



Oregon Housing Needs Analysis Interim Methodology

July 2024

Oregon Housing Needs Analysis Interim Methodology

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Common Terms & Acronyms

Affordable Housing: Housing is considered “affordable” to a household if it spends less than 30% of its pre-tax income on housing costs (see Cost Burdening below).

AMI: Area Median Income: Every year the U.S. Housing and Urban Development (HUD) produces a median family income to determine affordability thresholds for a given area (some geographies are HUD-specific). Affordable housing projects’ income limits, rent limits, loans, and other characteristics will be based on this income limit. This term is synonymous with Median Family Income or MFI.¹

Cost Burdening / Severe Cost Burdening: The term “cost burdening” refers to households who pay more than 30% of their income on housing costs. The term “severe cost burdening” is used for households paying more than 50% of their income on housing. These terms come from HUD, and include mortgage payments and interest, or rent, utilities, and insurance.

DAS: Department of Administrative Services

DLCD: Department of Land Conservation and Development

Goal 10 (Housing): One of Oregon’s 19 statewide land use planning requirements relating to planning for 20 years of housing need. Cities with populations larger than 10,000 people (as well as all cities and certain urban, unincorporated communities in Tillamook County) must abide by Goal 10 planning requirements.

Goal 14 (Urbanization): One of Oregon’s 19 statewide land use planning requirements relating to planning for 20 years of land need inside an urban growth boundary (see term below). Jurisdictions with populations larger than 10,000 people must abide by Goal 14 planning requirements.

HB: House Bill (year)

HSC: Housing Stability Council: The advisory body overseeing the Oregon Department of Housing and Community Services.

HUD: U.S. Department of Housing and Urban Development

¹ A note on AMI vs MFI from HUD: “HUD estimates Median Family Income (MFI) annually for each metropolitan area and non-metropolitan county. The metropolitan area definitions are the same ones HUD uses for Fair Market Rents (except where statute requires a different configuration). HUD calculates Income Limits as a function of the area’s Median Family Income (MFI). The basis for HUD’s median family incomes is data from the American Community Survey, table B19113 - MEDIAN FAMILY INCOME IN THE PAST 12 MONTHS. The term Area Median Income is the term used more generally in the industry. If the term Area Median Income (AMI) is used in an unqualified manor, this reference is synonymous with HUD’s MFI. However, if the term AMI is qualified in some way - generally percentages of AMI, or AMI adjusted for family size, then this is a reference to HUD’s income limits, which are calculated as percentages of median incomes and include adjustments for families of different sizes.” Source: HUD. 2018. “FY 2018 Income Limits Frequently Asked Questions.”

<https://www.huduser.gov/portal/datasets/il/il18/FAQs-18r.pdf>

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LCDC: Land Conservation and Development Commission: The governing body overseeing the Oregon Department of Land Conservation and Development.

OEA: Oregon Office of Economic Analysis

OHNA: Oregon Housing Needs Analysis

OHCS: Oregon Housing and Community Services Department

PUMA: Public Use Microdata Area: a geographic area defined by the U.S. Census Bureau to have roughly 100,000 people and to (typically) align with County boundaries. PUMA sizes vary depending on the population density. Oregon has 31 PUMAs, with most PUMAs located in the more densely populated western part of the state.

PUMS: Public Use Microdata Sample: Data files produced by the U.S. Census Bureau that allow users to create custom analyses that are not available through pre-tabulated data tables. These data are produced for PUMA geographies.

Regulated Affordable Housing: Housing that is rent- or income-restricted to be affordable to households earning certain incomes. These units typically have public support (funding) in exchange for affordability requirements. Housing is considered “affordable” to a household if it spends less than 30% of its pre-tax income on housing costs (see Cost Burdening above). Regulations are set according to the types of funding used to develop the housing, such as the Low-Income Housing Tax Credit, or U.S. Housing and Urban Development (HUD) funding. Most regulated affordable housing is affordable for households earning under 60% MFI, but restrictions vary.

UGB: Urban Growth Boundary: Cities in Oregon are surrounded by urban growth boundaries (UGBs) which designate where they expect to grow over a 20-year period.

Background and Policy Context

The Oregon Housing Needs Analysis and its Implementation

The Oregon Housing Needs Analysis (OHNA) is a new component to Oregon’s statewide land use planning system with the intent to facilitate housing production, affordability, and choice to meet housing needs for Oregonians statewide. The OHNA articulates new responsibilities for state agencies and local governments to reorient the implementation of statewide land use planning goals 10 (Housing) and 14 (Urbanization) to produce more housing, ensure equitable access to housing, and ensure state and local governments take action to address need. It affects the way all communities plan for housing and urban lands, and cities with populations of 10,000 or greater are now required to regularly plan and take action to address needs. The OHNA includes the following components:

Methodology	Dashboard	Program
<ul style="list-style-type: none"> • A methodology that estimates the total number of Needed Housing units over a 20-year period for all of Oregon, divided into geographic regions, components of need, and income levels. • An allocation of need from each region to each local government in a region. • This allocation at the local government level forms the basis for the statewide development of Housing Production Targets for cities with over 10,000 people. • The methodology will be run annually by the Oregon Office of Economic Development inside DAS. 	<ul style="list-style-type: none"> • A publicly available Housing Production Dashboard that will track progress toward housing production target goals by city. • A set of Housing Equity Indicators that will monitor equitable housing outcomes by city. • The dashboard and equity indicators will be published annually by OHCS. 	<ul style="list-style-type: none"> • A Housing Acceleration Program that supports cities who are falling behind on their Housing Production Targets. • The Housing Acceleration Program requires action, partnership, and investment to identify barriers to production within the control of local governments. • The Housing Acceleration Program and OHNA integration into Oregon’s other Land Use Planning Goals will be managed by DLCD and aligned with cities’ Housing Production Strategy Deadlines.

OHNA Implementation

- 1) **The OHNA Methodology** will be finalized by December 31, 2024. See the next section for more information. DAS is responsible for finalizing the methodology with input from OHCS and DLCD.

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- 2) **The OHNA Housing Production Dashboard and Housing Equity Indicators** will be published by December 31, 2024. OHCS is responsible for preparing and publishing these items, with input from DAS and DLCD.
- 3) **The OHNA Program** is writing administrative rules through December 31, 2025. To integrate the OHNA into the existing statewide land use planning system, the Land Conservation and Development Commission (LCDC) must adopt new and revised Oregon Administrative Rules surrounding three topics:
 - a) **Housing Needs and Production** rules will be adopted by December 31, 2024.
 - b) **Housing Accountability** rules will be adopted by December 31, 2024.
 - c) **Housing Capacity and Urbanization** rules will be adopted by December 31, 2025.

More information on the [OHNA Implementation Process](#) can be found on [DLCD's Rulemaking Website](#).

This Report: The OHNA Interim Methodology

This report describes the OHNA Interim Methodology and how it has changed from the Pilot Methodology published in 2020. It describes the steps of the Interim Methodology, including how different components were calculated and the data sources used. It also provides state and regional results by housing need component and by income level.

Local (city) results are not included in this draft and will be available in the Draft Methodology published in September. This choice was made for several reasons:

1. Publicly available data used to calculate the results will be updated between now and December 31, 2024, which will change the results. See page 32 for a description of public data used, sources, and information on when they are typically updated.
2. The Interim Methodology will continue to change between now and December 31, 2024. The Draft Methodology will incorporate public comments on this Interim Methodology and will include several known methodological changes that will not be available until the Draft is published.

Local city results published with the Draft Methodology in September will still be draft and will continue to change until the methodology is finalized using data for year ending 2023 on December 31, 2024.

Public Input and Finalizing the OHNA Methodology

[The law \(ORS 184.451\)](#) requires DAS to finalize and run the OHNA methodology by January 1, 2025. OHCS and DLCD will make recommendations to DAS on the final methodology in fall 2024, informed by public input. Figure 1 outlines the process to finalize the OHNA Methodology, including specific opportunities for public comment and testimony.

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Figure 1. OHNA Methodology Finalization Process (2024)

- **May 2024: Statewide and Metro-specific webinars hosted by DAS, DLCD, and OHCS (Completed)**
- **July 2024: Publish Interim Methodology Report (Completed)**
- **July-August 2024: Public comment period on Interim Methodology (Begun)**
- **August 2024: Respond to public comments and revise methodology**
- **September 2024: Publish Draft Methodology Report, LCDC meeting and public testimony on Draft Methodology**
- **October 2024: Housing Stability Council Presentation on Draft Methodology Report**
- **October-November 2024: Respond to public comments and revise methodology**
- **December 2024: DAS publishes Final Methodology**

The public can provide feedback on the Interim Methodology through August 16, 2024. After that, DAS, OHCS, and DLCD will incorporate comments and publish the Draft Methodology in September, at which point community members can provide additional feedback.

Community members looking for more information on the Interim Methodology can listen to two webinars recorded by OHCS in May 2024 and posted on its [website](#). The first provided an overview of the Interim Methodology for the state, and the second provided an overview of the Interim Methodology in the Portland Metro Region. Both webinars discussed changes from the Pilot Methodology.

Written comments on this Interim Methodology can be emailed to HCS.OHNA@hcs.oregon.gov or housing.dlcd@dlcd.oregon.gov until midnight on August 16, 2024 with the subject line: "Public Comment - OHNA Interim Methodology."

Legislative History

The OHNA has been under development for several years (see Figure 2). Under [2019's House Bill 2003](#), OHCS completed a Pilot Methodology and published a [technical report](#) that describes a recommended methodology and the analytical choices that were ruled out. Many of the data limitations identified and discussed in the Pilot Methodology technical report are relevant in this Interim Methodology and are not revisited herein.

