City of Hillsboro
Housing Needs Analysis Report

December 15, 2023

Source: City of Hillsboro

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Executive Summary

What is a Housing Needs Analysis?

Cities in Oregon are required to assess current and future housing needs in a report called a Housing Needs Analysis (HNA). The HNA is essentially a comparison of the amount and types of housing units needed to accommodate Hillsboro's growth for the next 20 years, and the amount of land available in the City and adjacent Urban Growth Boundary (UGB) expansion areas ("study area") to meet those needs. It includes the following components:

- **Housing Needs Projection.** This is a projection of the amount of housing the City will need in the next 20 years, based on current needs and projected future trends. State regulations require this projection be calculated using region-wide population projections, which are prepared periodically by the Metro regional government for each of the cities in its boundary.
- **Residential Buildable Lands Inventory (BLI).** This is a description of the amount of land in study area planned and designated to accommodate future housing. It sets the stage for future discussions of how to utilize this land and the implications of policy decisions about housing in Hillsboro.
- **Comparison of Availability and Need.** The crux of the analysis is a comparison of the supply of buildable land with land needed for housing. A subsequent process, called a Housing Production Strategy (HPS) is required by the State of Oregon and entails a detailed evaluation of strategies that the City can undertake with community partners to produce needed housing. The City is looking forward to this process to strategize increased housing production in Hillsboro.

Key takeaways from each of these components are summarized below. Greater detail is provided in later sections of this report, and the full technical documentation is included in the appendix.

How Was This Document Prepared?

The City developed this HNA with the help of a consultant team (MIG and Johnson Economics) and a robust and multi-pronged community engagement effort, described below and in Figure EX-1 below.

- **Community Advisory Committee (CAC).** The City appointed a CAC to review the methodology and findings of this analysis. The CAC met a total of six times throughout the process.
- **Historically Marginalized Communities Focus Groups.** City staff conducted two rounds of focus groups with historically marginalized communities to learn about housing priorities and challenges.
- **Stakeholder Interviews.** The consultant team conducted a total of five stakeholder interviews with housing professionals, advocates, and interested community members to learn about the opportunities and challenges to housing in Hillsboro.
- **Housing Developer Meetings.** City staff and the consultant team met multiple times with housing developers.

Summaries of these meetings and interviews can be found in **Appendix A: Summary of Community Engagement.**

Figure EX-1: Summary of Planning Process
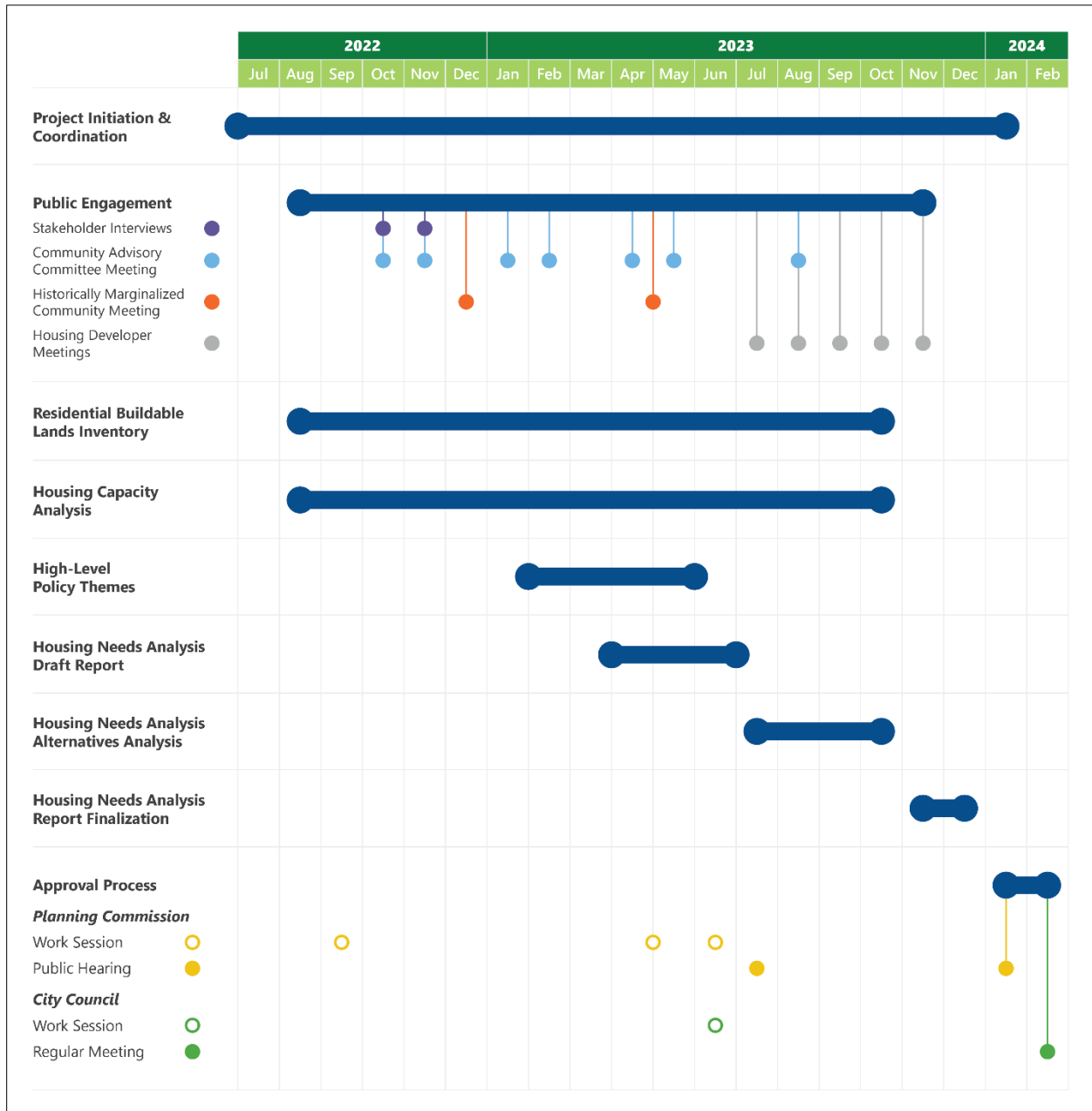
What are the Key Takeaways of this Report?

<u>Housing Needs Takeaways</u>

Demographic Profile

The following table (Figure EX-2) presents a profile of Hillsboro's demographics based on U.S. Census (Census) data, and the 2022 population estimate via the Portland State University (PSU) Population Research Center (PRC).

- Hillsboro had an estimated population of 109,532 residents in 2022, making it the 5th largest city in the state by city population and the third largest city in the Metro area (excluding Vancouver).
- Hillsboro has experienced steady growth in population, growing an estimated 57% since 2000. In contrast, Washington County and the state experienced population growth of 36% and 25%, respectively, during that same period.
- Hillsboro was home to an estimated 40,970 households in 2022, an increase of over 15,900 households since 2000. The percentage of families has fallen since 2000 from 68.5% to an estimated 66.1%.
- Average household size has fallen slightly since 2000. Hillsboro's estimated average household size is now 2.64 persons, similar to County and statewide averages.

FIGURE EX-2: Hillsboro Demographic Profile

POPULATION, HOUSEHOLDS, FAMILIES, AND YEAR-ROUND HOUSING UNITS					
	2000 (Census)	**2010 (Census)**	**Growth 00-10**	**2022 (PSU)**	**Growth 10-22**
Population[1]	69,883	91,611	31%	109,532	20%
Households[2]	25,028	33,289	33%	40,970	23%
Families[3]	17,142	22,440	31%	27,081	21%
Housing Units[4]	27,192	35,487	31%	43,037	21%
Group Quarters Population[5]	948	1,528	100%	1,391	-9%
Household Size (non-group)	*2.75*	*2.71*	*-1%*	*2.64*	*-3%*
Avg. Family Size	*3.28*	*3.24*	*-1%*	*3.18*	*-2%*

SOURCE: Census, Metro Consolidated Forecast, PSU Population Research Center, and Johnson Economics

Census Tables: DP-1 (2000, 2010); DP-3 (2000); S1901; S19301

1 From Census, PSU Population Research Center, growth rate 2010-2021 extended to 2022

2 2022 Households = (2022 population - Group Quarters Population)/2022 HH Size

3 Ratio of 2022 Families to total HH is based on 2020 ACS 5-year Estimates

4 4.8% vacancy rate is based on the most recent Decennial Census (2020)

5 2022 Group Quarters Population based on 5-year ACS estimates 2017-2021
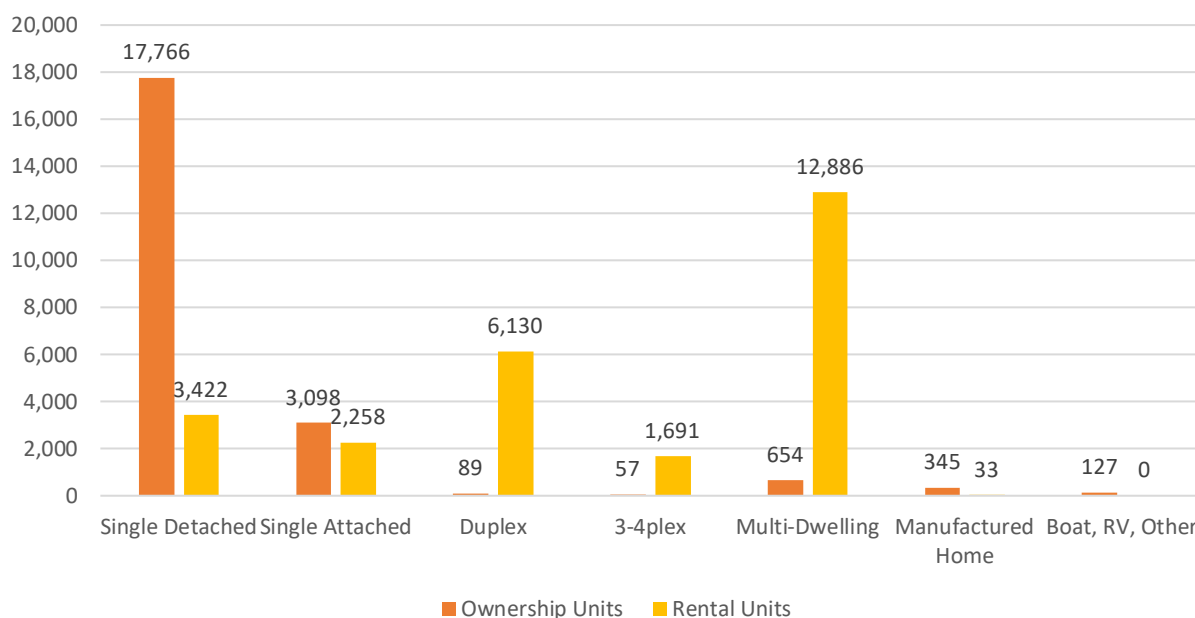
Current Housing Conditions

Hillsboro has an estimated 43,040 housing units in 2022, with a vacancy rate of 4.8% (includes ownership and rental units). The housing stock has increased by roughly 15,850 units (58% increase) since 2000.

As shown below, a large share of owner-occupied units (80%) are detached homes, which tend to have more bedrooms on average than attached or rental units. This is a key factor in the high cost of many single detached homes and a barrier to homeownership for many. Over 3% of ownership units are in buildings of three or more units, meaning these are likely condominium units. Renter-occupied units are more distributed among a range of structure types. About 16.5% of rented units are estimated to be detached homes or manufactured homes, while the remainder are some forms of attached unit. Nearly 62% of rental units are in larger apartment complexes.

Figure EX-3: Current Housing Inventory by Unit Type, for Owner and Rental Housing

Current Housing Inventory by Unit Type, for Owner and Rental Housing

Unit Type	Ownership Units	Rental Units
Single Detached	17,766	3,422
Single Attached	3,098	2,258
Duplex	89	6,130
3-4plex	57	1,691
Multi-Dwelling	654	12,886
Manufactured Home	345	33
Boat, RV, Other	127	0

Sources: Census, Johnson Economics, City of Hillsboro

Future Housing Need

The projected future (20-year) housing profile in the study area is based on the current housing profile (2022)[1], with a projected future household growth rate applied. The projected future growth is based on the forecasted 2043 population for Hillsboro from the most recent Metro Consolidated Forecast for cities in the Metro region (completed in 2021). This forecast estimates that Hillsboro's population will grow at a rate of 0.7% annually between 2022 and 2043. (This annual growth rate is lower than the actual annual rate experienced since 2010, which was 1.5% according to the Census and PSU PRC.)

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[1] The base year for the HCA forecast is 2022, reflecting the latest population estimate available from PSU PRC at the time of the analysis. However, because the analysis was completed in 2023, the year 2043 was used as the end of the forecast period.

Figure EX-4: Future Housing Profile (2043)

PROJECTED FUTURE HOUSING CONDITIONS (2022 - 2043)			SOURCE
2022 Population (Minus Group Pop.)	108,141	(Est. 2022 pop. - Group Housing Pop.)	PSU
Projected Annual Growth Rate	0.7%	Metro Coordinated Forecast (2021)	Metro
2043 Population (Minus Group Pop.)	124,644	(Total 2043 Population - Group Housing Pop.)	
Estimated group housing population:	1,603	1.3% of total pop. (held constant from 2022)	US Census
Total Estimated 2043 Population:	**126,247**	Metro Coordinated Forecast (2021)	Metro
Estimated Non-Group 2043 Households:	**54,229**	Metro Coordinated Forecast (2021)	Metro
New Households 2022 to 2043	13,259		
Avg. Household Size:	2.30	Projected 2043 pop./2043 houseolds	US Census
Total Housing Units:	**57,083**	Occupied Units plus Vacant	
Occupied Housing Units:	54,229	(= Number of Non-Group Households)	
Vacant Housing Units:	2,854	(= Total Units - Occupied Units)	
Projected Market Vacancy Rate:	5.0%	Stabilized vacancy assumption	

Sources: PSU PRC, Census, Johnson Economics LLC

The mix of needed units reflects past and anticipated future trends. Since 2000, single detached units (including manufactured and mobile homes) have constituted a little over 50% of the permitted units in Hillsboro, with attached housing making up the other half. Single detached units are expected to continue to make up a large share of new housing development for ownership households over the next 20 years. However, an increasing share of new needed units is anticipated to be made up of attached housing types to accommodate renters and first-time home buyers.

- Over the 20-year planning period, an increasing share of renter households are expected to be younger households, those with modest incomes, and the growing share of minority households in the area. These households will need a variety of densities and sizes to accommodate single and family households.
- 37% of the new units are projected to be single detached homes or new manufactured homes, while 63% are projected to be some form of attached housing.
- Single attached units (townhomes on individual lots) are projected to meet roughly 15% of future need.
- Duplex, triplex, and four-plex units are projected to represent a growing 12% of the total need, in part reflecting new state rules for middle housing zoning.
- 36% of all needed units are projected to be multi-dwelling units in structures of 5 or more attached units.
- 1.2% of new needed units are projected to be manufactured home units, which meet the needs of some low-income households for both ownership and rental.

- Of ownership units, 70% are projected to be single detached homes or manufactured homes, and 30% are projected to be attached forms.
- Nearly all new rental units are projected to be found in new attached buildings, with 66% projected in rental properties of 5 or more units, and 31% in other attached housing forms. Only 3.5% of new rental units are projected to be detached homes, including manufactured homes.
- There will continue to be a need for group housing, with an estimated 1,631 individuals living in group housing in 2043. In Hillsboro, this includes people living in correctional facilities (including juveniles), nursing facilities, and "other noninstitutional facilities" including residential group homes, emergency and transitional shelter, and residential treatment facilities.
- Housing is needed for people at all affordability levels, including those with extremely low, very low, low, and moderate incomes, as well as people with higher incomes. Figure EX-6 presents some of the types of housing products that might commonly serve households in these income ranges.
- Many low-income households, particularly the *lowest* income households, need subsidized affordable housing in order to find rents affordable given their modest resources and other household spending needs. Figure EX-7 presents estimates of need at key low-income affordability levels in 2022 and in 2043.
- There is a modest current and future need for farmworker housing Hillsboro, although this population may also be served by other available affordable units, and new market rate units to some degree.

Figure EX-5: Projected Future Need for NEW Housing Units (2043), Hillsboro

OWNERSHIP HOUSING									
			Multi-Family						
Unit Type:	**Single Detached**	**Single Attached**	**2-unit**	**3- or 4-plex**	**5+ Units MFR**	**Manuf. home**	**Boat, RV, other temp**	**Total Units**	**% of Units**
Totals:	4,838	1,204	241	231	422	151	0	7,087	50.5%
Percentage:	68.3%	17.0%	3.4%	3.3%	6.0%	2.1%	0.0%	100%	

RENTAL HOUSING									
			Multi-Family						
Unit Type:	**Single Detached**	**Single Attached**	**2-unit**	**3- or 4-plex**	**5+ Units MFR**	**Manuf. home**	**Boat, RV, other temp**	**Total Units**	**% of Units**
Totals:	235	960	413	772	4,568	11	0	6,959	49.5%
Percentage:	3.4%	13.8%	5.9%	11.1%	65.6%	0.2%	0.0%	100%	

TOTAL HOUSING UNITS									
			Multi-Family						
Unit Type:	**Single Detached**	**Single Attached**	**2-unit**	**3- or 4-plex**	**5+ Units MFR**	**Manuf. home**	**Boat, RV, other temp**	**Total Units**	**% of Units**
Totals:	5,073	2,165	654	1,002	4,990	162	0	**14,046**	**100%**
Percentage:	36.1%	15.4%	4.7%	7.1%	35.5%	1.2%	0.0%	100%	

Sources: Metro, City of Hillsboro, Census, Claritas, Johnson Economics

Figure EX-6: Projected Need for NEW Housing at Different Income Levels

Household Income Segment		Income Level (Rounded)*	Owner Units	Renter Units	Total	Share	Common Housing Product
Extremely Low Inc.	< 30% MFI	< $27,500	521	825	1,346	10%	Government-subsidized; Voucher; Shelter; Transitional
Very Low Income	30% - 60% MFI	$27.5k - $55k	752	1,389	2,141	15%	Aging/substandard rentals; Government-subsidized; Voucher; Manufactured homes
Low Income	60% - 80% MFI	$55k - $73k	688	1,084	1,772	13%	Aging apartments; Government-subsidized; Plexes; Aging single-detached; Small homes
Middle Income	80% - 120% MFI	$73k - $110k	1,418	1,513	2,931	21%	Single-detached homes; Townhomes; Condominiums; Newer apartments
Upper Income	> 120% MFI	> $110,000	3,708	2,147	5,855	42%	Single-detached homes; Townhomes; Condominiums; New apartments
TOTAL:			**7,087**	**6,959**	**14,046**	**100%**	

Sources: HUD, Census, Claritas, Johnson Economics

Figure EX-7: Projected Need for Housing Affordable at Low-income Levels, Hillsboro

Affordablilty Level	Income Level*		Current Need (2022)		Future Need (2043)		NEW Need (20-Year)	
			# of Units	% of All	# of Units	% of All	# of Units	% of All
Extremely Low Inc.	≤ 30% MFI	≤ $27,500	3,900	10%	5,246	10%	1,346	10%
Very Low Income	30% - 50% MFI	≤ $45,800	3,920	9%	5,279	10%	1,359	10%
Low Income	50% - 80% MFI	≤ $73,300	6,962	17%	9,517	18%	2,555	18%
TOTAL:	*≤ 80% MFI*	*≤ $73,300*	*14,782*	*36%*	*20,042*	*37%*	*5,259*	*37%*
Tax Credit	≤ 60% MFI	≤ $55,000	10,941	27%	14,429	27%	3,487	25%

Sources: OHCS, Claritas, Johnson Economics, HUD

Homeless Population Housing Needs: In 2022, Hillsboro was home to an estimated 808 homeless individuals, or 0.8% of the total population. If this rate were to persist into the future, this would imply 948 homeless individuals based on the total estimated population in 2043. This would be an increase of roughly 150 individuals over the next 20 years. Homeless individuals and families may require a mixture of shelter types depending on individual circumstances, ranging from emergency shelter to transitional housing to permanent subsidized housing. This population is a subset of the extremely-low-income population shown in prior figures.

Comparison of Future Need (2043) and Land Supply

A Buildable Lands Inventory (BLI) was conducted to estimate the acreage and unit capacity of residential land in the study area. The BLI is consistent with the requirements of OAR 660-024-0050 modeled after the BLI used for the most recent Metro Urban Growth Report for cities in the Metro region (completed in 2021).

- The BLI takes into account the City's zoning and comprehensive plan designations, environmentally constrained areas, publicly owned land, communally owned land such as HOAs, and religious/fraternal properties that are generally not expected to develop.
- Based on the assumptions in the BLI, overall capacity in the study area with adopted City comprehensive plan designations is about 12,500 units.
- Roughly 36% of this capacity is in single detached units, 32% in Middle Housing units, and 32% in Multi-Dwelling units.
- Roughly 25% of capacity lies within the expansion areas of unincorporated South Hillsboro and Witch Hazel Village South, and another 24% is on land that has some form of development approval currently.
- Redevelopment on mixed-use land accounts for about 1% of capacity, though market dynamics and City policy could affect this number significantly. This analysis assumes a modest amount of infill (680 units) through conversion of existing single detached units into duplexes and other middle housing.

Figure EX-8 presents the estimated new unit capacity of the buildable lands identified in the study area. Residential zones, as well as mixed-use zones that can accommodate some residential uses, were included in the inventory, and are broken into broad categories based on housing density. The inventory includes the unincorporated portions of Hillsboro's current known expansion areas of South Hillsboro and Witch Hazel Village South.
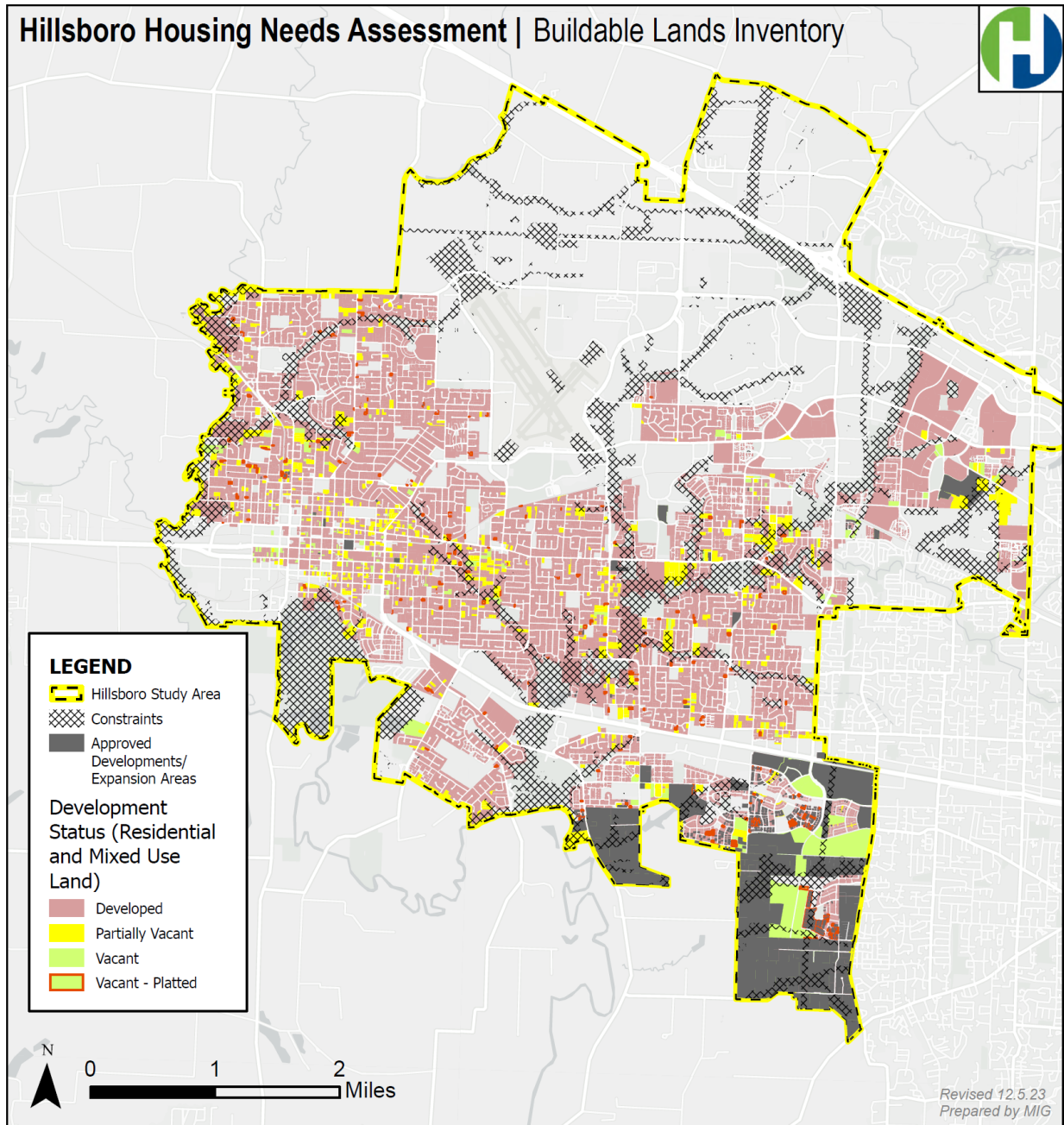
Figure EX-9 shows land within study area by "Development Status," indicating where future residential capacity may occur.

Figure EX-8: Estimated Buildable Lands Capacity by Acreage and No. of Units (2023)

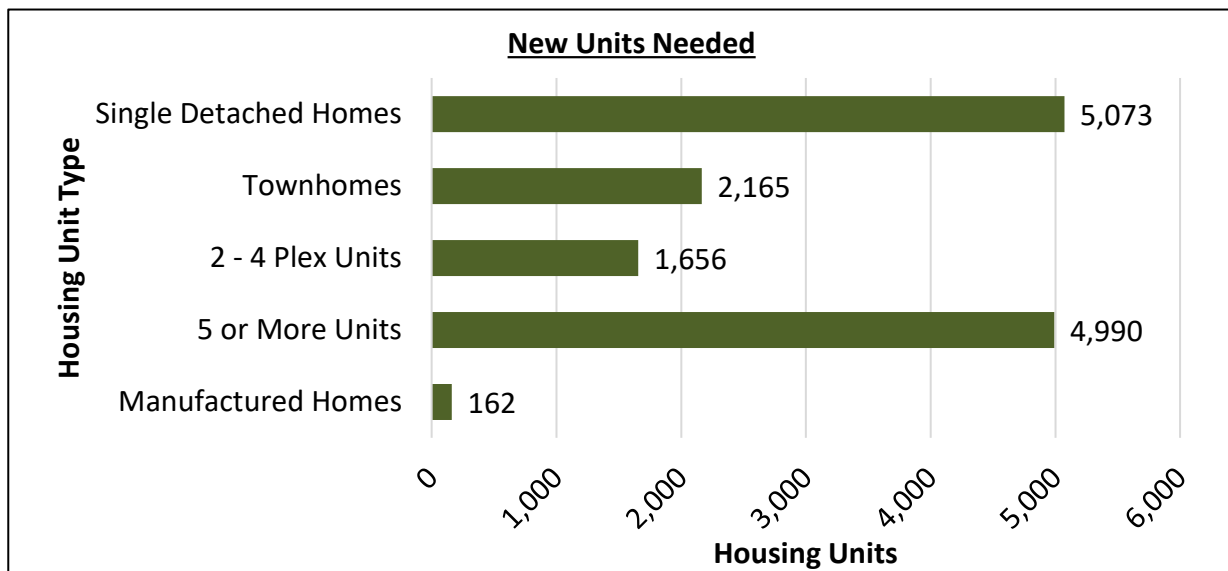| Development Category	Tax lots	Gross acres	Buildable Acres (minus constrained land)	Net Acres (subtracts future set-asides and existing structures)	Unit Capacity			
					Single Detached	Middle Housing	Multi-Dwelling	Total
Residential Land	**883**	**611**	**484**	**318**	**1,885**	**792**	**438**	**3,115**
Vacant	57	185	156	117	581	463	324	1,368
Partially Vacant	414	382	289	162	893	328	114	1,335
Platted	412	44	39	39	412	0	0	412
Mixed Use Land	**378**	**227**	**195**	**79**	**243**	**1,125**	**1,284**	**2,652**
Vacant	119	72	72	34	105	359	489	953
Partially Vacant	228	134	114	36	112	711	702	1,525
Redevelopable	31	22	9	9	27	55	93	174
Approved Development					600	551	1,831	2,982
Expansion Areas (S Hillsboro Unincorporated and Witch Hazel Village South)					1,718	863	499	3,080
Middle Housing Infill			n/a		0	680	0	680
TOTAL					4,447	4,011	4,052	12,509

Source: MIG

Figure EX-9. Development Status of Land, Buildable Lands Inventory

Source: MIG

Figure EX-10: Summary of Forecasted Future Unit Need (2043)

New Units Needed

Housing Unit Type	Housing Units
Single Detached Homes	5,073
Townhomes	2,165
2 - 4 Plex Units	1,656
5 or More Units	4,990
Manufactured Homes	162

Sources: PSU PRC, Census, Johnson Economics

Figure EX-10 summarizes the forecasted future unit need for Hillsboro. There is a total forecasted need for roughly 14,050 units over the next 20 years based on the forecasted growth rate. This is greater than the estimated total capacity of 11,723 units. Figure EX-11 presents a comparison of the BLI capacity for new housing units, compared to the estimate for new units needed by 2043. It breaks down need by general zoning category (LDR, MDR, HDR). Highlights include:

- The projected demand for low-density housing types is higher than the remaining capacity by an estimated 1,116 units, or the equivalent of 139 acres of low-density residential land.
- The results find a modest deficit for medium-density housing of 3 acres.
- The projected demand for high-density housing types is higher than the remaining capacity by an estimated 1,141 units, or the equivalent of 33 acres of high-density residential land. This is the greatest deficit of capacity in terms of number of units among these three categories.
- These findings assume that under newly adopted state rules, 3% of available buildable parcels in the LDR zone will used for the various types of smaller attached "middle housing" units (single attached townhomes, duplex, triplex, fourplex, and cottage cluster housing).

Figure EX-11: Comparison of Forecasted Future Land Need (2043) with Available Capacity

WITHIN CITY LIMITS		SUPPLY	DEMAND				
			Growth Rate (0.7%)				
Zone & Plan Category	Typical Housing Type	Buildable Land Inventory (Unit Capacity)	New Unit Need (2043)	Avg. Density (units/ac)	Surplus or (Deficit)		
					Units	Net Acres	Gross Acres
Low-Density	Single-detached; Single-attached & plex	4,447	5,428	8.0	(981)	(123)	(163)
Med-Density	Single-attached; Manufact. home; 2-4 plexes	4,011	3,628	20.0	383	19	26
High-Density	Multi-Unit apartments	4,052	4,990	35.0	(939)	(27)	(36)
	TOTALS:	12,509	14,046	20.7	(1,537)	(130)	(174)

Sources: MIG, Johnson Economics

These findings do not require rezoning of medium- or high-density zoned land to meet the need for low-density land. A range of potential housing policies and strategies will be considered in future development of a HPS by the City, including the ability of future planning areas to meet the need for different types of housing during the 20-year planning period.

Alternative Analysis

The end of this document contains an Alternative Analysis that utilizes assumptions that differ from those in the HNA forecast and analysis described in the main report. The Alternative Analysis assumes a higher future population growth rate and refinements to the assumptions used in the BLI. The purpose of the Alternative Analysis is to provide a more specific look at City housing needs, capturing a scenario that better reflects local experiences and concerns. The HNA forecast and analysis described in the main report provide the formal and legal compliance with State and Regional requirements, and the Alternative Analysis may be referred to when making subsequent housing policy considerations.

There are two categories of assumptions that distinguish the Alternative Analysis from the OAR-driven HNA approach. The first is the Average Annual Growth Rate assumed throughout the 20-year planning horizon and the associated increases in the amount of estimated needed housing. The second is a more accurate assessment of the Hillsboro's buildable land.

The results of the Alternative Analysis are briefly described here and explained in greater detail at the end of this document.

Alternative Analysis Growth Forecast

Metro has a forecast growth rate of 0.7% per year for Hillsboro, while the average household size is projected to fall to 2.3 persons per household from the current 2.6 persons. The smaller household size means that more households will be needed to accommodate the same population.

The Alternative Analysis growth rate methodology results in a higher assumed growth rate, but a smaller decline in the average household size by 2043. A comparison of the HNA forecast and the
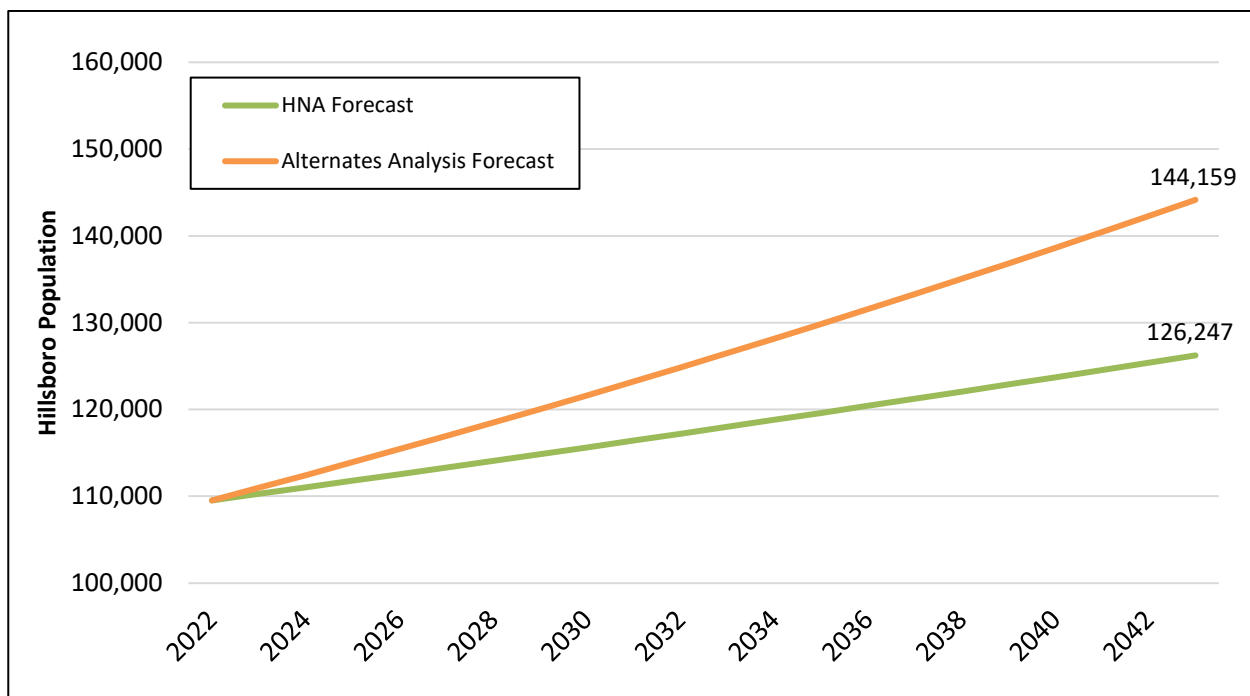
Alternative Analysis forecast is shown in Figure EX-12, followed by a discussion of the Alternative Analysis forecast methodology.

The Alternative Analysis forecast projects a higher Average Annual Growth Rate of 1.4% per year, resulting in a forecast of nearly 18,000 more residents over the forecast period than the HNA forecast.

The Alternative Analysis forecast projects nearly 4,000 more new households over the forecast period than the HNA forecast, and nearly 4,200 more new housing units needed (including a 5% vacancy assumption).

The assumed average household size is larger in the Alternative Analysis forecast than the Metro forecast (2.45 vs. 2.30 persons). This means that while the Alternative Analysis forecast projects more than double the population growth, the household growth is only 30% greater than the HNA forecast.

Figure EX-12: Standard HNA Forecast vs. Alternatives Analysis Growth Forecast

Sources: PSU PRC, Census, Johnson Economics

Figure EX-13: Income Distribution of Needed Units, Alternative Analysis Forecast

Household Income Segment		Income Level (Rounded)*	Owner Units	Renter Units	Total	Share	Common Housing Product
Extremely Low Inc.	< 30% MFI	< $27,500	677	1,065	1,742	10%	Government-subsidized; Voucher; Shelter; Transitional
Very Low Income	30% - 60% MFI	$27.5k - $55k	978	1,793	2,771	15%	Aging/substandard rentals; Government-subsidized; Voucher; Manufactured homes
Low Income	60% - 80% MFI	$55k - $73k	895	1,399	2,294	13%	Aging apartments; Government-subsidized; Plexes; Aging single-detached; Small homes
Middle Income	80% - 120% MFI	$73k - $110k	1,843	1,954	3,797	21%	Single-detached homes; Townhomes; Condominiums; Newer apartments
Upper Income	> 120% MFI	> $110,000	4,820	2,772	7,592	42%	Single-detached homes; Townhomes; Condominiums; New apartments
TOTAL:			**9,211**	**8,984**	**18,195**	**100%**	

Source: Johnson Economics

Alternative Analysis Buildable Land Inventory

To better match the development realities seen in Hillsboro, the Alternative Analysis BLI is a more accurate assessment regarding the likelihood of infill on vacant and partially vacant parcels in the City. The cumulative goal of these changes is to recognize that the financial feasibility of infill projects is challenging in even the best of conditions, and various obstacles only further reduce the likelihood of development on these types of properties in during the planning horizon. These changes include a more restrictive definition for "Partially Vacant" land, allowances for high-value "Executive" homes, and discounting slopes greater than 15%, among other factors.

