APPENDIX B: LAND CAPACITY ANALYSIS & ADEQUATE PROVISIONS MEMO

LAND CAPACITY ANALYSIS & ADEQUATE PROVISIONS MEMO

Date	April 4, 2025
To	Robert Grumbach, City of Woodinville
From	David Fiske and Andrew Oliver, Leland Consulting Group
CC	Alicia Ayars and Laura Barker, SCJ Alliance

BACKGROUND

As part of Woodinville's 2044 Comprehensive Plan update, Leland Consulting Group (LCG) was retained as part of a consultant team led by SCJ to complete an analysis of land capacity for housing and jobs, including considerations of housing by income band as required by RCW 36.70A.070(2)(c) and adequate provisions for meeting all housing needs as required by RCW 36.70A.070(2)(d). This memo outlines the methodology and results of this analysis, using the process outlined in the Washington Department of Commerce's 2023 guidebook "Guidance for Updating Your Housing Element."
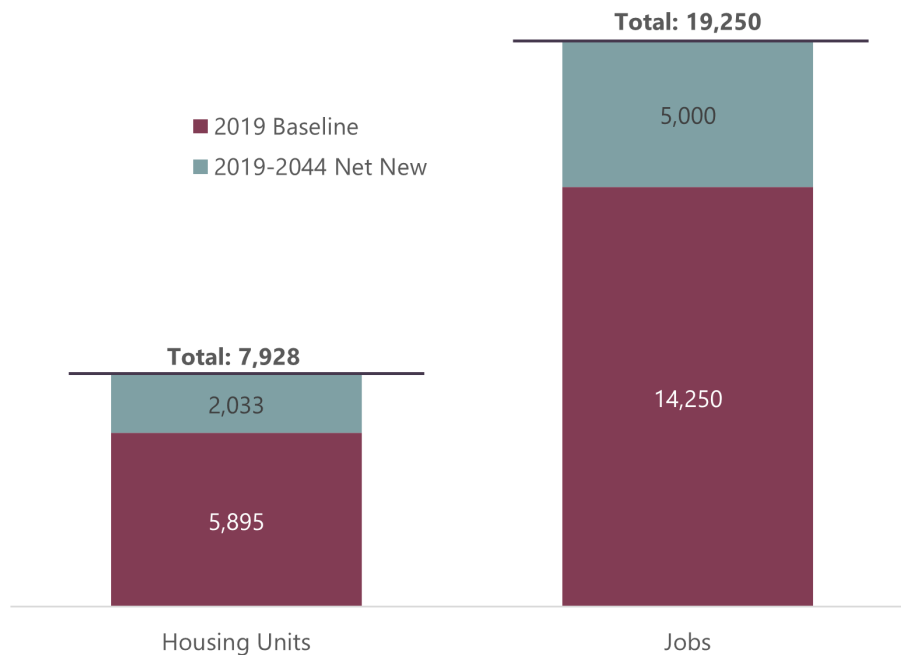
LAND CAPACITY ANALYSIS

HOUSING AND JOBS BASELINE TARGETS

Woodinville is required to show **land capacity to meet 2019-2044 planning targets for housing units and jobs** based on the Washington Office of Financial Management countywide projections as allocated to jurisdictions through the King County Countywide Planning Policies.[1] Figure 1 on the next page shows Woodinville's baseline and target housing units and jobs through 2044.

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[1] *King County 2021 Countywide Planning Policies:* https://kingcounty.gov/en/legacy/depts/executive/performance-strategy-budget/regional-planning/-/media/depts/executive/performance-strategy-budget/regional-planning/CPPs/2021_CPPs-Adopted_and_Ratified.ashx?la=en&hash=E23EC8BAFF1C93916893CC2AFB3906CE
King County Ordinance 19660, adopting and ratifying amendments to the 2021 King County Countywide Planning Policies (containing revised Housing Unit targets by income band: https://kingcounty.legistar.com/LegislationDetail.aspx?ID=6267191&GUID=FA36CEE0-0E16-4874-9F5D-E880DB3BFFD3

**Figure 1. Woodinville Baseline and Target Housing Units and Jobs, 2019-2044**

Source: 2021 King County Countywide Planning Policies (as amended 3/2023)