In February 2021, OHCS produced a [companion report](#) that summarizes the Pilot Methodology and provides an overview of the policy choices. And in March 2021, DLCD conducted a review of the pilot methodology and [submitted an evaluation](#) of the methodology along with legislative recommendations.

Under subsequent direction from the Legislature (2021's [House Bill 5006](#)), OHCS and DLCD refined the methodology in 2022 to better account for specific functions and components and provided a [Recommendations Report](#) on how to implement the OHNA into Oregon's existing Land Use Planning System. For a detailed technical explanation of the OHNA methodology and changes recommended last year, see the technical appendix to the OHNA Recommendations Report.

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In the 2023 Legislative Session, [House Bills 2001](#) and [2889](#) codified the OHNA into law advancing these recommendations and directing OHCS, DLCDC, and DAS to begin implementation.

In summer 2023, DLCDC began rulemaking and implementation which will continue through June 30, 2026, and in early 2024 OHCS and DAS began implementing the OHNA into their programs and systems. The Office of Economic Analysis at DAS will be finalizing the OHNA methodology throughout 2024 so it can be run by January 1, 2025.

Figure 2. OHNA Legislative History

2018	2019	2020	2021	2022	2023
HB4006 Housing production reporting required	HB2001 legalizes middle housing HB2003 requires local housing production strategies Pilot OHNA method	OHCS pilots OHNA methodology and DLCDC completes Housing Production Strategy Rulemaking	HB5006 directs DLCDC to create recommendations to implement the OHNA statewide	HB5202 directs DLCDC to manage Housing Capacity Work Group	HB2001 and 2889 make the OHNA law and direct DAS, DLCDC, and OHCS to implement it into programs

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The OHNA methodology focuses on the affordability and geographic distribution of newly produced housing, not the characteristics of the existing housing stock across the state. This is a methodological choice that has implications for policymaking and tracking the overall affordability of the entire housing stock.

Methodological changes between the Pilot and the Interim Methodologies have been made to improve the OHNA and to better account for different types of demand on current and future housing need. The Interim Methodology adjusts how some components of the Pilot Methodology are calculated and introduces new concepts. The OHNA Interim Methodology has six steps:

1. **Determine Regions**
2. **Determine Income Categories**
3. **Determine Components of Housing Need**
4. **Allocate Needed Housing to Income Categories**
5. **Allocate Needed Housing to Cities and UGBs**
6. **Set Housing Production Targets**

Step 1: Determine Regions

The first step in completing the OHNA is to define the regions for the analysis. The regions affect the entire analysis, from the ability to develop the analysis based on available data to the interpretation of the findings about regional housing needs for individual cities. Since each possible dataset that could be used to define regions has its own level of geographic specificity, choices about regions are integrally tied to choices about data.

Defining regions for this analysis required identifying the source of data that would be used throughout the analysis. The source of data needs to be consistently available statewide, available at an appropriate geographic level, updated annually, have acceptable margins of error for the variables of interest for the methodology, and be flexible enough to allow for comparisons necessary to deliver the analysis required by the statute.

Regions

The OHNA regions are built from Census Public Use Microdata Areas (PUMA) regions. This has not changed from the Pilot Methodology, but the regions themselves have changed due to the Census Bureau adjusting the PUMA boundaries.

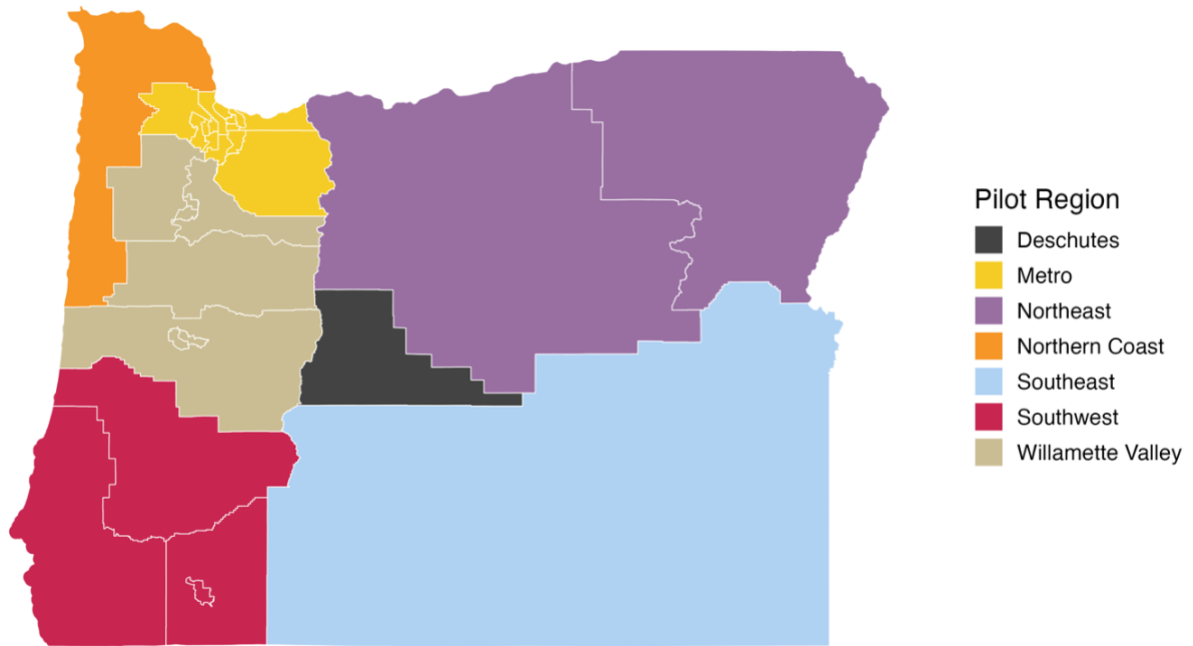
The 2019 legislation enabling the Pilot Methodology directed OHCS to develop regions based on those used by the Governor's [Regional Solutions Teams](#), unless it was more appropriate to define regions differently based on ease or cost of collection and/or analysis of data. The law also directed OHCS to consider commuting, employment, and housing markets when defining regions. Ultimately the Pilot Methodology used the regions in Figure 3, rather than the Regional Solutions Team's map as (1) the analysis relies on Public Use Microdata Samples (PUMS) data which align with these regions; (2) with

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multiple PUMAs in each region, the margin of error on the range of variables used in the analysis is smaller; and (3) discussions with stakeholders suggested that larger geographies are generally preferable to smaller regions.

Figure 3. Pilot Methodology Regions

See Exhibit 11, page 19 in the 2020 OHCS [Technical Report](#)



The Pilot Methodology used PUMAs from 2018. The U.S. Census Bureau updates PUMAs every 10 years following the Decennial Census. The most recent change occurred with the 2022 dataset, following the completion of the 2020 Census. In the OHNA, PUMAs are aggregated up to regions, therefore not all changes in the PUMA geographies impact each region.

In the Interim Methodology, four regions differ from the Pilot Methodology: Central, Northeast, North Coast, and Willamette Valley. The 2022 update of PUMA regions affected how Yamhill and Polk Counties were grouped, which affected the Northern Coast region. The Central region also changed; it is now larger as it contains the entirety of Crook, Deschutes, and Jefferson Counties.

Changes to PUMA boundaries will happen every ten years and may affect the OHNA regions in the future. Figure 4 shows the regions in the Interim Methodology, and Figure 5 shows the changes.

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Figure 4. Interim Methodology Regions