Compared to the standard BLI, the Alternative Analysis BLI demonstrates that the Hillsboro study area has capacity for **911 fewer units** using this analysis. Nearly 70% of these units are single detached dwellings, and nearly 30% are middle housing units.

Alternative Analysis Comparison of Need and Supply

Figure EX-14 presents the residential demand generated by the Alternative Analysis growth forecast of 1.4% compared to the Alternative Analysis BLI result of 11,599 units of capacity. This analysis results in a deficit of roughly 6,600 units totaling 692 gross acres. Nearly 80% of this land deficit is for lower density units that average 8 units per acre, while 9% is for medium density units and 13% is for higher density units.

Figure EX-14: Comparison of Need and Supply - Alternative Analysis BLI and Growth Forecast

WITHIN CITY LIMITS		SUPPLY	DEMAND				
			Growth Rate (1.4%)				
Zone & Plan Category	Typical Housing Type	Buildable Land Inventory (Unit Capacity)	New Unit Need (2040)	Avg. Density (units/ac)	Surplus or (Deficit)		
					Units	Net Acres	Gross Acres
Low-Density	Single-family detached; Some SF attached & plex	3,829	7,052	8.0	(3,223)	(403)	(537)
Med-Density	SF attached; Manufact. home; 2-4 plexes	3,757	4,697	20.0	(939)	(47)	(63)
High-Density	Multi-family apartments	4,012	6,446	35.0	(2,435)	(70)	(93)
	TOTALS:	11,599	18,195	20.7	(6,596)	(519)	(692)

Sources: MIG, Johnson Economics

Figure EX-15 shows the overall surplus/deficit of residential land found in the HNA analysis as well as the Alternative Analysis.

Figure EX-15: 20 Year Surplus/Deficit in Gross Acres, HNA Analysis and Alternative Analysis
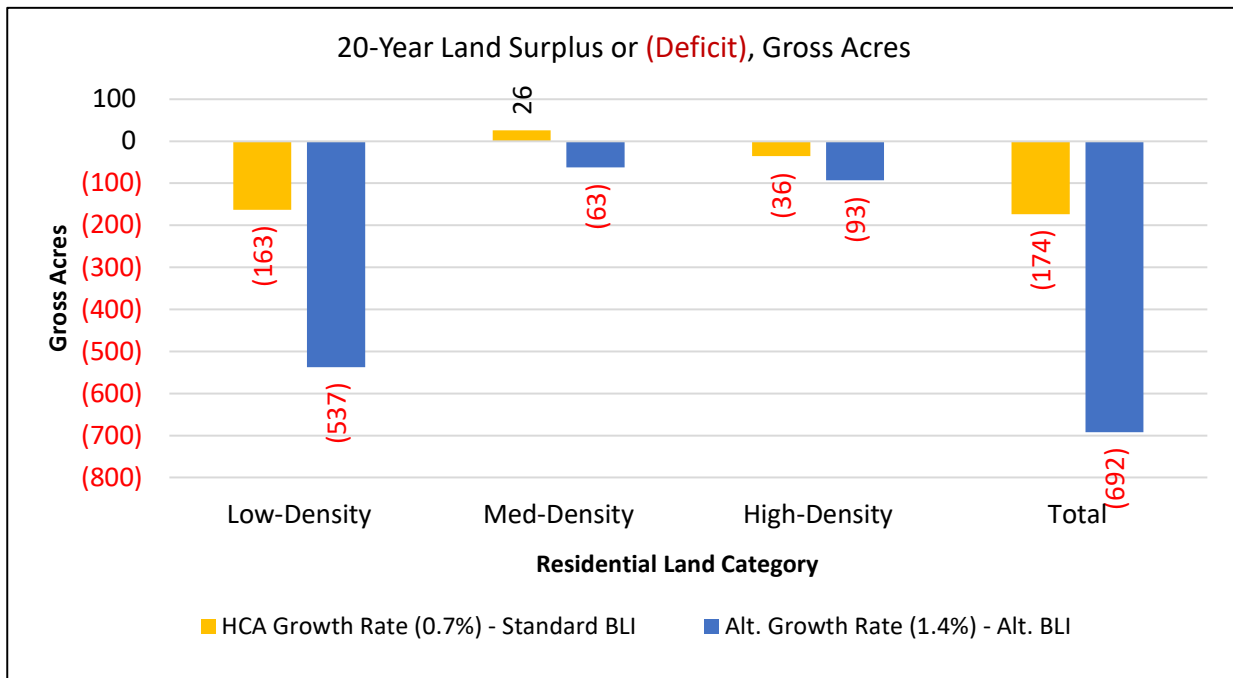
Sources: MIG, Johnson Economics

Introduction

Cities in Oregon are required to assess current and future housing needs in a report called a Housing Needs Analysis (HNA). The HNA is essentially a comparison of the amount and types of housing units needed to accommodate Hillsboro's growth for the next 20 years with the land the City has available to do meet those needs. It includes the following components:

- **Housing Needs Projection.** This is a projection of the amount of housing the City will need in the next 20 years, based on current needs and projected future trends. State regulations require this projection be coordinated with state- and region-wide population projections.
- **Residential Buildable Lands Inventory (BLI).** This is a description of the amount of land in Hillsboro and adjacent UGB expansion areas ("study area") planned and designated to accommodate future housing. It sets the stage for future discussions of how to utilize this land and the implications of policy decisions about housing in Hillsboro.
- **Comparison of Availability and Need.** The crux of the analysis is a comparison of the supply of buildable land with the amount of needed housing. A subsequent process, called a Housing Production Strategy (HPS) is required by the State of Oregon and entails a detailed evaluation of strategies that the City can undertake with community partners to produce needed housing. The City is looking forward to this process to strategize increased housing production in Hillsboro.

Project Timeline and Public Engagement Overview

The City began this HNA effort in July of 2022 and completed this report in December 2023. Figure 1 below shows a generalized timeline of the process. This project was guided by a robust and multi-pronged community engagement effort, as follows.

- **Community Advisory Committee (CAC).** The City appointed a CAC to review the methodology and findings of this analysis. The CAC met a total of six times throughout the process.
- **Historically Marginalized Communities Focus Groups**. City staff conducted four focus group meetings with historically marginalized communities to learn about housing priorities and challenges.
- **Stakeholder Interviews.** The consultant team conducted five stakeholder interviews with housing professionals, advocates, and interested community members to learn about the opportunities and challenges to housing in Hillsboro.
- **Housing Developer Meetings.** City staff and the consultant team met multiple times with housing developers.

Summaries of these meetings can be found in **Appendix A: Summary of Community Engagement.**

Figure 1. Summary of Planning Process
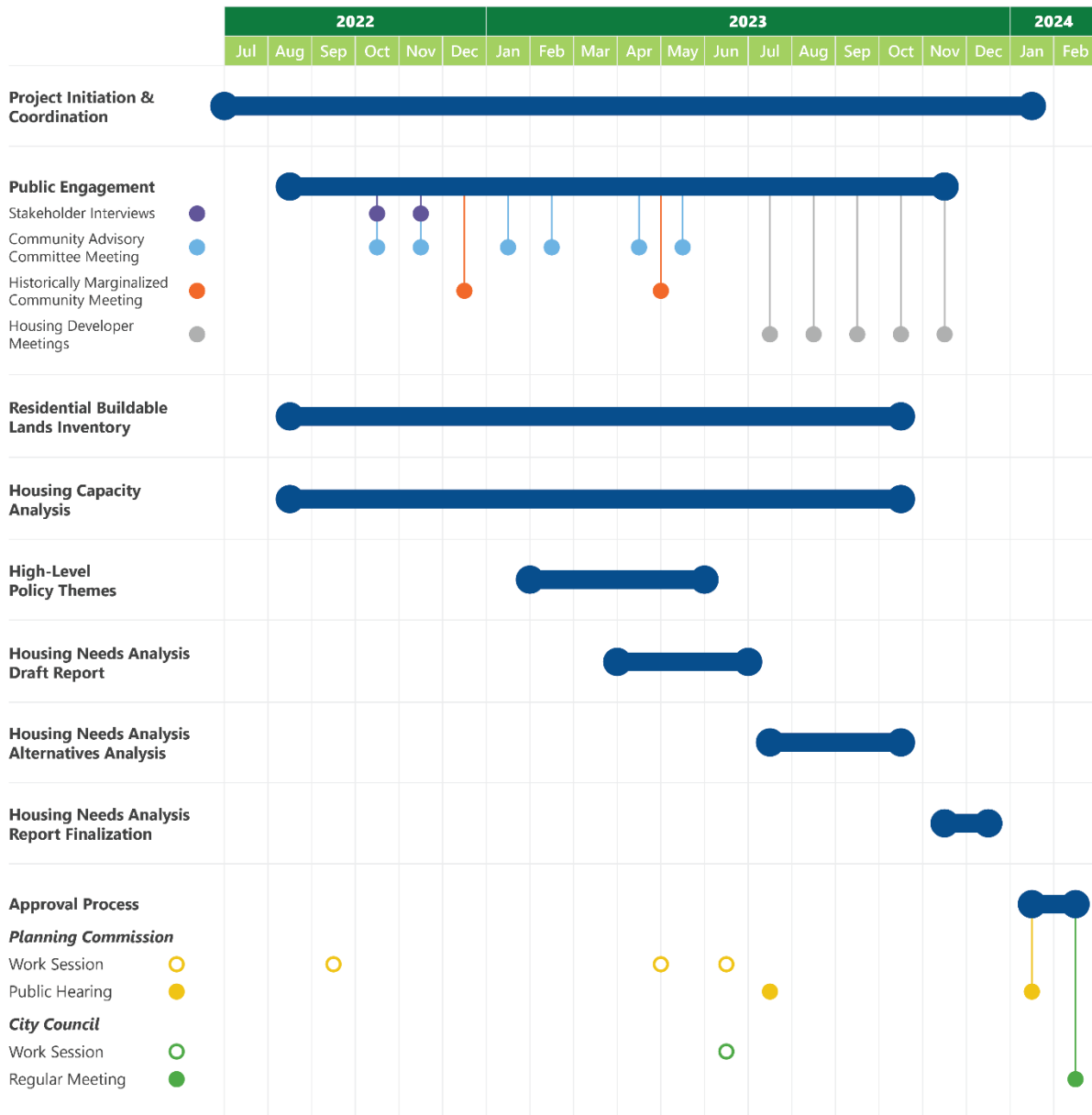
The Housing Continuum

Housing needs are not a constant throughout a person's or household's lifetime. The average individual or family is likely to move into a range of living situations and unit types as life circumstances change.

These changes may include a young person leaving home, meeting a partner, adding children, living with three or more generations, retirement, assisted living, but many other permutations of lifestyle may make other housing arrangements preferable or necessary. Throughout this cycle, changes in income, and unexpected challenges or opportunities, can impact the housing preferences of a household.

Ideally, a community should offer a full range of housing types to meet the needs of households of different financial means, ages, family sizes, abilities, and other factors. This helps meet the needs of the city's residents over time and ensures a community supports a diverse range of residents. The average person or family will also move between communities, regions, and even countries over a lifetime. Another key goal of promoting housing diversity across the metropolitan region and state is to supply available housing for households who may be relocating due to preference, cost, family, or work.

Housing Needs Over a Lifetime: While each household is unique, the following is an example of what one typical lifecycle might include:

- A child grows up with a family in housing that is preferably large enough to accommodate the family size. This might be a single-family home (owned or rented), or a larger apartment unit (2 to 3 bedrooms), or perhaps a townhome.
- As a young adult, the person moves out of their childhood housing, and often into some denser form of housing such as an apartment (studio or one bedroom) or group living situation (rental house with roommates). It is common for young adults to rent rather than own as they start their working lives and may not have the means to purchase a home. Young adults, single or couples, are key consumers of denser apartment housing in urban areas.
- The young person meets a partner, who shares the denser rental housing until they start a family. With a child in the home, the couple may seek to find a larger rental unit or small single-family home to rent or buy. Rental housing options might include larger apartments, middle housing (duplex or townhome), or older and smaller single detached homes that have filtered into the rental market. Or as first-time homebuyers, they may seek a modest, older home. If the couple remains childless, they might purchase an attached condo unit.
- As the family grows in age and income and perhaps adds additional children, they may move up the home buying "ladder" to a larger home, preferable neighborhood, and/or newly built home. If they lack the means to buy a home, they may seek to rent a single detached home in a preferable neighborhood or school district, even stretching their means to do so while their children are young.
- The family may yet move once or twice while children are at home, seeking a larger or "nicer" home, or perhaps having to relocate for work or extended family needs. This may also be a period where one or more extended family members, such as a grandparent, joins the household. A larger home, renovation, or ADU addition may be needed at this stage.
- When the children become young adults themselves (and start their own housing cycle), the couple may choose to remain in the home, or may change their housing preferences. At this "empty nest" stage or at retirement, the couple may decide to downsize, or relocate altogether. A smaller single detached home, or condominium or town home may be

appropriate. The couple may re-enter the rental market as well. Their house, if it is older and perhaps hasn't been updated in many years, may become a more modestly priced homebuying opportunity for new first-time or younger buyers.

- As the couple age, they may live with their children, forming a new multi-generational family. Or they may seek a retirement community, or eventually require assisted living. The passing of one of the partners may accelerate downsizing, or the move to an apartment.

The above is just one example of a "typical" lifecycle. It is important to note that each household is unique, and the range of housing "lifecycles" is as broad as human experience. Most importantly, some households will remain renters throughout their lives by choice or due to limited means. A full range of housing types must include recognition of the full range of income and affordability levels in the community as well.

The Continuum of Housing Affordability: Different housing types tend to meet the needs of households at different points on the income spectrum. Broadly speaking, lower income residents are more likely to rent their homes and high-income residents are more likely to own their homes.

- Middle income to upper income households (median income and higher) are most often served by the private housing market for single detached homes, condos, or newer high-quality apartments. These households have the means to own or rent without subsidy or assistance and can afford to meet more of their preferences for larger or nicer units and location. In a competitive market, middle income households will still make more trade-offs in housing size, condition, and location.
- Lower-middle income households (roughly 60% to 100% of median income) will also be largely served by the private real estate market for rentals and the low-priced homes. Many of these households will rent in older apartment complexes or single detached homes that may be in poor condition or less desirable locations. These are units that have "filtered" down the affordability ladder as they age and become outdated. If these households are able to own a home, it might be a similarly aged or modest unit in a less desirable location, or it may be a manufactured home. Some households earning 60% to 80% may find subsidized affordable housing, particularly in "tax credit" properties that offer units aimed at this income level. This is an important form of assistance to the households who can secure it, but like all affordable housing is undersupplied in most communities.
- The lowest income households (roughly 60% or lower income) are not well-served by the private real estate market and must generally find some form of subsidized affordable housing or face high rent burdens. Because there is not sufficient subsidized affordable housing to meet their needs, many of these households live in substandard housing situations including market units in very poor condition, overcrowded housing, and/or transitory and precarious housing situations. These households can be served by housing choice vouchers and subsidized units including tax credit properties and public housing. Households earning 30% or less of the median income are considered "extremely low-income" and generally must secure a rental housing voucher or federal public housing administered by a Housing Authority in order to escape extreme rent burdens.

Factors of Development Housing Cost: There are many factors that impact the cost of developing new housing. These costs will impact both the pace of new development, and the price/rent level of the finished housing. Some of these factors are within the public sector's influence, but some are not.

Factors that contribute to housing cost include:

- **Financial Policies:** System development charges, taxes and fees, utility rates, and incentives.
- Development Policies and Regulations: Zoning code, land availability, development standards, permitting process and timeliness, infrastructure design and construction standards.
- **Economic Development Programs:** Workforce development, job creation, resiliency to improve the means of householders.
- **Regulated Affordable Housing Providers and Funding:** Programs to directly serve households in lower income segments. Federal, state, Metro and local programs. Public private partnerships with agencies that build and operate this housing.
- **Public Infrastructure Availability:** Transportation, water, and telecommunication service to buildable properties. Multimodal traffic design and management, transit options.
- **Market Forces:** Much of the decision-making process for private real estate developers is out of the hands of the public sector to influence. Broad forces such as the state of the national and regional economy, population and job growth, interest rates and lending standards, the cost of labor and materials, and expectations of return from investors, all create the general environment in which the developer will make the decision to build and in what location. The public sector can ensure that the factors discussed above are addressed to make the city an attractive and accessible development destination when these market forces align.

Housing Need Findings of the Washington County Consolidated Plan

The five-year Washington County Consolidated Plan (2020-2024)[2] provides additional extensive information about the specific housing needs of Washington County residents, including those in Hillsboro.

The Consolidated Plan used an equity lens throughout to reach findings that echo and support many of those revealed through the City's HNA planning process. These include a focus on special needs and priority populations:

- Elderly and frail elderly;
- Persons with physical, cognitive, and developmental disabilities;
- Persons with mental illness and substance abuse challenges;
- Adults and/or youth at-risk and experiencing homelessness;
- Large families;
- Agricultural workers and families; and,
- Extremely low and very low-income households.

Housing Market and Needs Analyses that accompanied the Plan identified the largest countywide need from the low-income groups, with a large disparity between the number of households in this income segment, and the insufficient number of rental units affordable to them. Among the other (non-income) categories of priority populations, the analysis projected the largest growing need for housing for those with disabilities, the elderly, and large families, though there is a projected need for new housing for all of the identified groups.

The Plan emphasizes the following main goals for housing production:

- Increase the inventory of deeply affordable rental housing in good condition.
- Increase the inventory of accessible and visitable housing to serve persons with disabilities and the elderly.
- Improve the quality of affordable ownership housing in good condition and with accessibility features.
- Improve access to ownership for low to moderate income households through homebuyer assistance programs/products and by helping increase the affordable ownership inventory.

In addition to housing goals, the Plan identifies a number of community development and public service actions to support these populations achieve stability in housing and employment. The Plan identified the following key action items related to housing:

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[2] Available at https://www.washingtoncountyor.gov/commdev/2020-2024-consolidated-plan

Rental Housing

- Focus on the construction of affordable rental housing serving a range of extremely low and very low-income households.
- Expand affordable rental housing options for persons with disabilities and elderly.
- Focus on creation of housing with supportive services to serve households at 30 percent of MFI, especially projects that are in alignment with countywide plans to address homelessness.

Homeownership

- Expand homeownership opportunities that reach moderate-income renters who desire to be owners, including community land trusts, down payment assistance, cooperative housing models, sweat equity products, and potential partnerships with home builders.

Housing Preservation

- Focus preservation on regulated and/or low-cost market rate housing serving extremely low to moderate income households.

Assisting Vulnerable Populations

- Foster the creation of affordable rental and ownership housing for special needs populations in a range of community-support and geographic settings.
- Broaden the business community's knowledge of how to be a partner in employing people who have experienced homelessness, including youth, and/or previously justice involved.
- Support household stabilization and displacement mitigation for households at-risk of displacement from public investment and housing price increases.

Housing Needs Projection

This analysis outlines a forecast of housing needs within the City. Housing need and resulting land need are forecast to 2043 consistent with the 20-year need assessment requirements of Oregon Revised Statutes.[3]

This section of the Report presents a housing need analysis (expressed in number and types of housing units) and a residential land need analysis, based on those projections. The study area for this analysis is the city boundary of Hillsboro and adjacent UGB expansion areas.

The primary data sources used in generating this forecast were:

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

- Oregon Employment Department
- City of Hillsboro
- Washington County
- Census Employment Dynamics
- Regional Multiple Listing Service
- Zonda Market Research
- Caritas Spotlight[4]
- Other sources as appropriate.

This analysis relies heavily on Census data from the 2020 Decennial Census and the American Community Survey (ACS). All Census data feature some margin of error but remain the best data source available on many demographic and housing subjects.

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

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

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

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[3] ORS 197.628; OAR 660-025

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

possible, on the most recent 2021 ACS 5-year estimates. The 5-year estimates have a lower margin of error than the ACS 1-year estimates.

Hillsboro Demographic Profile

Table 1 is a profile of Hillsboro's demographics based on Census data and the 2022 population estimate provided by PSU PRC. Some key points include:

o   As of the 2020 Decennial Census, Hillsboro had an estimated population of 106,477 people within the city boundary. The PRC estimates that the population has grown to 109,532 residents in 2022. Based on the estimated population, Hillsboro is the 5th largest city in the state by city population. Hillsboro has surpassed Beaverton to become the third largest city in the Metro area (excluding Vancouver) and trails Gresham by roughly 5,000 residents.

o   Hillsboro has experienced steady growth in population, growing an estimated 57% since 2000. In contrast, Washington County and the state experienced population growth of 36% and 25%, respectively, during that same period. (Census and PSU PRC)

o   Hillsboro is home to an estimated 40,970 households in 2022, an increase of over 15,900 households since 2000. The percentage of families has fallen since 2000 from 68.5% to an estimated 66.1%. The city has a similar share of family households as Washington County (67%) and a higher share than the state (62%).

o   Average household size has fallen slightly since 2000. Hillsboro's estimated average household size is now 2.64 persons, roughly equivalent to the Washington County average of 2.6 and the statewide average of 2.5.

Table 1. Hillsboro Demographic Profile (2000-2022)

POPULATION, HOUSEHOLDS, FAMILIES, AND YEAR-ROUND HOUSING UNITS					
	2000 **(Census)**	**2010** **(Census)**	**Growth** **00-10**	**2022** **(PSU)**	**Growth** **10-22**
Population[1]	69,883	91,611	31%	109,532	20%
Households[2]	25,028	33,289	33%	40,970	23%
Families[3]	17,142	22,440	31%	27,081	21%
Housing Units[4]	27,192	35,487	31%	43,037	21%
Group Quarters Population[5]	948	1,528	100%	1,391	-9%
Household Size (non-group)	*2.75*	*2.71*	*-1%*	*2.64*	*-3%*
Avg. Family Size	*3.28*	*3.24*	*-1%*	*3.18*	*-2%*

SOURCE: Census, Metro Consolidated Forecast, PSU Population Research Center, and Johnson Economics

Census Tables: DP-1 (2000, 2010); DP-3 (2000); S1901; S19301

1 From Census, PSU Population Research Center, growth rate 2010-2021 extended to 2022

2 2022 Households = (2022 population - Group Quarters Population)/2022 HH Size

3 Ratio of 2022 Families to total HH is based on 2020 ACS 5-year Estimates

4 4.8% vacancy rate is based on the most recent Decennial Census (2020)

5 2022 Group Quarters Population based on 5-year ACS estimates 2017-2021

Population Growth

Since 2000, Hillsboro has grown by over 39,600 residents or 57%, in 22 years. This was much higher than the countywide rate of growth. Washington County has grown an estimated 36% since 2000, or 160,000 people (PSU PRC). Hillsboro accounted for roughly one quarter of countywide growth.

PSU estimates that the population of Hillsboro increased each year between 2020 and 2022, defying the trend of some other large Metro-area cities that experienced a net out-migration of residents during the unusual COVID years of 2020 and 2021. Overall, Washington County grew modestly by 1,500 residents, while Multnomah County lost population over the year. This is part of a pattern that saw a net decline in population in Oregon between 2021 and 2022, according to the Census. Oregon has long seen more deaths than births among its population, which has traditionally been outweighed by net in-migration.

The pandemic disrupted long term growth patterns in many metropolitan areas due to the increased prevalence of work-from-home, which freed many workers from needing to be proximate to their place of work. This was true of white-collar office workers, and less so of those in the blue collar or service industries, many of whom had to remain on-site. The closure of some businesses and services during the pandemic's "shut down" phase reduced the attractiveness of denser urban areas for some residents, as many of the usual amenities were closed due to concerns over COVID risk. In the case of Hillsboro, the community likely gained population due to the development of new housing, and the migration of households out of denser cities (i.e., Portland) to more suburban environments during the pandemic.

As the state and Metro area recover from the extreme disruption of the past few years, many economists believe that growth will return to the long-term trend. Increased housing vacancies in areas that experienced out-migration should be met by returning demand in a Metro housing market that remains undersupplied and expensive for both owners and renters. At the same time, urban amenities are returning, as is the connection between workers and their place of work though many still working remotely at least part of the week. While the changes in location and habits due to COVID have become permanent for many households and workers, new residents should gradually fill the gap and return growth to pre-pandemic trends.

Household Growth & Size

As of 2022, the city has an estimated 40,970 households. Since 2000, Hillsboro has added an estimated 15,942 households. This is an average of roughly 725 households annually during this period. The growth since 2000 has roughly kept pace with the increase in new housing units, which were permitted at an average rate of 740 units per year between 2000 and 2022.

Hillsboro's average household size of 2.64 people, with 66% family households, is in keeping with the average across Washington County. There has been a general trend in Oregon and nationwide towards declining household size as birth rates have fallen, more people have chosen to live alone, and the Baby Boomers have become "empty nesters." While this trend of diminishing household size is expected to continue nationwide, there are limits to how far the average can fall.

Figure 2 shows the share of households by the number of people for renter and owner households in 2021 (latest data available), according to the Census. Renter households are more likely to have one person. Owner households are more likely to have two or more people. Household size correlates to housing needs.

Figure 2. Share Of Households by Household Size by Renters and Owners, Hillsboro
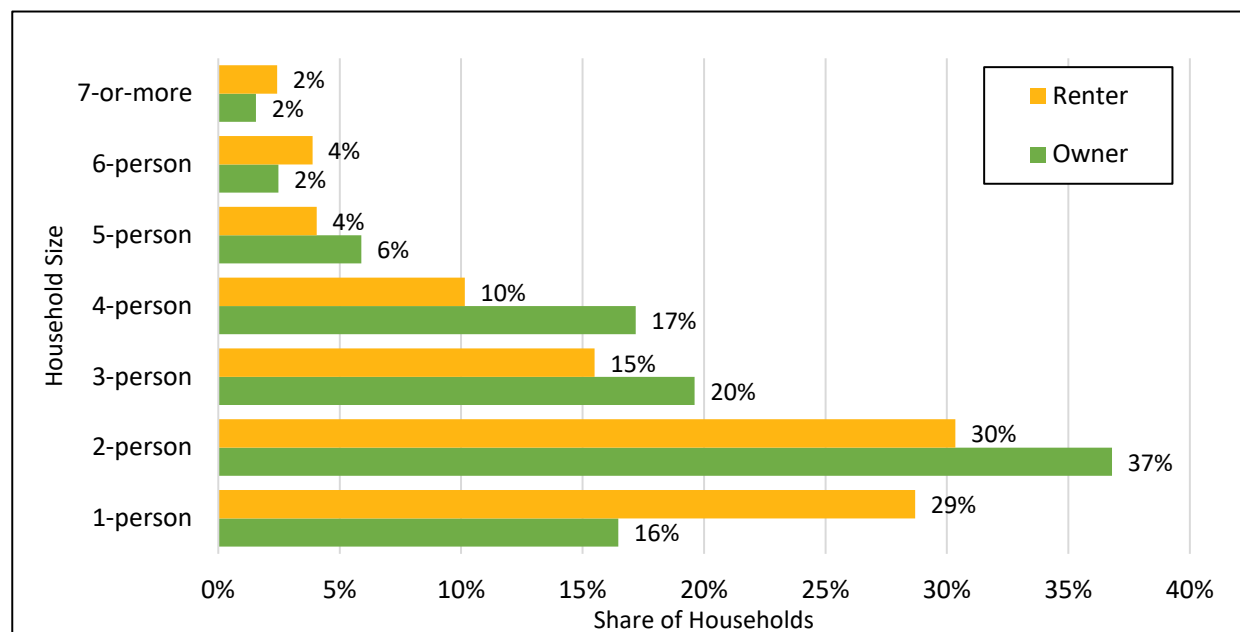
Sources: Census, Johnson Economics LLC; Census Tables: B25009 (2021 ACS 5-yr Estimates)

Family Households

The Census defines family households as two or more persons, related by marriage, birth or adoption and living together. As of the 2021 ACS, an estimated 66.1% of total Hillsboro households were family households, lower than the estimate in 2000 (68.5%). The total number of family households in Hillsboro is estimated to have grown by over 9,900 between 2000 and 2022. In 2022, family households in Hillsboro had an estimated average size of 3.2 people.

Group Quarters Population

As of the 2020 Census, Hillsboro had an estimated group quarters population of 1% of the total population, or roughly 1,100 persons. Group quarters include such shared housing situations as nursing homes, prisons, dorms, group residences, military housing, or shelters. In Hillsboro, the 2020 Census estimated that most group quarters population are in correctional facilities (36%), nursing facilities (26%) or unspecified "other noninstitutional facilities" (32.5%). The PSU PRC notes that "after declines in the GQ [group quarters] population during 2020-2021 associated with closures early during the pandemic, GQ population declined approximately 10% statewide, but the GQ populations have since returned to close to pre-pandemic level" (PSU PRC website). Hillsboro experienced a similar decline during this period. The 2020 Census estimated roughly 500 fewer group quarters residents than the 2010 Census.

In Hillsboro, it is estimated that group quarters population fell in 2020 due to the impacts of the COVID pandemic but has since rebounded to a level closer to the pre-pandemic period. Between the 2017 and 2021 ACS, the estimated group quarters population in Hillsboro ranged from 1,375 to 1,404 persons. This analysis draws on an average of these figures to estimate 1,391 group quarters residents as of 2022. This is an estimated 1.3% of the total population.

For this analysis, group quarters residents are removed from the estimated population total, before determining the number of other types of housing that are needed for non-group households.

Housing Units & Vacancy

Data from the City and the Census indicate that the city added an estimated 15,840 new housing units between 2000 and 2022, representing a 58% growth in the housing stock.

As of 2022, the city has an estimated housing stock of roughly 43,040 units for its 40,970 estimated households. This translates to an estimated average vacancy rate of 4.8%, which is the estimated vacancy rate found in the 2020 Decennial Census. The estimated vacancy in the Metro area was a higher 5.2%, and 7% statewide.

The most recent 2021 ACS estimated a lower vacancy rate of 3.5% in Hillsboro, but with a higher margin-of-error than the Decennial Census. In general, the local vacancy rate has been trending downwards since the 2008/9 recession. Vacancies peaked in 2013 near 7% in Hillsboro and have been declining ever since.

It is important to note that vacancies are not evenly distributed across housing types and price points. Vacancy includes rentals and homes for sale, or otherwise kept vacant. In a tight housing market like the one currently experienced by most of the Portland Metro area, including Hillsboro, the vacancy rate for the lowest cost units will be the lowest, as more households are competing for cost-effective units. For instance, in subsidized affordable housing, there is generally no real vacancy, as lower-income households wait on waiting lists to move into any available unit. Similarly, the inventory of for-sale housing affordable to many middle-income first-time homebuyers is very low, as these units are rarer, and sell quickly.

Age Trends

Figure 3 shows the share of the population falling into different age cohorts between the 2010 Census and the most recent 5-year American Community Survey estimates. The chart shows that children and young adults have fallen as a share of the population. The middle age segments have remained steady as a share of the population as the large Baby Boom generation has aged towards retirement. This is in keeping with the national trend. But overall, Hillsboro has a younger population than the county, which has an even greater share of those over 55 years in age.

Figure 3. Age Cohort Trends, 2010 – 2021
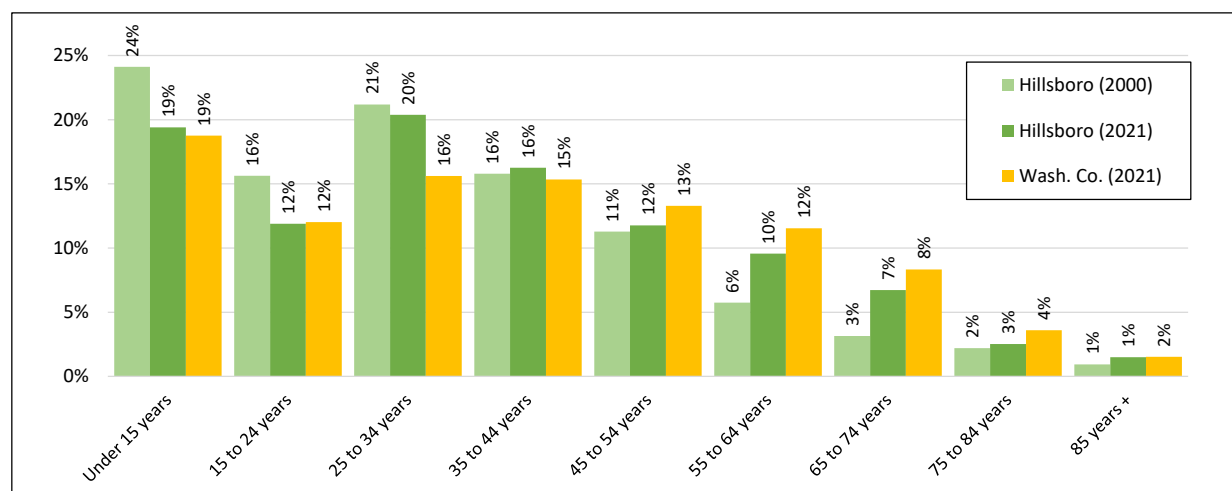
Sources: Census, Johnson Economics LLC; Census Tables: QT-P1 (2000); S0101 (2021 ACS 5-yr Estimates)

- Despite the general aging of the population, nearly 90% of the population is under 65 years of age, and nearly 20% are under age 15.
- In the 2021 ACS, the local median age was an estimated 34 years, compared to 40 years across Oregon.

Figure 4 presents the share of households with children, and the share of the population over 65 years of age for comparison. Compared to state and national averages, Hillsboro has a higher share of households with children at 33%. At 11%, the share of the population over 65 is lower than the state and national figures.

Figure 4. Share of Households with Children/ Population over 65 years (Hillsboro)
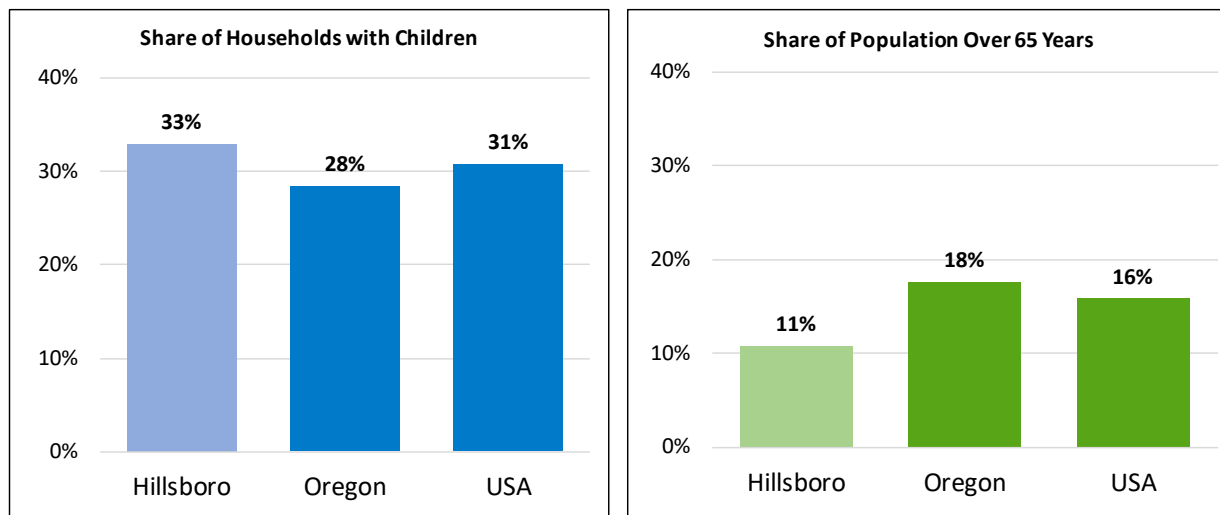
Sources: Census, Johnson Economics LLC; Census Tables: B11005; S0101 (2021 ACS 5-yr Estimates)

Diversity Trends

The following figure presents the distribution of Hillsboro's population by race and Hispanic ethnicity. As shown in Figure 5, the community grew more diverse between the 2010 and 2020 Census, with the population's white (non-Hispanic) share falling from 63% to 53%. The Hispanic or Latino population makes up 24% of residents, and the Asian population is 12% of the population. In comparison, the share of the population identifying as "white alone" is 61% in Washington County, and a much higher 72% statewide. The share of Hillsboro's population identifying as Hispanic or Latino is 24% of the population, indicating over 25,000 people as of the 2020 Census. This is higher than the 14% share statewide.

Minority households tend to have a larger average household size than the average of all households (Figure 6 presents statewide data due to the high margin of error for local data in this data set.) Households identifying as "white alone" have the lowest average household size (2.4 persons), while all other racial and ethnic categories have a larger estimated average household size. Some of the non-white categories, such as black households and those of two or more races, are still similar in average size (2.5 and 2.7 persons, respectively). Those with the largest estimated households are Latinos, Pacific Islanders, and those identifying as "some other race."

Larger average household size indicates a need for units with more bedrooms on average among many minority households. Each household has its own housing needs in terms of the number of bedrooms and other factors, based on the specific makeup of each family. Based on voluntary guidelines provided

by HUD for public housing programs, households of between 2 persons generally need a one-bedroom unit, households with 3 persons might need two bedrooms, and those with 4 persons might need three bedrooms. Larger households may need four or more bedrooms, which are typically found in single detached homes.

