternative, the City could consider discounting smaller units in their density calculations—for example, allowing units under 750 sq. ft. to count as less than one dwelling unit for the purpose of calculating density. This is something the City should consider more broadly than just in the Multiple Use Zones.
>
> In lieu of the changes suggested above, consider the following:
>
> - RC-E zone:
>   - Consider increasing density allowances for standalone multi-dwelling developments to 50 or 60 units/acre.
>   - Consider increasing the maximum FAR limits to allow up to 2.50 or 3.00 FAR.
> - TC-MU and TC-HDR zones:
>   - Consider increasing density allowances for standalone multi-dwelling developments to 50 units/acre.
>   - Consider allowing residential uses that are part of mixed-use development to exceed the maximum FAR—or scale the FAR allowance in a similar manner as in the RC-E zone.
> - SC-MU and SC-HDR:
>   - Consider allowing residential uses that are part of mixed-use development to exceed the maximum FAR—or scale the FAR allowance in a similar manner as in the RC-E zone.

Minimum Setbacks

Front Setbacks. Most of Beaverton's Multiple Use Zones have no front setback requirements; however, the Downtown zones (RC-BC, RC-OT, RC-MU, RC-DT) require minimum setbacks of 6 to 10 feet for buildings with ground-floor residential. This is presumably intended to provide some additional privacy for ground-floor residents. Non-residential and mixed-use buildings have no minimum setback. Looking at the example codes, Hillsboro generally requires no front setback in its mixed-use zones. Portland similarly has no minimum front setback for Commercial/Mixed Use zones, except requires 5- to 10-foot setbacks when across the street from a residential zone. Gresham, however, is similar to Beaverton in requiring 5-foot front setbacks in most Corridor/Civic Neighborhood zones.

Abutting Residential Zones. In most of Beaverton's MU zones, there is a 10- to 20-foot side or rear setback when abutting a residential zone. This is presumably intended to provide some buffer space between higher-intensity development in MU zones and lower-intensity housing in the residential zones. Note, however, that this additional setback applies regardless of which residential zone the property is abutting. For example, it could be abutting the Multi-Unit Residential (MR) zone, which allows up to 60 feet in building height and density of up to 33 units per gross acre.

Portland takes a similar approach as Beaverton, requiring 10-foot setbacks for interior (side/rear) lot lines abutting residential zone. Hillsboro tends to require 5-foot side and 10-foot rear setbacks for residential development, regardless of the adjacent zoning. Gresham takes a similar approach.

> ### Recommendations – Setbacks:
>
> Beaverton's setback standards to not appear to present significant barriers to housing development. However, if the desire is to relax setback standards somewhat, the City could consider removing minimum front setbacks for ground-floor residential uses in the Downtown zones.
>
> The City could also consider reducing the extra side/rear setback (say, from 20' to 10') when the MU site is adjacent to the MR zone, as opposed to RMA, RMB, or RMC.

Off-Street Parking

Off-street parking requirements can pose a barrier to higher-density development. The BDC requires one parking space per unit in most Multiple Use zones—except in Parking District 1 of the Regional Center zones, 0.75 spaces per unit is required. The state's Climate Friendly and Equitable Communities (CFEC) administrative rules will require the City to remove parking mandates for sites near frequent transit corridors, small units under 750 SF, affordable housing, and certain other dwelling unit types. The rules regarding parking near transit will likely affect several of Beaverton's MU zones. Therefore, further parking reductions may not be warranted. However, we recommend the City reassess its parking requirements for MU zones after implementing the CFEC changes to see if further reductions should be considered.

CODE EXAMPLES FROM OTHER CITIES

The following tables summarize development standards for mixed-use zones in the Cities of Portland, Hillsboro, and Gresham. These cities were selected as the most comparable and providing promising local examples for Beaverton.

Table 2. Portland's Mixed Use Zones (PZC 33.130)

Zone	Standalone Multi-Dwelling Allowed?	Max. Height	Max. FAR	Max. Density	Min. Setbacks
CM1 Commercial/ Mixed Use 1	Yes	35'	1.50 (up to 2.5 with bonuses)	None	• Street lot line: none • Street lot line across from residential zone: 5' or 10' (depending on building use) • Interior lot line abutting commercial/employment zones: none • Interior lot line abutting residential zone: 10'
CM2 Commercial/ Mixed Use 2	Yes	45' (up to 55' with bonuses)	2.50 (up to 4.00 with bonuses)	None	
CM3 Commercial/ Mixed Use 3	Yes	65' (up to 75' with bonuses)	3.00 (up to 5.00 with bonuses)	None	

Table 3. Hillsboro's Mixed Use Zones (CDC 12.24)

Zone	Standalone Multi-Dwelling Allowed?	Max. Height	Max. FAR	Max. Density	Min. Setbacks
MU-N Mixed-Use - Neighborhood	Yes	45'	None	11-24 du/na (fronting local/collector streets vs. arterial streets)	• Front: 10' • Side: 5' • Rear: 10' residential; 5' mixed-use
MU-C Mixed-Use - Commercial	Yes	70'	None	None	• Front: 5' res.; 0' mixed-use • Side: 5' • Rear: 10' res.; 0' mixed-use
MU-VTC Mixed-Use - Village Town Center	Yes	6 stories	None	Subject to Plan District unit maximums	• Front, Side: 0' for multi-dwelling

Zone	Standalone Multi-Dwelling Allowed?	Max. Height	Max. FAR	Max. Density	Min. Setbacks
					• Rear: 10'
SCR-V Station Community Residential - Village	Yes	3 stories	None	None if <1,300' from LRT station; 60 du/na if 1,301-2,600' from LRT; 45 du/na if >2,600' from LRT	• Front: 0' • Side: 5' res. • Rear: 10'
UC-RM Urban Center - Residential Medium Density	Yes	55'	None	43 du/na	• Front: 0' • Side: 5' • Rear: 10'
UC-MU Urban Center - Mixed-Use Urban Density	Yes	65' base height; no maximum height for tower, but subject to massing limitations	None	None	• Front: 0' • Rear: 0' (except 10' adjacent to existing bldg.)
UC-AC Urban Center - Activity Center	Yes, except ground-floor residential limited in some areas	None, but subject to massing limitations	None	None	• Front, Side, Rear: 0'
UC-NC Urban Center - Neighborhood Center	Yes, except ground-floor residential limited in some areas	65' Also subject to massing limitations	None	None	• Front: 0' • Side, Rear: 15' along street frontage shared with UC-RM zone; elsewhere none
UC-OR Urban Center - Office/Research	Yes, except ground-floor residential limited in some areas	85' Also subject to massing limitations	None	None	• Front, Side, Rear: 0'
UC-RP Urban Center - Research Park	Yes	55'	None	65 du/na	• Front, Side, Rear: 0'

Table 4. Gresham's Corridor and Civic Neighborhood Zones (4.0400)

Zone	Standalone Multi-Dwelling Allowed?	Max. Height	Max. FAR	Max. Density	Min. Setbacks
Rockwood Town Center (RTC)	Yes, except ground-floor residential limited in some areas	4 stories inside Stark/ Burnside/ 181st Ave Triangle (for mixed-use) 10 stories outside Triangle area	None	None inside Stark/ Burnside/ 181st Ave Triangle 40 du/na elsewhere	• Mixed-use: 0' front, side, rear • Residential: 5' front/ street side; 0' interior side; 15' rear
Station Centers (SC)	Yes, except ground-floor residential limited in some areas	80'	None	60 du/na	• Mixed-use: 0' front, side, rear • Residential: 5' front/ street side; 0' interior side; 15' rear
Corridor Mixed Use (CMU)	Yes	45'	None	24 du/na	• Front/street side: 5' • Interior side: 0' • Rear: 15'
Civic Neighborhood Residential Mid-Rise (CNRM)	Yes	6 stories, or 4 stories within 50 ft. of NW Wallula Ave.	0.9 for mixed-use None for residential	30 du/na	Multifamily and mixed-use: • Front: 5'-10' depending on street type • Street side: 5' • Side: 0'-5' depending on street type • Rear: 5'
Civic Neighborhood Transit Moderate Density (CNTM)	Yes	8 stories	None	None	
Civic Neighborhood Transit High Density (CNTH)	Yes	10 stories	None	None	

Accessible/Visitable Housing

City Direction:

- **Purpose:** People with disabilities are identified as a historically underserved group, and, anecdotally, we know there is a shortage of accessible housing units to meet this group's needs. To address this disparity, the city would like to better understand how current land use regulations could be changed to encourage more accessible or visitable homes.
- **City direction:** Identify options for meeting the housing needs of people with disabilities, in particular those with mobility issues. This could include regulations for visitable housing and incentives for accessible housing. Provide examples where available.

BACKGROUND

Federal Accessibility Requirements

Several federal laws have accessibility requirements for housing development:[2]

- The **Fair Housing Act** requires all new multi-family housing with four or more units to be designed and built to allow access for persons with disabilities. For buildings with an elevator, all units must be accessible. For those without an elevator, all ground floor units must be accessible.[3]
- The Architectural Barriers Act (ABA) of 1968, Title II of the ADA, and Section 504 of the Rehabilitation Act all have requirements for **public housing** projects or those receiving **federal funding.** Such developments are subject to the Uniform Federal Accessibility Standards (UFAS) or the 1991 ADA Standards, as applicable.[4,5]

All multi-dwelling developments are subject to the Fair Housing Act, and those receiving federal grants and loans (which is common for affordable housing projects) are subject to the other federal standards. However, the standards only apply to certain units in a development or to a percentage of units.

Visitability

- Visitability is a design approach for new housing that allows anyone who uses a wheelchair or other mobility device to visit the home. A visitable home typically includes:
  - A zero-step entrance
  - Wide interior doors
  - A half bathroom on the main floor
- The visitability movement targets housing units not otherwise covered by existing law:

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[2] Accessibility Requirements for Buildings, HUD. https://www.hud.gov/program_offices/fair_housing_equal_opp/disabilities/accessibilityR#:~:text=Accessibility%20Requirements%20for%20Federally%20Assisted,for%20persons%20with%20mobility%20disabilities.