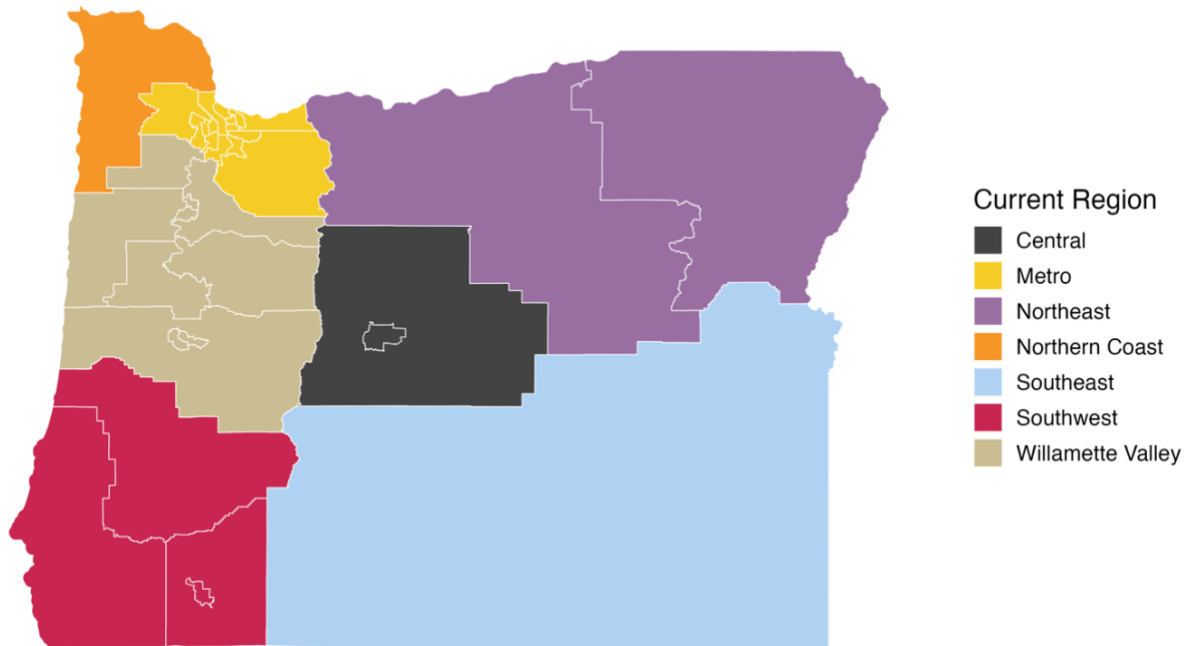
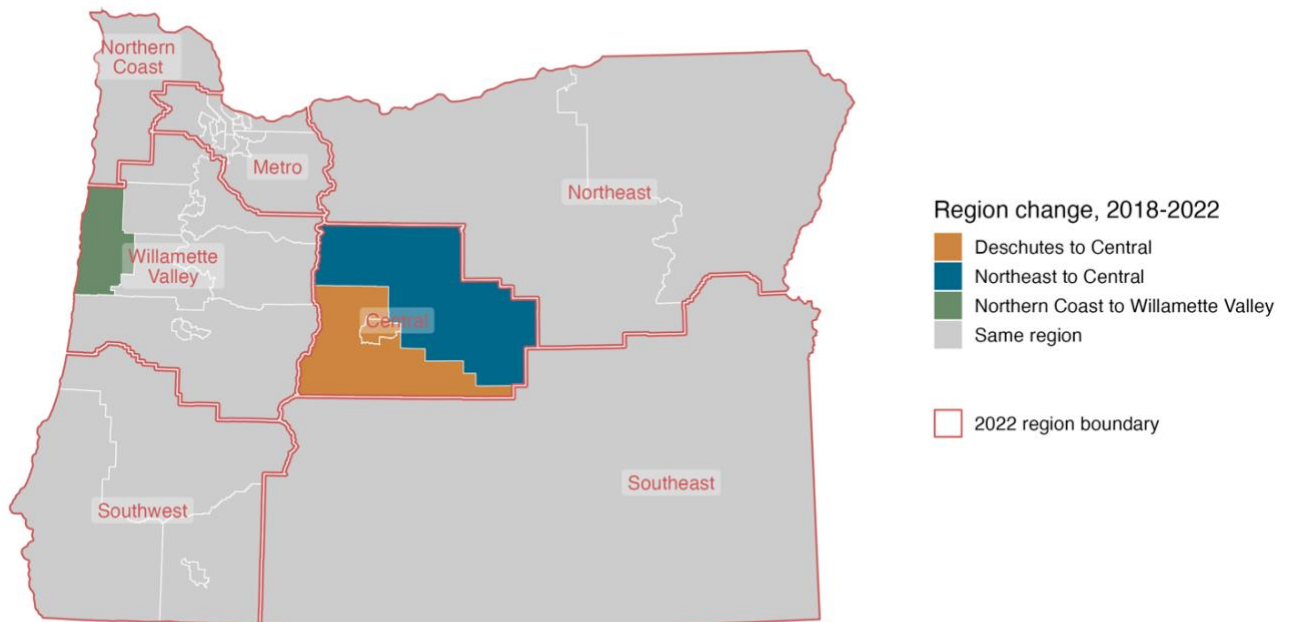


Figure 5. Changes to Regions from Pilot to Interim Methodology



Step 2: Determine Income Categories

The second step in completing the OHNA is to define the income categories that are used to distribute needed housing across the income spectrum. The methodology requires jurisdictions to use regional incomes to allocate housing need. This is an important change from prior Goal 10 planning

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requirements in which cities used their own city-level income distributions to allocate housing need by income level.

Income categories translate into housing affordability. Income categories are expressed as a percent of the Area Median Family Income (AMI), which is determined by the U.S. Department of Housing and Urban Development (HUD) and takes into account household size and the number of bedrooms. A housing unit is determined to be affordable to a household if it accounts for less than 30% of that household's gross income.

Across the Interim Methodology, all income categories are adjusted to account for household size. This has not changed from the Pilot Methodology. HUD provides regional AMIs based on a four-person household and provides guidance to allow practitioners to adjust for household size and number of bedrooms in a unit.² OHCS follows the HUD guidance, which is as follows:

Household Size Income Adjustment

- 1-person household: 70% of AMI
- 2-person household: 80% of AMI
- 3-person household: 90% of AMI
- 4-person household: 100% of AMI
- 5-person household: 108% of AMI

Apartment Unit Size Income Adjustment

- Studio unit: 70% of AMI
- 1-bedroom unit: 75% of AMI
- 2-bedroom unit: 90% of AMI
- 3-bedroom unit: 104% of AMI

Changes from Pilot Methodology

House Bill 2003 (2019) specifically directed the Pilot Methodology to identify housing need in the following income categories:

1. Very low income (<50% of AMI)
2. Low income (50-80% of AMI)
3. Moderate income (80-120% of AMI)
4. High income (120% of AMI or greater)

However, when developing the Pilot Methodology, the project team identified the need for extremely low-income households earning 0-30% of AMI and very low-income households earning 30-50% of AMI. The Pilot Methodology ultimately used the following income levels (see Exhibit 13, page 21 in the 2020 OHCS [Technical Report](#)):

1. 0-30% AMI
2. 31-50% AMI

² Portland Housing Bureau Median Income Percentages 2024. <https://www.portland.gov/phb/documents/2024-income-and-rent-limits-phb/download>

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3. 51-80% AMI
4. 81-120% AMI
5. 120%+ AMI

For the Interim Methodology, OHCS and DLCD recommended changes to the Pilot Methodology to more closely align with OHCS-regulated affordable housing programs, because developers seeking OHCS funding to build regulated affordable housing will be tied to these income limits. These changes adjust the second-lowest income category to a range of 31-60% of AMI, and the middle-income category to 61-80% of AMI, ultimately leading to the following income limits in the Interim Methodology:

1. 0-30% AMI
2. 31-60% AMI
3. 61-80% AMI
4. 80-120% AMI
5. 120%+ AMI

Step 3: Determine Components of Need

The third step of the OHNA is to determine the different components of housing need. The OHNA is an estimate of total housing needed statewide over a 20-year horizon and includes housing units that are needed now to house the existing population (Current Need) as well as units needed in the future to accommodate household growth (Future Need).

- **Current Need** includes housing underproduction and housing units for people experiencing homelessness (who are not captured in the Census data on total population).
- **Future Need** includes units for expected population growth, expected housing units that will be lost to second and vacation homes, and units to accommodate expected demographic change.

By including an estimate of current housing need in planning requirements, the OHNA departs from historic Goal 10 planning requirements which only required jurisdictions to look forward at the 20-year population forecast. In designing the OHNA, state leaders recognize that Oregon has been underbuilding housing for several decades and that a narrow focus solely on future population growth will not help communities relieve the pressures created in housing markets by low vacancy rates and high prices.

This section steps through each component of the Interim Methodology and discusses changes from the Pilot Methodology.

Current Need

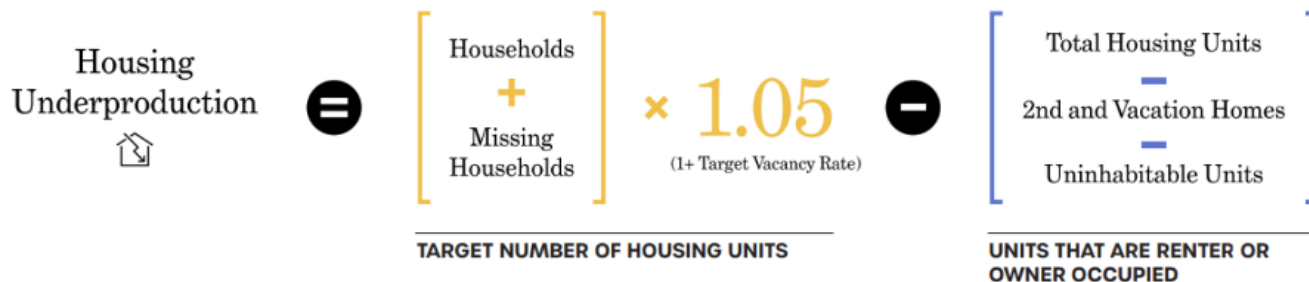
The OHNA is an estimate of total housing needed statewide over a 20-year planning horizon, including an estimate of how many units the state, regions, and cities need currently to adequately house their existing populations. Current need takes into account housing underproduction and units needed for people experiencing homelessness.

Housing Underproduction

Underproduction was included in the Pilot Methodology and has been adjusted in the Interim Methodology to provide a more nuanced approach to calculating the current need for housing. Underproduction was calculated in the Pilot Methodology using a target ratio of housing units per household. Regions with ratios that were lower than the target were experiencing housing underproduction. The target ratios were set different depending on if the region had above the national percentage of second and vacation homes. So, while it provided some regional variation, it was acknowledged as an overcount, and did not provide more insight into the causes of underproduction in any region.

The Interim Methodology adopts an approach used by Up for Growth, a housing policy research nonprofit in Washington, D.C. that has been vetted by housing industry experts.³ This is a more nuanced approach than using a standard target ratio (as the Pilot Methodology did, discussed below) and is considered a national best practice. This new approach calculates the target number of housing units a market should have (demand) and compares that against the actual number of units that market has available for year-round occupancy (supply). These steps are broken down below. Regions where the demand exceeds supply are experiencing housing underproduction.

Figure 6. Up for Growth Housing Underproduction Methodology



Target Number of Housing Units

The estimate of the target number of housing units starts with the Census Bureau’s estimate of total households and then estimates the number of “missing households” that have not formed in a market compared to historical formation rates in 2000.

Household formation is influenced by the housing stock available—when a market does not build sufficient housing, prices rise and vacancy falls, affecting the likelihood of households to form (roommates splitting up, children moving out, etc.). This measure estimates the number of households that are expected to form in less constrained housing market conditions, and as such are a component of current demand.