Figure 5. Racial and Ethnic Diversity, 2010 – 2020 (Hillsboro)
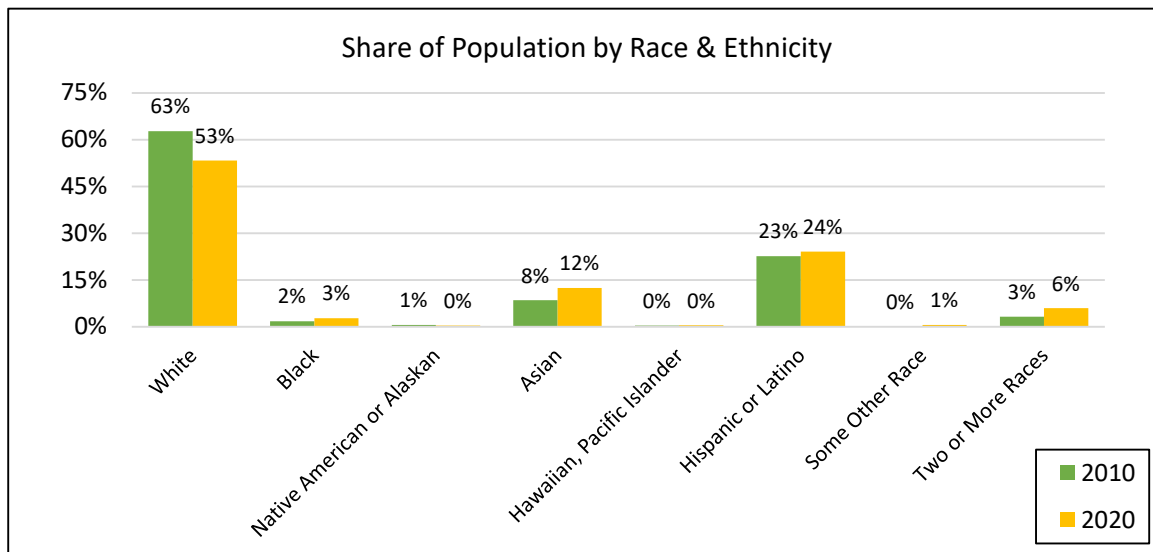
Sources: Census, Johnson Economics LLC; Census Tables: P1, P2 (2010, 2020)

Figure 6. Average Number of Persons per Household by Racial and Ethnic Category (Oregon)
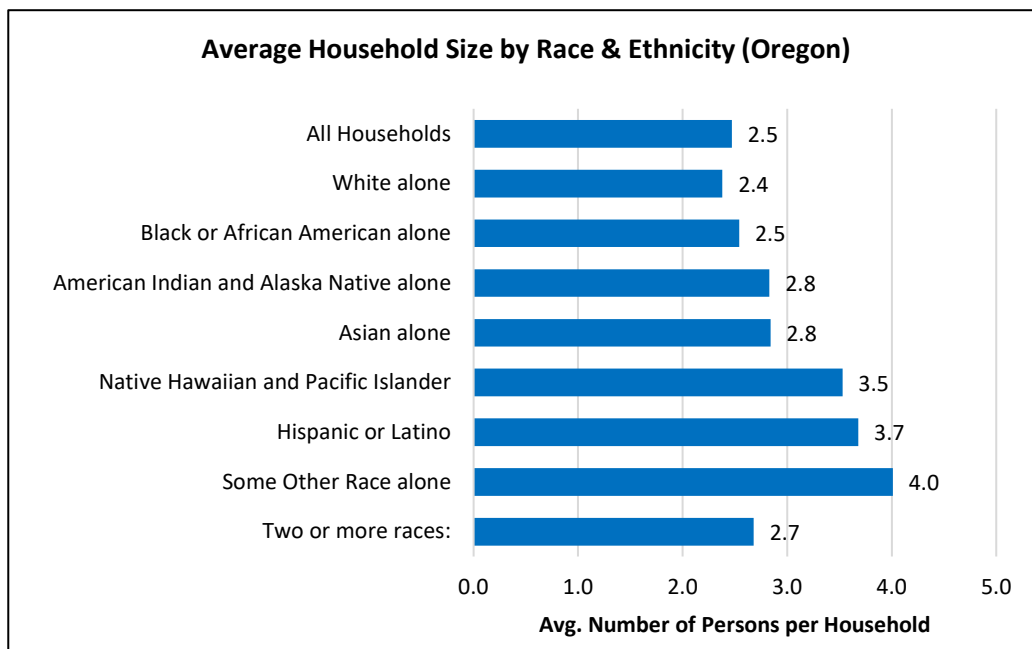
Sources: Census, Johnson Economics LLC; Census Tables: P17A-H, (State of Oregon, 2020)

* This data is presented on a statewide basis using the most recent Census data available (2010). The data for the Hillsboro or Washington County geographies feature unusually large margins of error due to small sample size.

Currently, many racial and ethnic minorities are less likely to own the homes they occupy based on statewide data (Figure 7) meaning that they tend to occupy rental units. These communities face systemic obstacles to home ownership including lower generational wealth, access to capital and financing, and a history of discrimination in lending and geography (e.g., redlining). While the country and state try to address explicit discrimination through the law, the legacy of these barriers continue to hamper home ownership for many minority households. Going forward, Hillsboro would benefit from more entry-level homebuying opportunities for these households, as well as additional rental housing for those who are still unready or unable to buy a home.
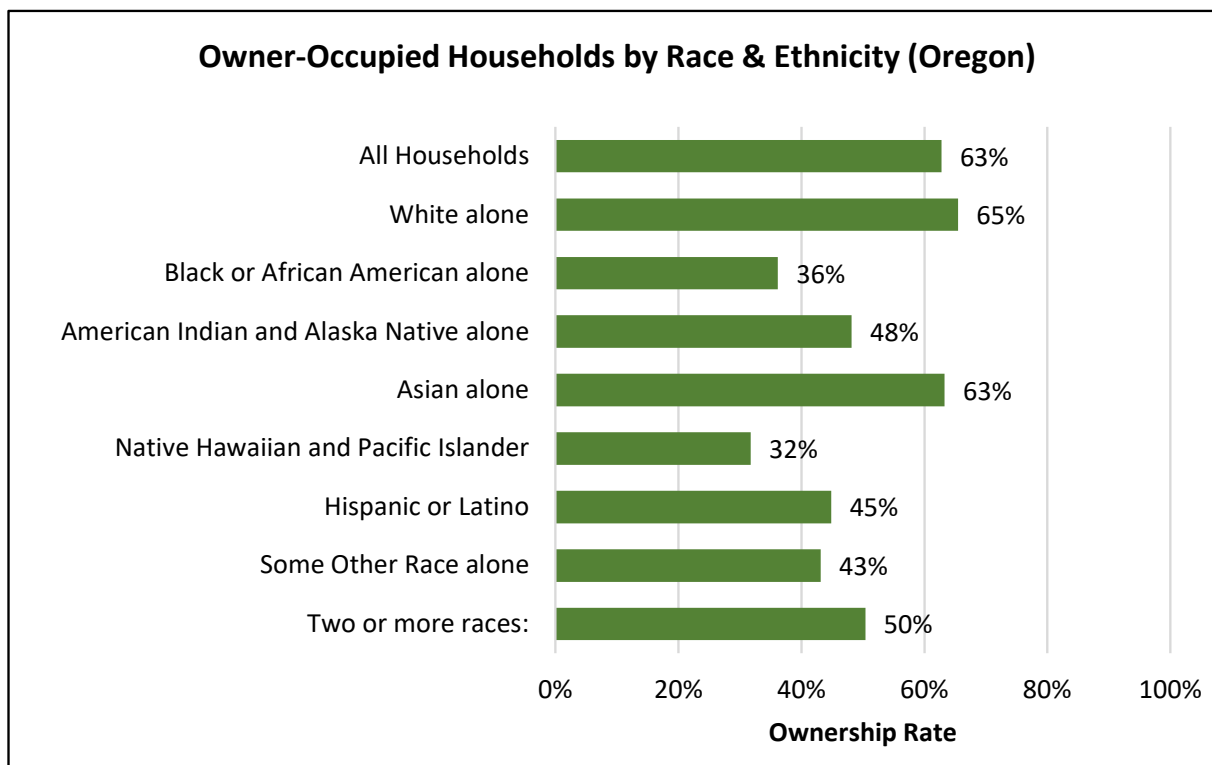
Populations from some racial and ethnic minority groups also have lower average incomes and are more likely to have income below the official poverty level compared to the total population. This is correlated with their greater share of renter households and will also impact the types of housing they consume, as discussed later in this report.

Figure 7. Home Ownership Rate by Racial and Ethnic Category (Oregon)

Owner-Occupied Households by Race & Ethnicity (Oregon)

Category	Ownership Rate
All Households	63%
White alone	65%
Black or African American alone	36%
American Indian and Alaska Native alone	48%
Asian alone	63%
Native Hawaiian and Pacific Islander	32%
Hispanic or Latino	45%
Some Other Race alone	43%
Two or more races:	50%

Sources: Census, Johnson Economics LLC; Census Tables: B25003A-H, (State of Oregon, 2021 ACS 5-year)

* This data is presented on a statewide basis using the most recent Census data available (2020). The data for the Hillsboro or Washington County geographies feature larger margins of error due to small sample size in some of the racial categories.

Income Trends

Table 2 presents data on Hillsboro's income trends.

Table 2. Income Trends, 2000 – 2022 (Hillsboro)

PER CAPITA AND MEDIAN HOUSEHOLD INCOME					
	2000 (Census)	2010 (Census)	Growth 00-10	2022 (Proj.)	Growth 10-22
Per Capita ($)	$21,680	$27,481	27%	$42,938	56%
Median HH ($)	$51,575	$62,474	21%	$94,075	51%

SOURCE: Census, Metro Consolidated Forecast, PSU Population Research Center, and Johnson Economics

Census Tables: DP-1 (2000, 2010); DP-3 (2000); S1901; S19301

- Hillsboro's per capita income was roughly $41,625 in 2021, compared to the statewide per capita income of $37,800. The projected per capita income in 2022 is nearly $43,000, based on the growth rate between 2000 and 2020.
- Hillsboro's estimated median household income was over $94,000 in 2022. This was similar to the Washington County median of $92,025, but 30% higher than the statewide median of $70,100. Based on the average annual rate of growth between 2000 and 2021, the estimated median income as of 2022 is $94,000.
- In real dollars, median income grew an estimated 82% between 2000 and 2022, in real dollars. Inflation was an estimated 55% over this period, so the local median income exceeded inflation in that period. This is not the case in many regions and nationally, where income growth has not kept pace with inflation.

Figure 8. Household Income Cohorts, 2021 (Hillsboro)

Household Income Groups

Income Group	Percent
$200,000 or more	11%
$150,000 to $199,999	12%
$100,000 to $149,999	24%
$75,000 to $99,999	13%
$50,000 to $74,999	18%
$35,000 to $49,999	10%
$25,000 to $34,999	4%
$15,000 to $24,999	4%
$10,000 to $14,999	2%
Less than $10,000	2%
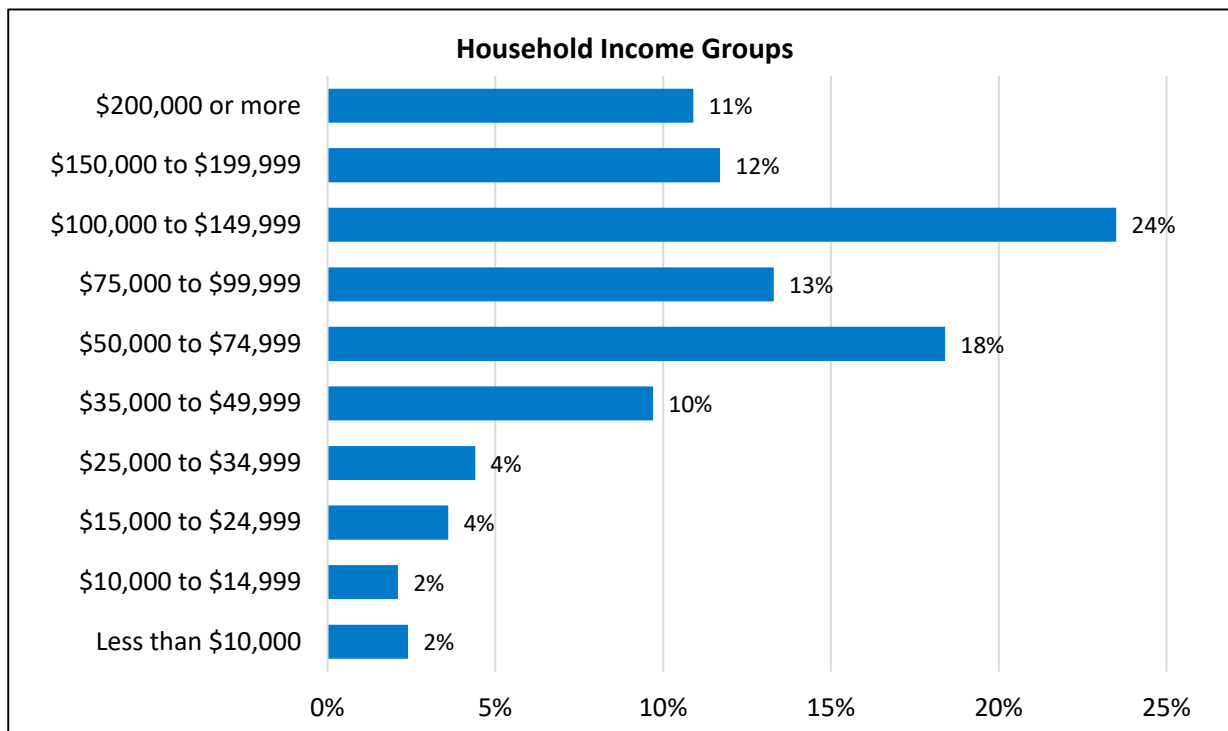
Sources: Census, Census Tables: S1901 (2021 ACS 5-yr Est.)

Figure 8 presents the estimated distribution of households by income as of 2021. The largest income cohorts are those households earning between $100k and $150k, followed by households earning between $50,000 and $75,000.

- 42% percent of households earn more than $100,000.
- 25% of households earn less than $50k per year, and 9% of households earn less than $25k per year.

Poverty Statistics

According to the Census, the official poverty rate in Hillsboro is an estimated 8% during the most recent period reported (2021 5-year estimates).[5] This is roughly 8,200 individuals in Hillsboro. In comparison, the official poverty rate in Washington County is a similar 8%, and at the state level is 12%. As shown in Figure 9, in the 2017-21 period:

- The Hillsboro poverty rate is highest for children and older residents at 9%, and 7% for those between 18 and 64 years.
- For those without a high school diploma, the poverty rate is 12%. For those with higher rates of education, the estimated poverty rate falls.
- Among those who are unemployed the poverty rate is 21%, while it is 4% for those who are employed.

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[5] Census Tables: S1701 (2021 ACS 5-yr Estimates)

While the Citywide average poverty rate is comparable to that of the County, the estimated poverty rate in individual Census tracts can vary widely, including some with much higher poverty rates. Two tracts in southwest Hillsboro, that encompass the Downtown and surrounding areas, featured estimated poverty rates of 22% in the 2021 ACS, among the highest poverty rates in the state. Downtown Hillsboro is the seat of Washington County governance and where many public services for the low-income and homeless are centered. Another tract in northeast Hillsboro, east of Cornelius Pass Rd. and west of Rock Creek, features a comparable poverty rate of 19%.

Figure 9. Share of Population in Poverty by Category (Hillsboro)

Poverty Level of Subgroups

Category	Value
Under 18 years	9%
18 to 64 years	7%
65 years and over	9%
Employed	4%
Unemployed	21%
Less than high school	12%
High school	11%
Some college, associate's	5%
Bachelor's degree or higher	4%
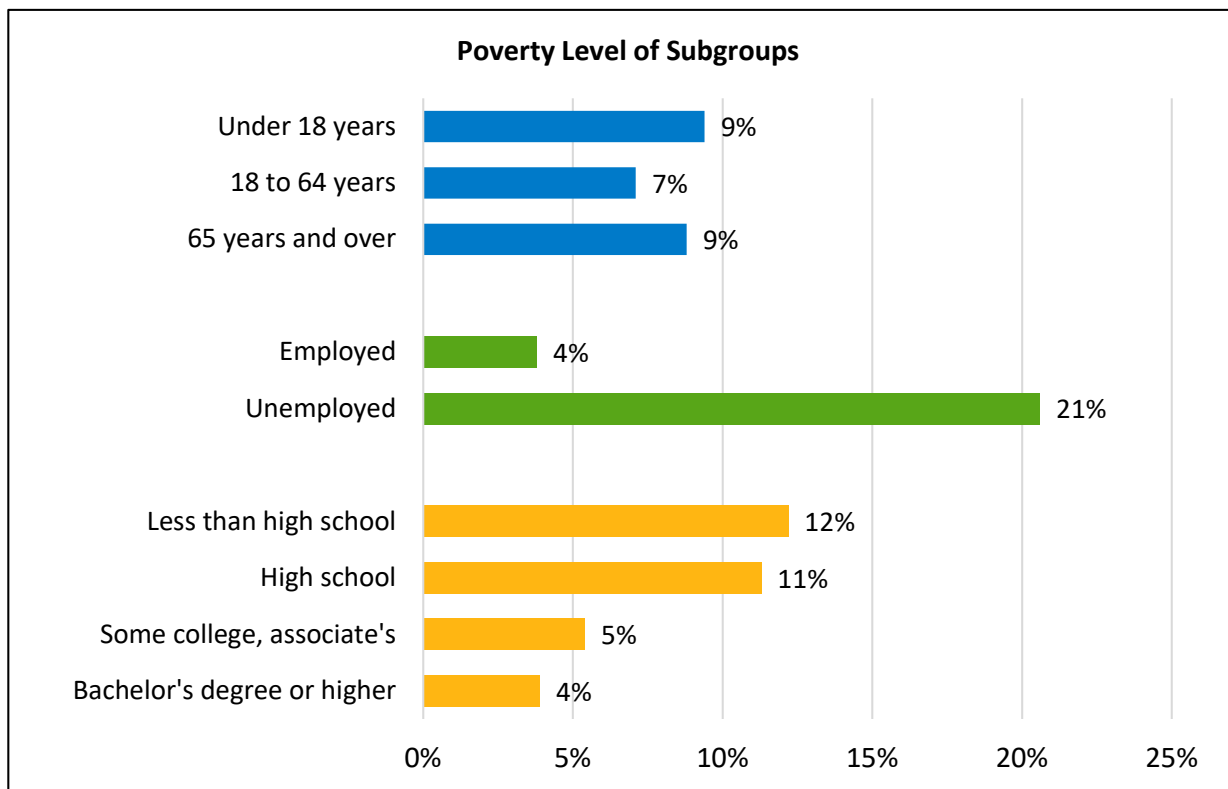
Sources: Census; Census Tables: S1701 (2021 ACS 5-yr Est.)

Employment Location Trends

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

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

As of 2019, the Census estimated there were roughly 85,000 covered employment jobs located in Hillsboro. Of these, an estimated 17,900 or 21%, were held by local residents, while over 67,000 employees commuted into the city from elsewhere (Figure 10). This general pattern of cross-commuting

is common among many communities within the Metro area. The most common places of residence for workers commuting into the city are Portland and Beaverton, with smaller shares from nearby areas including Aloha, Bethany, and Forest Grove.

Similarly, of the estimated 53,500 Hillsboro residents with covered employment, 67% of them commute elsewhere to their employment. The most common destinations for Hillsboro commuters are Portland, Beaverton, and Tigard. Smaller shares work elsewhere in the Portland metro or in the mid-Willamette Valley.

Figure 10. Commuting Patterns (Primary Jobs), Hillsboro

67,150
Work in Hillsboro,
live elsewhere

17,900
Live and work
in Hillsboro

35,600
Live in Hillsboro,
work elsewhere

79% / 21%

33% / 67%
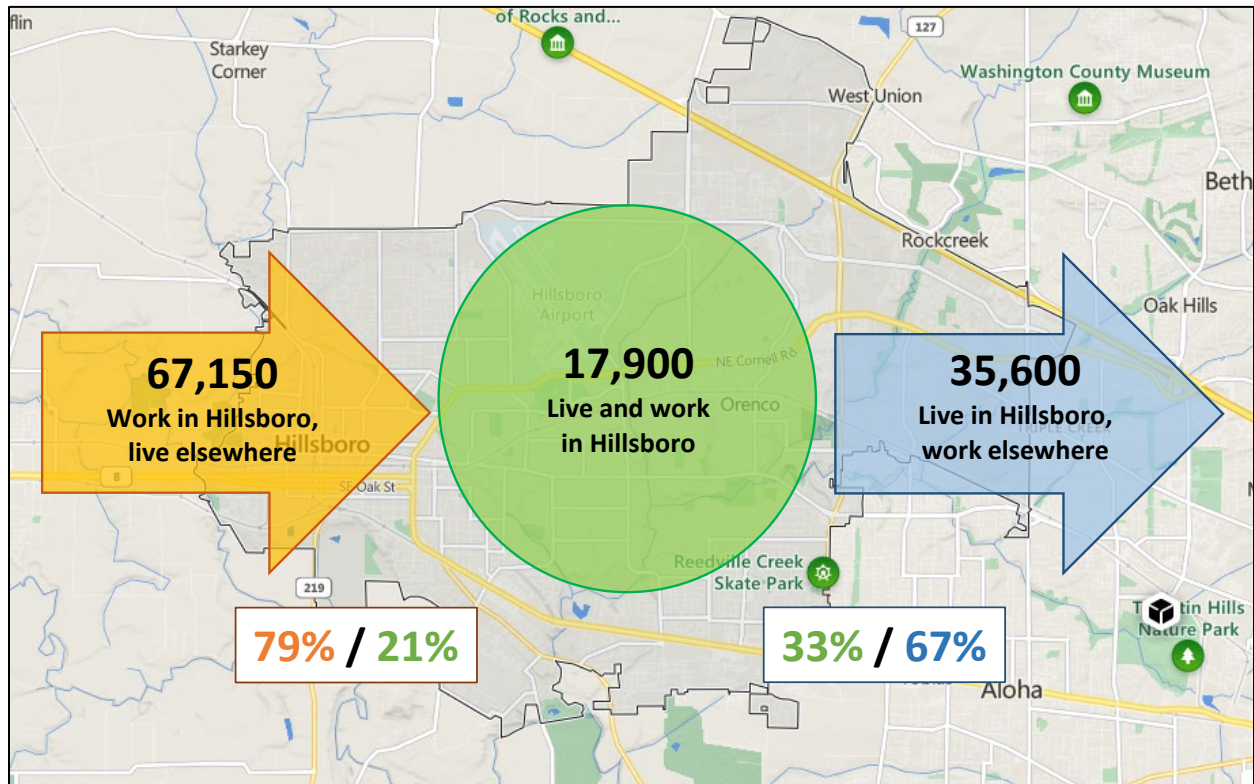
Source: Census Longitudinal Employer-Household Dynamics

Jobs/Household Ratio: Hillsboro features a high jobs-to-households ratio. There are an estimated 85,000 jobs in Hillsboro (covered), and an estimated 41,200 households in Hillsboro. This represents over two jobs per household. There is no standard jobs-to-households ratio that is right for all communities, but it can provide a guide to the balance between employment uses and residential uses in the city. In the case of Hillsboro, the community offers a high number of employment opportunities both for local and regional residents.

Current Housing Conditions

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

Housing Tenure
The Census estimates that Hillsboro has a slightly greater share of homeowner households than renter households. The 2021 ACS estimates that 51% of occupied units were owner-occupied, and 49% were renter occupied. The estimated ownership rate is similar to the rate in other large Metro cities, including Beaverton (50%) and Portland (53%), but the rate is higher across Washington County (61%) and statewide (63%). Nationally, the homeownership rate is now near the historical average of 65%.

Housing Stock
Hillsboro has an estimated 43,040 housing units in 2022, with a vacancy rate of 4.8% (includes ownership and rental units). The housing stock is projected to have increased by roughly 15,850 units since 2000, or a growth of 58%.

Figure 11. Estimated Share of Housing Units, By Property Type, 2022
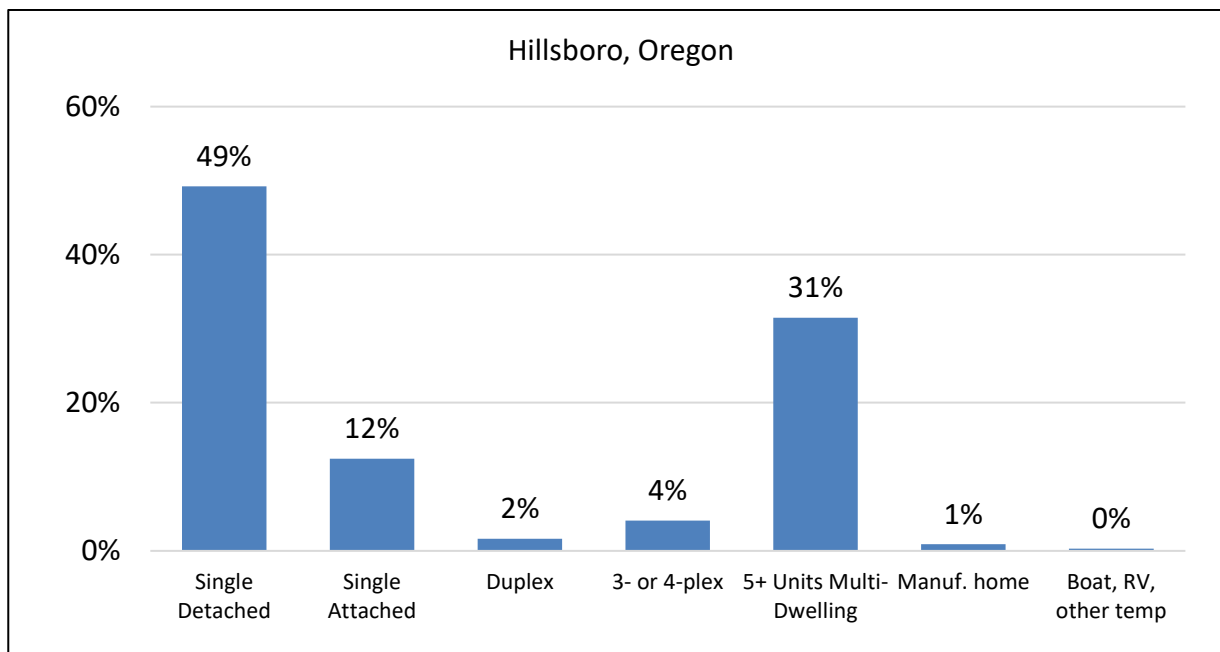
Sources: Census, City of Hillsboro

Figure 11 shows the estimated number of units by type in 2022 based on forecasting forward from the most recent Census and ACS data. Single detached homes represent an estimated 44% of housing units. Manufactured homes represent an additional 1% of the inventory.

Units in larger apartment complexes of 5 or more units represent 34% of units, and other types of attached homes (townhomes, duplexes and, 3-or 4 plexes) represent an additional 21% of units. (Single attached generally includes attached townhomes, and some 2 to 4-plexes which are separately metered).

Number of Bedrooms
Figure 12 shows the share of units for owners and renters by the number of bedrooms they have. In general, owner-occupied units are much more likely to have three or more bedrooms, while renter-occupied units are more likely to have two or fewer bedrooms. However, rental units with three or more bedrooms make up nearly 30% of rental units.

Figure 12. Number of Bedrooms for Owner and Renter Units, 2021
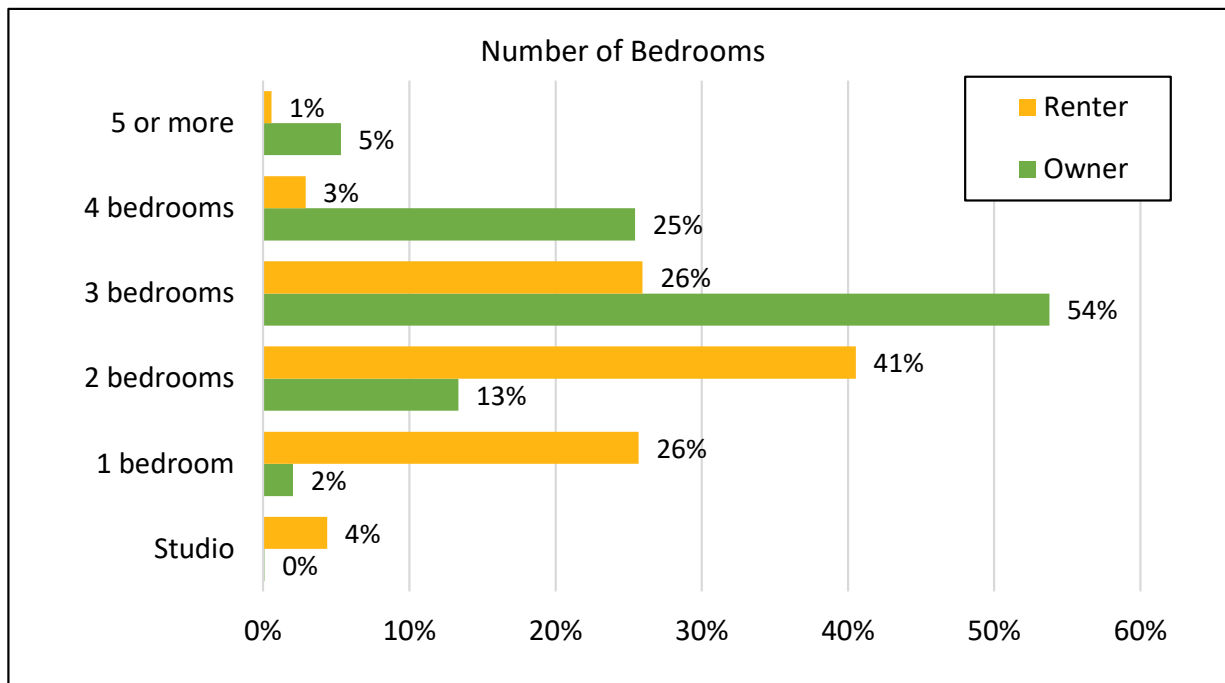
Source: Census; Census Tables: B25042 (2021 ACS 5-year Estimates)

Unit Types by Tenure
As shown in Table 3 and Figure 13, a large share of owner-occupied units (80%) are detached homes, which is related to why owner-occupied units tend to have more bedrooms on average. This is a key factor in the high cost of many single detached homes and a barrier to homeownership for many. Over 3% of ownership units are in buildings of three or more units, meaning these are likely condominium units. Renter-occupied units are more distributed among a range of structure types. About 16.5% of rented units are estimated to be detached homes or manufactured homes, while the remainder are some forms of attached unit. Nearly 62% of rental units are in larger apartment complexes.

Table 3. Current Housing Inventory by Unit Type, for Owner and Rental Housing

Ownership housing

OWNERSHIP HOUSING							
	Single Detached	Single Attached	Duplex	3- or 4-plex	5+ Units MFR	Manuf. home	Boat, RV, other temp	Total Units
Totals:	17,766	3,098	89	57	654	345	127	22,135
Percentage:	80.3%	14.0%	0.4%	0.3%	3.0%	1.6%	0.6%	100%

Rental housing

RENTAL HOUSING							
	Single Detached	Single Attached	Duplex	3- or 4-plex	5+ Units MFR	Manuf. home	Boat, RV, other temp	Total Units
Totals:	3,422	2,258	613	1,691	12,886	33	0	20,903
Percentage:	16.4%	10.8%	2.9%	8.1%	61.6%	0.2%	0.0%	100%

Sources: Census, Johnson Economics, City of Hillsboro

Figure 13. Current Housing Inventory by Unit Type, by Share
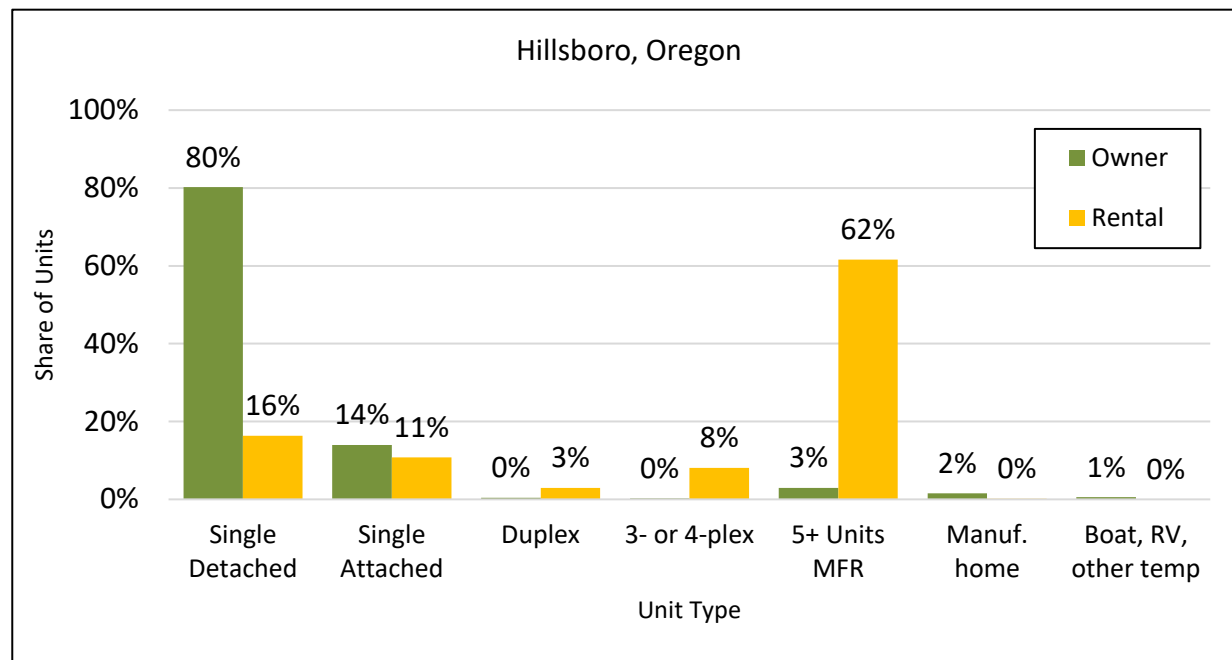
Sources: Census, Johnson Economics, City of Hillsboro

Age and Condition of Housing Stock

Hillsboro's housing stock reflects the pattern of development over time. As shown in Figure 14, an estimated 12% of owner housing and 23% of renter housing have been built over the last decade. An additional 50% of both ownership housing and rental housing was built in the 1990's and 2000's.

Figure 14. Age of Housing Units for Owners and Renters

Source: Census (Table: B25036 - 2021 ACS 5-year Estimates)

- Good quantitative data on housing condition is generally unavailable without an intensive on-site survey of all local housing that is beyond the scope of this analysis. Census categories related to housing condition are ill-suited for this analysis, dealing with such 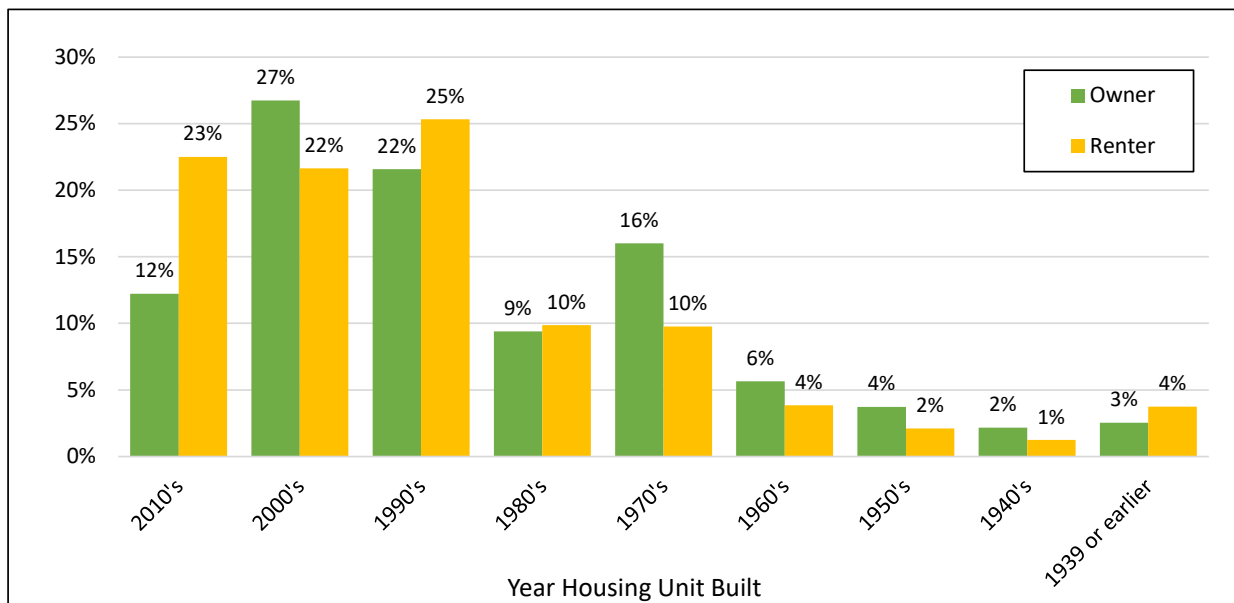issues as units without indoor plumbing, which was more common in the mid-20th Century, but is an increasingly rare situation. Age of units serves as the closest reliable proxy for condition with available data.
- For ownership units, older homes may be in poor condition, but are also more likely to have undergone some repair and renovation over the years. Rental units are more likely to degrade steadily with age and wear-and-tear, and less likely to receive sufficient reinvestment to keep them in top condition, though this is not universally true.

