City of Hillsboro
Housing Needs Analysis

January 2016

Prepared for:

City of Hillsboro

***DRAFT* REPORT**

ECONorthwest
ECONOMICS • FINANCE • PLANNING

KOIN Center
222 SW Columbia Street
Suite 1600
Portland, OR 97201
503.222.6060

This page intentionally blank

Acknowledgments

ECONorthwest prepared this report for the City of Hillsboro. ECONorthwest and the City of Hillsboro thank the many people who helped to develop the Hillsboro Housing Needs Analysis.

Housing Needs Analysis Steering Committee

Matt Crile, Broker and Owner, Windermere
Bill Reid, PNW Economics
Judith Shortt, Realtor and Planning Commissioner
Ben Sturtz, Reach Community Development

Comprehensive Plan Community Advisory Committee

Mica Annis, Youth Advisory Committee
Steve Callaway, City Council President
Marc Cardinaux, Hillsboro Chamber
Aron, Carleson, At-Large Member
Katie Eyre, Planning Commission President
Wil Fuentes, Planning and Zoning Hearings Board and HNASC Liason
John Godsey, Utilities Commission
Bonnie Kooken, Historic Landmarks Advisory Committee
Glenn Miller, Hillsboro School District Board
Tricia Mortell, At-Large Member
Daniel Nguyen, At-Large Member
Ahne Oosterhof , Library Advisory Board
Ken Phelan , Parks and Recreation Commission
Bryan Welsh, Advisory Committee for Citizen Involvement

Comprehensive Plan Technical Advisory Committee

Tom Arnold, City of Hillsboro - Engineering
Mary Bradley, City of Hillsboro - Fire
Peter Brandom, City of Hillsboro - City Managers Office
Stephanie Chase, City of Hillsboro - Library
Tami Cockeram, City of Hillsboro - City Managers Office
Nora Curtis, Clean Water Services
Laurie DeVos, City of Hillsboro - Parks & Recreation
Kristel Fesler, City of Hillsboro - Water
Chris Hartye, City of Hillsboro - City Managers Office
Anne Kelly, Washington County - DLUT
Stephen Nagy, Port of Portland
Tim O'Brien, Metro
Brad Choi, City of Hillsboro - Planning
Henry Reimann, City of Hillsboro - Police
Daniel Rittatore, City of Hillsboro - Economic Development

Ryan Smith, Tualatin Valley Water District
Tom Mills, TriMet

State of Oregon

Anne Debbaut, Regional Representative, Department of Land Conservation and Development (DLCD)
Gordon Howard, Urban Planning Specialist, DLCD

City of Hillsboro

Rob Dixon, Assistant City Manager
Colin Cooper, Planning Director
Nick Baker, Planner
Dan Dias, Development Services Manager
Ruth Klein, Senior Planner
Aaron Ray, Senior Planner
Emily Tritsch, Planner
Laura Weigel, Long Range Planning Manager

For over 40 years, ECONorthwest has helped its clients make sound decisions based on rigorous economic, planning, and financial analysis. For more information about ECONorthwest: www.econw.com. For more information about this report, please contact:

Laura Weigel, AICP, Long Range Planning Manager
City of Hillsboro, Oregon
Planning Department
503-681-6156
laura.weigel@hillsboro-oregon.gov

Beth Goodman
ECONorthwest
222 SW Columbia, Suite 1600
Portland, OR 97201
503-222-6060
goodman@econw.com

Table of Contents

1. INTRODUCTION 1

Background 1
Framework for a Housing Needs Analysis 2
Data used in this analysis 6
Organization of this Report 8

2. RESIDENTIAL BUILDABLE LANDS INVENTORY 9

Methods 9
Definitions 9
Development Constraints 11
Residential Buildable Land Inventory Results 14
Residential Development Capacity 17

3. HISTORICAL AND RECENT DEVELOPMENT TRENDS 22

Trends in Housing Mix 23
Trends in Tenure 28
Vacancy Rates 30
Housing Density 31
Manufactured Homes 32
Government-assisted housing programs 33

4. DEMOGRAPHIC AND OTHER FACTORS AFFECTING RESIDENTIAL DEVELOPMENT IN HILLSBORO 34

Demographic and socioeconomic factors affecting housing choice 34
Regional and Local Trends in Housing Costs and Affordability 57
Summary of the Factors Affecting Hillsboro's Housing Needs 72

5. CONCLUSIONS 75

Project New Housing Units Needed in the Next 20 Years 75
Needed housing by income level 79
Need for Government-assisted and Manufactured Housing 80
Residential Land Sufficiency within Hillsboro 82
Conclusions and Recommendations 83

This page intentionally blank

1. Introduction

This report presents Hillsboro's Housing Needs Analysis for the 2016 to 2036 period. It is intended to comply with statewide planning policies that govern planning for housing and residential development, including Goal 10 (Housing), and OAR 660 Division 7. The methods used for this study generally follow the *Planning for Residential Growth* guidebook, published by the Oregon Transportation and Growth Management Program (1996).

This report provides Hillsboro with a factual basis to update the Housing Element of the City's Comprehensive Plan and support future housing-related planning efforts. It also suggests options for addressing unmet housing needs in Hillsboro. It provides information that informs future planning efforts, including development of urban reserve areas, and describes factors that could affect the housing demand, such as changing demographics.

Background

Hillsboro is in the process of updating its Comprehensive Plan, which has not undergone a full update since 1984, although a Housing Needs Analysis was conducted in 2000 as part of a state mandated periodic review. Over the last three decades, Hillsboro has changed substantially. It has gone from a population of nearly 30,000 in 1980 to 95,000 in 2015, making it Oregon's fifth largest city. Hillsboro has become a regional employment center, with the growth of businesses such as Intel, Wells Fargo, Nike (Administrative Offices), TriQuint Semiconductor, Solar World, and many others.

Hillsboro's urban area changed as the City grew to accommodate new residents and businesses. The City has expanded by about 7,600 acres since 1980 to its current size of about 15,360 acres, a 50% increase in geographic size. Much of the expansion occurred in the east and northeast direction. Hillsboro has grown up, as well as out. With development of the Westside Light Rail, Orenco Station grew to be the town center, with about 3,490 dwelling units and 2,100 jobs.

Hillsboro is planning for continued growth along the Westside Light Rail line in mixed-use areas. These include Tanasbourne, an area that the City is planning for redevelopment of 2,000 to 3,000 new units in a wider range of housing including higher density housing, and AmberGlen, a regional center where the City is planning for 5,000 to 7,000 new medium- and high-density residential units. In South Hillsboro, the City is planning for growth of about 8,000 new dwelling units, mixing low and moderate density, single-family detached, and single-family attached (e.g., townhomes), with some higher-density multifamily and commercial development.

The Housing Needs Analysis describes Hillsboro's housing needs in the context of these area plans. It provides information about the factors that may affect residential development in Hillsboro over the next 20 years, including housing market changes, demographics, and other factors. The Housing Needs Analysis provides a factual basis for an evaluation and revision to the Housing Element in Hillsboro's Comprehensive Plan, to ensure that Hillsboro meets the

essential requirement of Goal 10: to provide opportunities for development of housing that meets the needs of households of all income levels.

Framework for a Housing Needs Analysis

Economists view housing as a bundle of services for which people are willing to pay: shelter certainly, but also proximity to other attractions (jobs, shopping, recreation), amenities (type and quality of fixtures and appliances, landscaping, views), prestige, and access to public services (quality of schools). Because it is impossible to maximize all of these services and simultaneously minimize costs, households must, and do, make tradeoffs. What they can get for their money is influenced both by economic forces and government policy. Moreover, different households will value what they can get differently. They will have different preferences, which in turn are a function of many factors like income, age of household head, number of people and children in the household, number of workers and job locations, number of automobiles, and so on.

Thus, housing choices of individual households are influenced in complex ways by dozens of factors; the housing market in the Portland Region, Washington County, and Hillsboro are the result of the individual decisions of hundreds of thousands of households. These points help to underscore the complexity of projecting what types of housing will be built in Hillsboro between 2016 and 2036.

The complex nature of the housing market was demonstrated by the unprecedented boom and bust during the past decade. This complexity does not eliminate the need for some type of forecast of future housing demand and need, with the resulting implications for land demand and consumption. Such forecasts are inherently uncertain. Their usefulness for public policy often derives more from the explanation of their underlying assumptions about the dynamics of markets and policies than from the specific estimates of future demand and need. Thus, we start our housing analysis with a framework for thinking about housing and residential markets, and how public policy affects those markets.

Summary

Goal 10 requires the City to plan for "needed" housing types, which are housing types determined to meet the need shown for housing within an urban growth boundary at particular price ranges and rent levels. Needed housing also includes (but is not limited to) attached and detached single-family housing, multiple-family housing, and manufactured homes, whether occupied by owners or renters. In short, Hillsboro must plan for a range of housing types at a range of price levels.

Goal 10 intends that cities identify housing needs and develop a land use policy framework that meets identified needs. One key issue addressed in a housing needs analysis is how much land is needed for different housing types, and therefore must be designated for those needs. Providing sufficient land in the proper designations is one of the most fundamental land use tools local governments have to meet housing needs.

Oregon housing policy

Statewide planning Goal 10

The passage of the Oregon Land Use Planning Act of 1974 (ORS Chapter 197), established the Land Conservation and Development Commission (LCDC), and the Department of Land Conservation and Development (DLCD). The Act required the Commission to develop and adopt a set of statewide planning goals. Goal 10 addresses housing in Oregon and provides guidelines for local governments to follow in developing their local comprehensive land use plans and implementing policies.

At a minimum, local housing policies must meet the requirements of Goal 10 and the statutes and administrative rules that implement it (ORS 197.295 to 197.314, ORS 197.475 to 197.490, and OAR 600-008).[1] Jurisdictions located in the Metro UGB are also required to comply with Metropolitan Housing in OAR 660-007 and Title 7 of Metro's Urban Growth Management Functional Plan in the Metro Code (3.07 Title 7).

Goal 10 requires incorporated cities to complete an inventory of buildable residential lands and to encourage the availability of adequate numbers of housing units in price and rent ranges commensurate with the financial capabilities of its households.

Goal 10 defines needed housing types as "housing types determined to meet the need shown for housing within an urban growth boundary at particular price ranges and rent levels." ORS 197.303 defines needed housing types:

(a) Housing that includes, but is not limited to, attached and detached single-family housing and multiple family housing for both owner and renter occupancy;

(b) Government assisted housing;[2]

(c) Mobile home or manufactured dwelling parks as provided in ORS 197.475 to 197.490; and

(d) Manufactured homes on individual lots planned and zoned for single-family residential use that are in addition to lots within designated manufactured dwelling subdivisions.

In summary, Hillsboro must identify needs for all of the housing types listed above as well as adopt policies that increase the likelihood that needed housing types will be developed.

The Metropolitan Housing Rule

OAR 660-007 (the Metropolitan Housing rule) is designed to "assure opportunity for the provision of adequate numbers of needed housing units and the efficient use of land within the Metropolitan Portland (Metro) urban growth boundary." OAR 660-0070-005(12) provides a Metro-specific definition of needed housing:

---

[1] ORS 197.296 only applies to cities with populations over 25,000.

[2] Government assisted housing can be any housing type listed in ORS 197.303 (a), (c), or (d).

> "Needed Housing" defined. Until the beginning of the first periodic review of a local government's acknowledged comprehensive plan, "needed housing" means housing types determined to meet the need shown for housing within an urban growth boundary at particular price ranges and rent levels.

The Metropolitan Housing Rule also requires cities to develop residential plan designations:

> (1) Plan designations that allow or require residential uses shall be assigned to all buildable land. Such designations may allow nonresidential uses as well as residential uses. Such designations may be considered to be "residential plan designations" for the purposes of this division. The plan designations assigned to buildable land shall be specific so as to accommodate the varying housing types and densities identified in OAR 660-007-0030 through 660-007-0037.

OAR 660-007 also specifies the mix and density of new residential construction for cities within the Metro UGB:

> "Provide the opportunity for at least 50 percent of new residential units to be attached single family housing or multiple family housing or justify an alternative percentage based on changing circumstances." (OAR 660-007-0030 (1))

OAR 660-007-0035 sets specific density targets for cities in the Metro UGB. Hillsboro's density target is ten dwelling units per net buildable acre.[3]

Metro Urban Growth Management Functional Plan

The Metro Urban Growth Management Functional Plan describes the policies that guide development for cities within the Metro UGB to implement the goals in the Metro 2040 Plan.

TITLE 1: HOUSING CAPACITY

Title 1 of Metro's Urban Growth Management Functional Plan is intended to promote efficient land use within the Metro UGB by increasing the capacity to accommodate housing capacity. Each city is required to determine its housing capacity based on the minimum number of dwelling units allowed in each zoning district that allows residential development, and maintain this capacity.

Title 1 requires that a city adopt minimum residential development density standards by March 2011. If the jurisdiction did not adopt a minimum density by March 2011, the jurisdiction must adopt a minimum density that is at least 80% of the maximum density. Hillsboro has met this requirement.

---

[3] OAR 660-024-0010(6) defines Net Buildable Acres as follows: "Net Buildable Acre" consists of 43,560 square feet of residentially designated buildable land after excluding future rights-of-way for streets and roads.

This report uses a definition of "net acre" that is consistent with the definition in OAR 660-024. A net acre is defined as including the parcel upon which residential dwellings are constructed, including any open space provided on that parcel. Net acreage does not include public or private rights of way, city or homeowners association (e.g., public or privately owned) parkland, homeowners association-owned common tracts in the net area, or land with constraints that prohibit development.

Title 1 provides measures to decrease development capacity in selected areas by transferring the capacity to other areas of the community. This may be approved as long as the community's overall capacity is not reduced.

Metro's *2012 Compliance Report* concludes that Hillsboro is in compliance for the City's Title 1 responsibilities.

TITLE 7: HOUSING CHOICE

Title 7 of Metro's Urban Growth Management Functional Plan is designed to ensure the production of affordable housing in the Metro UGB. Each city and county within the Metro region is encouraged to voluntarily adopt an affordable housing production goal.

Each jurisdiction within the Metro region is required to ensure that their comprehensive plans and implementing ordinances include strategies to: ensure the production of a diverse range of housing types, maintain the existing supply of affordable housing, increase opportunities for new affordable housing dispersed throughout their boundaries, and increase opportunities for households of all income levels to live in affordable housing (3.07.730).

Metro's *2012 Compliance Report* concludes that Hillsboro is in compliance for the City's Title 7 responsibilities.

TITLE 11: PLANNING FOR NEW URBAN AREAS

Title 11 of Metro's Urban Growth Management Functional Plan provides guidance on the conversion of land from rural to urban uses. Land brought into the Metro UGB is subject to the provisions of section 3.07.1130 of the Metro Code, which requires lands to be maintained at rural densities until the completion of a concept plan and annexation into the municipal boundary.

The concept plan requirements directly related to residential development are to prepare a plan that includes: (1) a mix and intensity of uses that make efficient use of public systems and facilities, (2) a range of housing for different types, tenure, and prices that address the housing needs of the governing city, and (3) identified goals and strategies to meet the housing needs for the governing city in the expansion area.

Metro's *2012 Compliance Report* concludes that Hillsboro is in compliance for the City's Title 11 responsibilities.

Hillsboro housing policy

The City of Hillsboro is in the process of updating its Comprehensive Plan, including the its housing policies. While the City's existing policies are consistent with the requirements of Goal 10, the City's revised housing policies will both better address the housing needs identified in this analysis and provide more flexibility to encourage development of a wider range of housing types to meet housing needs of Hillsboro residents, as well as people who work at businesses in Hillsboro and would like opportunities to live in Hillsboro.

Data used in this analysis

Throughout this analysis, we use data from well-recognized and reliable data sources. One key source for data about housing and households is the U.S. Census. This report primarily uses data from two Census sources:

- The **Decennial Census**, which is completed every ten years and is a survey of all households in the U.S. The Decennial Census is considered the best available data for information such as demographics (e.g., number of people, age distribution, or ethnic or racial composition), household characteristics (e.g., household size and composition), and housing occupancy characteristics. As of the 2010 Decennial Census, it does not collect more detailed household information, such as income, housing costs, housing characteristics, and other important household information. Decennial Census data is available for 2000 and 2010.
- The **American Community Survey (ACS)**, which is completed every year and is a sample of households in the U.S. The 2013 ACS sampled about 3.5 million households in 2013, or about 2.5% of the households in the nation. The ACS collects detailed information about households, such as: demographics (e.g., number of people, age distribution, ethnic or racial composition, country of origin, language spoken at home, and educational attainment), household characteristics (e.g., household size and composition), housing characteristics (e.g., type of housing unit, year unit built, or number of bedrooms), housing costs (e.g., rent, mortgage, utility, and insurance), housing value, income, and other characteristics.

In addition, the report uses information from other data sources:

- **Hillsboro GIS** data was used to identify constraints to buildable land development; these include slopes data, wetlands, floodplains, and utility rights-of-way. Boundary files and ownership data, including taxlots, were also used. This data, most of which is managed and maintained by the City of Hillsboro, is current as of 2015.
- **Hillsboro Building Permit** data was provided by the City and covers development over the 2000 to 2014 period. This report presents data about the number and type of building permits issued annually since 2000. It also presents data about residential development density, in dwelling units per acre, developed between 2000 and 2014.
- The **Multiple Service Listing (MLS**) provides data about changes in housing sales price between 2000 and 2015.

This report presents data from different time periods, depending on the availability of the data. As a general rule, this report presents the most recently available data to describe current conditions in Hillsboro.

- **Hillsboro's buildable lands inventory in 2015.** The buildable lands inventory presents information about Hillsboro's residential buildable land base in 2015. When determining the future housing capacity of Hillsboro's vacant buildable land, the analysis considers development densities that occurred over the 2000 to 2014 period, which provides a reasonable estimate for the types of densities that Hillsboro may expect in areas within Hillsboro's city limits. For areas outside of Hillsboro's city limits (e.g., South Hillsboro), we use adopted area plans to estimate future development capacity.
- **Changes in Hillsboro's housing market since 2000.** The most recently available U.S. Census data about Hillsboro's housing market is 2013. Hillsboro building permit data is available from 2000 through 2014. Where newer data is available, such as about affordable housing, we use data from 2015. We selected these time periods for considering changes to Hillsboro's housing market because it both shows changes over a relatively long period (13 or more years) and it presents data that describes current conditions in Hillsboro's housing market.
- **Demographic characteristics affecting future housing development.** Much of the demographic data about Hillsboro is from the U.S. Census and is current as of 2013. In general, we present information about demographic changes in Hillsboro over the 2000 to 2013 period. There are several exceptions to this general rule. For income data, the 2000 Census presents data about income in 1999. The most recent Census data about commuting patterns is from 2011. A few types of American Community Survey data, such as change in the Latino population, are not available for 2013 but are available for the 2011 to 2013 period. In some cases, data is readily available over a longer period, such as population growth, and we present change in Hillsboro over a longer period (e.g., 1990 to 2014).
- **Demographic forecasts.** We use the Oregon Office of Economic Analysis' forecast of population growth by age group for the 2010-2035 period.
- **Forecast of household growth.** We use Metro's forecast of household growth over the 2010 to 2035 period as the basis of the forecast for housing growth in Hillsboro over the 2016 to 2036 period.

Organization of this Report

The rest of this document is organized as follows:

- **Chapter 2. Residential Buildable Lands Inventory** presents the methodology and results of Hillsboro's inventory of residential land.
- **Chapter 3. Historical and Recent Development Trends** summarizes the state, regional, and local housing market trends affecting Hillsboro's housing market.
- **Chapter 4. Demographic and Other Factors Affecting Residential Development in Hillsboro** presents factors that affect housing need in Hillsboro, focusing on the key determinants of housing need: age, income, and household composition. This chapter also describes housing affordability in Hillsboro relative to the larger region.
- **Chapter 5. Conclusions** presents the forecast for housing growth in Hillsboro, describing housing need by density ranges and income levels. It also presents conclusions for Hillsboro's housing needs.

2. Residential Buildable Lands Inventory

This chapter provides a summary of the buildable lands inventory for the Hillsboro UGB. The City of Hillsboro performed the buildable lands inventory analysis and ECONorthwest summarized the results of that analysis and provided key findings.

Methods

The City of Hillsboro performed its buildable lands inventory analysis based on Oregon Metro's "2014 Urban Growth Report."[4] The buildable lands inventory uses methods and definitions that are consistent with OAR 660-009 and OAR 660-024 and have been peer-reviewed.

The buildable lands analysis was completed through several sequential steps. First, the analysis identified vacant and developed tax lots based on zoning, as well as refill opportunities within taxlots. Next, the analysis removed areas unsuitable for residential or employment growth capacity (e.g., parks, schools), and identified and deducted environmental constraints and future road rights-of-way. Finally, capacity for housing was calculated looking at both development on vacant lands and refill potential.

This analysis was performed by the City of Hillsboro based on data from the Hillsboro Planning Department. Specific data used in this analysis included geographic boundaries: the City, UGB, urban reserves, tax lots; environmental constraints: FEMA floodways, significant natural resources overlay (SNRO), Clean Water Services vegetative buffer, habitat benefit areas, steep slopes (greater than 25 degrees); and planning data: zoning and comprehensive plans, infrastructure right-of-way, and building permit data. The tax lot data was current as of spring 2015.

Definitions

A key step in the buildable lands analysis is to classify each tax lot into a set of mutually exclusive categories based on development status. For the purpose of this study, all tax lots in the UGB are classified into one of the following two categories:

- **Vacant land.** Tax lots that have no structures or have buildings with very little improvement value. For the purpose of this inventory, vacant land is any tax lot that meets at least one of the following conditions:
    1. Tax lot is fully vacant based on Metro aerial photos;
    2. Tax lot has less than 2,000 square feet developed and said developed part is less than ten percent of the entire tax lot;

[4] The Buildable Lands Methodology (Appendix 2 of Metro's "2014 Urban Growth Report") can be found at the following link:
http://www.oregonmetro.gov/sites/default/files/Appendix%202%20-%20BLI%20methods.pdf

3. Tax lot's area is ninety-five percent or more vacant based on Metro's GIS vacant land inventory; or

- **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, including partially vacant or partially developed tax lots, are considered developed.
- **Refill.** The share of the City's growth expected to be accommodated through infill and redevelopment. To calculate redevelopment of a multifamily structure, at least 50% more units must be added, otherwise the tax lot is not eligible for redevelopment. For a single-family dwelling unit (in an MFR or MUR zone), the redevelopment must yield at least 3 or more dwelling units. Redevelopment must pass through an economic filter before evaluation of additional dwelling units through redevelopment. If the real market value per square foot is less than the strike price, the tax lot is assumed eligible for redevelopment. The City of Hillsboro recommends the following strike prices per square foot (land and improvements) in the City's central corridors: MFR [multi-family zoning] $25; MUR [Mixed-use residential zoning] $30.
- **Infill**. Additional development potential on already developed lots either through subdividing the lot or otherwise increasing its density. This was calculated for parcels with a single-family zone whose lot is greater than 2.5 times the minimum zoned lot size and whose real market building value is below $300,000. Taxlots with an oversized lot (exceed 5 times the minimum zoned lot) are passed through into infill supply regardless of building value. Additional residential infill is the **minimum** of the following two calculations:
    1. Additional Dwelling Unit Infill = (Calculated area of tax lot – max lot size) / min lot size (rounded down to a whole number); can equal 0
    2. Additional Dwelling Unit Infill = (Net unconstrained sq. feet / 2,000 sq. ft.), rounded down to a whole number; can equal 0

Vacant land was then classified into two additional categories which are not mutually exclusive:

- **Vacant buildable land.** Land that is vacant and theoretically suitable for residential or employment growth capacity. Tax lots with constraints have not yet been removed.
- **Net unconstrained land.** Vacant buildable land with constraints removed.

Development Constraints

Existing Residential or Employment Development

Consistent with Metro's buildable lands inventory analysis,[5] the City if Hillsboro removed tax lots that do not have the potential to provide residential or employment growth capacity. Per Metro's methodology, the following tax lots were removed from the inventory:

- Tax exempt parcels with property codes for city, state, federal and Native American designations, including cemeteries
- Schools
- Churches and social organizations
- Private "streets" in residential and mixed-use zones
- Rail properties
- Tax lots under 1,000 square feet
- Parks, open spaces and, where possible, private residential common areas

Tax lots that fit these criteria were identified based on Assessor data, owner names, available GIS data, aerial photography, and tax exemption status.

Environmental Constraints

Consistent with state guidance on buildable lands inventories, the City of Hillsboro deducted portions of tax lots that fall within certain constraints from the buildable lands, including wetlands and steep slopes, to arrive at the net unconstrained land figures. Data used were based on the best available information. Categories used were consistent with OAR 660-008-0005(2):

- Floodways – FEMA's latest flood hazard data was used (2006)
- Slopes 25% or Steeper - Steep slopes were calculated using a digital elevation model to identify areas with slopes 25% or greater, which is consistent with the Division 9 rule.
- Environmental Constraints – Title 3 and 13 data were provided by Metro RLIS. SNRO data was provided by Metro RLIS and updated with the City of Hillsboro's latest environmental inventory data.
- Rights of Way – Utility ROW was provided by Metro RLIS, while transportation ROW was obtained by City GIS

The inventory was completed using Geographic Information Systems (GIS) spatial analysis, the output of which is tabular and map data. Although data for the inventory was gathered and evaluated at the parcel level, the inventory does not present a parcel-level analysis of lot

[5] The Buildable Lands Methodology (Appendix 2 of Metro's "2014 Urban Growth Report") can be found at the following link:
http://www.oregonmetro.gov/sites/default/files/Appendix%202%20-%20BLI%20methods.pdf

availability and suitability. The results of the inventory have been aggregated by comprehensive plan designations, consistent with state planning requirements. As such, the inventory is considered to be accurate in the aggregate only and not at the parcel level .The Buildable Land Inventory includes a review of the following residential comprehensive plan designations:[6]

- Residential Low Density (RL)
- Residential Medium Density (RM)
- Residential Mid-Rise Density (RMR)
- Residential High Density (RH)
- Mixed Use (MU)
- Commercial (C)
- Industrial (IN)
- Public Facility (PF)
- Station Community Planning Area (SCPA)
- Open Space (OS)
- Floodplain (FP)

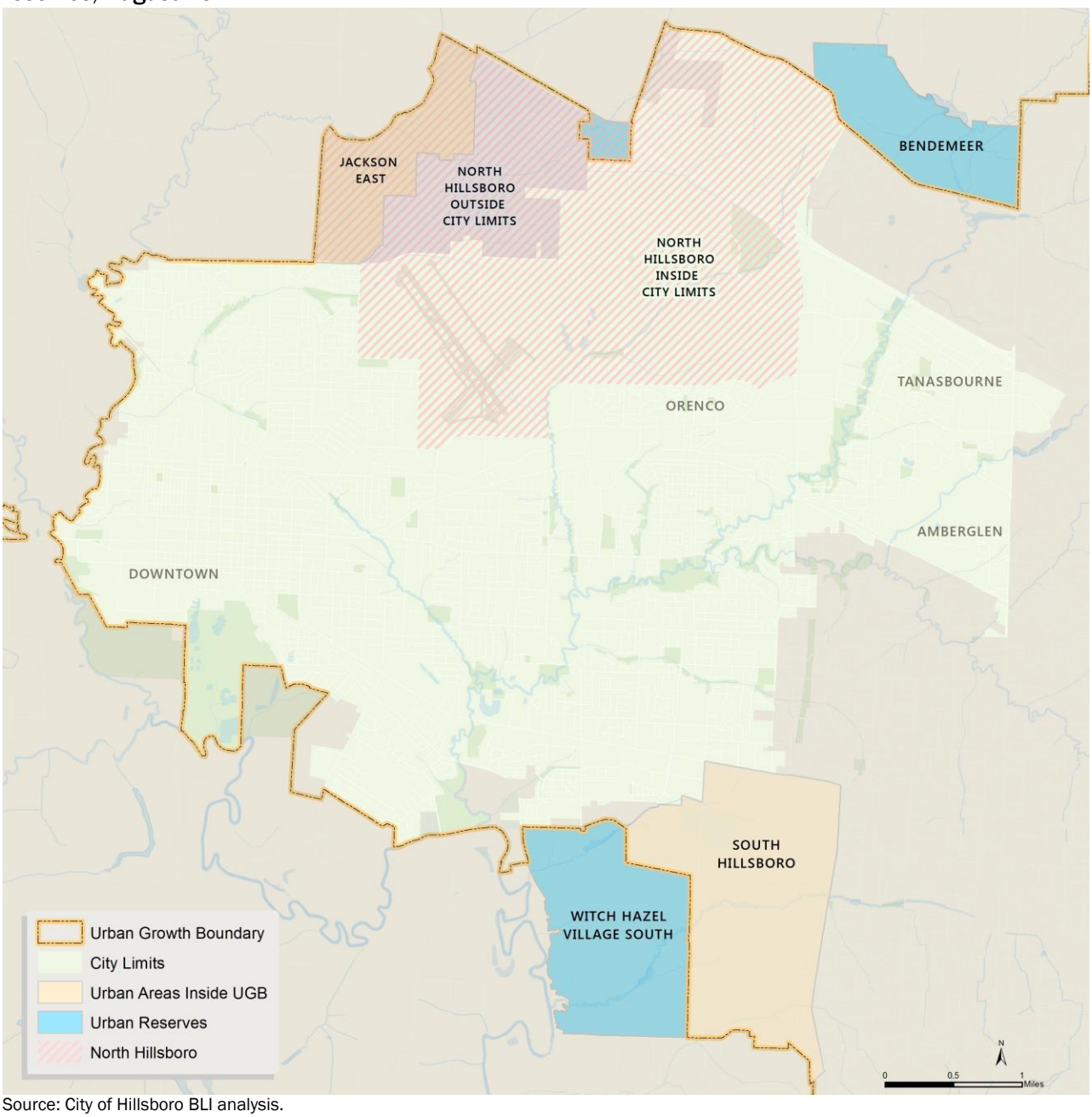
The buildable lands inventory divides land into three broad categories:

- **Within Hillsboro city limits** is all areas within the existing city limits of Hillsboro.
- **South Hillsboro, outside of the City limits** is the portion of South Hillsboro that was not within the Hillsboro City limits as of August 2015. South Hillsboro is expected to be annexed into the Hillsboro city limits within the planning period and some of South Hillsboro has already been annexed into the City limits since this project started.
- **Urban Reserves** are urban reserve areas outside of the Metro UGB but expected to be brought into the UGB and annexed into Hillsboro in the future. These areas include Witch Hazel Village South and Bendemeer.