[3] Disability Law Handbook, Southwest ADA Center. http://www.southwestada.org/html/publications/dlh/housing.html

[4] Accessible Housing Facilities: The ADA, FHA and Section 504. https://www.adainfo.org/wp-content/uploads/imported/5.4-Housing-Facilities-1-slide-per-page.pdf

[5] Uniform Federal Accessibility Standards (UFAS). https://www.access-board.gov/aba/ufas.html

- New single-dwelling homes, duplexes, triplexes, or townhouses (i.e., the housing types not covered by the Fair Housing Act).
- Housing not required by federal law to incorporate access features (e.g., not covered by Section 504 of the Rehabilitation Act).
- Housing intended for the open market rather than custom built for a specific buyer, such as a person with a disability.[6]
- A criticism of the recent focus on visitability is that it does not ensure fully accessible living for the occupants of a home. It is intended to benefit folks visiting the unit, but does not ensure that the bedroom, kitchen, or other living spaces are usable for those using wheelchairs or other mobility devices.

OPTIONS FOR ACCESSIBILITY/VISITABILITY CODE PROVISIONS

Development Code Incentives
The City could provide incentives in the BDC for accessible units meeting accessibility or visitability standards. There are a range of accessibility standards that could be targeted with such incentives:

- **Visitability** (as described above)
- **Universal Design** – This is a building concept that incorporates design layouts and characteristics into residences to make them usable by the greatest number of people and respond to the changing needs of the resident. Universal Design incorporates standards for features such as hallways, doorways, bathrooms, and kitchens that make these features usable for people with disabilities or adaptable for that purpose.[7]
- **Lifelong Housing Certification –** This is a program developed by the Rogue Valley Council of Governments (RVCOG) in partnership with AARP Oregon as a voluntary certification process for evaluating the accessibility and/or adaptability of homes. Residences can be certified at three levels based on the extent of their accessibility: (1) Visitable (basic accessibility for visitors); (2) Fully Accessible (accessible for a person in a wheelchair on the main floor); and (3) Enhanced Accessibility (customized for specific accessibility needs).[8]

There are a range of code incentives that the City could consider to encourage accessible/visitable housing units:

- Parking reductions
- Height bonus
- Density, lot size, or FAR bonus

    Example: The City of Portland provides bonus FAR in its Multi-Dwelling Zones when at least 25% of all the dwelling units on the site meet visitability standards (that are not already required to be accessible per the Building Code). [9]

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[6] Increasing Home Access: Designing for Visitability, AARP Public Policy Institute. https://assets.aarp.org/rgcenter/il/2008_14_access.pdf

[7] Universal Design Standards, West Virginia Housing Development Fund. https://tinyurl.com/yx63h792

[8] Lifelong Housing Program, RVCOG. https://rvcog.org/home/sds-2/lifelong-housing-program/

[9] Portland Zoning Code, Section 33.120. https://www.portland.gov/sites/default/files/code/120-md-zones_1.pdf

The City could also consider <u>financial</u> incentives for accessible housing—we expect to explore those options as part of the Housing Production Strategy.

Development Code Mandates

As an alternative to (or in addition to) providing code incentives for accessible units, certain visitability or accessibility features could be required in some types of housing development. For example:

- **Require visitable units in multi-unit development.**

  <u>Example</u>: The City of Portland requires visitability features for the following middle housing types in its Single-Dwelling Zones[10]:

  - Triplexes and Fourplexes – at least one unit must be visitable
  - Affordable Fourplexes and 5-6 plexes – at least two units must be visitable
  - Cottage Cluster – at least 33% of units in a cluster must be visitable. (This is also required for cottage clusters in Multi-Dwelling Zones. Other housing developed in Multi-Dwelling Zones is eligible for bonus FAR if visitable units are provided, as noted above.)

  Portland requires the following visitability features:

  - Visitable entrance (no stairs)
  - Visitable bathroom (specific requirements)
  - Visitable living area (200 SF)
  - Visitable doors (34 in wide)

- **Require percentage of fully accessible units in publicly-funded projects.**

  As noted above, federal accessibility standards (per the Fair Housing Act or per federal funding requirements) only apply baseline standards to certain units in a development. The City could consider applying higher accessibility standards for projects that are funded through City dollars (i.e., subsidized affordable housing). The City could apply the standards to a higher percentage of units than would be required under Section 504 of the Rehabilitation Act[11] (which required 5% of units to pro, and could require units to meet Universal Design, Lifelong Housing Certification, or similar standards.

- **Require elevators in multi-story buildings.**

  Alternatively, the City could consider requiring elevators in any multi-story buildings that are supported by the City. Currently, the Building Code only requires elevators to reach common spaces (such as exercise rooms) or units required to be accessible under federal law. Requiring elevators in one or more buildings would make all levels of that multi-dwelling building accessible for those with mobility challenges. It would also make all units "covered" units under the Fair Housing Act, meaning all units would need have accessibility features.

NOTE: Accessibility features can add to the cost of construction for a development, which can make affordable housing projects less financially feasible. Elevators, in particular, add significant cost to a project. While these requirements may provide more accessible units, they could prevent some

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[10] Portland Zoning Code, Section 33.110. https://www.portland.gov/sites/default/files/code/110-sd-zone_1.pdf
[11] Section 504 of the Rehabilitation Act requires 5% of housing units that receive federal funding to provide mobility features and 2% of units to be accessible for people with vision and hearing impairments.

affordable housing projects from being developed. As with any large cost factor in a development, the expense can become more feasible if shared across a larger building with more units.

Multigenerational Housing

City Direction:

- **Purpose:** Multigenerational households are called out in the Housing Projections as having distinct housing needs. Multigenerational living situations are also very common in communities of color, who have been historically underserved by the standard housing market.
- **City direction:** City staff acknowledge this topic is a bit complicated and may be more challenging to address through its development code requirements. There are known barriers when it comes to the Building Code (limits on the number of kitchens), the market (other housing may be more appealing to developers), and financial barriers (for people interested in building ADUs on their property), but staff is not aware of any specific Development Code issues that create a barrier to developing multigenerational housing types. Still, staff would like consultants to research this and identify strategies for encouraging multigenerational housing.

RESEARCH AND FINDINGS

MIG|APG considered the issue of removing barriers to, or encouraging, multigenerational housing from two different angles—multiple bedrooms and multiple units on one lot. These two issues are explored below.

Multiple Bedrooms

Multigenerational families that share a single dwelling unit will need more bedrooms than typical homes provide—except for very large and expensive single-detached homes. Below are possible ways to encourage dwelling units with multiple bedrooms by removing code barriers and providing incentives.

- **Modify off-street parking ratios.** Beaverton's off-street parking ratios for 2-4 plexes, townhouses, and multi-dwellings (outside of the Residential Mixed Zones and Multiple Use Zones) are scaled based on the number of bedrooms: one bedroom units require 1.25 spaces; two bedroom units require 1.50 spaces; and three or more bedroom units require 1.75 spaces. These ratios may not be so high as to pose a significant barrier to development; however, they may hinder some development of larger units that can accommodate bigger families.
  <u>Recommendation</u>: Consider applying the same off-street parking ratio to all dwelling units, consistent with parking regulations in the RM and MU zones. These changes would apply in the MR zone and in Commercial zones that allow residential uses.
- **Provide incentives for multiple bedrooms**. A direct way to encourage dwelling units with multiple bedrooms is to provide code incentives for including such units in a development. For example, the City of Portland provides an FAR bonus in its Multi-Dwelling Zones if at least 50 percent of the dwelling units on the site have at least three bedrooms and are affordable to those earning no more than 100 percent of the area median family income.[12]

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[12] PZC Section 33.120.211. https://www.portland.gov/sites/default/files/code/120-md-zones_1.pdf

Recommendation: Consider a bonus program for multi-bedroom units. This should be carefully considered with other potential bonus options for visitability/accessibility and affordability.

Multiple Units on One Lot

Multigenerational families may also benefit from occupying two or more dwelling units that are on the same lot or development site. The City of Beaverton recently made it much more feasible to construct 2-4 units on a site in the RM zones through adoption of middle housing code amendments. Below are other potential ways to enable multigenerational living arrangements in two or more dwelling units on the same lot.

- **Allow an ADU with a townhouse.** Accessory dwelling units can accommodate a range of multigenerational living arrangements and can adapt to a family's changing needs. Beaverton currently allows one ADU on a lot with a single-detached dwelling, as required by state law. The City could consider also allowing ADUs with townhouses. This is a common form of housing in certain places, such as San Francisco. A few considerations:
  - Because it goes beyond the state's requirements, the City would have more flexibility to regulate ADUs with townhouses. For example, it could further limit the size of the ADU, below the maximum 800 feet in the current code. It could also have additional requirements for where the ADU is placed; for example, the current code does not preclude an ADU from being constructed in front of the primary dwelling. The City could also require off-street parking for the unit, if parking is a concern.
  - Example: The City of Hillsboro allows ADUs with townhouses. The units are subject to the same standards regardless of whether they are accessory to a single-detached dwelling or townhouse.[13]
- **Legalize alternative housing types on wheels.** Many smaller housing formats are built on wheels, including tiny homes on wheels (THOWs), park model homes, and recreational vehicles (RVs). Many local codes (including Beaverton's) classify THOWs and park model homes as RVs and prohibit siting these housing types outside of manufactured home and RV parks.

  THOWs are typically lower in cost than homes constructed on a foundation and their mobility makes them more adaptable to changing household needs. These are both advantages to multigenerational living. Permitting these housing types, with appropriate siting standards to ensure adequate public facilities access and life/safety, can provide additional permanent or interim housing options outside of manufactured home/RV parks.

  Examples:

  - The City of Portland recently updated its City Code to allow permanent occupancy of THOWs and RVs on a lot with an existing home. THOWs and RVs continue to be classified as vehicles in the code and are therefore not considered "dwelling units" or buildings. Thus, they are not subject to typical development standards that apply to buildings; rather, they are subject to siting standards related to parking. Portland applies the following regulations to occupied RVs and THOWs :

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[13] Hillsboro CDC, Section 12.40.100. https://library.qcode.us/lib/hillsboro_or/pub/municipal_code/item/chapter_12-subchapter_12_40-12_40_100.