Housing Costs vs. Local Incomes

Figure 15 shows the share of owner and renter households paying more than 30% of their household income towards housing costs (typically including utilities), by income segment. Spending 30% or less on housing costs is a standard measure of "affordability" used by HUD[6] and others, and in the analysis

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[6] "Cost burden – Monthly housing costs (including utilities) exceeding 30% of monthly income. Severe cost burden – Monthly housing costs (including utilities) exceeding 50% of monthly income." Source: www.huduser.gov/portal/datasets/cp/CHAS/bg_chas.html

presented in this report. HUD defines households spending more than 30% of income on housing as "rent burdened" or "cost burdened."

Households with lower incomes tend to spend more than 30% of their income on housing as they have less income, while incrementally, fewer of those in higher income groups spend more than 30% of their incomes on housing costs as they have greater financial resources. Of those earning less than $20,000, it is estimated that most owner and renter households spend more than 30% of their income on housing costs.

In total, the Census estimates that over 31% of Hillsboro households pay more than 30% of income towards housing costs (2021 American Community Survey, B25106).

Figure 15. Share of Households Spending More than 30% on Housing Costs, by Income Group
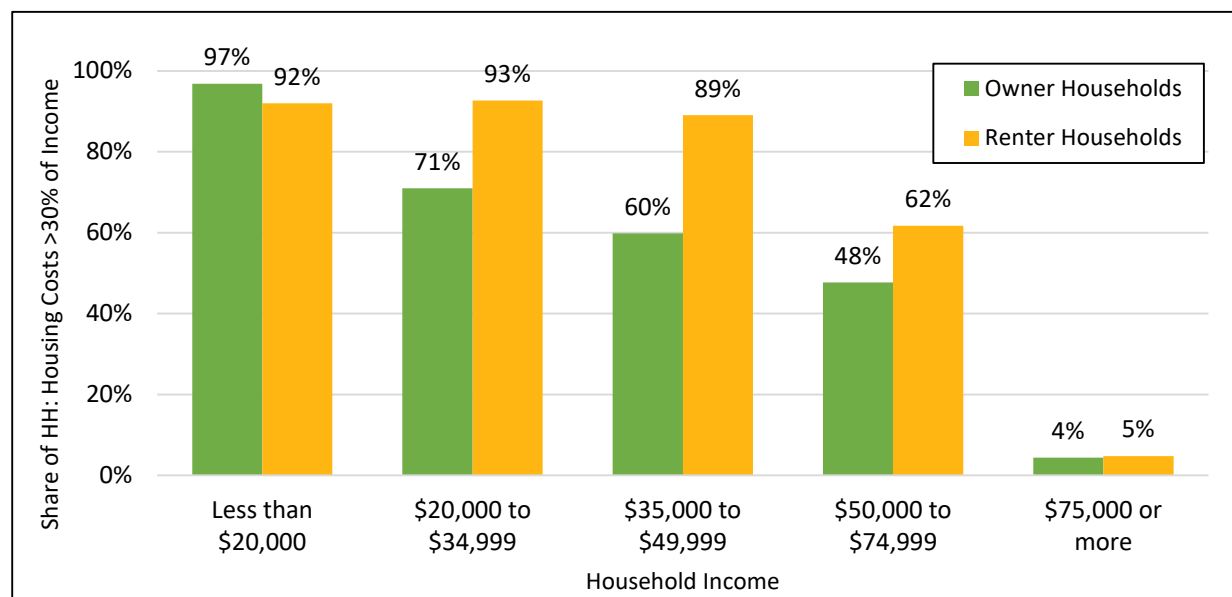
Sources: Census, Johnson Economics; Census Table: B25106 (2021 ACS 5-yr Estimates)

Housing is generally one of a household's largest living costs, if not the largest. The ability to find housing options that are affordable, and even build wealth through ownership, is one of the biggest contributors to helping lower income households save and cultivate wealth. Even if renting, housing costs that are affordable allow for more household income to be put to other needs, including savings.

Renters are disproportionately lower income relative to homeowners. Housing cost burdens are felt more broadly for these households, and as the analysis presented in a later section shows there is a need for more rental units at more affordable levels in Hillsboro, as in most communities.

Figure 16 shows the percentage of household income spent towards gross rent[7] for local renter households only. This more fine-grained data shows that not only are 42% of renters spending more

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

than 30% of their income on gross rent, but an estimated 15% of renters are spending 50% or more of their income on housing and are considered "severely rent-burdened".

The state of Oregon tracks cities where at least 25% of renter households are severely rent burdened, identifying them as "severely rent burdened cities." With 15% of renter households meeting this threshold, Hillsboro does not currently qualify as one of these cities.

Figure 16. Percentage of Household Income Spent on Gross Rent, Hillsboro Renter Households
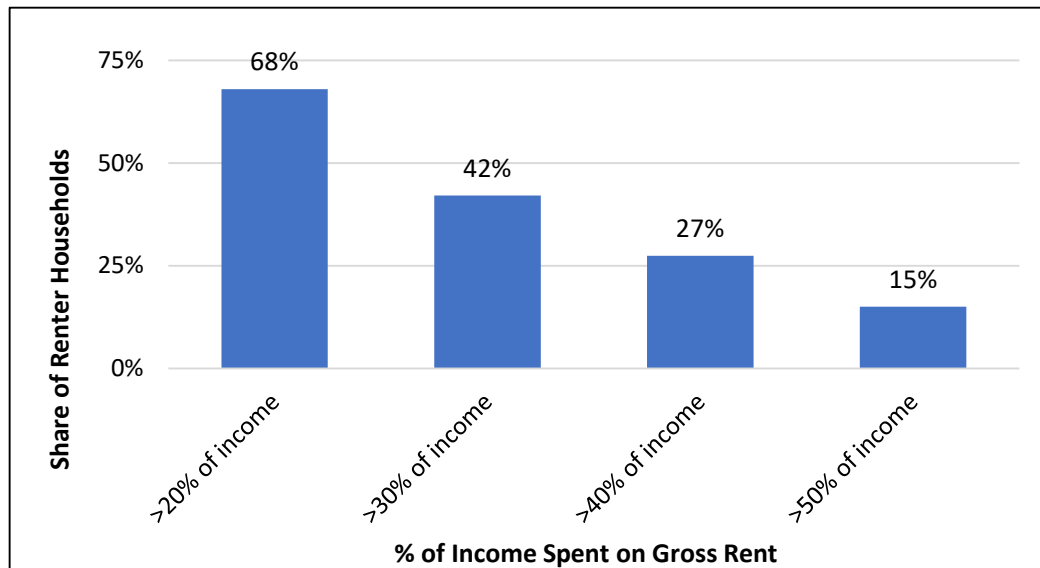
Sources: Census, Johnson Economics; Census Table: B25070 (2021 ACS 5-yr Estimates)

Publicly Assisted Housing

The Metro affordable housing database lists 2, 2,562 subsidized affordable units within Hillsboro in 77 separate properties. Table 4 lists those properties tracked by Oregon Housing and Community Services (OHCS) in Hillsboro, which is less complete but includes a breakdown of the eligible households. These are properties that are funded through HUD programs, tax credits and other programs which guarantee subsidized rents for qualified households. Most of these units are offered towards families (75%), while lesser amounts are aimed at other groups. The high share of renters still paying over 30% of their income towards housing costs indicates that there is an ongoing need for rental units at the lowest price points. Hillsboro is currently home to one property, the Montebello Apartments, dedicated to agricultural workers with 47 units.

Table 4. Subsidized Affordable Housing Inventory, Hillsboro

	# of Properties	# of Units	Share of Units
Agricultural Worker	1	47	2%
Developmentally Disabled	0	0	0%
Elderly	4	143	7%
Ex- or Released Offender	0	0	0%
Family	60	1,502	75%
Homeless	0	0	0%
Physically Disabled	3	89	4%
Substance Use Disorder	0	0	0%
Veterans	0	0	0%
Workforce	3	232	12%
Total:	*71*	*2,013*	*100%*

Source: OHCS

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

The most recent (January 2022) Point-in-Time count of people experiencing homelessness and households experiencing homelessness in Washington County[8] found 808 homeless individuals in 571 households on the streets, in shelters, or other temporary and/or precarious housing. The estimated 808 homeless individuals represented 0.8% of Hillsboro's total estimated population in 2022.

- An estimated 72% of individuals were in some sort of temporary shelter, while 28% were unsheltered.
- The total included 171 children (under age 18), all of whom were sheltered, and 44 youth (aged 18-24) of whom 12 were unsheltered.
- 61% of those counted identified as men, 38% as women, and 1% as transgender or gender non-conforming.
- 24% of those counted were Hispanic or Latino compared to 18% in the general population.
- 250 individuals, or 31%, were counted as "chronically homeless".[9]

While the Point-in-Time count is one of the few systematized efforts to count homelessness across the country in a regular, structured way, it is widely thought to undercount the population of homeless

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[8] Figures are for the entire County.

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

individuals and households. People who are doubled up, couch surfing, or experiencing domestic violence may not always be accurately counted. In addition to the impossibility of finding all unsheltered individuals experiencing homelessness, the count is conducted in late January, when homeless counts are likely near their lowest of the year due to inclement weather. It also relies on self-reporting.

A recent analysis prepared for OHCS to test a potential approach for preparing Housing Capacity Analyses on a regional basis included estimates of the homeless population in Oregon communities, including Hillsboro. The approach utilizes a combination of data from the bi-annual Point-in-Time count and from tracking of homeless school-aged children in keeping with the McKinney-Vento Act. The analysis estimates 768 homeless households in Hillsboro as of mid-2020. These include households that are unsheltered, in temporary shelters, or staying with friends or relatives. These households are a component of current and future housing needs.

The persistence of homelessness speaks to the need to continue to build a full spectrum of services and housing types to shelter this population, from temporary shelter to subsidized affordable housing. An analysis of the ability of current and projected housing supply to meet the needs of low-income people and the potential shortfall is included in the following sections of this report.

Market Conditions (For-Sale Housing)

Figure 17 and Figure 18 present home sales data from the Regional Multiple Listing Service (RMLS) for the prior 12 months (October 2021 to October 2022).

There were 1,585 home sales in Hillsboro over this period, or an average of 132 sales/month. Attached units and condominiums make up a significant share of home sales (29%).

- The median sale price was $535,500.
- The average (mean) sale price was $564,000.
- The average price per square foot was $305/square foot.
- The median square footage was 1,715 square feet.
- A home affordable to the median-income household in Hillsboro (roughly $90,000), would cost around $350,000.
- Only 7% of total sales were priced below $350,000. Therefore, very few units are affordable to any would-be buyers making less than the median household income.
- 93% of total sales were priced at more than $350,000, and 62% of total sales were priced at $500,000 or more.

Currently, RMLS tracks 174 active listings, or about 1.5 months of for-sale inventory at the average rate of sales over the prior 12 months. Historically, this is a very low housing inventory and indicates a tight housing market.

Figure 18 presents the estimated home price affordable to the median-income household in Hillsboro and comparison market areas, compared to the actual median sale price for homes in 2022. In all cases, the median sale price is well in excess of what would be affordable to the median-income household.

In Hillsboro, the median sale price was roughly 60% higher than the affordable price for the median household. However, in the comparison jurisdictions the median sale price ranged from 70% to 90% higher.

Figure 17. Hillsboro Home Sales (12 Months)

Home Sales by Unit Type

- Detached Home — 70%
- Manuf. Home — 2%
- Attached Home — 20%
- Condo — 9%

Home Sales by Price Level

Price Level	Count
$900,000+	66
$800,000 - $899,000	67
$700,000 - $799,000	114
$600,000 - $699,000	284
$500,000 - $599,000	453
$400,000 - $499,000	410
$300,000 - $399,000	142
$200,000 - $299,000	32
$100,000 - $199,000	16
<$100,000	4

Number of Units Sold & Avg. Sale Price per Sq.Ft.

Units Sold — Avg. Price/Sq.Ft.

Year	Units Sold
2010	912
2011	989
2012	1,230
2013	1,367
2014	1,389
2015	1,694
2016	1,685
2017	1,700
2018	1,383
2019	1,474
2020	1,851
2021	1,974
2022	1,416

Sources: RMLS, Johnson Economics

Figure 18. Home Price Affordable to Median Household vs. Actual Median Home Price (2022)

Median Affordable Home vs. Actual Median Sale Price

	Affordable Price (Med. Income)	Affordable Price (120% Medi.Income)	Median Sale Price
Hillsboro	$339,000	$419,000	$535,500
Beaverton	$305,000	$377,000	$575,000
Tigard	$346,000	$428,000	$630,000
Wash. County	$341,000	$422,000	$575,000
Portland Metro	$307,000	$379,000	$550,000
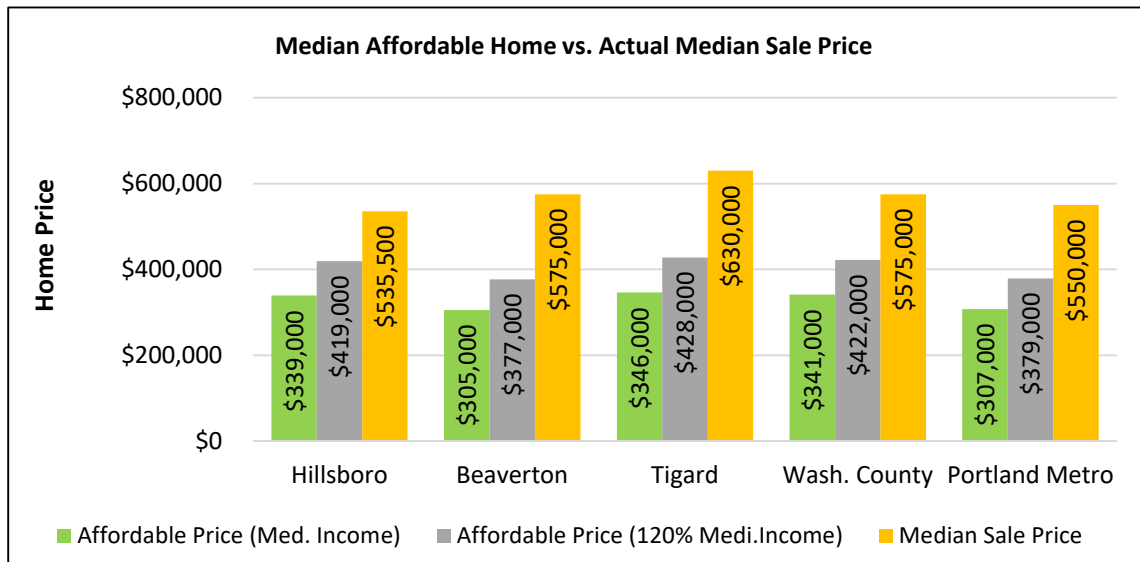
Sources: RMLS, Johnson Economics

As shown in Figure 19, Home prices in Hillsboro have doubled since 2015, from $260k to $535k. Since positive home price growth returned in 2012, home price growth has averaged 10% per year, and was estimated at 17% per year in each of the last two years.

Figure 19. Median Home Sale Price (2010-2022)

Median Sale Price

Legend: All Units; 2 Beds or Fewer; 3 Beds; 4 Beds or More; Condo
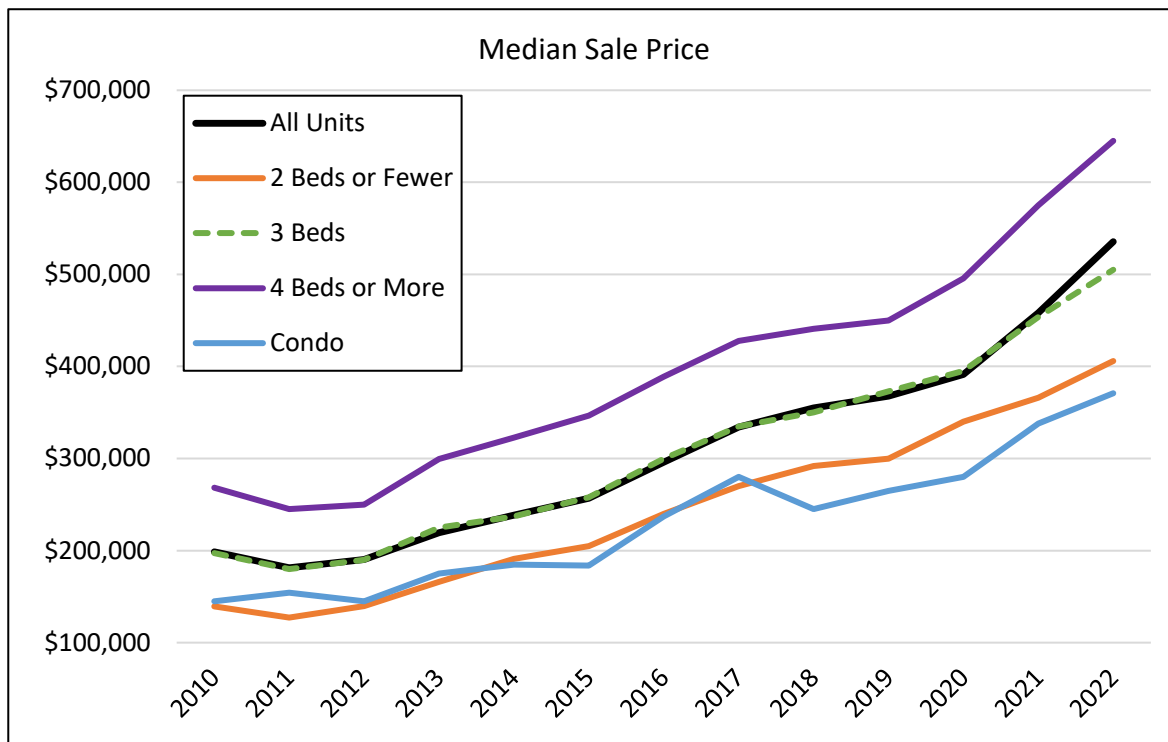
Sources: RMLS, Johnson Economics

Market Conditions (Rental Housing)

As shown on Figure 20, based on the inventory tracked by CoStar (13,500 units in 160 properties), estimated rental vacancy hovered above 5% for much of the last decade, before falling in 2020. The vacancy rate is now close to 5%. This includes units at all price points, as well as new properties in lease up. As noted previously, vacancies are not evenly distributed across rent levels, with few available units at low rent levels where the greatest unmet need remains (see following sections.)

Figure 20. Rental Vacancy in Hillsboro (2000-2022)
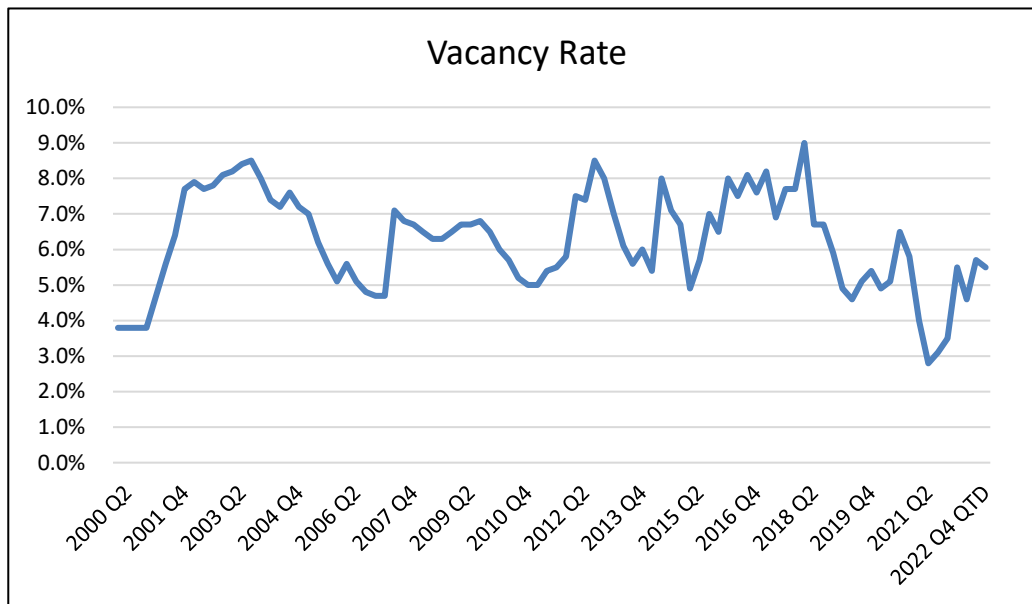
Sources: CoStar, Johnson Economics

Average rents have climbed steadily since 2009. The average rent in Hillsboro has nearly doubled over that period, increasing to roughly $2.00/square foot, or an average of $1,800/month (Figure 21).

Figure 21. Avg. Rent/Sq.Ft. Hillsboro (2000-2022)
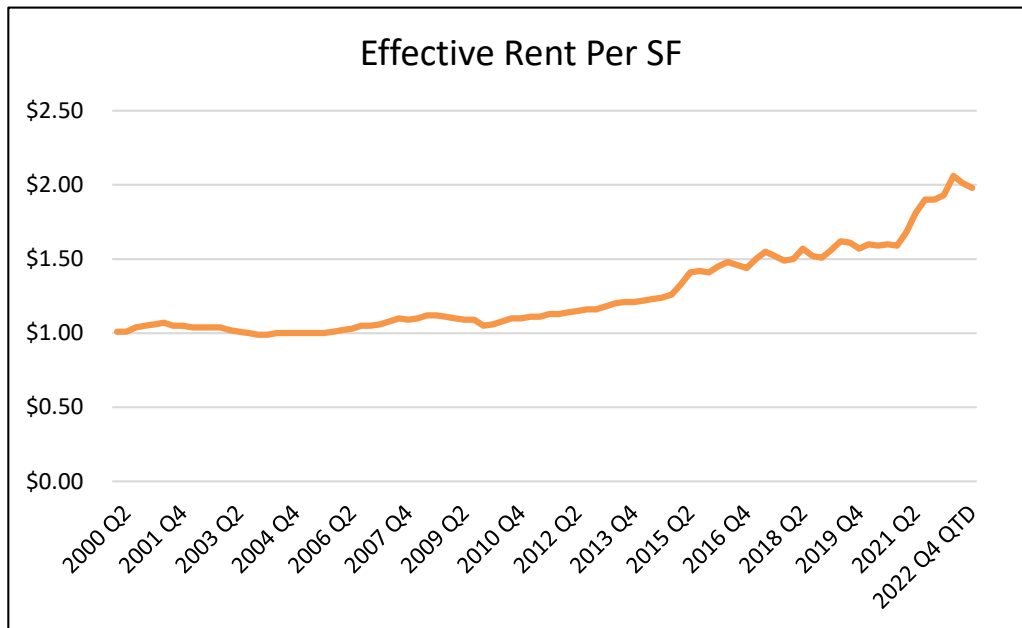
Sources: CoStar, Johnson Economics

Figure 22 presents the average annual rent growth since 2001. Rent growth has been positive since the prior recession. After the growth rate fell to near 0% at the outset of the COVID pandemic, it quickly reversed and rebounded with rent growth of roughly 20% in 2021, before falling to a more modest 4% by the end of 2022.

Figure 22. Annual Rent Growth Rate Hillsboro (2000-2022)
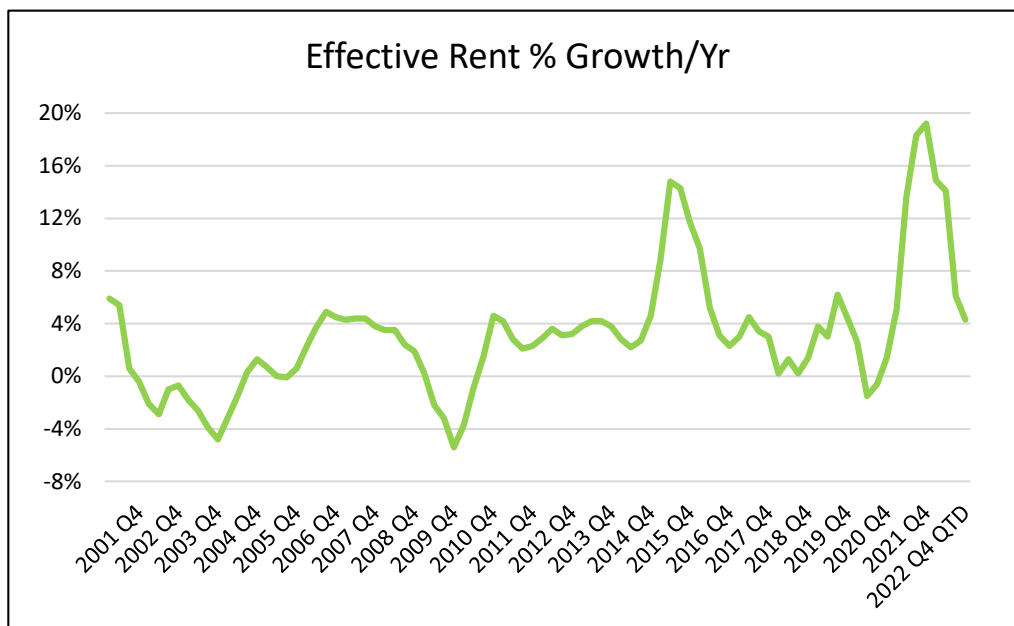
Sources: CoStar, Johnson Economics

Current Housing Needs

The profile of current housing conditions in the study area is shown in Table 5. This profile is based on Census 2020 and informed by the PRU PRC finalized estimate for 2022.

Table 5. Current Housing Profile (2022)

CURRENT HOUSING CONDITIONS (2022)			SOURCE
Total 2022 Population:	109,532		PSU Pop. Research Center
- Estimated group housing population:	1,391	(1.3% of Total)	US Census
Estimated Non-Group 2022 Population:	**108,141**	(Total - Group)	
Avg. HH Size:	2.64		US Census
Estimated Non-Group 2022 Households:	**40,970**	(Pop/HH Size)	
Total Housing Units:	**43,037**	(Occupied + Vacant)	Census 2010 + permits
Occupied Housing Units:	40,970	(= # of HH)	
Vacant Housing Units:	2,067	(Total HH - Occupied)	
Current Vacancy Rate:	4.8%	(Vacant units/ Total units)	

Sources: Johnson Economics, City of Hillsboro, PSU Population Research Center, U.S. Census

*This table reflects population, household and housing unit projections shown in Table 1.

We estimate a 2022 population of roughly 109,532 residents, living in 40,970 households (excluding group living situations). The average household size is 2.64 persons.

There are an estimated 43,040 housing units in Hillsboro, indicating an estimated vacancy rate of nearly 5%. This includes units vacant for any reason, not just those which are currently for sale or rent.

Estimate of Current Housing Demand

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

The analysis considered the propensity of households in specific age and income levels to either rent or own their home (tenure), to derive the current demand for ownership and rental housing units and the appropriate housing cost level of each. This is done by combining data on tenure by age, and tenure by income, from the Census American Community Survey (tables: B25007 and B25118, 2021 ACS 5-yr Estimates).

The analysis takes into account the average amount that owners and renters tend to spend on housing costs. For instance, lower income households tend to spend more of their total income on housing, while upper income households spend less on a percentage basis. In this case, it was assumed that households in lower income bands would prefer housing costs at no more than 30% of gross income (a standard measure of affordability). Higher income households pay a decreasing share down to 20% for the highest income households.

While the Census estimates that most low-income households pay more than 30% of their income for housing, this is an estimate of the current need. It assumes that low-income households prefer (or need) units affordable to them at no more than 30% of income, rather than more expensive units.

Table 6 presents a snapshot of current housing demand (i.e., preferences) equal to the number of households in the study area (40,970). The breakdown of tenure (owners vs. renters) reflects data from the 2021 ACS.

Table 6. Estimate of Current Housing Demand (2022)

Ownership				
Price Range	**# of Households**	**Income Range**	**% of Total**	**Cumulative**
$0k - $80k	682	Less than $15,000	3.2%	3.2%
$80k - $130k	691	$15,000 - $24,999	3.2%	6.4%
$130k - $180k	766	$25,000 - $34,999	3.6%	10.0%
$180k - $230k	1,168	$35,000 - $49,999	5.5%	15.5%
$230k - $310k	2,585	$50,000 - $74,999	12.1%	27.7%
$310k - $370k	3,128	$75,000 - $99,999	14.7%	42.4%
$370k - $440k	2,828	$100,000 - $124,999	13.3%	55.6%
$440k - $510k	2,323	$125,000 - $149,999	10.9%	66.6%
$510k - $680k	3,374	$150,000 - $199,999	15.8%	82.4%
$680k +	3,745	$200,000+	17.6%	100.0%
Totals:	**21,291**		**% of All:**	**52.0%**

Rental					
Rent Level	**# of Households**	**Income Range**	**% of Total**	**Cumulative**	
$0 - $400	1,223	Less than $15,000	6.2%	6.2%	
$400 - $700	839	$15,000 - $24,999	4.3%	10.5%	
$700 - $900	1,092	$25,000 - $34,999	5.6%	16.0%	
$900 - $1200	2,341	$35,000 - $49,999	11.9%	27.9%	
$1200 - $1600	3,831	$50,000 - $74,999	19.5%	47.4%	
$1600 - $1900	3,259	$75,000 - $99,999	16.6%	64.0%	
$1900 - $2200	2,553	$100,000 - $124,999	13.0%	76.9%	
$2200 - $2500	1,855	$125,000 - $149,999	9.4%	86.4%	
$2500 - $3400	1,313	$150,000 - $199,999	6.7%	93.0%	
$3400 +	1,372	$200,000+	7.0%	100.0%	**All Households**
Totals:	**19,678**		**% of All:**	**48.0%**	**40,970**

Sources: PSU PRC, Claritas., Census, Johnson Economics; Census Tables: B25007, B25106, B25118 (2021 ACS 5-yr Estimates); Claritas: Estimates of income by age of householder

The estimated home price and rent ranges are irregular because they are mapped to the affordability levels of the Census income level categories. For instance, a home affordable to those in the lowest income category (less than $15,000) would have to cost $80,000 or less. Rent affordable to someone in this category would be $400 or less.

The affordable price level for ownership housing assumes 30-year amortization, at an interest rate of 5% (in line with historical norms), with a 10% down payment. These assumptions are designed to represent prudent lending and borrowing levels for ownership households. The 30-year mortgage commonly serves as the standard. In the 2000's, down payment requirements fell significantly, but standards have tightened somewhat since the 2008/9 credit crisis. While 20% is often cited as the standard for most buyers, it is common for homebuyers, particularly first-time buyers, to pay significantly less than this using available programs.

Interest rates are subject to disruption from national and global economic forces, and therefore impossible to forecast beyond the short term. The 5% used here is roughly the average 30-year rate over the last 20 years. The general trend has been falling interest rates since the early 1980's. However, recent inflation has caused the Federal Reserve to raise its key rate, causing mortgage rates to climb above 7% for the first time since 2008. While forecasting these trends is impossible, many economists expect the inflation to be transitory, and the general long-term decline in interest rates to be reestablished.

Current Housing Inventory

The profile of current housing need or demand (Table 6) represents the preference and affordability levels of households. The current housing supply (Figure 23 and Figure 24) differs from this profile, meaning that some households may find themselves in housing units which are not optimal, either not meeting the household's rent/own preference, or being unaffordable (requiring more than 30% of gross income).

A profile of the current housing supply in Hillsboro was estimated based on permit data from the City and Census data from the most recently available 2021 ACS 5-year estimates, which provides a profile of housing types (single detached, single attached, manufactured home, etc.), tenure, housing values, and rent levels.

- An estimated 51.4% of housing units are ownership units, while an estimated 48.6% of housing units are rental units. This is slightly different from the estimated demand profile shown in Figure 4.2, which estimates demand for ownership units from 52% of households based on their age and income characteristics. The inventory includes vacant units.
- 80% of ownership units are detached homes, and 2% manufactured homes, which are another form of detached dwelling. An estimated 14% of ownership units are single attached.
- 16.5% of rental units are single detached homes or manufactured homes, while 62% are in structures of 5 units or more.
- Of total housing units, an estimated 49% are detached homes, and an additional 1% are manufactured homes. 50% percent are some form of attached unit type.
- The affordability of different unit types is an approximation based on Census data on the distribution of housing units by value (ownership) or gross rent (rentals).
- Most of the inventory identified at the lowest end of the rental spectrum is likely subsidized affordable housing in some form.

- Ownership housing found at the lower end of the value spectrum generally reflects older, smaller homes, or homes in poor condition on small or irregular lots. **It is important to note that these represent estimates of current property value or current housing cost to the owner, not the current market pricing of homes for sale in the city.** These properties may be candidates for redevelopment when they resell but are currently estimated to have low value.
- Most housing in Hillsboro is found in price and rent levels attainable to those earning at least $50,000 per year. Only 12% percent of housing is estimated to be affordable to those earning less than this, which is an estimated 25% of households.

Figure 23. Profile of Current Housing Supply by Type (2022)
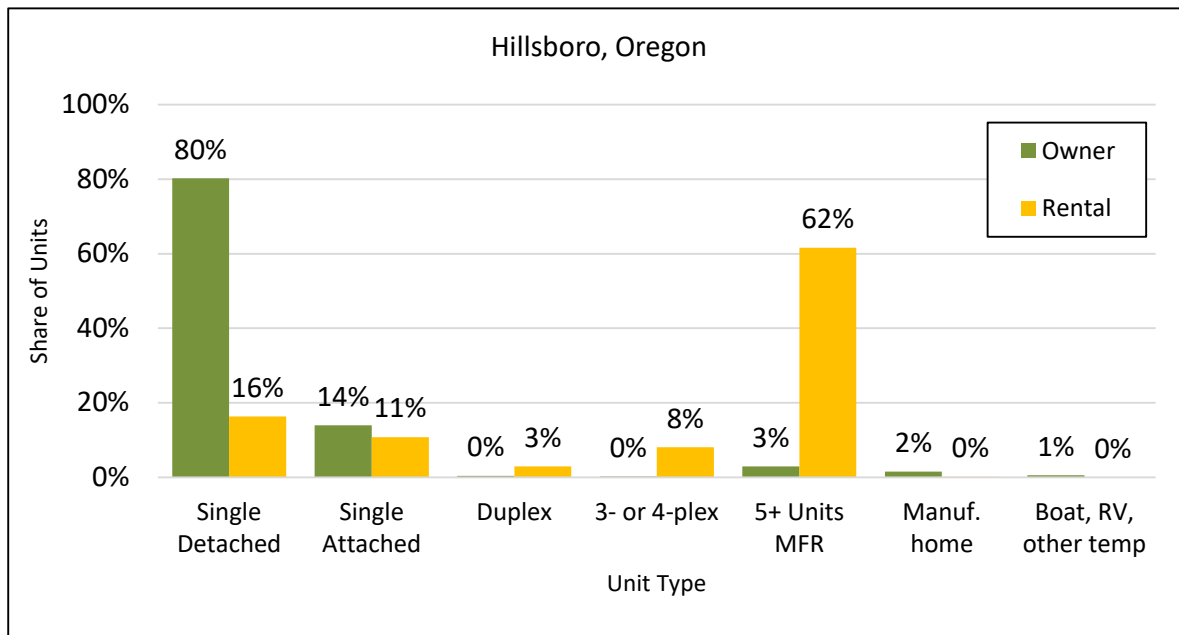
Sources: Census, PSU PRC, Johnson Economics; Census Tables: B25004, B25032, B25063, B25075 (2021 ACS 5-yr Estimates)

Figure 24. Profile of Current Housing Supply, by Estimated Affordability (2022)

Income Range	Ownership Housing		Rental Housing		Share of Total Units
	Affordable Price Level	Estimated Units	Affordable Rent Level	Estimated Units	
Less than $15,000	$0k - $80k	618	$0 - $400	135	2%
$15,000 - $24,999	$80k - $130k	64	$400 - $700	441	1%
$25,000 - $34,999	$130k - $180k	162	$700 - $900	701	2%
$35,000 - $49,999	$180k - $230k	722	$900 - $1200	2,170	7%
$50,000 - $74,999	$230k - $310k	2,784	$1200 - $1600	5,149	18%
$75,000 - $99,999	$310k - $370k	4,956	$1600 - $1900	4,557	22%
$100,000 - $124,999	$370k - $440k	5,063	$1900 - $2200	3,589	20%
$125,000 - $149,999	$440k - $510k	4,098	$2200 - $2500	3,106	17%
$150,000 - $199,999	$510k - $680k	2,335	$2500 - $3400	774	7%
$200,000+	$680k +	1,334	$3400 +	281	4%
	51%	22,135	49%	20,903	

Sources: Census, PSU PRC, Johnson Economics; Census Tables: B25004, B25032, B25063, B25075 (2021 ACS 5-yr Estimates)

## Comparison of Current Housing Demand with Current Supply

A comparison of estimated current housing demand with the existing supply identifies the existing discrepancies between needs and the housing which is currently available. The estimated number of units outnumbers the number of households by roughly 2,070 units, indicating an average vacancy rate of 4.8%.

This indicates that the middle and higher portion of the market is generally well supplied for ownership households. There is a finding that upper income households in Hillsboro could perhaps support some more expensive housing supply, though the large amount of new housing built in recent years is filling this niche. The largest supply is found around the middle price points, near the median home price, while income is more broadly distributed.

According to online property listings and Census estimates, the current market rates for most rental units are in the $1,200 to $2,200/month range, depending on unit size. There is still a cluster of rental housing in the community that is lower cost to the current tenants. These units are likely held by long-term tenants and would become more expensive if they were re-tenanted. There is support for more rental housing appropriate for lower-to-middle income households earning less than $50,000 per year. Rentals at the most expensive levels generally represent single detached homes for rent.

Figure 25 and Figure 26 present this information in chart form, comparing the estimated number of households in given income ranges, and the supply of units currently valued (ownership) or priced (rentals) within those income ranges. The data is presented for owner and renter households. (These figures present an estimate of current housing costs for current households. Some households may have a home price or rent that is tied to an earlier, lower-cost period. However, if relisted for sale or rent, these same units, would likely have their cost set to market, and therefore be more expensive.)