³ Up for Growth, Housing Underproduction in the U.S. 2023. <https://upforgrowth.org/apply-the-vision/2023-housing-underproduction/>

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The Interim Methodology calculates “missing households” based on changes in the headship rate (the percentage of people who are heads of households, or householders) for different age cohorts between 18 and 44. The lack of housing availability and affordability is not the only reason that explains reduced household formation rates, therefore including all age cohorts would be an overcount of household formation primarily caused by housing market constraints. Age cohorts are therefore limited to head of households between 18 and 44 as the most likely ages where this occurs—effectively excluding households over 44 is one way to limit the impact of the overcount. Limiting the age cohorts helps compensate for the nature of the overcount—essentially that housing isn’t the only factor contributing to decreased household formation rates.

The Interim Methodology uses a baseline headship rate in the year 2000 for all cohorts. This year was chosen because 2000 Decennial Census data affords us the most recent statistically reliable estimate of a housing market that was more in balance. Headship rates were also generally stable between 1980 and 2000, so going back further would not have a large impact on the baseline headship rate. The Interim Methodology compares the most recent headship rate (based on 2022 PUMS data) against the 2000 baseline for each age cohort. If a cohort has a lower headship rate in the most recent year compared to the baseline, it indicates that fewer households formed. The total estimate of “missing households” is the sum of reduced household formation from cohorts aged 44 years and younger. Should there be negative missing households (more households formed compared to the baseline rate), they are netted out to zero because they are not contributing to excess demand beyond what is already captured in the households formed data observation.

The estimate of missing households is added to the current total number of households to approximate the total number of households that would be seeking housing in unconstrained market conditions. The model then applies a 5% target vacancy rate to estimate the total number of housing units a region should have to accommodate current need and have a healthy level of vacancy. Five percent vacancy is the 75th percentile of the national vacancy rate between 1980 and 2000 and is meant to represent unconstrained market conditions. It is backed by industry stakeholder outreach and some research and is used in other methodologies of estimating housing need and underproduction.

Actual Units Available for Year-Round Occupancy

The estimate of the actual number of units available for year-round occupancy starts with the Census Bureau’s estimate of total housing units and removes uninhabitable units and second and vacation homes that are not available for year-round occupancy from the stock. Uninhabitable units are identified in the Census PUMS data as those that lack indoor plumbing and complete kitchens, and that have been vacant for at least a year. Second and vacation homes are identified in the Census Bureau as those that are vacant and used for “seasonal or recreational purposes.”

By removing uninhabitable units and second and vacation homes from the estimate of the current housing stock, the Interim Methodology attempts to calculate each region’s total housing stock available for year-round occupancy as a more accurate reflection of housing supply. When compared to the total number of households each region would have in unconstrained market conditions, the Interim Methodology can capture current housing underproduction and incorporate current housing need into future planning purposes. This change pushes Oregon’s statewide housing planning system toward

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one that more accurately measures total housing need; planning for future housing need without accounting for current need will continue to yield insufficient housing production relative to demand across the state.

Changes from Pilot Methodology

The Pilot Methodology estimated underproduction in each region relative to a target ratio of households to housing units. Units lost to second and vacation homes were not estimated as their own component; they were included as part of the target ratio for underproduction. Regions with a lower share of second and vacation homes than the national average (4%) were calculated by excluding second and vacation homes, and benchmarking against a ratio of 1.10 unit per household.⁴ When a region's ratio was less than the target of 1.10 excluding second and vacation homes, it was considered to have housing underproduction. For regions with above the national average of second and vacation homes, a ratio of 1.14 was used as the target to calculate underproduction (see page 19 in the 2020 OHCS [Technical Report](#)).

Housing Units Needed for People Experiencing Homelessness

The Interim Methodology makes a small adjustment to the calculation for this component.

Determining the number of units a region needs to house people experiencing homelessness requires careful attention, because available datasets have many known limitations including undercounting populations. Populations experiencing homelessness are generally not captured in foundational datasets derived from the Census, so they are not included in the projections of current (or future) need. This methodological choice was made under the assumption that if jurisdictions can plan for current need as the sum of underproduction and housing for people experiencing homelessness, while planning for enough housing units to meet future need, then homelessness would become "functionally zero," and would be rare and brief.⁵

The Pilot and Interim Methodologies rely heavily on the limited research available on this topic, as well as discussion and feedback from stakeholders with expertise in research and service provision for those experiencing homelessness in Oregon. The state continues to explore new research and better data to continually improve this portion of the OHNA methodology.⁶

To calculate each region's target number of housing units needed to accommodate households experiencing homelessness, the Interim Methodology uses the Point-In-Time (PIT) Count data of

⁴ 1.10 is the national average ratio of housing units to households formed from 1960 to 2015. The national average share of housing units that are used as second and vacation homes is 0.04. Taking these together creates a ratio of 1.14 that is used as a benchmark for sufficient "cushion" in the market to allow for vacancy, obsolescence, demolition, and second and vacation homes.

⁵ Functional Zero Homelessness occurs "when the number of people experiencing homelessness at any time does not exceed the community's proven record of housing at least that many people in a month."
<https://community.solutions/built-for-zero/functional-zero>

⁶ Recommendations for improving data are included in Chapter 7 of the OHCS RHNA Technical Report and Appendix B describes the key analytical issues in estimating the amount of housing need to accommodate the population of people experiencing homelessness in Oregon.

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sheltered households and the PIT estimate of the unsheltered population, scaled by a factor of 1.60 to address known undercounting issues in the data.⁷ The 1.60 scalar for the unsheltered population is at the higher end of other estimates of PIT undercounting.⁸

The model then adds the adjusted PIT count to an estimate of homeless households that are not in the PIT nor Census Data, which is derived from the McKinney-Vento statewide survey of doubled-up students by county. This data on doubled-up students is converted to households by dividing by the average number of children per household by region. The McKinney-Vento data comes from the U.S. Department of Education which works with state coordinators and local liaisons to collect performance data on students experiencing homelessness. The data records the number of school-aged children who live in shelters or hotels/motels and those who are doubled up, unsheltered, or unaccompanied. Sheltered, unsheltered, and accompanied students are assumed to be captured by the PIT counts, and so only doubled up student counts from the McKinney-Vento data are used.

In summary, the methodology looks like this for each OHNA region:

Sum of PIT Count of Sheltered Households for the region

- + Sum of PIT Count of Unsheltered Households * 1.6 scalar for each region
- + Sum of Region's Doubled Up Students / Regional Average Children per Household
- = OHNA Estimate of Units Needed to Accommodate Households Experiencing Homelessness

Changes from Pilot Methodology

This step has been changed slightly from the Pilot Methodology to correct for an over-adjustment. The Pilot Methodology scaled both the unsheltered and sheltered PIT counts of homelessness by the 1.60 multiplier. Because shelters have a certain number of beds available, the sheltered population experiencing homelessness is not undercounted to the same extent as the unsheltered population. The change to the Interim Methodology improves the accuracy of this component of the OHNA by only scaling the unsheltered population by the 1.60 scalar (see page 20 in the 2020 OHCS [Technical Report](#)).

Future Methodological Changes

OHCS is working with researchers at the Homelessness Research and Action Collaborative (HRAC) at Portland State University (PSU) to improve its understanding of how to more accurately count people experiencing homelessness. The work will revisit best practices in

⁷ Wilder Research, Homelessness in Minnesota - Findings from the 2015 Minnesota Homeless Study (2016). <http://mnhomeless.org/minnesota-homeless-study/reports-and-fact-sheets/2015/2015-homelessness-in-minnesota-11-16.pdf>

⁸ The estimate of a 130% undercount in the PIT is based on: Kim Hopper, Marybeth Shinn, Eugene Laska, Morris Meisner, and Joseph Wanderling, 2008: Estimating Numbers of Unsheltered Homeless People Through Plant-Capture and Postcount Survey Methods. *American Journal of Public Health* 98, 1438_1442, <https://doi.org/10.2105/AJPH.2005.083600>.

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measuring the population of people doubled up and will revisit the scalar applied to people experiencing unsheltered homelessness. This work is expected to be completed in summer 2024, and changes to the OHNA methodology will be incorporated into the Draft Methodology when it is published in September 2024.

Future Need

The OHNA is an estimate of total housing needed statewide over a 20-year planning horizon. Future need takes into account the housing units needed for population growth, housing units lost to second and vacation home demand, and housing units needed to accommodate demographic change.

Housing Units for Population Growth

To estimate 20-year future housing needs, forecasted population growth must be translated into future households and then translated into future needed housing units.

PSU's Population Research Center (PRC) produces the official population estimates for the State of Oregon. The Interim Methodology converts the PRC population forecast to households using the most recent regional average household size estimated with the most recent PUMS data. As with past Goal 10 housing planning requirements, the future population forecast excludes the estimate of people living in group quarters because they are not considered part of the household population, and their needs are planned for separately.

Because loss of units to second and vacation homes in the future is calculated as a separate component of need (see next section), the Interim Methodology assumes that each future household will occupy one housing unit, while also planning for the target vacancy rate. Once total future needed housing units are determined, the Interim Methodology applies the same 5% vacancy factor to estimate the future housing stock that cities and regions should plan for (see page 13).

Changes from Pilot Methodology

The Pilot Methodology used the same PRC population forecasts and PUMS estimates of average household size to convert population to households. To translate households into housing units, the Pilot Methodology used the national ratio of housing units per household (1.14), which was intended to account for a vacancy rate, demolition, and future units lost to second and vacation homes. By pulling second and vacation homes into its own component of need, the future need due to population growth can be modeled more accurately by accounting for the varied rate of second and vacation home growth across the state (see page 19 in the OHCS [Technical Report](#)).