- Only one RV or THOW is allowed on a residential lot with a house, attached house or manufactured home. They are not permitted on undeveloped lots.
- They must comply with parking requirements for RVs on residential lots. This means they cannot be parked in front of the street-facing façade of the primary dwelling.
- Occupancy of RVs and THOWs does not count toward residential density.
- THOWs are prohibited from being used as accessory short-term rentals.

  o Some cities in California have added references to "movable tiny houses" in their zoning codes and regulate them like other housing types. For example, the City of San Diego has the following definition:

  > _Movable tiny house_ means an accessory structure that is between 150 and 430 square feet in size on a residential lot, and that provides independent living facilities for one or more persons, independent of the primary dwelling unit, and that includes permanent provisions for living, sleeping, eating, cooking and sanitation.

  San Diego allows movable tiny houses on lots with a primary dwelling, similar to Portland. However, San Diego (and likely other cities) distinguishes THOWs from other types of recreational vehicles. This approach may be more appealing to those concerned about encouraging long-term occupancy of typical RVs. Tiny homes can better blend into a neighborhood setting and can often appear indistinguishable from a tiny home built on a foundation.

Additional Notes:

- Increasing access to accessible housing, as discussed above, is another way to enable multigenerational living. Accessible homes allow seniors to live comfortably alongside their children and grandchildren—thereby making multigenerational living more feasible.
- MIG|APG also considered whether the City should allow more than one ADU with a single-detached dwelling. However, the BDC states that constructing a third unit on a lot with an ADU would simply constitute a triplex, which is allowed in all single-dwelling and multi-dwelling zones. The City has relatively flexible standards for triplexes, plus triplexes that are created by converting or adding to an existing single-detached dwelling are exempt from the BDC's design review standards. However, if staff feels that permitting two ADUs would have significant advantages over permitting a triplex, in terms of process, fees, or flexibility, this is also something that the City could consider. The same goes for allowing an ADU with a duplex or triplex.

APPENDIX F

BUILDABLE LANDS INVENTORY

Methodology and Results

TO: City of Beaverton

FROM: Andrew Parish, AICP, MIG | APG

CC:

DATE: October 31, 2022

Introduction

This document describes the methodology and results of the Buildable Lands Inventory (BLI) prepared as part of the Housing Beaverton Project. The BLI is part of a broader Housing Needs Assessment (HNA) and Housing Implementation Plan (HIP) that will help the City identify housing needs and strategies for how to meet those needs.

What is a Buildable Lands Inventory (BLI)?

The BLI is a summary of the land in the City of Beaverton that can be used to meet needs for housing, employment, and other needs in the future. It includes the following steps:

1. Establish the Study Area
2. Identify Constraints to Development
3. Classify Land in the Study Area
4. Assign Development Status
5. Assess Results

These steps and their results are presented in this memorandum.

Step 1. Establish Study Area

The study area for the BLI is the City Limits, plus the area of Cooper Mountain that is anticipated to be annexed into the City of Beaverton after the adoption of the Cooper Mountain Community Plan.[1] The study area is shown in Figure 1. The yellow city limits shows

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[1] The buildable land within the Cooper Mountain area is addressed in a separate memorandum, see the project website at https://www.beavertonoregon.gov/386/Project-Documents

where the City of Beaverton currently has land use authority. The green Cooper Mountain Community Plan area is where Beaverton will have land use authority in the future. In addition, the city limits also will expand in the future through individual annexations not reflected on this map.

Figure 1. Study Area
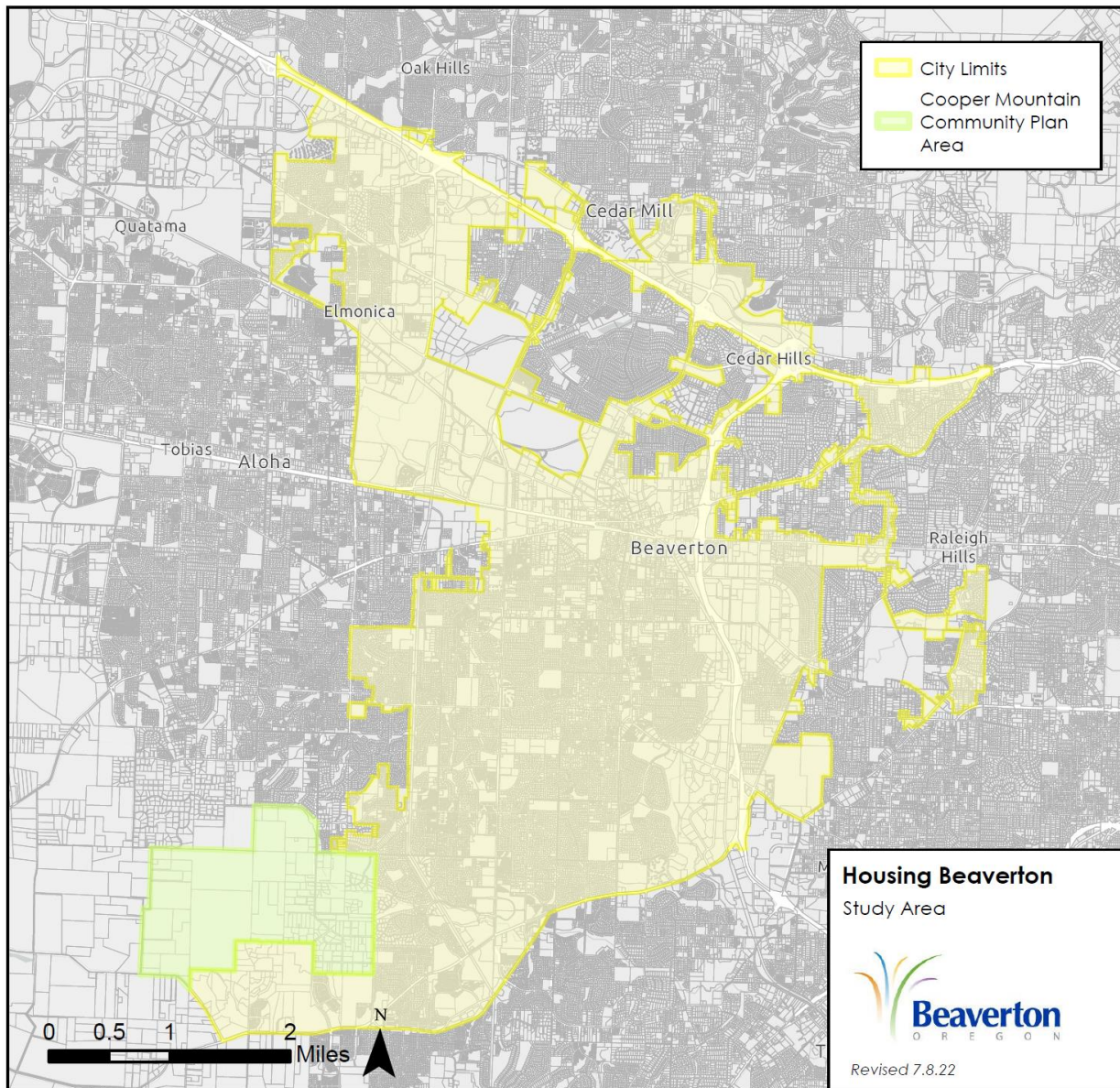
Step 2. Identify Constraints to Development

There are many factors that limit the ability of land to be developed for residential, employment, or other uses. Step 2 addresses land that is physically constrained in a general way – a detailed site assessment (which is out of scope for this BLI) of individual parcels may reveal new information. General constraints assessed by this effort include limitations on development related to natural resources and other environmental considerations such as steep slopes.

Data for these constraints was obtained from the City of Beaverton and the Metro Regional Land Information System (RLIS). These constraints may overlap one another spatially (such as an area with steep slopes that is also in a floodplain). Assumptions for these constraints are listed below:

- **FEMA Floodway.** These areas are assumed to be 100% constrained.
- **FEMA 100-year (1 percent annual chance) Floodplain.** Assumed to be 50% constrained (some development possible). Note: Updates are underway to FEMA Floodplain methodology and requirements that may further limit development capacity in the 100-year floodplain.
- **Slopes greater than 25%.** These areas are assumed to be 100% constrained.
- **Significant Natural Resource Areas (SNRAs).** These areas are assumed to be 40% constrained
- **Significant Groves.** These areas are assumed to be 40% constrained.
- **Metro Title 13 Riparian Class I**. These areas are assumed to be 100% constrained.
- **Metro Title 13 Riparian Class II** and **City of Beaverton Riparian Inventory**. These areas are assumed to be 50% constrained.
- **Metro Title 13 Upland A and B Zones.** These areas are assumed to be 40% constrained.

Note: All residential parcels are assumed to have capacity for one single-detached dwelling even if fully encumbered by constraints, consistent with Metro BLI methodology. Constraints are shown on Figure 2 and Figure 3 below. Figure 4 combines all considered constraints into one map, organized by their assumed impact to development.

The constraints used for the Cooper Mountain Community Plan Area differ somewhat, as it is a greenfield site with significant opportunities for natural resource protection and restoration as new development occurs. Detailed assumptions for the Cooper Mountain Community Plan BLI are available on the project website at https://www.beavertonoregon.gov/386/Project-Documents.