Figure 25. Comparison of Homeowner Household Income Groups to Estimated Supply of Housing Units Affordable at Those Income Levels (2022)

Owner Households vs. Current Units
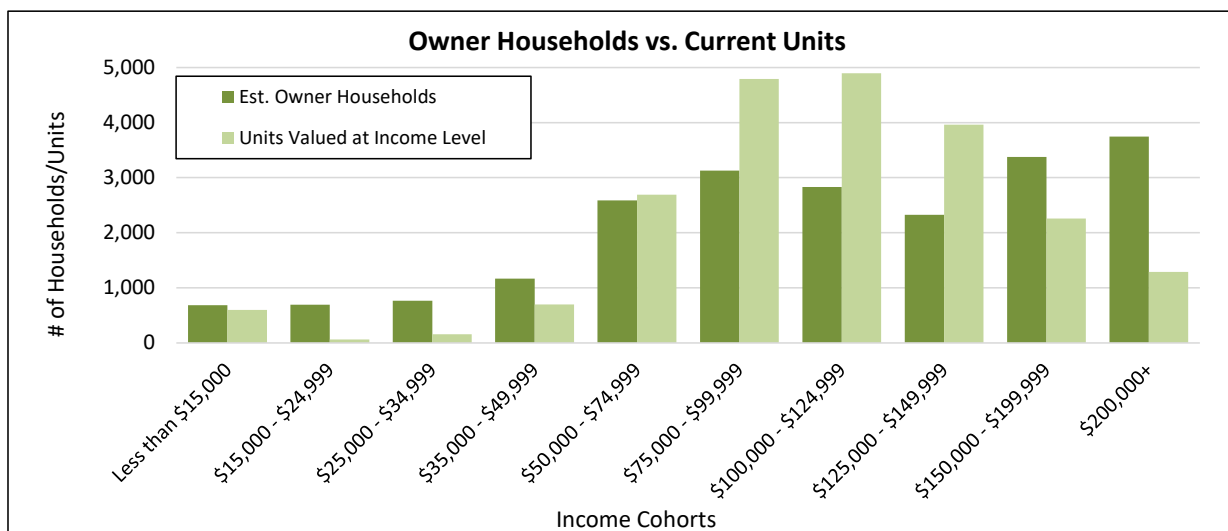
Sources: PSU PRC, City of Hillsboro, Census, Johnson Economics

Figure 26. Comparison of Renter Household Income Groups to Estimated Supply of Housing Units Affordable at Those Income Levels (2022)

Renter Households vs. Current Units
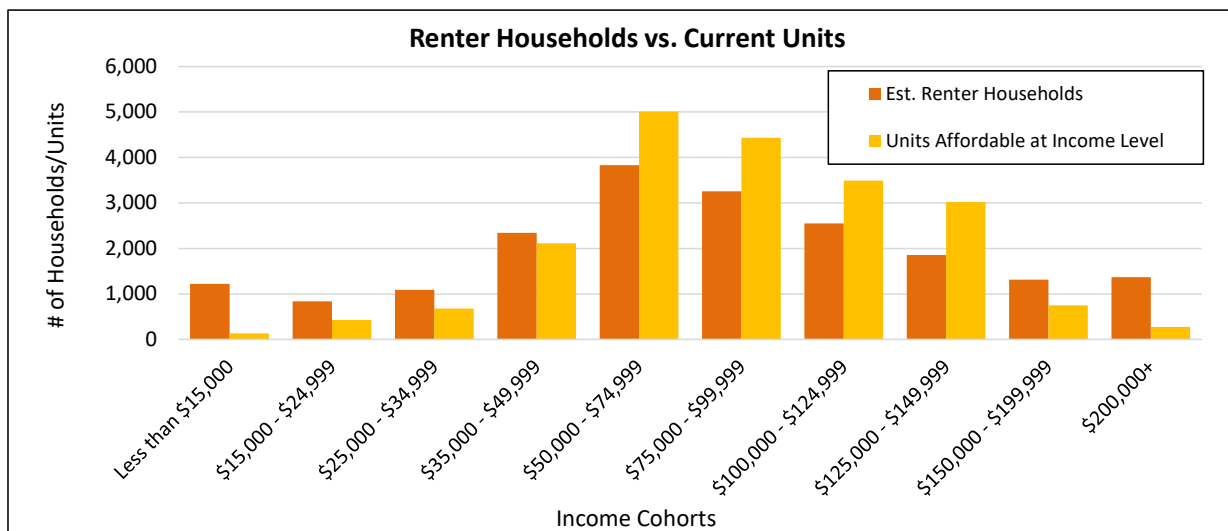
Sources: PSU PRC, City of Hillsboro, Census, Johnson Economics

The home value and rent segments which show a "surplus" in Figures 4.5 and 4.6 illustrate where current property values and rent levels are clustered in Hillsboro. Housing prices and rent levels will tend to congregate around those market levels. These levels will be too costly for some (i.e., require more than 30% in gross income) or less than what might be reasonable for others (i.e., they have income levels that indicate they could afford more expensive housing if it were available, and they had the preference).

In general, these findings demonstrate that there are few lower-cost housing opportunities for many owner households. This may include more attached types of units such as townhomes, or smaller units

such as condos or cottage clusters. There may be support for more modern rental units aimed at lower-income households. (Housing need at specific income levels is discussed in more later in this report)

<u>Home Sale Prices</u>

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

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

The findings of current need form the foundation for projected future housing need, presented in the following section. The 20-year projections of housing need are meant to achieve a healthy mix of unit types and affordability levels for all residents in 2043, including meeting the needs of current residents who may not be in optimal housing situations. Therefore, the total projected housing needs are inclusive of new and current households, while reflecting that the current housing inventory must serve as the starting point.

Future Housing Needs

The projected future (20-year) housing profile (Table 7) in the study area is based on the current housing profile (2022), with a projected future household growth rate applied. The projected future growth is based on the forecasted 2043 population for Hillsboro from the most recent Metro Consolidated Forecast for cities in the Metro region (completed 2021). This forecast estimates that the Hillsboro population will grow at a rate of 0.7% annually between 2022 and 2043. (This annual growth rate would be slower than the annual rate experienced since 2010, which was 1.5% according to the Census and PSU).

Table 7. Future Housing Profile (2043)

PROJECTED FUTURE HOUSING CONDITIONS (2022 - 2043)			SOURCE
2022 Population (Minus Group Pop.)	108,141	(Est. 2022 pop. - Group Housing Pop.)	PSU
Projected Annual Growth Rate	0.7%	Metro Coordinated Forecast (2021)	Metro
2043 Population (Minus Group Pop.)	124,644	(Total 2043 Population - Group Housing Pop.)	
Estimated group housing population:	1,603	1.3% of total pop. (held constant from 2022)	US Census
Total Estimated 2043 Population:	**126,247**	Metro Coordinated Forecast (2021)	Metro
Estimated Non-Group 2043 Households:	**54,229**	Metro Coordinated Forecast (2021)	Metro
New Households 2022 to 2043	13,259		
Avg. Household Size:	2.30	Projected 2043 pop./2043 households	US Census
Total Housing Units:	**57,083**	Occupied Units plus Vacant	
Occupied Housing Units:	54,229	(= Number of Non-Group Households)	
Vacant Housing Units:	2,854	(= Total Units - Occupied Units)	
Projected Market Vacancy Rate:	5.0%	Stabilized vacancy assumption	

Sources: PSU PRC, Census, Johnson Economics LLC

*Projections are applied to estimates of 2022 population, households, and housing units shown in Table 1.

The model projects growth in the number of non-group households over 20 years of nearly 13,300 households, with accompanying population growth of 16,715 new residents. (The number of households differs from the number of housing units, because the total number of housing units includes a percentage of vacancy. Projected housing unit needs are discussed below.)

In the Metro analysis relied on in this analysis, Metro forecast that between 2020 and 2045 Hillsboro will capture 12.5% of the population growth in Washington County (or 23k persons). Currently, Hillsboro represents 18% of the County population (or 606k persons), while Washington County is forecast to capture 38%, or 188k new persons, of the three-county Metro growth forecast over this period (or 491k new persons).

Projection of Future Housing Unit Demand (2043)

The profile of future housing demand was derived using similar assumptions as those used to produce the estimate of current housing need. This estimate includes current and future households *but does not include a vacancy assumption*. (The vacancy assumption is added in the subsequent step). Therefore, the need identified below is the total need for actual households in occupied units (54,229).

The analysis considered the propensity of households at specific age and income levels to either rent or own their home to derive the future need for ownership and rental housing units and the affordable cost level of each. The projected need is for *all* 2043 households and therefore includes the needs of current households.

The price levels presented here use the same assumptions regarding the amount of gross income applied to housing costs, from 30% for low-income households down to 20% for the highest income households.

The affordable price level for ownership housing assumes 30-year amortization, at an interest rate of 5%, with a 10% down payment. Because of the impossibility of predicting variables such as interest rates 20 years into the future, these assumptions were kept constant from the estimation of current housing demand. Income levels and price levels are presented in current dollars.

Table 8 presents the projected occupied future housing demand (current and new households, without vacancy) in 2043. The estimated demand is categorized by estimated price/rent levels and income levels.

The number of households across the income spectrum seeking a range of both ownership and rental housing is anticipated to grow. It is projected that the homeownership rate in Hillsboro will climb slightly over the next 20 years to above 52%, and the rental rate will fall slightly to 48%.

Table 8. Projected Occupied Future Housing Demand (2043)

Ownership				
Price Range	**# of Households**	**Income Range**	**% of Total**	**Cumulative**
$0k - $80k	903	Less than $15,000	3.2%	3.2%
$80k - $130k	914	$15,000 - $24,999	3.2%	6.4%
$130k - $180k	1,014	$25,000 - $34,999	3.6%	10.0%
$180k - $230k	1,546	$35,000 - $49,999	5.5%	15.5%
$230k - $310k	3,421	$50,000 - $74,999	12.1%	27.7%
$310k - $370k	4,141	$75,000 - $99,999	14.7%	42.4%
$370k - $440k	3,744	$100,000 - $124,999	13.3%	55.6%
$440k - $510k	3,075	$125,000 - $149,999	10.9%	66.6%
$510k - $680k	4,466	$150,000 - $199,999	15.8%	82.4%
$680k +	4,958	$200,000+	17.6%	100.0%
Totals:	**28,182**		**% of All:**	**52.0%**

Extremely Low Income	<30% MFI
Very Low Income	<50% MFI
Low Income	<80% MFI

Rental				
Rent Level	**# of Households**	**Income Range**	**% of Total**	**Cumulative**
$0 - $400	1,619	Less than $15,000	6.2%	6.2%
$400 - $700	1,110	$15,000 - $24,999	4.3%	10.5%
$700 - $900	1,446	$25,000 - $34,999	5.6%	16.0%
$900 - $1200	3,099	$35,000 - $49,999	11.9%	27.9%
$1200 - $1600	5,071	$50,000 - $74,999	19.5%	47.4%
$1600 - $1900	4,313	$75,000 - $99,999	16.6%	64.0%
$1900 - $2200	3,379	$100,000 - $124,999	13.0%	76.9%
$2200 - $2500	2,455	$125,000 - $149,999	9.4%	86.4%
$2500 - $3400	1,738	$150,000 - $199,999	6.7%	93.0%
$3400 +	1,816	$200,000+	7.0%	100.0%
Totals:	**26,047**		**% of All:**	**48.0%**

Extremely Low Income	<30% MFI
Very Low Income	<50% MFI
Low Income	<80% MFI

All Units
54,229

Sources: Metro, Census, Claritas, Johnson Economics

Comparison of Future Housing Demand to Current Housing Inventory

The profile of occupied future housing demand presented above was compared to the current housing inventory presented in the previous section to determine the total future need for *new* housing units by type and price range (Table 9).

This estimate includes a vacancy assumption. As reflected by the most recent Census data, and as is common in most communities, the vacancy rate for rental units is typically higher than that for ownership units. For this analysis, an average vacancy rate of 5% is assumed for both ownership and rental housing.

Table 9. Projected Future Need for NEW Housing Units (2043), Hillsboro

	OWNERSHIP HOUSING								
			Multi-Family						
Unit Type:	**Single Detached**	**Single Attached**	**2-unit**	**3- or 4- plex**	**5+ Units MFR**	**Manuf. home**	**Boat, RV, other temp**	**Total Units**	**% of Units**
Totals:	4,838	1,204	241	231	422	151	0	7,087	50.5%
Percentage:	68.3%	17.0%	3.4%	3.3%	6.0%	2.1%	0.0%	100%	

	RENTAL HOUSING								
			Multi-Family						
Unit Type:	**Single Detached**	**Single Attached**	**2-unit**	**3- or 4- plex**	**5+ Units MFR**	**Manuf. home**	**Boat, RV, other temp**	**Total Units**	**% of Units**
Totals:	235	960	413	772	4,568	11	0	6,959	49.5%
Percentage:	3.4%	13.8%	5.9%	11.1%	65.6%	0.2%	0.0%	100%	

	TOTAL HOUSING UNITS								
			Multi-Family						
Unit Type:	**Single Detached**	**Single Attached**	**2-unit**	**3- or 4- plex**	**5+ Units MFR**	**Manuf. home**	**Boat, RV, other temp**	**Total Units**	**% of Units**
Totals:	5,073	2,165	654	1,002	4,990	162	0	**14,046**	**100%**
Percentage:	36.1%	15.4%	4.7%	7.1%	35.5%	1.2%	0.0%	100%	

Sources: Metro, City of Hillsboro, Census, Claritas, Johnson Economics

- The results show a need for nearly 14,050 new housing units by 2043.
- Of the new units needed, roughly 51% are projected to be ownership units, while 49% are projected to be rental units. This represents more owners than the estimated tenure split, but it is projected that more ownership units will need to be added, to rebalance the current inventory and serve the slightly increased ownership rate in the future.
- New ownership housing at the lower-middle portion of the pricing spectrum. But income trends suggest that the most significant demand will remain in the middle and higher price ranges ($300k to $600k).
- The greatest need for rental units is found at the lowest income levels. Market rents are currently clustered in the $1,200 to $2,200 range in current dollars. Therefore, most units are to be found in this range. Many households will need rent levels lower than the market rate in order to maintain housing costs that are affordable (see more detail below).

Needed Unit Types: The mix of needed unit types shown in **Error! Reference source not found.** reflects past and anticipated future trends. Since 2000, single detached units (including manufactured and mobile homes) have constituted a little over 50% of the permitted units in Hillsboro, with attached housing making up the other half. Single detached units are expected to continue to make up a large share of new housing development for ownership households over the next 20 years. However, an increasing share of new needed units is anticipated to be attached housing types to accommodate renters and first-time home buyers.

- Over the 20-year planning period, an increasing share of renter households are expected to be younger households, those with modest incomes, and the growing share of minority households in the area. These households will need more than just rental units, but units of a variety of densities and sizes to accommodate single and family households.
- 37% of the new units are projected to be single detached homes or new manufactured homes, while 63% are projected to be some form of attached housing.
- Single attached units (townhomes on individual lots) are projected to meet roughly 15% of future need. These are defined as units on separate tax lots, attached by a wall but separately metered, the most common example being townhome units.
- Duplex, triplex, and four-plex units are projected to represent a growing 12% of the total need, reflecting new state rules for middle housing zoning. Duplex units would include a single detached home with an accessory dwelling unit on the same lot, or with a separate unit in the home (for instance, a rental basement unit.)
- 36% of all needed units are projected to be multi-dwelling units in structures of 5+ attached units.
- 1.2% of new needed units are projected to be manufactured home units, which meet the needs of some low-income households for both ownership and rental.
- Of ownership units, 70% are projected to be single detached homes or manufactured homes, and 30% are projected to be attached forms.
- Nearly all new rental units are projected to be found in new attached buildings, with 66% projected in rental properties of 5 or more units, and 31% in other attached housing forms. Only 3.5% of new rental units are projected to be detached homes, including manufactured homes.

Group Housing Needs: There is an estimated population of 1,631 individuals living in group housing in 2043, based on an assumption that the share of the population living in group quarters (1.3%) remains stable from current levels. This would represent an increase of roughly 240 people living in group quarters.

In Hillsboro, the Census estimates that 39% of the group quarters population lives in correctional facilities (including juveniles), and an additional 26% live in nursing facilities. Roughly a third live in "other noninstitutional facilities" including residential group homes, emergency and transitional shelter, and residential treatment facilities.

Needed Affordability Levels
Table 10 presents the estimated need for net new housing units by major income segment, based on the projected demographics of new households to the market area. The needed affordability levels presented here are based on current dollars. Table 10 also discusses the housing types typically attainable by residents at these income levels.

This analysis presented in this table uses the official state measure of "low-income" used to set rent and income limits for various affordable housing programs. This estimate via OHCS and HUD are based on an estimate of median income in Washington County that is quite high (over $106k in 2021, based on a family of four), while this analysis estimates that the median income in Hillsboro was a lower $90k.

For this analysis, the estimated Median Family Income (MFI) for a family of four ($106k) was adjusted to match the average household size in Hillsboro of 2.64 persons ($91.6k) so that the estimates presented below reflect the city average.

Table 10 presents some of the types of housing products that might commonly serve households in these income ranges. Many households below 60% MFI or even higher income will require some form of subsidized affordable unit or voucher to find housing affordability. Those at 60% to 100% MFI may find housing in older and substandard market rate rentals, manufactured homes, and middle housing types.

Table 10. Projected Need for NEW Housing at Different Income Levels

Household Income Segment		Income Level (Rounded)*	Owner Units	Renter Units	Total	Share	Common Housing Product
Extremely Low Inc.	< 30% MFI	< $27,500	521	825	1,346	10%	Government-subsidized; Voucher; Shelter; Transitional
Very Low Income	30% - 60% MFI	$27.5k - $55k	752	1,389	2,141	15%	Aging/substandard rentals; Government-subsidized; Voucher; Manufactured homes
Low Income	60% - 80% MFI	$55k - $73k	688	1,084	1,772	13%	Aging apartments; Government-subsidized; Plexes; Aging single-detached; Small homes
Middle Income	80% - 120% MFI	$73k - $110k	1,418	1,513	2,931	21%	Single-detached homes; Townhomes; Condominiums; Newer apartments
Upper Income	> 120% MFI	> $110,000	3,708	2,147	5,855	42%	Single-detached homes; Townhomes; Condominiums; New apartments
TOTAL:			**7,087**	**6,959**	**14,046**	**100%**	

Sources: HUD, Census, Claritas, Johnson Economics

- Table 10 presents the *net NEW* housing unit need over the next 20 years. However, there is also a *current* need for more affordable units. For all households, current and new, to pay 30% or less of their income towards housing in 2043, more affordable rental units (subsidized and non-subsidized) would be required. This indicates that some of the current supply, while it shows up as existing available housing, would need to become less expensive to meet the needs of current households.
- There is a finding of new need at the lowest end of the rental spectrum ($800 and less).
- The projection of future ownership units finds that the supply at the lowest end of the spectrum will be insufficient due to the prevalence of newer homes, much of which will be detached houses. (This reflects the estimated *value* of the total housing stock, and not necessarily the average pricing for housing currently for sale.) Ownership options and lower and middle price points are often manufactured homes, townhomes, condos, and small detached homes, often on smaller lots.

Subsidized Affordable Housing Need

Some low-income households, particularly the *lowest* income households, typically need subsidized affordable housing in order to find rents affordable given their modest resources and other household spending needs. Table 11 presents estimates of need at key low-income affordability levels in 2022 and in 2043. The table uses HUD definitions of Extremely Low, Very Low, and Low-income, as well as 60% MFI which is a standard affordability level for tax credit properties.

Table 11. Projected Need for Housing Affordable at Low-income Levels, Hillsboro

Affordablilty Level	Income Level*		Current Need (2022)		Future Need (2043)		NEW Need (20-Year)	
			# of Units	% of All	# of Units	% of All	# of Units	% of All
Extremely Low Inc.	≤ 30% MFI	≤ $27,500	3,900	10%	5,246	10%	1,346	10%
Very Low Income	30% - 50% MFI	≤ $45,800	3,920	9%	5,279	10%	1,359	10%
Low Income	50% - 80% MFI	≤ $73,300	6,962	17%	9,517	18%	2,555	18%
TOTAL:	*≤ 80% MFI*	*≤ $73,300*	*14,782*	36%	*20,042*	37%	*5,259*	37%
Tax Credit	≤ 60% MFI	≤ $55,000	10,941	27%	14,429	27%	3,487	25%

Sources: OHCS, Claritas, Johnson Economics, HUD

* Income levels are based on OHCS guidelines for avg. Hillsboro household size of 2.64 persons.

- There is an existing and on-going need at these levels, based on income levels specified by OHCS for Washington County. An estimated 36% of households qualify as at least "low-income" or lower on the income scale, while 10% of households qualify as "extremely low-income". (Again, this is based on the official state measure of Washington County median income for application to HUD and other subsidized affordable housing programs, which is relatively high.)
- Typically, only rent-subsidized affordable properties can accommodate these extremely-low-income households and many other low-income households at "affordable" housing cost levels. Often the lowest income households must be served by housing choice vouchers and public housing. Tax credit projects are often structured to serve those earning 60% and below of MFI, and sometimes can obtain vouchers tied to the buildings to serve the lowest end of the income levels.

Homeless Population Housing Need: In 2022, Hillsboro is home to an estimated 808 homeless individuals, or 0.8% of the total population. If this rate were to persist into the future, this would imply 948 homeless individuals based on the total estimated population in 2043. This would be an increase of roughly 150 individuals over the next 20 years. Homeless individuals and families may require a mixture of shelter types depending on individual circumstances, ranging from emergency shelter to transitional housing to permanent subsidized housing. This population is a subset of the extremely-low-income population shown in prior figures.

Agricultural Worker Housing: There is currently one property of 47 units meant for agricultural workers in Hillsboro. Based on the assumption that this type of housing will maintain its current representation in the local housing stock, this indicates that there will be a need for about 15 additional

housing units dedicated specifically for agricultural workers over the planning period. However, this population may also be served by other available affordable units, and new market rate units.

Conclusion of Need

The projected need for new housing types and estimated affordability levels are meant to help guide planning and policy decisions of the City moving forward. The vast majority of housing development, be it single or multi-dwelling, is undertaken by the private development sector and the real estate industry. Mission driven non-profit housing agencies are also a critical piece of the housing puzzle, City governments rarely directly develop housing itself, though cities often , support or partner with developers or housing providers, help acquire or assemble land for housing, and/or administer urban renewal, development incentive programs, and funding sources to support housing development.

Another important role of City government is to ensure that local policy and zoning code help to facilitate the production of the full spectrum of local housing needs by both market-rate and non-profit agencies. While this analysis assesses the current and future needs for a full range of housing types, including for households across the income spectrum, public policy will generally focus on those housing types and households that are not already supplied by market rate development. In many communities, the development and real estate industry will generally supply single detached housing and market-rate apartments without policy intervention if land and building sites are available and properly zoned.

However, the for-profit real estate industry generally will *not* supply the housing needed for low-income households without policy interventions, and non-profit housing agencies have difficulty meeting demand despite best efforts due to limited resources. Therefore, public policy and housing strategies are generally focused on those segments, which are not traditionally supplied by the development industry without partnerships or subsidies. The analysis presented in this report is meant to provide a dataset and baseline of findings to inform the recommended policy changes and finding of land need moving forward.

Residential Buildable Lands Inventory

This section describes the BLI for the study area. The BLI is consistent with the requirements of OAR 660-024-0050 modeled after the BLI used for the most recent Metro Urban Growth Report for cities in the Metro region (completed in 2021).The BLI been further discussed and refined with City staff, the CAC, regional and state agencies, and elected and appointed City officials.

The BLI is conducted in the following steps:

- **Step 1: Land classification.** This step identifies the land in the City that is available for residential uses.
- **Step 2: Constraints to Development.** This step identifies constraints such as natural resources, steep slopes, and utility easements that limit development.
- **Step 3: Development Status.** This step assigns a "Development Status" of vacant, partially vacant, or developed to tax lots in the inventory.
- **Step 4: Net Buildable Area.** This step removes land for future rights-of-way and other land needs to provide a net number of acres for each City zoning designation.
- **Step 5: Estimated Unit Capacity.** This step estimates the number of units and mix of unit type (single detached, multi-dwelling, middle housing) expected based on the results of Step 4.

Step 1: Land Classification

<u>Study Area</u>

The study area for this analysis is shown in Figure 27. The study area includes land within Hillsboro city limits, as well as adjacent UGB expansion areas.

Figure 27. Study Area Map
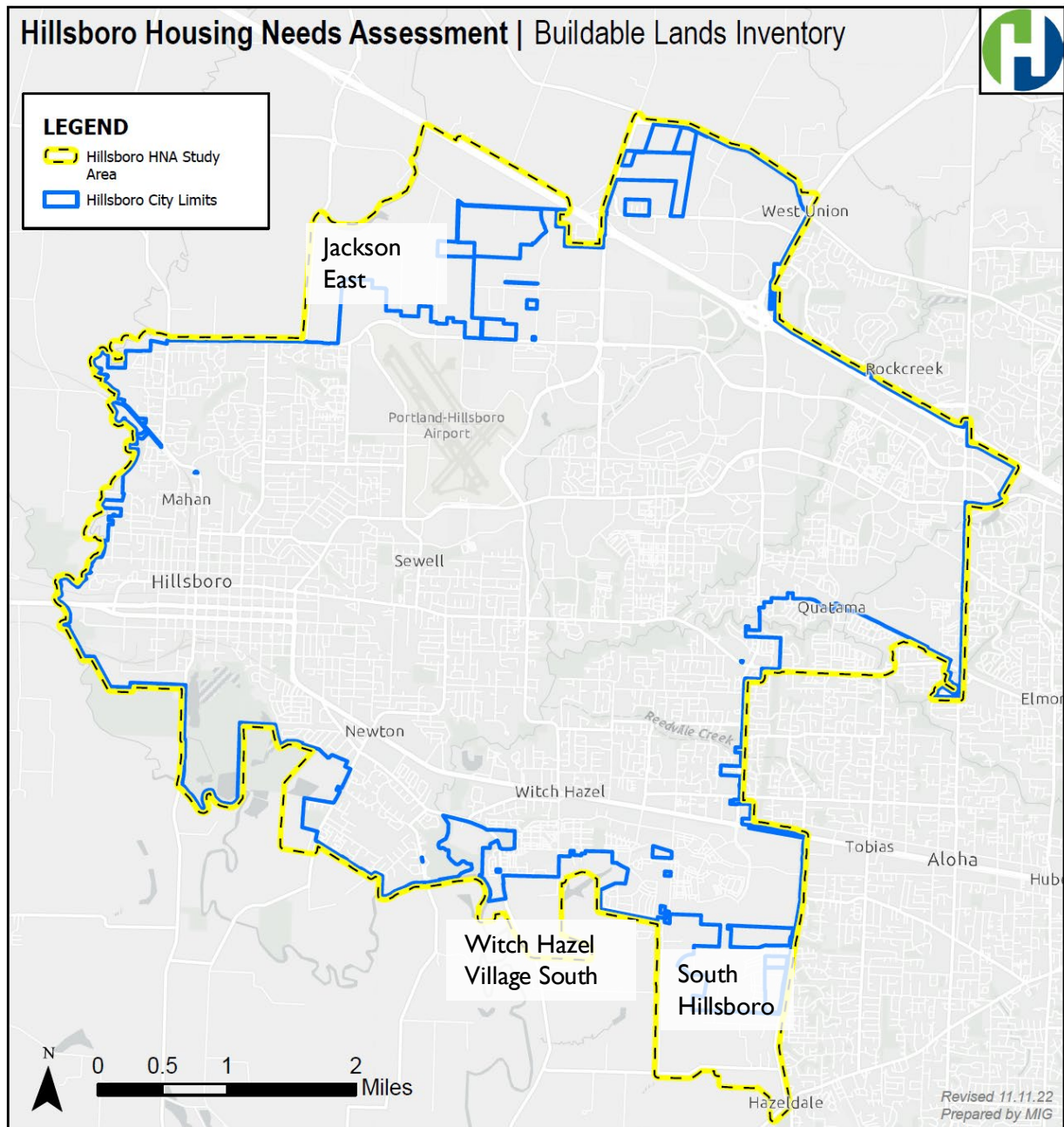
Comprehensive Plan Designations and Zoning

A list of the City Comprehensive Plan designations is shown in Table 12. This is the primary basis for classifying lands into the categories of Residential, Mixed-Use, Nonresidential, and Publicly Owned/Other. The purpose statements in Table 12 are taken from the City's existing Comprehensive Plan. The City's Comprehensive Plan and Zoning maps are shown in Figure 28 and Figure 29, respectively. Overarching categories of land and how they are considered in this inventory are described on the pages following those figures.

Table 12. City Comprehensive Plan Designations and Implementing Zones

Comp Plan Designations	Implementing Zones	Purpose
RL: Residential Low Density	- R-10 Residential - R-8.5 Residential - R-7 Residential - R-6 Residential	Provides for large to moderate lot, detached residential development, middle housing, and accessory dwelling units in a neighborhood with compatible uses such as schools, assembly facilities, and parks. This designation may act as a transition between rural agricultural areas and the urban edge.
RM: Residential Medium Density	- R-4.5 Residential - MR-1 Multi-Dwelling Residential	Provides for a mix of small-lot single detached dwellings, second dwellings, duplexes, triplexes, quadplexes, townhomes, cottage clusters and lower density multi-dwelling units in a neighborhood with compatible uses such as schools, assembly facilities, and parks.
RH: Residential High Density	MR-2 Multi-Dwelling Residential	Provides for higher density middle housing or multi-dwelling developments in a neighborhood with compatible uses such as schools, assembly facilities, and parks.
RMR: Residential Mid-Rise Density	MR-3 Multi-Dwelling Residential	Provides for higher density middle housing or multi-dwelling developments in a neighborhood with compatible uses such as schools, assembly facilities, and parks.
C: Commercial	- C-G Commercial – General - MU-C Mixed-Use – Commercial	Provides for retail, service, and office commercial developments in small-scale neighborhood nodes to serve daily community needs or at larger scales along highways and transit routes, or in downtown and other employment areas, for more convenient access to goods and services by various transportation modes.
SCPA: Station Community Planning Area	- SCR-LD Station Community Residential Low Density - SCR-OTC Station Community Residential Orenco Townsite Conservation - SCR-DNC Station Community Residential Downtown Neighborhood Conservation - SCR-MD Station Community Residential – Medium Density - SCR-HD Station Community Residential – High Density - SCC-DT Station Community Commercial – Downtown - SCC-SC Station Community Commercial – Station Commercial - SCC-MM Station Community Commercial – Multi-Modal - SCR-V Station Community Residential Village - SCBP Station Community Business Park - SCI Station Community Industrial - SCFI Station Community Fair Complex Institutional	Provides for medium- to high-density transit-oriented and pedestrian-sensitive mixed-use developments, authorized at more intensive land use densities and floor area ratios than other residential zones, in areas within reasonably close proximity of light rail transit stations.
MU: Mixed-Use	- MU-N Mixed-Use – Neighborhood - MU-C Mixed-Use – Commercial	Provides for a mix of commercial and residential uses on the same site, either horizontally side-by-side or vertically in the same structure, in appropriate locations to shorten

Comp Plan Designations	Implementing Zones	Purpose
	• MU-VTC Mixed-Use – Village Town Center • UC-NC Urban Center – Neighborhood Center	transportation trips and facilitate multi-modal development.
MU-UR: Mixed-Use – Urban Residential	• UC-RM Urban Center – Residential Medium Density • UC-MU Urban Center – Mixed-Use Urban Density	Provides for a range of medium- to high-density housing types (e.g., townhomes, apartments, and condominiums) with an urban character, constructed at or near the street frontage and sidewalk, while also accommodating complementary office and retail, and schools, assembly facilities, and parks.
MU-UC: Mixed-Use – Urban Commercial	• UC-AC Urban Center – Activity Center	Provides for a vibrant mix of retail, restaurants, civic, cultural, entertainment, and recreational uses, complemented by secondary office and residential uses, creating focused activity served by high-capacity transit and active street frontages that provide visual and physical connections to other activity centers.
MU-UE: Mixed-Use – Urban Employment	• UC-MU Urban Center – Mixed-Use Urban Density • UC-OR Urban Center – Office/Research	Provides concentrated opportunities for office and research employment to complement residential, retail, and commercial services within high intensity areas of the City served by transit that provide visual and physical connections to other activity centers.
MU-I: Mixed-Use – Institutional	• UC-MU Urban Center – Mixed-Use Urban Density • UC-OR Urban Center – Office/Research • UC-RP Urban Center – Research Park	Provides for a range of research, development, and testing laboratory; educational; medical research and clinical; and high-tech and bio-tech research and applied technology uses, encouraging a transit-supportive, pedestrian-sensitive campus environment, and preventing conflicts among the mix of uses and activities.
OS: Open Space	• All base zones are considered implementing zones. Standards for usable open space are defined in 12.50.210, and by plan district in 12.61.400-800, 12.62.500, 12.63.300, 12.64.210, and 12.65.210.	Provides usable open space for active or passive recreation (e.g., parks, golf courses, playgrounds) and unusable open space for natural resource preservation as an important aspect of livability, public health, and well-being for residents, employees, and customers.
FP: Floodplain	• All base zones are considered implementing zones. The corresponding RFO Regulatory Floodplain Overlay zone may be applied.	Identifies the boundaries of the 100-year base flood maps by the National Flood Insurance Program for agricultural, wetland, or recreational use, or some underground utility or accessory structures in order to protect the public from damage to life and property from flooding.
PF: Public Facility	• SCFI Station Community Fair Complex Institutional	Provides for public facilities such as airports, schools, fire stations, police stations, public buildings (e.g., libraries, public offices), public utilities (e.g., wastewater treatment center) and similar types of public uses and facilities.
IN: Industrial	• I-G Industrial General • I-P Industrial Park • I-S Industrial Sanctuary • SSID Shute Road Special Industrial District • ESID Evergreen Area Special Industrial District • HSID Helvetia Area Special Industrial District	Provides for all types of research and development, manufacturing, warehouse, and wholesale industrial, which may take a traditional form concentrated along highways and freight and transit routes, or as industrial park neighborhoods or mixed commercial business parks with high-amenity multi-modal access.