The study does not consider residential capacity in the portions of North Hillsboro that are outside the City limits or Jackson East (an area added to the Metro UGB by House Bill 4078). These areas are not yet planned by the City and are expected to be predominantly employment areas.

[6] Hillsboro's Comprehensive Plan can be downloaded from the following link:
https://www.hillsboro-oregon.gov/modules/showdocument.aspx?documentid=5715
Hillsboro's Community Development code can be accessed at the following link:
http://qcode.us/codes/hillsboro/view.php?version=beta&view=desktop&topic=12

Exhibit 1. Hillsboro city limits, areas outside of the City limits and within the Metro UGB, and urban reserves, August 2015



Source: City of Hillsboro BLI analysis.

Residential Buildable Land Inventory Results

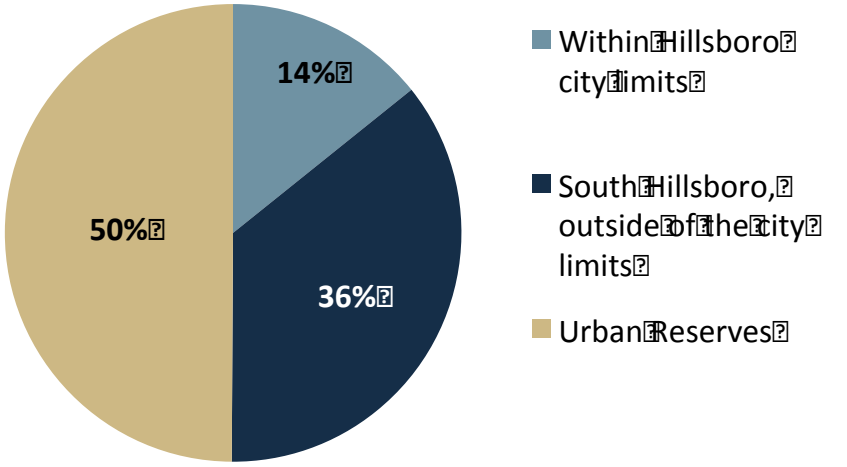
The inventory of Hillsboro's buildable lands shows that the City has approximately 273 acres of vacant, unconstrained land with residential capacity within the City limits, 685 acres in South Hillsboro (the portion outside of the City limits), and 954 acres in urban reserves.

Half of Hillsboro's vacant unconstrained buildable land is within the Metro UGB.

Fourteen percent of Hillsboro's vacant residential land is within the City limits. One-third of Hillsboro's vacant residential land is outside of Hillsboro but within the Metro UGB and half is in Urban Reserves.

Exhibit 2. Location of vacant unconstrained buildable residential land by area around, Hillsboro area, 2015

Source: City of Hillsboro BLI analysis



Of Hillsboro's more than 12,000 acres of residential land, about 1,900 acres are vacant and unconstrained.

Hillsboro has 273 vacant acres within the City limits, with 50 acres or more in Mixed Use and Residential Low Density.

Hillsboro has 685 vacant acres in the portion of South Hillsboro that is outside the City limits.

Hillsboro has 954 vacant acres in Urban Reserves. While concept planning has not been completed for these areas, the majority of this land is expected to develop for residential uses.

Exhibit 3. Vacant unconstrained buildable residential land by plan designation, gross acres, Hillsboro, 2015

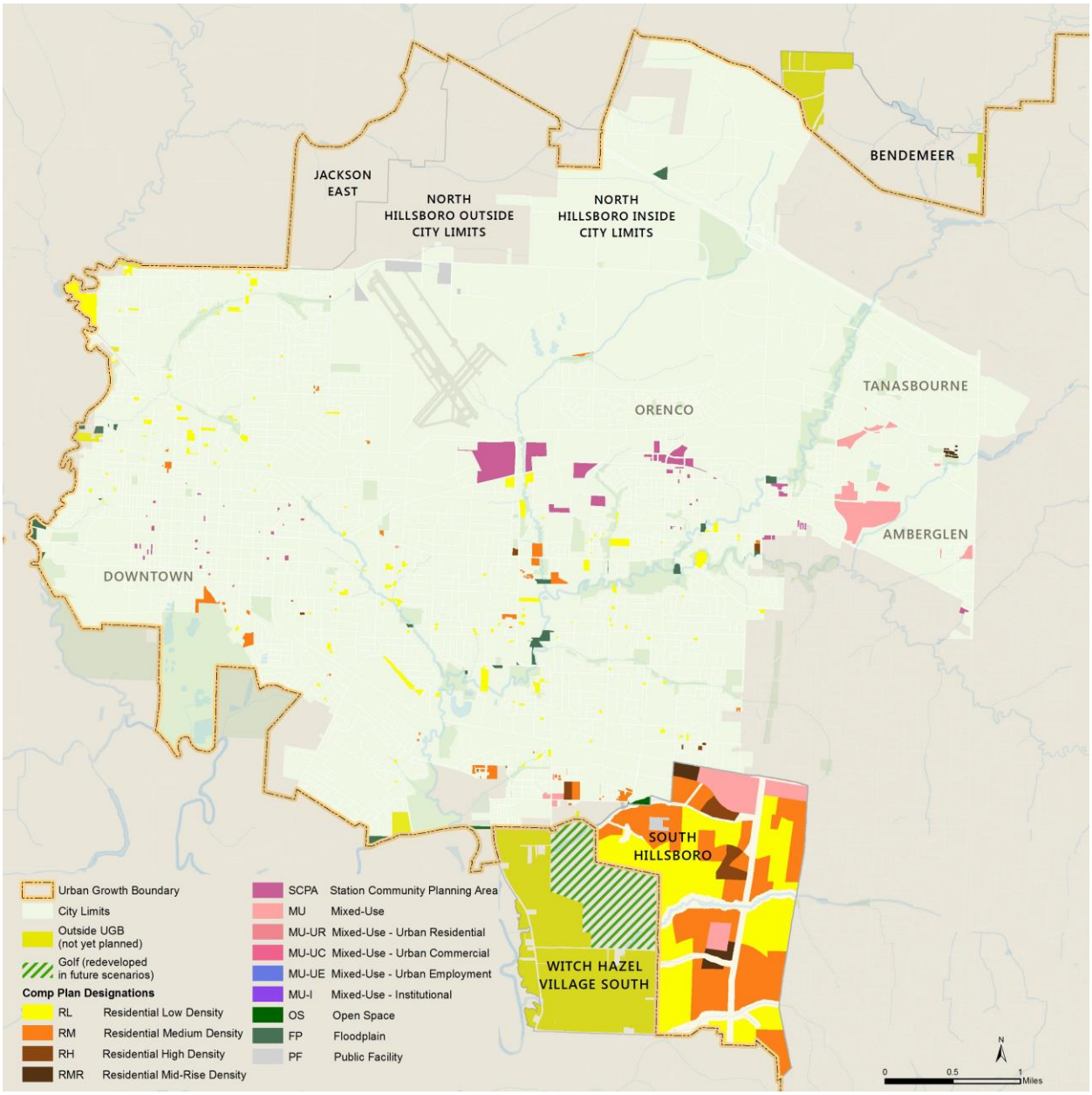
Source: City of Hillsboro BLI analysis

Plan Designation	Vacant Land (Acres)	Percent of All Vacant Residential Land
Within the Hillsboro city limits		
Res. Low Density (RL)	67	4%
Res. Medium Density (RM)	35	2%
Res. Mid-Rise Density (RMR)	3	0%
Res. High Density (RH)	9	0%
Mixed Use (MU)	79	4%
Public Facility (PF)	12	1%
Station Com. Planning Area (SCPA)	23	1%
Open Space (OS)	4	0%
Floodplain (FP)	41	2%
City limits subtotal	273	14%
South Hillsboro, outside of the city limits	685	36%
Urban Reserves	954	50%
Total	1,912	100%

Hillsboro's buildable lands are shown on maps in Exhibit 4 and Exhibit 5:

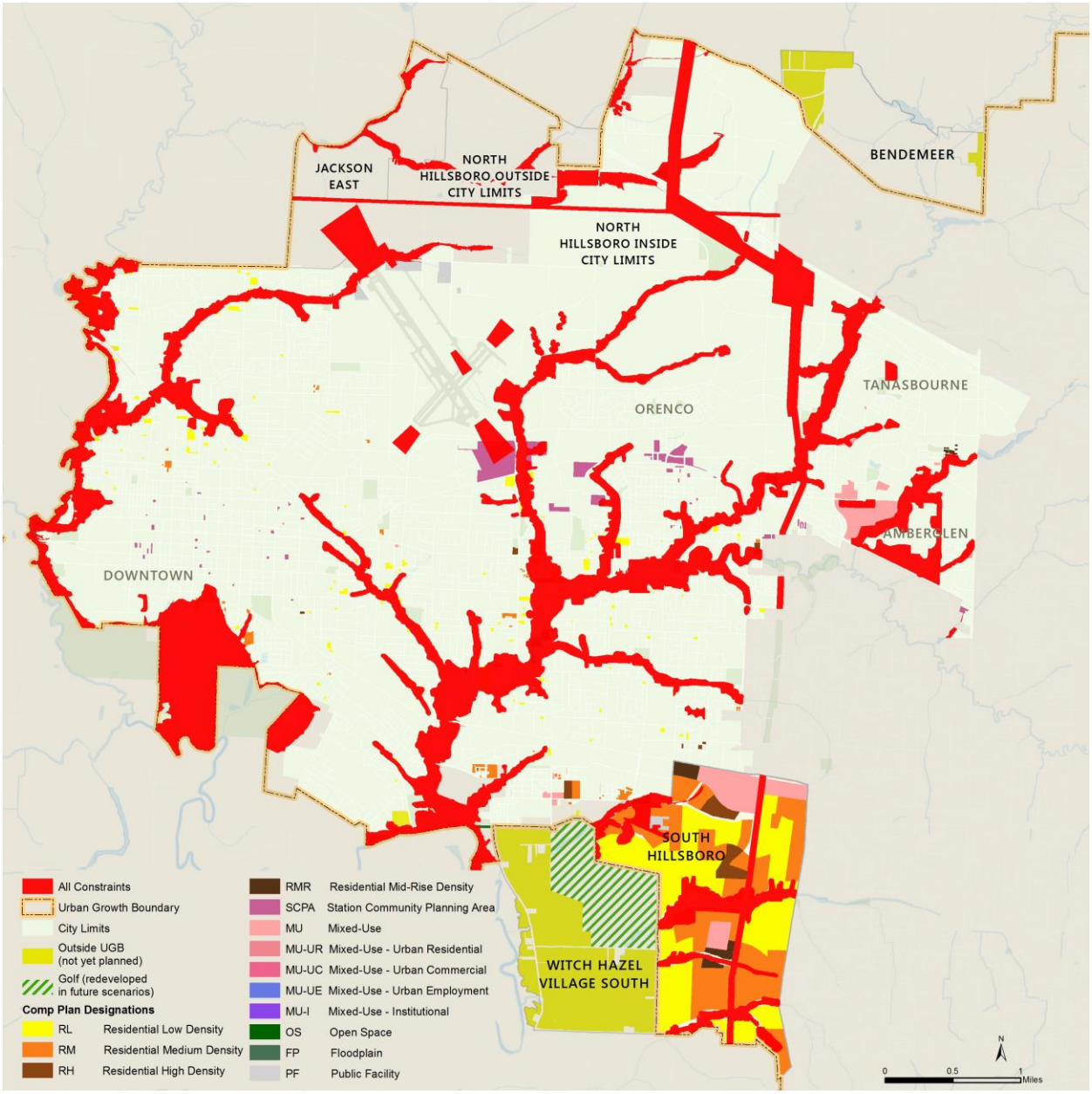
- Much of the residential land within Hillsboro is developed, with the largest parcels in SCPA and Mixed-Use designations.
- The majority of development capacity (currently within the Metro UGS) on vacant land in Hillsboro is in South Hillsboro.
- Witch Hazel Village South includes a golf course, which is assumed to redevelop for residential uses in the future.
- A large portion of Bendemeer is constrained and not considered developable.

Exhibit 4. Vacant residential land, Hillsboro, 2015



Source: City of Hillsboro BLI analysis.

Exhibit 5. Vacant residential land and development constraints, Hillsboro, 2015



Source: City of Hillsboro BLI analysis.

Residential Development Capacity

The capacity analysis separates capacity into three categories: (1) vacant land capacity on areas within the Metro UGB, (2) infill and redevelopment capacity in areas within the Metro UGB, and (3) potential capacity in Urban Reserves.

Vacant land capacity in Hillsboro in areas within the Metro UGB

The inventory of Hillsboro's buildable lands shows that the City has approximately 273 acres of vacant, unconstrained land with residential capacity within the City limits. The capacity analysis estimated capacity based on vacant developable land, the range of densities allowed in each zone, historical development densities (see Exhibit 24), and assumptions from Metro's "Gamma" forecast of housing capacity, which was based on the City's assessment of potential capacity. Exhibit 6 uses the following assumptions:

- In the following zones, the capacity of new dwelling units on vacant land is based on the range of densities allowed within the Plan Designation or on historical development densities (see Exhibit 24): Residential Low Density (RL), Residential Medium Density (RM), Residential Mid-Rise (RMR), Residential High Density (RH), Mixed Use (MU), Public Facility (PF), Station Community Plan Area (SCPA), Open Space (OS), and Floodplain (FP). The derived density for each Plan Designation is provided in Exhibit 5.
- In the SCPA designation, the capacity is based on an assumed future density of 34 dwelling units per net acre. There is no maximum density for new housing in SCPA. The historical development density for development in SCPA between 2000 and 2015 was 23 dwelling units per net acre. Based on more recent development densities in Orenco Station, the City estimates that development densities in SCPA areas (which includes AmberGlen and Tanasbourne) will be 34 dwelling units per net acre.
- In the MU designation, only a portion of the 79 acres has capacity for housing. The City estimated capacity in MU by assigning 65% of the net developable area to residential uses (this figure it based on an evaluation of past projects in Hillsboro)

Hillsboro has 273 vacant residential acres within the City limits, with a capacity of 4,536 dwelling units.

Exhibit 6. Housing Capacity on Vacant Land, within Hillsboro city limits, 2015

Source: City of Hillsboro BLI analysis

Plan Designation	Vacant Land (Acres)	New Housing on Vacant Land	
		Density (DU per Acre)	New Dwelling Units
Res. Low Density (RL)	67	8	539
Res. Medium Density (RM)	35	12	420
Res. Mid-Rise Density (RMR)	3	30	84
Res. High Density (RH)	9	21	196
Mixed Use (MU)	79	27	2,133
Public Facility (PF)	12	6	72
Station Com. Planning Area (SCPA)	23	34	792
Open Space (OS)	4	16	57
Floodplain (FP)	41	6	243
Total	**273**	**16.6**	**4,536**

South Hillsboro is an area that is outside of Hillsboro's city limits but within the Metro UGB and expected to be annexed into Hillsboro and developed for housing. South Hillsboro is expected to develop within the 2015 to 2035 period. The table below gives a capacity for South Hillsboro based on the *South Hillsboro Community Plan*.

South Hillsboro is projected to be developed to 8,000 residential dwelling units across its community. Of these, approximately 7,550 are located in soon-to-annexed areas. This capacity is current assigned to areas outside the City limits but inside the UGB.

Exhibit 7. Housing Capacity on the portion of South Hillsboro that city limits, 2015

Source: City of Hillsboro BLI analysis

*This is only the portion of South Hillsboro that is outside of the City limits and within the Metro UGB. Other parts of South Hillsboro is within the City limits.

Area	Vacant Land (Acres)	New Dwelling Units
South Hillsboro, outside of the city limits*	685	7,550

Infill and redevelopment capacity in Hillsboro in areas within the Metro UGB

Hillsboro expects that a large portion of residential development capacity will occur through infill development in single-family areas and redevelopment resulting in new multifamily development. Exhibit 8 shows the City's estimate of capacity resulting from infill and redevelopment:

- **Infill.** Infill development occurs in single-family areas, where a lot with an existing dwelling divides into two or more legal lots, increasing capacity for residential development. Since 2005, the amount of infill development in Hillsboro has varied from 50 to 60 new infill units per year in 2005 and 2006, to a low of about 10 new infill units per year in 2014.

  Hillsboro assumes that the City will have an average of 50 new infill units per year over the 2016 to 2036 period, for a total of 1,000 new units from infill. Analysis of the City's single-family land base shows that the City has capacity to accommodate 1,000 new units on land in existing residential areas.[7]

- **Redevelopment.** The primary areas where Hillsboro expects redevelopment over the next 20 years are AmberGlen and Tanasbourne.
  - *AmberGlen.* The City estimates that AmberGlen has capacity for 5,000 to 7,000 new dwelling units, based on analysis developed as part of the *AmberGlen Community Plan*. <u>About 2,000 of these dwelling units will be developed on about</u>

[7] Using Metro's methodology for determining infill capacity, Hillsboro would have capacity for about 2,260 new units from infill development. The City assumed 1,000 new infill units over the 20-year planning period based on historical infill development trends.

73 acres of vacant Mixed-Use land in AmberGlen. The remaining 3,000 to 5,000 dwelling units will be the result of redevelopment.

- *Tanasbourne.* The City estimates that Tanasbourne has capacity for 2,000 to 3,000 new dwelling units, based on *Tanasbourne Community Plan Update*. About 100 of these dwelling units will be developed on about 3 acres of vacant Mixed-Use land in Tanasbourne. The remaining 1,900 to 2,900 dwelling units will be the result of redevelopment.

Hillsboro has capacity for between 5,900 and 8,900 new dwelling units resulting from single-family infill development or redevelopment in AmberGlen and Tanasbourne.

Exhibit 8. Housing Capacity from infill and redevelopment, within Hillsboro city limits, 2015

Source: City of Hillsboro BLI analysis

Area	Infill or Redevelopment Capacity	
	Low	High
Infill Development	1,000	1,000
Redevelopment		
AmberGlen	3,000	5,000
Tanasbourne	1,900	2,900
Total	**5,900**	**8,900**

Summary of Capacity in Hillsboro within the Metro UGB

Exhibit 9 presents a summary of capacity for new residential development in Hillsboro on areas within the Metro UGB.

Hillsboro has capacity for between 17,986 and 20,986 new dwelling units in areas in Hillsboro within the Metro UGB.

Exhibit 9. Housing Capacity in Hillsboro in Hillsboro city limits and South Hillsboro outside of the city limits, 2015

Source: City of Hillsboro BLI analysis

This is only the portion of South Hillsboro that is outside of the City limits and within the Metro UGB. Other parts of South Hillsboro is within the City limits.

Area	Capacity for New Housing	
	Low	High
Within Hillsboro City Limits		
On Vacant Land	4,536	4,536
As Infill	1,000	1,000
As Redevelopment	4,900	7,900
South Hillsboro, outside of the city limits*	7,550	7,550
Total	17,986	20,986

Exhibit 10 shows the potential mix of new housing in the Hillsboro city limits and South Hillsboro outside of the city limits. The mix of new housing is based on historical development patterns and area plans. Exhibit 10 assumes:

- **Vacant land within the Hillsboro city limits.** Analysis of building permits issued within Hillsboro's city limits between 2000 and 2014 provides information about the amount of housing developed by type of housing and plan designation. For example, in the Residential Medium Density (RM) plan designation, 75% of new units permitted

between 2000 and 2014 were single-family detached units, 18% were single-family attached units, and seven percent were multifamily units. In contrast, 40% of units permitted in Mixed-Use (MU) were single-family attached and 60% were multifamily.

Exhibit 10 uses this historical data to estimate housing mix on vacant land within the city limits.

- **Infill.** Exhibit 10 assumes that all infill will be single-family detached, based on the definition of infill presented in the buildable lands inventory.
- **Redevelopment.** Exhibit 10 assumes that all redevelopment in AmberGlen and Tanasbourne will be single-family attached units or multifamily units. This assumption is based on the analysis presented in the *AmberGlen Community Plan* and the *Tanasbourne Community Plan*. Both of these plans describe residential development in these areas as moderate- and higher-density.
- **South Hillsboro outside of the city limits.** Exhibit 10 assumes that 57% of new housing in South Hillsboro will be single-family detached and 43% will be single-family attached units or multifamily. This assumption is based on the housing mix described in the *South Hillsboro Community Plan*.

Using these assumptions, Exhibit 10 estimates the potential mix of new housing by housing type, using the capacity estimates presented in Exhibit 9. Under both the low-capacity estimate and the high-capacity estimate, more than 60% of Hillsboro's capacity for new housing is for single-family attached units or multifamily units. Much of this capacity is the result of expected redevelopment in AmberGlen and Tanasbourne.

Between 32% and 37% of Hillsboro's housing capacity is for single-family detached housing.

Sixty-three percent to 68% of Hillsboro's housing capacity is for single-family attached units or multifamily units.

Exhibit 10. Estimated Mix of New Housing Capacity, Hillsboro city limits and South Hillsboro outside of the city limits, 2015

Source: City of Hillsboro BLI analysis

Area	Capacity for New Housing	
	Low	High
All New Housing	17,986	20,986
Single-Family Detached		
Dwelling Units	6,666	6,666
Percent of Total	37%	32%
Single-Family Attached and Multifamily		
Dwelling Units	11,403	14,403
Percent of Total	63%	68%

The conclusions of the capacity analysis are that:

- **Mix**. Hillsboro's capacity estimate for new housing within the city limits and South Hillsboro outside of the city limit exceed the State requirement (OAR 660-007-0030(1)) to "to provide the opportunity for at least 50 percent of new residential units to be attached single family housing or multiple family housing or justify an alternative percentage based on changing circumstances."

- **Density.** Hillsboro's capacity estimates for vacant land exceeds the State requirement (OAR 660-007-0035(2)) to "provide for an overall density of ten or more dwelling units per net buildable acre." The estimate for density on vacant lands within Hillsboro's city limits is 16.6 dwelling units per net acre. The density of development that occurs over the 2016-2036 period is likely to be higher, given the amount of infill and redevelopment that Hillsboro expects.

Urban Reserves

The urban reserves around Hillsboro include Witch Hazel Village South and Bendemeer. These areas are outside of the current Metro UGB. Ability to develop in these areas would require expansion of the UGB. The table below gives a rough indication of potential capacity in the Urban Reserves. Actual capacity will be determined through concept plan development.

Capacity in Urban Reserves around Hillsboro will depend on the plans for these areas.

If these Urban Reserves are developed at 8 dwelling units per acre, they have capacity for 7,600 dwelling units. At 12 dwelling units per acre, these areas have capacity for 11,400 dwelling units.

Exhibit 11. Housing Capacity on Vacant Land, Outside of Hillsboro city limits but within the Metro UGB, 2015

Source: City of Hillsboro BLI analysis

Area	Vacant Land (Acres)	New Dwelling Units
Urban Reserves	954	
8 du/acre		7,632
10 du/acre		9,540
12 du/acre		11,448

3. Historical and Recent Development Trends

Analysis of historical development trends in Hillsboro provides insight into the functioning of the local housing market. The mix of housing types and densities, in particular, are key variables in forecasting future land need. The specific steps are described in Task 2 of the DLCD *Planning for Residential Lands Workbook* as:

1. Determine the time period for which the data will be analyzed
2. Identify types of housing to address (all needed housing types)
3. Evaluate permit/subdivision data to calculate the actual mix, average actual gross density, and average actual net density of all housing types

This HNA examines changes in Hillsboro's housing market from January 2000 to February 2015. We selected this time period because it provides information about Hillsboro's housing market before and after the national housing market bubble's growth and deflation. In addition, data about Hillsboro's housing market during this period is readily available, from sources such as the Census and the City and County's building permit database.

The HNA presents information about residential development by housing type. There are multiple ways that housing types can be grouped. For example, they can be grouped by:

1. Structure type (e.g., single-family detached, apartments, etc.)
2. Tenure (e.g., distinguishing unit type by owner or renter units)
3. Housing affordability (e.g., units affordable at given income levels)
4. Some combination of these categories

For the purposes of this study, we grouped housing types based on: (1) whether the structure is stand-alone or attached to another structure and (2) the number of dwelling units in each structure. The housing types used in this analysis are:

- **Single-family detached** includes single-family detached units and manufactured homes on lots and in mobile home parks.
- **Single-family attached** is all structures with a common wall where each dwelling unit occupies a separate lot, such as row houses or townhouses.
- **Multifamily** is all attached structures (e.g., duplexes, tri-plexes, quad-plexes, and structures with five or more units) other than single-family detached units, manufactured units, or single-family attached units.

Trends in Housing Mix

This section provides an overview of changes in the mix of housing types in Hillsboro and comparison geographies. These trends demonstrate the types of housing developed in Hillsboro historically. Unless otherwise noted, this chapter uses data from the 2000 and 2010 Decennial Census, and 2013 American Community Survey 1-Year Estimates.

