



CITY OF COOS BAY HOUSING NEEDS ANALYSIS

SEPTEMBER, 2020



CITY OF COOS BAY

HOUSING ADVISORY COMMITTEE

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Executive Summary

2020 Buildable Lands Inventory / Housing Needs Analysis. The Buildable Lands Inventory / Housing Needs Analysis (BLI/HNA) estimates Coos Bay’s current and future housing needs, including whether the City has enough appropriately zoned land to accommodate housing demand over the next 20 years. Vacant parcels and parcels with the potential for infill or redevelopment for future multi-family (middle housing) and other units have been analyzed resulting in an informed projection of current and future housing needs and demand for developable land. There is sufficient buildable capacity and residential land use opportunity with existing zoning categories to accommodate Coos Bay’s projected housing needs, including consideration of affordability, for the next twenty years.

Oregon Statewide Planning Goals 10 and 14 requirements are fulfilled with the BLI/HNA. The adopted study cements the City’s understanding of its housing needs and supply of developable land over the Goals’ 20-year planning horizon. With the analysis finding that an appropriate number of housing units can be developed to meet future housing needs on existing city land under current zoning designations, there is no need for increased density on existing residential land and/or expansion of the Urban Growth Boundary (UGB).

BLI/HNA Composition. The BLI analyzes the amount, location, and suitability of land to determine the total acreage potentially available for development. The HNA analyzes current housing dynamics in the context of historic and projected demographic and housing trends (including renter and owner split). The HNA analysis utilizes a Housing Needs Model to account for affordability categories consistent with Oregon’s Statewide Planning Goal 10.

Both analyses rely on assumptions informed by industry standards, market conditions, and projected trends. Additionally, several national and local demographic trends and factors influence assumptions about current and future housing demand.

Buildable Land Supply. Figure E.1 shows the total resulting buildable acres available for residential development by zone. There are 480 total buildable residential acres in Coos Bay.

**Figure E.1:
Buildable Land Supply**

| Zone | Total Acres | Gross Vacant Acres | Gross Buildable Vacant Acres | Public Facilities Land Deducted | Redevelopment/ Infill Acres Added | Total Buildable Acres |
|-------------------------------|---------------|--------------------|------------------------------|---------------------------------|-----------------------------------|-----------------------|
| Coquille Plan - Village | 39.0 | 39.0 | 39.0 | 9.8 | 0.0 | 29.3 |
| Low Density Residential - 6 | 1217.1 | 476.4 | 182.8 | 18.7 | 18.9 | 183.0 |
| Low Density Residential - 8.5 | 103.8 | 10.0 | 7.6 | 0.2 | 1.2 | 8.6 |
| LDR-6 Overlay Zone | 56.2 | 39.8 | 23.7 | 4.6 | 1.1 | 20.2 |
| Medium Density Residential | 846.6 | 450.5 | 257.0 | 58.4 | 6.0 | 205.6 |
| *Commercial | 320.8 | 57.8 | 9.9 | 0.0 | 17.4 | 27.3 |
| *Mixed Use | 110.6 | 9.8 | 1.4 | 0.0 | 1.8 | 3.2 |
| *Waterfront Heritage | 26.8 | 14.4 | 1.2 | 0.0 | 1.8 | 3.0 |
| Total | 2720.8 | 1097.7 | 522.5 | 91.6 | 48.2 | 480.0 |

Source: LCOG Analysis with Coos Bay and Coos County GIS data

Housing Conditions. Figure E.2 compares current baseline housing conditions in Coos Bay with the resulting estimates for housing conditions in 2040. Coos Bay’s population is estimated to increase by 1,244 persons in that 20-year time frame. Housing units in Coos Bay will increase proportionately from 7,737 in 2020 to 8,341 in 2040.

Estimates for figures in this section were derived utilizing the best available data, including 2020 population forecast from the Portland State University Population Research Center (PRC), the U.S. Census, and permit data from the City of Coos Bay.

Figure E.2: Current and Estimated Future Housing Conditions

| | Current Housing (2020) | Estimated Future Housing (2040) |
|------------------------------------|------------------------|---------------------------------|
| Total Population | 17,057 | 18,301 |
| Estimated Group Housing Population | 159 | 171 |
| Estimated Non-Group Population | 16,898 | 18,130 |
| Average Household Size | 2.36 | 2.36 |
| Estimated Non-Group Households | 7,160 | 7,682 |
| Total Housing Units | 7,737 | 8,341 |
| Occupied Housing Units | 7,160 | 7,682 |
| Vacant Housing Units | 577 | 659 |
| Vacancy Rate | 7.5% | 7.9% |

Sources: ACS 2018 5-Year Estimates (Tables B11016, B26001), PSU Coordinated Population Forecast for Coos County, Lane Council of Governments, Bjelland Housing Needs Model.

Housing Demand and Supply. The analysis reveals that for current renters, the greatest demand is for units at the lower to middle end of the affordable rent level range. Rental demand is greater than supply at the lowest income level, indicating that the residents most likely to spend greater than 30% of their income on housing do not have adequate affordable options. With the exception of the lowest income category (under \$15,000), the analysis suggests that lower- to middle-income categories should have income-appropriate rental opportunities.

Current ownership demand is higher in the middle to upper end of the affordable price range. Although existing owned units at the lowest income range appear to far exceed modeled demand, the City recognizes that true ownership opportunities are likely misrepresented by these figures, and anecdotal evidence suggests that there is some genuine unmet demand for ownership in the lowest income range. Demand also outpaces supply for units affordable to higher income ranges. In general, the analysis demonstrates that there are insufficient ownership housing opportunities for residents at all income levels.

Based on the model inputs, future demand for ownership housing will remain higher at the levels affordable at mid- to higher-income ranges; demand for ownership housing will exist in the lowest income range. Future demand for rental housing will remain more evenly spread among the lower- to middle-income income ranges; rental demand will be lowest in the highest income range.

Comparison of Future Housing Demand to Current Housing Inventory. The analysis determined that 604 new rental and ownership housing units are needed by 2040 to meet future demand. Of the new units needed, roughly 81% are projected to be ownership units, while 19% are projected to be rental units. There is a need for 489 new ownership units and 115 new rental units. The mix of needed unit types reflects both past trends and anticipated future trends.

The analysis concludes that:

- Approximately 28% of the new units are projected to be single-family (detached and attached) homes.
- 61.2% are projected to be manufactured homes in parks. The reason that this proportion is so high is because of a manufactured home development that was approved by the City of Coos Bay in the Spring of 2020.
- Duplex through four-plex units are projected to represent 11% of the total need. Duplex units would include a detached single-family home with an accessory dwelling unit on the same lot, or with a separate unit in the home (for instance, a rental basement unit). These categories also include any other allowable middle housing types, such as cottage housing.
- For the purposes of this study, new needed units do not include multi-family housing in structures of 5+ attached units. These units will likely develop over the planning period, but the City is anticipating a focus on middle housing alternatives.
- Of ownership units, 32% are projected to be single-family homes, and 54% manufactured homes in parks. Some of the single-family units may be attached forms (townhomes – another form of middle housing).
- About 38% of new rental units are projected to be found in two- to four-unit structures. Twenty percent of projected rental properties are manufactured homes in parks.

The housing analysis is reconciled with the current buildable lands analysis to establish the capacity the City of Coos Bay has for new units by zone and ultimately general housing types (Low, Medium, and High Density residential). The result is a total of 79.2 acres needed to address the identified housing needs for the planning period (2020 – 2040).

The analysis demonstrates that there is sufficient capacity to accommodate all projected new unit types. There is a projected need for 79.2 acres of new residential development (32 acres of lower density, 44.9 acres of medium density and 2.3 of higher density). Coos Bay's residential buildable land capacity is 480 acres, leaving a surplus of approximately 401 acres.

Conclusion. The 2020 BLI/HNA adoption is reflective of 1) the State of Oregon's emphasis on improving middle housing options and 2) the City Council's recognition of and determination to resolve the lack of housing supply in Coos Bay. The information identified in the 2020 BLI/HNA lays the foundation for Coos Bay housing solutions. Future housing supply opportunities will be guided by housing policy and strategies with the updates of the City of Coos Bay's Comprehensive Plan and Development Code.

I. BACKGROUND

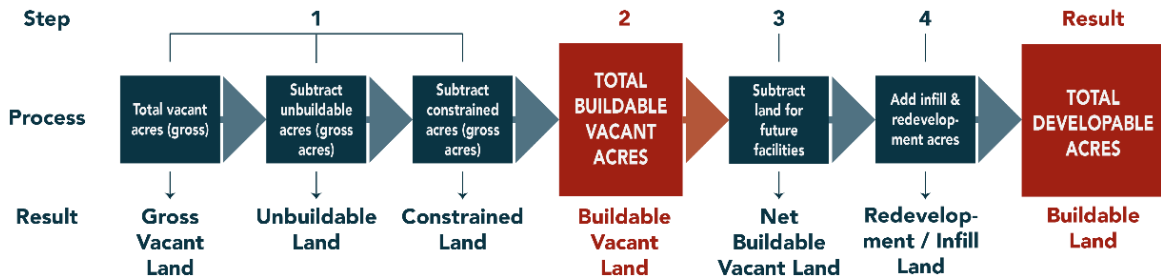
a. Study Purpose

This study determines Coos Bay’s housing needs, including whether the City has enough appropriately zoned land suitable for development within the existing Urban Growth Boundary to meet projected housing demand over the next 20-year planning period. The study consists of two parts: a Buildable Land Inventory (BLI) and a Housing Needs Analysis (HNA). The Buildable Land Inventory analyzes the amount, location, and suitability of land to determine the total acreage potentially available for development. The Housing Needs Analysis analyzes current housing dynamics in the context of historic and projected demographic and housing trends. The analysis¹ will address how these affect development, density, and land consumption to produce an informed projection of current and future housing needs and demand for developable land.

b. Overview of the Process

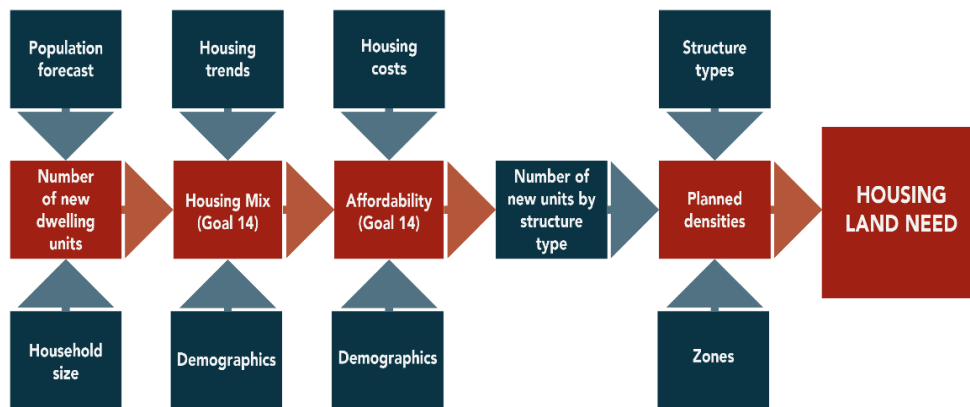
Step 1: Buildable Land Inventory

- Analyze all residentially zoned land within the existing UGB to identify the acreage that is vacant, underdeveloped, or environmentally constrained.
- Estimate the amount of developable residential land available that is not environmentally constrained.
- Account for public facility needs and consider infill and redevelopment potential.



Step 2: Housing Needs Analysis

- Analyze historical and projected demographic and housing trends.
- Estimate the amount of land and appropriate housing mix required to meet future demand following the *Planning for Residential Growth Workbook* model.



¹ These resources informed the analysis: Portland State University Population Research Center, United States Census, City of Coos Bay permitting and GIS, Coos County Assessor, other sources identified as needed.

Step 3: Analysis

- Compare projected land needed over the next 20 years with land available for development.
- Determine whether the existing UGB can accommodate expected growth.

c. Regulatory Context

Cities in Oregon must comply with statewide land use planning goals and their related statutes and administrative rules. Planning Goal 10: Housing and Planning Goal 14: Urbanization provide the regulatory framework for this study. The purpose of Planning Goal 10 is to ensure “the availability of adequate numbers of needed housing units at price ranges and rent levels which are commensurate with the financial capabilities of Oregon households.”² Specifically, Goal 10 and Oregon Administrative Rule 660-008 (Interpretation of Goal 10 Housing) require cities to conduct a Housing Needs Analysis that analyzes national, state, and local trends; determines historical density and mix; estimates needed housing by price and type; and provides for a 20-year supply of buildable land. Goal 14: Urbanization and Oregon Administrative Rule 660-015-0000(14) require communities “to provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.”³ To fulfill Goals 10 and 14, communities must understand their housing needs and supply of developable land over a planning horizon. Communities that cannot meet future demand must implement efficiency measures to increase the density on existing residential land, expand the Urban Growth Boundary (UGB), or a combination of both. The City of Coos Bay does not currently require a UGB amendment, therefore housing mix requirements of Goal 14 are not explicitly contemplated in the analysis.

d. Key Assumptions

Both the Buildable Lands Inventory and Housing Needs Analysis depend on several assumptions regarding inputs in the analyses. These assumptions are based on industry standards, market conditions, and projected trends.

BLI key assumptions:

- Constrained land includes both “environmentally sensitive lands” (slopes over 25%, wetlands, cultural resources, flood and tsunami zones, etc.) and ownership/use constraints (parks, open space, schools). See Figure 3.1.
- A lot is functionally vacant if it has less than \$10,000 in improvement value.
- Land is considered re-developable if land value is greater than improvement value.
- For the purposes of the BLI, it is assumed that 10% of re-developable land will redevelop over the planning period.
- Lots that are 250% of the zoned minimum lot size are assumed to have infill potential.
- For purposes of the BLI, it is assumed that 10% of lots with infill potential will experience infill over the planning period.
- The BLI assumes that 25% of gross buildable land is required for public facilities and uses.

² Department of Land Conservation and Development, *Oregon’s Statewide Planning Goals & Guidelines, Goal 10: Housing*, OAR 660-015-0000(10) (1988).

³ Department of Land Conservation and Development, *Oregon’s Statewide Planning Goals & Guidelines, Goal 14: Urbanization*, OAR 660-015-0000(14) (2016).

HNA key assumptions:

- Population will increase at an annual average growth rate of 0.4% between 2018 and 2040 per the PSU Population Forecast for Coos County.
- The analysis applies the current vacancy rate for Coos Bay of 7.5%.
- Housing costs assume generally low mortgage interest rates for the planning period.
- Housing demand is assumed to be better estimated by income and age dynamics than by existing housing characteristics alone (i.e. the existing match of age and income to housing in Coos Bay does not necessarily reflect a scenario where existing demand is met).
- Future housing mix assumes that more “middle housing” options will be realized due to housing trends and state and local policy trends.

e. Relevant Demographic Trends and Factors

In addition to the key assumptions discussed in the preceding section, several demographic trends and factors are expected to influence housing demand over the next 20 years:

National Trends

The following trends are outlined in the 2019 issue of the highly regarded “State of the Nation’s Housing” from the Joint Center for Housing Studies at Harvard University.

- **Millennials (1985-2004) will increasingly drive housing demand.** Millennials are the largest generation in history. Millions will reach the prime home-buying age group (35-44) in the next decade, which will drive demand for smaller, more affordable starter homes.
- **Older adults (65+) account for 25% of all households.** As the population ages, the share of single-person households and households without children will increase.
- **Immigration contributes significantly to household growth and drives housing demand.** Households are increasingly racially and ethnically diverse.
- **The cost of housing is rising.** High land prices and rising cost of construction labor are contributing to rising housing costs. Median home prices are rising more rapidly for lower-cost units, putting pressure on potential buyers in lower- to middle-income ranges. New modest-cost housing is in short supply.
- **Rental costs are rising and the number of low-cost rentals is shrinking.** Climbing rents, low vacancy rates, and an increasing share of high-income renters are putting pressure on rental markets.
- **Demographic trends will continue to contribute to demand for rental housing.** Population growth will continue to support demand for rental housing.
- **Housing cost burden affects more renters than homeowners.** Housing cost-burdened households (those spending greater than 30% of their income on housing) and severely housing cost-burdened households (those spending greater than 50% of their income on housing) have less income to spend on basic needs.
- **Affordability continues to be a significant social and economic threat.** Rising housing costs are outpacing income growth, and there is an insufficient supply of housing affordable at lower income levels. Income inequality continues to rise as top-quartile incomes grow at much faster rates than bottom quartile incomes. Poverty is increasingly geographically concentrated, and homelessness is on the rise.

Coos County Trends

The following trends were outlined in the Portland State University (PSU) Population Research Center's population forecast for Coos County (2018-2068). Also included are relevant trends from the 2009 Coos Bay Housing Needs Analysis.

- **The share of minority households will continue to grow.** This will affect both fertility rates and average household size.
- **The population is aging, and fertility rates are decreasing as women have fewer children.** An aging population will drive demand for affordable housing or group living options.
- **Net Migration affects housing needs.** PSU research notes that net out-migration rates are highest for younger adults, who leave Coos County to pursue educational and employment opportunities in their twenties and then return with their families in their thirties. Insights from Coos County real estate professional experience suggests that more 20 to 25 year-olds are buying homes in Coos County, but 30 to 40 year-olds are relocating to areas with more to offer. Net out-migration rates are also relatively high for older adults, who leave for communities with better access to healthcare facilities and end-of-life care. Net in-migration is highest for middle-age adults and retirees. Again, this is tempered with the observation of local real estate professionals that a large number of older adults buy property in Coos Bay to be closer to the City's Bay Area Hospital facility, including people from surrounding communities (Port Orford, Brookings, other smaller coastal communities). The heat of the valley keeps people choosing the coastal weather.
- **The cost of land and housing are increasing.** This follows a trend occurring in communities throughout Oregon.
- **There have been relatively modest increases in wages.** This is consistent with trends during the last ten years.
- **Continued need for affordable housing.** Households and families with lower incomes, including workers in the retail/tourism sector, are increasingly priced out of the housing market as property values, property taxes, and costs of goods are on the rise.
- **Continued need for manufactured housing.** Older residents, in particular, are increasingly turning to manufactured housing as an affordable option as there are limited assisted living facilities on the southern Oregon coast.
- **An increase in the need and market for multi-family and single-family attached housing.** The real estate market inventory is low, while demand remains high, particularly for rental housing. Investors are purchasing multi-unit properties and single-family homes to use as rentals due to the return on investment, which has pushed rents up and leaves low- to moderate-income families without access to low- and moderate-cost housing.
- **Continued demand for housing on somewhat smaller lots.** Lots that are 5,000 square feet and smaller reduce the cost of housing.

Coos Bay Trends

The following trends were noted in local research and observation by staff and members of the Housing Advisory Committee.