Figure 2. Natural Resource Constraints – City Data

Legend:
- BLI Study Area
- Significant Natural Resource Areas
- Wetland Inventory
- Floodway
- 100 Year Floodplain
- Slopes >25%
- Significant Groves

Housing Beaverton

Buildable Land Inventory - Constraints (City Data)

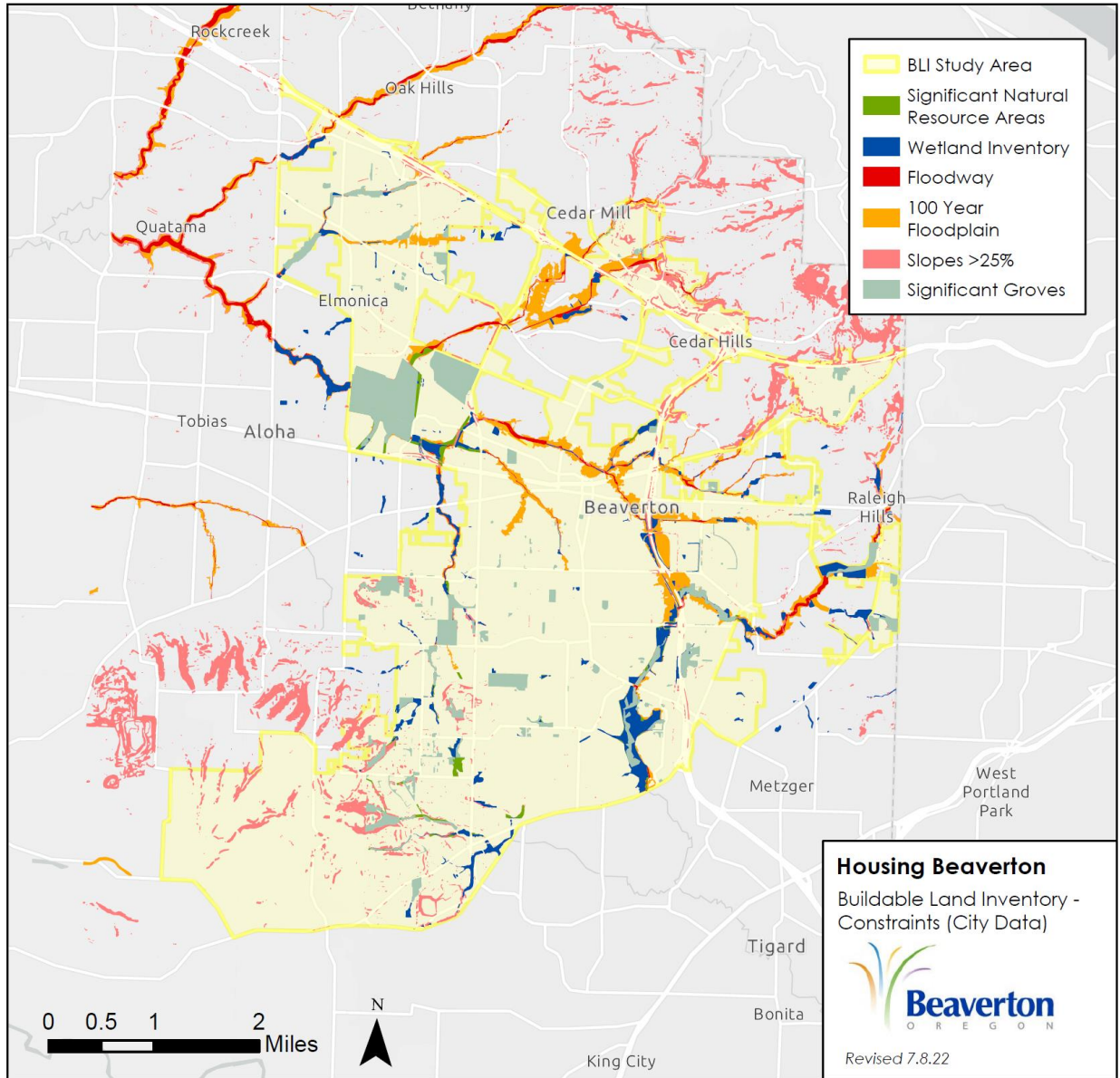Revised 7.8.22

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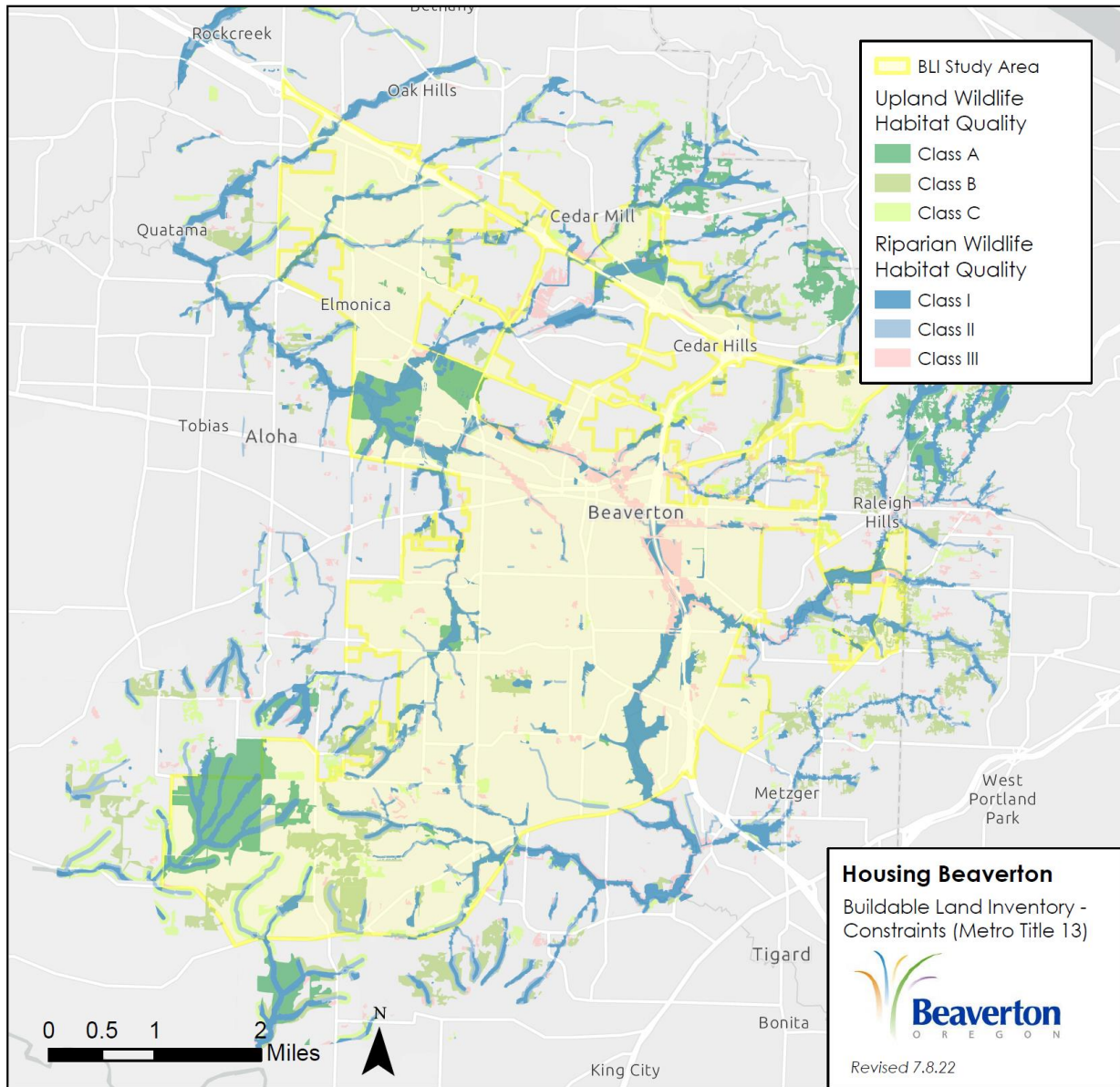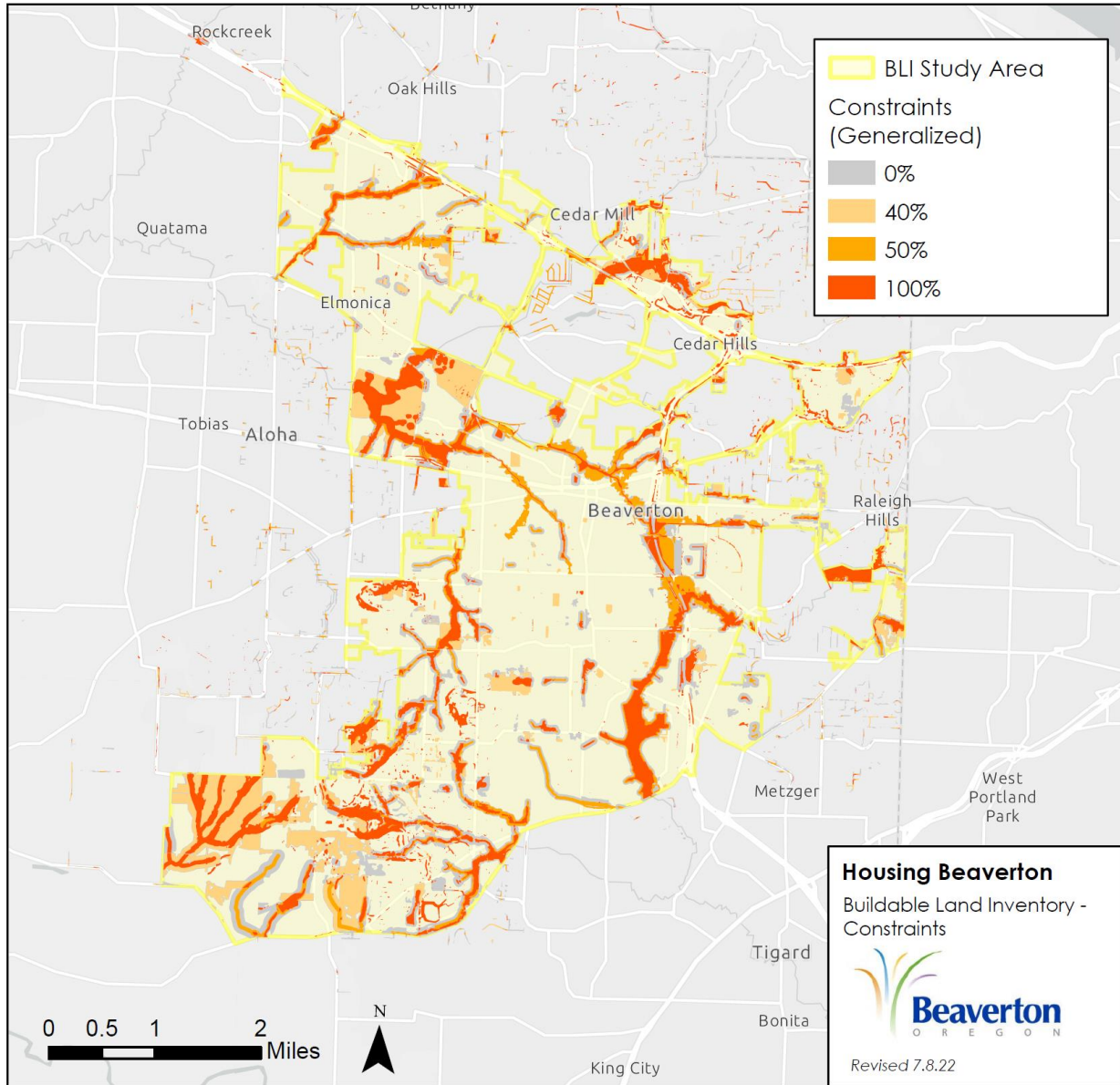**Figure 3. Natural Resource Constraints - Metro Title 13 Data**