This section shows the following trends in housing mix in Hillsboro:

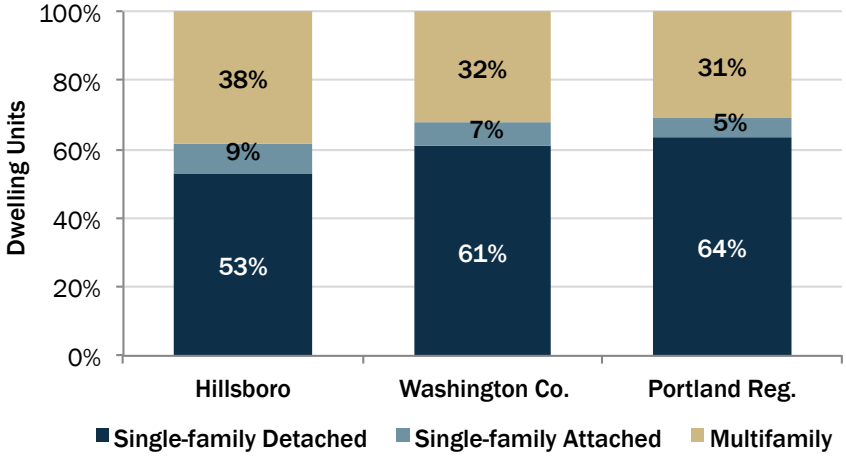
- **Hillsboro has a more diverse housing stock than Washington County and other large cities in the Portland Region.** Fifty-three percent of Hillsboro's housing stock is single-family detached and 47% is single-family attached (e.g., townhouses) or multifamily. In comparison, single-family attached or multifamily housing account for 39% of Washington County's housing stock, 46% in Gresham's housing stock, and 42% in Portland housing. In contrast, 60% of Beaverton's housing is single-family attached (e.g., townhouses) or multifamily.
- **Hillsboro's overall housing mix has remained largely stable since 2000.** Hillsboro's housing stock grew by 40% (more than 11,000 new units) between 2000 and 2013. However the mix of housing types remained largely stable, with the percentage of single-family detached housing decreasing slightly from 55% 2000 to 53% of housing in 2013. The percentage of single-family attached housing increased from 6% in 2000 to 9% in 2013.
- **Single-family attached and multifamily housing accounted for nearly 60% of residential building permits issued between 2000 and 2014.** Forty-two percent of new units permitted were multifamily and 17% were single-family attached. Forty-one percent of new housing permitted in Hillsboro was single-family detached.

The implication for the forecast of new housing in Hillsboro is that the City's housing stock is diversifying, with the growth of regional centers such as Orenco Station and is likely to continue to diversify with growth in Tanasbourne and AmberGlen.

Housing Mix

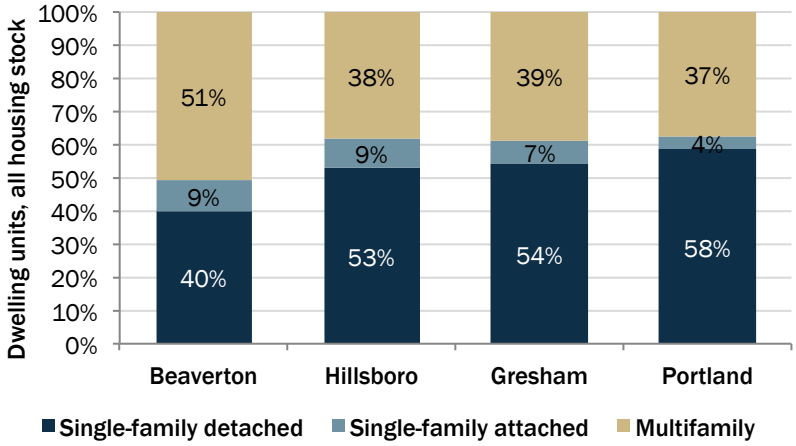
About 53% of Hillsboro's housing stock is single-family detached.
In comparison, more than 60% of the housing in Washington County and the Portland Region is single-family detached housing.

Exhibit 12. Housing Mix, 2013
Source: Census Bureau, 2013 ACS Table B25024



Hillsboro has a larger percentage of townhouses and multifamily housing than other large cities (except for Beaverton) in the Portland Region.
Forty-seven percent of Hillsboro's housing is townhouses or multifamily, compared to 46% of Gresham's, or 42% of Portland's housing stock. Beaverton has a larger percentage (60%) of housing in these housing types than Hillsboro.

Exhibit 13. Housing Mix, 2013
Source: Census Bureau, 2013 ACS Table B25024

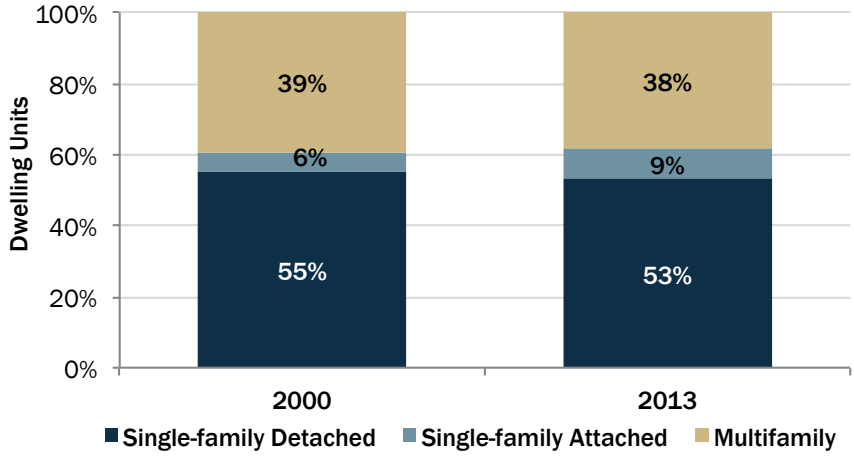


The mix of housing in Hillsboro was largely stable between 2000 and 2013.

The percentage of single-family attached housing increased from 6% of Hillsboro's housing stock in 2000 to 9% in 2013.

Exhibit 14. Change in Housing Mix, Hillsboro, 2000 and 2013

Source: Census Bureau, 2000 Decennial Census, SF3 Table H030, and 2013 ACS Table B25024

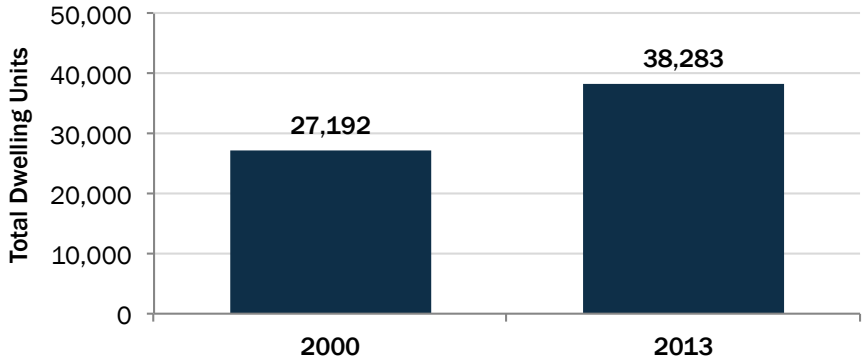


The total number of dwelling units in Hillsboro increased by 11,091 from 2000 to 2013.

This amounted to a 40% increase over the 13-year period, growing at an average annual rate of 2.7%.

Exhibit 15. Total Dwelling Units, Hillsboro, 2000 and 2013

Source: Census Bureau, 2000 Decennial Census, SF3 Table H030, and 2013 ACS Table B25024.



Building Permits

Over the 2000 to 2014 period, Hillsboro issued permits for more than 11,100 dwelling units, with an average of 741 permits issued annually.

About 41% of dwellings permitted were single-family detached, 17% were single-family attached, and 42% were multifamily.

Exhibit 16. Building Permits by Type of Unit, Hillsboro, 2000 through 2014

Source: City of Hillsboro.

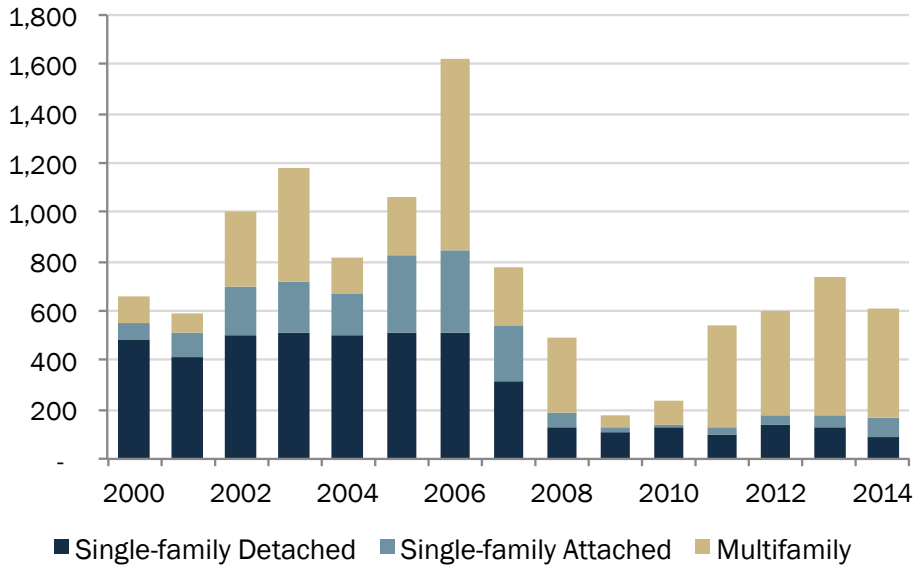
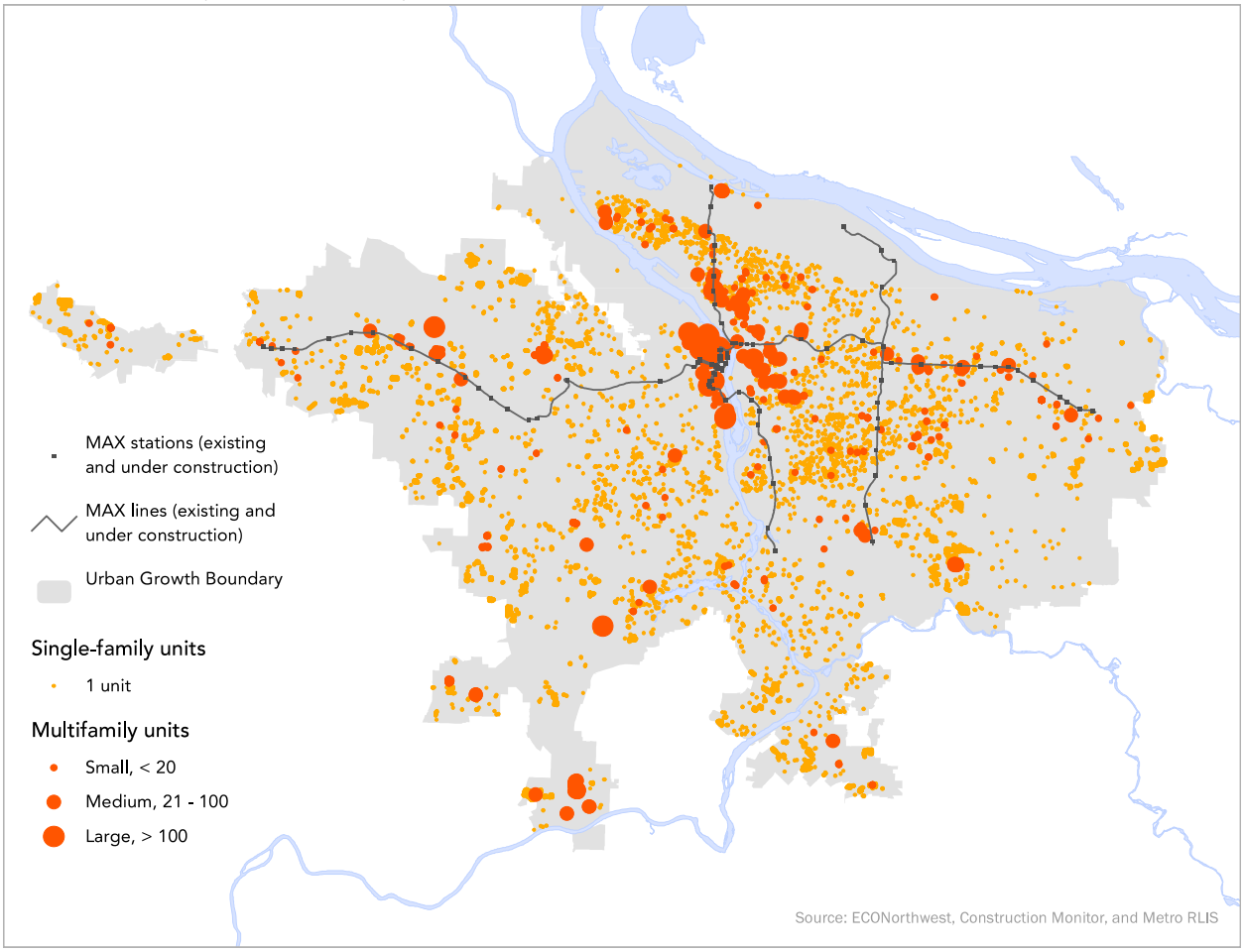


Exhibit 17 shows the location of newly permitted residential units in the Metro UGB between 2007 and 2014. New single-family and multifamily housing was permitted across the Portland Region. Exhibit 17 shows that much of the new multifamily housing was permitted along the MAX lines, near MAS stations.

Exhibit 17. Location of Newly Permitted Residential Units by Type of Unit, Metro UGB, 2007 through 2014

Source: ECONorthwest, Construction Monitor, and Metro RLSI.



Trends in Tenure

Housing tenure describes whether a dwelling is owner or renter-occupied. This section shows:

- **Half of Hillsboro's households are renters and half are homeowners.** In comparison, 59% of households in Washington County and in the Portland Region are owner-occupied.
- **Homeownership is about as common in Hillsboro as in other larger cities in the Portland Region.** Fifty percent of households are homeowners in Hillsboro, compared to 45% in Beaverton, 49% in Gresham, and 53% in Portland.
- **Most homeowners (87%) live in single-family detached housing and most renters (76%) live in multifamily housing in Hillsboro.** This pattern is consistent with other large cities in the Portland Region. In Portland, Beaverton, and Gresham, more than 80% of owner-occupied housing is single-family detached and more than two-thirds of renter housing is multifamily.

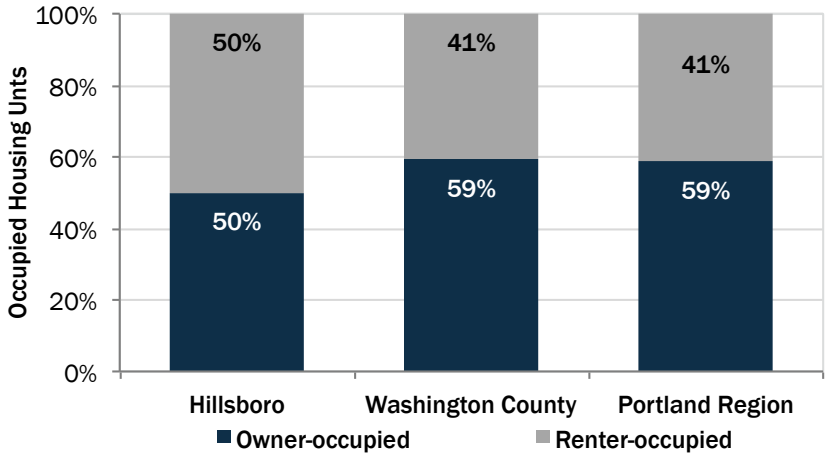
The implication for the forecast of new housing is that there may be opportunities to encourage development of a wider variety of affordable attached housing types for homeownership. At the same time, it is important that the rental housing continue to be developed in Hillsboro to provide diverse housing opportunities for people that cannot afford to be homeowners or choose not to become homeowners.

Hillsboro has relatively lower homeownership rates compared to the county and the region. About half of households in the Hillsboro live in owner-occupied dwelling units, compared with 59% of households in Washington County and 59% of Portland Region households.

Hillsboro's homeownership rate is similar to other larger cities in the Portland Region: 45% in Beaverton, 49% in Gresham, and 53% in Portland.

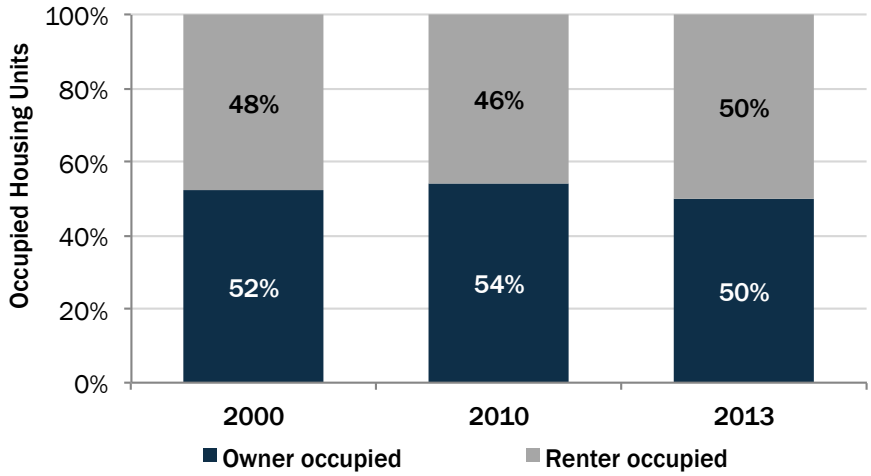
Exhibit 18. Tenure, Occupied Units, Hillsboro, Washington County, and the Portland Region, 2013

Source: Census Bureau, 2013 ACS Table B24003



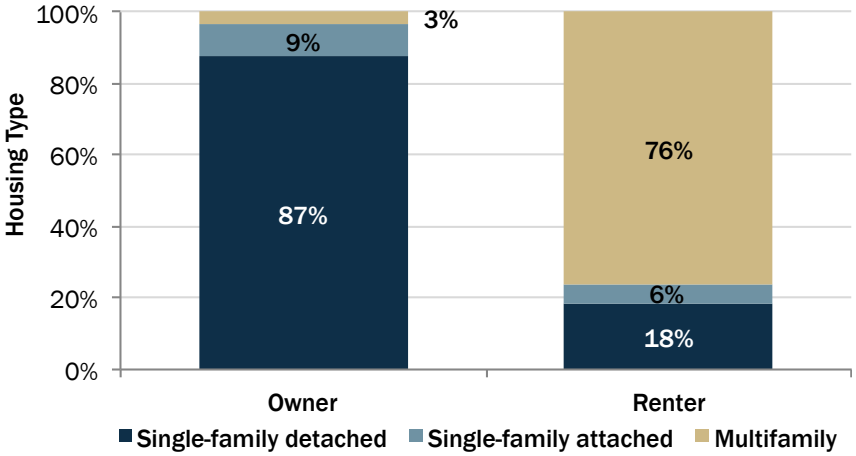
The overall homeownership rate in Hillsboro remained between 50% and 54% since 2000.
The changes in homeownership rates in Hillsboro are consistent with national increases in homeownership rates during mid-2000's and decreases with the decline of the national housing market late in the 2000's.

Exhibit 19. Tenure, Occupied Units, Hillsboro, 2000-2013
Source: Census Bureau, 2000 Decennial Census SF1 Table H004, 2010 Decennial Census SF1 Table H4, 2013 ACS Table B24003



The majority (87%) of owner-occupied housing units are single-family detached units and three-quarters of renter-occupied units are multifamily.
This pattern is consistent with other large cities in the Portland Region. In Portland, Beaverton, and Gresham, more than 80% of owner-occupied housing is single-family detached and more than two-thirds of renter housing is multifamily.

Exhibit 20. Housing Units by Type and Tenure, Hillsboro, 2013
Source: Census Bureau, 2013 ACS Table B25032



Vacancy Rates

The Census defines vacancy as: "Unoccupied housing units are considered vacant. Vacancy status is determined by the terms under which the unit may be occupied, e.g., for rent, for sale, or for seasonal use only." The 2010 Census identified vacant through an enumeration, separate from (but related to) the survey of households. The Census determines vacancy status and other characteristics of vacant units by enumerators obtaining information from property owners and managers, neighbors, rental agents, and others.

In 2013, the vacancy rate in Hillsboro was similar to vacancy in the Portland region.

Exhibit 21. Percent of Housing Units that are Vacant, 2013
Source: Census Bureau, 2013 ACS Table B25002

8.7%	5.6%	5.4%
Hillsboro	Washington County	Portland Region

In 2010, the vacancy rate in Hillsboro was similar to vacancy in the Portland region.

Exhibit 22. Percent of Housing Units that are Vacant, 2010
Source: Census Bureau, 2000, Summary File 1 Table QT-H1

6.2%	5.4%	6.2%
Hillsboro	Washington County	Portland Region

In 2000, the vacancy rate in Hillsboro was higher than the vacancy rate in Washington County and the Portland region.

Exhibit 23. Percent of Housing Units that are Vacant, 2000
Source: Census Bureau, 2000, Summary File 1 Table QT-H1

7.8%	5.5%	5.8%
Hillsboro	Washington County	Portland Region

Housing Density

Housing density is the density of housing by structure type, expressed in dwelling units per net or gross acre.[8] Housing needs analysis commonly include an analysis of historical residential densities to provide factual information to estimate future residential densities.

OAR 660-007-0035 sets specific density targets for cities in the Metro UGB. OAR 660-007 requires that Hillsboro "provide for an overall density of ten or more dwelling units per net buildable acre." The City's achieved density over the 2000 to February 2015 period exceeds this requirement.

The average density for housing developed in Hillsboro between 2000 and February 2015 was 14.4 dwelling units per net acre. Hillsboro's development densities varied from 7.8 dwelling units per net acre in Residential Low to 29.1 dwelling units per net acre in Residential Mid-Rise Density.

Exhibit 24. Housing Density by Comprehensive Plan Designation, Hillsboro, 2000-February 2015

Source: City of Hillsboro

Plan Designation	Dwelling units	Net Acres	Net Density
Residential Low Density	2,203	284	7.8
Residential Medium Density	1,907	179	10.7
Residential High Density	483	23	20.9
Residential Mid-Rise Density	668	23	29.1
Station Community Planning Area	4,801	207	23.1
Mixed-Use	106	4	26.8
Mixed-Use - Urban Residential	760	34	22.3
Open Space	121	7	16.2
Floodplain	28	4	6.2
Industrial	2	2	0.9
Total	**11,079**	**768**	**14.4**

The average density for single-family detached housing was 9.0 dwelling units per net acre. Single-family attached housing averaged 24 dwelling units per net acre and multifamily averaged 25.5 dwelling units per net acre.

Exhibit 25. Housing Density by Housing Type, Hillsboro, 2000-February 2015

Source: City of Hillsboro

Note: Single-family detached includes manufactured housing and accessory dwelling units. Multifamily housing includes duplexes.

Housing Type	Dwelling units	Net Acres	Net Density
Single-Family Detached	4,563	508	9.0
Single-Family Attached	1,883	79	24.0
Multifamily	4,633	182	25.5
Total	**11,079**	**768**	**14.4**

[8] OAR 660-024-0010(6) uses the following definition of net buildable acre. "Net Buildable Acre" "…consists of 43,560 square feet of residentially designated buildable land after excluding future rights-of-way for streets and roads." While the administrative rule does not include a definition of a gross buildable acre, using the definition above, a gross buildable acre will include areas used for rights-of-way for streets and roads. Areas used for rights-of-way are considered unbuildable.

Manufactured Homes

Manufactured homes have provided a limited source of affordable housing in Hillsboro. They provide a form of homeownership that can be made available to low and moderate-income households. Cities are required to plan for manufactured homes—both on lots and in parks (ORS 197.475-492).

Generally, manufactured homes in parks are owned by the occupants who pay rent for the space. Monthly housing costs are typically lower for a homeowner in a manufactured home park for several reasons, including the fact that property taxes levied on the value of the land are paid by the property owner rather than the manufactured homeowner. The value of the manufactured home generally does not appreciate in the way a conventional home would, however. Manufactured homeowners in parks are also subject to the mercy of the property owner in terms of rent rates and increases. It is generally not within the means of a manufactured homeowner to relocate another manufactured home to escape rent increases. Living in a park is desirable to some because it can provide a more secure community with on-site managers and amenities, such as laundry and recreation facilities.

Hillsboro had 581 mobile homes in 2000 and 440 mobile homes in 2013, a decrease of 141 dwellings. According to Census data, 100% of the mobile homes in Hillsboro were owner-occupied in 2013.

OAR 197.480(4) requires cities to inventory the mobile home or manufactured dwelling parks sited in areas planned and zoned or generally used for commercial, industrial or high-density residential development. Exhibit 26 presents the inventory of mobile and manufactured home parks within Hillsboro in 2015.

All of the manufactured home parks in Hillsboro are in areas zoned for high-density development or industrial zones. Redevelopment pressures, especially in the high-density residential areas, may result in the conversion of manufactured home parks to higher density housing. Closing of manufactured home parks would result in a decrease in relatively affordable housing that is generally owner-occupied.

Hillsboro has 8 manufactured home parks with a total of 411 spaces, of which 8 are vacant.

All of the manufactured home parks in Hillsboro are in areas zoned for high-density development (with densities of 11 dwelling units per net acre or greater) or industrial zones.

Exhibit 26. Inventory of Mobile/Manufactured Home Parks, Hillsboro, 2015

Source: Oregon Manufactured Dwelling Park Directory

Name	Type	Total Spaces	Vacant Spaces	Zone
Emerald Village Mobile Home Park LLC	Family	60	2	MFR-2
Fir Trees Mobile Home Park LLC	Family	64	0	MFR-1
Garden Circle Mobile Home ark	"55+"	18	0	SCC-DT
Hillsboro Mobile Home Park	Family	20	0	I-G
Maple Lane Estates	Family	19	4	I-G
River Road Mobile Estates	"55+"	105	0	MFR-1
South Side Mobile Home Park	Family	21	0	MFR-1
Terra Buena Mobile Terrace	"55+"	104	2	MFR-1

Government-assisted housing programs

Over the past several decades, the City has supported the development and preservation of affordable housing for low-income working families, individuals, and those living on limited and fixed incomes. This is evident through the City's involvement with Washington County in federal funding allotments and through the distribution of City General Fund grants to local non-profit organizations.

Since the late 1990s, the City has participated in the Washington County Home Investment Partnership (HOME) Consortium, the primary federal tool for financing land acquisition and new construction for local affordable housing. Between 2000 and 2015, HOME dollars assisted non-profit affordable housing developers in providing 624 rental and ownership units in Hillsboro. In addition, the City participates in a joint Community Development Block Grant (CDBG) program with Washington County, with Washington County currently serving as the grantee and administrator of CDBG funds. A portion of the federal CDBG funds that the City receives has provided grants and loans to low-income Hillsboro homeowners and renters for housing rehabilitation and repair.

Since the mid-2000s, the City has also supported the development and preservation of affordable housing by contributing an average of $80,000 from the General Fund to the Community Housing Fund (CHF). The CHF is a local non-profit that serves as a catalyst to leverage community financing for the new construction and rehabilitation of affordable housing. City contributions to CHF have typically been used within a revolving loan fund program supporting affordable housing pre-development costs, which may include architecture, soil engineering, land acquisition, zoning and entitlement consultation. For years the City has also directed General Fund dollars through a competitive grant program to local non-profit Community Action to provide emergency rental assistance, weatherization support, or utilities assistance.

More than six percent of Hillsboro's housing supply is government-subsidized.

Exhibit 27. Percentage of housing units that are government-subsidized, 2011

Source: Metro's 2011 Regional Inventory of Regulated Affordable Housing.

6.5%	5.4%	1.6%	7.5%
Hillsboro	Gresham	Beaverton	Portland

Of all government-subsidized affordable housing in the Metro region, more than 5% is located in Hillsboro.

Exhibit 28. Percentage of the Metro region's government-subsidized housing located in each city, 2013

Source: Oregon Housing and Community Services, Personal Communication with Susan Bailey, August 3rd, 2015.