- **Lack of smaller, low maintenance options.** With an aging population, these low maintenance options are in high demand. Condominiums, accessory dwelling units, and small homes on smaller lots are lacking.
- **Competitive market conditions.** Real estate data revealed that, in 2019, homes spent less time on the market than they did in 2018 or 2017.

II. COMMUNITY PROFILE

Coos Bay is the largest city on the Oregon Coast, with an estimated population of 17,057⁴ in 2020 covering 10.6 square miles.⁵ Coos Bay serves as the regional economic, educational, and healthcare center for the South Coast region, which comprises Coos, Curry, and Douglas Counties.⁶ Coos Bay offers a variety of cultural and recreational opportunities, and its proximity to the Pacific Coastline and Oregon's largest coastal estuary provide an abundance of natural scenic beauty.

a. Demographic Overview

The following table (Figure 2.1) provides a demographic overview of Coos Bay from 2010 to 2018.⁷ Coos Bay's population grew 5% from 15,967 in 2010 to 16,824 in 2018. In that same time period, the number of housing units has grown 1%, from 7,542 in 2010 to 7,655 in 2018. In 2018, Coos Bay was home to approximately 6,794 households and 3,793 families, down from 6,950 households and 3,991 families in 2010. Though both the number of households and the number of families residing in Coos Bay declined between 2010 and 2018, the average household size and average family size both grew. Household size increased from 2.27 in 2010 to 2.36 in 2018, and family size increased from 2.82 to 3.06. Finally, the population living in group quarters has declined dramatically (30%) from 225 in 2010 to 157 in 2018.

Figure 2.1: Demographic Profile of Coos Bay, 2010 to 2018

| | 2010 | 2018 | % Change |
|----------------------------|--------|--------|----------|
| Population | 15,967 | 16,824 | 5% |
| Households | 6,950 | 6,794 | -2% |
| Families | 3,991 | 3,793 | -5% |
| Housing Units | 7,542 | 7,655 | 1% |
| Group Quarters Population | 225 | 157 | -30% |
| Household Size (non-group) | 2.27 | 2.36 | 4% |
| Average Family Size | 2.82 | 3.06 | 9% |

Sources: 2010 DEC Summary File 1 (Tables P1, H1, H12, P27, P35, P37, P42) and ACS 2018 5-year estimates (Tables DP04, DP05, B25010, B11016, B26001, S1101), PSU Coordinated Population Forecast for Coos County (2018)

b. Population Projections

The population of Coos Bay is projected to grow 7% between 2020 and 2040, with an annual growth rate of 0.4% (see Figure 2.2).

Figure 2.2: Population Forecast for Coos Bay, 2020 to 2040

| | 2020 | 2040 | % Change |
|------------------|--------|--------|----------|
| Total Population | 17,057 | 18,301 | 7% |

Source: PSU Coordinated Population Forecast for Coos County, 2018-2068

⁴ Portland State University Population Research Center, *Coordinated Population Forecast for Coos County 2018-2068* (2018), <https://www.pdx.edu/population-research/population-forecasts>.

⁵ "QuickFacts for Coos Bay city, Oregon," United States Census Bureau (n.d.), <https://www.census.gov/quickfacts/fact/table/coosbaycityoregon/POP060210>.

⁶ "Working with Communities: Regional Solutions, South Coast Region," State of Oregon (n.d.), <https://www.oregon.gov/gov/admin/regional-solutions/Pages/SouthCoast.aspx>.

⁷ This table is intended to give a broad overview of demographic change in Coos Bay. At the time of this report, the best available data are from the PSU Coordinated Population Forecasts and the U.S. Census American Community Survey 2018 5-year estimates.

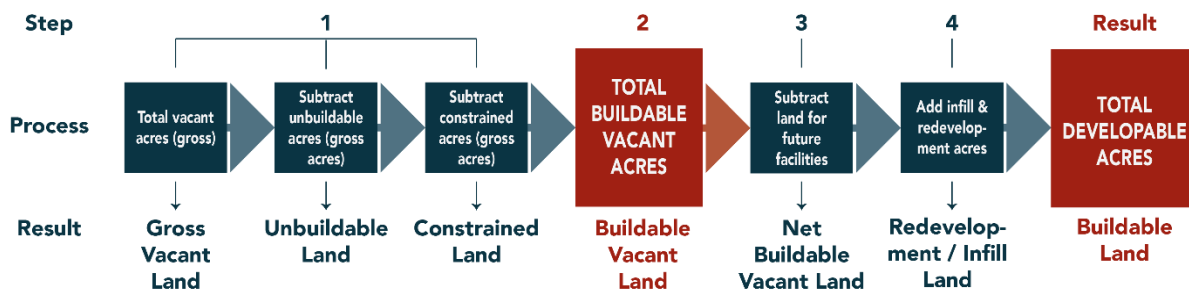
III. BUILDABLE LANDS INVENTORY

a. Methodology

The Buildable Lands Inventory (BLI) identifies the supply of buildable land within the City’s urban growth boundary (UGB) through analysis of overlapping land distinctions represented in a Geographic Information System (GIS).

Gross vacant land—including fully vacant and partially vacant parcels—is combined with lands that have redevelopment and infill potential to determine the total supply of land.⁸ Land that is unbuildable, environmentally constrained, or needed for future public facilities is deducted from the total supply to determine the supply of buildable land (Figure 3.1). Because this BLI was conducted specifically in support of Coos Bay’s Housing Needs Analysis, only lands zoned to allow residential uses (and likely to experience residential development) were included in the final inventory.

The BLI process is based on the Department of Land Conservation and Development’s *Planning for Residential Development* workbook. It consists of four key steps:



Step 1: Calculate the total vacant acres by zoning designation, including fully vacant and partially vacant parcels.

Step 2: Subtract unbuildable and environmentally constrained acres from total vacant acres to produce total buildable vacant acres.

Step 3: Subtract land for future facilities from total buildable vacant acres to produce net buildable vacant acres.

Step 4: Add re-developable and infill acres to net buildable vacant acres to produce total developable acres.

b. Buildable Lands Inventory (BLI) Definitions and Assumptions

The following definitions are used to classify the properties into different categories.

Vacant land – Parcels that have no structures or have buildings with very little value. For the purpose of this inventory, lands with improvement values under \$10,000 are considered vacant (not including lands that are identified as having mobile homes). To confirm vacancy on parcels

⁸ The Following sources were used to identify and evaluate land supply: Coos Bay GIS layers, Tax Assessor data, Aerial imagery, and consultation with Coos Bay City staff.

where improvement value is \$0, but the parcel was identified by Coos County assessment data as “Residential – IMPROVED,” lots were visually inspected using satellite imagery, building footprints, and address points. See Figure 6.8.

Partially vacant land – Parcels that have improvements but also have enough undeveloped land to accommodate additional development. This analysis identified all lots over 1 acre with only one unit on them. One half-acre was subtracted to account for the existing development and the remainder was identified as “partially vacant.” See Figure 6.9.

Unbuildable land – Parcels are considered unbuildable if they have objective ownership/zoning constraints. For example, lands in the Coos Bay Estuary Management zone, and the industrial zones. For larger lands in public or semi-public ownership, availability for development was investigated by staff. This includes lands in Federal, State, County, or City ownership, as well as lands held by churches, schools, utilities, ports, cemeteries, or in a tribe trust. See Figure 6.11.

Environmentally constrained land – Land considered unbuildable due to environmental constraints. The portion of each parcel subject to environmental constraints is deducted from the total buildable acreage, rather than removing entire parcels of land. The analysis includes four environmental constraints. See Section III(c) for more detail. See Figure 6.12.

Potentially re-developable land – Land on which development has already occurred but, due to present or expected market forces, is considered underdeveloped and may be converted to more intensive uses during the planning period. Re-developable residential land includes parcels with existing uses that are less intense than the planned use, such as a single-family home or mobile home on land that allows for multifamily development. Lots are considered re-developable if the land value is greater than the improvement value (as reported by Coos County assessment data). Lots identified as mobile home parks can also qualify as re-developable. Only a small percentage (10%) of potentially re-developable lands are added to total buildable acreage. This is because, for myriad reasons, it is safest to assume that only a conservative percentage of owners with lands that have redevelopment potential will pursue redevelopment within the planning period. See Figure 6.15.

Infill land – Like “partially vacant” land, infill land is assumed to be capable of accommodating additional development. Unlike “partially vacant” land, however, it represents the development opportunities presented by lots under 1 acre. As with “re-developable” land, development of smaller lots is more nuanced due to site dynamics and ownership preferences, so it is also calculated and added to buildable lands as a ratio (10%). Lots that are 250% of zoned minimum lot size are assumed to have infill potential, because they could technically be subdivided at least once (with some acreage to spare). There are myriad reasons why infill may not actually occur (e.g. lot configuration, placement of existing development, owner preference, HOA policies, etc.). This is why the analysis assumes that only 10% of property with infill potential will be realized. Minimum lot size used for LDR-6 and MDR zones is 5,000 square feet and for LDR-8.5 was 6,000 square feet. Furthermore, a lot must have at least 8,712 square feet (0.2 acre) that is not environmentally constrained. With a few exceptions, lots containing multi-unit buildings were excluded (this happened in instances where there was a large section undeveloped land distinct from the primary development). See Figure 6.16.

Developed land – Land that is developed at densities consistent with zoning and improvements that make it unlikely to redevelop during the analysis period. Lands not classified as vacant, partially vacant, or potentially re-developable are considered developed.

Gross vs. Net Vacant Lands – Gross acreage means all land within a given boundary. Net acres means all land measured to remove certain public facilities such as roads, utilities, and open space.

c. Environmental Constraints

Land considered unbuildable due to environmental constraints is removed from the inventory (Figure 6.12). The portion of each parcel subject to environmental constraints is deducted from the total buildable acreage, rather than removing entire parcels of land. The analysis includes four environmental constraints:⁹

1. *Steep slopes* – Land with slope greater than 20% is considered constrained. For the purpose of this analysis, only contiguous patches of steep land greater than 0.1 acre in size were included. Areas less than 0.1 acre in size were assumed to be manageable with non-engineered development techniques. As noted in the City’s Comprehensive Plan, the Coos Bay building code does not prohibit development based on slope. Because they present significant development limitations and necessitate costly development, these areas have been removed from this inventory.
2. *Landslide susceptibility* – Lands with "Very High" susceptibility are considered constrained.
3. *Flood hazard* – Lands in the FEMA FIRM designated 1% or 100-year flood plain are considered constrained. However, the City’s building code permits residential development in floodplains, and much of the land downtown near Blossom Gulch Creek lies within the 100-year floodplain. For this reason, after consultation with the Housing Advisory Committee, it was determined that only 50% of floodplain-constrained land should be removed. Land in the 100-year floodplain that was simultaneously constrained by wetland designation or steep slopes was considered fully constrained and removed from the analysis.
4. *Wetlands* – Lands categorized as wetland according to the National Wetland Inventory or riparian corridors according to the National Hydrography Dataset are considered constrained.

⁹ Lands in the “Extreme” Tsunami Zone in the City of Coos Bay are not considered environmentally constrained. The Housing Advisory Committee (HAC) determined that, in the absence of local regulations prohibiting such development, and without direct State prohibition, these lands should not be considered environmentally constrained.

d. Buildable Land Supply

Figure 3.1 shows the total buildable acres available for development. There are 480 total buildable acres in Coos Bay. See Appendix for supporting data.

Figure 3.1: Buildable Land Supply

| Zone | A Total Acres | B Gross Vacant Acres | C Unbuildable Vacant Acres Deducted | D Environmental Constraint Deduction | E Gross Buildable Vacant Acres (B-C-D) | F Public Facilities Land Deducted | G Redevelopment Acres Added | H Infill Acres Added | Total Buildable Acres (E-F) + (G+H) |
|-------------------------------|-------------------------|--------------------------------|---|--|--|---|---------------------------------------|--------------------------------|--|
| Coquille Plan - Village | 39.0 | 39.0 | 0.0 | 0.0 | 39.0 | 9.8 | 0.0 | 0.0 | 29.3 |
| Low Density Residential - 6 | 1217.1 | 476.4 | 214.4 | 79.2 | 182.8 | 18.7 | 5.2 | 13.7 | 183.0 |
| Low Density Residential - 8.5 | 103.8 | 10.0 | 0.3 | 2.1 | 7.6 | 0.2 | 0.0 | 1.2 | 8.6 |
| LDR-6 Overlay Zone | 56.2 | 39.8 | 1.6 | 14.5 | 23.7 | 4.6 | 0.3 | 0.8 | 20.2 |
| Medium Density Residential | 846.6 | 450.5 | 37.5 | 156.0 | 257.0 | 58.4 | 4.1 | 2.9 | 205.6 |
| *Commercial | 320.8 | 57.8 | 14.4 | 13.9 | 9.9 | 0.0 | 17.4 | 0.0 | 27.3 |
| *Mixed Use | 110.6 | 9.8 | 3.7 | 1.9 | 1.4 | 0.0 | 1.8 | 0.0 | 3.2 |
| *Waterfront Heritage | 26.8 | 14.4 | 2.6 | 8.1 | 1.2 | 0.0 | 1.8 | 0.0 | 3.0 |
| Total | 2720.8 | 1097.7 | 274.5 | 275.7 | 522.5 | 91.6 | 30.5 | 18.5 | 480.0 |

Source: LCOG Analysis with Coos County and Coos Bay GIS Data

Note: Because of the range of other uses that the Commercial, Mixed Use, and Waterfront Heritage zones can accommodate, only 1/3 of potentially buildable land in these zones is assumed available to accommodate future residential units ($E^ = (B-C-D)/3$). Redevelopment of these lands is also expected to realize at a higher rate (33% rather than 10%) because they are likely subject to higher market forces. Several other zones technically allow residential units, but not all are included, due to lower probabilities of residential units or low acreage. Because of the nature of these lands, this analysis does not deduct land for public facilities from Commercial, Mixed Use, or Waterfront zones.

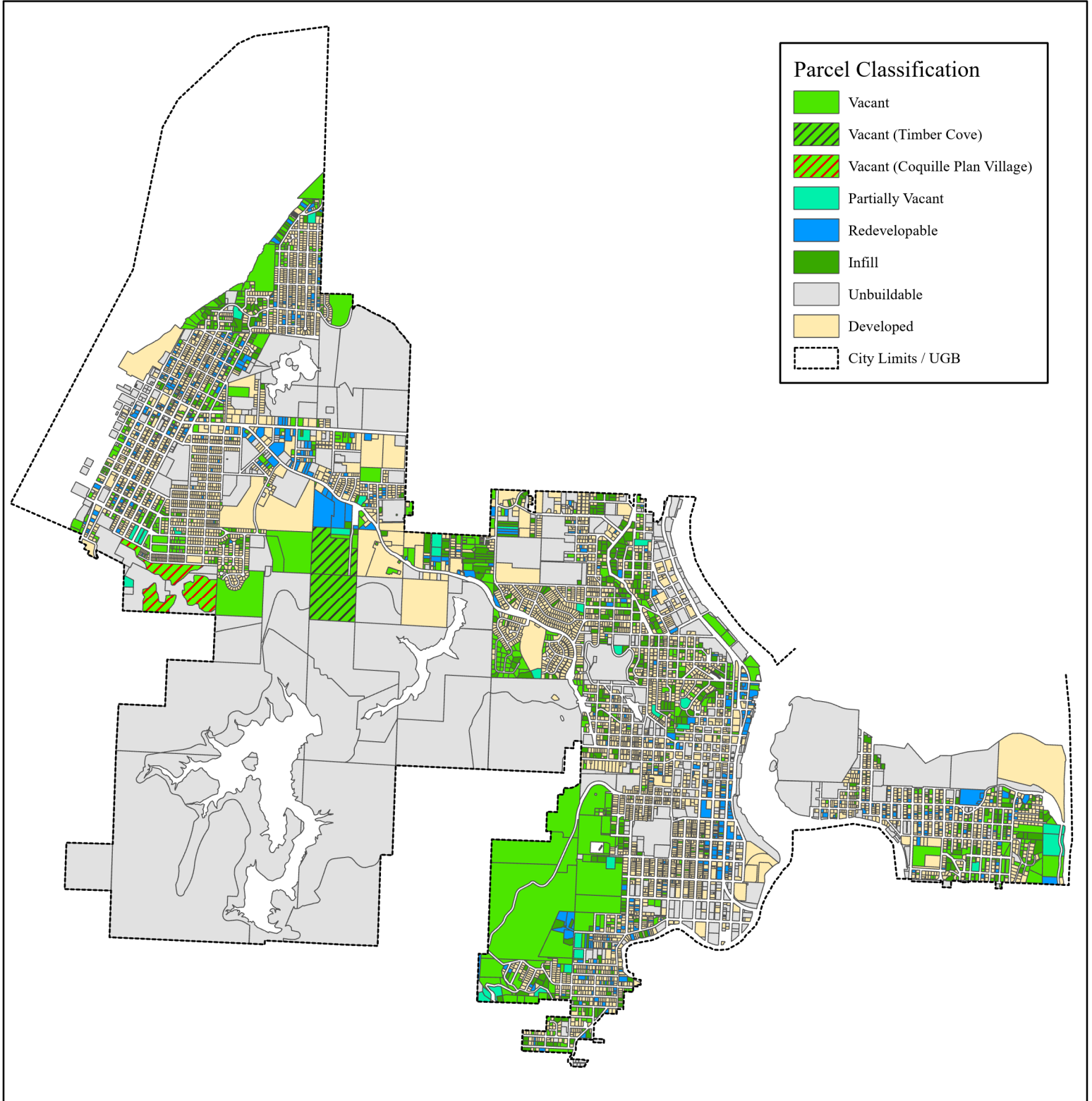
Following are four maps which characterize different aspects of the analysis of Coos Bay's buildable lands, including the classification of parcels by inventory categories:

- Map 1: Parcel Classifications City of Coos bay Buildable Lands Inventory
- Map 2: Parcels by Zoning Classification City of Coos Bay Buildable Lands Inventory
- Map 3: Parcels in Residential Zoning Only City of Coos Bay Buildable Lands Inventory
- Map 4: Environmentally Constrained Lands City of Coos Bay Buildable Lands Inventory

Map 1 Parcel Classifications City of Coos Bay Buildable Lands Inventory 2020

Map Date: September, 2020.