Housing Units Lost to Second and Vacation Home Demand

Estimating second and vacation homes as its own component allows cities to better account for demand for these housing units in the future and improves the State's understanding of the role that

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second and vacation homes play in each region's housing market. In many outdoor recreation- and tourist-heavy communities, particularly along the coast, in the Gorge, and in central Oregon, the presence of second and vacation homes removes units of the existing housing stock from year-round occupants at a different rate than in other parts of the state. This contributes to underproduction of needed housing by reducing the number of units available to full-time renters and owners, thereby decreasing vacancy rates and putting upward pressure on housing costs. As the stock of second and vacation homes grows in the future, it effectively takes away from housing production, as fewer units are available for year-round occupancy.

Figure 7. Summary of Process to Identify Second and Vacation Homes

1. Calculate change in the number of second and vacation homes per region
2. Determine how much housing is needed to offset this expected future loss in units
3. Apply the ratio to forecasted housing unit growth

The current share of second and vacation homes varies by region, as does the pace at which these shares are changing over time. First, the model calculates the change in the number of second and vacation homes for each region between the years 2000 and 2020. The growth in second and vacation homes is then contextualized by the number of all housing units added for each region between 2000 and 2020. The ratio of second and vacation homes added compared to the total housing production is calculated for each region. This ratio is effectively an approximation of how much additional production would be required to offset the loss in units to second and vacation home demand over the 20-year planning period.

Example Calculation for Second and Vacation Home Demand

If a city produced 1,000 housing units between 2000 and 2020 but saw the number of second and vacation homes in the same time period grow from 100 to 200 units (either through new construction or conversion of an existing home), then it would have a ratio of 0.1. If this city was estimated to grow by 2,500 new households over twenty years, the additional production to account for units lost to second and vacation home need would be $0.1 * 2,500$ or 250 units.

Changes from Pilot Methodology

As described, the Pilot Methodology captured housing units used as second and vacation homes in underproduction and population growth when those components used a static household-to-housing-unit ratio. By applying a ratio to the number of households in a region, the Pilot Methodology was attempting to capture the "cushion" of extra housing units that a balanced market would need to properly account for second and vacation home demand and market vacancy.

The Interim Methodology only calculates second and vacation homes as part of determining future housing need. These units are no longer available for year-round occupancy, and as units are purpose-built or converted into second and vacation homes, they need to be replaced in order to achieve the

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desired number of units per household. Units identified as being currently occupied as second and vacation homes are captured as part of the underproduction calculation (current need).

Housing Units for Demographic Change

The number of housing units needed to account for demographic change is a new component of the Interim Methodology and was not captured in the Pilot Methodology. This helps to account for changing household demographic composition (aging and reduced birth rate) as the population of Oregon changes.

Like many states, Oregon is aging, and seniors typically have smaller household sizes; according to Census data, the average household size (persons per household) headed by a person aged 60 to 69 is only 1.9 people, compared to 2.9 people for households headed by a person aged 30-39. As population forecasts expect a larger share of the population to be 65 and older, and as the fertility rate continues to remain below replacement rate, more housing units will be needed to house Oregon's older total future population. An example below depicts how demographic change is handled in the model.

First, the Interim Methodology uses PUMS data to calculate the current persons per household (PPH) for each major age cohort by region. It then joins the age cohort-based PPH figures to the 2025 and 2045 population forecasts by age cohort, and then calculates a total PPH for each region for 2025 and 2045. Average household sizes for each region are forecast to be smaller due to changing demographics.

The PRC-forecasted populations in each region in 2025 and 2045 are then converted into households by dividing by the average household size in each region. This differs from the population change component, where the PPH is held constant between the baseline and horizon years (using 2025 PPH).

The final step in the process is to convert the added number of households in each region into needed housing units. Following the methodology for the other components, the Interim Methodology also applies the target 5% vacancy factor to the estimated number of needed housing units in the future (see page 13).

Example Regional Demographic Change

1. $(\text{Population}_{2045} \div \text{PPH}_{2025}) - (\text{Population}_{2025} \div \text{PPH}_{2025}) = \text{Households added by Population Change}$
2. $(\text{Population}_{2045} \div \text{PPH}_{2045}) - (\text{Population}_{2025} \div \text{PPH}_{2025}) = \text{Households added by Demographic Change}$
3. $\text{Households added by Demographic Change} \times 1.05 = \text{Housing Units Needed to Account for Demographic Change}$

The demographic change component is effectively capturing the change in household size for existing households (starting in 2025) as well as the marginal new households added between 2025 and 2045. This is a deviation from other components in that it considers housing need for existing and future

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households. It is included in the future need category because it captures future demand for housing from existing households (rather than underproduction and homelessness, which are current demand).

Step 4: Allocate Needed Housing to Income Categories

Once total housing units needed are estimated for each component and each region, the next step is to distribute housing need to income categories. Allocation processes differ by component.

Current Need: Housing Underproduction

Underproduced units are allocated to income categories based on the rate of cost burdened renter households in each region. Cost burdening is the best proxy available to estimate the current need for housing. Because underproduction in a market leads to cost burdening by limiting choice and reducing overall affordability, the impacts of underproduction are most acutely felt by lower-income renter households who currently need affordable housing. Underproduced units are therefore distributed proportionate to rates of regional cost burdening. This has not changed from the Pilot Methodology.

Current Need: Housing Units Needed for People Experiencing Homelessness

Housing units needed for people experiencing homelessness are distributed by income based on information provided from OHCS. This distribution has not changed since the Pilot Methodology. There is no existing, high-quality dataset with information about the incomes of people who are experiencing homelessness, but many households that are experiencing homelessness have incomes and still cannot find a home that is affordable to them.

To provide a starting place for understanding the distribution of households experiencing homelessness by income, the Interim Methodology uses OHCS administrative data from Community Action Agencies that receive state Emergency Housing Assistance (EHA) and State Housing Assistance Program (SHAP) funds. Statewide, of households whose income is captured in the EHA / SHAP administrative data, a large portion (89%) are in the lowest income categories.

- 3% of units are allocated to the 61-80% AMI Category
- 8% of units are allocated to 31-60% AMI Category
- 89% of needed units are allocated to the 0-30% AMI Category

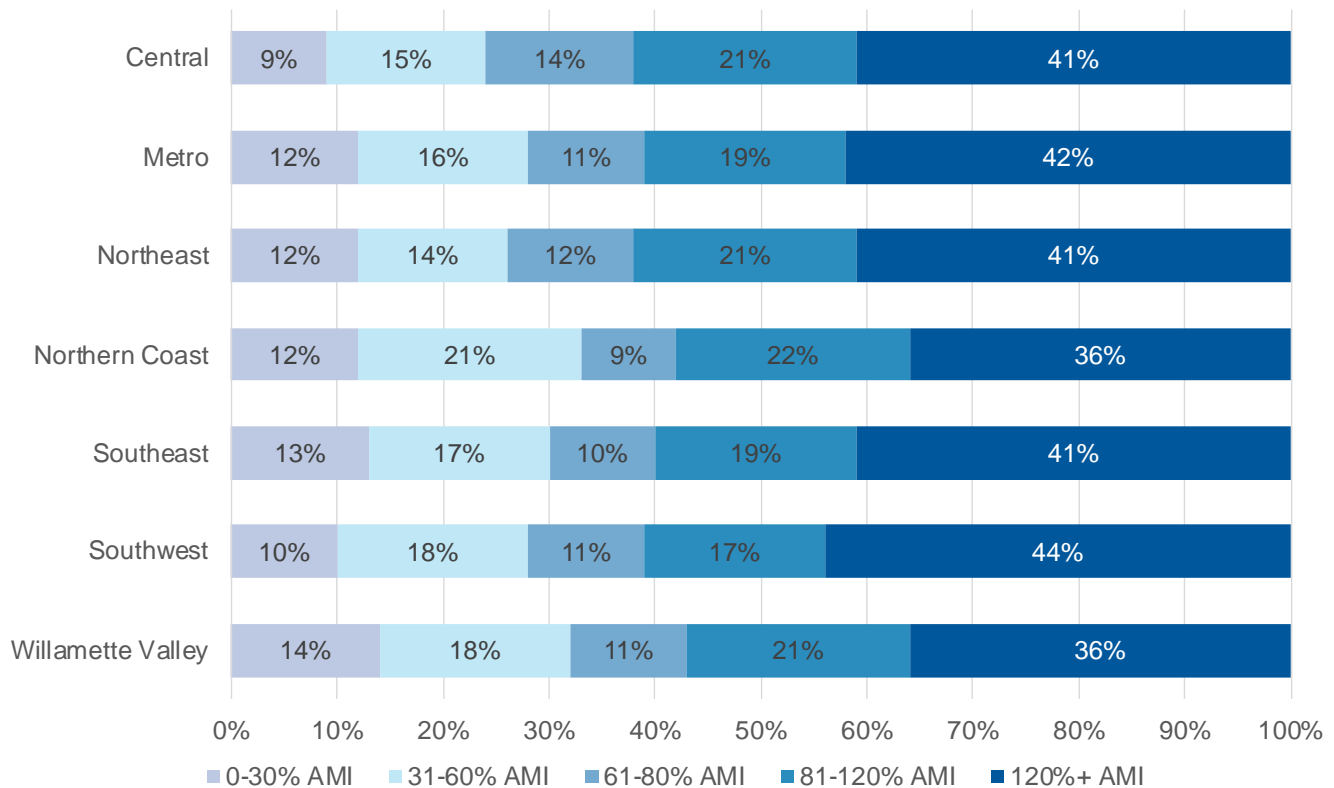
This does not vary regionally. OHCS began receiving EHA and SHAP data in fiscal year 2020. This distribution is based on the first three quarters of fiscal year 2020 only. OHCS recommends revisiting and refining these data in the future.