Figure 4. Summary of Constraints to Development

Step 3. Classify Land in the Study Area

Land in the study area is classified based on its zoning designation, property ownership, and other characteristics. Land classifications include residential, employment, mixed use, publicly owned, and other land such as area for utilities. Land in different classifications is treated differently in terms of how new development, infill development, and redevelopment are assumed to occur.

A summary of land classification is provided in Table 1.

Residential Land

Land with the following zoning designations is generally categorized as Residential Land

- Multi-Unit Residential (MR) – Formerly R1, Urban High Density
- Residential Mixed A (RMA) – Formerly R2 and R4, Urban Medium Density
- Residential Mixed B (RMB) – Formerly R5 and R7, Urban Standard Density
- Residential Mixed C (RMC) – Formerly R10, Urban Low Density

Employment Land

Land with the following zoning designations is generally categorized as Employment Land:

- Office Industrial (OI)
- Office Industrial – Nike Campus (OI-NC)
- Industrial (IND)
- Station Community – Employment Subarea (SC-E1 & E3)

Mixed Use Land

Land with the following zoning designations is generally categorized as Mixed Use Land:

- Regional Center – Mixed Use (RC-MU)
- Regional Center – Beaverton Central (RC-BC)
- Regional Center – Old Town (RC-OT)
- Regional Center – Downtown Transition (RC-DT)
- Regional Center – East (RC-E)
- Office Industrial – Washington Square (OI-WS)
- Commercial – Washington Square (C-WS)
- Town Center – Multiple Use (TC-MU)
- Town Center – High Density Residential (TC-HDR)
- Station Community – Multiple Use (SC-MU)
- Station Community – High Density Residential (SC-HDR)
- Station Community – Sunset (SC-S)
- Neighborhood Service Center (NS)
- Community Service (CS)
- Corridor Commercial (CC)
- General Commercial (GC)

Publicly Owned/Other Land

Land with this classification is often owned by a public agency such as roads and rail right-of-way, parks, schools, power substations, and powerline easements. This category also includes land in common ownership such as Homeowners Associations. For example, many subdivisions have open space tracts required by the City that are owned collectively by the neighborhood and assumed to be undevelopable. Land in a variety of zoning designations can fall into this category.

In some cases, land in public ownership is intended to be developed for residential or employment uses. In those cases (such as parcels downtown owned by the Beaverton Urban Redevelopment Agency), the land is classified as either residential, employment, or mixed use.

South Cooper Mountain and Cooper Mountain Community Plan Areas

The South Cooper Mountain area and the Cooper Mountain Community Plan area are treated separately by this BLI. South Cooper Mountain was the subject of a major planning effort in 2013 and has recent land use approvals for nearly all properties. The ongoing Cooper Mountain Community Plan encompasses 1,240 acres and includes its own assumptions about buildable land and natural resources. Policy direction on the topic of environmental protection and housing variety differ from other areas in the City of Beaverton as well.

Table 1. Summary of Land Classification

Land Type	Taxlots	Total Acres
Residential	21,288	4,355.0
Employment	3,811	1,642.4
Mixed Use	254	746.0
Public/Other	1,885	8,821.9
Cooper Mountain	182	1,242.8
South Cooper Mountain	400	553.6
Total	**27,820**	**17,361.7**

Figure 5. Land Type
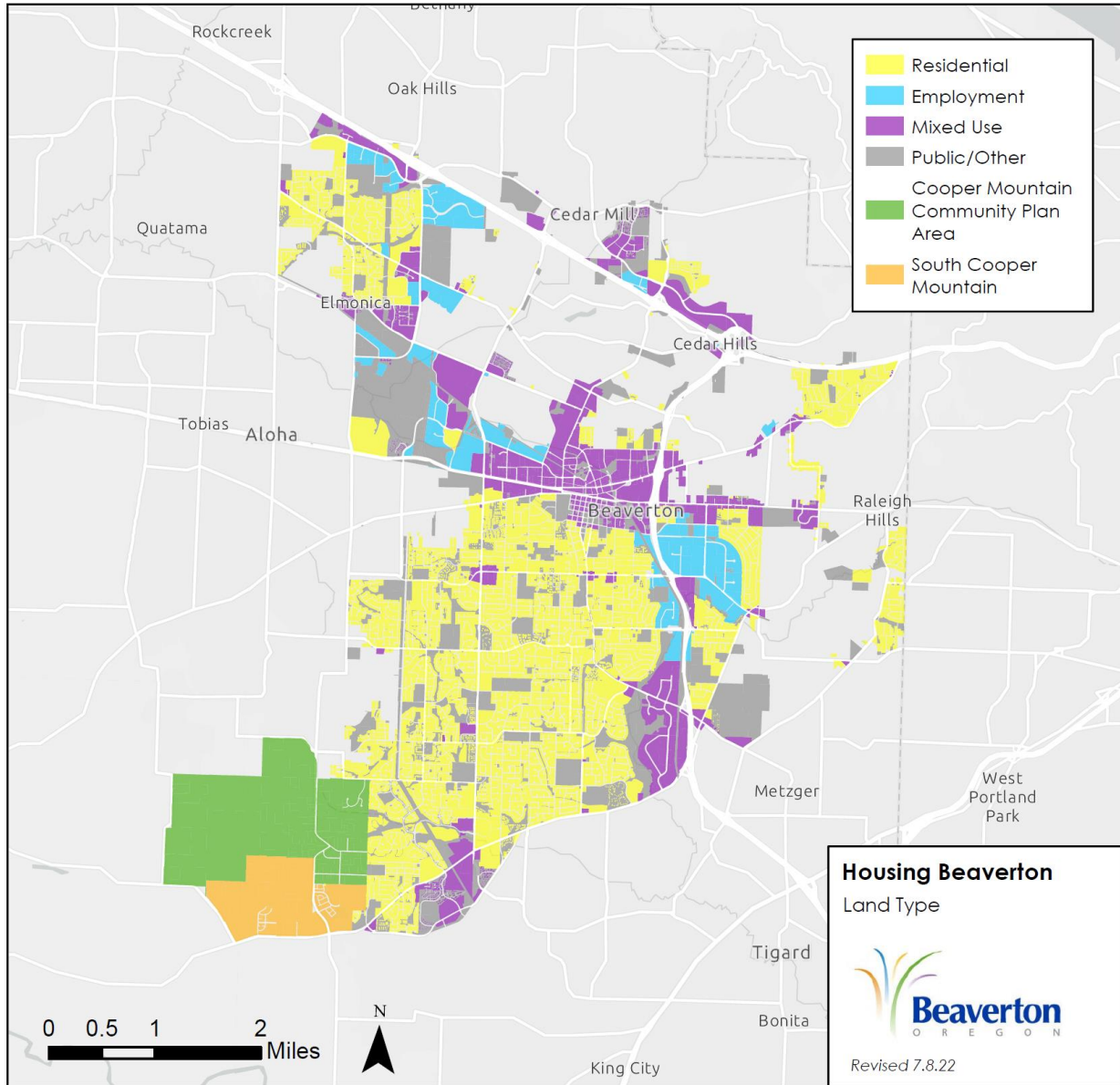
Step 4. Assign Development Status

This step assigns each parcel in the study area a "Development Status" based on the land use classification from Step 3, constraints from Step 2, and other information available as described below. The methodology followed for this step provided a starting point for the analysis – additional information about pending/recently approved developments, City plans that affect development, and professional judgement regarding anomalous data are used as well.

Residential Land

Residential Land is assigned a development status as follows:

- **Vacant**. Land that has a building improvement value of less than $20,000, as indicated by Washington County assessor data.
- **Partially Vacant**. This designation is intended for parcels with an existing structure that are large enough to further subdivide or develop to provide additional residential units. The recent update of the City's development code (called the Housing Options Project or HOP) allows for more flexibility and variety in the types of units that may be provided on this land. Partially Vacant land was determined as follows.
    o Parcels must be at least 8,000 square feet in size.
    o Existing building footprints were given a 15' buffer to approximate land area needed for setback and yard areas. Then, building footprint and buffer areas were removed from the buildable area of each parcel.
    o Parcels that have 5,000 square feet left over for potential development were designated Partially Vacant.
- **Developed**. All other residential land was designated Developed.

A summary of Residential Land is shown in Table 2 and Figure 6.