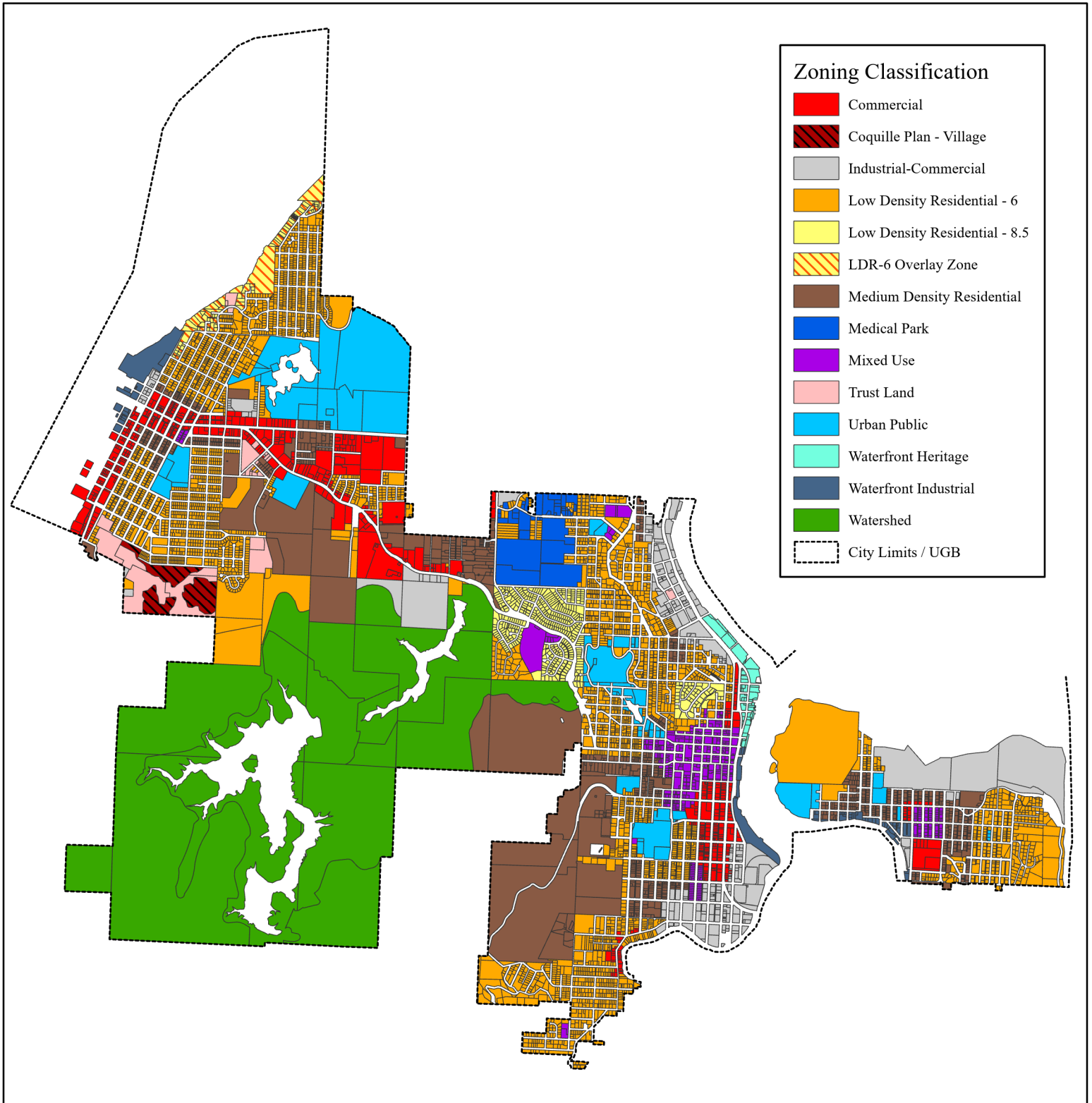
The information on this map was derived from digital databases provided by the City of Coos Bay. Care was taken in the creation of this map, but it is provided "as is". LCOG cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, expressed or implied, accompanying this product.



Map 2 Parcels by Zoning Classification City of Coos Bay Buildable Lands Inventory 2020

Map Date: September, 2020.

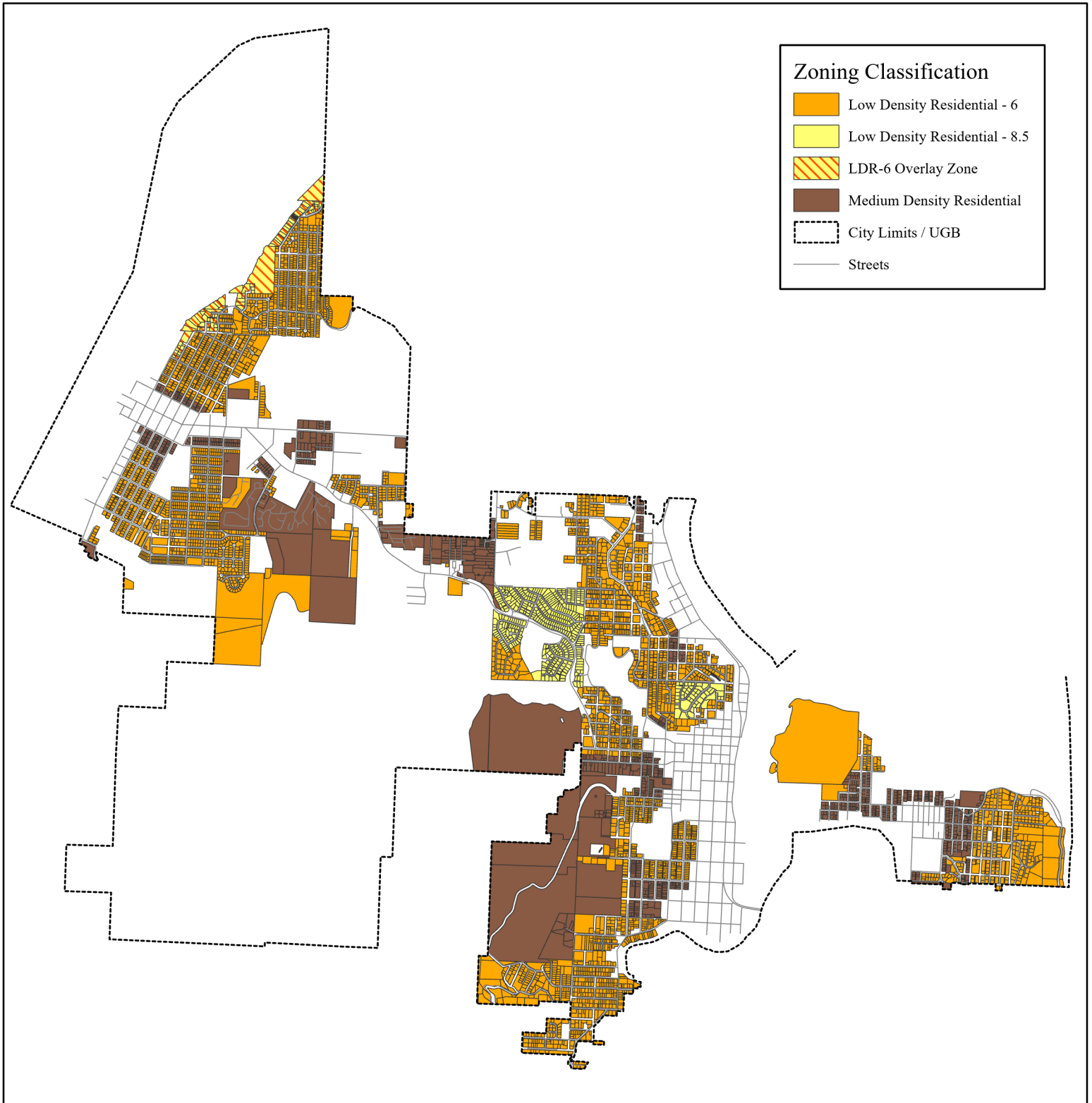
The information on this map was derived from digital databases provided by the City of Coos Bay. Care was taken in the creation of this map, but it is provided "as is". LCOG cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, expressed or implied, accompanying this product.



Map 3 Parcels in Residential Zoning Only City of Coos Bay Buildable Lands Inventory 2020

Map Date: September, 2020.

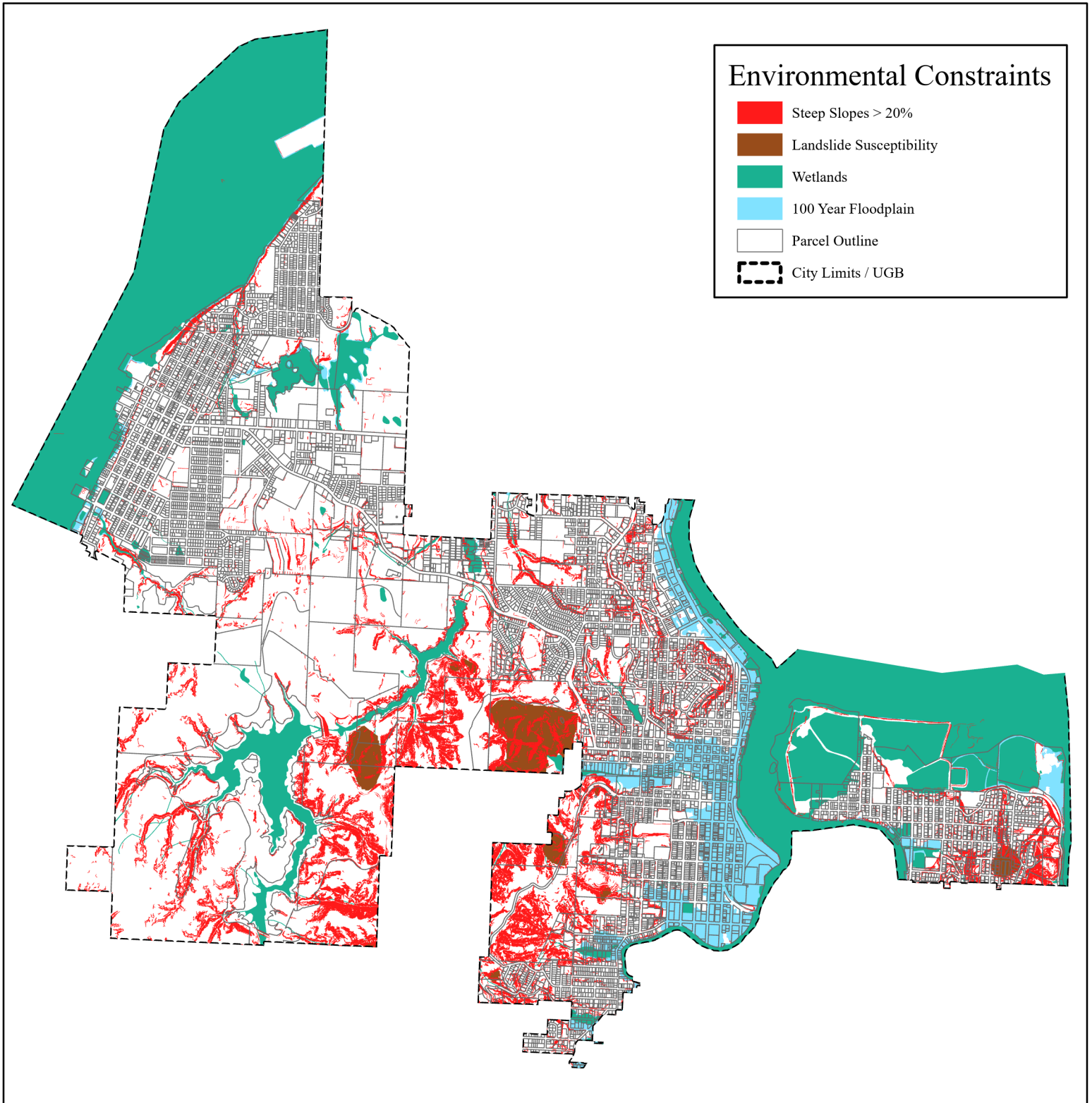
The information on this map was derived from digital databases provided by the City of Coos Bay. Care was taken in the creation of this map, but it is provided "as is". LCOG cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, expressed or implied, accompanying this product.



Map 4 Environmental Constraints City of Coos Bay Buildable Lands Inventory 2020

Map Date: September, 2020.

The information on this map was derived from digital databases provided by the City of Coos Bay. Care was taken in the creation of this map, but it is provided "as is". LCOG cannot accept any responsibility for errors, omissions, or positional accuracy in the digital data or the underlying records. There are no warranties, expressed or implied, accompanying this product.



IV. HOUSING NEEDS ANALYSIS

a. Current Housing Supply

The findings presented in the current housing needs section are the foundation for the projections of future need in the following sections.

A greater share of Coos Bay residents own (57%) than rent (43%). By comparison, ownership rates are higher in Coos County (65%), the State of Oregon (62%) and the United States (64%).¹⁰ Following national trends, ownership rates in Coos Bay have fallen from 60% in 2000.¹¹

Figure 4.1 shows current housing conditions in Coos Bay. Coos Bay has 7,737 total housing units in 2020,¹² with an estimated current vacancy rate of 7.5%. An estimated 17,057 residents live in 7,160 households, excluding those living in group housing.

Estimates for figures in this section were derived utilizing the best available data, including 2020 population forecast from the Portland State University Population Research Center (PRC), the U.S. Census, and permit data from the City of Coos Bay.

Figure 4.1: Current Housing Profile (2020)

| Current Housing Conditions | | | Source |
|--|---------------|----------------------------|--------------------------|
| Total 2020 Population | 17,057 | (2019 figure plus AAGR) | PSU |
| - Estimated Group Housing Population | 159 | (% of total) | 2018 ACS |
| Estimated Non-Group 2020 Population | 16,898 | (Total - Group) | |
| Average Household Size | 2.36 | | 2018 ACS |
| Estimated Non-Group 2018 Households | 7,160 | (Non-Group Pop/HH size) | |
| Total Housing Units | 7,737 | (Occupied + Vacant) | 2010 US Census + Permits |
| Occupied Housing Units | 7,160 | (Equals # of HH) | |
| Vacant Housing Units | 577 | (Total HH - Occupied) | |
| Current Vacancy Rate | 7.5% | (Vacant units/Total units) | |

Sources: American Community Survey (ACS) 2018 5-Year Estimates (Tables B11016, B26001), 2010 Decennial Census Summary File 1 (Table H1), PSU Coordinated Population Forecast for Coos County, Lane Council of Governments

Note: To produce the 2020 estimate for total housing units, the number of new building permits in Coos Bay from April 2010 through May 2020 was added to the total number of units from the 2010 Decennial Census.

¹⁰ American Community Survey 2018 5-Year Estimates, Table DP04

¹¹ 2000 Decennial Census Summary File 1, Table H004

¹² 2020 estimate of units is based on 2010 decennial census count augmented by Coos Bay permits (2010-2020)

Figure 4.2 provides a profile of current housing supply by estimated affordability. This, and a significant amount of the remaining analysis, was performed using the Bjelland Housing Needs Model.¹³

Figure 4.2: Profile of Current Housing Supply, Estimated Affordability (2020)

| Income Range | Ownership Housing | | Rental Housing | | Share of Total Units |
|---------------------|------------------------|-----------------|-----------------------|-----------------|----------------------|
| | Affordable Price Level | Estimated Units | Affordable Rent Level | Estimated Units | |
| Under \$15,000 | <\$91.3k | 1,088 | \$0 - \$308 | 263 | 17% |
| \$15,000 - \$24,999 | \$91.3K <\$128.9K | 446 | \$309 - \$539 | 431 | 11% |
| \$25,000 - \$34,999 | \$128.9K <\$185.3K | 751 | \$540 - \$776 | 1,022 | 23% |
| \$35,000 - \$49,999 | \$185.3K <\$279.3K | 1,325 | \$777 - \$1,132 | 1,172 | 32% |
| \$50,000 - \$74,999 | \$279.3K <\$372.8K | 443 | \$1,133 - \$1,739 | 324 | 10% |
| Over \$75,000 | \$372.8+ | 321 | \$1,740 + | 151 | 6% |
| Totals: | 57% | 4,374 | 43% | 3,363 | |

Sources: ACS 2018 5-Year Estimates (Tables B25075, B25063), City of Coos Bay Permits, Lane Council of Governments, Bjelland Housing Needs Model (Template 6)

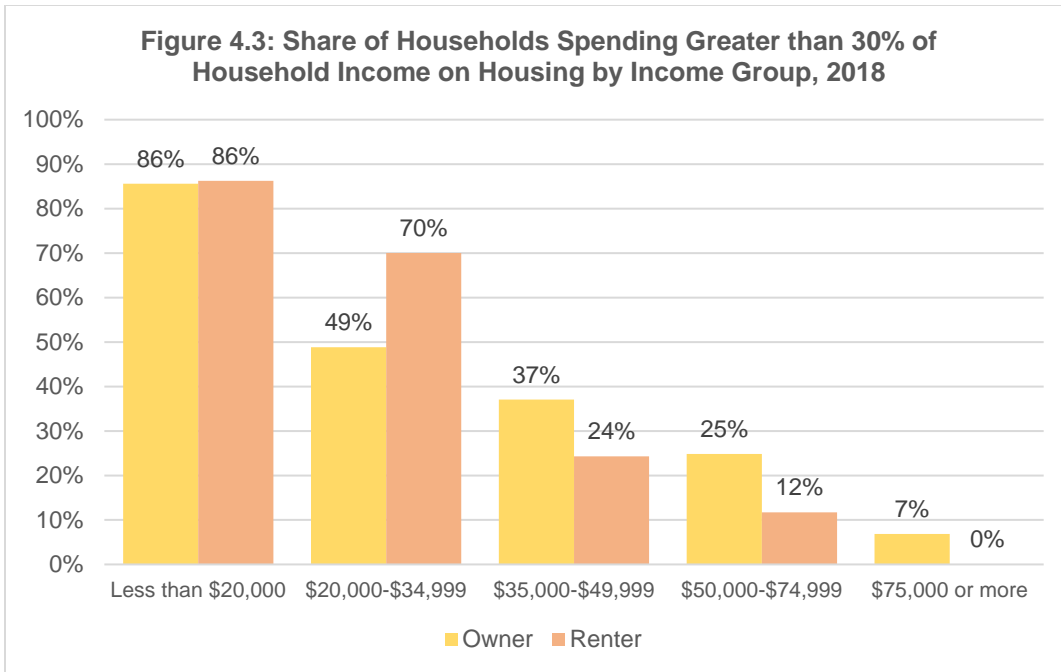
b. Housing Costs and Affordability

Figure 4.3 shows the share of households spending greater than 30% of household income on housing by tenure and income group. Overall, 37% of households are housing cost burdened, meaning they spend 30% or more of their income on housing costs.^{14 15} Unsurprisingly, the households in the lower income brackets spend a greater proportion of their household income on housing costs. This is true for both homeowners and renters. In the lowest income bracket (less than \$20,000), 86% of renters and owners are housing cost burdened according to this measure. Renter households in the \$20,000 to \$35,000 bracket are significantly more likely to spend more than 30% of their income on housing than owner households (70% of renters vs. 49% of owners). As incomes increase, the share of housing cost burdened households decreases, though notably every income group aside from renter households with incomes greater than \$75,000 experiences housing cost burden to some degree, indicating a lack of affordable housing options at those income levels.