Future Need: Housing Units for Population Growth

Units needed to accommodate population growth are allocated based on each region's current income distribution. The state's income distribution and that of each region are shown in Figure 8 below. This has not changed from the Pilot Methodology.

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Figure 8. Income Distributions for Oregon and Each OHNA Region, 2022



Future Need: Housing Units Lost to Second and Vacation Home Demand

PUMS data does not provide rent or valuation data for units identified as second and vacation homes, but data on the year built are available and are used as a proxy for valuation with the assumption that newer units are more expensive and should be allocated to the highest income categories. The OHNA methodology allocates units identified as second and vacation homes that were built prior to 1990 to the 80-120% AMI income category while those built after 1990 are allocated to the 120%+ AMI income category. This distribution was determined based on separate analyses of regional patterns of affordability of occupied homes by year built. This is a change from the Pilot Methodology since this component was not calculated individually.

Future Need: Housing Units Needed for Demographic Change

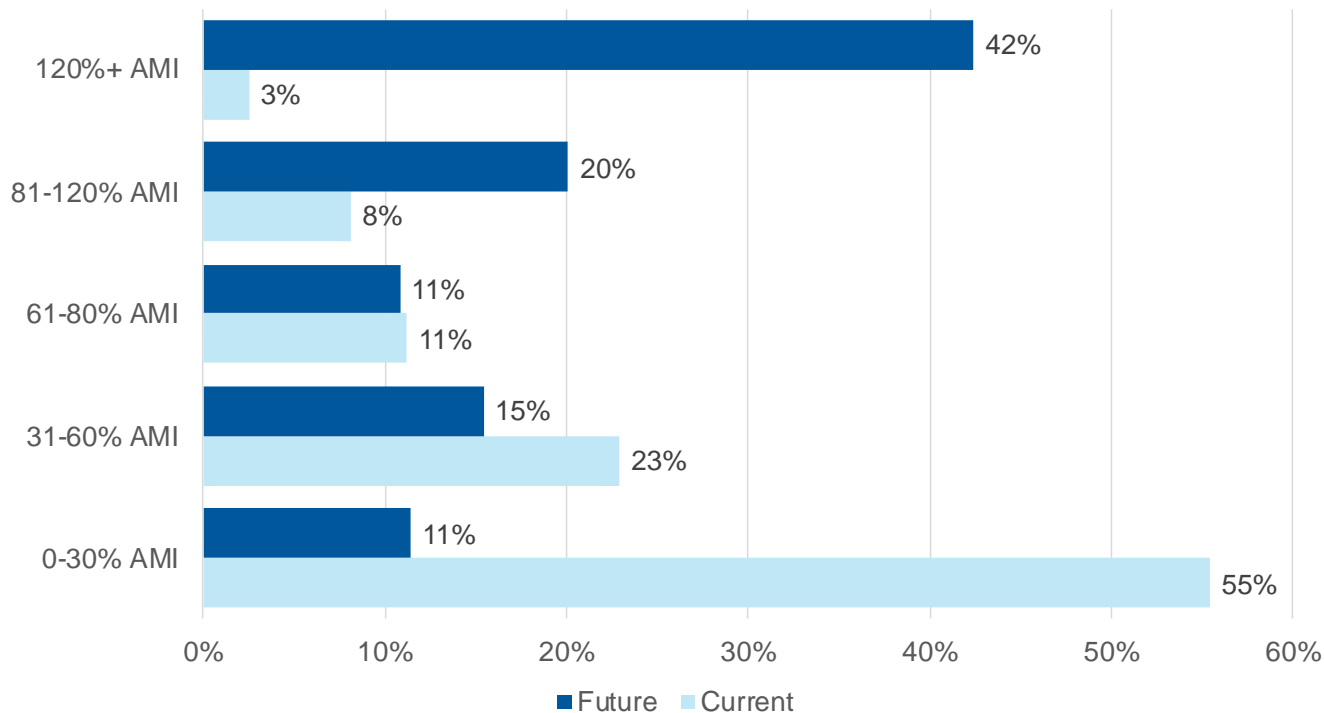
Given the similarities between units needed for population growth and units needed for demographic change, units needed for demographic changes are also allocated to income categories based on each region's income distribution. This component was not part of the Pilot Methodology.

Summary of Needed Units by Income Level

Generally, the Interim Methodology results suggest that needed housing units in the future are skewed toward higher incomes while current needed housing units are skewed toward lower incomes. Figure 9 below shows an example distribution of housing unit need by income level for current and future need categories.

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Figure 9. Example Income Target Distribution by Category of Need for the Metro Region



Step 5: Allocate Needed Housing to Cities and UGBs

After the total housing units needed over 20 years is calculated, the fifth step in the methodology is to determine what needed housing should be allocated to areas inside or outside of Urban Growth Boundaries. The Portland Metro region has a different allocation methodology (see page 25).

Step A. Determine Regional Need Inside vs. Outside UGBs

First, the 20-year future population growth outside of UGBs is determined for each region. This is based on PRC forecasts which report outside-UGB subtotals for every county. This step recognizes that not all Oregonians live inside UGBs, and not all Oregonians will live inside UGBs in the future. Lands outside a UGB receive future housing need for their planning purposes but do not receive current need. Current need is primarily a symptom of a lack of enough housing units. Areas outside of UGBs have not historically had to plan for housing units; therefore, the responsibility for providing additional housing units to meet current need should be concentrated inside of UGBs.

Second, units needed for population growth, demographic change, and demand for second and vacation homes outside UGBs are removed from the regional total. The remaining units are then allocated to UGBs inside the region.

Step B. Allocating Regional Need to Urban Growth Boundaries

Next, each component of need is allocated from the adjusted regional total (excluding areas outside of UGBs) to each of the UGBs in the region using a set of policy variables and weights in the following

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combinations. These allocation weights attempt to balance where people currently live, where the PSU population forecasts expect people to live, and where the region's jobs are. Second and vacation home allocations are intended to focus those housing units where the housing markets are most directly impacted today. Including an area's share of jobs as a weight in the allocation is a policy choice driven by Oregon's desire to create compact livable communities with access to jobs and amenities. It also helps to ensure that Oregon will meet its climate and emissions reductions goals.

- Housing Underproduction
 - 50% from UGB's share of its region's current population
 - 50% from UGB's share of its region's current employment (derived from current Census Longitudinal Employer-Household Dynamics (LEHD) block-level counts of jobs within all geographies)
- Housing Units for People Experiencing Homelessness
 - 50% from UGB's share of its region's current population
 - 50% from UGB's share of its region's current employment
- Housing Units for Population Growth:
 - 50% from UGB's share of its region's population growth
 - 50% from UGB's share of its region's current employment
- Housing Units for Demographic Change
 - 50% from UGB's share of its region's current population
 - 50% from UGB's share of its region's current employment
- Housing Units Lost to Second and Vacation Home Demand
 - 100% from UGB's share of its regions current second and vacation home stock (as determined by 2020 Decennial Census block-level counts of second and vacation homes spatially joined to UGB boundaries)

Step C. Distribute from Urban Growth Boundaries to Cities

This is only applicable in the Portland Metro UGB, which contains multiple jurisdictions (see page 25).

Changes from Pilot Methodology

The Interim Methodology differs from the Pilot Methodology with the addition of separating out the demographic change and second and vacation home components and with the allocation processes from the population growth component. The allocation of underproduction and units needed to accommodate homelessness are unchanged from the Pilot.

Step 6: Set Housing Production Targets

Once the total housing need is determined, the sixth step of the OHNA Interim Methodology is to set statewide and regional targets for housing production. In early 2023, Governor Tina Kotek issued [Executive Order 23-04](#) to establish an annual statewide housing production goal. Based on this policy objective and using the same formula as the Governor's housing production goal, the OHNA Interim Methodology prioritizes and front-loads the current need target over 10 years and spreads the future need target over the 20-year OHNA planning horizon. An example calculation of an annual production

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target is shown below. The same calculations apply for calculating the production targets at each income level.

Example Annual Production Target Calculation

Total Need: 50,000 units

Current Need: 10,000 units

Future Need: 40,000 units

Annual Production Target:

$$\begin{aligned} & \text{[Current Need / 10 years]} + \text{[Future Need / 20 years]} \\ & \quad \underline{\text{[10,000 units / 10 years]} + \text{[40,000 units / 20 years]}} \\ & = 1,000 \text{ units} + 2,000 \text{ units} \\ & \quad = \mathbf{3,000 \text{ units per year}} \end{aligned}$$

Changes from Pilot Methodology

The Pilot Methodology did not contemplate target setting, so this is an addition to the Interim Methodology in alignment with policy direction and legislative intent.

Future Methodological Steps

Once the OHNA Methodology is finalized and run each year, DAS expects to smooth the regional totals using 2-3 years of historic data. The intention is to prevent OHNA targets from jumping around significantly from year to year due to data volatility, so local jurisdictions can have consistent information for planning purposes. The smoothing process may be challenging when PUMA boundaries change. The process has not yet been determined. By December 31, 2024, DAS will determine whether the initial housing needs and targets will be based on one or two years of data. By December 31, 2025, DAS will determine whether the subsequent years' housing needs and target will be based on one, two, or three years of data.