Figure 28. City Comprehensive Plan Map

	RL	Residential Low Density
	RM	Residential Medium Density
	RH	Residential High Density
	RMR	Residential Mid-Rise Density
	C	Commercial
	SCPA	Station Community Planning Area^
	MU	Mixed-Use
	MU-UR	Mixed-Use - Urban Residential
	MU-UC	Mixed-Use - Urban Commercial
	MU-UE	Mixed-Use - Urban Employment
	MU-I	Mixed-Use - Institutional
	ANX	Recent Annexation
	OS	Open Space
	FP	Floodplain
	PF	Public Facility
	IN	Industrial
	City of Hillsboro Municipal Limits	
	Community Plan Areas	
	Senate Bill 122 (ORS §195.020)	
	City of Beaverton Municipal Limits	
	Urban Growth Boundary	
	Urban Reserve	

*Please refer to Comprehensive Plan for additional information on Community Plans
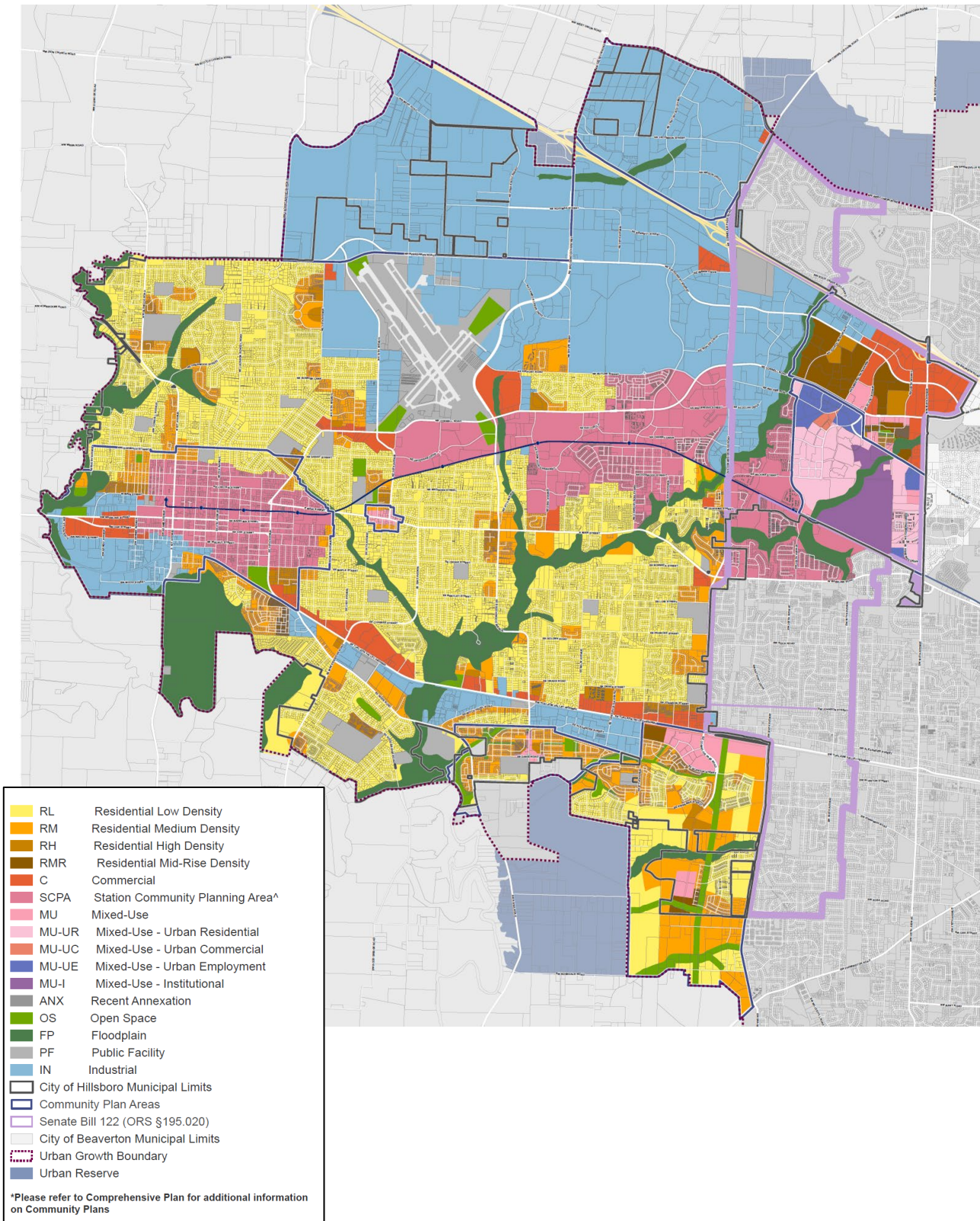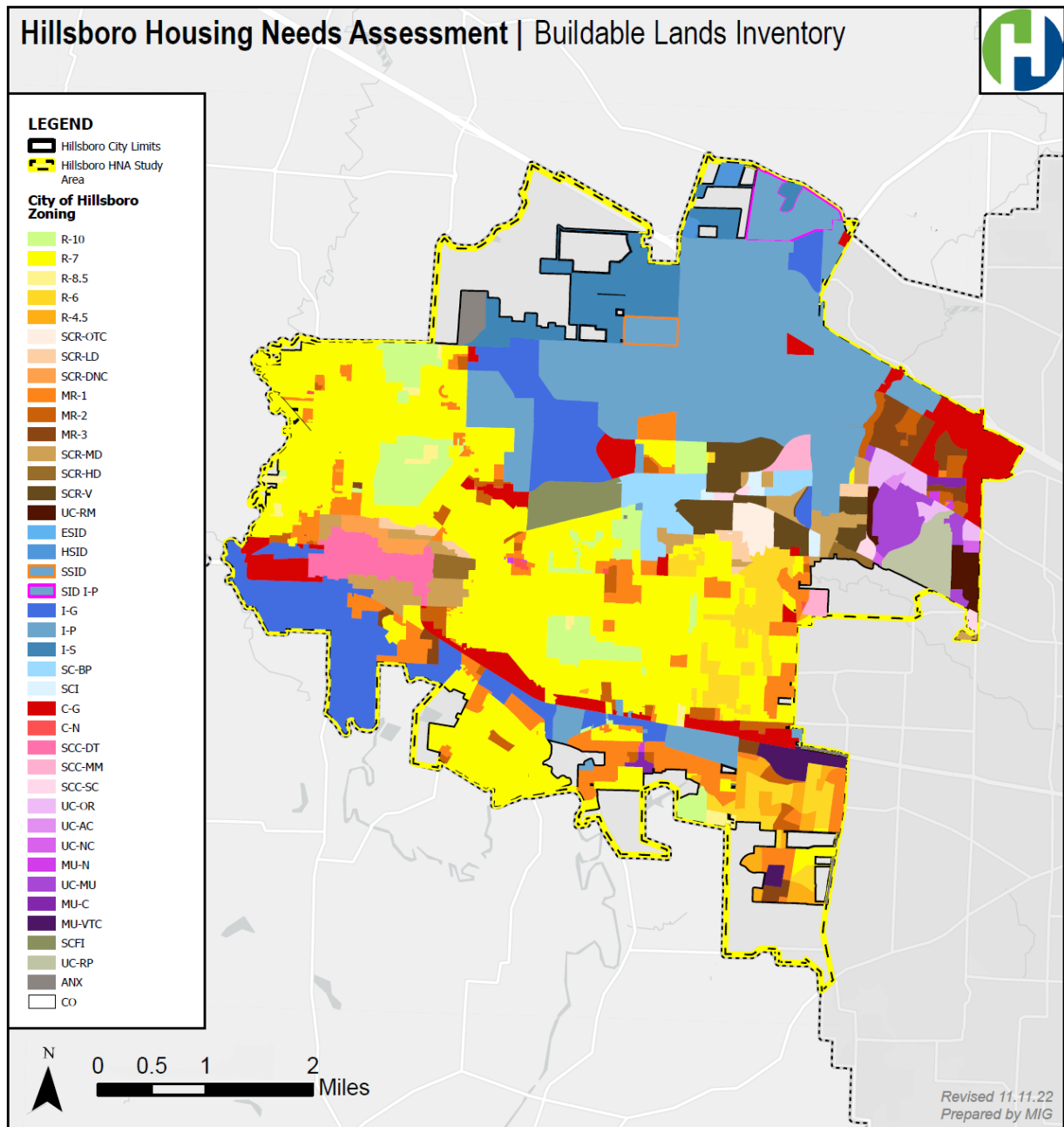
Figure 29. City Zoning Map

<u>Residential Land</u>
Residential Land is intended to meet the City's need for residential uses of various types. It includes land within the Residential Low Density (RL), Residential Medium Density (RM), Residential High Density (RH), and Residential Mid Rise (RMR) designations, unless it meets the criteria for "Publicly Owned/Other" land.

<u>Mixed Use Land</u>
Mixed Use land can be developed to meet the City's residential and employment needs – sometimes within the same structure. It includes land within the Mixed Use (MU), Mixed Use Urban Residential (MU-UR), Mixed Use Urban Commercial (MU-UC), Mixed Use Urban Employment (MU-UE), and Mixed Use Institutional (MU-I) designations, as well as most of the areas with a Station Community Plan Area (SCPA) designation, unless it meets the criteria for "Publicly Owned/Other" land. More information about the assumptions for future housing development in these areas is found later in this report.

<u>Nonresidential Land</u>
Nonresidential land includes employment land (which will be addressed in a separate Employment Buildable Lands Inventory), and "Publicly Owned/Other" land, as follows.

Employment Land
Employment Land is intended to meet the City's employment needs. It includes land within the Commercial (C) and Industrial (IND) comprehensive plan designations, and some of the areas with a SCPA designation, unless it meets the criteria for "Public/Other" land.

Cities in Oregon are required to plan for both residential and employment uses. The City is currently engaged in an Economic Opportunities Analysis and an Inventory of Buildable Employment Land to evaluate land needed to accommodate future employment growth.

Publicly Owned/Other Land
This category of land includes the PF and OS designations, as well as land in the following categories:

- Land in another Comprehensive Plan designation under City, County, State, Federal, or Special District Ownership
- Land commonly held in HOA ownership, such as required open space.
- Religious or fraternal properties
- Private driveways and ROW

Parcels in this category may be included in other classifications if information is available to suggest development capacity for residential or employment uses.

Figure 30. Land Classification
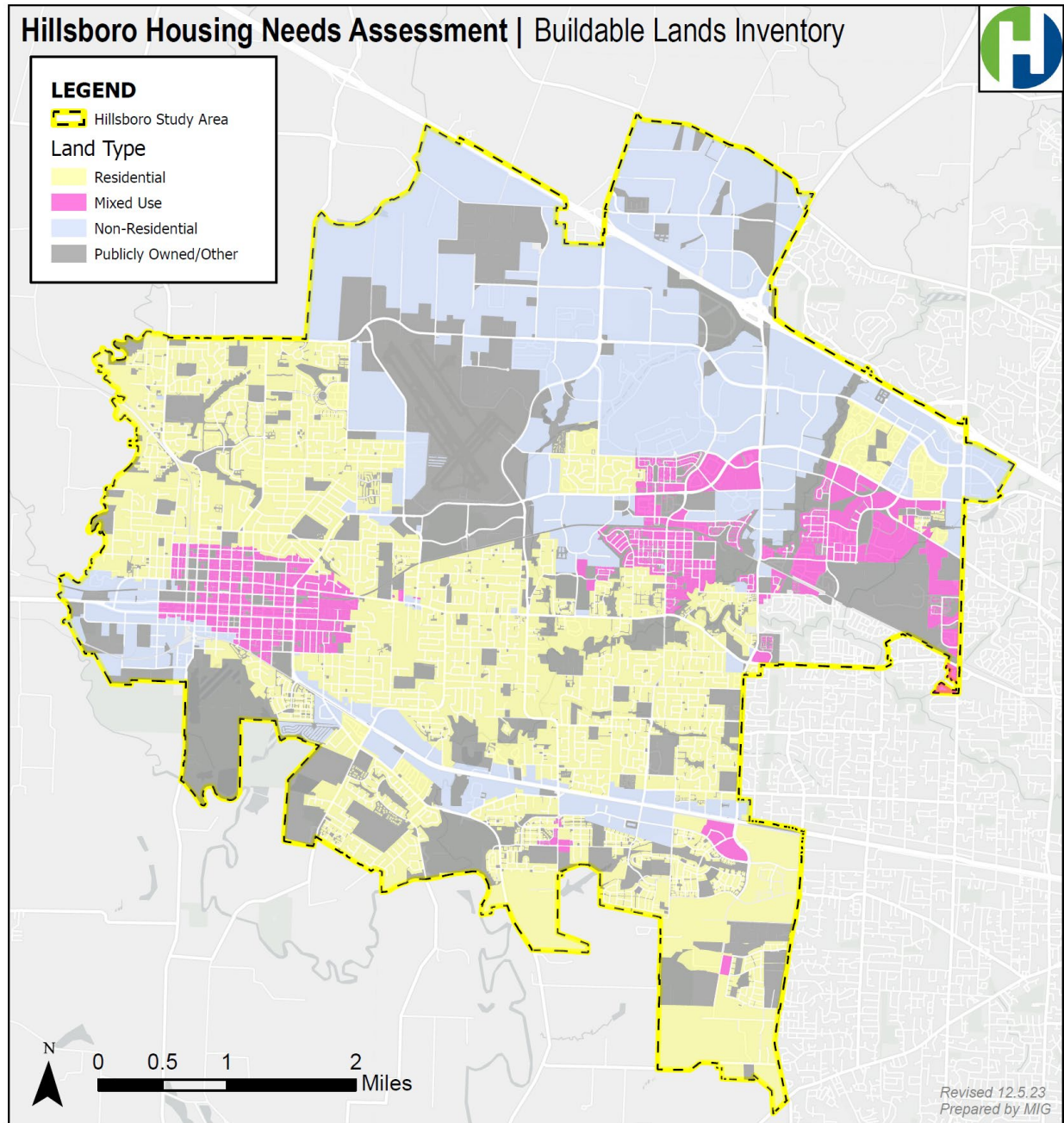
Step 2: Constraints to Development

One of the primary tasks of this BLI is to identify land that is constrained by natural resources, natural hazard areas, or other regulatory constraints. Metro's 2018 BLI used a system of partial constraints for natural resources as identified in the Metro Title 13 inventory – this BLI uses a simplified system of full constraints for all land uses.

Constraints are described in Table 13 and shown on Figure 31.

Table 13. Development Constraints

Constraint	Description	Developable Portion
Steep Slopes	Slopes greater than 25%	0% Developable
Water Bodies	Includes lakes, streams, other areas of open water	0% Developable
FEMA 100 Year Floodplain	The floodway plus floodway fringe, calculated to convey a 1% annual chance (100-year) flood	0% Developable
Significant Wetlands	Wetlands identified as significant in the City's Local Wetland Inventory	0% Developable
Significant Forest Resources	Areas identified in Significant Forest Resources inventories	0% Developable
Significant Natural Resources Overlay	Includes significant wetlands, riparian corridors, and wildlife habitat. Disturbances greater than 500' generally require permit and mitigation per Development Code 12.27.220.	0% Developable
BPA easements	Land controlled by the Bonneville Power Administration (BPA); development is very limited	0% developable
Airport Runway Protection Area	Airport Runway Protection Area prohibits most uses and is identified as a constraint. Other airport zones can develop with some restrictions.	0% developable

Figure 31. Constraints to Development
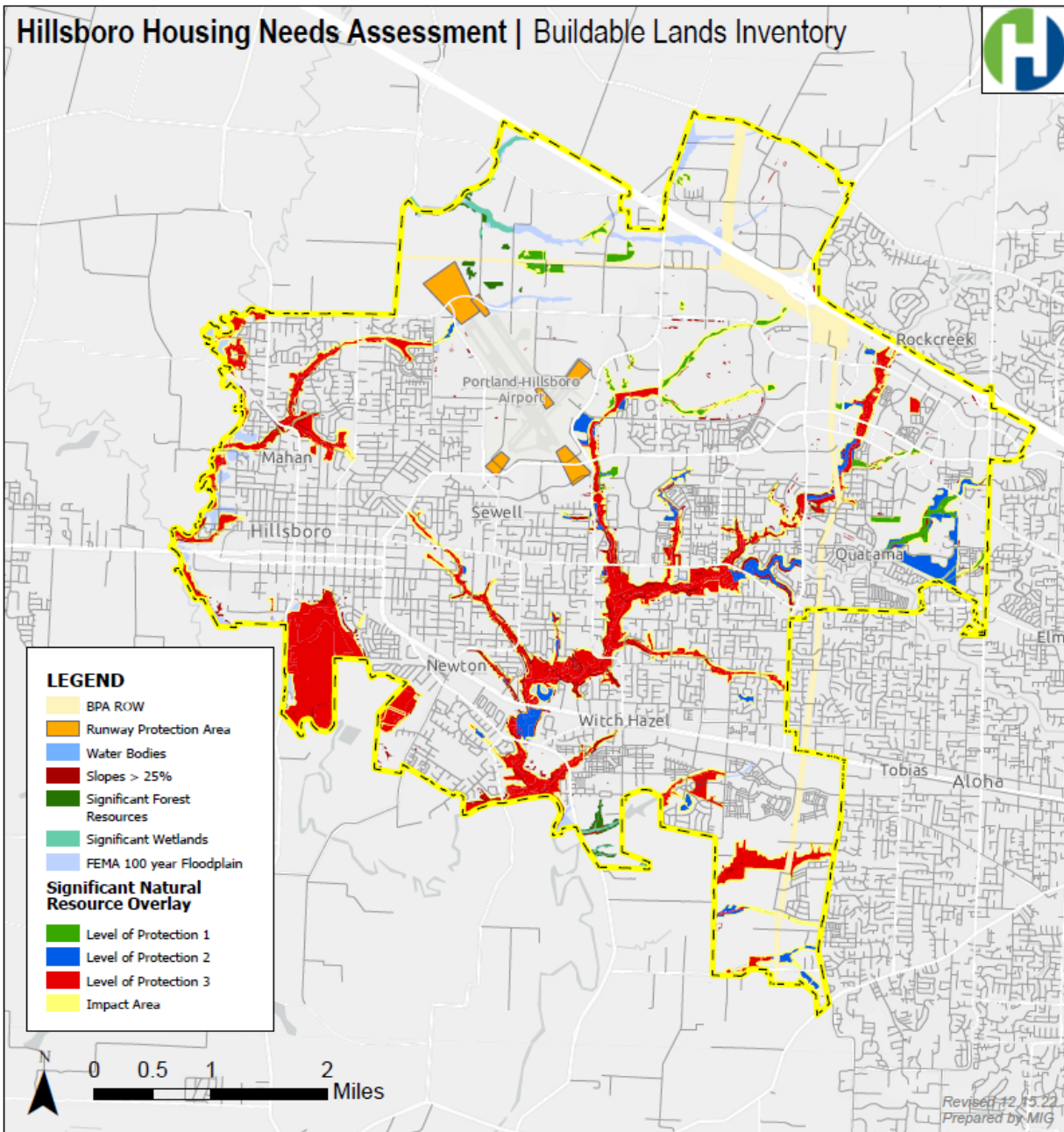
The BLI includes the following information for each tax lot in the study area based on the location of constraints.

- Acres – Total size of the tax lot
- Constrained Acres – Acreage of constrained areas
- Unconstrained Acres – Total acres minus Constrained Acres

The following table shows gross acres of land in each primary land classification in the study area.

Table 14. Constrained and Unconstrained Acres by Land Type

Land Type	Total Acres	Constrained Acres	Unconstrained Acres
Residential	5,397.9	894.2	4,503.7
Mixed Use	1,395.3	108.0	1,287.3
Non-Residential	4,735.6	610.8	4,124.8
Publicly Owned/Other	4,587.6	1,679.3	2,908.2
Total	**16,116.4**	**3,292.3**	**12,824.1**

Step 3: Development Status

Each tax lot in the study area is categorized as Vacant, Partially Vacant, or Developed. Vacant tax lots (including those with low-value structures) are assumed to have development capacity equal to the area unconstrained by natural resources, minus additional set-asides for future right-of-way and infrastructure (see Step 4). Platted lots are also identified and assumed to develop with one unit per lot. Developed parcels will be subject to further screening for redevelopment potential, described in later steps. Properties in the "Partially Vacant" category have an existing home but are large enough to subdivide based on criteria such as parcel size and allowable lot size in the applicable zoning designation.

The following data is used to determine development status of study area tax lots:

- Assessor data, including property land use code, improvement value, and land value;
- City inventory of outdoor areas, used in identifying public and commonly-held open spaces such as public facilities, parks, greenways, and homeowners association-owned open spaces;
- Metro Vacant Land Inventory derived annually from aerial photo information;
- Review of recent aerial imagery; and
- Discussion and review with City staff and the CAC.

Detailed methodology and notes related to development status follows.

Residential Development Status
The following criteria are used to determine the status of residential land unless that land is in the list of Approved Developments and Planned Expansion Areas described later in this step.

- **Vacant**. Land that has a building improvement value of less than $20,000, as indicated by County assessor data. All land outside of constrained areas is included in the developable area for these properties.
- **Vacant – Platted.** Vacant land that is part of a platted but unbuilt subdivision is included in this category. Platted lots are assumed to contain one unit each unless other information is available (see Step 4). "Developable Acres" is shown as "0" for these lots because they are treated separately from other acreage in the inventory.
- **Partially Vacant**. This designation is intended for parcels with an existing structure that are large enough to further subdivide and provide additional residential units. The recent update of the City's development code (known as "Housing Hillsboro") allows for more flexibility and variety in the types of units that may be provided on this land. The methodology for Partially Vacant land is consistent with the 2018 Metro Buildable Lands Inventory[10], as follows:

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[10] https://www.oregonmetro.gov/sites/default/files/2018/07/03/UGR_Appendix2_Buildable_Lands_Inventory.pdf

- o Each zoning designation is given a minimum lot size (see Table 15 for new single detached dwellings.
- o Lots whose gross acreage is greater than 5 times the minimum size are added to the Partially Vacant inventory.
- o Lots whose gross acreage is between 2.5 and 5 times the minimum lot size are subject to a $365,000 building value screen. Lots with improvement value below this amount are included in the Partially Vacant inventory. The rationale for this is that more expensive homes are less likely to be subdivided.
- o Lots whose gross acreage is less than 2.5 times the minimum lot size are not included.
- o In order not to over-estimate the likely densities in some zones, the infill capacity of partially vacant lots is determined as the minimum of:
  - ▪ (Calculated area of tax lot – max lot size) / min lot size (rounded down to a whole number); can equal 0
  - ▪ (Net unconstrained sq. ft. / 2,000 sq. ft.), rounded down to a whole number; can equal 0

- **Developed**. All other residential land is designated Developed and has no developable area. Developed land is subject to further screening for redevelopment potential in Step 4.

Table 15. Lot Size Assumptions for Partially Vacant Land

Zoning Designation	Minimum Lot Size	Source
RL	10,000	City zoning/comprehensive plan
R-10	10,000	City zoning/comprehensive plan
R-8.5	8,500	City zoning/comprehensive plan
SCR-OTC	7,000	City zoning/comprehensive plan
R-7	7,500	City zoning/comprehensive plan
RM	6,000	City zoning/comprehensive plan
R-6	6,000	City zoning/comprehensive plan
MR-3	6,000	City zoning/comprehensive plan
MR-2	6,000	City zoning/comprehensive plan
R-4.5	4,500	City zoning/comprehensive plan
MR-1	4,500	City zoning/comprehensive plan
SCC-MM	3,889	Metro assumptions used
SCR-LD	3,600	City zoning/comprehensive plan
SCR-DNC	3,000	City zoning/comprehensive plan
RH	3,000	City zoning/comprehensive plan
SCR-MD	2,000	City zoning/comprehensive plan
MU-N	1,885	Metro assumptions used
SCC-DT	1,496	Metro assumptions used
MU-C	1,496	Metro assumptions used
SCR-HD	1,481	Metro assumptions used
UC-RM	1,086	Metro assumptions used
UC-OR	1,086	Metro assumptions used
UC-NC	1,086	Metro assumptions used
UC-MU	1,086	Metro assumptions used
SCC-SC	1,086	Metro assumptions used
UC-AC	797	Metro assumptions used
SCR-V	797	Metro assumptions used

<u>Mixed Use Development Status</u>

Mixed Use development is subject to the same criteria as Residential Land. However, an additional screen is used to determine the likelihood of redevelopment of mixed-use parcels in Step 4, and assumptions about the residential/employment mix (see Table 17.) are applied.

<u>Approved Developments and Planned Expansion Areas</u>

Where information is available, this analysis uses information about approved or expected developments. These developments are listed in Step 4.

Additionally, this analysis relies on prior work completed by ECONorthwest to assess the capacity of two planned expansion areas – Witch Hazel Village South and the portions of South Hillsboro not currently within City limits. See additional detail in Step 4.

Land associated with approved developments and expansion areas are removed from the inventory, with unit capacity addressed in Step 5.

<u>Summary</u>

Table 16 lists the number of tax lots, total and constrained acreage, and developable area by land type. Land with approved developments is excluded from this table. A map summarizing development status is shown in Figure 32.

Table 16. Developable Area of Residential and Mixed Use Tax Lots (Excluding Approved Developments and Planned Expansion Areas)

Land Type and Development Status	Number of Tax Lots	Total Area (Acres)	Constrained Area (Acres)	Developable Area (Acres)
Residential	**22,289**	**4,682**	**713**	**337**
Developed	21,406	4,071	586	0
Partially Vacant	414	382	93	192
Vacant	57	185	29	145
Vacant – Platted	412	44	5	0
Mixed Use	**5,775**	**1,080**	**70**	**135**
Developed	5,428	874	48	0
Partially Vacant	228	134	20	70
Vacant	119	72	3	65
Total	**28,064**	**5,762**	**783**	**472**

Figure 32. Development Status of Residential and Mixed Use Land
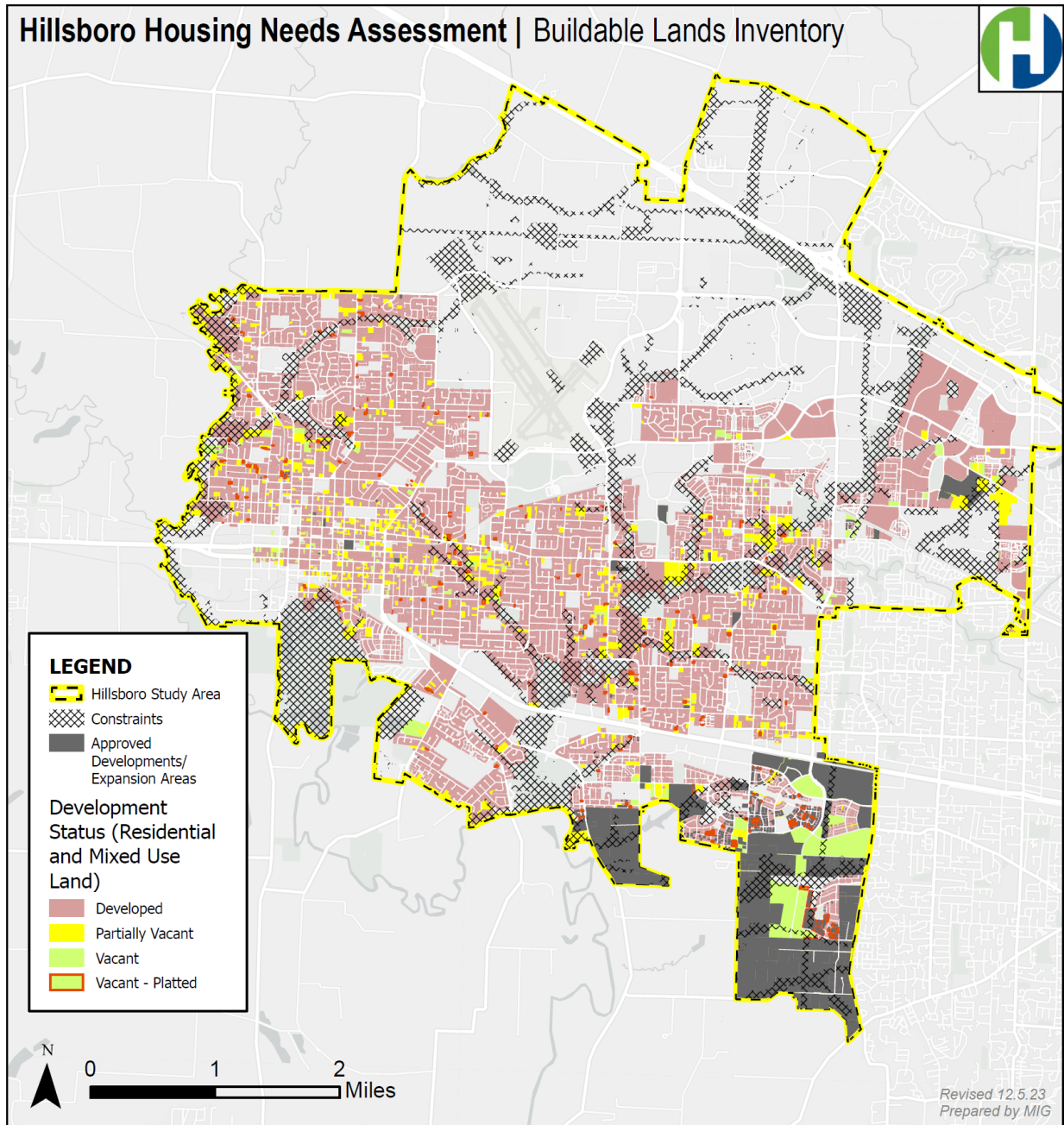
Step 4: Net Buildable Area

This step of the BLI establishes the net buildable area of residential land in the study area by removing land needed for future right-of-way and other infrastructure set-asides, and by subtracting the non-residential portions of mixed-use zones. This step also accounts for platted subdivisions and other development with known approvals.

Right of Way and Other Set-Asides

When vacant land develops, land for roads, infrastructure, open space, and other needs reduce the gross available acres into a net developable acreage. It is common for this reduction to be 1/5th to 1/3rd of the gross developable area. The BLI uses the following assumptions to calculate net developable acreage for each parcel.

- Detached Housing Zones (SFR 4.5 through SFR-10 zones): 25%
- Multi-Unit Residential and Mixed Use Zones: 25%

Residential Mix in Mixed Use Designations

Table 17 lists assumptions that address the proportion (by land area) of development in multiple-use zones that is expected to occur as residential uses, the remainder of which is assumed to be developed with employment uses.

Table 17. Residential and Employment Mix Assumptions for Mixed-Use Areas

Mixed Use Zone	Residential Percentage	Employment Percentage
Mixed Use – Commercial	60%	40%
Mixed Use – Neighborhood	80%	20%
Mixed Use – Village Town Center	60%	40%
Station Community – Business Park	0%	100%
Station Community Commercial – Downtown Zone	30%	70%
Station Community Commercial – Multi-Modal Zone	40%	60%
Station Community Commercial -Station Commercial	50%	50%
Station Community Residential – Downtown Neighborhood Conservation	90%	10%
Station Community Residential – High Density	80%	20%
Station Community Residential – Low Density	90%	10%
Station Community Residential – Medium Density	85%	15%
Station Community Residential – Orenco Town Center	90%	10%
Station Community Residential – Village	80%	20%
Urban Center – Activity Center	60%	40%
Urban Center – Mixed-Use Urban Density	80%	20%
Urban Center – Residential Medium Density	80%	20%

Platted Lots and Approved Developments

Platted lots that are currently unbuilt are each assumed to have the capacity for one dwelling unit. Where information is available about approved developments on specific tax lots, that will supersede other assumptions. These are listed in Table 18.

Table 18. List of Platted Lots and Major Approved Developments (currently without Certificate of Occupancy)

Development Description	Taxlot(s)	Number of Units
3rd Ave Apartments	1N231CA06300 1N231CA06400	35
4th Avenue Apartments	1S206BA03700	13
Amberglen Alta 1 Cooley	1N236AC00400	326
Amberglen Alta 2 Mixed-Use Apartments	1N236BD00500	594
Amberglen lot 35	1N236BD00900	162
Approved case file and construction underway - Reed's Crossing Town Center North Townhome Apartments	1S211CB09300	45
Approved case file and construction underway - Reed's Crossing Wellness Center and Hillsboro Eye Clinic	1S211CB08900	0
Approved case file and construction underway - The Ackerly Senior Living	1S211CB09400	182
Approved PUD for Westbrooke Estates	1S210CB00900 1S210CB01000 1S210CB01100 1S210CC01100	135
Butternut Creek Phase 14	1S215D000100	44
Dawson Woods	1S204AA00400	24
Nueva Esperanza, PUD	1N234CB00400	150
Habitat for Humanity - Century Commons	1S203AC00600	20
Merrill Gardens at Hillsboro	1N231CD02400	140
Oak Street village	1S206AA01700	58
Q2 Apartments	1N235DA00300	66
Reeds Crossing 1c	1S2140003500	221
Reed's Crossing Town Center North Mixed-Use	1S211CB09500 1S211CB09600 1S211CB09700	256
Reeds Crossing phase 2	1S2110001800	485
River Bend No. 2	1S216A000802	26
Total Approved Units		**2,982**
Platted Lots		**412**
Total Approved and Platted Units		**3,394**

Planned Expansion Areas

In 2022, ECONorthwest prepared an estimate of remaining buildable capacity in the unincorporated portion of South Hillsboro, Witch Hazel Village South, and other areas. Witch Hazel Village South and the South Hillsboro Community Plan Area are part of the study area for this BLI, while the Golf Club and Rosa Reserve areas are not part of this inventory.

This report relies on the ECONorthwest study for these areas, as shown in Table 19 and Table 20. Figure 33 identifies these expansion areas. Figure 34 and Figure 35 are detailed maps of South Hillsboro and Witch Hazel Village South, respectively.

Figure 33. Hillsboro Expansion Area Yield Study Reference Map (Source: ECONorthwest, Labels by MIG)
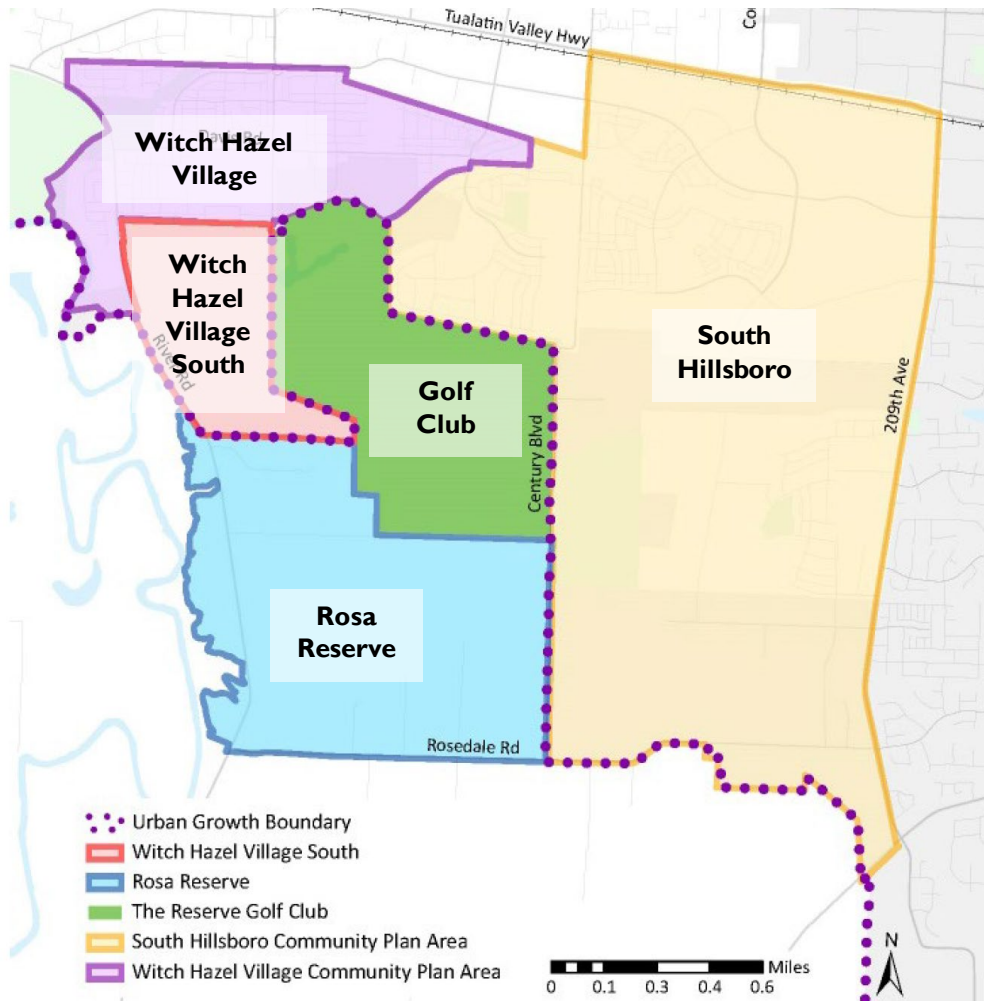
Figure 34. South Hillsboro Unincorporated Area (Source: ECONorthwest)

Source: City of Hillsboro GIS
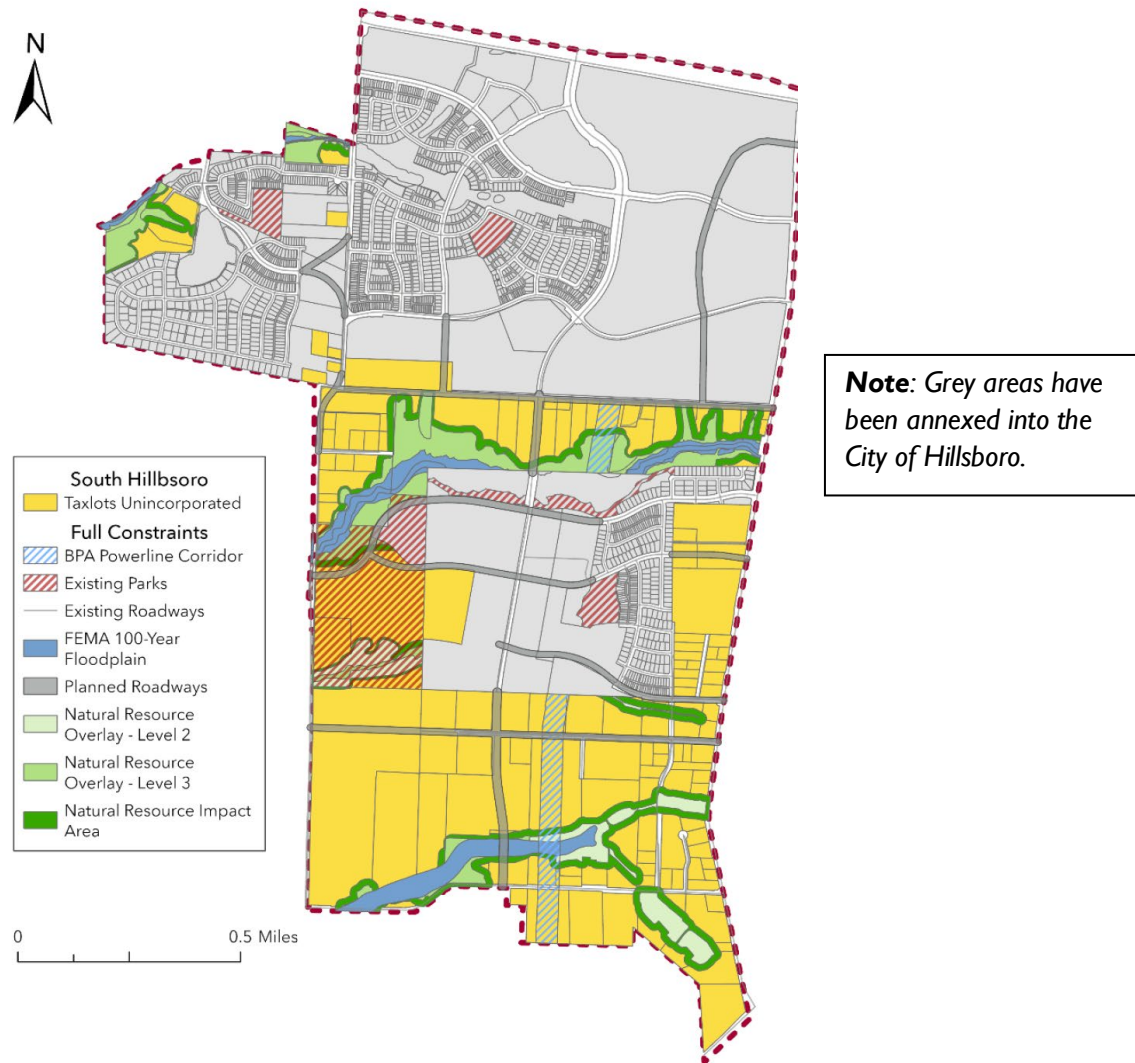
Table 19. Estimated Dwelling Unit Yield, South Hillsboro Unincorporated Areas (Source: ECONorthwest)

Housing Types	Low			High			"Best Guess" Dwelling Unit Estimate
	Net Developable Acres	Units	% of Units	Net Developable Acres	Units	% of Units	
Single Detached	189	1,215	74%	183	1,519	63%	1,367
Middle Housing	25	417	26%	34	665	28%	541
Apartments	-	-	0%	7.3	209	9%	104
Total	**214**	**1,632**		**224**	**2,393**		**2,012**

Figure 35. Witch Hazel Village South Detail (Source: ECONorthwest)

Table 20. Estimated Dwelling Unit Yield, Witch Hazel Village South (Source: ECONorthwest)

Housing Types	Low			High			"Best Guess" Dwelling Unit Estimate
	Net Developable Acres	Units	% of Units	Net Developable Acres	Units	% of Units	
Single Detached	45	372	46%	36	344	30%	351
Middle Housing	10	198	24%	15	363	31%	322
Apartments	8	240	30%	13	447	39%	395
Total	**63**	**810**		**64**	**1,154**		**1,068**

Step 5: Estimated Unit Capacity

Development Assumptions by Zoning Designation

The BLI uses an assumed density for the City's zoning. This information is based on the Hillsboro Community Development Code (CDC).[11]

Table 21 shows the assumed density for the City's zoning. This information is based on the Hillsboro Community Development Code (CDC).[12]

Table 21. Unit Capacity on Residential and Mixed-Use Land

Zoning	Density Notes	Assumption for BLI
R-10	Generally 10,000 sf single detached lots, but other housing types allowed.	5 du/ac
R-8.5	Generally 8,500 sf single detached lots, but other housing types allowed	6 du/ac
R-7	Generally 7,000 sf single detached lots, but other housing types allowed	7 du/ac
R-6	Generally 6,000 sf single detached lots, but other housing types allowed	8 du/ac
R-4.5	Generally 4,500 sf single detached lots, but other housing units allowed.	9 du/ac
MR-1	11-16 du/ac per code (townhouses higher).	16 du/ac
MR-2	17-21.25 du/ac per code.	21.25 du/ac
MR-3	23-28.5 du/ac per code	28.5 du/ac
SCR-LD	9-14 du/ac	14 du/ac
SCR-MD	18-23 du/ac per code, up to 36 du/ac in a PUD.	20 du/ac
SCR-HD	24-30 du/ac per code. Up to 45 du/ac in a PUD.	30 du/ac
SCR-OTC	6-12 du/ac	12 du/ac
SCR-DNC	9-23 du/ac, depending on location relative to LRT.	23 du/ac within 1,300 feet of a light rail station; 15 du/ac beyond.
SCC-DT		70 du/ac
SCC-MM		30 du/ac
SCC-SC		30 du/ac
MU-N	Differing requirements for Local/Collector frontage vs Arterial frontage. Differing	20 du/ac

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[11] https://library.qcode.us/lib/hillsboro_or/pub/municipal_code/item/chapter_12
[12] https://library.qcode.us/lib/hillsboro_or/pub/municipal_code/item/chapter_12

Zoning	Density Notes	Assumption for BLI
	requirements for Mixed Use buildings as well.	
MU-C	12 du/ac in mixed use buildings, 23 in residential-only buildings.	15 du/ac
MU-VTC	Specific South Hillsboro mins/maxes per 12.24.360-2. About 20 du/ac for single detached otherwise.	20 du/ac
SCR-V	24 du/ac near LRT, 15 du/ac further from LRT, down to 7 du/ac far from LRT	40 du/ac within 1,300 feet of light rail; 15 du/ac beyond.
UC-RM	24-43 du/ac	30 du/ac
UC-MU	43 du/ac min, no max	70 du/ac
UC-AC	43 du/ac min, no max	45 du/ac
UC-NC	30 du/ac min, no max	35 du/ac
UC-OR	30 du/ac min, no max	35 du/ac
UC-RP	18-65 du/ac	30 du/ac

Redevelopment of Mixed-Use Land

Land in mixed-use designations has undergone a "Strike Price" assessment for redevelopment potential. "Strike Price" is a term-of-art used to indicate the price at which it becomes cost-effective for a developer to consider a site for redevelopment. The strike price is the combined land value and improvement value per square foot of the lot.