¹³ This analysis utilizes a Housing Needs Model designed by demographer and housing specialist Richard Bjelland. The model generates future housing need estimates based on a set of demographic inputs designed to meet housing requirements established by Oregon's Statewide Planning Goal 10. See Appendix for a description of the model.

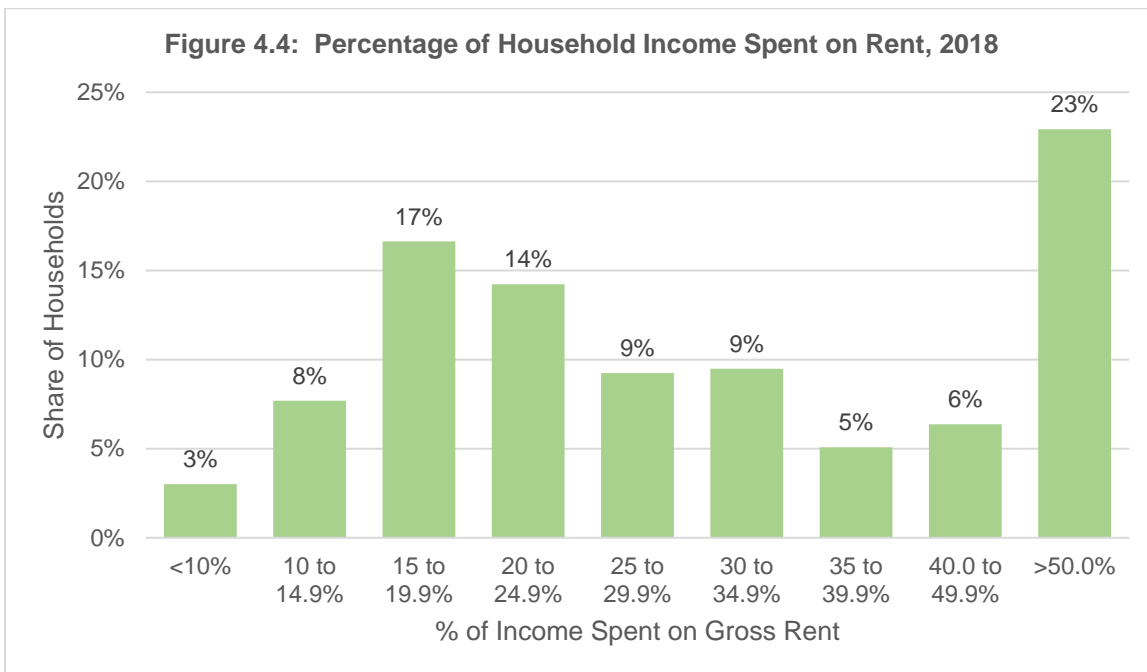
¹⁴ American Community Survey 2018 5-Year Estimates, Table B25106

¹⁵ The so-called "30 percent rule" is widely used as a measure of housing cost burden and is the basis for the analysis presented here. Those spending greater than 30% of their income on housing costs are considered to be cost burdened; those spending greater than 50% are considered severely housing cost burdened.



Source: ACS 2018 5-year estimates (B25106)

Figure 4.4 shows gross rent as a percentage of income for renter households in Coos Bay, which provides another way to look at housing cost burden specifically for renters. Nearly half of all renter households (43%) spend greater than 30% of their incomes on rent, while 23% spend greater than 50% of their incomes on rent, indicating that they are severely housing cost burdened. Lower income residents and particularly renters bear the brunt of the lack of affordable housing options in cities across the country. The analysis reveals that Coos Bay, like so many other communities, needs more affordable rental units.



Source: ACS 2018 5-year estimates (B25070)

c. Current Housing Demands

The Bjelland Housing Needs Model indicates that there is currently a demand for 2,749 rental units and 4,988 owner units. For renters, the greatest demand is for units at the lower to middle end of the affordable rent level range; by contrast, ownership demand is higher in the middle to upper end of the affordable price range. Figure 4.5 shows an estimate of the current housing demand for owner and rental units by cost in Coos Bay and presents a housing mix that aligns with the available income data for Coos Bay’s residents. This data provides a valuable reference for understanding where current housing types are in surplus or in deficit.

Figure 4.5: Estimate of Current Housing Demand (2020)

| Ownership | | | | |
|------------------------|-----------------|-----------------------------|------------|------------|
| Affordable Price Range | # of Households | Income Range | % of Total | Cumulative |
| <\$91.3k | 371 | Under \$15,000 | 7% | 7% |
| \$91.3K <\$128.9K | 719 | \$15,000 - \$24,999 | 14% | 22% |
| \$128.9K <\$185.3K | 772 | \$25,000 - \$34,999 | 15% | 37% |
| \$185.3K <\$279.3K | 1,050 | \$35,000 - \$49,999 | 21% | 58% |
| \$279.3K <\$372.8K | 977 | \$50,000 - \$74,999 | 20% | 78% |
| \$372.8+ | 1,100 | Over \$75,000 | 22% | 100% |
| Totals: | 4,988 | % of All Households: | 64% | |

| Rental | | | | |
|-----------------------|-----------------|-----------------------------|------------|------------|
| Affordable Rent Level | # of Households | Income Range | % of Total | Cumulative |
| \$0 - \$308 | 609 | Under \$15,000 | 22% | 22% |
| \$309 - \$539 | 378 | \$15,000 - \$24,999 | 14% | 36% |
| \$540 - \$776 | 687 | \$25,000 - \$34,999 | 25% | 61% |
| \$777 - \$1,132 | 508 | \$35,000 - \$49,999 | 18% | 79% |
| \$1,133 - \$1,739 | 445 | \$50,000 - \$74,999 | 16% | 96% |
| \$1,740 + | 123 | Over \$75,000 | 4% | 100% |
| Totals: | 2,749 | % of All Households: | 36% | |

| | |
|-----------------------|--------------|
| All Households | 7,737 |
|-----------------------|--------------|

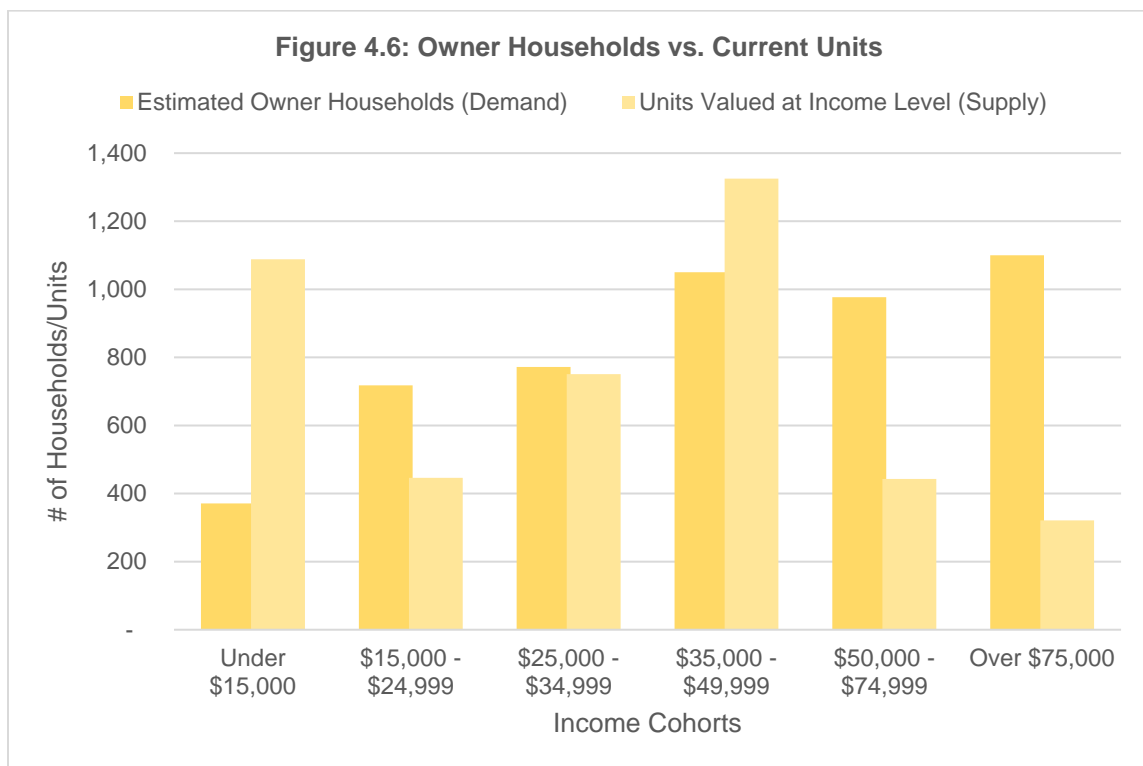
Sources: ACS 2018 5-Year Estimates (Table B19037), City of Coos Bay, Lane Council of Governments, Bjelland Housing Needs Model (Template 5)

d. Comparison of Current Housing Demand with Current Supply

Figures 4.6 and 4.7 reveal discrepancies between the current housing *demand* and the existing *supply* of housing for both rental and ownership housing.

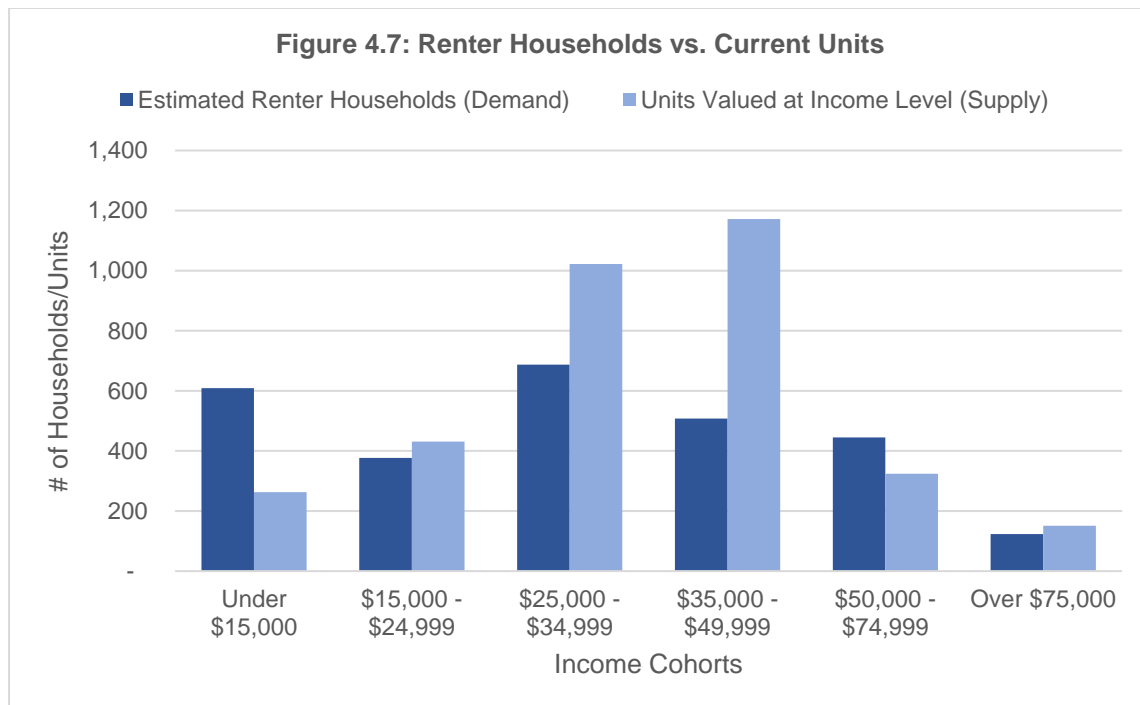
For ownership housing, existing units at the lowest income range appear to exceed demand, while demand outpaces supply for units affordable to higher income ranges (Figure 4.6). Though Figure 4.6 indicates a surplus of lower-cost units, it should be noted that there is still demand for ownership housing affordable at lower price points among new buyers and low-income households in Coos Bay. Homeownership is likely less accessible to households with lower income levels than the figure implies for a number of reasons, including potentially undervalued housing stock, low levels of ownership turnover, and middle earning households purchasing homes at lower value points in the absence of cost-appropriate options for those residents.

In general, the findings indicate that there are insufficient ownership housing opportunities across all income levels. This suggests that the community may also be able to support some new single-family housing at higher price points.



Sources: ACS 2018 5-Year Estimates (Tables B19037, B25075, B25063), City of Coos Bay, Lane Council of Governments, Bjelland Housing Needs Model (Templates 5 and 6)

Figure 4.7 addresses the same dynamic for renter households. For rental housing, demand is greater than supply at the lowest income level, indicating that the residents most likely to spend greater than 30% of their income on housing do not have adequate affordable options. These findings suggest that, with the exception of the lowest income category (under \$15,000), lower- to middle-income categories have income-appropriate rental opportunities. There is, in fact, a significant surplus in the \$25,000 to \$50,000 income category (rental units in the \$540 to \$1,132 range). It also stands out that higher earning income categories do not have many higher valued alternatives, which could be impacting the availability of well-matched housing options in the middle-income range.



Sources: ACS 2018 5-Year Estimates (Tables B19037, B25075, B25063), City of Coos Bay, Lane Council of Governments, Bjelland Housing Needs Model (Templates 5 and 6)

The price and rent segments which show a “surplus” in Figures 4.6 and 4.7 are illustrating where current property values and market rent levels are in Coos Bay. Housing prices and rent levels will tend to congregate around those levels. These levels will be too costly for some (i.e. require more than 30% in gross income) or “too affordable” for others (i.e. they have income levels that indicate they could afford more expensive housing if it were available).

e. Future Housing Needs

The findings presented in the future housing needs section are built on the foundational structure of the “current needs” identified in the previous section.

Figure 4.8 presents a future housing profile (2040) for Coos Bay. Figure 4.8 is similarly formatted to Figure 4.1, which provides housing profile for Coos Bay in 2020. The figures in the 2040 profile are based on the current (2020) housing profile and the PSU population forecast and growth rate for 2040. These projections predict a growth in population of 1,244 new residents and 522 new households. This translates into a Coos Bay housing inventory in 2040 of 7,682 occupied dwelling units, and 8,341 total units (including a vacancy factor).

Figure 4.8: Future Housing Profile (2040)

| Projected Future Housing Conditions (2020-2040) | | | Source |
|---|---------------|--|--------|
| Total 2020 Population (Minus Group Pop.) | 17,057 | See Figure 5.6 | PSU |
| Projected Annual Growth Rate | 0.4% | | PSU |
| 2040 Non-Group Population | 18,130 | (Total 2040 Pop. - Group Housing Pop.) | |
| Estimated group housing population | 171 | Share of total pop from Census (2040 Non-Group Pop + 2040 Group Pop) | Census |
| Total Estimated 2040 Population | 18,301 | | PSU |
| Estimated Non-Group 2040 Households* | 7,682 | (2040 Non-Group Pop/Avg. HH Size) (2040 Non-Group HH- 2020 Non-Group HH) | |
| New Households 2018 to 2040 | 522 | | |
| Avg. Household Size | 2.36 | Projected household size | Census |
| Total Housing Units | 8,341 | Occupied units plus vacant | |
| Occupied Housing Units | 7,682 | (Equals # of HH) | |
| Vacant Housing Units | 659 | | |
| Projected Market Vacancy Rate | 7.9% | (Vacant units/total units) | |

Sources: ACS 2018 5-Year Estimates (Tables B11016, B26001), 2010 Decennial Census Summary File 1 (Table H1), PSU Coordinated Population Forecast for Coos County, Lane Council of Governments

*Housing Units is calculated by adding vacant units (vacancy rate) to Households

The Estimate of Future Housing Demand (Figure 4.9) utilizes the same methodology as the Estimate of Current Housing Demand (Figure 4.5). Based on the model inputs, demand for ownership housing will remain higher at the levels affordable at mid- to higher-income ranges; demand for ownership housing will be lowest in the lowest income range. Demand for rental housing will remain more evenly spread among the lower- to mid-income income ranges; rental demand will be lowest in the highest income range.

The affordable price level for ownership housing assumes 30-year amortization in an environment of low interest rates. Because of the impossibility of predicting variables such as interest rates 20 years into the future, these assumptions were kept constant from the estimation of current housing demand. Income levels and price levels presented are not adjusted for inflation.

Figure 4.9: Estimate of Future Housing Demand (2040)

| Ownership | | | | |
|------------------------|-----------------|-----------------------------|------------|------------|
| Affordable Price Range | # of Households | Income Range | % of Total | Cumulative |
| <\$91.3k | 398 | Under \$15,000 | 7% | 7% |
| \$91.3K <\$128.9K | 773 | \$15,000 - \$24,999 | 14% | 22% |
| \$128.9K <\$185.3K | 866 | \$25,000 - \$34,999 | 16% | 38% |
| \$185.3K <\$279.3K | 1,127 | \$35,000 - \$49,999 | 21% | 59% |
| \$279.3K <\$372.8K | 1,048 | \$50,000 - \$74,999 | 19% | 78% |
| \$372.8+ | 1,180 | Over \$75,000 | 22% | 100% |
| Totals: | 5,391 | % of All Households: | | 65% |

| Rental | | | | | |
|-----------------------|-----------------|-----------------------------|------------|-----------------------|--------------|
| Affordable Rent Level | # of Households | Income Range | % of Total | Cumulative | |
| \$0 - \$308 | 673 | Under \$15,000 | 23% | 23% | |
| \$309 - \$539 | 409 | \$15,000 - \$24,999 | 14% | 37% | |
| \$540 - \$776 | 715 | \$25,000 - \$34,999 | 24% | 61% | |
| \$777 - \$1,132 | 545 | \$35,000 - \$49,999 | 19% | 79% | |
| \$1,133 - \$1,739 | 477 | \$50,000 - \$74,999 | 16% | 96% | |
| \$1,740 + | 132 | Over \$75,000 | 5% | 100% | |
| Totals: | 2,950 | % of All Households: | 35% | All Households | 8,341 |

Sources: ACS 2018 5-Year Estimates (Table B19037), City of Coos Bay, Lane Council of Governments, Bjelland Housing Needs Model (Template 11)

f. Allocation of Projected Future Housing Need

Once the estimate of future housing demand has been established, assumptions about how all future units should be allocated can happen. Note that this does not mean how all “new” units should be allocated, but rather how “all” units should be allocated. This approach contemplates and enables the possibility of the repurposing of existing units. The allocation identified below does not, however, anticipate any significant change in how existing units are being used. Analysts began by accounting for existing housing type proportions and then added a distribution of conceptual “new” units to reflect desired changes in the proportion of housing types.

The City of Coos Bay determined to incorporate, in that future proportion, a greater amount of “middle housing” (housing between traditional single-family and high-density apartments). For the City’s purposes, the housing model’s “Duplexes” and “3- or 4-Unit” categories functionally represent most “middle housing,” including cottage housing, townhomes, etc. This is supported by documented trends, including existing and ever-increasing local and state policies promoting housing choice and specifically middle housing, as well as national, state, and local trends pointing to consumer desire for smaller, more convenient, and more affordable housing options among older age groups and young professionals. Figure 4.10 shows how the future housing demand was allocated and provides a comparison to the current inventory.