In addition, after the OHNA Methodology is finalized and run each year, DAS expects to revisit the methodology over time. A schedule for revisiting the methodology, potential data changes, or potential catalysts that would trigger a methodology update have not yet been determined but will be decided by December 31, 2024. The law also allows OHCS and DLCD to recommend changes to the OHNA Methodology.

Peer Cities

While not a statutorily designated part of the OHNA *methodology* under DAS, the Housing Production Dashboard that OHCS produces must include, for each city with a population of 10,000 or greater, “a comparative analysis of progress in comparison to the region and other local governments with similar

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market types” which are referred to as “peer cities.”⁹ The Oregon Administrative Rules that are being written for the OHNA Housing Acceleration Program may also reference a city’s progress toward housing production targets compared to its region or peers.

Peer cities were explored in the [Technical Appendix](#) (pdf page 32) to the [2022 OHNA Legislative Recommendations Report](#) and the idea was carried into the OHNA law. To group cities, the report explored eight attributes that can indicate market similarity:

1. Population size (static)
2. Household size (static)
3. Share of households with high incomes (static)
4. Median gross rent (static)
5. Share of housing used as second and vacation homes (static)
6. Share of housing that is single unit detached (static)
7. Population growth (change)
8. Housing production rates (growth)

The project team conducted a statistical analysis (a k-means algorithm of unsupervised learning) to group the cities based on their shared conditions, using place-level ACS data for each variable for each city.

Using this methodology, the draft peer groupings will be listed in the OHNA Draft Methodology that will be published in September, and final peer groupings will be determined by December 31, 2024. The methodology used to group peer cities will be revisited on a frequency to be determined by DAS by December 31, 2024.

⁹ See ORS 456.601(3)b: https://www.oregonlegislature.gov/bills_laws/ors/ors456.html

Portland Metro Region

The law codifying the OHNA into statewide land use planning systems treats the Portland Metro UGB differently from the rest of the state. The Metro Regional Government is required to plan for growth for all the jurisdictions within its UGB.

DAS is responsible for generating the estimate of total need and need by component using the Interim Methodology, allocating the units to local jurisdictions, and setting the production targets. For areas inside Metro, DAS will still serve this role, but the allocation methodology will be different, and it will use data sources created by Metro, including their distributed population forecast (as PRC does not produce population forecasts inside the Metro UGB).

OHNA Interim Metro UGB Suballocation Methodology Steps

Step A. Determine City Need for Metro UGB

The Metro UGB allocation is calculated in the previous section using the same Interim Methodology process as all other regions.

Step B. Distribute from Urban Growth Boundaries to Cities

The Interim Metro Suballocation Methodology's goal is to redistribute the Metro UGB's total allocation to the constituent cities and unincorporated portions of counties within the UGB via a weighted allocation process similar to the main Interim Methodology's UGB allocation process. Each component of the UGB allocation is weighted to reflect the nature of the component.

The first step is to assign units to unincorporated county areas. The Interim Methodology assigns units to unincorporated areas based on the current share of units located inside those areas. Using the most recent data from the Census, approximately 17% of units are allocated to unincorporated areas, with each of the 3 counties receiving their share of the units. No further allocation detail is provided within the unincorporated areas. This is also being further evaluated and will be adapted in the future Draft Methodology.

The second step is to allocate units to cities within the Metro UGB using the following process. A discussion of the inverse weights follows on the next page.

- Units needed for underproduction:
 - **Production:** 50% from the city's rate of housing unit production relative to the UGB-wide average as calculated with HUD/Census Bureau's permit data (SOCDS) from the previous three years (total permits are calculated as a percentage of current units as estimated using place-level 2022 ACS 5-year data) (**Inverse weight – see below**)
 - **Affordability:** 50% from the percentage of a city's housing units that are rental 0-50% AMI units, relative to the UGB-wide average, using 2020 CHAS 5-year data (**Inverse weight**)
- Units needed for people experiencing homelessness:

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- **Production:** 50% from the city's rate of housing unit production relative to the UGB-wide average as calculated with HUD/Census Bureau's permit data (SOCDS) from the previous three years (total permits are calculated as a percentage of current units as estimated using place-level 2022 ACS 5-year data) (**Inverse weight**)
- **Affordability:** 50% from the percentage of a city's housing units that are rental 0-50% AMI units, relative to the UGB-wide average, using 2020 CHAS 5-year data (**Inverse weight**)
- Units lost to second and vacation home demand:
 - **Second and vacation homes:** 100% from the city's share of all current UGB second and vacation homes as calculated with 2020 Decennial Census place-level counts
- Units needed to accommodate population growth:
 - **Future population:** 50% from the city's share of future population, as calculated with Metro's distributed forecast
 - **Infrastructure:** 50% from the city's share of UGB employed residents who live within areas with adequate transit access to jobs, as calculated with TriMet and SmartTransit's most recent transit schedule data and OpenStreetMap street grid data
- Units needed to accommodate demographic change:
 - **Current population:** 50% from the city's share of current (baseline) population, as calculated with Metro's distributed forecast
 - **Infrastructure:** 50% from the city's share of UGB employed residents who live within areas with adequate transit access to jobs, as calculated with TriMet and SmartTransit's most recent transit schedule data and OpenStreetMap street grid data

Inverse weighting

Several weights used in the Metro UGB Suballocation Methodology are termed "inverse weights." These weights are inverted so as to proportionally "credit" cities that have outperformed others in the recent past in terms of affordability and production. The intent behind this system is to ensure that no city becomes less affordable after receiving its allocation. The inverse weighting system works in the following manner, using the "Production" weight as an example:

- Each city's rate of housing unit production is calculated by taking the previous three years of total permits from HUD/Census Bureau's permit data (SOCDS) counts and converting them to a percentage of current total units sourced from ACS 2022 5-year place-level estimates.
- The UGB average is calculated from among all cities.
- The "delta," or nominal units needed for each city to match the UGB's average rate, is calculated. Cities above the rate receive a weight of 0.
- All the nominal deltas are converted to percent of the total delta. This percentage becomes half the weight used to allocate underproduction and units needed to accommodate homelessness.

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Example Delta Calculation for Inverse Weights

UGB average rate of housing unit production: 7% of current units (average of all cities)

City X	City Y
City X's current units: 12,000 City X's actual production: 600 City X's production rate: 5% of current units	City Y's current units: 15,000 City Y's actual production: 1,500 City Y's production rate: 10% of current units
To match the UGB rate of housing production, City X should have built 840 units (7% * 12,000)	To match the UGB rate of housing production, City Y only needed to build 1,050 units (7% * 15,000)
Its delta is 240 units (840 – 600)	
If the sum of all cities' deltas was 500, City X would have 240/500 or 48%. Because recent production is only half of the weight for the current need allocation, this 48% would be averaged with the weight calculated for affordability to arrive at a blended weight.	Since it produced more than the average, it has no delta, and its weight would be zero.

Next, each component of housing need is distributed by household income using the same distributions as the Interim Methodology for all other regions. After the weighted suballocation process, the units allocated to each city are totaled up by income category and component, mirroring the allocations given to UGBs outside Metro. In the case of unincorporated areas, the suballocations are totaled up by the governing county into one suballocation total for each of the three counties in the Metro region.

Future Methodological Changes

In summer 2024 Metro is preparing its draft Urban Growth Report to support its Urban Growth Management Decision in late 2024. With conversations ongoing as the Interim Methodology is published, the Metro Allocation methodology will change to better align with Metro policy goals, including how growth should be allocated to unincorporated areas within the UGB.

Interim Methodology Results

This section provides statewide and regional results of total 20-year housing need by income and need component based on the Interim Methodology. Local city-level results by income and need component will be provided with the Draft Methodology published in September (see page 4 for reasons why and the timeline for finalizing the OHNA methodology).

Figure 10. Statewide and Regional 20-Year Total Housing Need by Income Level

Region	Income Level					Total Need
	0-30%	30-60%	60-80%	80-120%	120%+	
Central	6,692	8,262	7,352	12,055	20,680	55,042
Metro	33,880	33,078	21,820	37,246	74,689	200,713
Northeast	3,873	2,830	2,098	4,756	7,012	20,568
Northern Coast	3,713	2,940	1,223	3,378	3,612	14,866
Southeast	2,489	1,994	1,106	2,210	3,737	11,536
Southwest	9,658	10,202	5,823	9,841	21,791	57,314
Willamette Valley	28,031	27,098	14,916	29,866	44,584	144,496
Oregon	88,337	86,404	54,337	99,352	176,106	504,536

Figure 11. Statewide 20-Year Needed Housing Units by Income Level and Component

Income Level	Current Need		Future Need			Total Need
	Underproduction	Units for Homelessness	Second & Vacation Homes	Demographic Units	Pop. Growth Units	
0-30%	13,456	26,349	0	16,947	31,584	88,337
31-60%	15,747	2,368	0	23,910	44,378	86,404
61-80%	7,255	888	0	15,903	30,291	54,337
81-120%	6,483	0	11,820	28,098	52,952	99,352
120%+	2,664	0	6,064	58,417	108,960	176,106
Oregon	45,606	29,606	17,884	143,275	268,165	504,536

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Figure 12. Interim Methodology Regions (from page 9)