HOUSING UNIT TARGETS BY INCOME BAND

RCW 36.70a.070.2 adds a new requirement to plan for housing targets by income levels and emergency housing. This is based on King County Countywide Planning Policies as allocated by the Washington State Department of Commerce. The housing unit baseline and targets are broken down by what income band the housing units serve, expressed as a percentage of the HUD Area Median Income (AMI). For reference, the HUD AMI for Woodinville and the Seattle Metro as a whole is **$146,500 for a family of four.**[2] This figure is used to determine eligibility and income limits for subsidized affordable housing units. The housing targets for families earning under 30% AMI are broken down into permanent units (i.e. standard housing units) and permanent supportive housing (PSH), defined in the Department of Commerce guidebook as "subsidized, leased housing for people who are experiencing homelessness or are at risk of homelessness and living with a disabling condition." Finally, each jurisdiction receives a housing target for emergency housing, defined as "temporary accommodations for households who are experiencing homelessness or are at imminent risk of becoming homeless." Woodinville's housing baseline and 2044 targets by income band are shown on the following page.
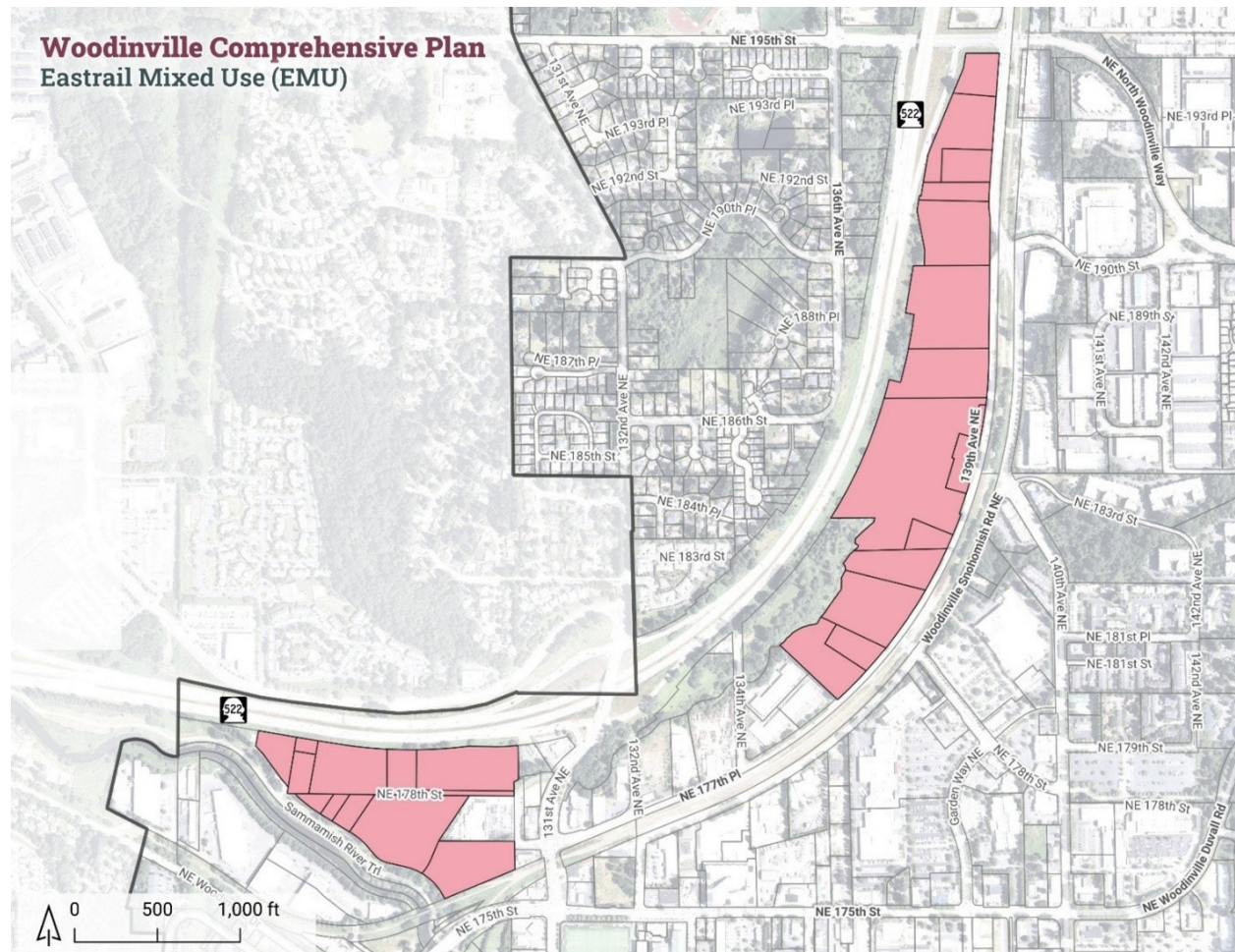
Figure 2. Woodinville Existing and Target Housing Units by Income Band, 2019-2044
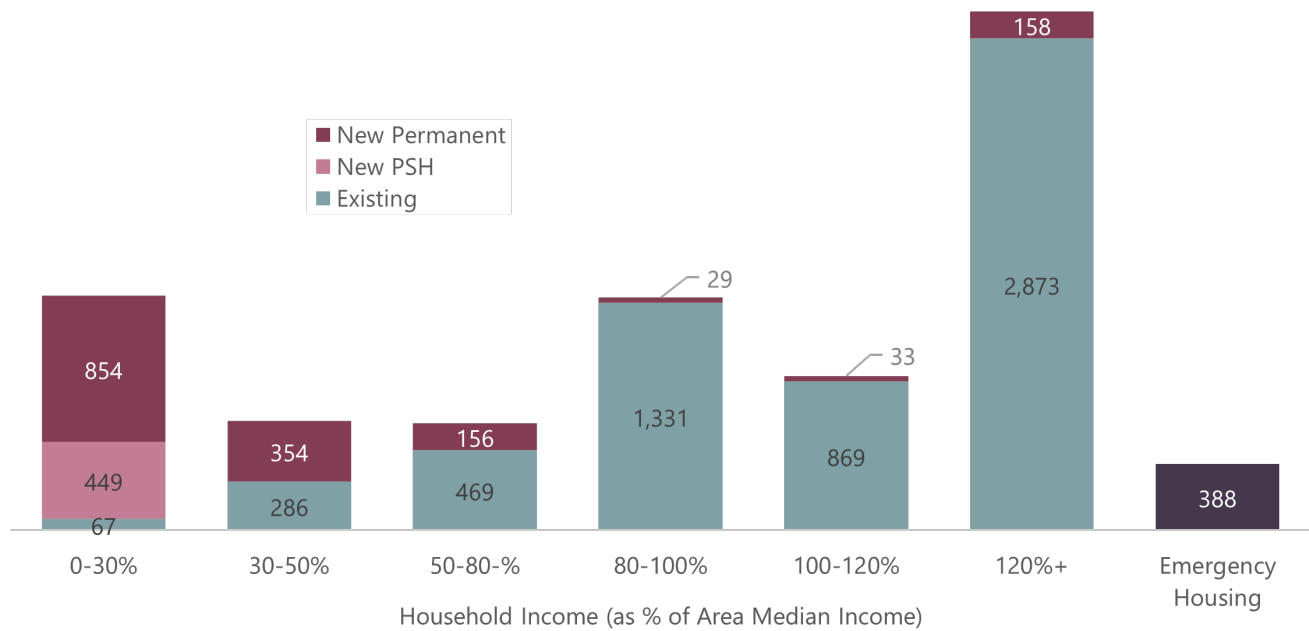
	0-30% AMI	30-50% AMI	50-80% AMI	80-100% AMI	100-120% AMI	120% AMI +	Emergency Housing
Existing Units	67	286	469	1,331	869	2,873	0
New PSH	449						
New Units	854	354	156	29	33	158	388