5.6%	5.6%	1.6%	51.3%
Hillsboro	Gresham	Beaverton	Portland

4. Demographic and Other Factors Affecting Residential Development in Hillsboro

Demographic trends are important to thoroughly understand the dynamics of the Hillsboro housing market. Hillsboro exists in a regional economy; trends in the region impact the local housing market. This chapter documents national, state, and regional demographic, socioeconomic, and other trends relevant to Hillsboro.

Demographic trends provide a broader context for growth in a region; factors such as age, income, migration, and other trends show how communities have grown and shape future growth. To provide context, we compare Hillsboro to Washington County and the Portland Region (defined here as Clackamas, Multnomah, and Washington Counties) where appropriate. Characteristics such as age and ethnicity are indicators of how population has grown in the past and provide insight into factors that may affect future growth.

Demographic and socioeconomic factors affecting housing choice[9]

Analysts typically describe housing demand as the *preferences* for different housing types (i.e., single-family detached or apartment), and *the ability to pay* for that housing (the ability to exercise those preferences in a housing market by purchasing or renting housing—in other words, income or wealth).

[9] The research in this chapter is based on numerous articles and sources of information about housing, including:

Davis, Hibbits, & Midghal Research, "Metro Residential Preference Survey," May 2014.

The American Planning Association, "Investing in Place; Two generations' view on the future of communities." 2014

"Access to Public Transportation a Top Criterion for Millennials When Deciding Where to Live, New Survey Shows," Transportation for America.

"Survey Says: Home Trends and Buyer Preferences," National Association of Home Builders International Builders

The Case for Multi-family Housing. Urban Land Institute. 2003

E. Zietz. *Multi-family Housing: A Review of Theory and Evidence.* Journal of Real Estate Research, Volume 25, Number 2. 2003.

C. Rombouts. *Changing Demographics of Homebuyers and Renters.* Multi-family Trends. Winter 2004.

J. McIlwain. *Housing in America: The New Decade.* Urban Land Institute. 2010.

D. Myers and S. Ryu. *Aging Baby Boomers and the Generational Housing Bubble*. Journal of the American Planning Association. Winter 2008.

M. Riche. *The Implications of Changing U.S. Demographics for Housing Choice and Location in Cities.* The Brookings Institution Center on Urban and Metropolitan Policy. March 2001.

L. Lachman and D. Brett. *Generation Y: America's New Housing Wave.* Urban Land Institute. 2010.

Metro, the agency responsible for regional planning within the Portland metropolitan UGB, uses a decision support tool called Metroscope to model changes in measures of economic, demographic, land use, and transportation activity. Metroscope includes a residential location model, which projects the locations of future households based on factors such as land availability and capacity, cost of development, changes in demographics, changes in employment, and changes in transportation and transit infrastructure. The housing needs analysis in Chapter 5 of this report is based on the Metroscope forecast of household growth in Hillsboro over the next 20 years.

Many demographic and socioeconomic variables affect housing choice. However, the literature about housing markets finds that age of the householder, size of the household, and income are most strongly correlated with housing choice.

- **Age of householder** is the age of the person identified (in the Census) as the head of household. Households make different housing choices at different stages of life. This chapter discusses generational trends, such as housing preferences of Baby Boomers (people born from about 1946 to 1964) and Millennials (people born from about 1980 to 2000.)
- **Size of household** is the number of people living in the household. Younger and older people are more likely to live in single-person households. People in their middle years are more likely to live in multiple person households (often with children).
- **Income** is the household income. Income is probably the most important determinant of housing choice. Income is strongly related to the type of housing a household chooses (e.g., single-family detached, duplex, or a building with more than five units) and to household tenure (e.g., rent or own).

This chapter focuses on these factors, presenting data that suggests how changes to these factors may affect housing need in Hillsboro over the next 20 years.

National trends[10]

This brief summary on national housing trends builds on previous work by ECONorthwest, the Urban Land Institute (ULI) reports, and conclusions from *The State of the Nation's Housing, 2014* report from the Joint Center for Housing Studies of Harvard University. The Harvard report summarizes the national housing outlook as follows:

"With promising increases in home construction, sales, and prices, the housing market gained steam in early 2013. But when interest rates notched up at mid-year, momentum slowed. This moderation is likely to persist until job growth manages to lift household incomes. Even amid a broader recovery, though, many hard-hit communities still struggle and millions of households continue to pay excessive shares of income for housing."

[10] These trends are based on information from: (1) The Joint Center for Housing Studies of Harvard University's publication "The State of the Nation's Housing 2013," (2) Urban Land Institute, "2011 Emerging Trends in Real Estate," and (3) the U.S. Census.

Several challenges to a strong domestic housing market remain. Demand for housing is closely tied to jobs and incomes, which are taking longer to recover than in previous cycles. While trending downward, the number of underwater homeowners, delinquent loans, and vacancies remains high. *The State of the Nation's Housing* report projects that it will take several years for market conditions to return to normal and, until then, the housing recovery will likely unfold at a moderate pace.

- **Post-recession recovery slows down**. Despite strong growth in the housing market in 2012 and the first half of 2013, by the first quarter of 2014, housing starts and existing home sales were both down by 3% from the same time a year before, while existing home sales were down 7% from the year before. Increases in mortgage interest rates and meager job growth contributed to the stall in the housing market.
- **Continued declines in homeownership**. After 13 successive years of increases, the national homeownership rate declined each year from 2005 to 2013, and is currently at about 65%. The Urban Land Institute projects that homeownership will continue to decline to somewhere in the low 60% range.
- **Housing affordability**. In 2012, more than one-third of American households spent more than 30% of income on housing. Low-income households face greater obstacles in finding affordable housing. Among those earning less than $15,000, more than 80% paid over 30% of their income and almost 70% of households paid more than half of their income. For households earning $15,000 to $29,000, more than 60% were cost burdened, with about 30% paying more than half of their income on housing.
- **Long-term growth and housing demand**. The Joint Center for Housing Studies forecasts that demand for new homes could total as many as 13.2 million units nationally between 2015 and 2025. Much of the demand will come from Baby Boomers, Millennials,[11] and immigrants.
- **Changes in housing preference**. Housing preference will be affected by changes in demographics, most notably the aging of the Baby Boomers, housing demand from the Millennials, and growth of foreign-born immigrants.
    - *Baby Boomers.* The housing market will be affected by continued aging of the Baby Boomers, the oldest of whom were in their late 60s in 2015 and the youngest of whom were in their early 50s in 2015. Baby Boomers' housing choices will affect housing preference and homeownership, with some Boomers likely to stay in their home as long as they are able and some preferring other housing products, such as multifamily housing or age-restricted housing developments.
    - *Millennials.* As Millennials age over the next 20 years, they will be forming households and families. In 2015, the oldest Millennials in their mid-20s and the youngest in their mid-teens. By 2035, Millennials will be between 35 and 55 years old.

[11] Millennials are, broadly speaking, the children of Baby Boomers, born from the early 1980's through the early 2000's.

Millennials were in the early period of household formation at the beginning of the 2007-2009 recession. Across the nation, household formation fell to around 600,000 to 800,000 in the 2007 to 2013 period, well below the average rate of growth in previous decades. Despite sluggish growth recently, several demographic factors indicate increases in housing growth to come. The Millennial generation is the age group most likely to form the majority of new households. While low incomes have kept current homeownership rates among young adults below their potential, Millennials may represent pent-up demand that will release when the economy fully recovers. As Millennials age, they may increase the number of households in their 30s by 2.4 to 3.0 million over the through 2025.

- *Immigrants.* Immigration and increased homeownership among minorities will also play a key role in accelerating household growth over the next 10 years. Current Population Survey estimates indicate that the number of foreign-born households rose by nearly 400,000 annually between 2001 and 2007, and accounted for nearly 30 percent of overall household growth. Beginning in 2008, the influx of immigrants was staunched by the effects of the Great Recession. After a period of declines, however, the foreign-born are again contributing to household growth. Census Bureau estimates of net immigration in 2011–2012 indicate an increase of 110,000 persons over the previous year, to a total of nearly 900,000.

The growing diversity of American households will have a large impact on the domestic housing markets. Over the coming decade, minorities will make up a larger share of young households, and constitute an important source of demand for both rental housing and small homes. This makes the growing gap in homeownership rates between whites and blacks and whites and Hispanics troubling. Since 2001, the difference in homeownership rates between whites and blacks rose from 25.9 to 29.5 in 2013. Similarly the gap between white and Hispanic homeownership rates increased since 2008, from below 26%, to over 27% in 2013. This growing gap between racial and ethnic groups will hamper the country's homeownership rate, as minority households constitute a larger share of the housing market.

- **Changes in housing characteristics**. The U.S. Census Bureau's *Characteristics of New Housing Report* (2013) presents data that show trends in the characteristics of new housing for the nation, state, and local areas. Several long-term trends in the characteristics of housing are evident from the *New Housing Report*:[12]
  - *Larger single-family units on smaller lots.* Between 1990 and 2013, the median size of new single-family dwellings increased 25% nationally from 1,905 sq. ft. to 2,384 sq. ft., and 19% in the western region from 1,985 sq. ft. to 2,359 sq. ft. Moreover, the percentage of units fewer than 1,400 sq. ft. nationally decreased by almost half, from 15% in 1999 to 8% in 2012. The percentage of units greater than 3,000 sq. ft.

[12] https://www.census.gov/construction/chars/highlights.html

increased from 17% in 1999 to 29% of new one-family homes completed in 2013. In addition to larger homes, a move towards smaller lot sizes is seen nationally. Between 1990 and 2013, the percentage of lots less than 7,000 sq. ft. increased from 27% of lots to 36% of lots.

- *Larger multifamily units.* Between 1999 and 2013, the median size of new multiple family dwelling units increased by 2% nationally and 3% in the western region. The percentage of new multifamily units with more than 1,200 sq. ft. increased from 28% in 1999 to 32% in 2013 nationally, and increased from 25% to 32% in the western region.
- *More household amenities.* Between 1990 and 2013, the percentage of single-family units built with amenities such as central air conditioning, two or more car garages, or two or more baths all increased. The same trend in increased amenities is seen in multifamily units.

State Trends

Oregon's *2011-2015 Consolidated Plan* includes a detailed housing needs analysis as well as strategies for addressing housing needs statewide.[13] The plan concludes that "Oregon's changing population demographics are having a significant impact on its housing market." It identified the following population and demographic trends that influence housing need statewide. Oregon is:

- Facing housing cost increases due to higher unemployment and lower wages, as compared to the nation.
- Experiencing higher foreclosure rates compared with the previous two decades (beginning in 2005.)
- Losing federal subsidies on about 8% of federally-subsidized Section 8 housing units.
- Losing housing value throughout the State.
- Losing manufactured housing parks, with a 25% decrease in the number of manufactured home parks between 2003 and 2010.
- Comprised of increasingly older, more diverse, and less affluent households.[14]

[13] http://www.ohcs.oregon.gov/OHCS/HRS_Consolidated_Plan_5yearplan.shtml

[14] State of Oregon *Consolidated Plan 2011 to 2015*. http://www.oregon.gov/ohcs/hd/hrs/consplan/2011_2015_consolidated_plan.pdf

Regional trends in the Portland Metro area

Metro's *Urban Growth Report 2009-2030 Employment and Residential* (January 2010) and the *Urban Growth Report 2015-2035* (September 2014) both describe macro trends that may influence future housing preferences within the Portland metropolitan region. Washington County's draft *2015-2020 Consolidated Plan* provides information about trends in housing affordability in Hillsboro and across Washington County. These trends are summarized briefly below:

- **Climate change** may affect the region's precipitation, water storage, and hydroelectric generation. These changes have implications for sustainable population growth and housing demand within the region. For example, higher water prices could increase demand for smaller lots, which typically require less irrigation for landscaping. In addition, new government regulations of greenhouse gas emissions may affect housing or transportation costs, changing where households locate within the region. It is unclear how climate change will affect housing demand in the Portland Region over the 20-year planning period.
- **Lending practices** affect regional housing demand. One result of the recent housing market decline was changes in lending practices, which made borrowing for homeownership more difficult. If lending practices continue to limit borrowing opportunities, fewer households may be able to afford homeownership or may be forced to wait longer to become homeowners. It is unclear how lending practices will affect housing demand in the Portland Region over the 20-year planning period.
- **Growth in traffic congestion and increased costs of automotive fuel** may affect the locational preferences for households within the Portland Region. For example, households may choose to live closer to work, rather than commuting across the Region.
- **Infrastructure funding deficiencies** may result in increases in new housing costs through increases in local fees or charges for new residential development (e.g., increases in systems development charges). The result will be shifting infrastructure costs to homebuyers, which would favor development locations and patterns with lower infrastructure costs.
- **Increased infill and redevelopment** may indicate increasing demand by households to live in dense areas near amenities and transportation nodes. The *2014 Urban Growth Report* notes an uptick in redevelopment and infill following the recession. This may increase the price of multifamily housing as developers work to match the increased demand.
- **The changing composition of employment** leads more employees to work in the service sector, and fewer in industrial and retail jobs. It remains unclear how this may affect the housing market over the 20-year planning period.
- **Displacement caused by redevelopment** has followed from increased demand for urban living and from redevelopment in formerly underserved neighborhoods. This trend may make it challenging for policymakers to facilitate development while limiting displacement.

- **Poverty rates have increased** in Washington County since 2007, with poverty increasing in cities such as Hillsboro, Beaverton, Tualatin, and other cities in Washington County.
- **Cost burden has increased**, with more households spending over half of their income on housing costs. About three-quarters of low-income households (those with incomes of 50% or less of median family income) are likely to spend half of their income or more on housing costs.
- **Unmet demand for affordable housing** across Washington County is for 14,000 to 23,000 housing units affordable to renters with incomes at or below 50% median family income ($34,700 per year for a family of four in 2014).
- **Housing with intensive services for persons with special needs is in especially short supply,** with the greatest need for housing for homeless, elderly, persons with mental illness, developmentally disabled, farmworkers, and released offenders.

Local Demographic Trends

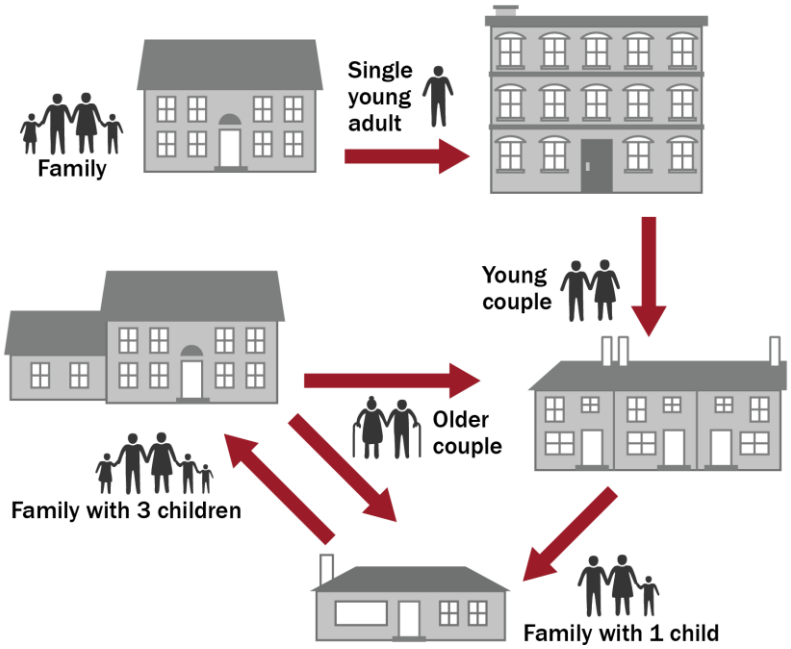
Regional demographic trends largely follow the statewide trends discussed above, but provide additional insight into how demographic trends might affect housing in Hillsboro. Demographic trends that might affect the key assumptions used in the baseline analysis of housing need are: (1) the aging population, (2) changes in household size and composition, and (3) increases in diversity.

An individual's housing needs change throughout life, with changes in income, family composition, and age. The types of housing needed by a 20-year-old college student differ from the needs of a 40-year-old parent with children, or an 80-year-old single adult. As Hillsboro's population ages, different types of housing will be needed to accommodate older residents. The housing characteristics by age data below reveal this cycle in action in Hillsboro.

Housing needs and preferences change in predictable ways over time, with changes in marital status and family size. Families of different sizes need different types of housing.

Exhibit 29. Effect of demographic changes on housing need

Source: ECONorthwest, adapted from Clark, Willam A.V. and Frans M. Dieleman. 1996. *Households and Housing*. New Brunswick, NJ: Center for Urban Policy Research.



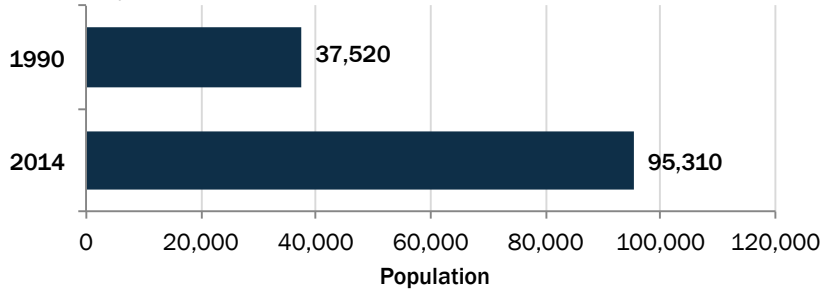
Growing population

Hillsboro's population grew by 154% between 1990 and 2014, adding nearly 60,000 new residents. Over this period, Hillsboro's population grew at an average annual growth rate of 4.0%, more than double the Portland Region's growth rate and faster than Washington County.

Hillsboro's population growth will drive future demand for housing in Hillsboro over the planning period.

Since 1990, Hillsboro's population has more than doubled.
From 1990 to 2014, Hillsboro's population more than doubled in size, increasing by about 154%.

Exhibit 30. Population, Hillsboro, 1990 - 2014
Source: PSU Population Research Center.



From 1990 to 2014, Hillsboro's population grew by 57,790 people, accounting for 23% of population growth in Washington County.

Exhibit 31. Population Growth, 1990 - 2014
Source: US Decennial Census 1990, 2000, 2010. PSU Population Research Center 2012. US Census Population Estimates 2012

154%	80%	46%	39%
Hillsboro	Washington County	Portland Region	Oregon

Hillsboro's population grew faster than the county, region, and state.

Exhibit 32. Annual Average Rate of Growth, 1990 - 2014
Source: US Decennial Census 1990, 2000, 2010. PSU Population Research Center 2012. US Census Population Estimates 2012

4.0%	2.5%	1.6%	1.4%
Hillsboro	Washington County	Portland Region	Oregon

Aging population

This section shows two key characteristics of Hillsboro's population, with implications for future housing demand in Hillsboro:

- **Hillsboro's population is younger than the state, on average.** Hillsboro has a larger share of young people, including young families with children, and a relatively small share of people over 40 years. If Hillsboro continues to attract young residents, then it will continue to have demand for housing for families, especially housing affordable to younger families with moderate incomes.

A recent survey of people living in the Portland Region shows that Millennials prefer single-family detached housing. The survey finds that housing price is the most important factor in choosing housing for younger residents.[15]

Continued growth in Millennials in Hillsboro will result in increased demand for both affordable single-family detached housing, as well as increased demand for affordable townhouses and multifamily housing. Growth in this population will result in increased demand for both ownership and rental opportunities, with an emphasis on housing that is comparatively affordable.

- **Hillsboro's population is growing older, with the aging of the Baby Boomers.** Although Hillsboro has a smaller share of people over 40 years old than the Regional average, Hillsboro's population is growing older, consistent with State and national trends. Demand for housing for retirees will grow over the planning period, as the Baby Boomers continue to age and retire. The State forecasts that the share of residents aged 60 years and older will account for nearly one-quarter of Washington County's population, compared to around 15% in 2010.

  The impact of growth in seniors in Hillsboro will depend in part on whether seniors continue to live in Hillsboro as they retire. Growth in people over 60 years old since 2000 suggests that some, and perhaps many of the residents of Hillsboro that retire will continue to live in Hillsboro after retirement. National surveys show that, in general, most retirees prefer to age in place by continuing to live in their current home and community as long as possible.[16]

  Growth in the number of seniors will result in demand for housing types specific to seniors, such as assisted living facilities or age-restricted developments. These households will make a variety of housing choices, including: remaining in their homes as long as they are able, downsizing to smaller single-family homes (detached and attached) or multifamily units, or moving into group housing (such as assisted living facilities or nursing homes), as their health fails. The challenges that aging seniors face in continuing to live in their community include: changes in healthcare needs, loss of mobility, the difficulty of home maintenance, financial concerns, and increases in property taxes.[17]

From 2000 to 2013 Hillsboro's median age increased from 29.7 to 33.8 years.

Exhibit 33. Median Age, years, 2000 - 2013

Source: US Census Bureau, 2000 Decennial Census Table B01002, 2010 Decennial Census Table P013.

2000	29.7 Hillsboro	33.0 Washington County	36.3 Oregon
2013	33.8 Hillsboro	36.0 Washington County	39.1 Oregon

[15] Davis, Hibbits, & Midghal Research, "Metro Residential Preference Survey," May 2014.

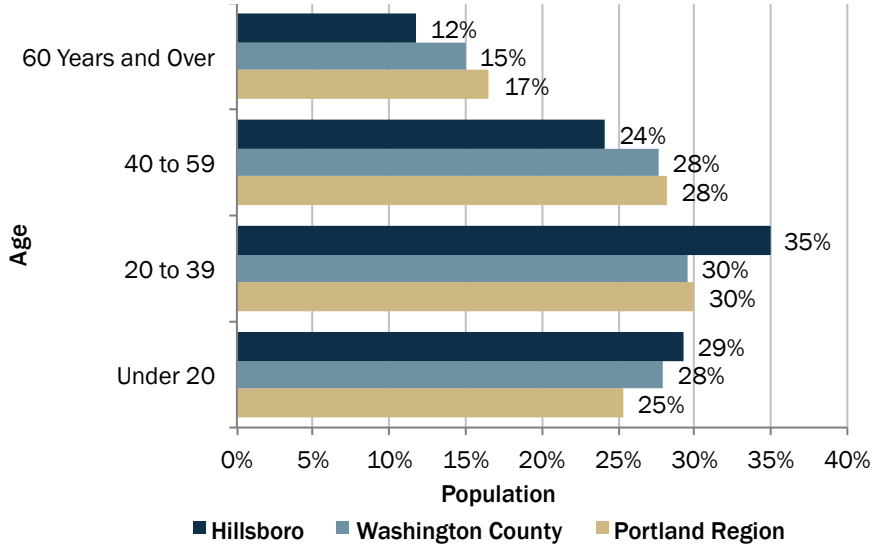
[16] A survey conducted by the AARP indicates that 90% of people 50 years and older want to stay in their current home and community as they age. See http://www.aarp.org/research.

[17] "Aging in Place: A toolkit for Local Governments" by M. Scott Ball.

In 2010, almost 60% of Hillsboro residents were aged between 20 and 59.

Exhibit 34. Population Distribution by Age, 2010

Source: US Census Bureau, 2010 Decennial Census Table P12.

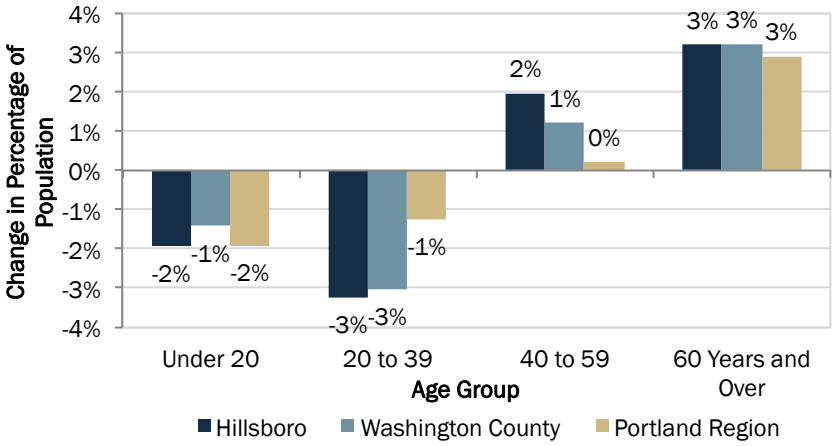


The age group that added the largest percentage change in population between 2000 and 2010 was people 60 years and older. This trend held true across the Portland Region, as well as in Hillsboro. In addition, the percentage of people younger than 39 years old decreased between 2000 and 2010.

This change shows the large size of the Baby Boom generation. As Millennials age over the next two decades, the percentage of people aged 20 to 59 will increase.

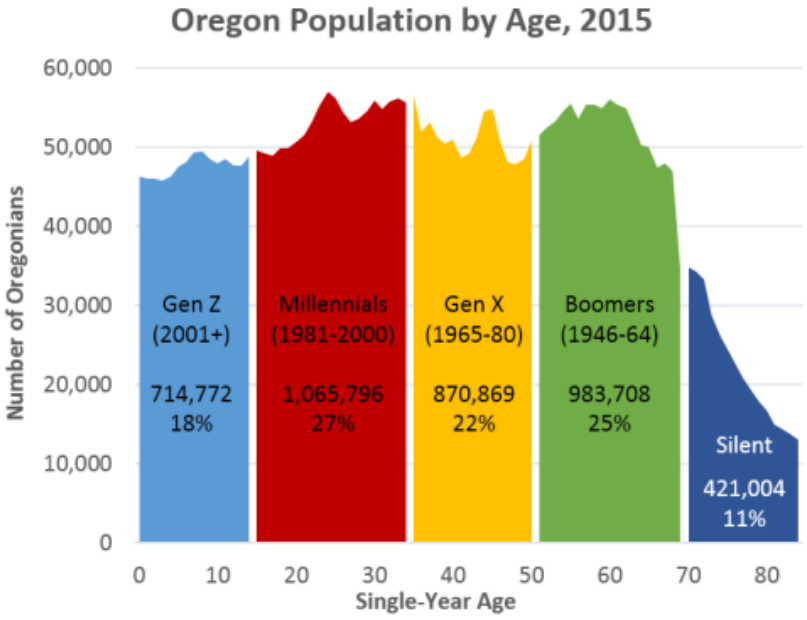
Exhibit 35. Change in Percentage of Population by Age Group, Hillsboro, 2000 to 2010

Source: US Census Bureau, 2000 and 2010 Decennial Census Table P12.



Oregon's largest age groups are the Millennials and the Baby Boomers.
By 2035, Millennials will be between 35 and 54 years old. Baby Boomers will be 71 to 89 years old.

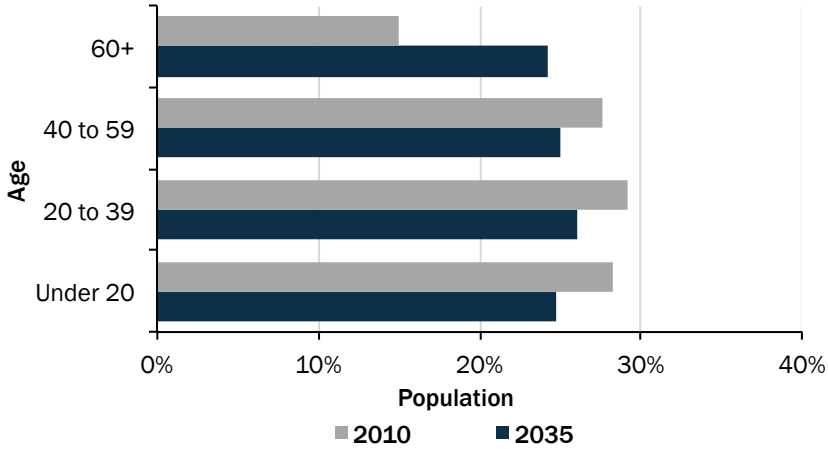
Exhibit 36. Population Distribution by Generation and Age, Oregon, 2015
Source: Oregon Office of Economic Analysis, "Population, Demographics, and Generations" by Josh Lehner, February 5, 2015. http://oregoneconomicanalysis.com/2015/02/05/population-demographics-and-generations/



Source: Oregon Office of Economic Analysis

By 2035, residents older than sixty are expected make up a larger share of the population than before 2010.
The share of residents aged 60 years and older will account for nearly one quarter of Washington County's population, compared to around 15% in 2010.