This analysis uses a $18.50 strike price threshold for mixed use land. If the combined land value and improvement value per unconstrained square foot for a parcel is below this value, then it is added to a list of potentially redevelopable sites and included in the BLI. As a comparison, the 2018 Metro BLI used a $12 strike price for suburban areas such as Hillsboro – meaning this analysis supposes a much higher likelihood of redevelopment than the Metro effort.

A review of residentially-designated land at this strike price was also conducted, but no properties other than single-family detached dwellings or manufactured home parks were identified as having a likelihood of redevelopment.

This screen has identified **31 tax lots totaling roughly 9 unconstrained acres** across the City's mixed use zones that meet the $18.50 du/ac strike price. These properties are included in Table 22 in the "Redevelopable" category, and their residential capacity is estimated at 174 units based on zoning assumptions.

Middle Housing and House Bill 2001

The text of House Bill 2001 and the City's Housing Hillsboro Project have implications for this work, particularly in the assumptions for what the density and housing mix new development and redevelopment will look like:

- Some proportion of existing single detached housing in Hillsboro will divide internally or redevelop into middle housing units (duplexes, triplexes, quads). State statute provides a safe harbor of a 3% assumed increase in density for residential land due to this development activity for purposes of evaluating potential UGB amendments.

- Some proportion of new development in residential zones will develop as middle housing units (duplexes, triplexes, quads, townhomes, cottage clusters), when they would have previously been developed as single detached units. This has been addressed through density and mix assumptions of new development included in this analysis.

There are 22,684 lots classified as "Developed" with an assessor's property code of "101" (single detached dwellings). Redevelopment/subdivision of 3% of these lots would mean **680** new units throughout the City over the planning horizon. These units are accounted for in the overall capacity assumptions.

Table 22. Summary of BLI Results

Development Category	Tax lots	Gross acres	Buildable Acres (minus constrained land)	Net Acres (subtracts future set-asides and existing structures)	Total Unit Capacity
Residential Land	**883**	**611**	**484**	**318**	**3,115**
Vacant	57	185	156	117	1,368
Partially Vacant	414	382	289	162	1,335
Platted	412	44	39	39	412
Mixed Use Land	**378**	**227**	**195**	**79**	**2,652**
Vacant	119	72	72	34	953
Partially Vacant	228	134	114	36	1525
Redevelopable	31	22	9	9	174
Total	**1,261**	**838**	**680**	**397**	**5,767**
Approved Development					**2,982**
Expansion Areas (South Hillsboro Unincorporated and Witch Hazel Village South)					**3,080**
Middle Housing Infill					**680**
Total Units					**12,509**

The BLI is summarized in Table 22. Key takeaways include:

- Based on the assumptions in this analysis, overall capacity in the study area is about 12,500 units.
- Roughly 36% of this capacity is in single detached units, 32% in Middle Housing units, and 32% in Multi-Dwelling units.
- Roughly 25% of capacity lies within the expansion areas of unincorporated South Hillsboro and Witch Hazel Village South, and another 24% is on land that has some form of development approval currently.
- Redevelopment on mixed-use land accounts for about 1% of capacity, though market dynamics and City policy could affect this number significantly.

Comparison of Land Need and Supply

This section summarizes the results of the Housing Needs Projection and BLI. Table 23 presents the estimated new unit capacity of the buildable lands identified in the study area. Residential zones, as well as mixed-use zones that can accommodate some residential uses, were included in the inventory, and are broken into broad categories based on housing density. The inventory includes the unincorporated portions of Hillsboro's current known expansion areas of South Hillsboro and Witch Hazel Village South.

Table 23. Summary of Buildable Land Inventory

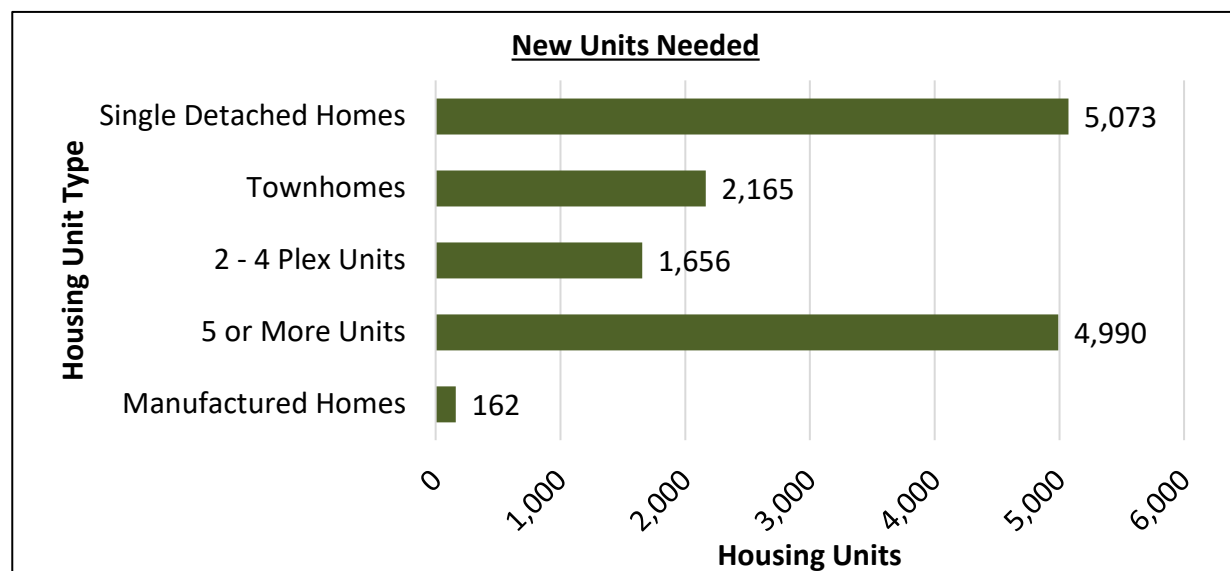| Development Category	Tax lots	Gross acres	Buildable Acres (minus constrained land)	Net Acres (subtracts future set-asides and existing structures)	Unit Capacity			
					Single Detached	Middle Housing	Multi-Dwelling	Total
Residential Land	**883**	**611**	**484**	**318**	**1,885**	**792**	**438**	**3,115**
Vacant	57	185	156	117	581	463	324	1,368
Partially Vacant	414	382	289	162	893	328	114	1,335
Platted	412	44	39	39	412	0	0	412
Mixed Use Land	**378**	**227**	**195**	**79**	**243**	**1,125**	**1,284**	**2,652**
Vacant	119	72	72	34	105	359	489	953
Partially Vacant	228	134	114	36	112	711	702	1,525
Redevelopable	31	22	9	9	27	55	93	174
Approved Development					600	551	1,831	2,982
Expansion Areas (S Hillsboro Unincorporated and Witch Hazel Village South)					1,718	863	499	3,080
Middle Housing Infill			n/a		0	680	0	680
TOTAL					4,447	4,011	4,052	12,509

Source: MIG

- There is a total estimated remaining capacity of 12,509 units of different types within the study area.
- The estimated remaining capacity for low density housing units remains the greatest share at capacity for 4,447 units, or 36% of the total.
- There is a total estimated capacity for 4,011 middle housing units, including future infill in low density zones. This is roughly 32% of the total unit capacity.
- There is a total estimated capacity for 4,052 housing units in higher density multi-dwelling properties. This is roughly 32% of the total unit capacity.
- Of the total capacity, 24% is located in future developments that have already been approved (2,982 units).
- 25% of capacity remains in the unincorporated portions of the expansion areas of South Hillsboro and Witch Hazel Village South.

Figure 36 summarizes the forecasted future unit need for Hillsboro.

Figure 36. Summary of Forecasted Future Unit Need (2043)

Unit Type:	Single Detached	Single Attached	Multi-Family			Manuf. home	Boat, RV, other temp	Total Units	% of Units
			2-unit	3- or 4-plex	5+ Units MFR				
Totals:	5,073	2,165	654	1,002	4,990	162	0	**14,046**	**100%**
Percentage:	36.1%	15.4%	4.7%	7.1%	35.5%	1.2%	0.0%	100%	

*(Table header: **TOTAL HOUSING UNITS**)*

New Units Needed

- Single Detached Homes — 5,073
- Townhomes — 2,165
- 2 - 4 Plex Units — 1,656
- 5 or More Units — 4,990
- Manufactured Homes — 162

Sources: PSU PRC, Census, Johnson Economics

<u>Comparison of Housing Need and Capacity</u>

There is a total forecasted need for roughly 14,050 units over the next 20 years based on Metro's forecasted growth rate. This is greater than the estimated total capacity of 12,509 units. Table 24 presents a comparison of the BLI capacity for new housing units, compared to the estimate for new unit need by 2043. It breaks down need by general zoning category (LDR, MDR, HDR).

The projected demand for low-density housing types is higher than the remaining capacity by an estimated 981 units, or the equivalent of 163 gross acres of low density residential land.

The results find a modest surplus for medium-density housing of 26 gross acres.

The projected demand for high-density housing types is higher than the remaining capacity by an estimated 939 units, or the equivalent of 36 gross acres of high density residential land. Because the achieved density of these housing types is higher, it translates to somewhat less acreage deficit than the deficit in low density zones.

These findings assume that under newly adopted state rules, 3% of available buildable parcels in the Low Density Residential zone will be used for the various types of attached units (single attached).

Table 24. Comparison of Forecasted Future Land Need (2043) with Available Capacity

WITHIN CITY LIMITS		SUPPLY	DEMAND				
			Growth Rate (0.7%)				
Zone & Plan Category	Typical Housing Type	Buildable Land Inventory (Unit Capacity)	New Unit Need (2043)	Avg. Density (units/ac)	Surplus or (Deficit)		
					Units	Net Acres	Gross Acres
Low-Density	Single-detached; Single-attached & plex	4,447	5,428	8.0	(981)	(123)	(163)
Med-Density	Single-attached; Manufact. home; 2-4 plexes	4,011	3,628	20.0	383	19	26
High-Density	Multi-Unit apartments	4,052	4,990	35.0	(939)	(27)	(36)
	TOTALS:	12,509	14,046	20.7	(1,537)	(130)	(174)

Sources: MIG, Johnson Economics

These findings do not require rezoning of medium- or high-density zoned land to meet the need for low-density land. A range of potential housing policies and strategies will be considered in future development of an HPS by the City, including the ability of future plan areas to meet the need for different types of housing during the 20-year planning period.

High-Level Policy Themes

The project team prepared high-level policy themes as part of the HNA to inform the subsequent HPS process. The HPS is required of Oregon cities under House Bill 2003 and OAR 660-008 and requires Hillsboro to evaluate a broad range of solutions to increase housing production to meet its housing needs. The HPS is a strategic and flexible tool that can assess policies, programs, funding tools, equity, partnerships, and more.

The City's HPS process will begin in January 2024 and is anticipated to conclude in December 2024. The below high-level policy themes were refined in spring 2023 based on input from the HNA CAC and historically marginalized communities' focus groups.

High-Level Policy Themes

1. Ensure adequate supply of land and public infrastructure, utilities, and services to support a variety of housing types and choices.
2. Increase housing development opportunities in multi-dwelling and mixed-use zones and commercially zoned areas along TV Highway corridor's future rapid bus transit line.
3. Support housing for all incomes to align with the results of the HNA.
4. Extend high-amenity housing discussion beyond large lot size, since high-amenity housing can come in all forms and lot sizes.
5. Include affordable housing in new residential expansion areas to foster more mixed-income neighborhoods that have access to new amenities such as parks, open space, trails, and bicycle/pedestrian infrastructure.
6. Support homeownership opportunities for homebuyers, including low-income and first-time buyers.
7. Identification, acknowledgment, and discussion of multi-generational housing.
8. Increase rental housing development that includes a greater number of bedrooms for larger families.
9. Increase development of accessible housing for seniors and people with disabilities.
10. Assess connections to the housing supply for those experiencing or at risk of houselessness in Hillsboro and how these connections and housing opportunities can be increased.
11. Identification, acknowledgment, and discussion to preserve manufactured dwelling parks and increase opportunities for alternative housing such as manufactured and modular.

Next Steps

This report is the culmination of over a year of analysis, coordination, and engagement to identify the City's housing needs, however the work is far from complete. In January 2024, the City will begin the HPS process directed by City leadership interested in furthering housing production in our community and required by the State of Oregon.

Going forward, state law requires the City to update this analysis and evaluate its performance in producing needed housing every six years. Through this important work, the City will continue to understand and respond to the community's housing needs.

Alternative Analysis

This section summarizes the results of an Alternative Analysis that utilizes assumptions that differ from those in the HNA forecast and analysis described in the main report. The Alternative Analysis assumes a higher future population growth rate and refinements to the assumptions used in the BLI. The purpose of the Alternative Analysis is to provide a more specific look at City housing needs, capturing a scenario that better reflects local experiences and concerns. The HNA forecast and analysis described in the main report provide the formal and legal compliance with State and Regional requirements, and the Alternative Analysis may be referred to when making subsequent housing policy considerations.

> **"Oregon is facing a housing and homelessness crisis that demands bold action."**
>   **- Gov Tina Kotek**
>
> On her first full day in office, Governor Tina Kotek signed Executive Order 23-04 which set an ambitious housing production goal of 36,000 homes per year and established the Housing Production Advisory Council, a council of experts charged with developing an action plan to meet the new construction targets.
>
> The annual housing production goal of 36,000 additional housing units at all levels of affordability across the state represents an 80 percent increase over current construction trends. This ambitious target aims to address Oregon's current housing shortage and keep pace with projected population growth. It would set Oregon on the path to build 360,000 additional homes over the next decade.
>
> - Statement, Office of the Governor

Introduction

This Alternative Analysis provides a set of assumptions regarding buildable land that is a more accurate assessment about the likelihood of some kinds of infill development, and a forecasted growth rate that more closely reflects the City's historic growth rate.

The City has prepared this alternative assessment of housing need and land supply in order to better and more accurately address local experiences and concerns. There are two categories of assumptions that distinguish the Alternative Analysis from the OAR-driven HNA approach. The first is the Average Annual Growth Rate assumed throughout the 20-year planning horizon and associated increases in the amount of estimated needed housing. The second is a more accurate assessment of Hillsboro's buildable land.

The assumptions that underlie this analysis have been developed with input from representatives of the housing development community focusing on both greenfield and infill residential development, and other housing stakeholders.

Alternative Analysis Growth Forecast

The HNA undertaken by the City presents a forecast of needed housing in the community over a 20-year timeframe (2023-2043). The analysis presented in the HNA report conforms to the statutory guidelines for completing an HNA by a city in the Metro area (ORS 197.628; OAR 660-025), meaning it

relies on the latest adopted population and household forecasts from the most recent Metro Consolidated Forecast (adopted 2021).

As shown in the HNA report, the population forecasted by Metro in Hillsboro by 2043, when compared to the current estimated population (2022) results in a quite modest annual growth rate of 0.7% per year during the 2023 and 2043 study period. For comparison, Hillsboro has achieved estimated annual growth of 1.5% since 2010, and 2.0% annually since 2000.[13] The Alternative Analysis forecasted growth rates are more consistent with these past trends and do not assume a growth rate at the higher end of the range. For this reason, we believe the Alternative Analysis forecast more accurately predicts the City's population in 2043. The following summarizes the results of additional analysis based on an alternative growth rate methodology that projects higher growth than that found in the HNA report.

<u>Baseline and Alternative Analysis Growth Rate Comparison</u>
As noted, the Metro Consolidated Forecast (adopted 2021) forecasts a growth rate of 0.7% per year for Hillsboro, with the average household size projected to fall to 2.3 persons per household from the current 2.6 persons in Hillsboro. The smaller household size means that more housing units will be needed to accommodate the same population.

The Alternative Analysis growth rate methodology results in a higher assumed growth rate, but a smaller decline in the average household size by 2043. A comparison of the HNA forecast and the Alternative Analysis forecast is shown in Table 25, followed by a discussion of the Alternative Analysis forecast methodology.

- The Alternative Analysis forecast projects a much higher growth rate of 1.4% per year, resulting in a forecast of nearly 18,000 more residents over the forecast period than the HNA forecast.
- The Alternative Analysis forecast projects nearly 4,000 more new households over the forecast period than the HNA forecast, and nearly 4,200 more new housing units needed (including a 5% vacancy assumption).
- The assumed average household size is larger in the Alternative Analysis forecast than the Metro Consolidated Forecasted (adopted in 2021) (2.45 vs. 2.30 persons). While the Alternative Analysis forecast projects more than double the population growth, the household growth is only 30% greater than the HNA forecast.

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[13] Source: Census, PSU PRC

Table 25. HNA Forecast vs. Alternative Analysis Forecast

	2022	**HNA FORECAST**				**ALTERNATIVE ANALYSIS FORECAST**			
		2043	**Growth**	**% Growth**	**Annual Rate**	**2043**	**Growth**	**% Growth**	**Annual Rate**
Total Population:	109,532	126,247	16,715	15%	0.7%	144,159	34,627	32%	1.3%
Avg. HH Size*	2.64	2.30				2.45			
Households:	40,970	54,229	13,259	32%	1.3%	58,171	17,201	42%	1.7%
Housing Units:	43,037	57,083	14,046	33%	1.4%	61,232	18,195	42%	1.7%

* Excluding group housing population

Source: PSU PRC, Census, Johnson Economics

Table 25 shows the estimated new housing needs projected under the Alternative Analysis forecast, assuming a similar mix to those forecast in the HNA forecast. The Alternative Analysis forecast projects a need for roughly 18,200 new units over 20 years, in comparison to the projected need for roughly 14,050 in the HNA forecast.

Figure 37. HNA Forecast vs. Alternative Analysis Forecast
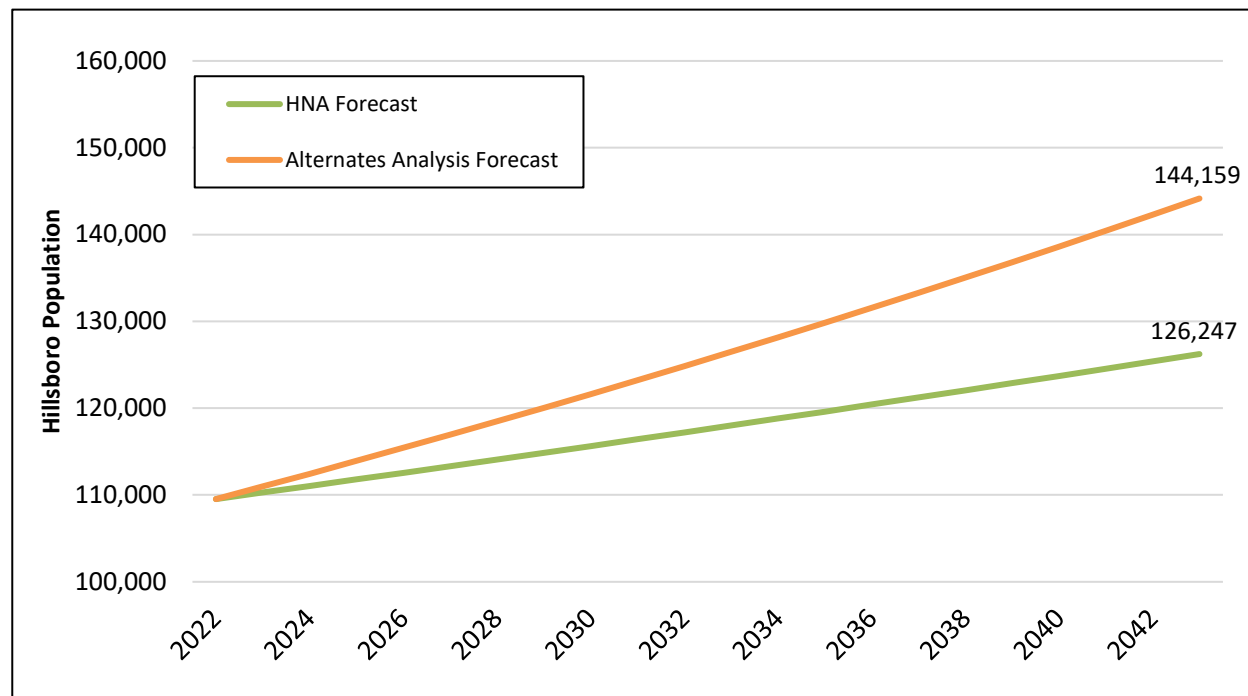
Source: PSU PRC, Census, Johnson Economics

Figure 38. Projected Future Need for New Housing by Income Level and Type (2043) – Alternative Analysis Forecast

Household Income Segment		Income Level (Rounded)*	Owner Units	Renter Units	Total	Share	Common Housing Product
Extremely Low Inc.	< 30% MFI	< $27,500	677	1,065	1,742	10%	Government-subsidized; Voucher; Shelter; Transitional
Very Low Income	30% - 60% MFI	$27.5k - $55k	978	1,793	2,771	15%	Aging/substandard rentals; Government-subsidized; Voucher; Manufactured homes
Low Income	60% - 80% MFI	$55k - $73k	895	1,399	2,294	13%	Aging apartments; Government-subsidized; Plexes; Aging single-detached; Small homes
Middle Income	80% - 120% MFI	$73k - $110k	1,843	1,954	3,797	21%	Single-detached homes; Townhomes; Condominiums; Newer apartments
Upper Income	> 120% MFI	> $110,000	4,820	2,772	7,592	42%	Single-detached homes; Townhomes; Condominiums; New apartments
TOTAL:			*9,211*	*8,984*	*18,195*	*100%*	

Source: Johnson Economics

Alternative Analysis BLI

To better match the development realities seen in Hillsboro, the following Alternatives Analysis BLI approach is a more accurate assessment regarding the potential for infill on vacant and partially vacant parcels in the City. The cumulative goal of these changes is to recognize that the financial feasibility of infill projects is challenging in even the best of conditions, and various obstacles only further reduce the likelihood of development on these types of properties during the planning horizon. These changes are described briefly here, with greater detail provided in **Appendix B**.

Environmental Constraints - Slopes

In addition to the constraints identified in the standard BLI, this analysis includes areas with greater than 15% slope as unbuildable for the purposes of infill development. The 15% slope criterion is derived from the Oregon Fire Code which is integrated into the City's Municipal Code and dictates: "The grade for fire access roads shall not exceed 10 percent to facilitate fire ground operations and meet the recommendations of NFPA 1901, Standard for Automotive Fire Apparatus. The grade may be increased to a maximum of 15 percent, for lengths approved by the fire code official…."

The 10%-15% limitation on grade for fire access limits development on slopes on interior and infill lots where a long drive or access road will be needed to access the housing unit.

While development on a slope may be more feasible on large sites that allow for terracing (i.e., for a hillside apartment complex), few of these sites remain in the City's BLI. Most of the remaining inventory consists of small sites that might in theory allow for one or perhaps two additional homes if it is financially and physically feasible to develop the vacant portions of them.

In these cases, even if fire access is technically possible, building on the slope presents additional costs and complexities that make these low-feasibility infill sites. The level of land excavation required to level a >15% slope can be prohibitively expensive, as can building an elevated home on posts, or "stilts". While these types of construction may seem common for high-end homes on view lots, it is uncommon for standard market-rate housing types on smaller lots, because these methods of land development and foundation construction can add many tens or even hundreds of thousands of dollars to the cost of a project.

Other challenges of building on a slope can include stormwater drainage (flooding, foundation erosion) and sewage (pumps or specialized slowing features). Small and infill parcels also present challenges to access for the specialized equipment needed for this type of construction, further adding logistical hurdles and additional costs.

Adding the 15% slopes to the constrained areas had a minor impact on the inventory. Land with a slope greater than 15% is generally in the vicinity of other resource constraints. Adding land with 15% slopes to the constraints resulted in a total of 22 fewer acres of buildable land in the inventory.

Location of Structure and Access Issues
In many cases, the location of existing structures on a property will inhibit development on the property by precluding efficient use of remaining acreage or blocking street access. A visual check of partially vacant lots was performed, resulting in either discounting land that appears to be impacted by access/structure issues, or by removing the lot from the inventory, on a case-by-case basis.

Because each property is unique, the feasibility of accessing the vacant portions of a partially vacant property while leaving the existing home must ultimately be assessed on a case-by-case basis. Generally, it is not economically feasible to remove a home that still retains its value and utility, even on a large lot. This is because the combined cost of the home, plus the land, plus demolition and site development costs, will exceed the market rate for buildable land in most cases. If new housing units cannot be added while retaining the existing home, no infill development is likely on the parcel.

After a non-exhaustive review of several hundred of the largest (i.e., greatest-capacity) partially vacant properties, 30 lots were identified where the location of the building on site and/or access issues would likely hinder further infill development. There may be additional properties in the inventory that would face substantial challenges to further infill development due to the location of structures and access issues.

Definition of Partially Vacant Land
The standard definition of Partially Vacant land based on the 2018 Metro BLI uses gross acreage of parcel to estimate infill capacity. This alternative uses net area of partially vacant parcels to conduct lot size calculations after constrained lands and building footprints along with their associated buffers have been removed. This has the effect of removing from the inventory many parcels with marginal capacity to subdivide and add one or two new units.

Executive Homes

Expensive properties with significant acreage are not precluded from subdividing, but this Alternative Analysis BLI recognizes they are less likely to do so (particularly as larger lots become more scarce within the region). Aging or small homes that have low value on large land parcels are generally considered good candidates for redevelopment. However, homes that retain a high improvement value (assumption of >$500,000, not counting the value of the land), may well be million or multi-million dollar properties in total. These properties are often purchased or built-to-suit as high-end estate homes and are unlikely to add more housing units on the existing property. The owners of executive housing generally have the means to maintain the larger land area, and do not feel economic pressure to add infill residential density to their property.

Where improvement values are greater than $500,000 (not including land value), we have assumed an additional buffer of 1 acre. Seven such properties were identified, resulting in an additional seven acres of land being removed from the inventory.

Flag Lots

A number lots identified as vacant or redevelopable are flag lots. In these cases, we have removed the area of the "flag pole" from developable acreage. In some cases, lots were removed where the "flag" crossed environmentally protected areas or had other access issues that would inhibit development. This has the effect of removing approximately 2 acres of net residential land from the inventory.

Sewer Availability

Access to infrastructure is especially important for small infill projects that cannot, for example, pay for lengthy sewer connections.

If sewer infrastructure is not already available at the property line, the developer of a property may be required to make costly off-site improvements to extend the sewer line from some distance. This often entails excavation and reconstruction of improvements, such as street and sidewalks that are not directly adjacent to the property. If the site is larger and can accommodate multi-family housing, the size and capacity of sewer infrastructure may also need to be expanded.

While these improvements would ultimately benefit the property and, in some cases, the broader area, the cost can be prohibitive to development, particularly in return for only a few resulting homes. All project costs must ultimately be capitalized into the cost of the homes, and if the market does not support that home price in a specific location, it becomes infeasible.

Each property and project is unique, and the cost and feasibility of water and sewer connections can be difficult to assess in a systematic way. A small number of properties were identified that seem unlikely to be able to pay for the several hundred feet of sewer infrastructure to serve what would be a small infill development.

Summary

The results of these additional filters are included in Table 26. Compared to the standard BLI, the Hillsboro study area has capacity for **911 fewer units** using this analysis. Nearly 70% of these units are single detached dwellings, and nearly 30% are middle housing units.

Table 26. Summary of Alternative Analysis Buildable Land Inventory

Development Category	Tax lots	Gross acres	Buildable Acres (minus constrained land)	Net Acres (subtracts future set-asides and existing structures)	Single Detached	Middle Housing	Multi-Dwelling	Total
Residential Land	**805**	**540.6**	**406.4**	**292.6**	**1,335**	**601**	**434**	**2,370**
Vacant	104	238.2	156.5	116.2	555	454	324	1,333
Partially Vacant	289	258.0	210.6	137.1	368	147	110	624
Platted	412	44.4	39.3	39.3	412	0	0	412
Mixed Use Land	**274**	**177.6**	**145.7**	**74.8**	**177**	**1062**	**1248**	**2,487**
Vacant	158	79.4	73.5	34.1	95	339	496	930
Partially Vacant	85	76.4	63.1	31.6	55	668	659	1382
Redevelopable	31	21.8	9.0	9.0	27	55	93	174
Approved Development					600	551	1,831	2,982
Expansion Areas (South Hillsboro Unincorporated and Witch Hazel Village South)					1,718	863	499	3,080
Middle Housing Infill					0	680	0	680
Total					**3,829**	**3,757**	**4,012**	**11,599**

Sources: City of Hillsboro, MIG

Alternative Analysis Comparison of Forecasted Need and Supply

Table 27 presents the residential demand generated by the Alternative Analysis growth forecast of 1.4% compared to the alternative BLI result of 11,599 units of capacity. This analysis results in a deficit of roughly 6,600 units totaling 692 gross acres. Nearly 80% of this land deficit is for lower density units that average 8 units per acre, while 9% is for medium density units and 13% is for higher density units.

Table 27. Comparison of Forecasted Need and Supply - Alternative Analysis BLI and Growth Forecast

WITHIN CITY LIMITS		SUPPLY	NEED				
			Growth Rate (1.4%)				
Zone & Plan Category	Typical Housing Type	Buildable Land Inventory (Unit Capacity)	New Unit Need (2040)	Avg. Density (units/ac)	Surplus or (Deficit)		
					Units	Net Acres	Gross Acres
Low-Density	Single-family detached; Some SF attached & plex	3,829	7,052	8.0	(3,223)	(403)	(537)
Med-Density	SF attached; Manufact. home; 2-4 plexes	3,757	4,697	20.0	(939)	(47)	(63)
High-Density	Multi-family apartments	4,012	6,446	35.0	(2,435)	(70)	(93)
	TOTALS:	*11,599*	*18,195*	*20.7*	*(6,596)*	*(519)*	*(692)*

Sources: MIG, Johnson Economics

Figure 39 shows the overall surplus/deficit of residential land found in the HNA analysis as well as the Alternative Analysis.

Figure 39. 20 Year Surplus/Deficit in Gross Acres, HNA Analysis and Alternative Analysis
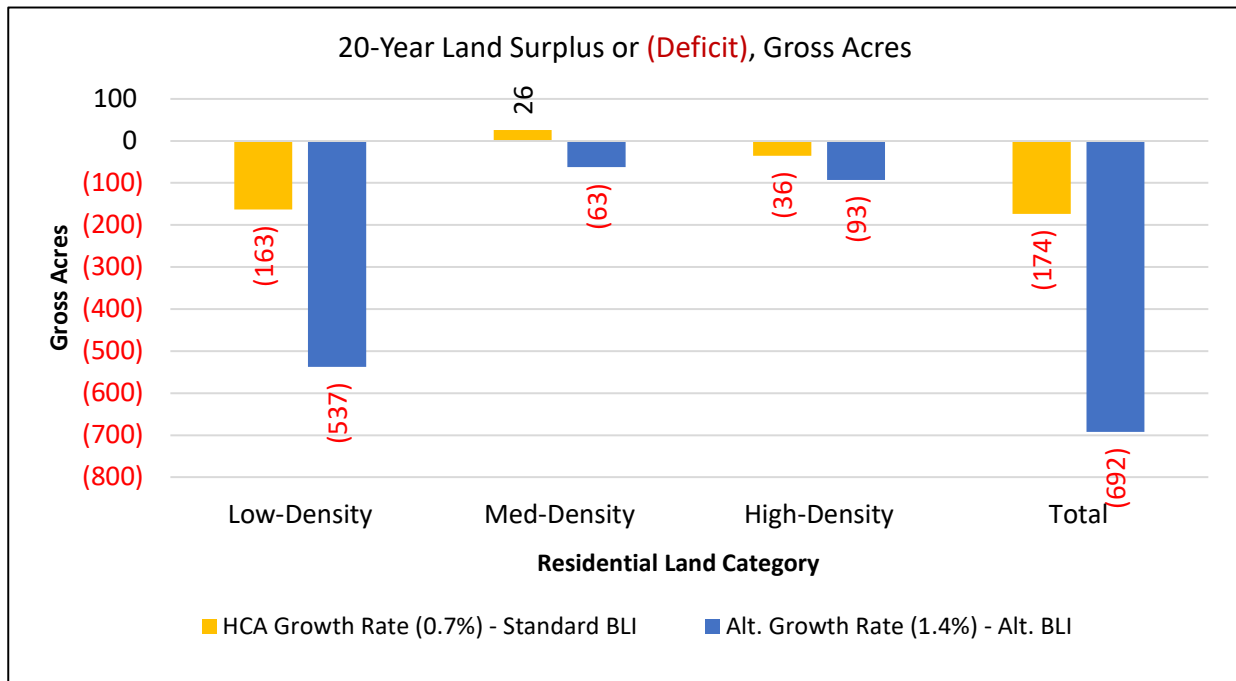
Sources: MIG, Johnson Economics

Appendices

Appendix A: Summary of Community Engagement

1. Overview of Public Engagement
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3. Detailed Stakeholder Interview Summaries

Appendix B: Alternative Analysis Buildable Lands Inventory

Appendix A: Overview of HNA 2022-2023 Engagement

City staff met with Public Engagement Committee on September 7, 2022 to review and approve the proposed Public Communications and Engagement Plan (PCEP), which resulted in additional translation services and contracting with community-based cultural organizations.