Source: 2021 King County Countywide Planning Policies (as amended 3/2023)

Figure 3. Eastrail Mixed-Use Zone

Source: Leland Consulting Group, City of Woodinville

SCENARIOS

As part of the Comprehensive Plan update, LCG completed an analysis of the potential new housing units and jobs that could be accommodated by rezoning a portion of the current GB zone into a mixed-use zone similar in intensity to Woodinville's CBD zone. This area, the new Eastrail Mixed Use (EMU) zone, is shown in Figure 3 in pink. LCG's analysis estimated that **1,670 new housing units and 429 net new jobs could be accommodated in this area,** after a reasonable deduction for market uncertainties.

For this citywide analysis, two scenarios were developed to determine if the city could meet its targets for housing needs, and particularly housing needs by income band. One scenario assumes the capacity with the EMU being added, and another scenario leaves this area in its current GB zoning.

VACANT AND REDEVELOPABLE PARCELS AND PENDING DEVELOPMENT

The first step in the land capacity analysis was to update the land capacity analysis done for the King County Urban Growth Capacity Report. To determine which parcels could accommodate new development over the 20-year planning horizon. King County provided GIS data from their Urban Growth Capacity Report classifying parcels in Woodinville as **vacant, redevelopable** (based on low building to land value ratio and other considerations), or **constant** (not likely to change over the next 20 years). Working with city staff, LCG refined the set of vacant and redevelopable parcels to account for planned and proposed development, some changes in land classification, and new development which has taken place since the King County assessment. The revised set of vacant and redevelopable parcels is shown below in Figure 4.

Next, development which has occurred since 2019 or is planned, proposed, or under construction was totaled. These new housing units and jobs **count towards the growth targets,** since the baseline established by King County was for 2019. The map below in Figure 5 shows the parcels with recent or forthcoming development on the city. This recent and forthcoming development totals **3,493 housing units and 3,508 jobs.**[3]

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[3] *These pending jobs numbers reflect the City's assumptions of 300 square feet per job in CBD and TB zones, 600 square feet per job in the existing GB zone, and 700 square feet per job in the I zone, provided to LCG during the GB rezone analysis.*

Figure 4. Vacant and Redevelopable Parcels in Woodinville, 2023

Woodinville Comprehensive Plan
Vacant/Redevelopable Parcels

Legend

■ Water Bodies

Redevelopment Classification
■ Vacant
■ Redevelopable
▭ Woodinville City Limits

0   0.5   1 mi

Source: : King County, City of Woodinville, Leland Consulting Group

Figure 5. Development Since 2019 and Planned Development in Woodinville

Woodinville Comprehensive Plan
Development Since 2019/Pipeline

Legend
- Water Bodies
- Woodinville City Limits
- Pending Parcels

Source: City of Woodinville, CoStar, Leland Consulting Group

REDUCTION FACTOR

Commerce's HB 1220 guidance indicates that jurisdictions should reduce the amount of vacant and redevelopable acreage by a reasonable amount to account for land which may not be available for redevelopment due to the need for new **right-of-way, public space, stormwater facilities, or other dedications,** as well as a reasonable estimate of the amount of land that will remain unavailable due to the **market**. The Department of Commerce suggests a minimum reduction of 15% for vacant parcels and 25% for redevelopable parcels. Using these as minimum deductions, LCG calculated an additional market factor based on recent development trends by zone in Woodinville to arrive at a reasonable estimate of redevelopment capacity in the city. The reduction factors are shown below in Figure 6.