Exhibit 37. Population Growth by Age Group, Washington County, 2010 - 2035
Source: Oregon Office of Economic Analysis, Long-term County Forecast, 2013 Release.



Over time, older age groups are expected to grow quickly.
From to 2010 to 2035, Washington County's fastest-growing age group will be those aged over 60 years.

Exhibit 38. Fastest-growing Age Groups, Washington County, 2010 - 2035
Source: Oregon Office of Economic Analysis, Long-term County Forecast, 2013 Release.

60+ Year-Olds	40-59 Year-Olds	20-39 Year-Olds
139% Increase	33% Increase	32% Increase
110,523 More People	48,551 More People	48,823 More People

Increased ethnic and racial diversity

Hillsboro is becoming more ethnically and racially diverse. In 2013, about 39% of Hillsboro's population was non-white and non-Hispanic. The largest ethnic and racial minority groups were Hispanic/Latino and Asians. The Hispanic and Latino population grew from 19% of Hillsboro's population in 2000 to 25% of the population in the 2011-2013 period, adding more than 10,000 new Hispanic and Latino residents to Hillsboro's population. In comparison to Washington County and the Portland Region, Hillsboro's population is more ethnically diverse.

Continued growth in the Hispanic and Latino population will affect Hillsboro's housing needs in a variety of ways.[18] Growth in first and, to a lesser extent, second- and third-generation Hispanic and Latino immigrants will increase demand for larger dwelling units to accommodate the, on average, larger household sizes for these households. Households for Hispanic and Latino immigrants are more likely to include multiple generations, requiring more space. As Hispanic and Latino households integrate over generations, household size typically decreases and housing needs become similar to housing needs for all households.

Growth of Asian immigrants will increase demand for rental and ownership housing. First-generation Asian immigrants are more likely to have larger households and may need housing that accommodates children or multiple generations. As Asian immigrants integrate over generations, on average, income remains higher than average and household size decreases.[19]

Growth in Hispanic and Latino households will result in increased demand for housing of all types, both for ownership and rentals, with an emphasis on housing that is comparatively affordable. Growth of Asian immigrants will result in increased demand for all types of housing, with an emphasis on owner-occupied housing.

---

[18] The following articles describe housing preferences and household income trends for Hispanic and Latino families, including differences in income levels for first-, second-, and third-generation households. In short, Hispanic and Latino households have lower median income than the national averages. First- and second-generation Hispanic and Latino households have median incomes below the average for all Hispanic and Latino households. Hispanic and Latino households have a strong preference for homeownership but availability of mortgages and availability of affordable housing are key barriers to homeownership for this group.

Pew Research Center. *Second-Generation Americans: A Portrait of the Adult Children of Immigrants*, February 7, 2012.

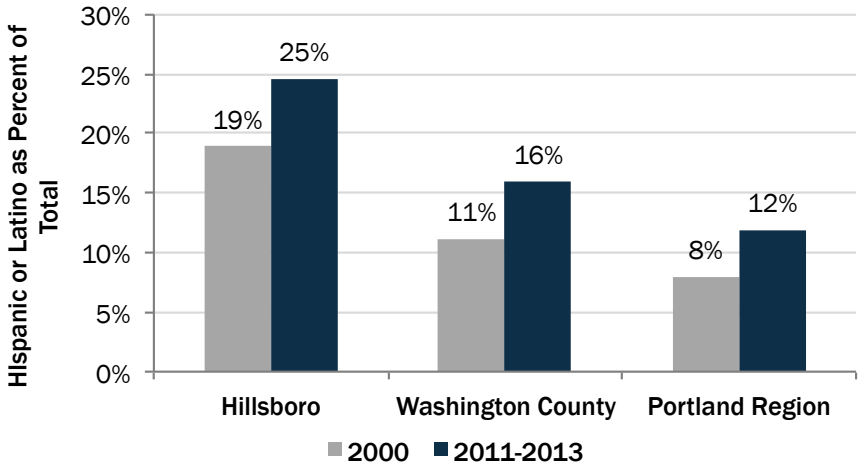
National Association of Hispanic Real Estate Professionals. *2014 State of Hispanic Homeownership Report*, 2014.

[19] The following article describes household characteristics for Asian immigrant households, including differences in income levels for first-, second-, and third-generation households. Asian immigrant households have higher median income than the national averages, even for first-generation immigrants. Asian immigrant households are a somewhat larger than the national average, especially for first-generation immigrants. First- and second-generation Asian immigrants are less likely to be homeowners than the national average but more than half are homeowners.

Pew Research Center. *Second-Generation Americans: A Portrait of the Adult Children of Immigrants*, February 7, 2012.

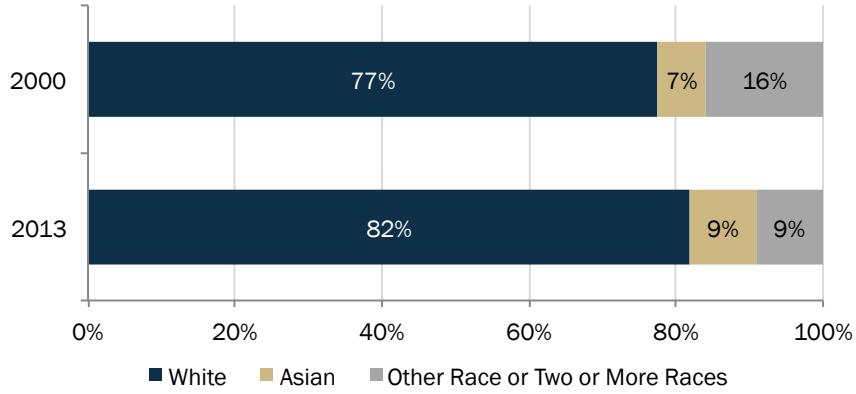
Hillsboro's Hispanic population has increased.
The Hispanic population also grew in Washington County and the Portland Region.

Exhibit 39. Hispanic or Latino Population as a Percent of the Total Population, 2000 to 2011-2013
Source: US Census Bureau, 2000 Decennial Census Table P008, 2011-2013 ACS Table B03002.



Hillsboro's Asian population has grown since 2000.
The Asian population grew by about 88% from around 4,500 in 2000 to around 9,000 people in 2013.

Exhibit 40. Racial Composition, 2000 to 2011-2013
Source: US Census Bureau, 2000 Decennial Census Table P007, 2011-2013 ACS Table B02001.



The share of residents in Hillsboro that are neither white nor Hispanic has increased since 2000.

Exhibit 41. Non-white and Non-Hispanic Population, Hillsboro, 2000 to 2011-13
Source: US Census Bureau, 2000 Decennial Census Table P008, 2011-2013 ACS Table B03002.

2000	**30% of Hillsboro's population** 20,854 non-white and non-Hispanic people in Hillsboro
2011-13	**39% of Hillsboro's population** 37,613 non-white and non-Hispanic people in Hillsboro

Household size and composition

Household size and composition in Hillsboro are somewhat different from the County and Regional averages. Hillsboro's households are larger and a larger percentage of households are family households with children. One reason for this difference may be the larger share of Hispanic and Latino population in Hillsboro relative to Regional averages.

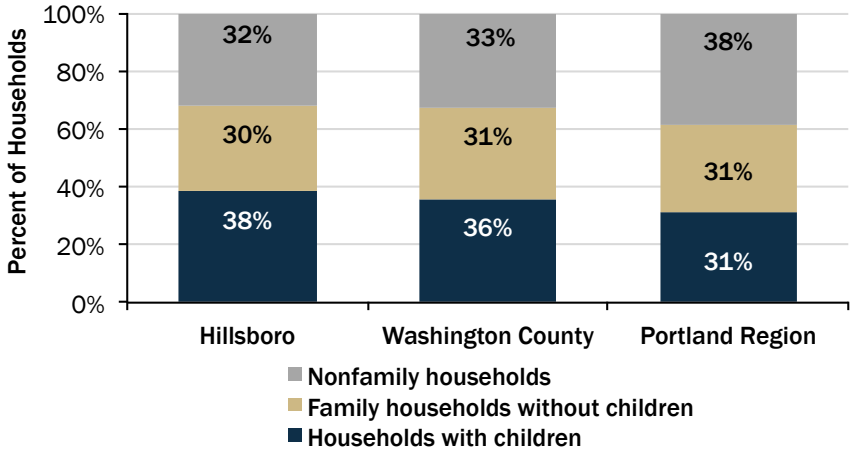
Hillsboro's average household size exceeds Washington County's.

Exhibit 42. Average Household Size, 2013
Source: US Census Bureau, 2013 ACS Table B25010.

2.75 Persons	2.60 Persons	2.52 Persons
Hillsboro	Washington County	Oregon

Hillsboro has a larger share of households with children than Washington County or the Portland Region.

Exhibit 43. Household Composition, 2013
Source: US Census Bureau, 2010 Table P20.



Income of Hillsboro Residents

Income is one of the key determinants in housing choice and households' ability to afford housing. Income for people living in Hillsboro is slightly above the average in Washington County and considerably above the average State average.

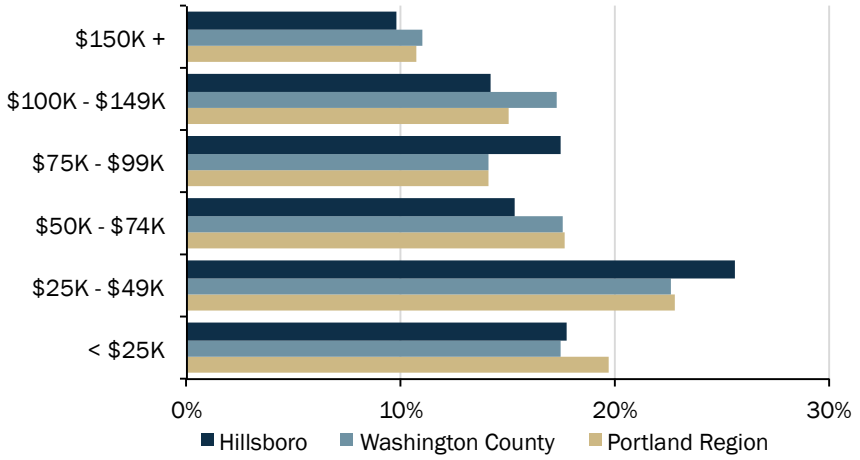
In 2013, Hillsboro's median household income was above that of the state, but below that of the county.

Exhibit 44. Median Household Income, 2013
Source: US Census Bureau, 2013 ACS Table B25119

$61,073	$63,238	$50,251
Hillsboro	Washington County	Oregon

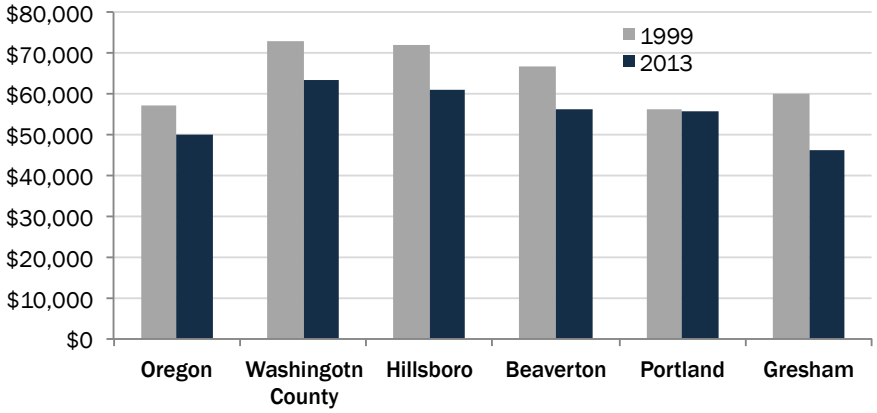
About a quarter of Hillsboro households earn between $25,000 and $49,000.
Hillsboro's median household income of $61,073 is slightly below that of Washington County, at $63,238.

Exhibit 45. Household Income, Portland Region, Washington County, Hillsboro, 2013
Source: US Census Bureau, 2013 ACS Table B19001



After adjusting for inflation, Hillsboro's median household income decreased by 15% from 1999 to 2013, from $72,205 to $61,073 per year.

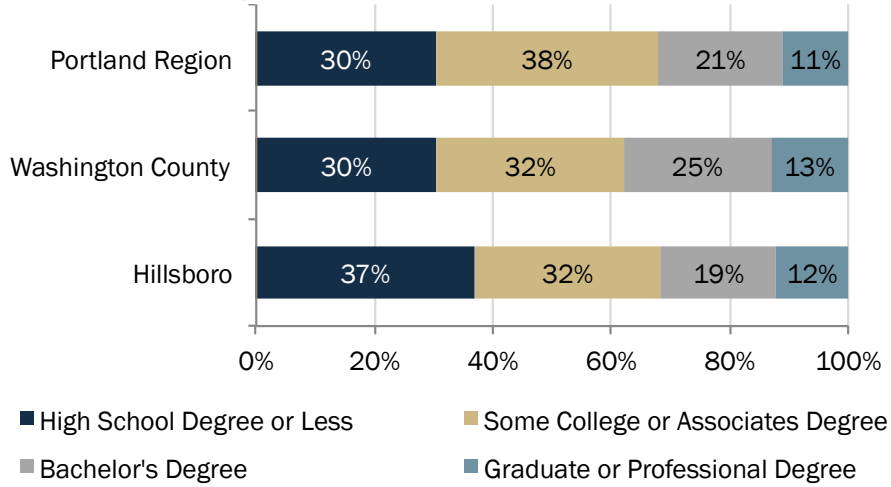
Exhibit 46. Median Household Income, Oregon, Washington County, Portland, Beaverton, Gresham, Hillsboro, 1999-2013, Not adjusted for Inflation
Source: US Census Bureau, 2000 Decennial Census, Table HCT012, 2013 ACS Table B25119



Hillsboro has a smaller share of college-educated residents (32%) than Washington County (38%).

Exhibit 47. Educational Attainment, Portland Region, Washington County, Hillsboro, 2013

Source: US Census Bureau, 2013 ACS Table B15003

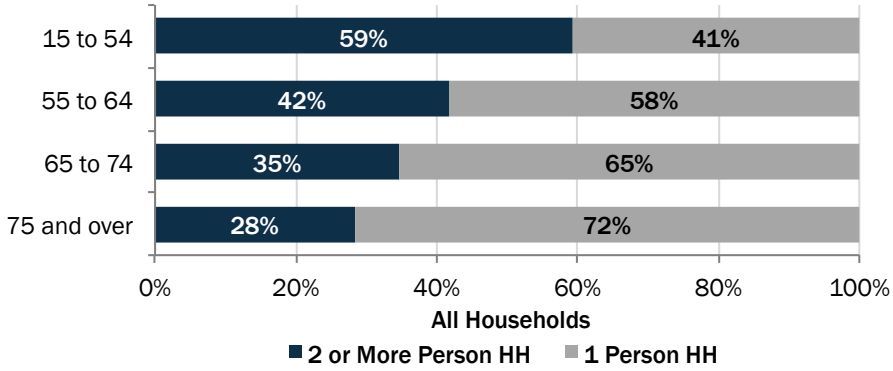


Relationship between age and household characteristics

Household size in Hillsboro changes with age.

Exhibit 48. Households by Size and Age of Householder, Hillsboro, 2013

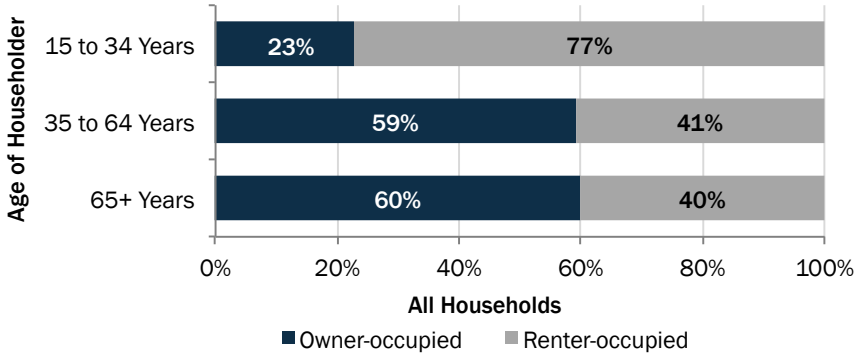
Source: US Census Bureau, 2013 ACS Table B25116.



Housing tenure in Hillsboro changes with age.

Exhibit 49. Households by Tenure and Age of Householder, Hillsboro, 2013

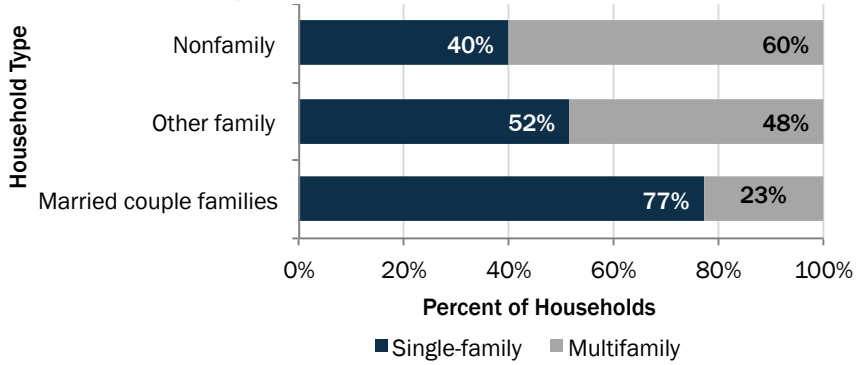
Source: US Census Bureau, 2013 ACS Table H17.



About 60% of nonfamily households live in multifamily structures, while only to 23% of married couple families do.

Exhibit 50. Units in Structure by Household Type, Hillsboro, 2013

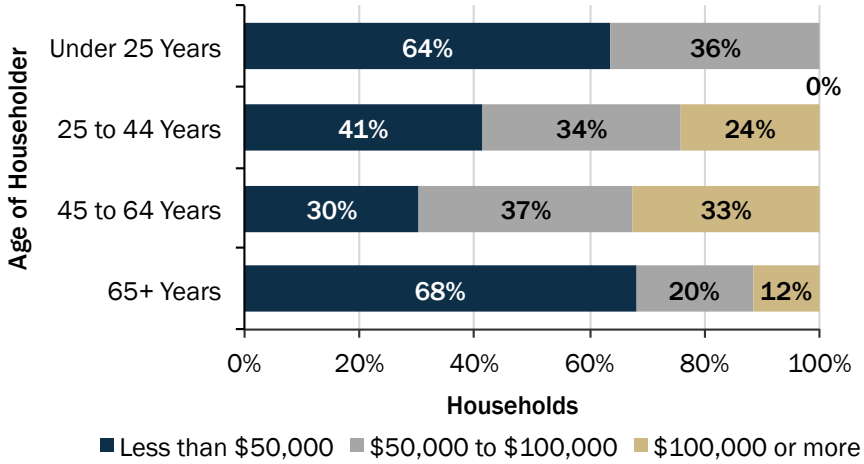
Source: US Census Bureau, 2013 ACS Table B11011.



Household income tends to increase as people age, until they reach the age of 65.

Exhibit 51. Household Income by Age of Householder, Hillsboro, 2013

Source: US Census Bureau, 2013 ACS Table B19037.

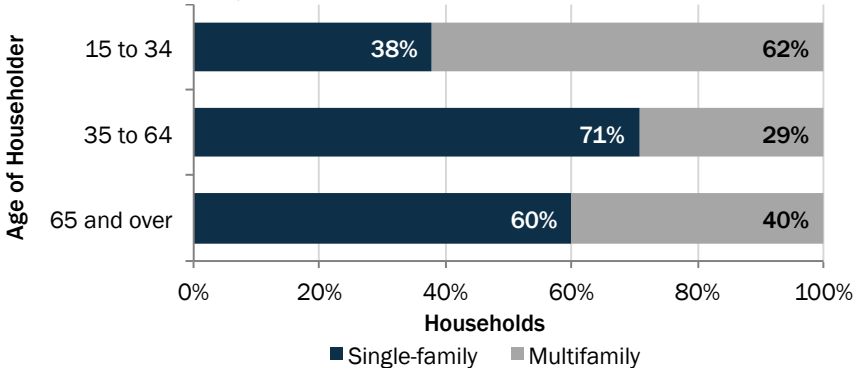


Householders younger than 35 are more than twice as likely to live in multifamily housing than householders aged between 35 and 64.

About 62% of householders aged 15 to 34 live in multifamily housing, compared to just 29% of 35 to 64 year olds.

Exhibit 52. Units in Structure by Age, Hillsboro, 2013

Source: US Census Bureau, 2013 ACS Table B25125.



Potential housing needs of workers in Hillsboro

An important part of the City's vision for housing is providing more opportunities for people who work in Hillsboro to live in Hillsboro. This issue is important for workers at all income levels, from workers with a high-income to low-income workers. The City's primary policy tools to influence whether people who work in Hillsboro live in Hillsboro is through zoning to allow for production of all types of housing, from affordable housing types (e.g., small single-family detached housing, townhouses, and multifamily housing) to executive housing (e.g., larger single-family detached housing with a larger lot and more amenities).

Providing opportunities for development of a range of housing types may not be sufficient to encourage development of all types of housing because the factors that affect households' choices of where to locate are complex. They include: access to work, shopping, recreation, and friends and family; quality of public service, especially schools; preferences for neighborhoods with specific characteristics; housing costs; preferences for housing and land with specific characteristics.

The planning and economics literature is inconclusive on the relative weight of site and structure characteristics in housing location choice. It is clear that travel time is an important variable that households consider when making a residential location choice.

Commuting trends

Hillsboro is part of the complex, interconnected economy of the Portland Region. Of the more than 65,000 people who work in Hillsboro, more than three-quarters of workers commute into Hillsboro from other areas, most notably Portland, Beaverton, and Aloha. More than 30,000 residents of Hillsboro commute out of Hillsboro for work, most frequently to Portland, Beaverton, and Tigard.

Hillsboro is part of an interconnected regional economy.
Fewer people both live and work in Hillsboro than commute into or out of the City.

Exhibit 53. Commuting Flows, Hillsboro, 2011
Source: US Census Bureau, Census On the Map.

About 21% of all people who work in Hillsboro also live in Hillsboro.

Exhibit 54. Places Where Hillsboro Workers Lived, 2011
Source: US Census Bureau, Census On the Map.

21%	13%	7%	6%
Hillsboro	Portland	Beaverton	Aloha

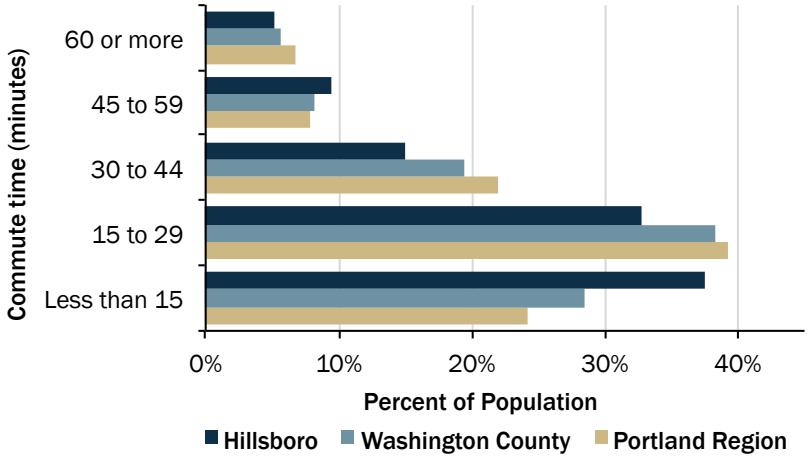
About 31% of residents who live in Hillsboro, also work in Hillsboro.

Exhibit 55. Places Where Hillsboro Residents were Employed, 2011
Source: US Census Bureau, Census On the Map.

31%	20%	11%	4%
Hillsboro	Portland	Beaverton	Tigard

Most Hillsboro residents have a commute time that takes less than 30 minutes.
About 70% of Hillsboro residents have commute times that are less than 30 minutes, and only 5% commute for longer than one hour.

Exhibit 56. Commute Time by Place of Residence, Hillsboro, Washington County, Portland Region, 2011
Source: US Census Bureau, 2013 ACS Table B08303.

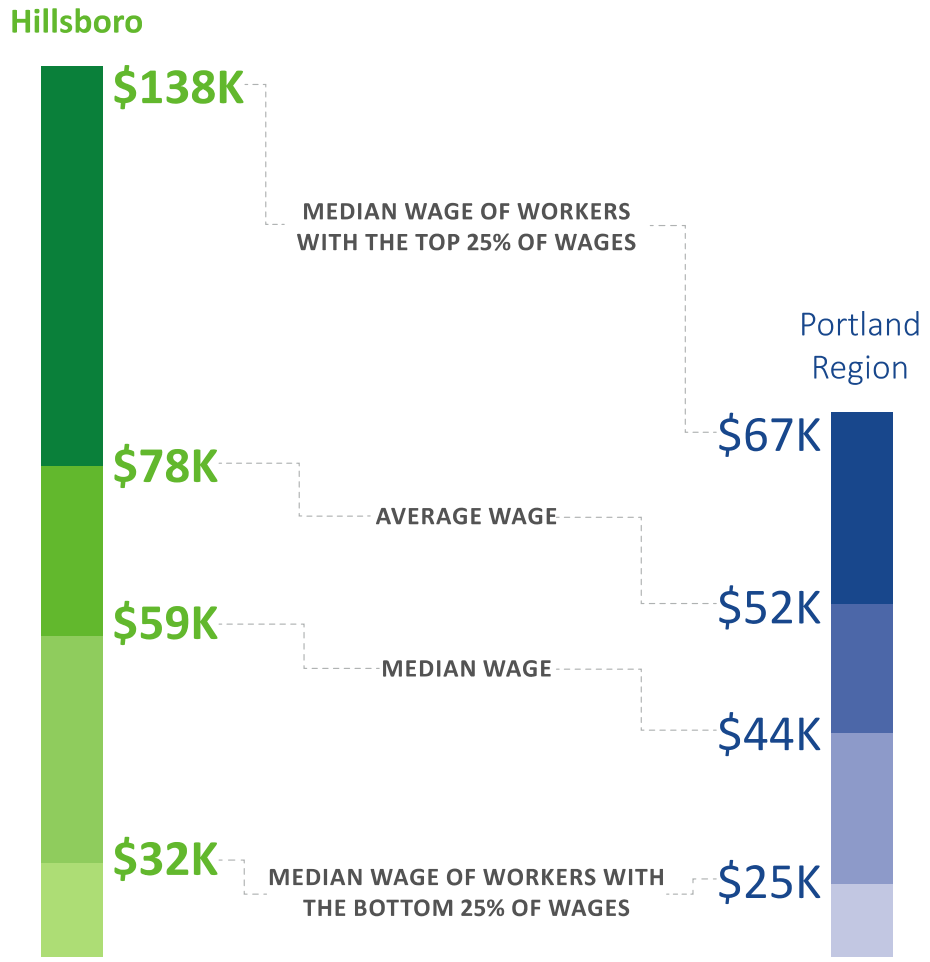


Income of Workers in Hillsboro

About one-fifth of people that work at businesses located in Hillsboro also live in Hillsboro. One of the City's residential policy objectives is to decrease commuting across the Portland Region by providing housing opportunities for people to both live and work in Hillsboro. This section provides information about the income of people who work in Hillsboro, which informs the type of housing needed by workers in Hillsboro.

The difference between the average and median pay, especially in Hillsboro, suggests that there is considerable variation in the distribution of pay among all workers. The analysis below shows that workers at businesses in Hillsboro generally receive higher pay than workers across the Portland Region. The difference is most distinct for the highest-wage workers.