The HNA community engagement process reached a representative cross-section of Hillsboro's diverse communities and had a robust mix of CAC members. It also included opportunities for input from historically marginalized communities in Hillsboro. In addition, the project offered opportunities for stakeholder interviews for people who live or work in Hillsboro to provide input into the project.

Project Webpage on City Website:

A project webpage was established early in the project on the City website, which offered a variety of opportunities to get involved in the project and provided an engagement timeline and project timeline and other relevant project information. The webpage was updated as new information became available. It also offered sign-up for email updates to various news and announcements in the City. The website is: https://www.hillsboro-oregon.gov/our-city/departments/community-development/projects/housing-needs-analysis

Community Advisory Committee

A CAC was established early in the project. The role of the CAC was for community members to provide input into the HNA project. The CAC was a voluntary committee comprised of 15 community members including people who live or work in Hillsboro, and for-profit and non-profit developers. The CAC met five times from October 2022 through April 2023 and has its final meeting on June 13, 2023. The CAC reviewed and provided feedback on housing data and provided input on the high-level housing policy themes.

Meeting content included the following: Introduction to HNA/project overview, Buildable lands inventory (BLI) methodology/data, Initial discussion about goals and policies, review of the draft BLI draft report and data, review of the draft housing forecast report (which included extensive data and a Land Sufficiency Analysis) review of high-level policy themes. The final meeting will provide the results to the finalized BLI and housing forecast report.

Range of input received during meetings included: Most needed housing types in Hillsboro, BLI methodology, housing forecast report methodology, and High-Level Policy Themes. Short summaries from each of the CAC meetings are included below:

CAC Meeting #1 Input: "What in your opinion is the most needed housing type in the City? Examples of responses summarized: need to set aside opportunities for lower income folks, youth homelessness, low cost rentals not available, tiny houses needed, homeownership for 30-80% AMI needed, housing for at risk youth needed, low-income and affordable needed, smaller cottage clusters, lack of affordable housing, for families with more than two bedrooms needed, very low income housing for seniors needed, lack of supply of developable land across all housing types – increase supply, need

all levels of housing from affordable workforce, middle housing up to executive housing, everyone is struggling with the cost of housing in Hillsboro, at all levels of income, affordable rental properties with good living conditions and affordable homeownership for first-time homebuyers, homeownership for first-time buyers is almost impossible, renters can't save up or devote money to homebuying with high rent prices in Hillsboro.

CAC Meeting #2 Input: Examples of input on Buildable Lands Inventory draft via open discussion includes: Wide range of concerns and questions for many types of housing needs. Concern whether there is enough land to accommodate the need. Concerns about how land will develop, how fast to grow, most of the land being lower density, not enough multifamily and equity issues about locations next to roads and commercial areas, how to balance residential land with other needs like parks. Questions about what partially vacant includes, how are areas set aside for camping categorized, what is the average size for market driven residential, why was publicly owned land taken off the table? Comments about qualified census tracts should be target for multifamily because designation makes affordable projects more viable, subsidized affordable housing more like 100 du/ac is a common average density.

Examples of input on the Housing Needs Projection data analysis came in form of many questions, for example: Does the data accurately represent the pandemic? Is the city trying to house everyone who currently commutes to Hillsboro for work? Does Metro establish the growth figures? Do we talk about different affordability levels? What is the city's current attached/detached split and how does this compare to projections? Does the analysis assume that current needs are being met? Generally, no.

CAC Meeting #3 Input: Update and continued discussion/input/questions on BLI and housing forecast report.

Questions and answers:

- How do we fit more homes into this city? The need seems high. This will be the subject of further conversation – rezonings, new expansion areas, coordination with Metro are all part of the equation.
- What is the solution for homeless folks? Short term housing by the City and nonprofits?
- Does Partially Vacant category include parking lots for churches with large parking lots? Generally, not.
- Does the land availability drive the forecast or the other way around?
  - Forecasts are kind of idealized - the regional population projection leads to the number of housing units and other data/trends let us identify what housing unit types to forecast. If that doesn't align with the land base, then that informs City policy to accommodate that growth.
  - The HPS is a follow up step for the City to look at those items more specifically.

Discussion on Comprehensive Plan Evaluation and Initial Goals/Policy Concepts
Questions on intergenerational housing, affordable and accessible housing, large lot housing, implementation of Metro regional housing bond, creating intergenerational wealth, may be missing language on large potential need and potential shortfall in supply of land, if something isn't a problem (e.g. short term rental) maybe we don't need a policy related to it, Supportive housing – make sure it is addressed, include policy analogous to "net zero" policies – e.g., how to eliminate houselessness, short-term rental policies - we wouldn't have to ban them but could limit them to a degree;

Hillsboro Housing Needs Analysis

CAC Meeting #4 Input: The City will not adopt comprehensive plan changes as part of this project. CAC members participated in a live polling exercise through Mentimeter, which facilitated conversation about what role the City should play in housing. Below is a summary of the conversation:

What housing issues are the most important for City policy to address?

- o The top three responses were Affordable homeownership opportunities, Affordable rental opportunities, and Reducing homelessness.
- o CAC members noted that homelessness is expensive, and Washington County has a high share of youth that are homeless.
- o Hillsboro has large minority populations, who often feel housing issues more acutely.
- o Rehabilitating homes that are in disrepair keep people housed and is important for safety.
- o Cost of land is prohibitive to build affordable products without subsidy these days.
- o Executive housing is an important component of the City's tax base.
- o The City's housing plan must include availability of executive housing so that we work towards a full spectrum of housing options at all levels of income.
- o Suggestion to clarify what is meant by "affordable housing" in policies.

CAC Meeting #5 Input: High-Level Policy Themes.
The six themes below each received two or more positive comments in support from CAC members with exception of #3, which received no negative or positive comments.
Increase housing development opportunities in **multi-dwelling and mixed-use zones.**
1. Identification, acknowledgment, and discussion of **multi-generational housing.**
2. **Extend high-amenity housing discussion beyond large lot size**, since high-amenity housing can come in all forms and lot sizes.
3. Identification, acknowledgment, and discussion around **homelessness**
4. Support **housing for all incomes** to align with the results of the HNA.
5. Support **homeownership opportunities** for low-and moderate-income community members.
Additional preferences suggested by CAC members during the High-Level Policy Themes input process, which included:

- Mixed income areas
- Disability friendly housing
- LGBTQ friendly housing
- More development of rental properties
- Rental housing with more bedrooms for larger families
- Housing for low-income households in single family neighborhoods
- Affordable, inclusive and accessible housing
- Increased density and transit-oriented development
- Housing for low-income young families
- Inclusive housing options
- On affordability, concern too much redevelopment will drive the cost of housing up.

Final CAC Meeting #6 (June 13, 2023)
Staff and consultants provided an overview of the HNA and a description of what the follow-up HPS work to come. The Committee felt that the High-Level Policy Themes were a good start for future housing conversations.

Appendix A: Summary of HNA 2022-2023 Engagement

## Historically Marginalized Community (HMC) Input

The City contracted with two community-based organizations beginning in the fall of 2022 to provide an opportunity for English and a Spanish-language BIPOC focus groups (each 12 to 15 community members) to receive valuable input on current and future housing needed in Hillsboro. The role of the HMC focus groups was to provide input and have a voice in the HNA process as they historically have not had this opportunity. A total of four focus group meetings were held (two for BIPOC group and two for Spanish speaking group).

In the first round of focus groups (HMC #1), participants learned what is a HNA and afterwards they gave input via polling on the following questions and provided additional comments:

1. Which types of housing are currently most needed in your community?
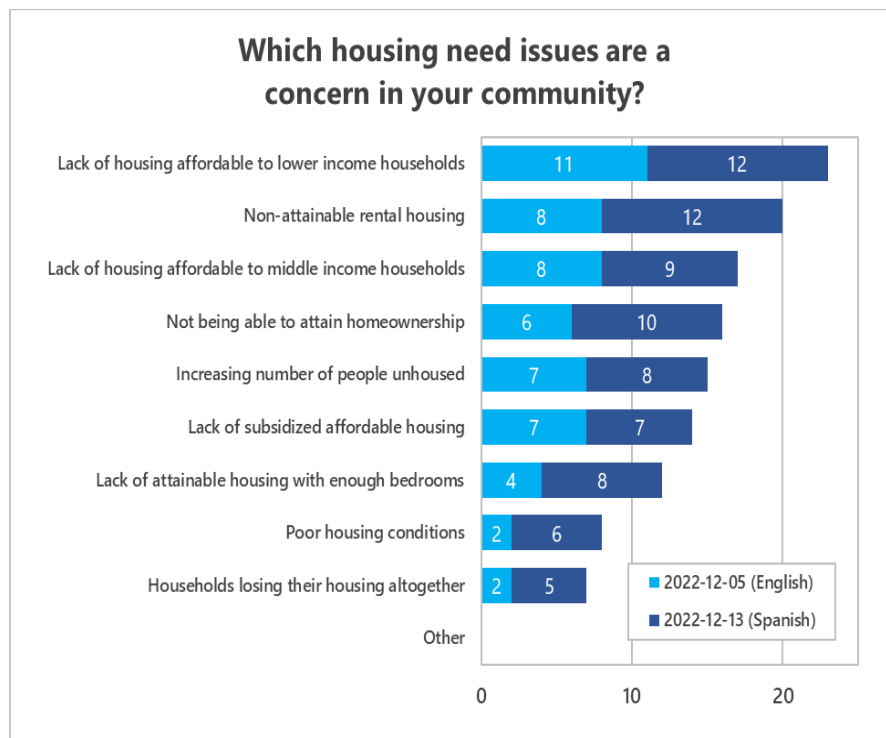2. Which housing need issues are a concern in your community?

Meeting #1 Poll Summary
The following charts shows the number of December 5, 2022 BIPOC English-speaking focus group participants and the number of December 13, 2022 Spanish-speaking focus group participants who indicated that the following housing types were among their top three (or, in some cases, four) priorities.
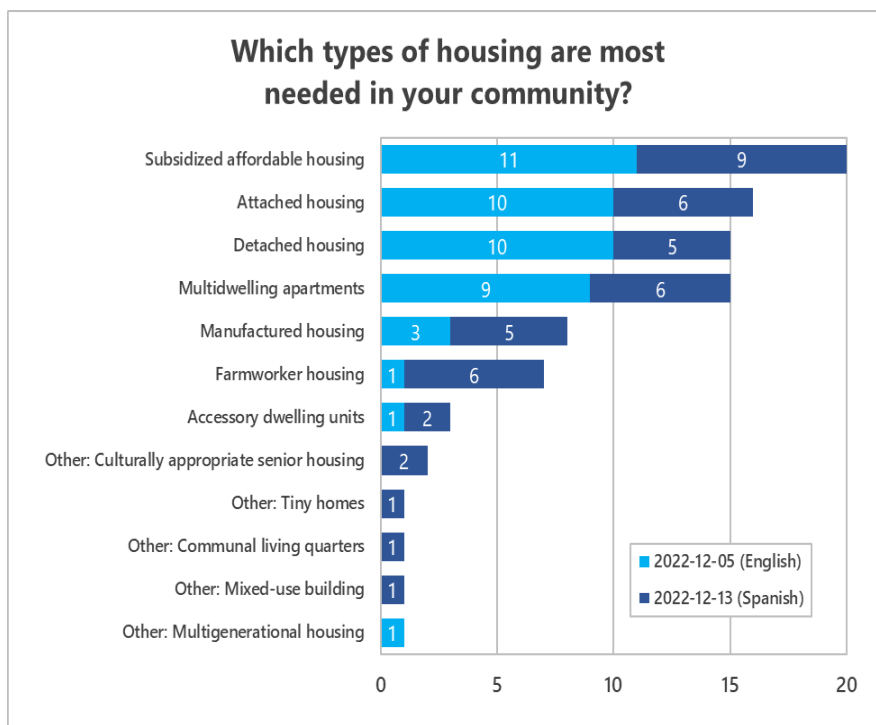
The following chart shows the number of December 5, 2022 English-speaking focus group participants and the number of December 13, 2022 Spanish-speaking focus group participants who indicated that the following issues were a concern in their community.

Appendix A: Summary of HNA 2022-2023 Engagement

Hillsboro Housing Needs Analysis

Which housing need issues are a concern in your community?

Issue	2022-12-05 (English)	2022-12-13 (Spanish)
Lack of housing affordable to lower income households	11	12
Non-attainable rental housing	8	12
Lack of housing affordable to middle income households	8	9
Not being able to attain homeownership	6	10
Increasing number of people unhoused	7	8
Lack of subsidized affordable housing	7	7
Lack of attainable housing with enough bedrooms	4	8
Poor housing conditions	2	6
Households losing their housing altogether	2	5
Other		

Meeting #1 with BIPOC Group (December 5, 2022)
Additional comments received:

- There are few housing options that are affordable for low- and middle-income households, and there is a general lack of affordable rental housing.
- The cost of rent prevents many households from being able to save towards a down payment.
- Homeowner association dues are a burden for low- and middle-income homeowners; costs are passed on to renters, presenting an additional barrier.
- Security deposit requirements present an additional barrier to low- and middle-income renters.
- Investors are purchasing housing units to rent out (often with upgrades that drive up demand and cost) or to list as short-term rentals, which decreases housing inventory.
- The stigma around subsidized affordable housing persists and often presents a barrier when needed housing is proposed in existing neighborhoods.
- Awareness about resources available to households looking to purchase a house is lacking.
- Awareness about subsidized affordable housing and how to find it is lacking.
- There is a sense that detached housing with a private yard no longer makes sense given the amount of developable land left in Hillsboro.
- A portion of Hillsboro's population prefers denser, mixed-use development patterns that encourage walking and allow people to meet their daily needs without an automobile.
- Additional multigenerational housing options and opportunities are desired.

Meeting #1 with Spanish Speaking Group (December 13, 2022)
Additional comments received:

- There are few housing options that are affordable for low- and middle-income households, and there is a general lack of affordable rental housing.

Appendix A: Summary of HNA 2022-2023 Engagement

- The cost of rent prevents many households from being able to save towards a down payment.
- Rent increases pose challenges and create financial hardship, sometimes putting tenants at risk of becoming unhoused.
- Housing for farmworkers is viewed as a critical need.
- Detached housing is an important means by which community members can accumulate generational wealth.
- Apartments are viewed as an important housing option because they are generally more affordable than other housing types.
- There is need for apartments with a greater number of bedrooms.
- Manufactured housing provides a form of homeownership that is more affordable than the alternatives.
- Attached housing meets a range of needs, blending some of the benefits of apartments (e.g., greater affordability) with those of detached housing (e.g., a yard, garages, more space, etc.)
- The availability of parking and outdoor space is a concern for large households and for community members who need a place to store their construction or landscaping equipment.
- Poor living conditions are an issue with some market-rate affordable housing.
- There is some interest in mixed-use buildings, live/work units, tiny homes, communal living quarters, and accessory dwelling units.

Meeting #2 with BIPOC Group (April 27, 2023)
There were eleven participants. There were six high-level housing policy themes presented for input. Overall, participants were primarily interested in supporting housing for all incomes and homeownership opportunities for low-and moderate-income community members. The identification, acknowledgement and discussion around homelessness and high amenity housing were the second most chosen choices followed by increasing housing opportunities in multi-dwelling and mixed-use zones. Multi-generational housing was mentioned the least. A few participants asked about what is being done to address homelessness.

Below are the "High-Level Policy Themes" from March 30, 2023, which focus on a wide range of housing items that were previously identified in the HNA process. These policy themes were drafted as a starting point for discussion when developing housing production strategies that build upon the findings of housing needs. Following these themes are summaries of community input that followed. At the end of this document are track changes for consideration to update the High-Level Policy Themes.

Hillsboro Housing Needs Analysis

1. Increase housing development opportunities in **multi-dwelling and mixed-use zones.**
2. Identification, acknowledgment, and discussion of **multi-generational housing.**
3. **Extend high-amenity housing discussion beyond large lot size**, since high-amenity housing can come in all forms and lot sizes.
4. Identification, acknowledgment, and discussion around **homelessness**
5. Support **housing for all incomes** to align with the results of the HNA.
6. Support **homeownership opportunities** for low-and moderate-income community members.

Participants	1	2	3	4	5	6
1	x			x	x	
2		x			x	x
3				x		
4	x			x	x	x
5				x	x	x
6			x			
7			x		x	x
8			x		x	
9			x			
10					x	x
11	x				x	x
Totals	3	1	4	4	8	6

The matrix above shows an x in box, depicting which of the six high-level policy themes were most important to each of the eleven participants.

Meeting #2 with Spanish Speaking Group (May 4, 2023)
There were eight participants. There were six high-level housing policy themes presented for input, the same as in themes that were presented to the BIPOC Group. The majority of the participants were most interested in homeownership opportunities for low and moderate income. Second greatest interest was housing for all incomes. Other areas of interest included rent-to-own, address homelessness, tiny homes for young adults so they do not have stay living with their parents, housing for empty nesters, manufactured housing, reuse of buildings that became vacant during the pandemic, and addressing issue being at risk of losing subsidized housing when income increases.

Community members voiced a concern for the poverty line standards to hold them back towards homeownership and self-growth. There has been a deep emphasis on allowing individuals of low income and middle income to have opportunity towards home ownership, they want the study to take into account every single logistic that stops individuals towards achieving that dream of having their own home. They voiced a deep need for the analysis to not only focus on the types of houses needed, but also on the lack of resources and reusing pre-existing abandoned houses and buildings in order to preserve our green areas and farmland.

Appendix A: Summary of HNA 2022-2023 Engagement

Stakeholder Interviews

Interviews were conducted via phone/video call in November of 2022 by MIG, the City's consultant for this effort. A total of five interviews were conducted with the following: Resident of Hillsboro, Real Estate Broker 1, Habitat for Humanity Portland Region, Real Estate Broker 2, Bienestar Oregon, and Resident of Hillsboro and disability advocate.

The consultant team drafted and refined a set of questions for interviews, though not all questions were applicable for all interviewees. These questions are included below.

Interview Questions

1. What types of projects or programs does your organization offer to address housing needs in Hillsboro? If you are developing or providing housing, what type of housing is being developed and who are the intended residents?
2. What is the greatest need in terms of housing in Hillsboro? What types of housing are needed that are not being developed? What do you see as the most significant housing gap in the city, either in terms of income levels or types of households not being served or types of housing not available or being built? What kinds of housing would you like to see more of in Hillsboro?
3. What do you see as some of the primary sources of these gaps or the most significant barriers to addressing them?
4. What tools or strategies do you think would be effective in creating more desired housing in Hillsboro? Which tools or strategies are a poor fit for this community?
5. How could the city strengthen their relationships with your organization and best assist you in the housing related work you are doing?
6. Are there any particular sources of information you recommend we look at to better understand housing needs and conditions in Hillsboro?
7. Do you have anything else to say on this general topic?

Housing Needs in Hillsboro from Stakeholder Interviews:

Summary of What We Heard on Housing Needs:

- Large need for housing for working families.
- Larger units with 2-4 bedrooms that are affordable.
- Need for starter homes.
- Executive housing
- Single-level units and dwellings for people who are older or not mobile.
- Homes with yard space
- 3-bedroom, 2.5-bathroom 1600 sf homes on a 7,000-sf lot
- More small senior units or first-time-buyer homes
- Smaller units for individuals needed.
- Higher density housing with parks and open space amenities.
- Middle housing is missing – more townhome development would be useful. Housing for people with disabilities, families with children, and immigrant households as well.
- Housing for those with developmental disabilities
- Homes with Universal Design/single level living would be ideal for some people. ADUs could meet some of this need.
- Opportunities for cohousing, roommates, young people without financial resources
- More housing in dense areas connected by transit.

Challenges to Housing in Hillsboro:

- Suburban zoning can be prohibitive for multifamily development.
- The timelines associated with zone changes are challenging for affordable projects.
- Changing interest rates and supply chain for construction materials have been a challenge recently.
- Homes tend to be multi-level because there are few lots big enough for moderate or larger single-level homes with yard space.
- The market pressure for maximizing home square footage is less intense than it has been in the past.
- Affordable housing providers are often reliant on one-time funds.
- There are not many infill lots in Hillsboro.
- People are being priced out – school districts say so as well. People are displaced to Vancouver WA or Salem.
- Disability appears to be low on the list of priorities for the City based on my experience. Caregivers are aging and there is going to be a big need for independent housing. Disability is a common reason for denying a housing voucher – the process to make home modifications is very arduous.

Planning Commission and City Council Work Sessions

PC Work Session #1 September 28, 2022:
An Introduction to the project was provided by City staff followed by questions that ranged from "How stakeholders interviewees were chosen to "Should this HNA promote and incentivize mid-to-high-rise residential?"

Discussion covered topics such as regionwide need for housing, housing affordability, importance of homeownership opportunities, climate change and urban heat impact, such as people moving within the state and strategies to address housing.

PC Work Session #2 April 26, 2023
Range of questions and comments from Commissioners, such as redevelopment percentage, strike price proposed, housing needs (e.g. ADUs, needs of those with disabilities), density, comparison of land deficit in 2023 to 2016, 38% low-income in Hillsboro, publicly owned land, preference for mix of incomes and not isolating lower income households, address moderate income households, suggestion to use matrix of ideas for HPS.

PC Work Session #3 (June 14, 2023)
Staff and consultants provided an overview of the HNA and a description of what the follow-up HPS work to come. The Planning Commission asked clarifying questions and discussed the kinds of strategies that might help alleviate the need shown by the analysis.

City Council Work Session (June 20, 2023)
Staff and consultants provided an overview of the HNA and a description of what the follow-up HPS work to come. There was concern among Council that the growth rate and buildable land assumptions the City is required to use are not adequately stating the City's housing need. There was some discussion about what it would mean to push back against DLCD on these assumptions.

Appendix B: Alternative Analysis Buildable Lands Inventory

Introduction

This memorandum summarizes the results of the City's HNA Alternative Analysis. The purpose of this Alternative Analysis is to provide a set of assumptions regarding buildable land that are more accurate assessment of the likelihood of some kinds of infill development, and a forecasted growth rate that more closely reflects the City's historic growth rate.

The assumptions in this memorandum have been developed with input from members of the Washington County Chamber of Commerce's Land Use & Housing Council, representatives of the development community focusing on both greenfield and infill residential development, and others.

The following additional filters have been applied to land within the study area, and results are provided alongside each filter. Visual examples from this GIS analysis are provided for additional context.

Environmental Constraints

- **Description:** In addition to the constraints identified in the standard BLI, this analysis includes areas with greater than 15% slope as unbuildable for both Vacant and Partially Vacant parcels.
- **Rationale:** Sloped land can negatively impact the developability of a parcel, which may be difficult to overcome for smaller developments. The 15% slope assumption is derived from the Oregon Fire Code which is integrated into the City's Municipal Code and dictates: "The grade for fire access roads shall not exceed 10 percent to facilitate fire ground operations and meet the recommendations of NFPA 1901, Standard for Automotive Fire Apparatus. The grade may be increased to a maximum of 15 percent, for lengths approved by the fire code official…."[14]

The 10%-15% limitation on grade for fire access limits development on slopes on interior and infill lots where a long drive or access road will be needed to access the housing unit.
While development on a slope may be more feasible on a large site that allows for terracing (i.e. for a hillside apartment complex), few of sites remain in the buildable inventory. Most of the remaining inventory is small sites that might in theory allow for one or perhaps two additional homes.
In these cases, even if fire access is technically possible, building on the slope presents additional costs and complexities that make these low-feasibility infill sites. The level of land excavation required to level a >15% slope can be prohibitively expensive, as can building an elevated home on posts, or "stilts". While these types of construction may seem common for high-end homes on view lots, it is uncommon for standard market-rate housing types on smaller lots, because these methods of land development and foundation construction can add many tens or hundreds of thousands of dollars to the cost of a project.

Other challenges of building on a slope can include stormwater drainage (flooding, foundation erosion) and sewage (pumps or specialized slowing features). Small and infill parcels also present

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[14] Oregon Fire Code (OFC) 503.2.7 as amended by the City of Hillsboro Municipal Code 11.28.010, OFC D103.2

challenges to access for the specialized equipment needed for this type of construction, further adding logistical hurdles and additional costs.

- **Results:** Adding the 15% slopes to the constrained areas had a minor impact on the inventory. Land with a slope greater than 15% is generally in the vicinity of other resource constraints. Adding land with 15% slopes to the constraints resulted in a total of 22 fewer acres of buildable land in the inventory.

The image below shows a typical condition in Hillsboro, where areas of 15% slope are generally within the City's environmental overlay. Some areas of 15% slope do occur outside of this area, accounting for the modest addition to total unbuildable area.
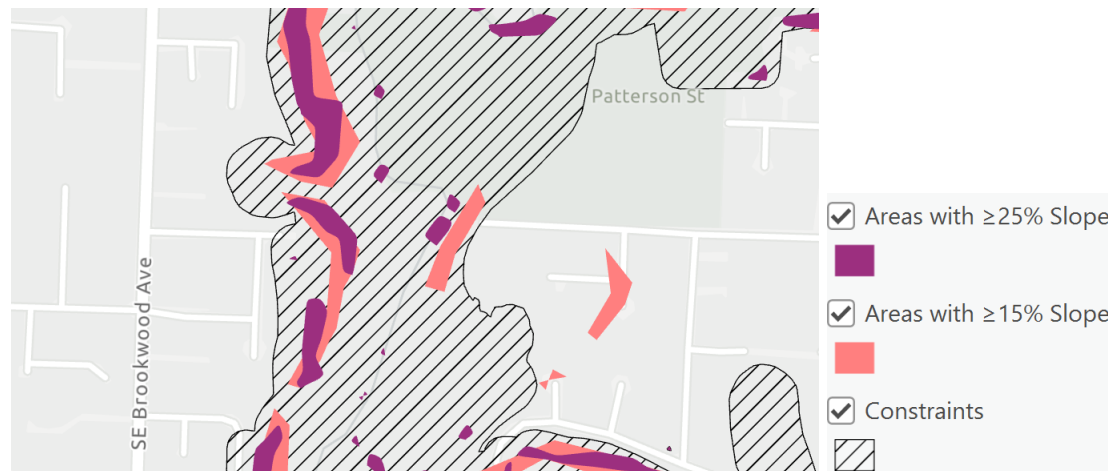
Partially Vacant Definition

- **Description:** The standard definition of Partially Vacant land based on the 2018 Metro BLI uses gross acreage of parcel in order to estimate infill capacity – inclusive of any structures and natural resources on the site. An alternative is to use net area of parcels once constrained lands and building footprints + their associated buffers have been removed to conduct lot size calculations that categorize land as Partially Vacant.
- **Rationale:** Lot size calculations are part of the methodology used to determine whether a property is designated as Partially Vacant. The purpose of this category is to identify land with additional capacity for single detached lots - protected resources and existing structures will diminish capacity significantly.
- **Results:** Use of the net developable area as part of Partially Vacant categorization had the following effect:
  - The standard BLI identifies 642 taxlots as Partially Vacant, totaling 515 gross acres and resulting in capacity for roughly 2,850 units.
  - This Alternative Analysis BLI identifies 374 taxlots as Partially Vacant, totaling 334 gross acres and resulting in capacity for roughly 2,000 units.

Flag Lots

- **Description:** The area in the "flag" portion of the lot is removed from developable area for Vacant and Partially Vacant land. Transportation access issues related to these flags will be taken into consideration as well.

- **Rationale:** This land will be used to provide access to the property and not to accommodate housing units.
- **Results:** Less than one acre of land across the identified flag lots was removed for all Partially Vacant properties, and about 1.5 acres of land across all Vacant properties was removed. Four properties were removed from the inventory due to issues with the flag of the lot such as environmental constraints or apparent access issues.

The image below illustrates an example of a flag lot that resulted in reduced acreage in the inventory.
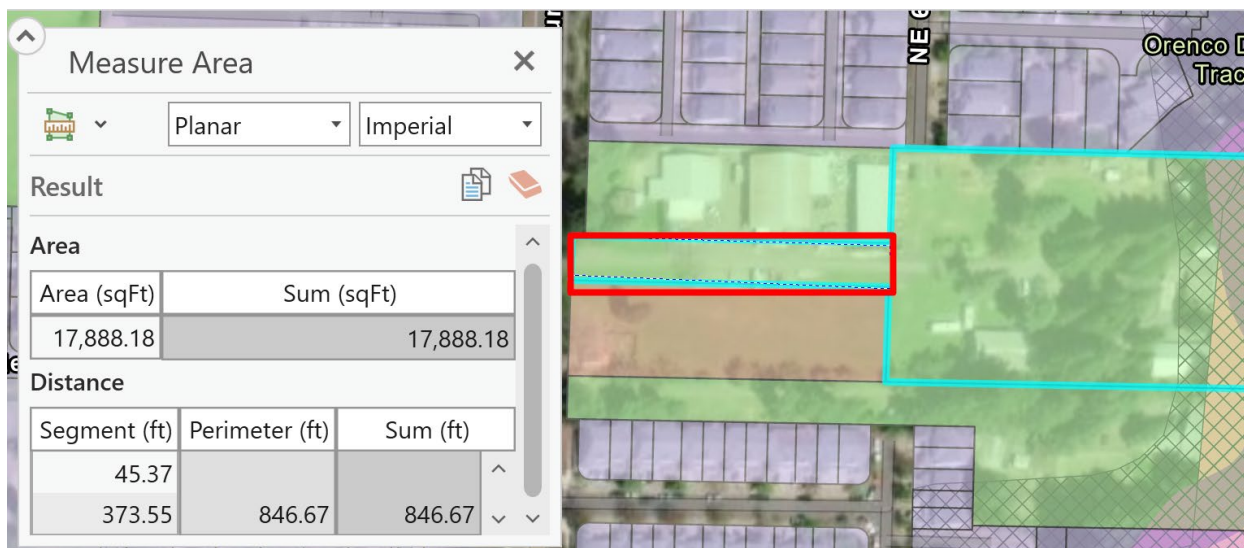
Location of Structures/Access Issues

- **Description:** In many cases, the location of existing structures on a property can inhibit further development on the property by precluding efficient use of remaining acreage or blocking potential street access. A visual check of partially vacant lots was performed, resulting in either discounting land that appears to be impacted by access/structure issues, or removing the lot from the inventory, on a case-by-case basis.
- **Rationale:** In many cases, the location of existing structures on a property can inhibit further development on the property by precluding efficient use of remaining acreage or blocking potential street access. As each property is unique, the feasibility of accessing the vacant portions of a Partially Vacant property while leaving the existing home must ultimately be assessed on a case-by-case basis.

  Generally, it is not economically feasible to remove a home that still retains its value and utility, even on a large lot. This is because the combined cost of the home, plus the land, plus demolition and site development costs, will exceed the market rate for buildable land in most cases. If new housing units cannot be added while retaining the existing home, no infill development is likely on the parcel.

- **Results:** After a review of several hundred of the largest (i.e. greatest-capacity) Partially Vacant properties, 30 lots were identified where location of the building on site and/or access issues would likely hinder further infill development. These lots were showing capacity for 129 units. There may be additional properties in the inventory that would face substantial challenges to further infill development due to the location of structures and access issues.

Location of Structure

Sanitary Sewer Availability

- **Description:** The City provided GIS line features for existing sanitary sewer infrastructure. Buffers were created at intervals from 50 feet to 1,000 feet from the line feature. This information was used to inform a case-by-case analysis of properties.

- **Rationale:** The cost of additional sewer infrastructure is a significant impediment to development - particularly smaller infill projects. If sewer infrastructure is not already at the property line, the developer of a property may be required to make costly off-site improvements to extend the sewer line from some distance. This often entails excavation and reconstruction of improvements, such as street and sidewalks that are not directly adjacent to the property. If the site is larger and can accommodate multi-family housing, the size and capacity of sewer infrastructure may also need to be expanded.

  While these improvements would ultimately benefit the property and, in some cases, the broader area, the cost can be prohibitive to development particularly in return for only a few resulting homes. All project costs must ultimately be capitalized into the cost of the homes, and if the market does not support that home price in a specific location, it becomes infeasible. Each property and project is unique, and the cost and feasibility of water and sewer connections can be difficult to assess in a systematic way.

- **Results:** Three lots were removed from the inventory in part due to distance from sanitary sewer availability.

>100' from sewer
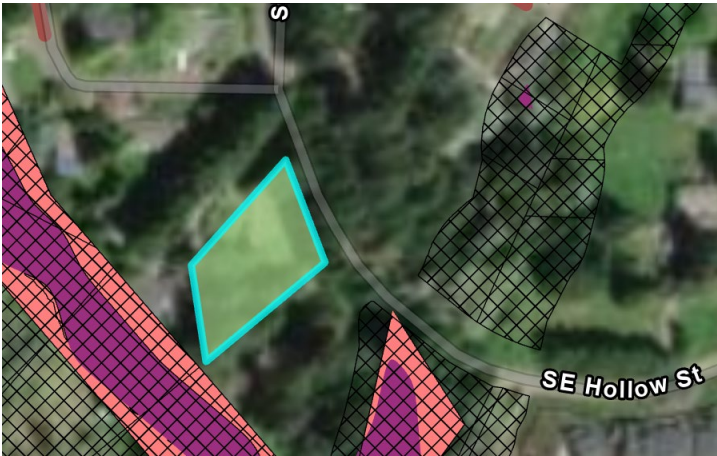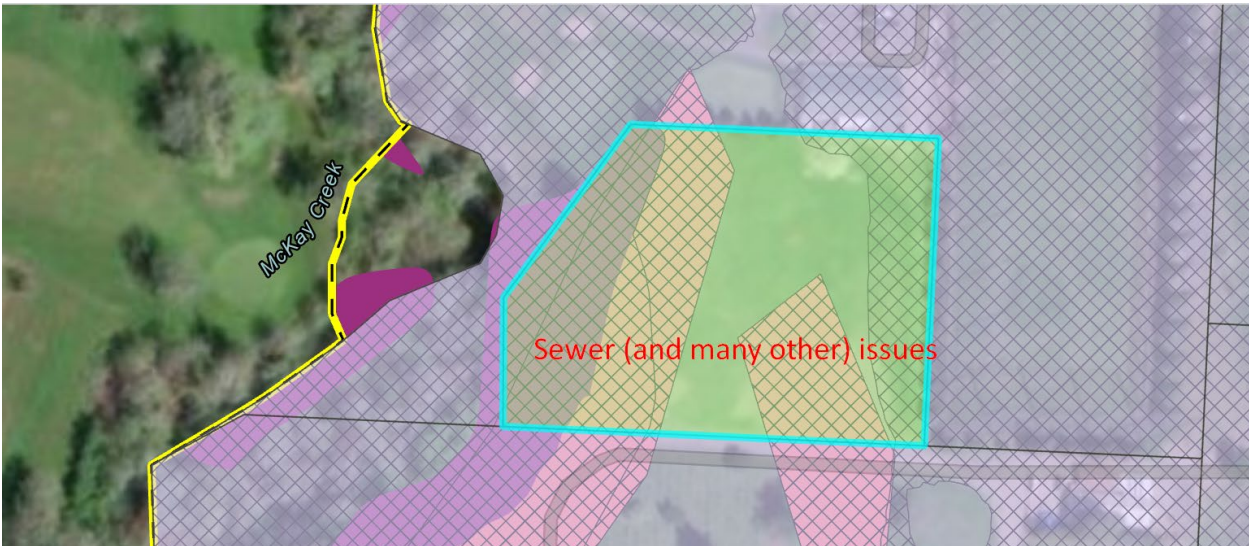
Sewer (and many other) issues

Executive Homes

- **Description:** For homes with greater than $500,000 in improvement value (i.e. structure value only, not including land value), assume one full acre is kept if any infill occurs on the property.
- **Rationale:** Executive Homes with significant acreage are not precluded from subdividing in this inventory but they may be unlikely to do so particularly as larger lots become more scarce within the region.
- **Results:** 583 properties on land classified as Residential or Mixed Use have improvement values greater than $500k. Many of these are commercial properties or apartment buildings, or expensive homes on lots that are on lots less than 5x the minimum lot size (and therefore do not have any infill capacity). **7 properties** were identified as part of this screen that have enough unbuilt acreage on site to expect further infill, totaling **7 acres** of buildable land removed from the inventory.

Summary

The results of the Alternative Analysis BLI are summarized in the following table. Compared to the standard BLI, the Hillsboro study area has capacity for 911 fewer units. Nearly 70% of these units are single detached dwellings, and nearly 30% are middle housing units.

Development Category	Tax lots	Gross acres	Buildable Acres (minus constrained land)	Net Acres (subtracts future set-asides and existing structures)	Single Detached	Middle Housing	Multi-Dwelling	Total
					Unit Capacity			
Residential Land	**805**	**540.6**	**406.4**	**292.6**	**1,335**	**601**	**434**	**2,370**
Vacant	104	238.2	156.5	116.2	555	454	324	1,333
Partially Vacant	289	258.0	210.6	137.1	368	147	110	624
Platted	412	44.4	39.3	39.3	412	0	0	412
Mixed Use Land	**274**	**177.6**	**145.7**	**74.8**	**177**	**1062**	**1248**	**2,487**
Vacant	158	79.4	73.5	34.1	95	339	496	930
Partially Vacant	85	76.4	63.1	31.6	55	668	659	1382
Redevelopable	31	21.8	9.0	9.0	27	55	93	174
Approved Development					600	551	1,831	2,982
Expansion Areas (South Hillsboro Unincorporated and Witch Hazel Village South)					1,718	863	499	3,080
Middle Housing Infill					0	680	0	680
Total					**3,829**	**3,757**	**4,012**	**11,599**

Appendix B: Alternative Analysis Buildable Lands Inventory