Figure 6. Market Factor by Zone in Woodinville

Zone	Gross Vacant Acreage	Gross Redevelopable Acreage	Reduction Factor	Net Vacant Acreage	Net Redevelopable Acreage
Residential					
R-1	91.9	212.2	87%	15.7	17.9
R-4	84.8	55.5	77%	22.7	10.6
R-6	34.3	53.0	87%	6.0	4.7
R-8	0.3	1.0	93%	0.0	0.1
R-12	0.8	3.6	100%	0.0	0.2
R-18	0.3	17.3	100%	0.0	0.9
R-24	3.0	5.4	100%	0.2	0.3
R-48	0.0	4.8	100%	0.0	0.2
Commercial/Mixed-Use					
NB	0.5	0.0	100%	0.0	0.0
TB	4.4	0	14-25%	3.8	0
CBD	14.4	28.0	15-25%	12.2	21.0
GB	35.9	24.2	47%	20.0	12.4
O	2.5	0.0	100%	0.1	0.0
Business/Industrial					
I	44.9	29.7	100%	2.2	1.5

Source: King County, City of Woodinville, CoStar, WA Department of Commerce, Leland Consulting Group

Single-family zones contain a relatively large amount of vacant and redevelopable acreage, but also have higher reduction factors based on the recent rate of development in those zones.[4] In **multifamily residential zones** (R-12 through R-48), there has been little development in recent years, and these zones also have a very small amount of vacant and redevelopable acreage, so expected new units in these zones are minimal. The city's **commercial and mixed-use zones,** especially the CBD zone, have seen considerable development in recent years, so their market reduction factor is lower, reflecting a higher share of land expected to redevelop over the next 20 years.

In the EMU zone, the market factor developed by LCG during that analysis was applied, which assumes all vacant and redevelopable parcels west of 131st and 50 percent of vacant and redevelopable parcels east of 131st could redevelop over the planning horizon.

[4] *Note that in single-family zones, there will be an additional layer of capacity analysis for ADUs and Middle Housing discussed later in this memo, reflecting the potential for increased development in those zones due to recent legislative changes.*

HOUSING AND JOB DENSITY ASSUMPTIONS

Having established the amount of available developable acreage, the next step in the analysis is to estimate the density at which that acreage will redevelop. Following Commerce guidance, single-family zones are assumed to redevelop at the **maximum allowed density in the zoning code** (i.e. one unit per acre in R-1, four units per acre in R-4, etc.). Housing unit density assumptions for multifamily zones are based on the **density of recent development** in that zone over the past five years. The density assumptions for housing are shown in Figure 7 below, for zones which allow housing.

Figure 7. Housing Density Assumptions for Woodinville Land Capacity Analysis (units/acre)
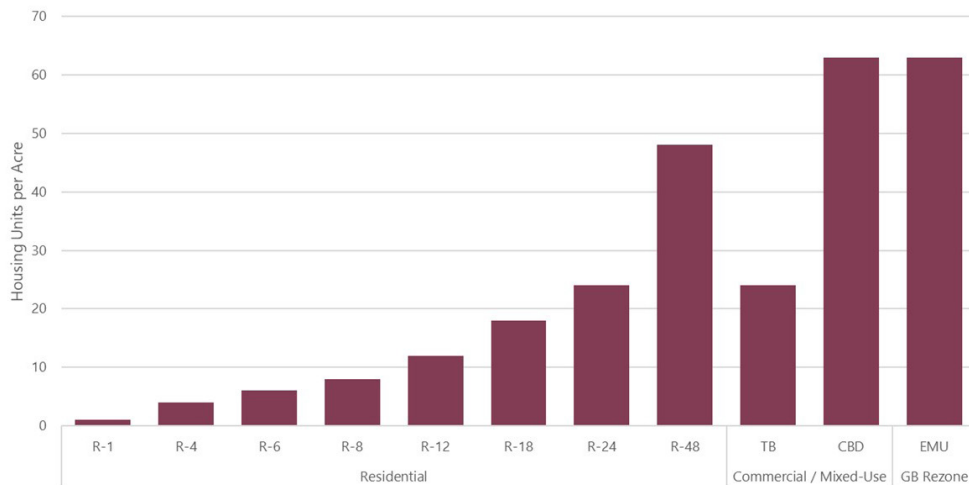
Source: Woodinville Zoning Code, CoStar, City of Woodinville, Leland Consulting Group

For **employment density,** the square footage of rentable building area (RBA) per acre in recent development by zone was divided by the city's square foot per job assumptions developed during the Buildable Lands process to produce a job density by acre figure for each zone. In mixed-use zones with the potential for residential over ground floor commercial, such as CBD and the GB rezone area, local and regional examples were studied to arrive at a reasonable estimate of jobs in the ground floor of mixed-use developments. The job density assumptions are shown below in Figure 8.