Figure 4.10: Allocation of Projected Future Housing Units (2040)

| Rental | | | | | | |
|------------------------|--------------------|--------------------------------------|--------------|--------------|--------------|---------------------------|
| Rent Range | Total Needed Units | Single-Family (Attached or Detached) | 2-unit | 3- or 4-plex | 5+ Units MFR | Manufactured Home in Park |
| \$0 - \$308 | 673 | 4% | 4% | | 77% | 15% |
| \$309 - \$539 | 409 | 8% | 12% | 22% | 55% | 3% |
| \$540 - \$776 | 715 | 35% | 16% | 16% | 31% | 2% |
| \$777 - \$1,132 | 545 | 50% | 13% | 12% | 24% | 1% |
| \$1,133 - \$1,739 | 477 | 73% | 15% | 12% | | |
| \$1,740 + | 132 | 100% | | | | |
| Total: | 2,950 | | | | | |
| 2040 Percentage | | 36.0% | 11.3% | 11.1% | 37.1% | 4.5% |
| 2020 Percentage | | 45.3% | 10.5% | 9.1% | 32.5% | 2.5% |

| Ownership | | | | | | |
|------------------------|--------------------|--------------------------------------|-------------|--------------|--------------|---------------------------|
| Price Range | Total Needed Units | Single-Family (Attached or Detached) | 2-unit | 3- or 4-plex | 5+ Units MFR | Manufactured Home in Park |
| <\$91.3k | 398 | 15% | | | | 85% |
| \$91.3K <\$128.9K | 773 | 50% | 8% | 2% | | 40% |
| \$128.9K <\$185.3K | 866 | 70% | 10% | 5% | | 15% |
| \$185.3K <\$279.3K | 1,127 | 90% | 5% | 5% | | |
| \$279.3K <\$372.8K | 1,048 | 100% | 15% | | | |
| \$372.8+ | 1,180 | 100% | | | | |
| Total: | 5,391 | | | | | |
| 2040 Percentage | | 79.7% | 3.8% | 2.1% | 0.0% | 14.4% |
| 2020 Percentage | | 83.7% | 1.2% | 0.0% | 0.0% | 15.1% |

| Total New Rental and Ownership Units | | | | | | |
|--------------------------------------|--------------------------------------|--------|--------------|---------------|----------------------------|-------------|
| | Single-Family (Attached or Detached) | 2-unit | 3- or 4-plex | 5 + Units MFR | Manufactured Homes in Park | Total Units |
| 2040 Totals | 5,356 | 537 | 442 | 1,095 | 910 | 8,341 |
| 2040 % of Total Units | 64.2% | 6.4% | 5.3% | 13.1% | 10.9% | 100% |
| 2020 Totals | 5,188 | 404 | 307 | 1,094 | 744 | 7,737 |
| 2020 % of Total Units | 67.1% | 5.2% | 4.0% | 14.1% | 9.6% | 100% |

Sources: ACS 2018 5-Year Estimates (Table B19037), City of Coos Bay, Lane Council of Governments, Bjelland Housing Needs Model (Templates 6 &12)

g. Comparison of Future Housing Demand to Current Housing Inventory

The estimate of future housing demand (Figure 4.9) was compared with the current housing inventory presented in Section IV(a) Current Housing Supply to determine the projected future need for strictly *NEW* housing units by type and price range (Figure 4.11). *This estimate includes a vacancy assumption.* As reflected by the most recent Census data, and as is common in most communities, the vacancy rate for rental units is typically higher than that for ownership units. An average vacancy rate of 7.9% is assumed for the purpose of this analysis.

Overall, 604 new rental and ownership single-family units are needed by 2040 to meet future demand (Figure 4.11). Following are key takeaways about the projected needs for new units:

- Of the new units needed, roughly 81% are projected to be ownership units, while 19% are projected to be rental units. This results from identified needs based on the Census-based rental/owner split built into the housing needs model and for increased opportunities for ownership.
- There is a need for 489 new ownership units. There is no new need for ownership housing at the lowest end of the pricing spectrum, but new units are needed in the mid-range middle housing category (e.g. manufactured homes in parks and multi-unit housing). The table

suggests that there is support for some ownership units at higher price points—155 new units are needed at the two highest price ranges in the single-family category.

- There is a need for 115 new rental units. The greatest need for rental units is found at the lowest price points. There is support for some units under \$539 rent levels, which is below many current market rents. There is also support for units over \$1,133. This shows that there is some support for new, more expensive rental supply.

Figure 4.11: Projected Future Need for NEW Housing Units (2040)

| Ownership | | | | | | |
|--------------------|--------------------------------------|-----------|--------------|---------------|---------------------------|-------------|
| Price Range | Single-Family (Attached or Detached) | 2-unit | 3- or 4-plex | 5 + Units MFR | Manufactured Home in Park | Total Units |
| <\$91.3k | | | | | | |
| \$91.3K <\$128.9K | 3 | | 1 | | 171 | 176 |
| \$128.9K <\$185.3K | | 8 | 2 | | 116 | 126 |
| \$185.3K <\$279.3K | | 11 | 1 | | 20 | 32 |
| \$279.3K <\$372.8K | 64 | | | | | 64 |
| \$372.8+ | 91 | | | | | 91 |
| Totals: | 159 | 19 | 4 | | 307 | 489 |
| Percentage: | 32% | 4% | 1% | | 63% | 100% |

| Rental | | | | | | |
|--------------------|--------------------------------------|------------|--------------|---------------|---------------------------|-------------|
| Rent Range | Single-Family (Attached or Detached) | 2-unit | 3- or 4-plex | 5 + Units MFR | Manufactured Home in Park | Total Units |
| \$0 - \$308 | 3 | | | | 41 | 44 |
| \$309 - \$539 | 4 | | 13 | | 7 | 24 |
| \$540 - \$776 | | | | | 11 | 11 |
| \$777 - \$1,132 | | 9 | | | 3 | 12 |
| \$1,133 - \$1,739 | 3 | 11 | 11 | | | 24 |
| \$1,740 + | | | | | | |
| Totals: | 9 | 20 | 24 | | 62 | 115 |
| Percentage: | 8% | 17% | 21% | | 54% | 100% |

| Total New Rental and Ownership Units | | | | | | |
|--------------------------------------|--------------------------------------|-------------|--------------|---------------|---------------------------|-------------|
| | Single-Family (Attached or Detached) | 2-unit | 3- or 4-plex | 5 + Units MFR | Manufactured Home in Park | Total Units |
| Totals | 168 | 39 | 28 | 0 | 369 | 604 |
| % of Total Units | 27.8% | 6.4% | 4.6% | 0% | 61.2% | 100% |

Sources: ACS 2018 5-Year Estimates (Table B19037), City of Coos Bay, Lane Council of Governments, Bjelland Housing Needs Model, Template 14

Needed Unit Types

The mix of needed unit types shown in Figure 4.11 reflects both past trends and anticipated future trends. Since 2000, detached single-family units (including manufactured and mobile homes) have constituted nearly all of the permitted units in Coos Bay. In keeping with development trends, and the buildable land available to Coos Bay, single-family units are expected to make up the greatest share of new housing development over the next 20 years. However, middle housing is expected to see an increase in proportion as the result of deliberate housing policy and accompanying trends reflecting a desire for smaller and more convenient housing options amongst the growing population of older residents and the desires of younger professionals looking for more convenience and more accessible options for ownership (including manufactured homes). This HNA/BLI concludes that:

- Approximately 28% of the new units are projected to be single-family detached (and attached) homes.
- 61.2% are projected to be manufactured homes in parks. The reason that this proportion is so high is because of a manufactured home development that was approved by the City of Coos Bay in the Spring of 2020.
- Duplex through four-plex units are projected to represent 11% of the total need. Duplex units would include a detached single-family home with an accessory dwelling unit on the same lot, or with a separate unit in the home (for instance, a rental basement unit). These categories also include any other allowable middle housing types, such as cottage housing.
- For the purposes of this study, new needed units do not include multi-family housing in structures of 5+ attached units.
- Of ownership units, 32% are projected to be single-family homes, and 54% manufactured homes in parks. Some of the single-family units may be attached forms (townhomes – another form of middle housing).
- About 38% of new rental units are projected to be found in two- to four-unit structures. Twenty percent of projected rental properties are manufactured homes in parks.

V. RECONCILIATION OF LAND SUPPLY AND FUTURE NEED (2040)

This section builds on data and analysis presented previously to compare “demonstrated need” for vacant buildable land with the supply of such land currently available in Coos Bay.¹⁶

This section identifies and compares Coos Bay’s current resources (supply) and with current and projected needs (demand) and concludes land supply and land demand for the 2020-2040 time period.

Figure 5.1 presents the estimated new unit capacity of the buildable lands identified in the City of Coos Bay. The zones are further broken down into Low, Medium, and High Density residential (Unit Capacity Low = 5 & 7, Medium = 10 & 12, Higher = 14).

Figure 5.1: Estimated New Unit Capacity of Buildable Lands

| | Total Buildable Acres | Share of all Buildable Acres | Projected Unit/Acre* | Housing Unit Capacity | Share of Housing Capacity |
|-----------------------------------|------------------------------|-------------------------------------|-----------------------------|------------------------------|----------------------------------|
| Low Density Residential - 6 | 183 | 38.1% | 7 | 1,281 | 27% |
| Low Density Residential - 8.5 | 8.6 | 1.8% | 5 | 43 | 1% |
| LDR-6 Overlay Zone | 20.2 | 4.2% | 12 | 242 | 5% |
| Medium Density Residential | 205.6 | 42.8% | 12 | 2,467 | 51% |
| Mixed Use | 3.2 | 0.7% | 14 | 45 | 1% |
| Commercial | 27.3 | 5.7% | 14 | 382 | 8% |
| Coquille Plan - Village | 29.3 | 6.1% | 10 | 293 | 6% |
| Waterfront Heritage | 3 | 0.6% | 14 | 42 | 1% |
| Total | 480 | 100.0% | | 4,796 | 100% |
| <i>Low Density Residential</i> | <i>191.6</i> | <i>39.9%</i> | | <i>1,324</i> | <i>27.6%</i> |
| <i>Medium Density Residential</i> | <i>255.1</i> | <i>53.1%</i> | | <i>3,003</i> | <i>62.6%</i> |
| <i>Higher Density Residential</i> | <i>33.5</i> | <i>7.0%</i> | | <i>469</i> | <i>9.8%</i> |

Source: LCOG Analysis with Coos County and Coos Bay GIS Data, City of Coos Bay Dev. Code

*Represents an average. Zones accommodate a range of units/acre

Figures 5.2 and 5.3 summarize the forecasted future unit need for Coos Bay. These are the summarized results from Section IV of this report.

Comparison of Housing Need and Capacity

There is a total forecasted need for 8,431 units in Coos Bay in 2040, including 604 new units. This is well below the estimated capacity of 4,796 units. After this need is accommodated, there is an estimated remaining capacity of over 4,000 additional units, mostly in the low- and medium-density residential zones, but also a considerable capacity of acreage where higher density is allowed.

¹⁶ Section III(b) described population forecasts, Section IV(a) described land supply, and Section V described current (a) and future (c) housing needs.

Figure 5.2 shows the calculation of estimated land need based on the new units identified in Figure 4.11. Planned units per acre are estimated in this instance by housing type (as opposed to zone). These estimates enable a calculation of land need by dividing total new units in each category by the estimated units per acre for each housing type. The result is a total of 79.2 acres needed to address the identified housing needs for the planning period (2020 – 2040).

Figure 5.2: Estimated Land Need (Acres)

| | Total New Rental and Ownership Units | | | | | Total Units |
|--------------------------------|--------------------------------------|------------|--------------|---------------|---------------------------|-------------|
| | Single-Family (Attached or Detached) | 2-unit | 3- or 4-plex | 5 + Units MFR | Manufactured Home in Park | |
| A. Total New Units | 168 | 39 | 28 | 0 | 369 | 604 |
| B. Planned Units/Acre | 5.25 | 10 | 12 | 14 | 9 | - |
| Land Need (Acres) (A/B) | 32 | 3.9 | 2.3 | - | 41 | 79.2 |

Sources: City of Coos Bay Dev. Code, Lane Council of Governments, Bjelland Housing Needs Model,

Figure 5.3 below demonstrates that there is sufficient capacity to accommodate all projected new unit types. The following table shows the same comparison, converting the forecasted residential need and capacity by acres, rather than units. There is a projected need for 79.2 acres of new residential development, but a buildable capacity of 480 acres, leaving a surplus of approximately 401 acres.

Figure 5.3: Land Inventory vs. Land Need

| | Low Density | Medium Density | Higher Density | Total (Acres) |
|--|--------------|----------------|----------------|---------------|
| Buildable Land Inventory (Acres) | 191.6 | 255.1 | 33.5 | 480.0 |
| Estimated Land Need (Acres) | 32 | 44.9 | 2.3 | 79.2 |
| Land Surplus (Inventory - Need) | 159.6 | 210.2 | 31.2 | 400.8 |

Sources: LCOG Analysis with Coos County and Coos Bay GIS Data

ANALYSIS FINDING:

There is currently sufficient buildable capacity within Coos Bay and within existing zoning categories to accommodate projected need, including consideration of affordability. Some of this capacity is in the form of parcels with the potential for infill or redevelopment for future multi-family units. The character of future supply can and should be guided by housing policy and strategy recommendations to be included in subsequent reports and ultimately integrated into updates of the City of Coos Bay’s Comprehensive Plan and Development Code.

VI. APPENDIX

a. Housing Needs Glossary

Cohort – A group of individuals or households having one or more statistical factors (such as age, race, or class membership) in common in a demographic study

Dwelling Unit – A dwelling unit (living quarters) is either a Housing Unit or Group Quarters.

Group Quarters – All persons not living in households are classified by the Census Bureau as living in Group Quarters. Persons in group quarters are categorized as living in institutions (institutionalized population) or noninstitutional group quarters (noninstitutionalized population). The institutionalized population includes people under formally authorized, supervised care or custody and are usually classified as "patients or inmates". Types of institutions are correctional institutions, nursing homes, mental hospitals, hospitals for the chronically ill, schools or wards for handicapped or drug/alcohol abuse, orphanages, residential treatment centers, detention centers, etc. Noninstitutional group quarters consist of other group quarters where the persons living in the unit may include staff of institutions living on institutional grounds. Other examples of noninstitutional group quarters are rooming houses, group homes, halfway houses, maternity homes for unwed mothers, religious group quarters, dormitories, military quarters, barracks, emergency shelters, homeless shelters, YMCA/YWCA, campgrounds, etc.

Household – A household includes all of the people who occupy a housing unit as their usual place of residence. The occupants may be a single-family, one person living alone, two or more families living together, or any other group of related or unrelated persons who share living quarters and are not living in group quarters. The count of households in a 100 percent tabulation census equals the count of occupied housing units.

Householder – The household member (or one of the household members) in whose name the living unit is owned, being bought, or rented. If there is no such person, any adult household member.

Housing Affordability – Housing costs as a percentage of income is the primary indicator for affordability for rental and ownership housing. The conventional threshold for measuring affordability is 30% (i.e. housing is affordable if it costs less than 30% of a household's income); however, this measure may underestimate the number of households who are burdened by housing costs because it does not consider other factors that increase living expenses, such as transportation costs.

Housing Cost Burden – Housing cost-burdened households spend greater than 30% of their income on housing. Severely housing cost-burdened households spend greater than 50% of their income on housing.

Housing Unit – A housing unit is a house, apartment, manufactured home, mobile home or trailer, a group of rooms or a single room occupied as separate living quarters or, if vacant, intended for occupancy as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from other persons in the building and which have direct access from outside the building or through a common hall.

Template – A pre-configured portion of an Excel worksheet used for inputting data, storing defined model parameters, performing calculations on the data and parameters, and aggregating and displaying results of those calculations.

Tenure – A description of the terms under which a household is occupying a housing unit – ownership versus rental.

Very Low Income – The Department of Housing and Urban Development (HUD) defines very low income as 50% of area median income (AMI).

b. Community Profile Supporting Data

The following tables provide additional demographic details to support the Section II Community Profile.

Households

Figure 6.1 shows the number and share of owner-occupied and renter-occupied households in Coos Bay by the number of people living in the household. One- and two-person households make up the majority of both owner-occupied (72%) and renter-occupied (69%) households, which is consistent with local and national trends toward smaller household size as the population ages.

Figure 6.1: Tenure by Household Size, 2018

| | Owner Occupied | | Renter Occupied | |
|----------------------------|----------------|------|-----------------|------|
| | # | % | # | % |
| Total | 3,841 | 100% | 2,953 | 100% |
| 1-person household | 1,183 | 31% | 1,305 | 44% |
| 2-person household | 1,581 | 41% | 728 | 25% |
| 3-person household | 358 | 9% | 341 | 12% |
| 4-person household | 373 | 10% | 382 | 13% |
| 5-person household | 159 | 4% | 147 | 5% |
| 6-person household | 112 | 3% | 26 | 1% |
| 7-or-more person household | 75 | 2% | 24 | 1% |

Source: ACS 2018 5-year estimates (Table B25009)

Age Trends

Figure 6.2 shows the relative growth and decline of age cohorts in Coos Bay between 2010 and 2018. In general, the youngest and oldest age cohorts have experienced growth, while the middle cohorts have experienced declines. Consistent with documented national trends, the 70 to 74 cohort in Coos Bay grew the most at 50%, while the 80 to 84 cohort showed the greatest decline at -40%.

Figure 6.2 Population by Age in Coos Bay, 2010 to 2018

| | 2010 | 2018 | % Change |
|-------------------|--------|--------|----------|
| Total Population | 15,967 | 16,176 | 1% |
| Under 5 years | 1,000 | 1,037 | 4% |
| 5 to 9 years | 864 | 1,125 | 30% |
| 10 to 14 years | 822 | 789 | -4% |
| 15 to 19 years | 1,141 | 900 | -21% |
| 20 to 24 years | 1,112 | 921 | -17% |
| 25 to 29 years | 1,004 | 1,143 | 14% |
| 30 to 34 years | 944 | 782 | -17% |
| 35 to 39 years | 822 | 1,088 | 32% |
| 40 to 44 years | 858 | 835 | -3% |
| 45 to 49 years | 1,017 | 760 | -25% |
| 50 to 54 years | 1,152 | 971 | -16% |
| 55 to 59 years | 1,147 | 969 | -16% |
| 60 to 64 years | 1,036 | 1,302 | 26% |
| 65 to 69 years | 885 | 1,045 | 18% |
| 70 to 74 years | 714 | 1,072 | 50% |
| 75 to 79 years | 558 | 717 | 28% |
| 80 to 84 years | 457 | 274 | -40% |
| 85 years and over | 434 | 446 | 3% |

Sources: 2010 DEC Summary File 1 (Table P12) and ACS 2018 5-year estimates (Table S0101)

Figure 6.3 shows the share of households with children and the share of the population over 65 in Coos Bay compared with Coos County and Oregon. The share of households with children in Coos Bay (26%) is slightly higher than Coos County (24%) and lower than Oregon (29%); the share of the population over 65 in Coos Bay (22%), meanwhile, is smaller than Coos County (25%), and higher than Oregon (17%). Greater shares of older residents and smaller shares of households with children under 18 in both Coos County and Coos Bay reflect the trend toward declining fertility rates and aging populations, though this trend appears to be marginally less apparent in Coos Bay relative to the county.