Table 2. Development Status of Residential Land

Development Status (Residential)*	Number of Taxlots	Unconstrained Acres	Acres for Existing Structures	Developable Acres
Developed	19,047	3,171.8	-	-
Partially Vacant	2,011	789.3	329.7	459.6
Vacant	230	39.3	-	39.3
Total	**21,288**	**4,000.3**	**329.7**	**498.9**

* Excludes residential land in South Cooper Mountain and Cooper Mountain Community Plan areas (see Section 3)

Figure 6. Development Status - Residential Land

Development Status
Residential Land
- Developed
- Partially Vacant
- Vacant
- BLI Study Area

Housing Beaverton
Development Status
(Residential)

Revised 7.8.22
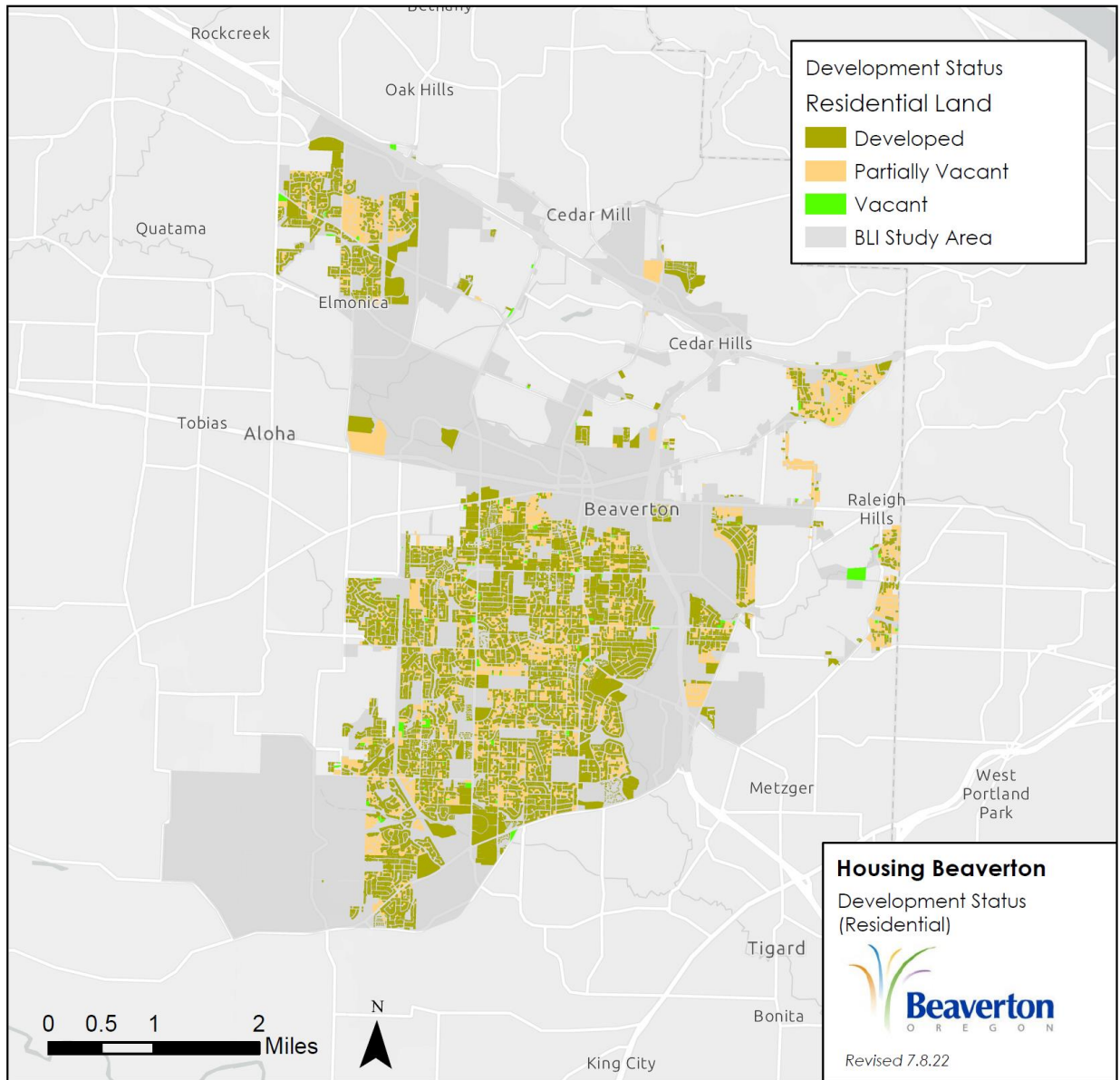
Mixed Use Land

Mixed Use Land is assigned a development status similar to Residential Land. However, an additional screen is used to determine the likelihood of redevelopment of mixed use parcels, and assumptions about the residential/employment mix are applied.

A summary of Mixed Use Land is shown in

Table 3.

Residential Mix in Mixed Use Zones

The following assumptions address the proportion (by land area) of development in multiple-use zones that is expected to occur as residential uses, the remainder of which is assumed to be developed with employment uses. This breakdown was developed with input from City of Beaverton staff.

CS ....20% residential

CC ....20% residential

GC ....20% residential

C-WS ....20% residential

NS ....20% residential

RC-BC ....50% residential

RC-DT ....80% residential

RC-TO ....50% residential

RC-OT ....80% residential

RC-MU ....50% residential

RC-E ....20% residential

TC-MU ....70% residential

TC-HDR ....80% residential

SC-MU ....80% residential

SC-HDR ....80% residential

SC-S ....80% residential

OI-WS ....10% residential

Table 3. Development Status of Mixed Use Land

Development Status (Mixed Use)	Number of Taxlots	Unconstrained Acres	Acres for Existing Structures	Developable Acres (Residential)	Developable Acres (Employment)
Developed	3,693	1,280.6	-	-	-
Partially Vacant	33	13.4	4.9	6.1	2.3
Vacant	85	140.5	-	97.8	42.7
Total	**3,811**	**1,434.5**	**4.9**	**103.9**	**45.0**

Figure 7. Development Status - Mixed Use Land
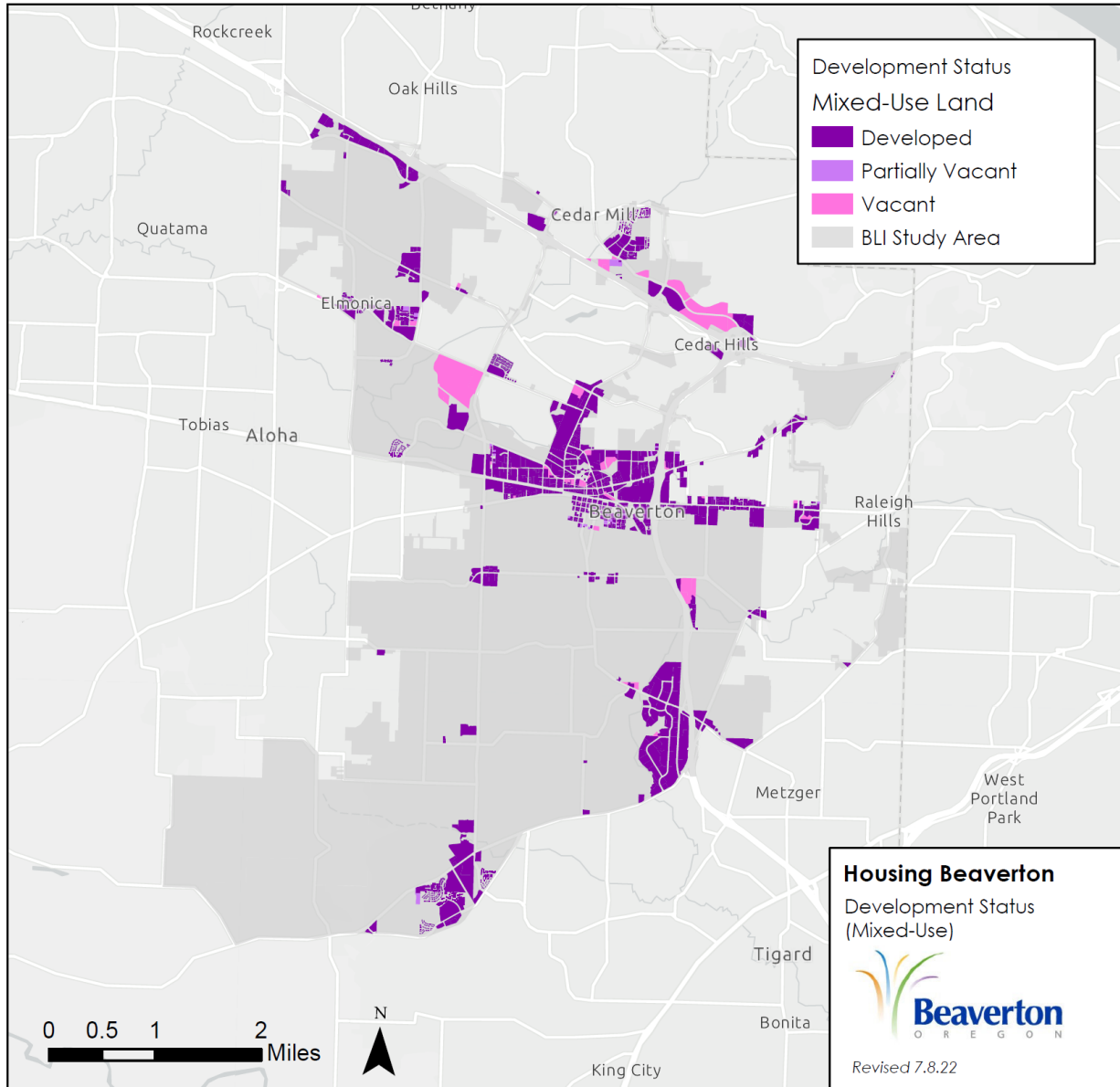
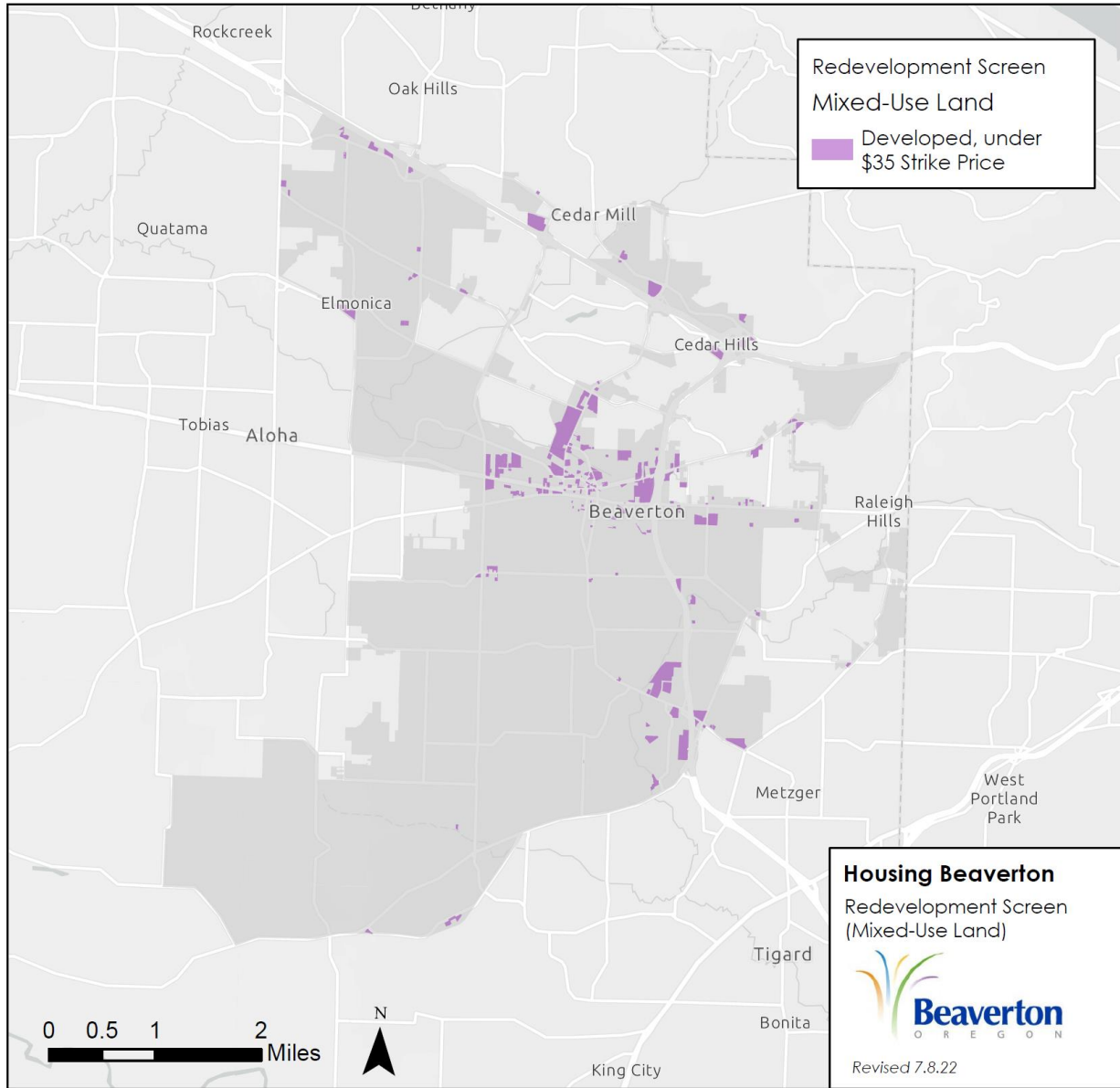## Redevelopment of Mixed Use Land