Figure 8. Job Density Assumptions for Woodinville Land Capacity Analysis (jobs/acre)
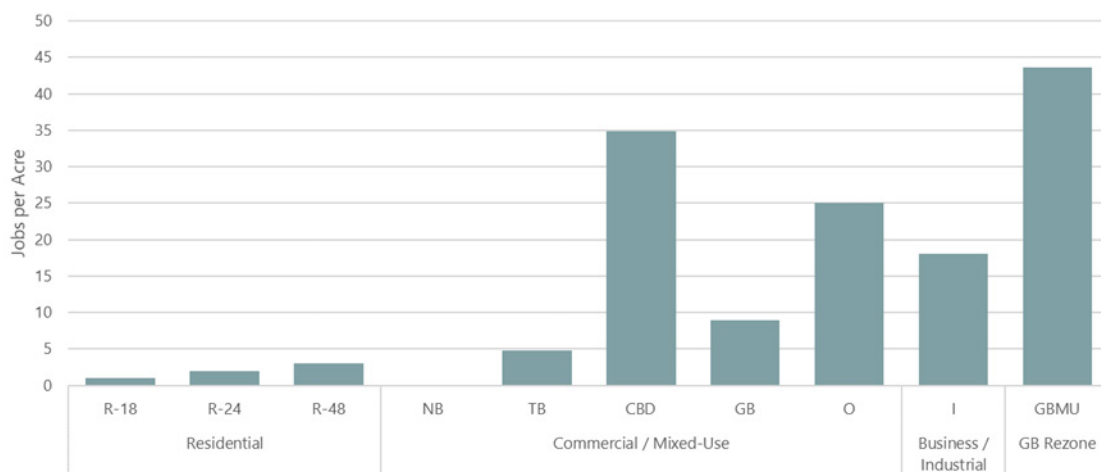
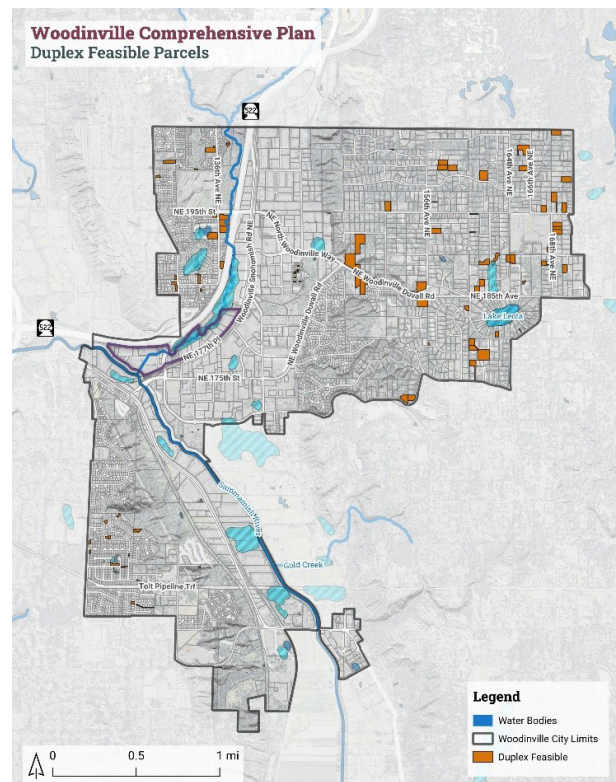*Source: CoStar, City of Woodinville, Leland Consulting Group*
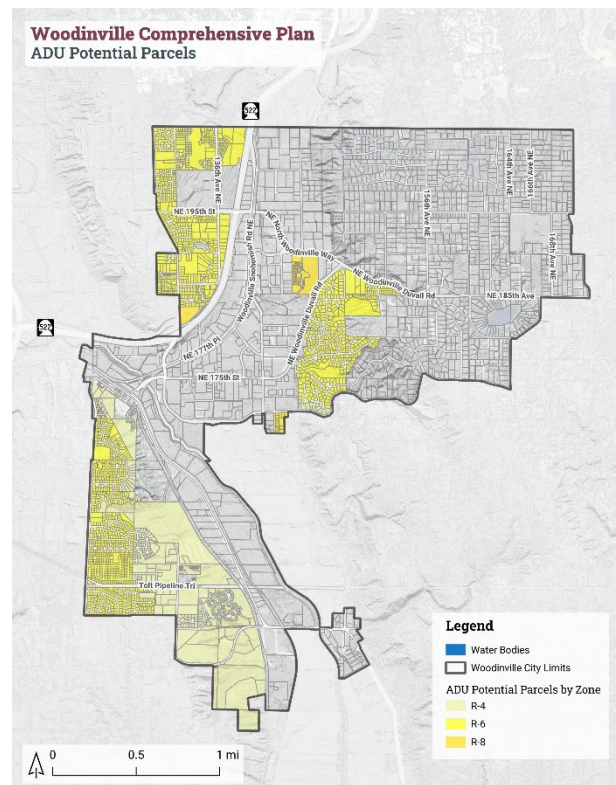
These densities are then applied based on the expected share of residential, mixed-use, and commercial development in each zone, again based on recent development trends in Woodinville.