Figure 6.3: Selected Age Characteristics, 2018

| | Coos Bay | Coos County | Oregon |
|-----------------------------|----------|-------------|--------|
| Share of HHs with Children | 26% | 24% | 29% |
| Share of Population over 65 | 22% | 25% | 17% |

Source: ACS 2018 5-year estimates (Tables DP01 and S1101)

Income Trends

Figure 6.4 shows the change in per capita and median household income in Coos Bay between 2010 and 2018. Per capita income grew 27% during that time period, and median household income grew 15%.

Figure 6.4: Per Capita and Median Household Income, 2010 to 2018

| | 2010 | 2018 | % Change |
|-------------------------|----------|----------|----------|
| Per Capita Income | \$21,481 | \$27,315 | 27% |
| Median Household Income | \$37,985 | \$43,779 | 15% |

Sources: ACS 2010 & 2018 5-year estimates (Table DP03)

Figure 6.5 shows household income and benefits by cohort in Coos Bay. The middle-income cohorts make up the largest share of household income; the highest two income cohorts (\$150,000 and higher) represent a lower share of households than do the lowest income cohorts (\$14,999 and lower).

Figure 6.5: Household Income Cohorts, 2018

| | # | % |
|------------------------|-------|------|
| Total households | 6,794 | 100% |
| Less than \$10,000 | 543 | 8% |
| \$10,000 to \$14,999 | 547 | 8% |
| \$15,000 to \$24,999 | 729 | 11% |
| \$25,000 to \$34,999 | 753 | 11% |
| \$35,000 to \$49,999 | 1,086 | 16% |
| \$50,000 to \$74,999 | 1,341 | 20% |
| \$75,000 to \$99,999 | 706 | 10% |
| \$100,000 to \$149,999 | 797 | 12% |
| \$150,000 to \$199,999 | 128 | 2% |
| \$200,000 or more | 164 | 2% |

Source: ACS 2018 5-year estimates (Table DP03)

Figure 6.6 shows poverty status for different groups in Coos Bay. In 2018, 19% of all people in Coos Bay lived below the poverty level. Individuals under the age of 18 had the highest poverty rate at 28%. For the population 25 years and older, those with less than a high school degree were dramatically more likely to live in poverty (34%) as compared with those with a Bachelor's degree or higher (4%). Unemployed people were also more likely (28%) to live below the poverty line, but a significant number of employed people (9%) were also in poverty.

Figure 6.6: Poverty Status, 2018

| | % Below Poverty Level |
|---|-----------------------|
| All people | 19% |
| Age | |
| Under 18 | 28% |
| 18 to 64 | 18% |
| 65 and over | 11% |
| Population 25 years and over | 15% |
| Less than high school | 34% |
| High school graduate (includes equivalency) | 19% |

| | |
|-----------------------------|-----|
| Some college, associate's | 12% |
| Bachelor's degree or higher | 4% |
| Employed | 9% |
| Unemployed | 28% |
| Unemployment Rate | 8% |

Source: ACS 2018 5-year estimates (Table S1701)

c. Buildable Lands Inventory Supporting Data

The following tables outline analysis and findings that support the Buildable Lands Inventory.

Land Base

Figure 6.7 shows gross acres in tax lots by zoning designation within the City of Coos Bay UGB. Coos Bay has approximately 10,164 acres within its UGB, of which 7,445 acres (73%) are in tax lots. The remaining acres not in tax lots include streets or other rights-of-way, rivers, lakes, or the Coos Bay Estuary.

Figure 6.7: Gross Acres in Tax Lots by Zone

| Zone | Parcel Count | Total Acres | Percent of Total |
|-------------------------------|--------------|----------------|------------------|
| Commercial | 636 | 320.8 | 4.3% |
| Coos Bay Estuary Mgmt Plan | 156 | 2,084.6 | 28.0% |
| Coquille Plan - Village | 1 | 39.0 | 0.5% |
| Hollering Place | 4 | 2.9 | 0.0% |
| Industrial-Commercial | 256 | 363.0 | 4.9% |
| Low Density Residential - 6 | 4,119 | 1,217.1 | 16.3% |
| Low Density Residential - 8.5 | 438 | 103.8 | 1.4% |
| LDR-6 Overlay Zone | 84 | 56.2 | 0.8% |
| Medical Park | 39 | 105.0 | 1.4% |
| Medium Density Residential | 951 | 846.6 | 11.4% |
| Mixed Use | 407 | 110.6 | 1.5% |
| Trust Land | 27 | 93.9 | 1.3% |
| Urban Public | 54 | 398.6 | 5.4% |
| Waterfront Heritage | 48 | 26.8 | 0.4% |
| Waterfront Industrial | 68 | 61.9 | 0.8% |
| Watershed | 18 | 1,614.5 | 21.7% |
| Total | 7,306 | 7,445.1 | 100.0% |

Source: Coos County and Coos Bay GIS Data

Fully Vacant Land

Figure 6.8 shows fully vacant land by zoning designation for all residential zones in the City of Coos Bay. Fully vacant acres include all parcels containing no structures or buildings with very little value (less than \$10,000). Zones where residential use is allowed comprise 2,270.8 of 7,445.1 total acres in Coos Bay. Zones where residential building is not permitted (including Coos Bay Estuary Management Plan, Hollering Place, Medical Park, Trust Land, Urban Public,

Waterfront Industrial, and Watershed zones) are not relevant for this analysis and have therefore been omitted from this and following tables.

There are 1,058.5 fully vacant acres in the City's eight zones where residential development is possible. The Low Density Residential – 6 and Low Density Residential – 8.5 zones contain the most fully vacant acres; together, they account for 84% of vacant acres.

Figure 6.8: Fully Vacant Land by Zone

| Zone | Total Acres | Fully Vacant Acres | Percent of Vacant Acres |
|-------------------------------|----------------|--------------------|-------------------------|
| Commercial | 320.8 | 57.8 | 5.5% |
| Coquille Plan - Village | 39.0 | 39.0 | 3.7% |
| Low Density Residential - 6 | 1,217.1 | 445.2 | 42.1% |
| Low Density Residential - 8.5 | 103.8 | 7.1 | 0.7% |
| LDR-6 Overlay Zone | 56.2 | 39.8 | 3.8% |
| Medium Density Residential | 846.6 | 445.5 | 42.1% |
| Mixed Use | 110.6 | 9.8 | 0.9% |
| Waterfront Heritage | 26.8 | 14.4 | 1.4% |
| Total | 2,720.8 | 1,058.5 | 100.0% |

Source: Coos County and Coos Bay GIS Data

Partially Vacant Land

Figure 6.9 shows partially vacant land by zoning designation. Partially vacant parcels have some improvements, but still have enough undeveloped land to accommodate additional development. This analysis is limited to residential zones. Thirty parcels qualified as partially vacant, covering a total of 54.1 acres. After deducting 15 acres (one-half acre per partially vacant parcel), 39.1 acres are considered vacant and able to accommodate additional development.

Figure 6.9: Partially Vacant Land by Zone

| Zone | Parcel Count | A Total Partially Vacant Acres | B Half Acre Reserved per Parcel | Remaining Acres Considered Vacant (A-B) |
|-------------------------------|--------------|-----------------------------------|------------------------------------|---|
| Low Density Residential - 6 | 24 | 43.2 | 12.0 | 31.2 |
| Low Density Residential - 8.5 | 3 | 4.4 | 1.5 | 2.9 |
| Medium Density Residential | 3 | 6.5 | 1.5 | 5.0 |
| Total | 30 | 54.1 | 15.0 | 39.1 |

Source: Coos County and Coos Bay GIS Data

Gross Vacant Land

Figure 6.10 shows gross vacant land by zone. Gross vacant land is the sum of fully vacant land and the vacant portion of partially vacant land. Overall, 1,097.7 acres of 2,720.8 total acres (40.3%) in Coos Bay are vacant. The Coquille Plan – Village zone is 100% vacant, followed by the LDR-6 Overlay zone at 70.8%. The Low Density Residential – 8 and Mixed Use zones have the lowest relative land vacancy rates at 9.6% and 8.9%, respectively.

Figure 6.10: Gross Vacant Land by Zone

| Zone | Total Acres | Gross Vacant Acres | % of Total Acres |
|-------------------------------|----------------|--------------------|------------------|
| Commercial | 320.8 | 57.8 | 18.0% |
| Coquille Plan - Village | 39.0 | 39.0 | 100.0% |
| Low Density Residential - 6 | 1,217.1 | 476.4 | 39.1% |
| Low Density Residential - 8.5 | 103.8 | 10.0 | 9.6% |
| LDR-6 Overlay Zone | 56.2 | 39.8 | 70.8% |
| Medium Density Residential | 846.6 | 450.5 | 53.2% |
| Mixed Use | 110.6 | 9.8 | 8.9% |
| Waterfront Heritage | 26.8 | 14.4 | 53.6% |
| Total | 2,720.8 | 1,097.7 | 40.3% |

Source: Coos County and Coos Bay GIS Data

Unbuildable Land

Constraints such as parcel size and public ownership must be accounted for in determining whether land is realistically available for future development. For the purposes of this analysis, certain plan designations, zones, and ownership rendered land unbuildable. Figure 6.11 shows the unbuildable vacant acres by the remaining relevant zones on which residential development is possible. Of 1,097.7 gross vacant acres in Coos Bay, 274.5 (25%) are unbuildable. The two zones with the largest number of gross vacant acres were Low Density Residential – 6 and Medium Density Residential. Nearly half of the gross vacant land in the Low Density Residential – 6 zone identified in table c.4 (214.4 of 476.4 gross vacant acres) is unbuildable; by contrast, only 8.3% of the Medium Density Residential zone is unbuildable (37.5 of 450.5 gross vacant acres).

Figure 6.11: Unbuildable Vacant Acres by Zone

| Zone | Gross Unbuildable Vacant Acres | % of Total Gross Unbuildable | % of Gross Vacant Acres |
|-------------------------------|--------------------------------|------------------------------|-------------------------|
| Commercial | 14.4 | 5.2% | 24.9% |
| Coquille Plan - Village | 0.0 | 0.0% | 0.0% |
| Low Density Residential - 6 | 214.4 | 78.1% | 45.0% |
| Low Density Residential - 8.5 | 0.3 | 0.1% | 2.7% |
| LDR-6 Overlay Zone | 1.6 | 0.6% | 4.1% |
| Medium Density Residential | 37.5 | 13.7% | 8.3% |
| Mixed Use | 3.7 | 1.3% | 37.5% |
| Waterfront Heritage | 2.6 | 1.0% | 18.3% |
| Total | 274.5 | 100.00% | 25.0% |

Source: Coos County and Coos Bay GIS Data

Of the vacant lands in the Residential zones, 274.5 acres are unbuildable due to the following ownership constraints:

- *One large parcel spanning 118.5 acres on the west side of White Point is owned by the Oregon International Port of Coos Bay*
- *103.7 acres across 47 parcels are owned by either the City of Coos Bay or the Coos Bay-North Bend Water Board*
- *15.8 acres are owned by schools*
- *3.6 acres are owned by churches*
- *1.4 acres are owned by the State of Oregon*
- *0.9 acre is owned by the Bay Area Hospital District*

Environmentally Constrained Land

Environmental constraints affect the building cost, density, or other site-specific development factors. State policy gives jurisdictions the right to decide what is unbuildable based on local development policies. For the purposes of this study, five environmental constraint categories are considered: steep slopes, landslide susceptibility, flood hazard, tsunami zones, and wetlands. In low lying areas, flood hazard is the primary environmental constraint, while in higher elevation areas steep slope is the primary constraint. Landslide susceptibility is a relatively minor constraint in Coos Bay. Figure 6.12 shows land totals for all environmental constraints combined.

Figure 6.12: Environmentally Constrained Acres

| Zone | Environmentally Constrained Acres |
|-------------------------------|-----------------------------------|
| Commercial | 13.9 |
| Coquille Plan - Village | 0.0 |
| Low Density Residential - 6 | 79.2 |
| Low Density Residential - 8.5 | 2.1 |
| LDR-6 Overlay Zone | 14.5 |
| Medium Density Residential | 156.0 |
| Mixed Use | 1.9 |
| Waterfront Heritage | 8.1 |
| Total | 275.7 |

Source: Coos County and Coos Bay GIS Data

Buildable Vacant Land

Figure 6.13 reveals the gross buildable vacant acres by zoning designation. Vacant parcels in zones that allow residential development total some 2,720.8 acres in the UGB. Absolute constraints—including parcels with ownership constraints and unbuildable zones—reduce the supply of vacant residential lands by approximately 1,372.2 acres. Environmental constraints reduce that supply by another 275.7 acres. The amount of vacant residentially zoned buildable land after these deductions is 547.5 acres.

Figure 6.13: Total, Gross Vacant, Deducted, & Gross Buildable Acres by Zone

| Zone | Total Acres | A | B | C | Gross Buildable Vacant Acres A-(B+C) |
|-------------------------------|---------------|--------------------|-----------------------------------|------------------------------------|--------------------------------------|
| | | Gross Vacant Acres | Unbuildable Vacant Acres Deducted | Environmental Constraint Deduction | |
| Commercial | 320.8 | 57.8 | 14.4 | 13.9 | 29.6 |
| Coquille Plan - Village | 39.0 | 39.0 | 0.0 | 0.0 | 39.0 |
| Low Density Residential - 6 | 1217.1 | 476.4 | 214.4 | 79.2 | 182.8 |
| Low Density Residential - 8.5 | 103.8 | 10.0 | 0.3 | 2.1 | 7.6 |
| LDR-6 Overlay Zone | 56.2 | 39.8 | 1.6 | 14.5 | 23.7 |
| Medium Density Residential | 846.6 | 450.5 | 37.5 | 156.0 | 257.0 |
| Mixed Use | 110.6 | 9.8 | 3.7 | 1.9 | 4.2 |
| Waterfront Heritage | 26.8 | 14.4 | 2.6 | 8.1 | 3.6 |
| Total | 2720.8 | 1097.7 | 274.5 | 275.7 | 547.5 |

Source: Coos County and Coos Bay GIS Data

Public Facilities Land Needs

During development, particularly of larger undeveloped parcels, some acreage must be set aside for roads, rights-of-way, parks, and other public facilities. Under the provisions of OAR 660-024-0040(9), the 20-year land needs for streets and roads, parks, and school facilities in Coos Bay will together require an amount of land equal to 25% of the gross buildable acres for residential land needs. Smaller parcels generally have access to existing roadways, so land needed for public facilities was estimated and subtracted only from parcels greater than one acre. This process of subtracting public facility needs converts gross acres to net acres (Figure 6.14).

Figure 6.14: Land Deducted for Public Facilities by Zone

| Zone | Gross Buildable Vacant Acres | Gross Acres > 1 acre in size | 25% Public Facilities Land Deduction | Total Net Acres |
|-------------------------------|------------------------------|------------------------------|--------------------------------------|-----------------|
| Commercial | 13.9 | 0.0 | 0.0 | 13.9 |
| Coquille Plan - Village | 0.0 | 39.0 | 9.8 | -9.8 |
| Low Density Residential - 6 | 79.2 | 74.6 | 18.7 | 60.6 |
| Low Density Residential - 8.5 | 2.1 | 0.7 | 0.2 | 2.0 |
| LDR-6 Overlay Zone | 14.5 | 18.3 | 4.6 | 9.9 |
| Medium Density Residential | 156.0 | 233.6 | 58.4 | 97.6 |
| Mixed Use | 1.9 | 0.0 | 0.0 | 1.9 |
| Waterfront Heritage | 8.1 | 0.0 | 0.0 | 8.1 |
| Total | 275.7 | 366.2 | 91.6 | 184.1 |

Source: Coos County and Coos Bay GIS Data

Note: This analysis does not deduct land for public facilities from Commercial, Mixed Use, or Waterfront zones., because these areas are predominantly in developed areas.

Potentially Re-developable Land

Thirteen net acres are re-developable within residential designations (Figure 6.15).

Figure 6.15: Redevelopment Potential

| Zone | Parcel Count | Gross Acres with Redevelopment Potential | % Actualization | Net Acres with Redevelopment Potential |
|-------------------------------|--------------|--|-----------------|--|
| Commercial | 134 | 58.1 | 30% | 17.4 |
| Low Density Residential - 6 | 223 | 51.9 | 10% | 5.2 |
| Low Density Residential - 8.5 | 1 | 0.1 | 10% | 0.0 |
| LDR-6 Overlay Zone | 7 | 2.5 | 10% | 0.3 |
| Medium Density Residential | 82 | 41.3 | 10% | 4.1 |
| Mixed Use | 26 | 5.9 | 30% | 1.8 |
| Waterfront Heritage | 16 | 5.9 | 30% | 1.8 |
| Total | 489 | 214.4 | | 13.1 |

Source: Coos County and Coos Bay GIS Data

Potential Infill Land

Lots that are 250% of zoned minimum lot size are assumed to have infill potential. As with redevelopment potential, an actualization rate of 10% is assumed, and this analysis is limited to residential zones. Figure 6.16 shows that there are 18.5 net acres of potential infill land in residential designations.

Figure 6.16: Infill Potential

| Zone | Parcel Count | Gross Acres with Infill Potential | Net Acres with Infill Potential (10% actualization) |
|-------------------------------|--------------|-----------------------------------|---|
| Low Density Residential - 6 | 254 | 137.0 | 13.7 |
| Low Density Residential - 8.5 | 19 | 11.5 | 1.2 |
| LDR-6 Overlay Zone | 15 | 8.3 | 0.8 |
| Medium Density Residential | 40 | 28.6 | 2.9 |
| Total | 328 | 185.3 | 18.5 |

Source: LCOG Analysis with Coos County and Coos Bay GIS Data

d. Housing Needs Analysis Supporting Data

The following tables outline analysis and findings that support the Housing Needs Analysis.