This BLI includes a high-level evaluation of potential redevelopment of mixed use land, called a "Strike Price" analysis. "Strike Price" is a term-of-art used to indicate the price at which it becomes cost-effective for a developer to consider a site for redevelopment. The strike price is the combined land value and improvement value per square foot of the lot.

This analysis uses a $35 strike price threshold for mixed use land.[2] If the combined land value and improvement value for a parcel is below this value, then it has been included in the map and table below. Table 4 and Figure 8 describe these properties by zoning designation.

Figure 8. Developed Mixed Use Land Below $35 Strike Price

Table 4. Redevelopment Screen of Developed Mixed Use Land at $35/sf

Zoning	Number of Taxlots Under $35 Strike Price	Total Acres	Net Buildable Acres (Future streets removed)
CC	2	9.2	7.5
CS	47	97.6	73.5
C-WS	5	26.5	21.6
GC	29	44.4	35.8
NS	20	12.1	10.5
OI-WS	9	38.4	25.0
RC-BC	37	18.3	11.9
RC-DT	2	7.3	4.0
RC-E	20	32.5	25.8
RC-MU	18	20.9	16.0
RC-OT	18	4.5	4.2
SC-HDR	11	18.5	12.2
SC-MU	10	25.0	18.2
TC-HDR	1	0.0	0.0
TC-MU	6	6.7	4.9
Total	**235**	**361.6**	**271.2**

Employment Land

Employment Land is assigned a development status as follows:

- **Vacant**. Land that has a building improvement value of less than $20,000, as indicated by Washington County Assessor data.
- **Developed**. All other employment land is designated Developed.

A summary of Employment Land is shown in Table 5 and Figure 9.

Figure 9. Development Status - Employment Land
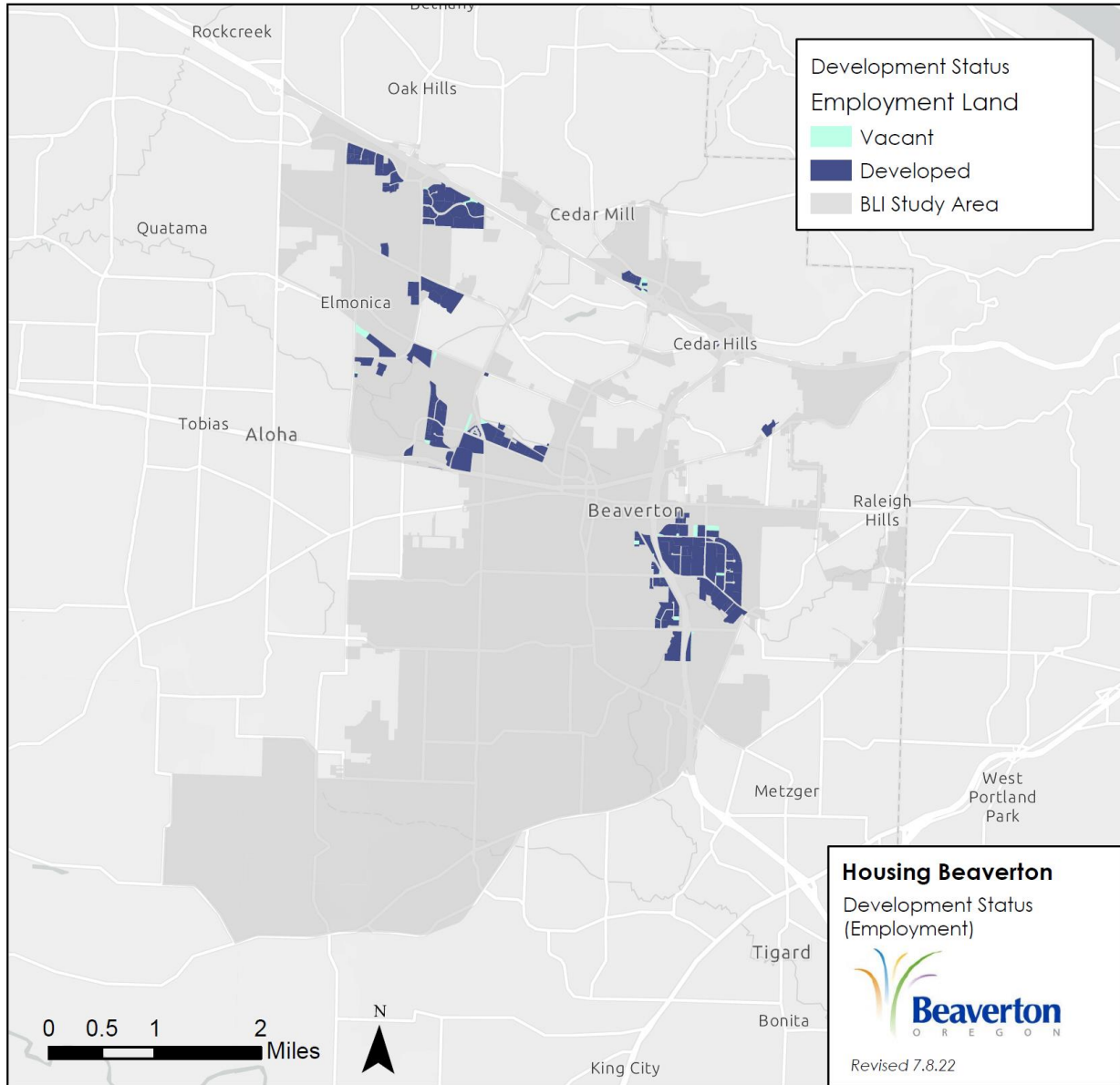
Table 5. Development Status of Employment Land

Development Status (Employment)	Number of Taxlots	Unconstrained Acres
Developed	232	663.5
Vacant	28	18.2
Total	**260**	**681.7**

Redevelopment of Employment Land

Similar to Mixed Use Land, a "strike price" screen was used on Employment Land to evaluate the amount of potential redevelopment within the study area.[3] Results of this screen are shown on Figure 10 and Table 6.