ADDITIONAL ADU CAPACITY

HB 1337, passed by the legislature in 2023, requires that cities allow two ADUs, detached or attached, on all parcels currently zoned for low-density residential (i.e. single-family). As part of this capacity analysis, LCG considered the additional housing capacity that this new legislation could create in Woodinville. Parcels in the R-4 through R-8 zones were considered for this analysis. The built square footage was first removed from the parcel acreage, and then the remaining acreage within the allowed lot coverage ratio (per the zoning code) was calculated. Assuming at least 1,000 square feet would be required to construct an ADU, this resulted in a total of 1,253 parcels which have sufficient space for an ADU. Based on Commerce guidance and regional trends, LCG assumed that 2 percent of homeowners might choose to develop an ADU over the planning horizon. Assuming that a small share of those might also choose to construct 2 ADUs given new legislation, this would result in an ADU capacity of 63 units. This would average out to about 3 ADUs per year, compared to 1.1 ADUs per year which have been permitted on average over the past ten years, according to city data. Although this is a large increase in the rate of ADU production, it reflects a capacity estimate for the purposes of analyzing potential housing production numbers, and particularly capacity by income band, as discussed further below.
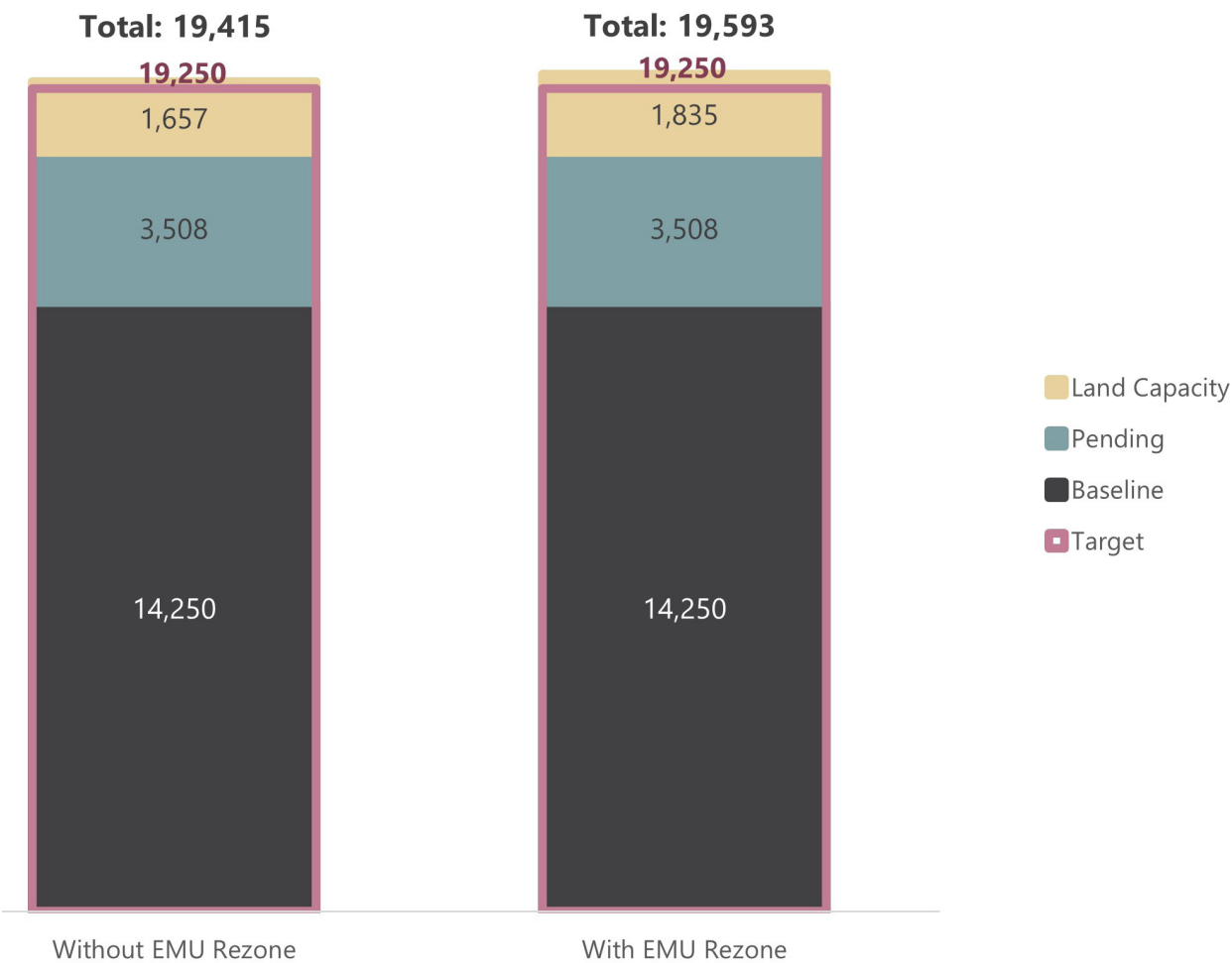
ADDITIONAL MIDDLE HOUSING CAPACITY

HB 1110, also passed by the legislature in 2023, requires that Woodinville allow Middle Housing of at least two units on all lots in single-family residential zones regardless of size. To determine the potential for added units, LCG conducted a high-level feasibility analysis of parcels in the R-1 through R-8 zones. Similar to the ADU analysis, the net buildable area within the allowed lot coverage was analyzed, with an assumption of at least 2,000 square feet of buildable area needed to construct two housing unit types. Next, potential sales prices and construction costs developed by the Department of Commerce's Pro Forma tool for middle housing were compared with the assessed value of each parcel to determine lower-value parcels where a developer could make a 15 percent rate of return after buying the parcel and redeveloping with two units. This analysis shows a total of 94 parcels where a duplex would be feasible, shown on the map at right. Assuming that at most half of these properties might redevelop over the next 20 years yields a capacity of 48 additional units of middle housing in the single-family zones in the city.

Woodinville Comprehensive Plan
ADU Potential Parcels

Woodinville Comprehensive Plan
Duplex Feasible Parcels

EMPLOYMENT RESULTS

As shown below in Figure 9, **Woodinville has sufficient land capacity to meet its 2019-2044 growth target for employment.** Much of this is due to recent and planned development, with additional capacity primarily in the CBD zone, as well as the TB and GB zones. The rezone adds additional capacity for 429 jobs in mixed-use buildings.