Housing Tenure, Occupancy, and Structure

Figure 6.17 provides an overview of housing occupancy and tenure in Coos Bay. Coos Bay has 7,737 total housing units in 2020,¹⁷ with an estimated vacancy rate of 7.5%. A greater share of Coos Bay residents own (56.5%) than rent (43.5%). By comparison, ownership rates are higher in Coos County (64.8%), the State of Oregon (61.9%) and the United States (63.8%).¹⁸ Following national trends, ownership rates in Coos Bay have fallen from 59.6% in 2000.¹⁹

Figure 6.17: Housing Occupancy and Tenure in Coos Bay, 2020

| Occupancy | | |
|--|-------|-------|
| | # | % |
| Total housing units | 7,737 | |
| Occupied housing units | 7,160 | 92.5% |
| Vacant housing units | 577 | 7.5% |
| Homeowner vacancy rate | 4.5 | (X) |
| Rental vacancy rate | 1.9 | (X) |
| Tenure | | |
| | # | % |
| Occupied housing units | 7,160 | |
| Owner-occupied | 4,045 | 56.5% |
| Renter-occupied | 3,115 | 43.5% |
| Average household size of owner-occupied unit | 2.42 | (X) |
| Average household size of renter-occupied unit | 2.28 | (X) |

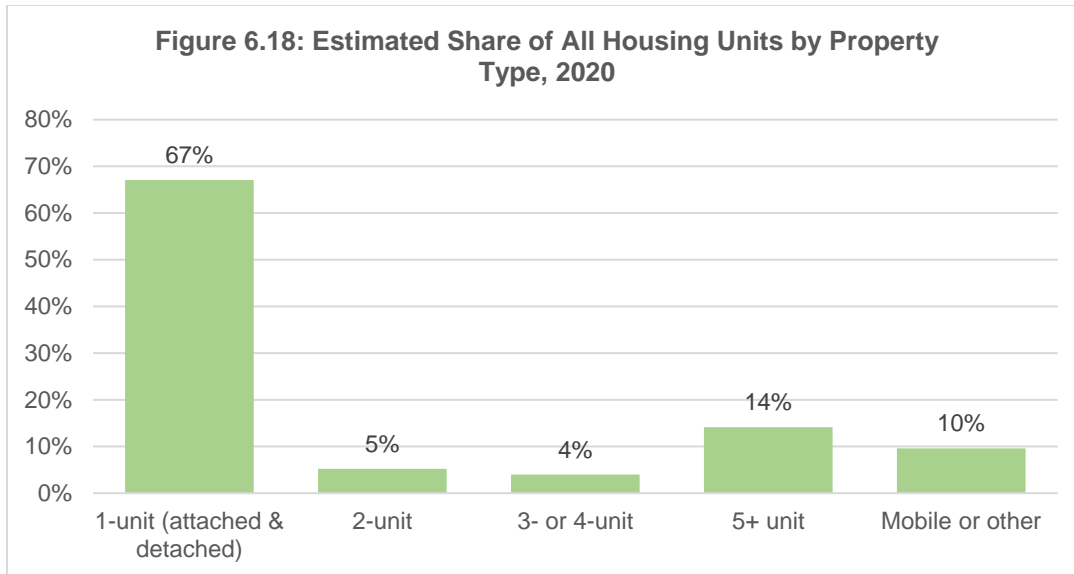
Sources: ACS 2018 5-Year Estimates (Tables B11016, B26001, DP04), PSU Coordinated Population Forecast for Coos County, Lane Council of Governments
Notes: The U.S. Census defines homeowner and rental vacancy rates as the proportion of the homeowner or rental inventory that is vacant for sale or rent.

Figure 6.18 shows the estimated share of units by type in 2020. Single-family units represent 67% of the housing stock. Large multifamily complexes (five or more units) and mobile or other homes comprise a significant portion of the housing stock, at 14% and 10%, respectively.

¹⁷ 2020 estimate of units is based on 2010 decennial census count augmented by Coos Bay permits (2010-2020).

¹⁸ American Community Survey 2018 5-Year Estimates, Table DP04

¹⁹ 2000 Decennial Census Summary File 1, Table H004



Sources: ACS 2010 5-Year Estimates (Table B25032), City of Coos Bay Permits, Lane Council of Governments

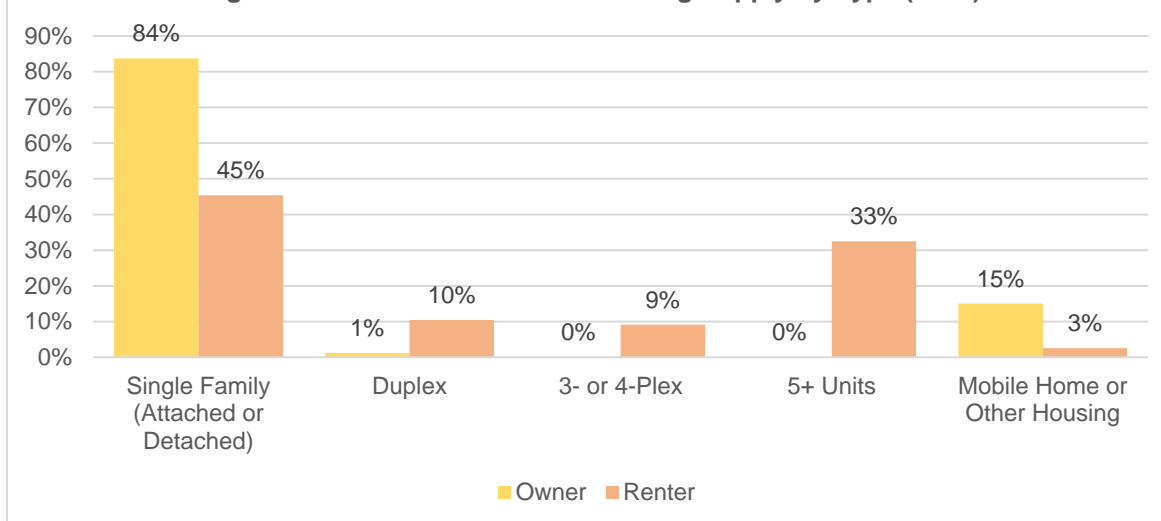
Figures 6.19 and 6.20 show the unit type by tenure for occupied housing units in Coos Bay. Single-family homes comprise the largest share of ownership housing (84%), with mobile homes making up the next largest share at 15%. Rental housing, by contrast, is more evenly distributed among unit types: 45% of rental housing is made up of single-family units, followed by large multi-family complexes of 5 or more units (33%). Figure 6.21 shows the allocation of current housing supply by unit type and price range.

Figure 6.19: Current Inventory by Unit Type for Ownership and Rental Housing

| Ownership Housing | | | | | | |
|-------------------|--|--------|------------------|-----------------|-----------------------------------|-------------|
| | Single-Family (Attached or Detached) | Duplex | 3- or 4- plex | 5+ units MFR | Manufactured Homes in Parks | Total Units |
| # | 3,663 | 52 | 0 | 0 | 659 | 4,374 |
| % | 84% | 1% | 0% | 0% | 15% | 100% |
| Rental Housing | | | | | | |
| | Single-Family (Attached or Detached) | Duplex | 3- or 4- plex | 5+ units MFR | Manufactured Homes in Parks | Total Units |
| # | 1,525 | 352 | 307 | 1,094 | 85 | 3,363 |
| % | 45% | 10% | 9% | 33% | 3% | 100% |

Sources: ACS 2018 5-Year Estimates (Table S2504), ACS 2010 5-Year Estimates (Table B25032), City of Coos Bay Permits, Lane Council of Governments

Figure 6.20: Profile of Current Housing Supply by Type (2020)



Sources: ACS 2018 5-Year Estimates (Table S2504), ACS 2010 5-Year Estimates (Table B25032), City of Coos Bay Permits, Lane Council of Governments

Figure 6.21: Allocation of Existing Housing Units (2020)

| Rental | | | | | | |
|------------------------|--------------------|--------------------------------------|--------------|--------------|---------------|---------------------------|
| Rent Range | Total Needed Units | Single-Family (Attached or Detached) | 2-unit | 3- or 4-plex | 5 + Units MFR | Manufactured Home in Park |
| \$0 - \$308 | 263 | | | | 77.9% | 22.1% |
| \$309 - \$539 | 431 | | 27.8% | 2.3% | 65.9% | 3.9% |
| \$540 - \$776 | 1,022 | 26.4% | 21.5% | 19.3% | 31.6% | |
| \$777 - \$1,132 | 1,172 | 66.6% | 1.0% | 8.5% | 23.9% | |
| \$1,133 - \$1,739 | 324 | 100% | | | | |
| \$1,740 + | 151 | 100% | | | | |
| Total: | 3,363 | | | | | |
| 2020 Percentage | | 45.3% | 10.5% | 9.1% | 32.5% | 2.5% |

| Ownership | | | | | | |
|------------------------|--------------------|--------------------------------------|-------------|--------------|---------------|---------------------------|
| Price Range | Total Needed Units | Single-Family (Attached or Detached) | 2-unit | 3- or 4-plex | 5 + Units MFR | Manufactured Home in Park |
| <\$91.3k | 1,088 | 43% | 1.8% | | | 55.1% |
| \$91.3K <\$128.9K | 446 | 13.2% | 7.2% | | | 59% |
| \$128.9K <\$185.3K | 751 | 100% | | | | |
| \$185.3K <\$279.3K | 1,325 | 100% | | | | |
| \$279.3K <\$372.8K | 443 | 100% | | | | |
| \$372.8+ | 321 | 100% | | | | |
| Total: | 4,374 | | | | | |
| 2020 Percentage | | 79.7% | 3.8% | 2.1% | 0.0% | 14.4% |

Sources: ACS 2018 5-Year Estimates (Table B19037), City of Coos Bay, Lane Council of Governments, Bjelland Housing Needs Model, Templates 6

Publicly Assisted Housing

The North Bend City/Coos-Curry Housing Authority manages public housing assistance programs for Coos and Curry Counties, including Public Housing and the Section 8 Housing Choice Voucher programs. The Housing Authority manages 52 Public Housing Units across Coos and Curry Counties, 15 of which are in Coos Bay. According to 2019 data from the Department of Housing and Urban Development's (HUD's) Picture of Subsidized Housing database, average household income of Coos Bay's Public Housing residents is \$20,876 per year; 57% of Public Housing residents were very low income, defined by HUD as 50% of area family median income.²⁰

Section 8 Housing Choice Vouchers are one form of rental assistance designed to assist very low-income families, the elderly, and persons with disabilities. The North Bend City/Coos-Curry Housing Authority runs the Section 8 Housing Choice Voucher program for Coos and Curry Counties. The Housing Authority reports that it currently manages 798 vouchers, which can be used in Coos Bay and the surrounding jurisdictions in Coos and Curry Counties; 332 of these are used in Coos Bay. According to HUD's 2019 Picture of Subsidized Housing database, the average household income of voucher households was \$11,662 per year; 96% of voucher holders were very low income, defined by HUD as 50% of area family median income. The average wait time for persons on the waiting list to receive a voucher was 11 months.²¹

There are three homeless shelters in Coos Bay. There were 613 individuals experiencing homelessness at the time of the state of Oregon's 2019 point-in-time homelessness count, representing a 54% increase from the count in 2017;²² 22% were children (95% of whom were unsheltered); 15% were experiencing chronic homelessness; 79% were unsheltered; 53% were male and 47% were female and 4% were veterans.

e. Bjelland Housing Needs Model

To facilitate this analysis, a Coos Bay-specific Housing Needs Model was utilized. The model was designed by demographer and housing specialist Richard Bjelland.²³ The model utilizes demographic and other data inputs to generate a set of future housing need estimates. This Coos Bay specific model is designed to address the housing need requirements set out in Oregon's Statewide Planning Goal 10. Bjelland's methodology is demographically driven as opposed to historic construction extrapolations, which most previous housing needs analyses relied upon. As a result, the model is more responsive to considerations of affordability and can be more responsive to desired future alternatives.

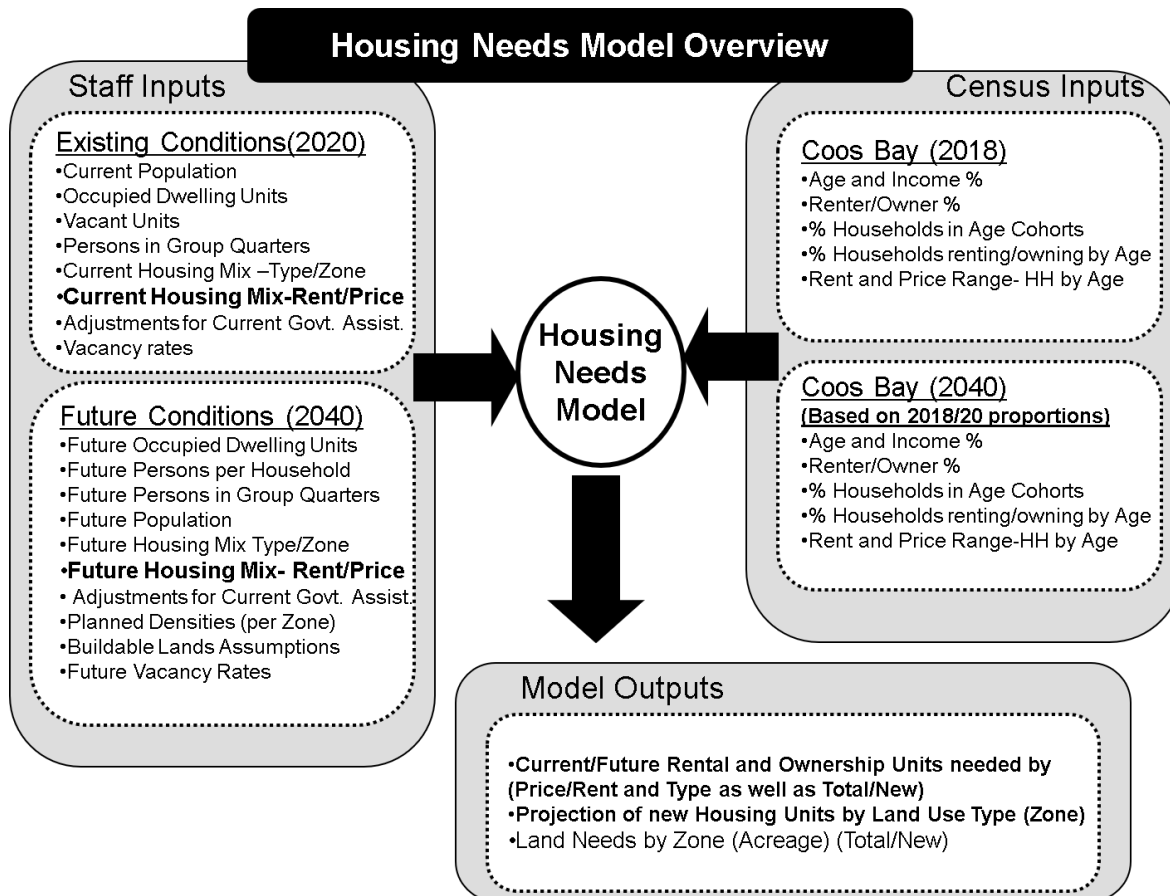
The Coos Bay model utilizes 2018 Census Bureau demographic data for the City of Coos Bay. The model looks at several different types of housing and predicts the tenure (rental vs owner) split between housing units as well as the needed rental and purchase price points. Data is presented and entered into a set of interconnected spreadsheets or "templates" that make up the model. The results from the model are then used to address the affordable housing needs of the City. The residential land needs module included in the model estimates the land needs by land use designation for the additional housing units indicated by the model. Additional adjustments to the model inputs are made to account for the recognized growth between the time-period of 2018 and 2020, and to account for a number of local housing dynamics.

²⁰ "Picture of Subsidized Households: 2019," HUD Office of Policy Development and Research (n.d.), <https://www.huduser.gov/PORTAL/datasets/assthsng.html>.

²¹ IBID

²² "2019 Point-in-Time Count," Oregon Housing and Community Services, (November 15, 2019), <https://public.tableau.com/profile/oregon.housing.and.community.services#!/vizhome/2019Point-in-TimeDashboard/Story1>.

²³ Bjelland Consulting.



Model Structure

The design of the model involved creating a series of modules (Excel templates), each reflecting the different steps needed to conduct a housing analysis. The resulting model resides in an Excel file that has numerous worksheets, graphs, and tables. The model examines housing needs for two time periods—an analysis of current housing needs and an analysis of estimated future needs based on a planning period end date (20 years).

Current Housing Status Analysis

The model first calculates the total number of housing units needed for the planning period by utilizing:

- population estimates,
- number of people in group quarters,
- number of occupied housing units and/or number of households,
- average household size, and
- desired vacancy rate for the study area.

The population estimate, people in group quarters, and occupied housing units or number of households (which equal each other) are taken from Census data for the current year and drive the *Description of Current Housing Status* template. Vacancy data for this template may be derived from the Census or from local sources.

The model uses Oregon age and income data standardized by community size (small, medium, and large communities). Every model is based on normalized age and income data from a cohort

of numerous similarly sized communities. The model for medium-sized communities is applied in Coos Bay. The model uses normalized data as opposed to raw numbers because it allows for easier adjustments for projections of different time frames and allows for comparisons to other communities.

The age and income cohort percentages have been calculated for every Oregon city and are entered into the model before being delivered to a user. The Census generated tenure parameters used in the model represent the probabilities of either being a renter or homeowner for each of the many age and income cohorts. Based on these tenure parameters, the model allocates those households in each age and income cohort to an indicated number of rental and ownership units at the price point that is affordable for the Income range for that cohort. The model then adjusts each of the cohort numbers of ownership units to reflect that many homeowners have paid off their mortgages and therefore can “afford” a higher priced unit than their income would otherwise indicate.

Census data was used to determine the percentage of homeowner households in each cohort that owned their homes free and clear. The model then aggregates the units for each different price point to show the total units that could be afforded at each price point by tenure.

Users can quickly test different scenarios of the future by varying the estimated population and/or the percentage distribution of age and income cohorts. Price points for housing units were calculated on the basis that housing costs should take no more than 30% of the household’s income, i.e., a household with \$30,000 in income could afford to pay $\$30,000 \times .3 / 12 = \750 per month for housing. This assumption resulted in a range of monthly housing costs that would be ‘affordable’ for each age and income cohort. Monthly rent ranges were calculated for each income category after subtracting out estimated costs for utilities. Ownership price points were calculated for each income category as discussed earlier and were based on examining the typical housing costs associated with owning a home with long term mortgage rates around 5%.

The next step in the model attempts to simulate the real world where some households choose to live in a unit at a lower price point than the price point that they could afford. When they do, they remove that unit from the supply of units needed for those households who could only afford that price point. Therefore, adjustment factors to the indicated number of housing units that could be afforded at each price point are utilized in this part of the model to arrive at the final estimate of needed housing units. These adjustment factors represent the percentage of households who could afford that cost level but choose a lower cost unit (*Out Factor*) offset by households who could afford a higher cost unit but choose this cost level (*In Factor*). The determination of localized adjustment factors for each price point is left to the user in each study area although base line adjustment factors are provided in the model. LCOG made no adjustment to the factors provided in the model.