Exhibit 57. Wages of Workers Employed at Businesses in Hillsboro and the Portland Region, 2014
Source: Oregon Employment Department, Quarterly Census of Employment and Wages; Analysis by ECONorthwest



The information below provides more details of the differences in wages of workers at Hillsboro's businesses and in the broader Portland Region.

Workers at businesses in Hillsboro have an average wage that is more $25,000 above the average wage for all workers in the Portland Region.

Exhibit 58. Average wage of workers employed at businesses in Hillsboro and the Portland Region, 2014
Source: Oregon Employment Department, Quarterly Census of Employment and Wages

$78,000
Hillsboro

$52,000
Portland Region

The median wage of workers at Hillsboro businesses is about $15,000 above the median wage for all workers in the Portland Region.

Exhibit 59. Median wage of workers employed at businesses in Hillsboro and the Portland Region, 2014
Source: Oregon Employment Department, Quarterly Census of Employment and Wages

$59,000
Hillsboro

$44,000
Portland Region

The lowest paid (bottom 25% of wages) workers in Hillsboro have a median wage that is about $7,000 above the wage for the lowest paid workers in the Portland Region.

Exhibit 60. Median wage of workers employed in the Bottom 25% of wage at businesses in Hillsboro and the Portland Region, 2014
Source: Oregon Employment Department, Quarterly Census of Employment and Wages

$32,000	$25,000
Hillsboro	Portland Region

The highest-paid (top 25% of wages) workers in Hillsboro have a median wage that more than double the wage of the highest-paid workers in the Portland Region.

Exhibit 61. Median wage of workers employed in the Top 25% of wage at businesses in Hillsboro and the Portland Region, 2014
Source: Oregon Employment Department, Quarterly Census of Employment and Wages

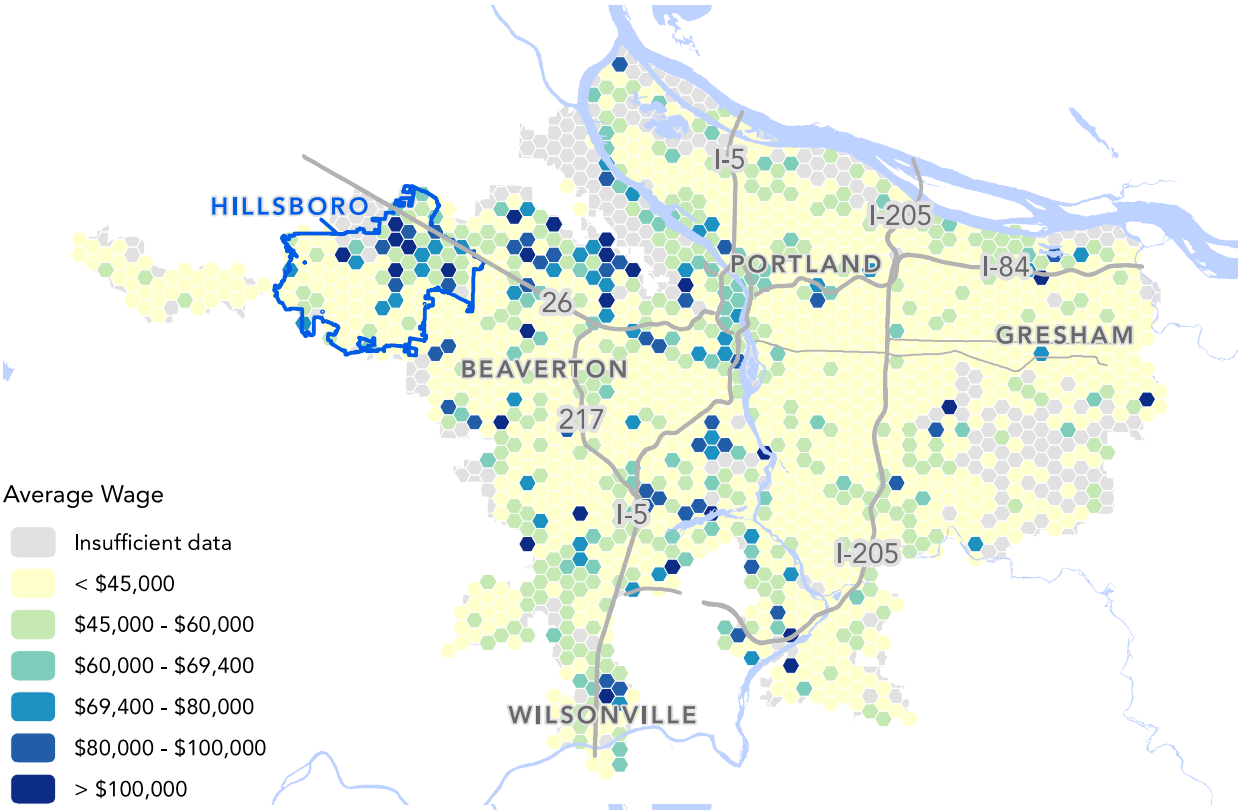
$138,000	$67,000
Hillsboro	Portland Region

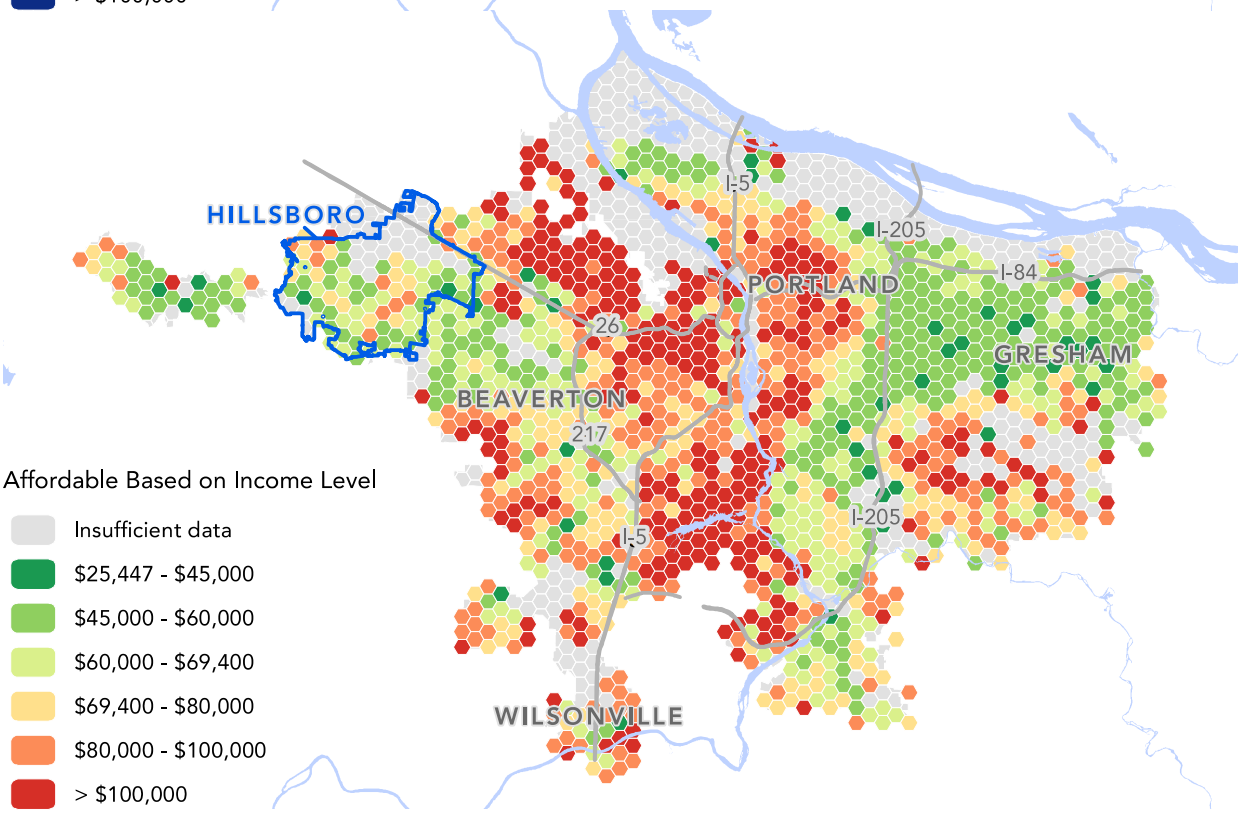
The maps in Exhibit 62 show the average wage and the income necessary to purchase a house. The median wage for workers in Hillsboro is generally higher than in most other parts of the Portland Region, with several areas showing an average wage of $80,000 and above. The level of income necessary to afford a house in much of Hillsboro is at or below the median family income in 2014.

Exhibit 62 illustrates that Hillsboro is part of a the Portland Region's housing market. While some households may continue to prefer to continue to work in businesses in Hillsboro and live in areas outside of Hillsboro, the City would like to provide opportunities for higher-wage households to live *and* work in Hillsboro. Providing these opportunities will require having land zoned to allow larger lots in single-family zones (e.g., 7,000 to 10,000 square foot lots), as well as opportunities for development of high amenity condominiums in urban settings, such as AmberGlen.

Exhibit 62. Comparison, Average Wage and Single-Family Affordability, 2014

Source: Oregon Employment Department, Quarterly Census of Employment and Wages; Metro RLIS, U.S. Department of Housing and Urban Development; Analysis by ECONorthwest





Regional and Local Trends in Housing Costs and Affordability

This section describes changes in sales prices, rents, and housing affordability in Hillsboro and across Portland Region since 2000.

Changes in housing costs

Hillsboro's housing sales prices are relatively low, with a median sales price in $255,000 in 2014, compared to those in Washington County and other cities in the Portland Region. In general, Hillsboro's housing prices changed with changes in housing price throughout the region, generally staying below housing prices in cities like Portland, Tualatin, Wilsonville, or Lake Oswego.

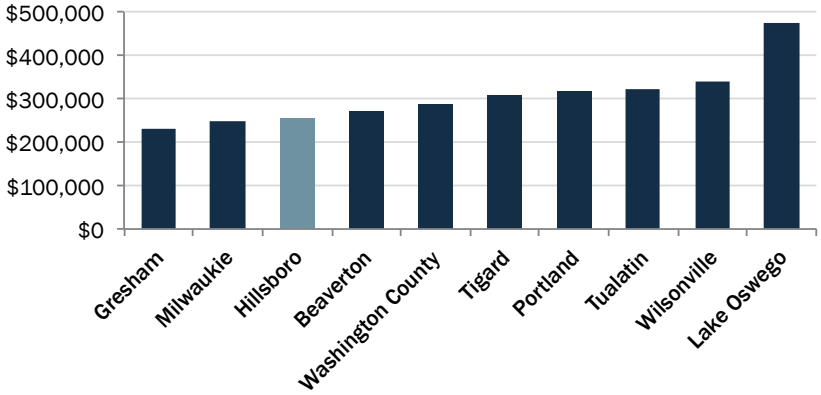
Hillsboro's median home sales price was below the average in Washington County.

Exhibit 63. Median Home Sale Price, Hillsboro, Beaverton, Gresham, Portland, Washington County, 2014
Source: RMLS

$255K	$286K	$270K	$317K	$223K
Hillsboro	Washington County	Beaverton	Portland	Gresham

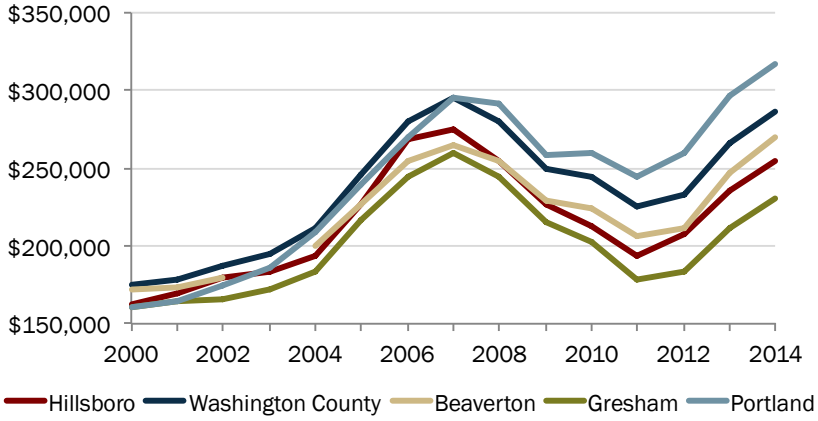
Hillsboro's median home sale price was lower than most comparable cities in the Region.

Exhibit 64. Median Sales Price, Hillsboro-area Geographies, 2014
Source: RMLS.



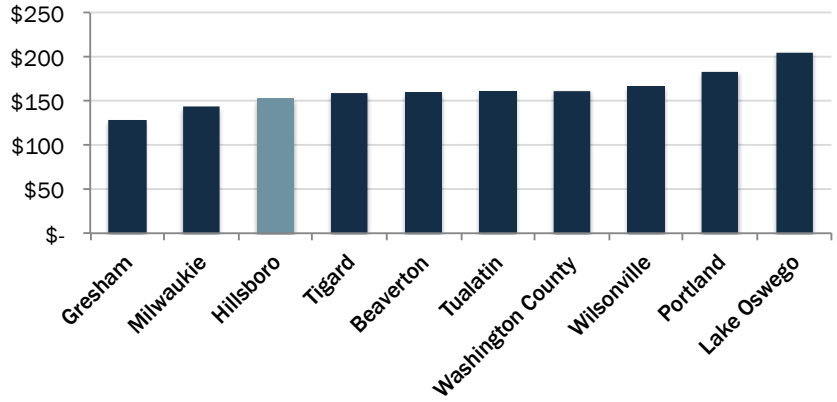
Median home sales prices in Hillsboro and across the Portland region peaked in 2007 decreased with the national housing market recession.
Median sales prices in Hillsboro were below the 2007 peak in 2014, as were the prices in most other cities in the region, except for Portland.

Exhibit 65. Median Sales Price, Hillsboro, Beaverton, Gresham, Portland, Washington County, 2000-2014
Source: RMLS.



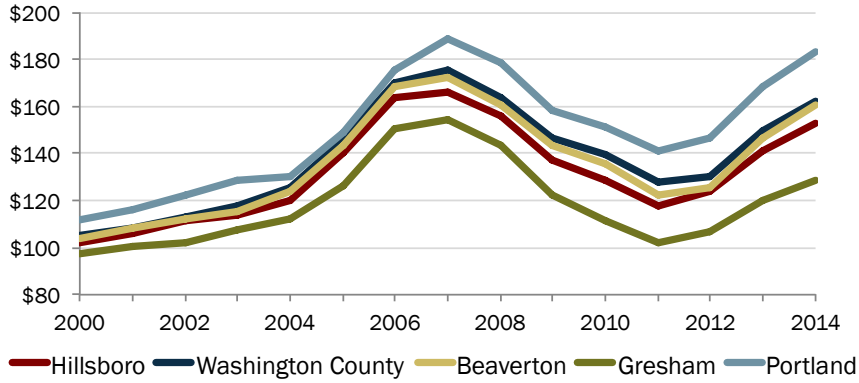
Hillsboro's median home sale price per square foot of built space was lower than most comparable cities in the Region.
In 2014, Hillsboro's median home sale price per square foot was $153.

Exhibit 66. Median Sales Price per Square Foot, Hillsboro-area Geographies, 2014
Source: RMLS.



Hillsboro's median sales price per square foot have grown since the recession, but remain slightly below the pre-recession peak.
In 2014, Hillsboro prices had risen to $153/SF, slightly below the previous peak of $166/SF.

Exhibit 67. Median Sales Price per Square Foot, Beaverton, Gresham, Hillsboro, Portland, Washington County, 2000-2014
Source: RMLS



Housing costs have increased faster than income since 2000.
The median value of a house in Hillsboro was 3.2 times the median household income in 2000 and 3.8 by the 2009-2013 period. The change in housing value compared to income was a little smaller in Hillsboro than Washington County.

Exhibit 68. Ratio of Housing Value to Income (Median to Median), 2000 to 2009-13[20]
Source: US Census Bureau, 2000 Decennial Census, Tables HCT012 and H085, and 2013 ACS, Tables B19013 and B25077

2000	3.2 Hillsboro	3.5 Washington County
2009-13	3.8 Hillsboro	4.4 Washington County

[20] This ratio compared the median value of housing in Hillsboro to the median household income. Inflation-adjusted median owner values in Hillsboro increased from $229,203 in 2000 to $230,400 in 2009-13. Over the same period, median income decreased from $72,117 to $61,073.

The analysis above describes housing prices in Hillsboro's entire housing market and their changes over time. The analysis below considers the lower and higher ends of Hillsboro's housing market in comparison to the entire Portland Region. It is based on housing sales over three years, 2012 through 2014. It considers sales prices for housing with sales prices in the bottom quarter of the housing market (the lowest priced housing) and housing prices in the top quarter of the housing market (the highest priced housing).

The median sales prices for the lowest cost housing in Hillsboro was $15,000 lower the Portland Region's median.

Exhibit 69. Median Home Sale Price for Homes with a Sales Price in the Bottom 25% of Sales Prices, Hillsboro and Portland Region, 2012-2014
Source: RMLS

$185K	$200K
Hillsboro	Portland Region

The median sales price for the highest cost housing in Hillsboro was $90,000 lower than the Portland Region's median.

Exhibit 70. Median Home Sale Price for Homes with a Sales Price in the Bottom 25% of Sales Prices, 2012-2014
Source: RMLS

$290K	$380K
Hillsboro	Portland Region

Rental Costs

Rent costs are relatively high in Hillsboro, compared to Washington County and other comparable cities in the Portland Region.

Median contract rent for in Hillsboro is about $926.

Exhibit 71. Median Contract Rent, 2013
Source: US Census Bureau, 2013 ACS Table B25058

$926	$872
Hillsboro	Washington County

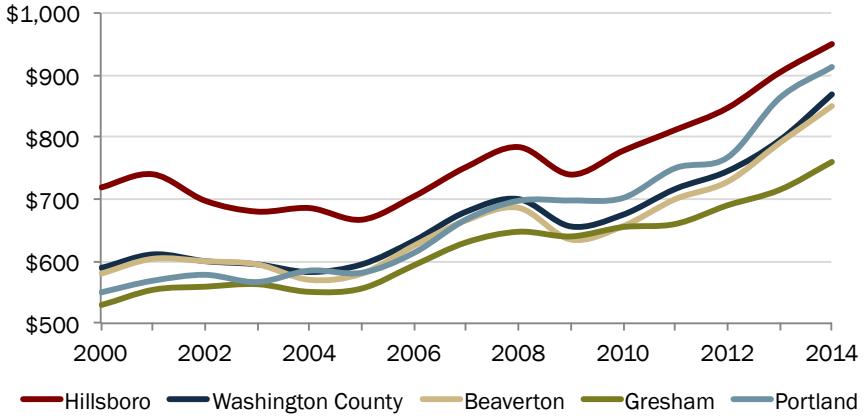
Median rent for a one-bedroom apartment in Hillsboro is about $950.

Exhibit 72. Median Rent, 1-Bedroom Units, Hillsboro-area Geographies, 2014
Source: REIS

$950	$850	$760	$913	$869
Hillsboro	Beaverton	Gresham	Portland	Washington County

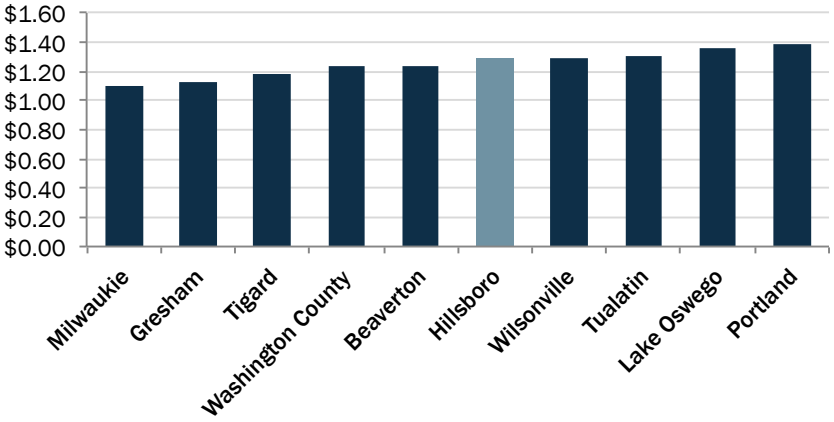
Hillsboro's median rent for a one-bedroom unit has historically been higher than other larger cities in the Region.

Exhibit 73. Median Rent, 1-Bedroom Units, Hillsboro-area Geographies, 2000-2014
Source: REIS



Hillsboro's median rent per square foot for a one-bedroom unit is about $1.29.
In comparison, median rent per square foot in Washington County as a whole is about $1.23.

Exhibit 74. Median Rent per square foot, 1-Bedroom Units, Hillsboro-area Geographies, 2014
Source: REIS



Median rent for a two-bedroom apartment in Hillsboro is about $1,143.

Exhibit 75. Median Rent, 2-Bedroom Units, Hillsboro-area Geographies, 2014

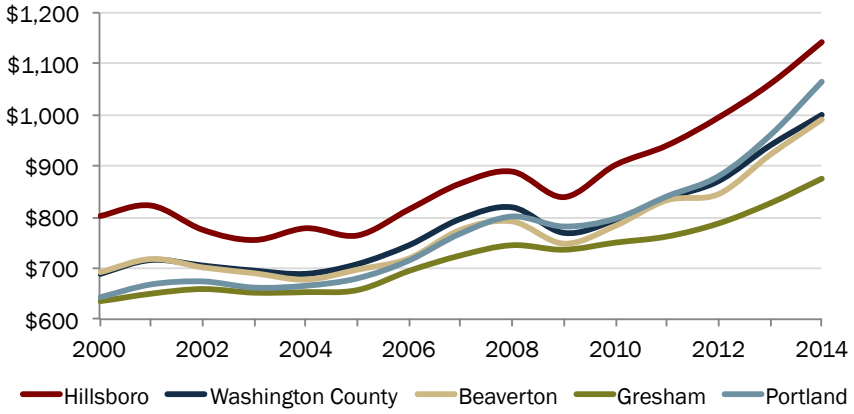
Source: REIS

$1,143	$991	$875	$1,065	$1,000
Hillsboro	Beaverton	Gresham	Portland	Washington County

Hillsboro's median rent for a two-bedroom unit has historically been higher than other larger cities in the Region.

Exhibit 76. Median Rent, 2-Bedroom Units, Hillsboro-area Geographies, 2000-2014

Source: REIS

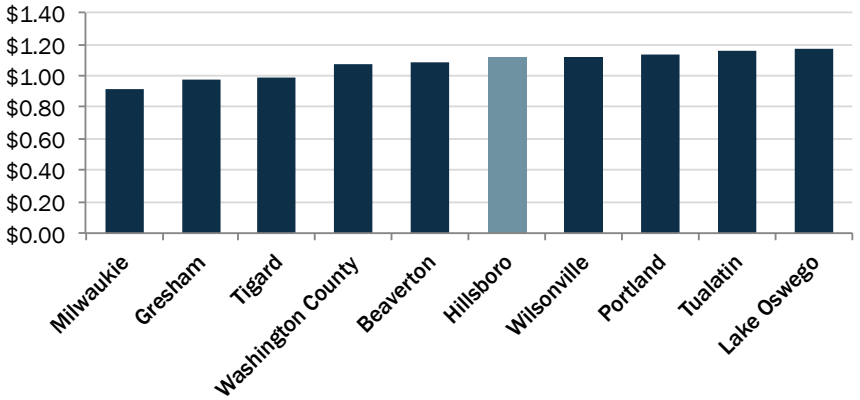


Hillsboro's median rent per square foot for a two-bedroom unit is about $1.12.

In comparison, median rent per square foot in Washington County as a whole is about $1.07.

Exhibit 77. Median Rent per square foot, 2-Bedroom Units, Hillsboro-area Geographies, 2014

Source: REIS



Housing Affordability

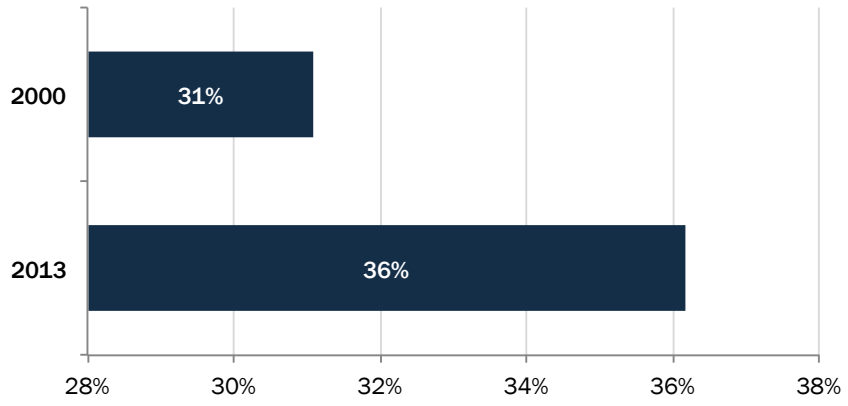
A typical standard used to determine housing affordability is that a household should pay no more than a certain percentage of household income for housing, including payments and interest or rent, utilities, and insurance. HUD guidelines indicate that households paying more than 30% of their income on housing are experiencing "cost burden," and households paying more than 50% of their income on housing are experiencing "severe cost burden." Using cost burden as an indicator is consistent with the Goal 10 requirement to provide housing that is affordable to all households in a community.

More than one-third of Hillsboro's households are cost burdened. Half of renter households are cost burdened, compared with 22% of homeowners. Cost burden rates in Hillsboro are consistent with those across the Portland Region for renter households and a smaller percentage of owner-occupied households in Hillsboro are cost burdened than in the Portland Region.

Cost Burden

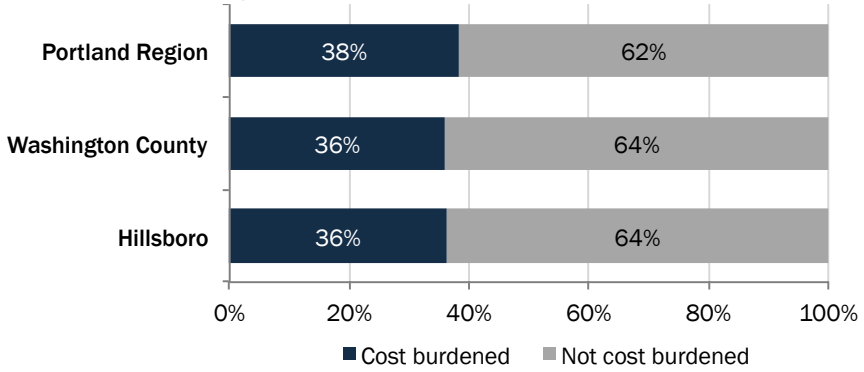
The percentage of cost burdened households in Hillsboro increased from 31% to 36% from 2000 to 2013.
The 5% increase was smaller than in Washington County (6%), Beaverton (6%), Gresham (9%), and Portland (6%).

Exhibit 78. Housing Cost Burden, Hillsboro, 2000-2013
Source: US Census Bureau, 2000 Decennial Census Tables H069 and H094, 2013 ACS Tables B25091 and B25070.



More than a third of all households in Hillsboro are cost burdened.
The percentages of cost burdened households in Washington County and Hillsboro are slightly lower than that of the Portland Region as a whole.

Exhibit 79. Housing Cost Burden, Portland Region, Washington County, Hillsboro, 2013
Source: US Census Bureau, 2013 ACS Tables B25091 and B25070.