Figure 9. Woodinville Employment Land Capacity Analysis Results

Total: 19,415

19,250

1,657

3,508

14,250

Without EMU Rezone

Total: 19,593

19,250

1,835

3,508

14,250

With EMU Rezone

Land Capacity
Pending
Baseline
Target

HOUSING RESULTS

Woodinville greatly exceeds its overall baseline target allocation for housing units, with or without the rezone, as a result of the very large amount of recent and planned development in the city, primarily in the CBD zone. The totals are shown below in Figure 10. Even if no further housing were constructed beyond what is currently planned, the city would already exceed its target by 1,460 units. In addition, there is capacity for 2,375 more units without the EMU rezone and 4,000 with the EMU rezone. Despite these high numbers relative to the target, the next step in the HB 1220 analysis requires that these housing units are broken down and analyzed by the income band they could potentially serve, which paints a different overall picture.
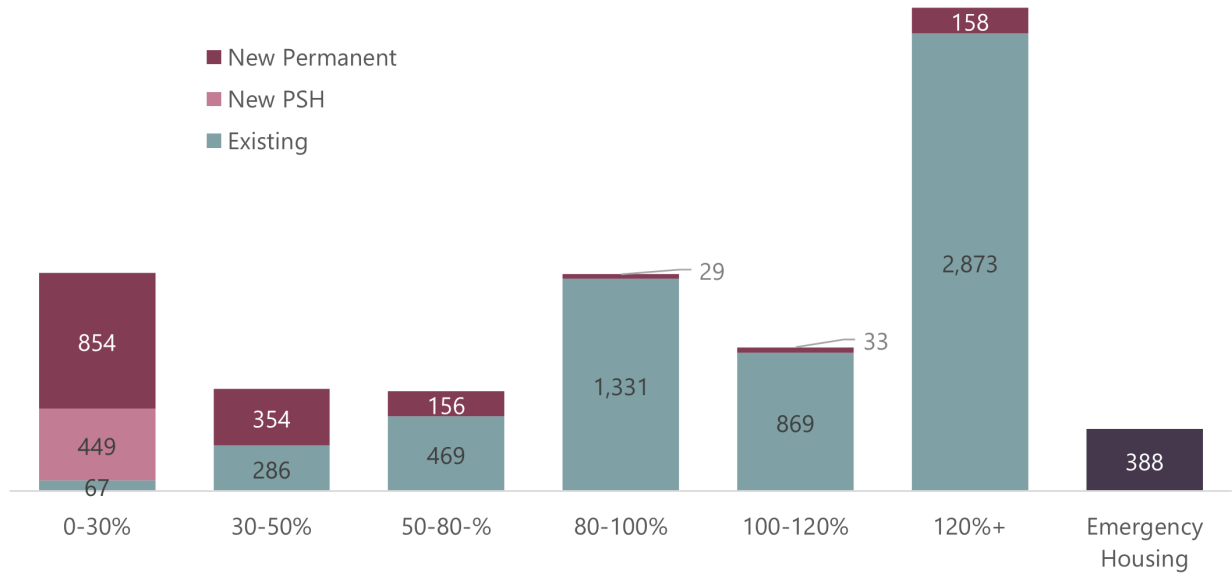
Figure 10. Woodinville Housing Land Capacity Results
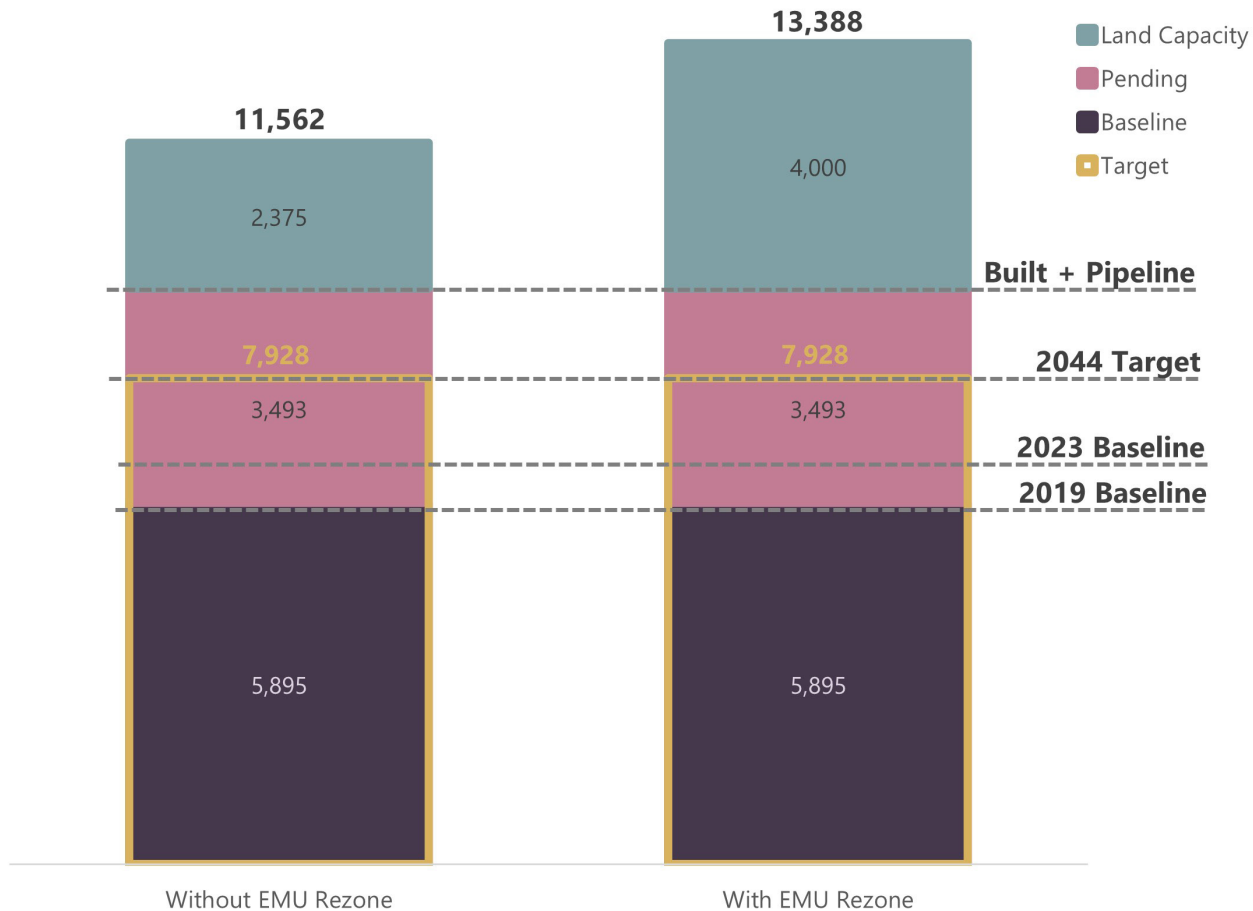
Source: Leland Consulting Group