Figure 10. Developed Employment Land Below $14 Strike Price

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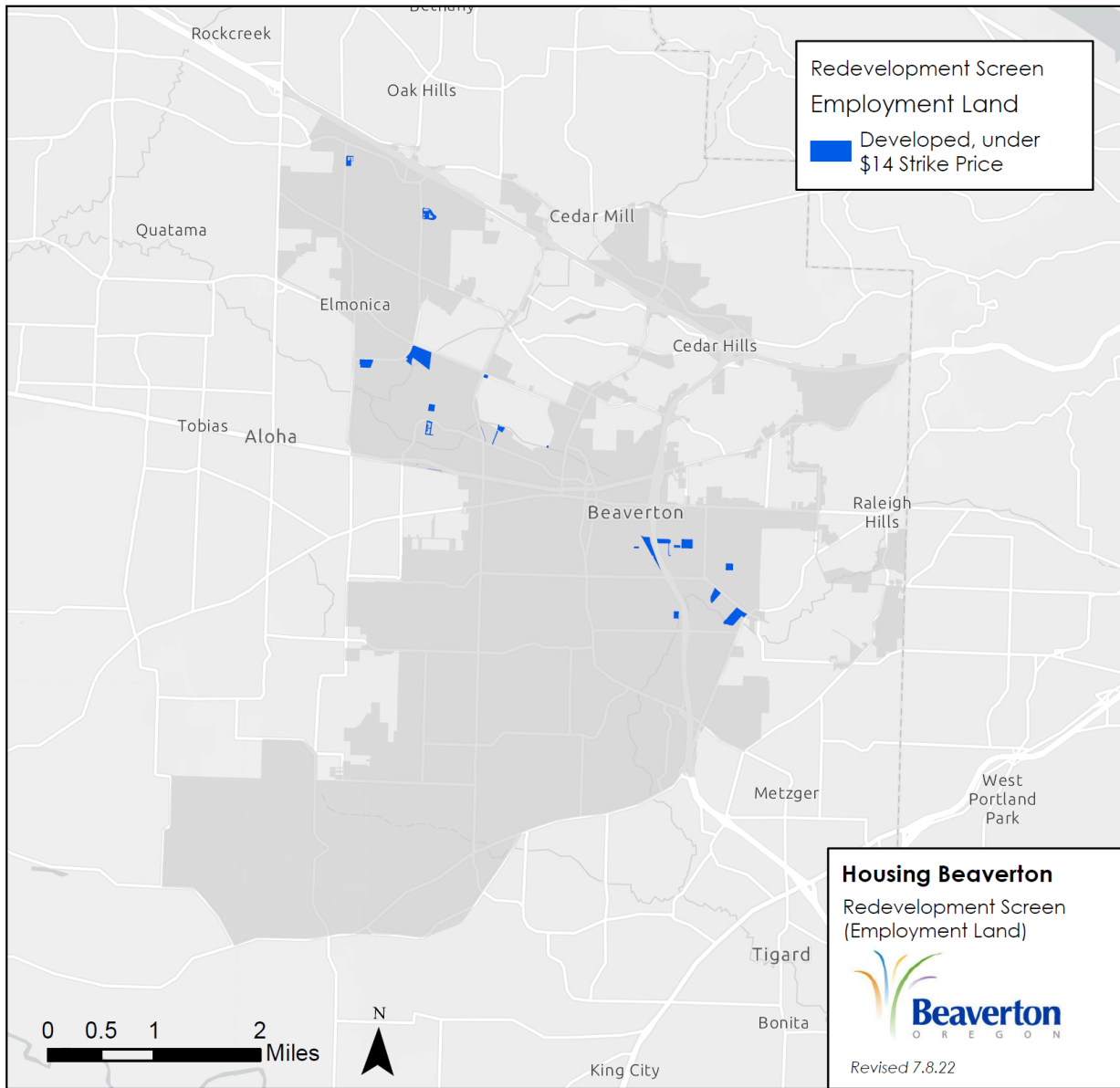
[3] The $14 figure is an estimate based on the City of Beaverton's previous BLI and recent development in the City. For reference, the 2018 Metro BLI used a strike price of between $5 and $7 for suburban employment designations.

Table 6. Redevelopment Screen of Developed Employment Land at $14/sf

Zone	Number of Taxlots Below $14 Strike Price	Total Acres	Net Buildable Area (Future Streets Removed)
IND	11	53.6	23.6
OI	7	16.4	13.3
SC-E	5	8.4	5.7
Total	**23**	**78.4**	**42.7**

Public/Other Land

Public/Other Land is considered developed. Where information about potential development or redevelopment is available, parcels have been categorized appropriately even if under public ownership.

South Cooper Mountain

As noted previously, the South Cooper Mountain area is currently under development and subject to numerous land use approvals, summarized below. Key takeaways for this area are provided in Step 5.

Cooper Mountain Community Plan Area

As noted previously, the Cooper Mountain Community Plan area is currently being planned as part of a separate process. Key takeaways for this area are provided in Step 5.

Step 5. Assess Results

This step includes assessing the built capacity of the lands classified in earlier steps and removing land needed for future streets.

Land for Future Streets and Other Infrastructure

Development of large properties requires creating new streets, trails, stormwater facilities, and other infrastructure that reduces the amount of land left over for the development of new homes or businesses. Smaller properties, such as a residential lot that may only fit a single-detached home or duplex, generally do not require significant area for new streets or other infrastructure to be built as part of development. The following assumptions are used to remove land for future required improvements:

- Property is less than 3/8ths of an acre (about 16,000 square feet) – 0% set aside for future streets and infrastructure.
- Property is between 3/8ths of an acre and 1 acre – 10% set aside for future streets and infrastructure.
- Property is greater than 1 acre – 18.5% set aside for future streets and infrastructure.

After these set-asides, the remaining Net Buildable Acreage is the base that will be used for later steps in the Housing Beaverton Project including the Housing Needs Analysis and Housing Production Strategy.

BLI Results

Results of this analysis are provided in the following maps and tables.

Table 7. Overview of Net Buildable Acres

Land Type	Development Status	Number of Taxlots	Developable Acres		Streets and Infrastructure Set-Asides (in acres)		Net Buildable Acres	
Residential	Developed	19,047	-		-		-	
	Partially Vacant	2,011	459.6		45.1		414.5	
	Vacant	230	39.3		2.6		36.7	
	Total	21,288	498.9		47.7		451.2	
Mixed Use			Res	Emp	Res	Emp	Res	Emp
	Developed	3,687	-	-	-	-	-	-
	Partially Vacant	33	6.1	2.3	.7	.2	5.1	2.1
	Vacant	85	97.8	42.7	17.1	6.9	80.7	35.8
	Total	3,805	103.9	45.0	17.8	7.1	85.8	37.9
Employment	Developed	232	-		-		-	
	Vacant	28	18.2		2.6		15.6	
	Total	260	18.2		2.6		15.6	
Public/Other	-	1,885	-		-		-	
Cooper Mountain*	-	182	-		-		-	
South Cooper Mountain*	-	400	-		-		-	

*See Table 10 below.

The following tables describe developable acreage by zoning designation for Residential Land (Table 8), Mixed Use Land (Table 9), Employment Land (Table 10), as well as the Cooper Mountain Community Plan Area and South Cooper Mountain (Table 12).

Table 8. Net Buildable Acres and Estimated Units of Residential Land by Zoning Designation

Zone	Vacant and Partially Vacant Taxlots	Net Buildable Acres	Estimated Density	Estimated Units
MR	23	28.3	35	990
RMA	116	29.0	17	493
RMB	470	89.5	10	895
RMC	1,630	301.3	7	2,172
County Designation	2	1.5	4	6
Total	**2,241**	**449.6**	**-**	**4,556**

Table 9. Net Buildable Acres of Mixed Use Land by Zoning Designation

Zone	Vacant and Partially Vacant Taxlots	Net Buildable Acres (Residential)	Net Buildable Acres (Employment)	Residential Density	Estimated Residential Units
CS	14	2.4	10.2	35	357
GC	1	0.1	0.2	35	7
NS	5	0.2	1.2	35	42
OI-WS	2	0.0	0.1	35	3
RC-BC	24	5.2	5.2	60	312
RC-DT	1	0.0	0.1	30	3
RC-E	3	0.0	0.1	12	1
RC-MU	6	1.4	1.4	43	60
RC-OT	16	2.2	0.6	24	14
SC-HDR	15	3.0	0.7	24	16
SC-MU	18	37.1	9.3	24	223
SC-S	6	29.5	7.4	24	177
TC-HDR	6	4.3	1.1	24	26
TC-MU	1	0.4	0.2	24	4
TOTAL	**118**	**85.8**	**37.9**	**-**	**1,245**

Table 10. Net Buildable Acres of Employment Land by Zoning Designation

Zone	Vacant Taxlots	Net Buildable Acres
IND	14	5.8
OI	5	3.7
SC-E	5	3.9
County Designation	4	2.1
TOTAL	**28**	**15.5**

Table 11 provides an estimate of the number of new middle housing units would result from a 3% increase in density of developed neighborhoods. This percentage comes from the text of House Bill 2001, which requires that cities use this figure unless they provide a evidence to support a different amount.

Table 11. Middle Housing Assumptions

Zone	Number of Existing Taxlots	Existing Units	3% of Existing Units	Notes
MR	413	4,066	-	Units in MR designation are generally at middle housing/multifamily densities
RMA	3,287	8,683	260	3% increase in density on developed RMA properties would yield 260 units
RMB	6,400	8,806	264	3% increase in density on developed RMB properties would yield 264 units
RMC	8815	9,265	277	3% increase in density on developed RMC properties would yield 277 units
County Designation	132	130	-	Taxlots with county zoning assumed to receive City zoning in the future
Total	19,047	30,950	802	3% increase in density on developed RMA, RMB, and RMC properties would yield 802 units

Table 12. Cooper Mountain Community Plan and South Cooper Mountain Areas

Plan Area	Total Acres	Estimated Capacity	Notes
Cooper Mountain Community Plan	1,240 acres	About 5,000 units, with a mix of roughly 43% Single Detached, 26% Attached/ Middle Housing, and 30% Multi-dwelling units	Capacity and mix subject to the refinement and adoption of the Community Plan by the Beaverton City Council.
South Cooper Mountain	464 acres	3,384 units permitted.	All residential properties have land use approval. Modifications of approvals would require additional land use applications and approval by decision-makers pursuant to the Beaverton Development Code.

Table 13. Summary of Residential Capacity

Source	Unit Total	Notes
Residential Land	4,556	Mix of single-detached, middle housing, and multi-dwelling units
Mixed-Use Land	1,245	Likely predominantly middle housing or multi-dwelling units
Middle Housing Infill	802	Middle housing units
South Cooper Mountain	3,384	Mix of single-detached, middle housing, and multi-dwelling units
Cooper Mountain Community Plan Area	5,000	Mix of single-detached, middle housing, and multi-dwelling units
Total	**14,987**	

Next Steps

Results of this BLI will be incorporated into other elements of the Housing Beaverton Project, including the Housing Needs Analysis and Housing Production Strategy.