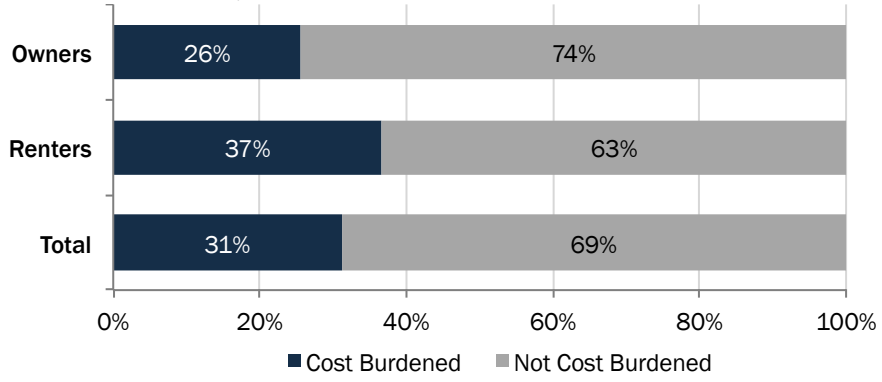


Cost burden varies by tenure, with renters cost burdened more frequently than homeowners. One reason for higher cost burden rates among renters is that renters are more likely to have lower incomes, on average, compared to homeowners. Renters generally have less income available to spent on housing than homeowners.

In 2000, 26% of homeowners were cost burdened, compared to 37% of renters, and 31% of all households.

Exhibit 80. Housing Cost Burden by Tenure, Hillsboro, 2000

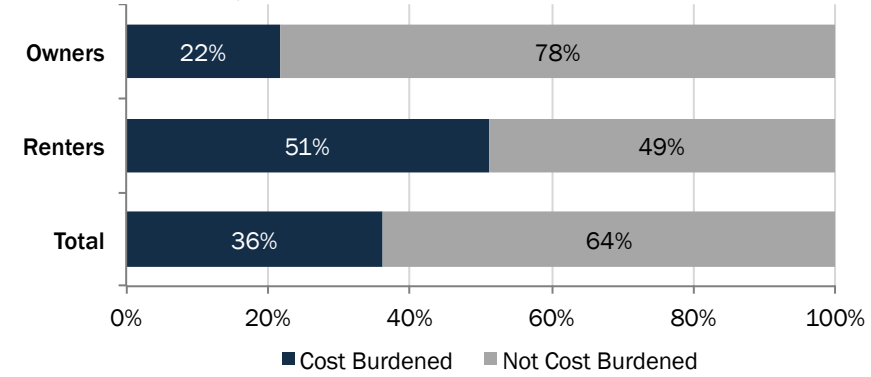
Source: US Census Bureau, 2013 ACS Tables B25091 and B25070.



In 2013, about 22% of owners were cost burdened while more than half of renters were cost burdened.

Exhibit 81. Housing Cost Burden by Tenure, Hillsboro, 2013

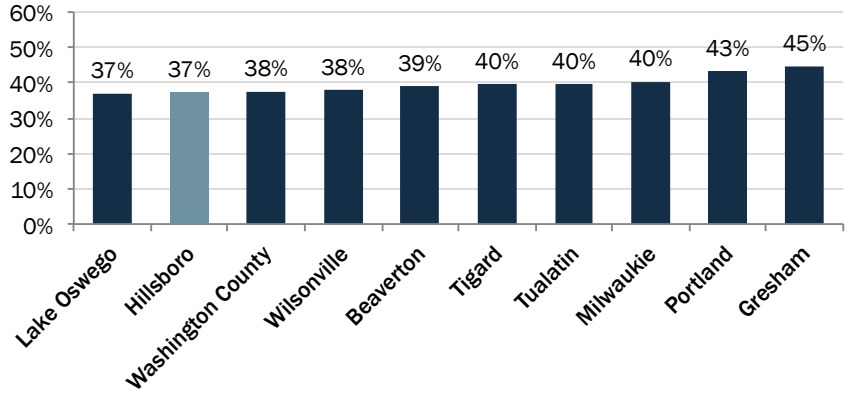
Source: US Census Bureau, 2013 ACS Tables B25091 and B25070.



Hillsboro's percentage of cost-burdened homes is below that of Washington county, Portland, and Beaverton, among the other comparable geographies shown.

Exhibit 82. Housing Cost Burden, Hillsboro-area Geographies, 2009-2013

Source: US Census Bureau, 2009-13 ACS Tables B25091 and B25070.
Note: This chart uses 5-year ACS data, rather than 1-year data used elsewhere.



Another measure of cost burden is considering housing costs plus transportation costs. When examining housing and transportation cost burden, a household is considered cost burdened if they spend more than 45% of gross income on housing and transportation costs combined. Metro's 2*015 Metro Urban Growth Report* contains extensive of housing and transportation cost burden. Metro's analysis divides Hillsboro into North Hillsboro and South Hillsboro.

Hillsboro-area residents spend on average between 41% and 43% of their income on transportation.
Compared to the UGB, Hillsboro residents spend a slightly higher percentage of their income.

Exhibit 83. Average Cost of Transportation and Housing as a Percent of Income, North and South Hillsboro, and the Metro Urban Growth Boundary, 2010 and 2035 [21]
Source: 2015 Metro Urban Growth Report, Appendix 12,

2010	41% $2,053 per month North Hillsboro	43% $2,096 per month South Hillsboro	39% $2,300 per month Metro UGB
2035	37% $1,878 per month North Hillsboro	40% $1,975 per month South Hillsboro	35% $2,050 per year Metro UGB

About 14% of Hillsboro-area households are cost burdened, when including both housing and transportation costs, compared to 17% of households in the Metro UGB.
When considering both housing and transportation, Metro defines cost burdened households as those that spend more than 45% of their income on housing plus transportation.

Exhibit 84. Percent of Households with Housing and Transportation Cost Burden, North and South Hillsboro and the Metro Urban Growth Boundary
Source: 2015 Metro Urban Growth Report, Appendix 12,

2010	14% 3,080 households North Hillsboro	14% 3,012 households South Hillsboro	17% 104,100 households Metro UGB
2035	12% 3,107 households North Hillsboro	10% 2,450 households South Hillsboro	15% 119,300 households Metro UGB

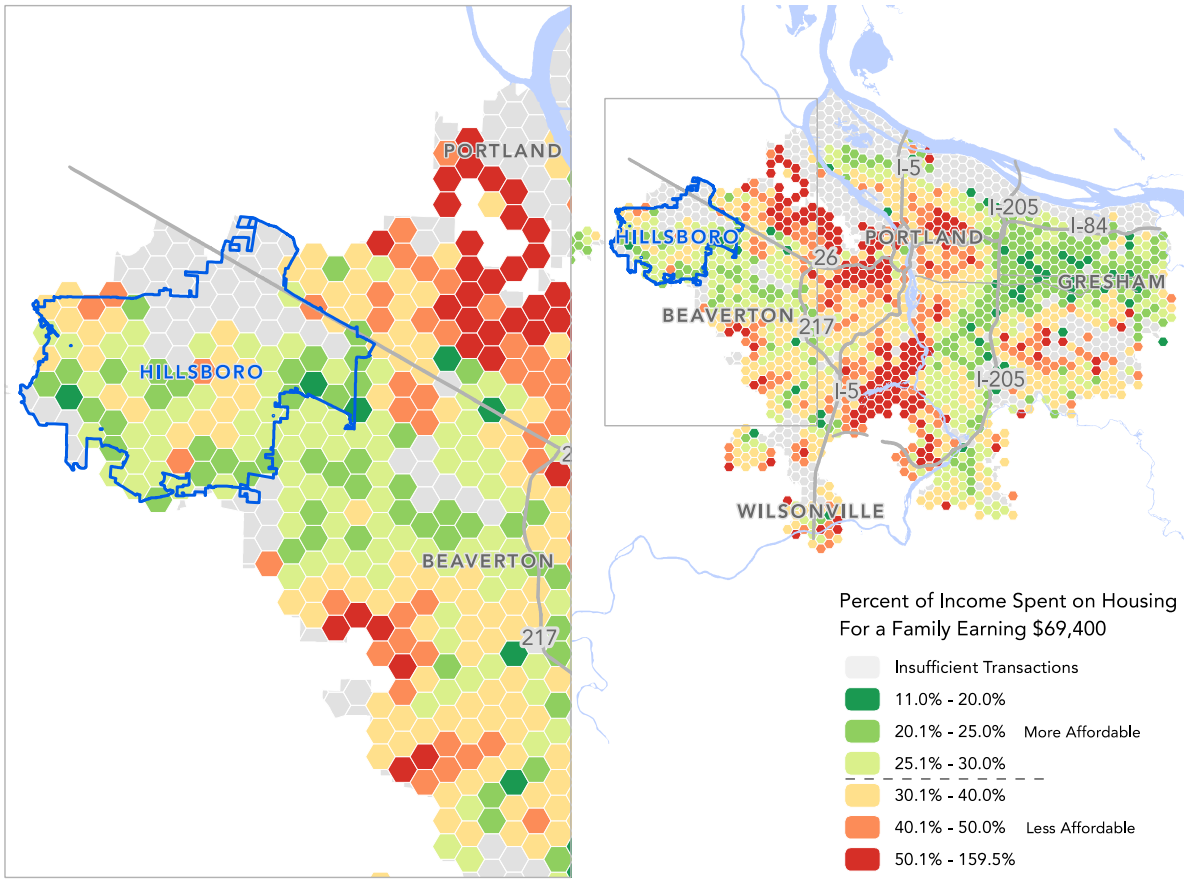
[21] 2035 estimates use Metro's Medium Growth forecast.

Single-Family Housing Affordability and Cost Burden

Exhibit 85 shows housing affordability for single-family housing for a family of four earning the Portland Region's Median Family Income ($69,400) in 2014. Single-family housing affordability is based on a number of factors in addition to the actual sales price for a home. The factors include the household's income, the down payment required, and current interest rates. Areas shaded in green are considered affordable for these households, with households spending less than 30% of their income on housing costs.

Exhibit 85 shows that Hillsboro is relatively affordable, compared to other parts of the Portland Region.

Exhibit 85. Percent of Income Spent on Housing for a Family Earning $69,400 in 2014
Source: ECONorthwest, Metro RLIS, U.S. Department of Housing and Urban Development



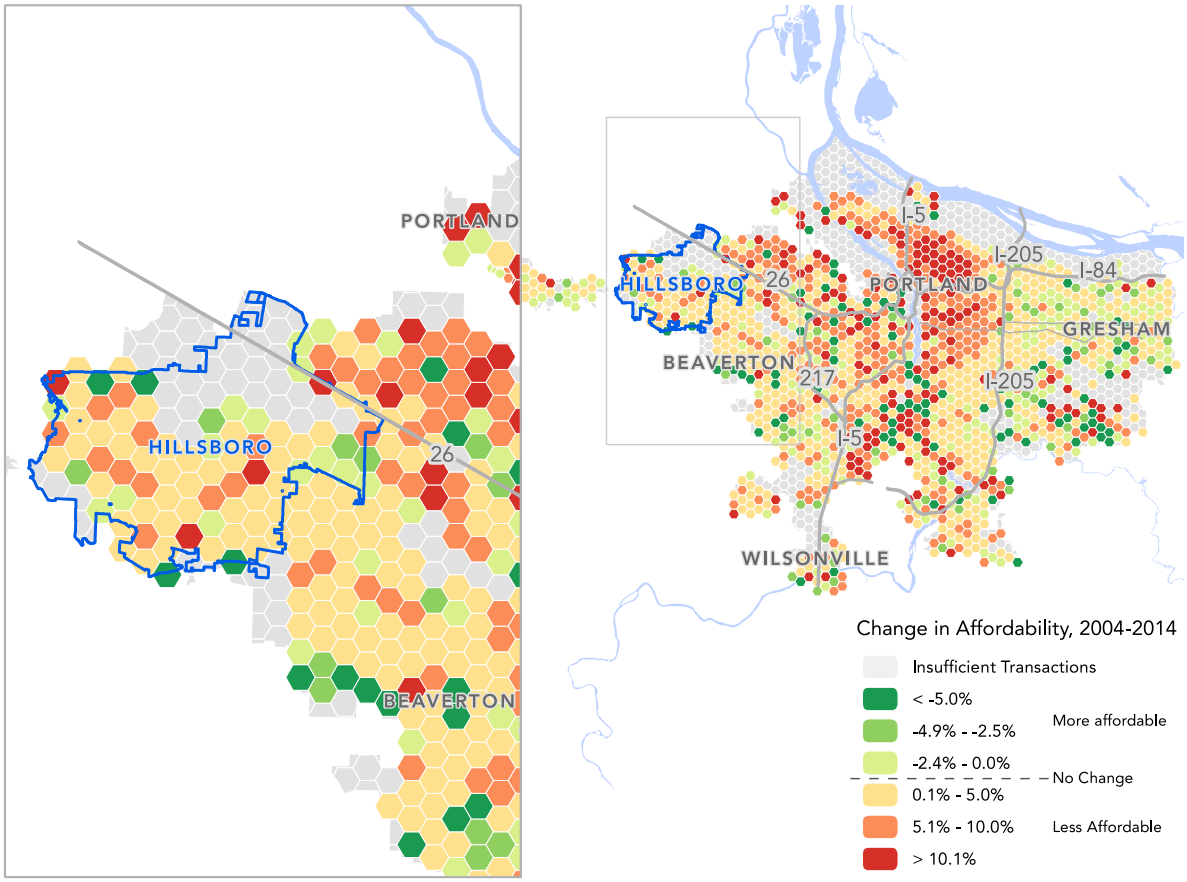
Source: ECONorthwest, Metro RLIS, US Department of Housing and Urban Development

Exhibit 86 shows change in the share of median family income needed to own a single-family home over the 2004-2014 period. For example, an increase of five percent indicates that a household earning the median income that spent 30% of their income on housing costs 2004 would be spending 35% of their income if they were to buy the same house in 2014.

Housing has generally become less affordable throughout the Portland Region between 2004 to 2014, with single-family housing prices growing faster than income. In most parts of Hillsboro, housing became less affordable but with a relatively small decrease in affordability compared to areas such as Portland (especially the city center), Lake Oswego, and Bethany.

Exhibit 86. Change in Affordability, 2004 to 2014

Source: ECONorthwest, Metro RLIS, U.S. Department of Housing and Urban Development

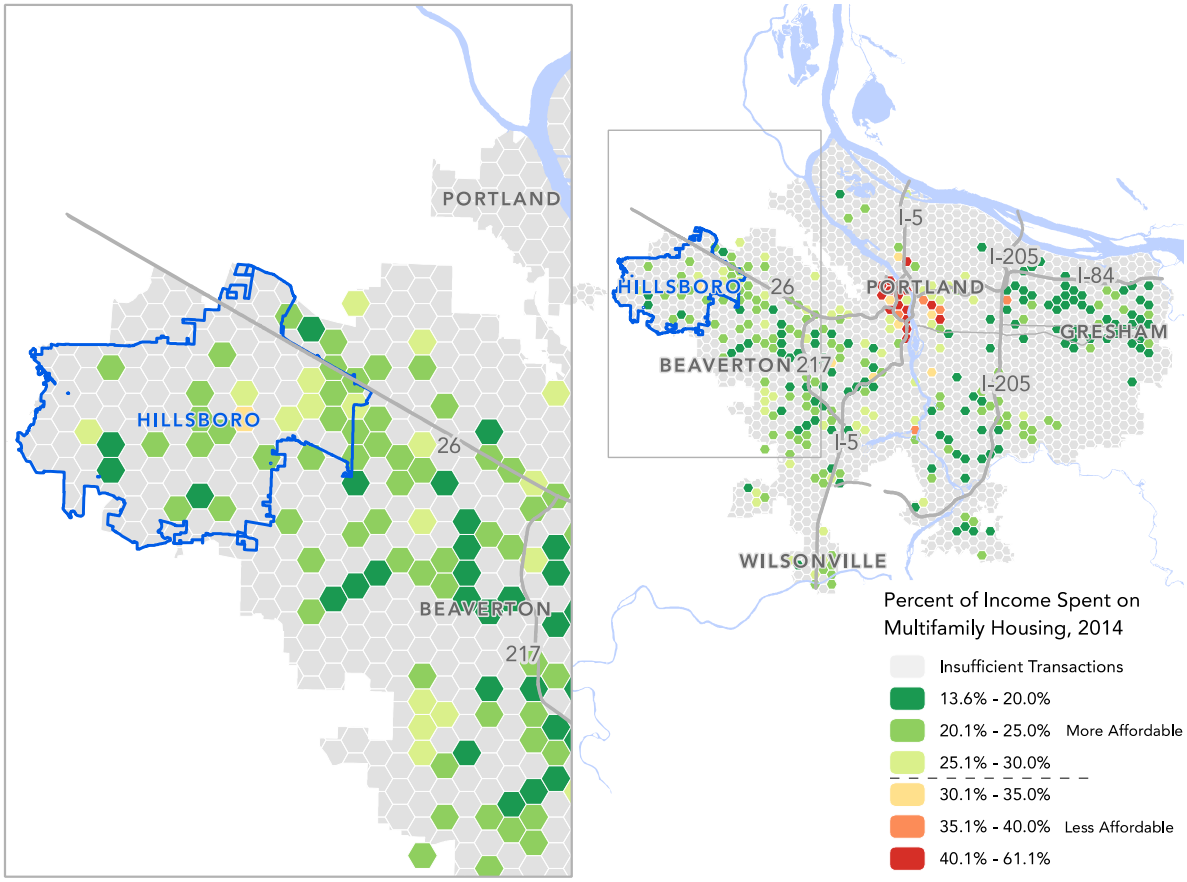


Source: ECONorthwest, REIS, Metro RLIS, US Census, US Department of Housing and Urban Development

Multifamily Housing Affordability and Cost Burden

Exhibit 85 shows the percent of household income for a family of three ($62,460 in 2014) spent on two-bedroom apartments in areas with existing multifamily housing. Overall, multifamily apartments are more affordable to households earning the regional median family income than buying a home. Hillsboro is relatively affordable for renting a two-bedroom apartment. Portland is the most expensive area in the region.

Exhibit 87. Percent of Income Spent on Housing for a Family Earning $69,400 in 2014
Source: ECONorthwest, Metro RLIS, U.S. Department of Housing and Urban Development

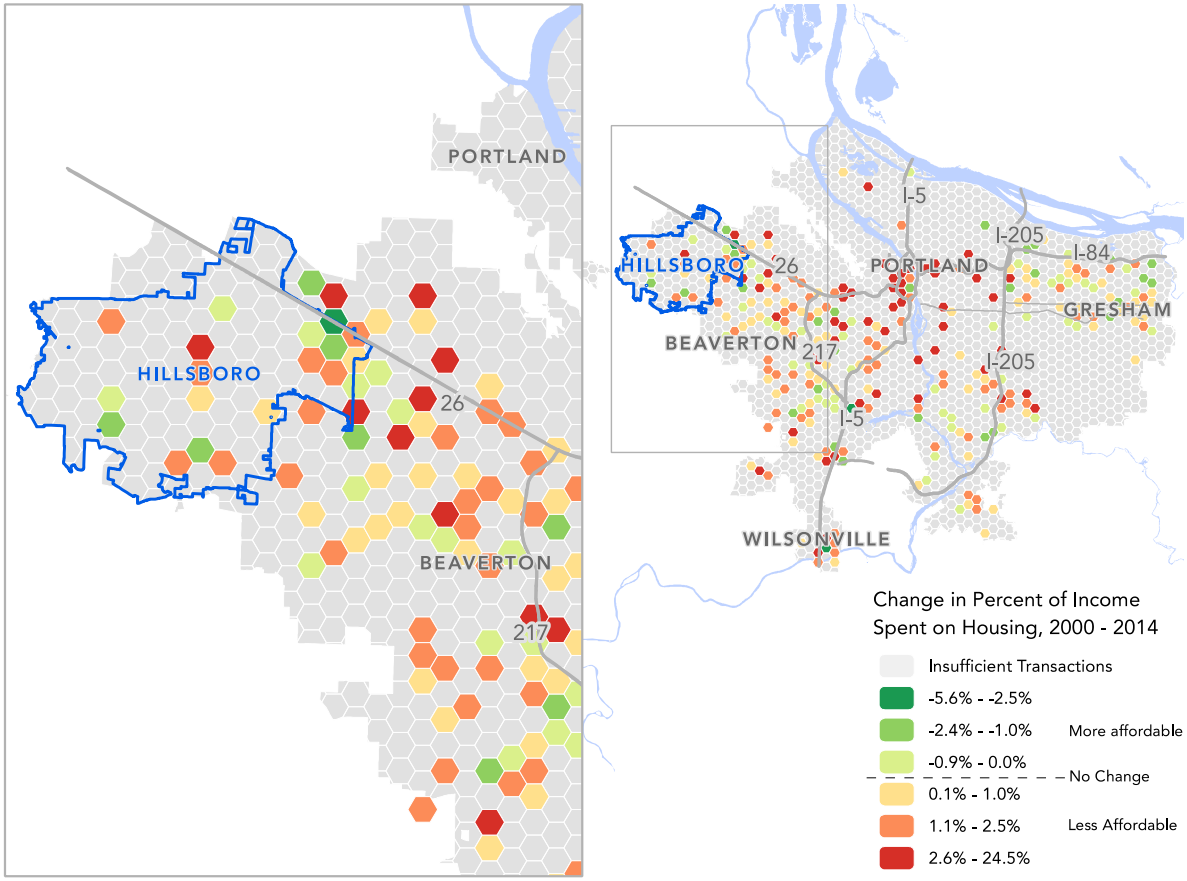


Source: ECONorthwest, REIS, Metro RLIS, US Department of Housing and Urban Development

Exhibit 86 shows that a two-bedroom apartment has become less affordable for a family of three between 2000 and 2014. Change in multifamily affordability in Hillsboro has been mixed, with some areas becoming more affordable and others becoming less affordable.

Exhibit 88. Change in Affordability, 2000 to 2014

Source: ECONorthwest, Metro RLIS, U.S. Department of Housing and Urban Development



Source: ECONorthwest, REIS, Metro RLIS, US Department of Housing and Urban Development

While cost burden is a common measure of housing affordability, it does have some limitations. Two important limitations are:

- A household is defined as cost burdened if the housing costs exceed 30% of their income, regardless of actual income. The remaining 70% of income is expected to be spent on non-discretionary expenses, such as food or medical care, and on discretionary expenses. Households with higher income may be able to pay more than 30% of their income on housing without impacting the household's ability to pay for necessary non-discretionary expenses.
- Cost burden compares income to housing costs and does not account for accumulated wealth. As a result, the estimate of how much a household can afford to pay for housing does not include the impact of accumulated wealth on a household's ability to pay for housing. For example, a household with retired people may have relatively low income but may have accumulated assets (such as profits from selling another house) that allow them to purchase a house that would be considered unaffordable to them based on the cost burden indicator.

Cost burden is only one indicator of housing affordability. Another way of exploring the issue of financial need is to review housing affordability at varying levels of household income.

Fair Market Rent[22] for a 2-bedroom in Washington County apartment is $944.

Exhibit 89. HUD Fair Market Rent (FMR) by Unit Type, Washington County, 2015

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

$682	$793	$944	$1,391	$1,672
Studio	1-Bedroom	2-Bedroom	3-Bedroom	4-Bedroom

A household must earn at least $18.08 per hour to afford a two-bedroom unit in Washington County.

Exhibit 90. Affordable Housing Wage, Washington County, 2015

Source: U.S. Department of Housing and Urban Development; Oregon Bureau of Labor and Industries

$18.15/hour

Affordable Housing Wage for two-bedroom Unit in Washington County

[22] Fair Market Rent is determined by the U.S. Department of Housing and Urban Services (HUD). It is the 40th percentile of gross rents for typical, non-substandard rental units occupied by recent movers in a local housing market.

One way to evaluate housing affordability is to consider the types of housing affordable at different levels of income. The median family income (MFI)[23] in the Portland Region (including Washington County) was $73,900 in 2015.

More than one-quarter of Hillsboro households have income of less than $36,950 and cannot afford a two-bedroom apartment at Washington County's Fair Market Rent (FMR) of $944. Given that rent is on average higher in Hillsboro than Washington County, the rent on a two-bedroom apartment may be above the County's Fair Market Rent estimate.

Exhibit 91. Financially Attainable Housing, by Median Family Income (MFI) for Washington County ($73,900), Hillsboro, 2015

Source: U.S. Department of Housing and Urban Development
US Census Bureau, 2013 ACS Table B19001

% of WA Co. MFI	<30%	30%-50%	50%-80%	80%-120%	>120%
Annual Income	<$22,170	$22,170-$36,950	$36,950-$59,120	$59,120-$88,680	> $88,680
Monthly Affdble. Housing Cost	<$554	$554-$923	$923-$1,478	$1,478-$2,217	> $2,217
Percent of Hillsboro House-holds	16%	11%	22%	18%	33%
Attainable Owner Housing Types	None	Mfg. in parks	Townhome Duplex Mfg on lot	Townhome Single-family house	All housing types
Attainable Renter Housing Types	Subsidized Apartment	Apartment Mfg. in parks Duplex	Apartment Townhome Single-family house	Most Single-family houses	All housing types

[23] HUD determines the median family income (MFI) in each county or urban areas of the nation.

The following table compares the income of households in Hillsboro with housing available and affordable in each income range, based on Census data.

Hillsboro currently has a deficit of housing affordable to households earning less than $25,000 and for households earning more than $100,000 per year. The deficit of housing for households earning less than $25,000 results in these households living in housing that is more expensive than they can afford, consistent with the data about renter cost burden in Hillsboro.

The deficit for housing for households earning more than $100,000 suggests that some high-income households could afford more expensive housing, either by choice or because higher cost (and higher amenity) housing is not available in Hillsboro.

Exhibit 92. Rough Estimate of Housing Affordability, Hillsboro, 2015
Source: US Census Bureau, 2011-2013 ACS Tables 19001, 25075, 25063

Annual Income	<$25K	<$25K-$50K	<$50K-$75K	<$75K-$100K	>$100K
HH in Hillsboro	5,730 17%	6,628 20%	6,850 21%	5,490 17%	8,552 26%
Est. of Number of Owner Units in Hillsboro	637	723	3,493	4,936	6,836
Est. of Number of Renter Units in Hillsboro	969	10,958	3,397	1,073	228
Does Hillsboro Have Enough Units?	**No Deficit: 4,124 units**	Yes Surplus: 5,052 units	Yes Surplus: 40 units	Yes Surplus: 519 units	**No Deficit: 1,488 units**

Summary of the Factors Affecting Hillsboro's Housing Needs

The purpose of the analysis thus far has been to provide background on the kinds of factors that influence housing choice, and in doing so, to convey why the number and interrelationships among those factors ensure that generalizations about housing choice are difficult to make and prone to inaccuracies.

There is no question that age affects housing type and tenure. Mobility is substantially higher for people aged 20 to 34. People in this age group will also have, on average, less income than people who are older. They are less likely to have children. All of these factors mean that younger households are much more likely to be renters, and renters are more likely to be in multifamily housing.

The data illustrate what more detailed research has shown and what most people understand intuitively: life cycle and housing choice interact in ways that are predictable in the aggregate; age of the household head is correlated with household size and income; household size and age of household head affect housing preferences; income affects the ability of a household to afford a preferred housing type. The connection between socioeconomic and demographic factors and housing choice is often described informally by giving names to households with certain combinations of characteristics: the "traditional family," the "never marrieds," the "dinks" (dual-income, no kids), the "empty nesters."[24] Thus, simply looking at the long wave of demographic trends can provide good information for estimating future housing demand.

One is ultimately left with the need to make a qualitative assessment of the future housing market. The following is a discussion of how demographic and housing trends are likely to affect housing in Hillsboro over the next 20 years:

- **Growth in housing will be driven by growth in population.** Between 2000 and 2014 Hillsboro's population (within its city limits) grew by more than 25,000 people (36%). The population in Hillsboro's city limits is expected to grow by 12,520 people (39%) between 2010 and 2035. In the areas outside the city limits but within the UGB, Hillsboro is expected to grow by 7,550 people and in areas outside the UGB, Hillsboro is expected to grow by 1,626 households.
- **On average, future housing will look a lot like past housing.** That is the assumption that underlies any trend forecast, and one that allows some quantification of the composition of demand for new housing.
- **Hillsboro will have demand for housing for higher-paid workers at businesses in Hillsboro.** Workers at businesses in Hillsboro have higher-than-average pay, when compared to the Portland Region. The highest-paid workers in Hillsboro earn more than twice the amount of the highest-paid workers across the Portland Region, as a result of the types of businesses that are located in Hillsboro. Housing sales prices in Hillsboro are lower than the Portland Region averages.