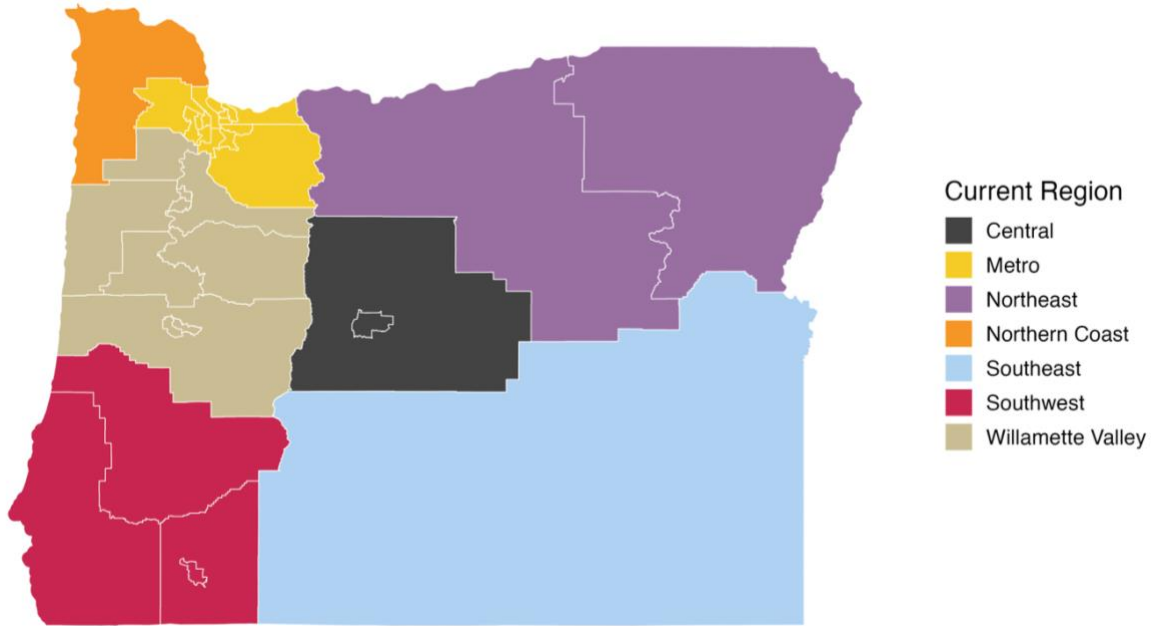


Figure 13. Central Region 20-Year Needed Housing Units by Income Level and Component

Income Level	Current Need		Future Need			Total Need
	Underproduction	Units for Homelessness	Second & Vacation Homes	Demographic Units	Pop. Growth Units	
0-30%	707	1,923	0	958	3,104	6,692
31-60%	1,153	173	0	1,635	5,301	8,262
61-80%	921	65	0	1,501	4,866	7,352
81-120%	686	0	1,801	2,256	7,313	12,055
120%+	246	0	1,680	4,421	14,333	20,680
Oregon	3,713	2,161	3,481	10,771	34,917	55,042

Figure 14. Metro Region 20-Year Needed Housing Units by Income Level and Component

Income Level	Current Need		Future Need			Total Need
	Underproduction	Units for Homelessness	Second & Vacation Homes	Demographic Units	Pop. Growth Units	
0-30%	4,274	9,806	0	6,417	13,383	33,880
31-60%	5,391	881	0	8,688	18,118	33,078
61-80%	2,738	331	0	6,077	12,674	21,820
81-120%	2,254	0	2,199	10,628	22,165	37,246
120%+	703	0	1,060	23,635	49,291	74,689
Oregon	15,360	11,018	3,259	55,446	115,631	200,713

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Figure 15. Northeast Region 20-Year Needed Housing Units by Income Level and Component

Income Level	Current Need		Future Need			Total Need
	Underproduction	Units for Homelessness	Second & Vacation Homes	Demographic Units	Pop. Growth Units	
0-30%	859	1,251	0	938	825	3,873
31-60%	669	112	0	1,090	959	2,830
61-80%	299	42	0	935	822	2,098
81-120%	263	0	1,356	1,669	1,468	4,756
120%+	156	0	759	3,243	2,853	7,012
Oregon	2,246	1,406	2,115	7,875	6,927	20,568

Figure 16. Northern Coast Region 20-Year Needed Housing Units by Income Level and Component

Income Level	Current Need		Future Need			Total Need
	Underproduction	Units for Homelessness	Second & Vacation Homes	Demographic Units	Pop. Growth Units	
0-30%	1,007	1,757	0	519	430	3,713
31-60%	1,125	158	0	906	751	2,940
61-80%	450	59	0	390	323	1,223
81-120%	357	0	1,260	963	798	3,378
120%+	159	0	624	1,548	1,282	3,612
Oregon	3,098	1,974	1,883	4,327	3,583	14,866

Figure 17. Southeast Region 20-Year Needed Housing Units by Income Level and Component

Income Level	Current Need		Future Need			Total Need
	Underproduction	Units for Homelessness	Second & Vacation Homes	Demographic Units	Pop. Growth Units	
0-30%	643	815	0	676	354	2,489
31-60%	560	73	0	893	468	1,994
61-80%	253	27	0	542	284	1,106
81-120%	329	0	287	1,045	548	2,210
120%+	176	0	181	2,219	1,162	3,737
Oregon	1,962	916	468	5,375	2,815	11,536

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Figure 18. Southwest Region 20-Year Needed Housing Units by Income Level and Component

Income Level	Current Need		Future Need			Total Need
	Underproduction	Units for Homelessness	Second & Vacation Homes	Demographic Units	Pop. Growth Units	
0-30%	1,070	4,125	0	1,983	2,481	9,658
31-60%	1,604	371	0	3,654	4,573	10,202
61-80%	671	139	0	2,227	2,786	5,823
81-120%	592	0	1,581	3,406	4,262	9,841
120%+	414	0	616	9,222	11,540	21,791
Oregon	4,350	4,635	2,197	20,491	25,642	57,314

Figure 19. Willamette Valley Region 20-Year Needed Housing Units by Income Level and Component

Income Level	Current Need		Future Need			Total Need
	Underproduction	Units for Homelessness	Second & Vacation Homes	Demographic Units	Pop. Growth Units	
0-30%	4,897	6,672	0	5,457	11,006	28,031
31-60%	5,245	600	0	7,044	14,209	27,098
61-80%	1,923	225	0	4,232	8,536	14,916
81-120%	2,002	0	3,337	8,130	16,398	29,866
120%+	812	0	1,144	14,129	28,500	44,584
Oregon	14,877	7,496	4,482	38,991	78,650	144,496

Data Sources and Updates

The OHNA Interim Methodology relies on publicly available data, which are updated and released throughout the calendar year. Figure 20 below lists the variables used throughout the OHNA Interim Methodology, their sources, and when they are typically updated. The regional results shared in the prior chapter will be updated with the latest data identified in Figure 20 below before the OHNA Methodology is finalized by December 31, 2024.

Figure 20. Publicly Available Data Sources and Release Schedules

Category	Component	Data Input	Source	Area	Annual Release Schedule
Many	Regional Income Limits as a Percent of Area Median	AMI levels to allocate units to incomes	HUD	Region	April
Current Need	Underproduction	Total households	Census PUMS for American Community Service (ACS) 1-year estimates	Region	October
		Missing households			
		Total housing units			
		Second and vacation homes			
		Uninhabitable units			
		Rate of cost burdening (to allocate units to income levels)			
	Units Needed for Homelessness	Point-In-Time count	HUD / OHCS	Region	October
		McKinney-Vento data	Oregon Dept. of Education	Region	Varies
		EHA and SHAP data (to allocate units to income levels)	OHCS	Region	September

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Category	Component	Data Input	Source	Area	Annual Release Schedule	
Future Need	Units Needed for Population Growth	Population forecasts	PSU	Region	Rotating 4-year cycle for a set of counties and their UGBs	
		Number of people living in group quarters	Census PUMS	Region	October	
		Average household size				
		Regional income distribution (to allocate units to income levels)				
	Units Lost to Second and Vacation Home Demand	Total housing units	Census PUMS	Region	October	
		Units identified as used for “seasonal or recreational purposes”				
		Year built for units identified as used for “seasonal or recreational purposes” (to allocate units to income levels)				
	Units Needed for Demographic Change		Population forecasts by age cohort, by region	PSU	Region	Rotating 4-year cycle for a set of counties and their UGBs
			Number of people living in group quarters	Census PUMS	Region	October
			Average household size			
Regional income distribution (to allocate units to income levels)						

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Category	Component	Data Input	Source	Area	Annual Release Schedule
Allocating Needed Housing	Local Allocation Factor	UGB's current share of regional population	PSU	UGB	Rotating 4-year cycle for a set of counties and their UGBs
		UGB's current share of regional jobs	Census LEHD-LODES	UGB	December
		UGB's current share of regional units identified as used for "seasonal or recreational purposes"	2020 Census	UGB	December
Metro	Local allocation factor	City's share of UGB's jobs and residents in transit accessible areas	Census LEHD-LODES	City (Metro only)	Variable
	Local allocation factor	City's share of UGB's jobs and residents in transit accessible areas	TriMet GTFS	City (Metro only)	
	Local allocation factor	City's share of UGB's affordable units	HUD CHAS	City (Metro only)	September
	Local allocation factor	City's share of UGB's recent housing production	HUD SOCDS	City (Metro only)	Monthly
	Local allocation factor	City's share of UGB's future population growth	Metro Distributed Forecast	City (Metro only)	Variable

Notes: All references to Census PUMS are for 1-year ACS data.

PSU forecasts come from the Population Research Center: <https://www.pdx.edu/population-research/population-forecasts>

LEHD-LODES is the Longitudinal Employer Household Data Origin-Destination Employment Statistics: <https://lehd.ces.census.gov/data/>

TriMet GTFS is the General Transit Feed Specification: <https://developer.trimet.org/GTFS.shtml>

HUD CHAS is the Comprehensive Housing Affordability Survey: <https://www.huduser.gov/portal/datasets/cp.html>

HUD SOCDS is the State of the Cities Data Systems which is calculated from Census Data: <https://www.huduser.gov/portal/datasets/socds.html>