An additional off-setting variable to the Out Factor is the estimated number of units which are rented to households who could only afford to live in those units and not be cost burdened due to tenant-based subsidies that the household receives such as a Section 8 voucher that pays the difference between the market rent and what the tenant could afford. The total units inputted for this factor at each relevant price point represents the estimated number of households who pay only that amount of rent out of their own funds with the balance of the market rent coming from the tenant subsidy.

The last step in the current housing status part of the model utilizes information on the existing housing inventory in conjunction with the current housing units needed by tenure and price point

to determine whether current needs are being met, and if not, where and how large are the gaps. As with all communities using the model, the data for Coos Bay's current housing inventory was entered into the *Current Inventory of Dwelling Units* template. The existing inventory of units were placed into the five housing types that have been established for use in the model. Each of these housing types can be owner occupied or renter occupied.

The five classifications of dwelling units are:

1. *Single Family Units*—either site built or manufactured single family dwellings on their own lot
2. *Manufactured Dwelling Park Unit*—a single family dwelling unit located in a rental park
3. *Duplex Unit*—a two-family dwelling unit located on its own lot
4. *Tri-plex or Quad-plex Unit*—a three or four-family dwelling unit
5. *5+ Multi-family Unit*—dwelling units in buildings with 5 or more units per building

These five classifications were selected to facilitate the use of the model output for both land use planning purposes and housing needs analyses by housing type. The future need for housing units by housing type drive the determination of land needed based on the planned density of the land use zones associated with each housing type.

Future Housing Status Analysis

In order to determine the future housing needs for a projected population, users of the model must estimate the demographic composition of that population and make some assumptions regarding their housing type choices by price point. Entering the future *age and income* cohort percentages will automatically produce the number of future total units indicated by price point and tenure. After the future *Out Factors* are entered, the model calculates the future total units needed by price point and tenure. These numbers are the basis for the principal planning effort involved in using the model—determining the appropriate allocation of housing types to meet the identified housing needs for that community. In the case of Coos Bay, these assumptions were made with substantial Housing Advisory Committee input and iteration. This allocation process will take place by completing the *Future Housing Units Planned by Housing Type* template. This template uses percentages of the five housing types as the means to allocate the needed units.

If the *Current Inventory of Dwelling Units* template has been completed and the Housing Units Planned allocation data entered, the model will calculate the number of new units needed by price point, tenure, and housing type to bring the market into balance with the projected need at the end of the planning period. The model summarizes the new needs by housing type, which can then be used by the community to drive their land use planning and housing policy decisions.

The land use module can utilize the buildable lands inventory cities are required to gather to input the data needed for the *Buildable Lands Inventory for Housing* Template. Lane Council of Governments used a simple adaptation of the model's methodology to convert needed new housing into land need (or in this case land surplus).

Uses of the Methodology and Model

Different scenarios can be run on the model to test out various assumptions about the study area and its future economic development and/or demographic composition. For any scenario run for the study area, the model and its underlying methodology will generate a series of tables and graphs that represent the model's outputs.

Current Housing Units Needed by Tenure and Cost ©
For Coos Bay as of 2020
Scenario Coos Bay HNA 2020-40

Template 4
Housing Units Indicated by Tenure & Cost**

| Rental | | | | Ownership | | | | |
|---------------|---------|-----------------|--------|----------------|---------|-----------------|--------|------------------|
| Rent* | # Units | % of Units | Cum % | Price* | # Units | % of Units | Cum % | |
| 0 - 308 | 849 | 30.9% | 30.9% | <55.3k | 150 | 3.0% | 3.0% | |
| 309 - 539 | 438 | 15.9% | 46.8% | 55.3k <91.3k | 184 | 3.7% | 6.7% | |
| 540 - 776 | 354 | 12.9% | 59.7% | 91.3k <128.9k | 718 | 14.4% | 21.1% | |
| 777 - 1132 | 438 | 15.9% | 75.6% | 128.9k <185.3k | 735 | 14.7% | 35.8% | |
| 1133 - 1739 | 425 | 15.5% | 91.1% | 185.3k <279.3k | 1,056 | 21.2% | 57.0% | |
| 1740 - 2349 | 123 | 4.5% | 95.5% | 279.3k <372.8k | 851 | 17.1% | 74.1% | |
| 2350+ | 123 | 4.5% | 100.0% | 372.8k+ | 1,294 | 25.9% | 100.0% | |
| Totals | 2,749 | % of All | 35.5% | Totals | 4,988 | % of All | 64.5% | |
| | | | | | | | | All Units |
| | | | | | | | | 7,737 |

* Housing Units Indicated is based on the 'Calculation of Dwelling Unit Needs Indicated by Tenure Choice and Affordable Cost' template and incorporates the inclusion of a vacancy factor. The numbers represent the units that could be afforded at that cost.

** Rent and Price Ranges are stated in 1999 dollars and are the upper limits for affordable housing (housing that is non-cost burdened)

Template 5
Housing Units Needed by Tenure & Cost* ©

| Rental | | | | | | Ownership | | | | |
|---------------|--------------|--------------------|--------------|-----------------|--------|----------------|--------------|--------------|-----------------|--------|
| Rent | Out Factor** | Tenant Vouchers*** | Needed Units | % of Units | Cum % | Price | Out Factor** | Needed Units | % of Units | Cum % |
| 0 - 308 | 0% | 262 | 609 | 22.2% | 22.2% | <91.3k | 0% | 371 | 7.4% | 7.4% |
| 309 - 539 | 5% | 56 | 378 | 13.7% | 35.9% | 91.3k <128.9k | 5% | 719 | 14.4% | 21.8% |
| 540 - 776 | 5% | 11 | 687 | 25.0% | 60.9% | 128.9k <185.3k | 5% | 772 | 15.5% | 37.3% |
| 777 - 1132 | 10% | 3 | 508 | 18.5% | 79.4% | 185.3k <279.3k | 7% | 1,050 | 21.1% | 58.4% |
| 1133 - 1739 | 25% | 0 | 445 | 16.2% | 95.5% | 279.3k <372.8k | 8% | 977 | 19.6% | 78.0% |
| 1740 + | 50% | | 123 | 4.5% | 100.0% | 372.8k+ | 15% | 1,100 | 22.0% | 100.0% |
| Totals | | 332 | 2,749 | % of All | 35.5% | | | 4,988 | % of All | 64.5% |

* Housing Units Needed is based on the 'Housing Units Indicated by Tenure and Cost' table and incorporates an adjustment factor to reflect that some households will choose to occupy a housing unit in a lower cost category than the one they could afford.

** The adjustment factor represents the percentage adjustments needed to reflect households who could afford that cost level but chose a lower cost unit (Out Factor).

*** Estimated number of Section 8 Vouchers/Certificates or similar subsidies used to lower tenant paid rents to this price point

| | |
|--|--|
| | Label or data descriptor for data element |
| | The percentage of Households that could afford a unit at this housing cost but chose a lower cost unit |
| | A number produced by the Housing Needs Analysis template reflecting the data, assumptions, and estimates used in this scenario |

Template 6
Current Inventory of Dwelling Units ©
For Coos Bay as of 2020
Scenario Coos Bay HNA 2020-40

| Rental | | | | | | | | |
|-------------------|---------------------|------------------------------|--------------|--------------------|-----------------------|-------------|-----------------|--------------|
| Rent | Single Family Units | Manufact Dwelling Park Units | Duplex Units | Tri-Quadplex Units | 5+ Multi-Family Units | Total Units | % of Units | Cumulative % |
| 0 - 308 | | 58 | | | 205 | 263 | 7.8% | 7.8% |
| | 0.0% | 22.1% | 0.0% | 0.0% | 77.9% | 100.0% | | |
| 309 - 539 | | 17 | 120 | 10 | 284 | 431 | 12.8% | 20.6% |
| | 0.0% | 3.9% | 27.8% | 2.3% | 65.9% | 100.0% | | |
| 540 - 776 | | 10 | 220 | 197 | 325 | 1,022 | 30.4% | 51.0% |
| | 26.4% | 1.0% | 21.5% | 19.3% | 31.8% | 100.0% | | |
| 777 - 1132 | | 780 | 12 | 100 | 280 | 1,172 | 34.8% | 85.9% |
| | 66.6% | 0.0% | 1.0% | 8.5% | 23.9% | 100.0% | | |
| 1133 - 1739 | | 324 | | | | 324 | 9.6% | 95.5% |
| | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% | | |
| 1740 + | | 151 | | | | 151 | 4.5% | 100.0% |
| | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% | | |
| Totals | 1,525 | 85 | 352 | 307 | 1,094 | 3,363 | % of All | 43.5% |
| Percentage | 45.3% | 2.5% | 10.5% | 9.1% | 32.5% | 100.0% | | |

| Ownership | | | | | | | | |
|-------------------|---------------------|------------------------------|--------------|--------------------|-----------------------|-------------|-----------------|--------------|
| Price * | Single Family Units | Manufact Dwelling Park Units | Duplex Units | Tri-Quadplex Units | 5+ Multi-Family Units | Total Units | % of Units | Cumulative % |
| <91.3k | 468 | 600 | 20 | | | 1,088 | 24.9% | 24.9% |
| | 43.0% | 55.1% | 1.8% | 0.0% | 0.0% | 100.0% | | |
| 91.3k <128.9k | 355 | 59 | 32 | | | 446 | 10.2% | 35.1% |
| | 79.6% | 13.2% | 7.2% | 0.0% | 0.0% | 100.0% | | |
| 128.9k <185.3k | 751 | | | | | 751 | 17.2% | 52.2% |
| | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% | | |
| 185.3k <279.3k | 1,325 | | | | | 1,325 | 30.3% | 82.5% |
| | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% | | |
| 279.3k <372.8k | 443 | | | | | 443 | 10.1% | 92.7% |
| | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% | | |
| 372.8k+ | 321 | | | | | 321 | 7.3% | 100.0% |
| | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% | | |
| Totals | 3,663 | 659 | 52 | 0 | 0 | 4,374 | % of All | 56.5% |
| Percentage | 83.7% | 15.1% | 1.2% | 0.0% | 0.0% | 100.0% | | |

| | Single Family Units | Manufact Dwelling Park Units | Duplex Units | Tri-Quadplex Units | 5+ Multi-Family Units | Total Units** | Total Dwelling Units** | Inventory Check |
|-------------------|---------------------|------------------------------|--------------|--------------------|-----------------------|---------------|------------------------|-----------------|
| Totals | 5,188 | 744 | 404 | 307 | 1,094 | 7,737 | 7,737 | Correct |
| Percentage | 67.1% | 9.6% | 5.2% | 4.0% | 14.1% | 100.0% | | |

Price * - Reminder - The allocation of ownership units into price points will change if a different mortgage scenario is selected

**Total Units should equal Total Dwelling Units which is from the Current Housing Status template on Unit Calculations worksheet

Future Housing Units Needed by Tenure and Cost ©

For Coos Bay as of 2040

Scenario Coos Bay HNA 2020-40

Template 10

Future Housing Units Indicated by Tenure Choice and at an Affordable Cost** ©

| Rental | | | | Ownership | | | | |
|---------------|---------|-----------------|--------|----------------|---------|-----------------|--------|-----------|
| Rent* | # Units | % of Units | Cum % | Price* | # Units | % of Units | Cum % | |
| 0 - 194 | 911 | 30.9% | 30.9% | <55.3k | 161 | 3.0% | 3.0% | |
| 195 - 422 | 470 | 15.9% | 46.8% | 55.3k <91.3k | 198 | 3.7% | 6.7% | |
| 423 - 655 | 380 | 12.9% | 59.7% | 91.3k <128.9k | 770 | 14.3% | 21.0% | |
| 656 - 897 | 470 | 15.9% | 75.6% | 128.9k <185.3k | 828 | 15.4% | 36.3% | |
| 898 - 1132 | 456 | 15.5% | 91.1% | 185.3k <279.3k | 1,133 | 21.0% | 57.3% | |
| 1133 - 1739 | 131 | 4.5% | 95.5% | 279.3k <372.8k | 913 | 16.9% | 74.3% | |
| 1740+ | 132 | 4.5% | 100.0% | 372.8k+ | 1,388 | 25.7% | 100.0% | All Units |
| Totals | 2,950 | % of All | 35.4% | Totals | 5,391 | % of All | 64.6% | 8,341 |

* Housing Units Indicated is based on the 'Calculation of Current Dwelling Units Indicated by Tenure Choice and Affordable Cost' template and incorporates the inclusion of a vacancy factor. The numbers represent the units that could be afforded at that cost.

** Rent and Price Ranges are stated in 1999 dollars and represent affordable housing cost needs (housing that is non-cost burdened)

Template 11

Future Housing Units Needed by Tenure & Cost* ©

| Rental | | | | | | Ownership | | | | |
|-------------|--------------|--------------------|--------------|-----------------|--------|----------------|---------------|--------------|-----------------|--------|
| Rent | Out Factor** | Tenant Vouchers*** | Needed Units | % of Units | Cum % | Price | Out Factor** | Needed Units | % of Units | Cum % |
| 0 - 308 | 0% | 262 | 673 | 22.8% | 22.8% | <91.3k | 0% | 398 | 7.4% | 7.4% |
| 309 - 539 | 5% | 56 | 409 | 13.9% | 36.7% | 91.3k <128.9k | 5% | 773 | 14.3% | 21.7% |
| 540 - 776 | 5% | 11 | 715 | 24.2% | 60.9% | 128.9k <185.3k | 5% | 866 | 16.1% | 37.8% |
| 777 - 1132 | 10% | 3 | 545 | 18.5% | 79.4% | 185.3k <279.3k | 7% | 1,127 | 20.9% | 58.7% |
| 1133 - 1739 | 25% | 0 | 477 | 16.2% | 95.5% | 279.3k <372.8k | 8% | 1,048 | 19.4% | 78.1% |
| 1740 + | 50% | | 132 | 4.5% | 100.0% | 372.8k+ | 15% | 1,180 | 21.9% | 100.0% |
| | | Totals | 2,950 | % of All | 35.4% | | Totals | 5,391 | % of All | 64.6% |

* Housing Units Needed is based on the 'Housing Units Indicated by Tenure and Cost' table and incorporates an adjustment factor to reflect that some households will choose to occupy a housing unit in a lower cost category than the one they could afford.

** The adjustment factor represents the percentage adjustments needed to reflect households who could afford that cost level but chose a lower cost unit (Out Factor).

*** Estimated number of Section 8 Vouchers/Certificates or similar subsidies used to lower tenant paid rents to this price point

| | |
|--|--|
| | Label or data descriptor for data element |
| | The percentage of Households that could afford a unit at this housing cost but chose a lower cost unit |
| | A number produced by the Housing Needs Analysis template reflecting the data, assumptions, and estimates used in this scenario |

Template 12
Future Housing Units Planned by Housing Type ©
Existing Units plus New Units Added
For Coos Bay as of 2040
Scenario Coos Bay HNA 2020-40

| Rental | | | | | | | |
|-------------------|---------------------|----------------------------|--------------------------------------|---------------------|---------------------------|------------------------------|--------------------|
| Rent | Needed Units | Single Family Units | Manufactd Dwelling Park Units | Duplex Units | Tri-Quadplex Units | 5+ Multi-Family Units | Total Units |
| 0 - 194 | 673 | 4.0% | 19.0% | 0.0% | 0.0% | 77.0% | 100.0% |
| | | 27 | 128 | 0 | 0 | 518 | 673 |
| 195 - 422 | 409 | 8.0% | 7.0% | 10.0% | 20.0% | 55.0% | 100.0% |
| | | 33 | 29 | 41 | 82 | 225 | 409 |
| 423 - 655 | 715 | 35.0% | 4.0% | 15.0% | 15.0% | 31.0% | 100.0% |
| | | 250 | 29 | 107 | 107 | 222 | 715 |
| 656 - 897 | 545 | 50.0% | 1.0% | 13.0% | 12.0% | 24.0% | 100.0% |
| | | 272 | 5 | 71 | 65 | 131 | 545 |
| 898 - 1132 | 477 | 73.0% | 0.0% | 15.0% | 12.0% | 0.0% | 100.0% |
| | | 348 | 0 | 72 | 57 | 0 | 477 |
| 1133 + | 132 | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% |
| | | 132 | 0 | 0 | 0 | 0 | 132 |
| Totals | 2,950 | 1,062 | 191 | 290 | 312 | 1,095 | 2,950 |
| Percentage | | 36.0% | 6.5% | 9.8% | 10.6% | 37.1% | 100.0% |

| Ownership | | | | | | | |
|--------------------------|---------------------|----------------------------|--------------------------------------|---------------------|---------------------------|------------------------------|--------------------|
| Price | Needed Units | Single Family Units | Manufactd Dwelling Park Units | Duplex Units | Tri-Quadplex Units | 5+ Multi-Family Units | Total Units |
| <91.3k | 398 | 15.0% | 85.0% | 0.0% | 0.0% | 0.0% | 100.0% |
| | | 60 | 338 | 0 | 0 | 0 | 398 |
| 91.3k <128.9k | 773 | 50.0% | 45.5% | 3.5% | 1.0% | 0.0% | 100.0% |
| | | 387 | 352 | 27 | 8 | 0 | 773 |
| 128.9k <185.3k | 866 | 70.0% | 23.0% | 6.0% | 1.0% | 0.0% | 100.0% |
| | | 606 | 199 | 52 | 9 | 0 | 866 |
| 185.3k <279.3k | 1,127 | 90.0% | 3.0% | 6.5% | 0.5% | 0.0% | 100.0% |
| | | 1,014 | 34 | 73 | 6 | 0 | 1,127 |
| 279.3k <372.8k | 1,048 | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% |
| | | 1,048 | 0 | 0 | 0 | 0 | 1,048 |
| 372.8k+ | 1,180 | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 100.0% |
| | | 1,180 | 0 | 0 | 0 | 0 | 1,180 |
| Totals | 5,391 | 4,294 | 923 | 152 | 22 | 0 | 5,391 |
| Percentage | | 79.7% | 17.1% | 2.8% | 0.4% | 0.0% | 100.0% |

| Total Rental and Ownership Units | | | | | | | |
|---|---------------------|----------------------------|--------------------------------------|---------------------|---------------------------|------------------------------|--------------------|
| | Needed Units | Single Family Units | Manufactd Dwelling Park Units | Duplex Units | Tri-Quadplex Units | 5+ Multi-Family Units | Total Units |
| Totals | 8,341 | 5,356 | 1,113 | 443 | 334 | 1,095 | 8,341 |
| % of Total Units | | 64.2% | 13.3% | 5.3% | 4.0% | 13.1% | 100.0% |

| | |
|--|--|
| | Label or data descriptor for data element |
| | The planned percentage of dwelling units needed of this housing type at this price point in the region |
| | A number produced by the model reflecting the data, assumptions, and estimates used in this scenario |