[24] See *Planning for Residential Growth: A Workbook for Oregon's Urban Areas* (June 1997).

This combination of relatively high wages, relatively low housing prices, and high commuting rates (only 20% of workers in Hillsboro live in Hillsboro) suggest that Hillsboro's housing market lacks housing that meets the preferences of higher-paid workers. Discussions with developers working in Hillsboro support this conclusion. Developers of single-family housing identified the lack of lots larger than 5,000 square feet (and preferably larger than 7,000 square feet) as an unmet need in Hillsboro's housing market.

- **Hillsboro will have demand for additional smaller units and more diverse housing types.** The demographic trends suggest that there will be an increase in demand for more affordable housing, such as smaller average house and lot sizes for single-family housing.

  Key demographic and economic trends that will affect Hillsboro's future housing needs are: (1) the aging of the Baby Boomers, (2) aging of the Millennials, (3) continued growth in Hispanic and Latino population, and (4) providing housing opportunities for high-income workers in Hillsboro as a way to decrease commuting.

  - *The Baby Boomer's population is continuing to age.* By 2035, people 60 years and older will account for 24% of the population in Washington County (up from 15% in 2010). As that population ages, household sizes decrease and homeownership rates decrease.
  - *Millennials will continue to age.* By 2035, Millennials will be roughly between about 35 years old to 55 years old. As they age, generally speaking, their household sizes will increase and homeownership rates will peak by about age 55. Between 2016 and 2036, Millennials will be a key driver in demand for housing for families with children.
  - *Hispanic and Latino population will continue to grow.* The U.S. Census projects that by about 2040, Hispanic and Latino populations will account for one-quarter of the nation's population. The share of Hispanic and Latino populations in the western U.S. is likely to be higher. Hispanic and Latino populations already account for more than one quarter of Hillsboro's population. In addition, Hispanic and Latino populations are generally younger than the U.S. average, with many Hispanic and Latino people belonging to the Millennial generation.

    Hispanic and Latino population growth will be an important driver in growth of housing demand, both for owner- and renter-occupied housing. Growth in Hispanic and Latino populations will drive demand for housing for families with children. Given the lower income for Hispanic and Latino households, especially first-generation immigrants, growth in this group will also drive demand for affordable housing, both for ownership and renting.
  - *Housing demand will continue for higher-paid workers in Hillsboro.* About 80% of people who work at businesses in Hillsboro live outside of the City, in areas like Portland, Beaverton, Bethany, and unincorporated parts of Washington County. The median pay of workers at businesses in Hillsboro is about 30% higher the Portland Region's median. The highest-paid workers at businesses in Hillsboro

earn more than twice what workers at businesses across the Portland Region earn.

The median sales price of housing in Hillsboro is about 20% below the median sales price for housing across the Portland Region (about $68,000 lower). For the highest cost housing, the median sales price in Hillsboro is 25% below the Portland Region's median sales price (nearly $100,000 lower).

The high rates of commuting, higher wages of people who work in Hillsboro, and comparatively low housing sales price suggest that there is need for housing that meets the preferences of households with higher income. In general, higher cost housing is housing with a larger lot, a larger unit, and/or higher-cost finishings.

In summary, an aging population, increasing housing costs (although lower than in the Region), housing affordability concerns for Millennials and the Hispanic and Latino populations, and other variables are factors that support the conclusion of need for a smaller and less expensive units and a broader array of housing choices. Millennials and immigrants will drive demand for affordable housing types, including demand for small, affordable single-family units (many of which may be ownership units) and for affordable multifamily units (many of which may be rental units).

In addition, Hillsboro will need to provide opportunities for higher-amenity, higher-cost housing to meet the housing needs and preferences of people who work in Hillsboro but choose not to live in Hillsboro. The housing affordable to these higher-paid workers would generally cost between $400,000 to $600,000.

- **No amount of analysis is likely to make the distant future completely certain: the purpose of the housing forecasting in this study is to get an approximate idea about the future so policy choices can be made today.** Economic forecasters regard any economic forecast more than three (or at most five) years out as highly speculative. At one year, one is protected from being disastrously wrong by the sheer inertia of the economic machine. But a variety of factors or events could cause growth forecasts to be substantially different.

5. Conclusions

This chapter includes a projection of Hillsboro's housing needs for the next 20 years and a comparison of this projection to the capacity of housing in Hillsboro's buildable lands to determine whether Hillsboro has enough residential capacity to accommodate growth over the 2016 to 2036 period. This chapter presents conclusions about Hillsboro's housing needs based on the findings of the Housing Needs Analysis.

Project New Housing Units Needed in the Next 20 Years

The results of the Housing Needs Analysis are based on: (1) the Metro forecast for new dwelling units in Hillsboro over the 20-year planning period, (2) information about Hillsboro's housing market relative to the Portland Region, and (3) the demographic composition of Hillsboro's existing population and the expected long-term changes in the demographics of the Portland Region.

Metro's forecast for household growth

The Housing Needs Analysis in this chapter is based on a coordinated population forecast from Metro (the adopted November 2012 "Gamma" forecast), which is a necessary prerequisite to estimate housing needs. Since the development of Metro's "Gamma" forecast, changes have occurred in Hillsboro, within the Metro UGB, and around the Metro UGB. The most significant change was the passage of House Bill 4078, which brought a new urban area into the Metro UGB around Hillsboro, and modified of Urban Reserve areas around Hillsboro.

The projection of household growth includes areas currently within the city limits, as well as areas currently outside of the city limits that the City expects to annex for residential uses. We have grouped these areas into three categories:[25]

- **Within Hillsboro city limits** is all areas within the existing city limits of Hillsboro.
- **South Hillsboro, outside of the city limits** refers to the portions of South Hillsboro that were outside of Hillsboro's city limits in August 2015 (but are expected to be annexed into Hillsboro in the future). A small part of South Hillsboro was within the city limits, as of August 2015.
- **Urban Reserves** are urban reserve areas outside of the Metro UGB that are expected to be brought into the UGB and annexed into Hillsboro in the future. These areas are Witch Hazel Village South and Bendemeer.

[25] Hillsboro staff worked with Metro's "Gamma" forecast TAZ allocation to estimate the number of households in Metro's forecast in each of these areas.

Metro's forecast shows growth forecasted to occur between 2010 and 2035.

The forecast shows that Hillsboro will grow by 12,520 households within its city limits and 7,467 households South Hillsboro outside of the city limits.

Urban Reserve areas are forecast to grow by 1,626 households.

Exhibit 93. Metro Forecast of Household Growth in and around Hillsboro, 2010 to 2035

Source: Metro "Gamma" Forecast, November 2012.

	2010 Households	2035 Households	Household Growth 2010-2035
Within Hillsboro city limits	32,495	45,015	12,520
South Hillsboro, outside of the city limits	202	7,669	7,467
Urban Reserves	290	1,916	1,626
Total	32,987	54,600	21,613

The planning period of the Hillsboro Housing Needs Analysis is 2016 to 2036. As a result, ECONorthwest estimated the number of households in each of these areas, using the following approaches and assumptions:

- **Within Hillsboro city limits.** The 2016 estimate of households is based on: (1) adding the number of building permits issued between 2010-2014 to the estimate of households in 2010[26] and (2) extrapolating the 2014 estimate of households to 2016 based on the forecast growth rate over the 2010-2035 period (1.3% average annual growth rate).

  The 2036 estimate was extrapolated by assuming that the number of households would grow by 1.3% per year (the forecast growth rate for 2010 to 2035) between 2035 and 2036.

- **South Hillsboro, outside of the city limits.** The 2016 estimate is the same as the 2010 estimate, based on the fact that few to no building permits were issued in these areas between 2010 and 2015, based on information from the City.

  The 2036 estimate is the same as the 2035 forecast, assuming that these areas may still be growing to reach the 2035 forecast.

- **Urban Reserves.** The 2016 estimate is the same as the 2010 estimate, based on the fact that few to no building permits were issued in these areas between 2010 and 2015, based on information from the City.

  The 2036 estimate is the same as the 2035 forecast, assuming that these areas may still be growing to reach the 2035 forecast.

[26] Hillsboro issued permits for 3,730 building permits between 2010 and 2014. Adding that to the 2010 estimate of households in the city limits results in a 2014 estimate of 36,225 dwelling units within Hillsboro's city limits.

Hillsboro's city limits and South Hillsboro are forecast to grow by a total of 16,040 households between 2016 and 2036. The Urban Reserves are forecast to have a small amount of growth, 1,626 households, over the 20-year period.

The forecast shows nearly equal growth within the city limits and in areas outside of the City and within the UGB.

The forecast assumes minimal growth in Urban Reserves.

Exhibit 94. Forecast of Household Growth, based on Metro's "Gamma" Forecast of Household Growth, Hillsboro area, 2016 to 2036

Source: Metro "Gamma" Forecast, November 2012.

	2016 Households	2036 Households	Household Growth 2016-2036
Within Hillsboro city limits	37,182	45,606	8,424
South Hillsboro, outside of the city limits	83	7,699	7,616
Urban Reserves	290	1,916	1,626
Total	37,555	55,221	17,666

The forecast assumes that Hillsboro's city limits and South Hillsboro will grow at an average annual growth rate of 1.8%, adding a total of 16,040 new households. In this analysis, we assume that each household will require one dwelling unit, resulting in growth of a total of 16,040 new dwelling units or 802 new units per year.

Between 2000 and 2014, the City of Hillsboro issued building permits for about 11,000 dwelling units, at an average annual growth rate of 2.5% or 790 dwelling units per year. During the same period, Hillsboro's population grew at a slightly slower 2.2% average annual growth rate. Based on this information, Metro projects that growth in Hillsboro will slow over the next 20 years, compared with the prior 14 years.

Metro's forecast for growth in the Urban Reserves assumes that these areas have little growth over the 20-year period, in large part because they will need to be brought into the Metro UGB, planned, and annexed before growth can begin in earnest. If Hillsboro continues to grow at historical rates of about 2.5% per year, the city would grow to 55,000 households by 2032, rather than 2036.

New housing units needed over the next 20 years

The allocation of new dwellings to housing type in Hillsboro is based on the requirement of OAR 660-007: *"Jurisdictions other than small developed cities must either designate sufficient buildable land to provide the opportunity for at least 50 percent of new residential units to be attached single family housing or multiple family housing or justify an alternative percentage based on changing circumstances."*

Exhibit 95 shows an allocation housing to housing types in the Hillsboro city limits and South Hillsboro (outside of the city limits) during the 2016 to 2036 period. This section does not forecast needed housing for the Urban Reserves, as these areas are currently outside of the Metro UGB. The mix of housing types in the Urban Reserves will be determined through concept planning.

The allocation of housing by housing type for the city limits and South Hillsboro (outside of the city limits) is based on the following assumptions:

- Metro's forecast for household growth shown in Exhibit 94 in each of the two areas.
- The assumptions about the mix of housing new housing in Hillsboro are:
  - Fifty percent of new housing will be single-family detached, a category which includes manufactured housing.
  - Seventeen percent of new housing will be single-family attached. This assumption is consistent with the amount of single-family attached housing developed in Hillsboro over the 2000 to 2014 period, which was 17% of new housing.
  - Thirty-three percent of new housing will be multifamily.

While the allocation of housing shown in Exhibit 95 evenly applies the same housing mix in each of the two areas, development in these areas is likely to have a different housing mix than the one shown below. It is reasonable to look at housing mix over the entire City of Hillsboro, rather than in sub-areas. Hillsboro's obligation is to provide "the opportunity for at least 50 percent of new residential units to be attached single family housing or multiple family housing."

Aside from areas within the city limits and within South Hillsboro, the other areas in Exhibit 95 are not currently planned.

Hillsboro's housing need is for 50% new single-family detached housing, 17% single-family attached housing, and 33% multifamily housing.

Exhibit 95. Forecast of new needed housing units, Hillsboro area, 2016 to 2036

Source: Metro "Gamma" Forecast, November 2012. Calculations by ECONorthwest.

	Mix of New Units	Within Hillsboro City Limits	South Hillsboro, outside of the city limits	Hillsboro Total (city limits and South Hillsboro)
Single-family detached	50%	4,212	3,808	8,020
Single-family attached	17%	1,432	1,295	2,727
Multifamily	33%	2,780	2,513	5,293
Total new dwelling units	100%	8,424	7,616	16,040

The forecast of new units does not include dwellings that will be demolished and replaced. This analysis does not factor those units in; it assumes they will be replaced at the same site and will not create additional demand for residential land.

Needed housing by income level

The next step of the Housing Needs Analysis is to develop an estimate of need for housing by income and housing type. This requires an estimate of the income distribution of current and future households in the community. These estimates presented in this section are based on (1) secondary data from the Census, and (2) analysis by ECONorthwest.

The analysis in Exhibit 96 is based on American Community Survey data about income levels in Hillsboro, using information shown in Exhibit 45. Income is categorized into market segments consistent with HUD income level categories, using Washington County's 2015 Median Family Income (MFI) of $73,900. Exhibit 96 is based on current household income distribution, assuming that approximately the same percentage of households will be in each market segment in the future.

Based on Hillsboro's household income distribution, about 27% of Hillsboro's households are low or very low-income, 22% are low-middle income, and 51% are high or upper-middle income.

Exhibit 96. Estimate of needed new dwelling units by income level, Within Hillsboro city limits and areas Outside of Hillsboro but within the UGB, 2016-2036

Source: U.S. Department of Housing and Urban Development
US Census Bureau, 2013 ACS Table B19001

% of WA Co. MFI	<30%	30%-50%	50%-80%	80%-120%	>120%
Annual Income	<$22,170	$22,170-$36,950	$36,950-$59,120	$59,120-$88,680	> $88,680
Percent of Hillsboro House-holds	16%	11%	22%	18%	33%
# of House-holds	2,561	1,776	3,497	2,965	5,242
Attainable Owner Housing Types	None	Mfg. in parks	Townhome Duplex Mfg on lot	Townhome Single-family house	All housing types
Attainable Renter Housing Types	Subsidized Apartment	Apartment Mfg. in parks Duplex	Apartment Townhome Single-family house	Most Single-family houses	All housing types

Hillsboro will have an ongoing need for housing affordable to lower income households. The housing need analysis and the related policy review demonstrate that the City is meeting its obligation to plan for needed housing types (as required by ORS 197.303) for households at all income levels. These policies include those that allow for development of a range of housing types (e.g., duplexes, manufactured housing, and apartments) and policies that support

government-subsidized housing. This conclusion is supported by the fact that Metro's 2012 *Compliance Report* concluded that Hillsboro was in compliance for the City's Title 1 (Housing Capacity) and Title 7 (Housing Choice) responsibilities.

Need for Government-assisted and Manufactured Housing

ORS 197.303 requires cities to plan for government-assisted housing, manufactured housing on lots, and manufactured housing in parks.

- **Government-subsidized housing.** Government-subsidies can apply to all housing types (e.g., single-family detached, apartments, etc.) Hillsboro allows development of government-assisted housing in all residential zones, with the same development standards for market-rate housing. This analysis assumes that Hillsboro will continue to allow government housing in all its residential zones. Because government-assisted housing is similar in character to other housing (with the exception of subsidies), it is not necessary to develop separate forecasts for government-subsidized housing.
- **Manufactured housing on lots.** Manufactured dwellings are permitted in any zone where single-family dwellings are allowed. The siting standards for manufactured dwellings on lots are the same for site-built housing, except that manufactured dwellings are not allowed to be placed adjacent to the City's Cultural Resource Inventory, on lots within the Community Residential-Downtown Neighborhood Conservation zone or the SCR-OTC Station Community Residential-Orenco Townsite Conservation zone, and manufactured dwellings are generally not allowed within the 100-year floodplain without special approval. Because manufactured homes are subject to the same siting requirements as site-built homes, it is not necessary to develop separate forecasts for manufactured housing on lots.
- **Manufactured housing in parks.** OAR 197.480(4) requires cities to inventory the mobile home or manufactured dwelling parks sited in areas planned and zoned or generally used for commercial, industrial or high-density residential development. According to the Oregon Housing and Community Services' Manufactured Dwelling Park Directory,[27] Hillsboro has eight manufactured dwelling parks located in zones including: MFR-1 Multi-Family Residential, MFR-2 Multi-Family Residential, Station Community Commercial-Downtown (SCC-DT), and Industrial General (I-G). Hillsboro only allows new manufactured home parks to site in MFR-1, a multifamily zone that allows a density of 11 to 16 dwelling units per net acre.

  ORS 197.480(2) requires Hillsboro to project the need for mobile homes or manufactured dwelling parks based on: (1) population projections, (2) household income levels, (3) housing market trends, and (4) an inventory of manufactured dwelling parks sited in areas planned and zoned or generally used for commercial, industrial or high-density residential.

[27] Oregon Housing and Community Services, Oregon Manufactured Dwelling Park Directory, http://o.hcs.state.or.us/MDPCRParks/ParkDirQuery.jsp

- Exhibit 93 shows that Hillsboro's city limits and South Hillsboro (outside of the city limits) will grow by 16,040 dwelling units over the 2016 to 2036 period.
- Analysis of housing affordability (in Exhibit 96) shows that about 27% of Hillsboro's new households will be low-income, earning 50% or less of the County's median family income. One type of housing affordable to these households is manufactured housing.
- Manufactured housing in parks accounts for about 1.4% (551 dwelling units) of Hillsboro's current housing stock.
- National, state, and regional trends during the 2000 to 2010 period showed that manufactured housing parks were closing, rather than being created. For example, between 2003 and 2010, Oregon had a statewide decrease of 25% in the number of manufactured home parks. Since 2000, one manufactured park with a total of about 177 manufactured home spaces closed in Hillsboro. This manufactured home park was replaced by the Village at Orenco, which has 172 single-family detached dwellings.
- The longer-term trend for closing manufactured home parks is the result of manufactured home park landowners selling or redeveloping their land for uses with higher rates of return, rather than lack of demand for spaces in manufactured home parks. Manufactured home parks contribute to the supply of lower-cost affordable housing options, especially for affordable home ownership. The trend in closure of manufactured home parks increases the shortage of manufactured home park spaces. Without some form of public investment to encourage continued operation of existing manufactured home parks and construction of new manufactured home parks, this shortage will continue.

  Exhibit 96 shows that the households most likely to live in manufactured homes in parks are those with incomes between $22,170 and $36,950 (30 to 50% of median family income). Assuming that about 1% to 1.5% of Hillsboro's new households choose to live in manufactured housing parks, the City may need 160 to 240 new manufactured home spaces. At an average of 11 dwelling units per net acre (the average assumed for future housing in the Residential Medium Density Plan Designation (which includes MFR-1) in Exhibit 6), this results in demand for 13 to 20 acres of land.

  The City allows development of manufactured housing parks in MFR-1 zone, where the City has 35 vacant suitable buildable acres of land. Development of a new manufactured home park in Hillsboro over the planning period seems unlikely, given trends of manufactured park closures. The land needed for development of a manufactured housing park is part of the capacity estimate in Exhibit 6.

Residential Land Sufficiency within Hillsboro

This section uses the estimate of housing capacity presented in Chapter 2 and the forecast of housing demand based on Metro's forecast to determine whether Hillsboro has enough residential land capacity to accommodate expected growth over the 2016 to 2036 period.

Exhibit 97 shows the capacity for new housing within the Hillsboro city limits and in South Hillsboro (Exhibit 10). It compares these capacity estimates with demand for new housing based on Metro's household forecast (Exhibit 95) by type of housing. Exhibit 97 shows:

- **Single-Family Detached.** Hillsboro has a deficit of 1,354 single-family detached dwelling units within the Hillsboro city limits and in South Hillsboro, in both the low and high capacity scenarios.
- **Single-Family Attached and Multifamily.** Hillsboro has a surplus of single-family attached and multifamily units within the Hillsboro city limits and in South Hillsboro, in both the low and high capacity scenarios. This surplus ranges from 3,383 dwelling units to 6,383 dwelling units. The primary reason for the range in the surplus is the uncertainty about how much redevelopment will occur within AmberGlen and Tanasbourne.

Hillsboro has a deficit of capacity for new single-family detached housing and a surplus of capacity for new single-family attached and multifamily capacity.

Exhibit 97. Comparison of Capacity for New Housing with Demand for New Housing by type of dwelling unit, Hillsboro city limits and South Hillsboro (outside of the city limits), 2016 to 2036

Source: Metro "Gamma" Forecast, November 2012. Capacity by City of Hillsboro. Calculations by ECONorthwest.

	Capacity for New Housing	Demand for New Housing	Comparison (Capacity *minus* Demand)
Low Capacity			
Single-Family Detached	6,666	8,020	-1,354
Single-Family Attached and Multifamily	11,403	8,020	3,383
High Capacity			
Single-Family Detached	6,666	8,020	-1,354
Single-Family Attached and Multifamily	14,403	8,020	6,383

Conclusions and Recommendations

The key findings of the Hillsboro Housing Needs Analysis are that:

- **Hillsboro's development policies exceed state requirements for future planning of development densities.** On vacant land within the Hillsboro city limits, planned densities on vacant land meet the City's obligation under OAR 660-007 to provide opportunity over an overall density of ten or more dwelling units per net buildable acre. The overall average capacity on vacant buildable residential land is 16.6 dwelling units per net buildable acre. In addition, about one-third of Hillsboro's housing capacity is for infill development of single-family housing and redevelopment with single-family attached and multifamily housing, which will increase development density substantially.
- **Hillsboro's development policies result in a mix of housing that exceeds state requirements for future planning for mix of housing**. Under OAR 660-007, the city is required to "to provide the opportunity for at least 50 percent of new residential units to be attached single family housing or multiple family housing or justify an alternative percentage based on changing circumstances." Up to two-thirds of Hillsboro's new housing will be single-family attached and multifamily, based on the land Hillsboro has for residential development. About one-third of Hillsboro's capacity of new single-family attached and multifamily housing are in AmberGlen and Tanasbourne.
- **Hillsboro is meeting its obligation to plan for needed housing types for households at all income levels.** Hillsboro's residential development policies include those that allow for development of a range of housing types (e.g., duplexes, manufactured housing, and apartments) and that support government-subsidized housing. This conclusion is supported by the fact that Metro's 2012 *Compliance Report* concluded that Hillsboro was in compliance with Metro Functional Plan and Title 7 (Housing Choice). Hillsboro will have an ongoing need for housing affordable to lower-income households.
- **Hillsboro is planning for a complete, balanced community.** Hillsboro's plans have resulted in development of a balanced portfolio of different housing types that are well-designed and will be developed across the community to serve different people at different points in their lives.
- **Hillsboro has a diverse housing stock , with 53% Hillsboro's housing in single-family detached units, 9% single-family attached, and 38% multifamily.** The mix of development since 2000 has included a larger percentage of multifamily (42% of new housing developed between 2000 and 2014) and single-family attached (17%).

  Within these broad housing types, Hillsboro's housing stock is a mixture of housing types. For example, Hillsboro's single-family detached housing ranges from mobile and manufactured housing to more affordable single-family detached housing to higher-amenity single-family detached housing. Hillsboro has a substantial amount of government-assisted affordable housing. Hillsboro's multifamily housing stock includes

a wide range of housing types, from lower density duplexes and tri- and quad-plexes, to higher density housing at Orenco Station.

If Hillsboro adds the forecast number of single-family detached units (6,666 units) and single-family attached and multifamily units (11,403 to 14,403 units), Hillsboro's housing mix by 2036 will be about 48% single-family detached and 52% single-family attached and multifamily.

ECONorthwest makes the following recommendations to Hillsboro to ensure that the City continues to provide opportunities to meet needed housing.

- **Hillsboro should continue to provide opportunities for development of a variety of housing choices to meet the housing needs at all income levels.** The housing market in Hillsboro has resulted in development of a substantial amount of housing that is relatively affordable to people within the Portland Region. Hillsboro should continue to ensure for opportunities to develop housing affordable at all income levels, from low-income households to households at the Regional median income to the higher-income households (such as worker at technology firms located in Hillsboro).

  The City's most significant policy tools to ensure opportunities for development of a variety of housing types are: ensuring that the City has an adequate supply of land to meet future housing needs; ensuring that the City's comprehensive plan and zoning policies that support development of a balanced mix of housing and support stable neighborhood development; and through leading and supporting planning efforts in areas newly brought into the Metro UGB and Hillsboro's service area.

- **Hillsboro should ensure that development begins relatively soon in South Hillsboro, to provide opportunities for needed housing development.** Of Hillsboro's areas that are planned, South Hillsboro accounts for about two-thirds of the City's capacity for new single-family detached housing. South Hillsboro is planned to provide a wide range of housing opportunities, including single-family detached housing on larger lots (8,000 to 12,400 square feet), single-family detached housing on moderate sized and smaller lots (7,000 to 4,000 square feet), single-family attached, multifamily housing, and mixed-use housing. The City is making progress on this goal, as portions of South Hillsboro annexed into the city limits during development of the housing needs analysis.

- **Hillsboro will need to identify additional opportunities for more single-family detached housing.** An important consideration in continuing to plan for a balanced community will be identifying additional opportunities for single-family detached development. The housing needs analysis identified a deficit of 1,354 single-family detached dwelling units. The City will need to work with regional partners to plan for new areas for single-family detached housing soon. It takes a minimum of five years (and more frequently, ten years) to bring an area into the Metro UGB, develop concept plans to guide future development, and to develop and begin to build the infrastructure necessary to support residential development. Given this long timeframe, Hillsboro should work with regional partners to identify and begin planning for additional areas for single-family housing over the next five to ten years. The areas most likely to meet

these housing needs are in the Witch Hazel Village South and Bendemeer Urban Reserves.

- **Hillsboro has opportunities to provide housing that meets the needs and preferences for people who work at businesses in Hillsboro but live elsewhere.** Like most other cities in the Metro region (and across the State), most workers at businesses in Hillsboro do not live in Hillsboro. Twenty-one percent of people working at Hillsboro businesses lived in Hillsboro in 2011 and the other 79% commuted to Hillsboro. The median wage for workers at businesses in Hillsboro is one-third higher than the Portland Region's median wage. The wage for the highest-paid workers in Hillsboro is about twice the wage for the highest-paid workers across the Portland Region. At the same time, median home sale prices in Hillsboro are below the average of most other cities in the Portland Region.

  The relatively high wages in Hillsboro, the large number of jobs in Hillsboro, and the high rates of commuting suggest that Hillsboro's housing market may not have the types of housing that meet the needs and preferences for high paid workers in Hillsboro. Discussions with real estate professionals suggest that Hillsboro lacks high amenity housing, such as larger single-family housing on lots about 7,000 to 10,000 square feet and larger condominiums in urban centers.

- **Hillsboro should continue to work towards redevelopment in AmberGlen and Tanasbourne.** Two-thirds of Hillsboro's single-family attached and multifamily housing capacity is tied to redevelopment in AmberGlen and Tanasbourne. In addition, these areas have vacant land with capacity for about 2,000 dwelling units, in the Mixed Use Plan Designation. It is important to Hillsboro that these areas develop with the moderate- to high-density residential development, as well as commercial and other development described in the community plan for each area. These areas are along the MAX line and provide opportunity for dense development in conjunction with high capacity transit.

- **Hillsboro should begin to plan for additional multifamily redevelopment opportunities.** While there is a substantial amount of multifamily capacity in AmberGlen and Tanasbourne, these areas are expected to substantially build out over the 20-year planning period. In the next five to seven years, the City should begin to consider additional opportunities for multifamily redevelopment within the city core. Downtown Hillsboro may provide opportunities for redevelopment and multifamily housing development, such as the 4th Main apartments.