HOUSING NEEDS BY INCOME BAND

HB 1220 requires jurisdictions to analyze their housing capacity by what household income level the new units can serve. Each county establishes income-based targets for each city within the county with guidance from Commerce, and the cities must then demonstrate that they have sufficient land capacity for the number of units allocated in each income band, as well as capacity for emergency housing units. Woodinville's existing and target housing units for the 2019-2044 period are shown below in Figure 11.

Figure 11. Woodinville Existing and Target Housing Units by Income Band, 2019-2044

Legend:
- New Permanent
- New PSH
- Existing

Income Band	Values
0-30%	854 / 449 / 67
30-50%	354 / 286
50-80-%	156 / 469
80-100%	29 / 1,331
100-120%	33 / 869
120%+	158 / 2,873
Emergency Housing	388

Source: King County 2021 Countywide Planning Policies (as amended in 2023)

PENDING UNITS BY INCOME BAND

The first step in this analysis is to break down the units which have been built since 2019, are proposed, or are under construction by the income level that they can serve. LCG analyzed existing average rents by zone and by unit size based on data from CoStar and corroborated with data from the Washington Center for Real Estate Research at the University of Washington. Average ownership housing prices from the WA Center were also analyzed. These rents and housing prices were then compared to the HUD Area Median Income (AMI) for the appropriate household size to determine what income levels (as a percentage of the AMI) could afford to rent or purchase housing in Woodinville's various zones without being cost-burdened (defined as spending more than 30 percent of household income on housing costs).

INCOME CATEGORIES

This analysis uses three main income categories:

- **Low-Income** (Households earning under 80% AMI)
- **Moderate-Income** (Households earning 80-120% AMI)
- **High-Income** (Households earning more than 120% AMI)

This analysis showed that rental units in most of Woodinville's multifamily zones are affordable to moderate-income households earning between 80 and 120 percent of the AMI. The exception is the R-8 and R-24 zones which appear to have lower rents, serving low-income households. This is likely due to the rental units in these zones being made up of older, "naturally occurring" affordable housing. For ownership units, the average sales price of single-family units in the city (about $1.2 million as of mid-2023) would only be affordable to high-income households. About 10 percent of homes sold in Woodinville between July 2022 and June 2023 were condominiums, and these were selling for an average of $443,000, a price which would be affordable to moderate-income households.

Figure 12. Breakdown of Pending (Recent and Planned) Units by Income Band

Zone	Low-Income (0-80% AMI)	Moderate-Income (80-120% AMI)	High Income (120% AMI +)
CBD	146	2,755	0
GB	0	0	0
R-1	0	0	21
R-4	0	0	110
R-6	0	0	35
T/I	0	0	0
TB	0	425	0
Total	146	3,180	166

Source: City of Woodinville, CoStar, WA Center for Real Estate Research, Leland Consulting Group

The table above shows the breakdown of recent and planned units by income bracket and zone based on this analysis and city data on subsidized affordable units serving low-income households.

LAND CAPACITY BY INCOME BAND

The next step in this analysis is to break down the land capacity for future units into income bands that those units could serve. Following Department of Commerce guidance, this is accomplished by grouping zones into **zone categories** based on the housing types that are allowed, and then grouping those categories by the **lowest potential income level that could be served by the housing types in that zone category.** For example, in a hypothetical multifamily zone, a developer may choose to build high-end rental units catering to households earning 120 percent AMI or higher, studios or one-bedroom units catering to households earning 80-120 percent AMI, or deeply subsidized affordable housing financed through the Low-Income Housing Tax Credit (LIHTC), serving households earning under 80 percent AMI. Because the lowest potential income level served in this zone is households earning under 80 percent AMI, this hypothetical zone would be classified in that income bracket in the Commerce framework.

In Woodinville's CBD zone, existing development and market trends indicate that only a small share of new units will actually serve lower-income households. Based on recent data provided by the city, approximately 4 percent of units in the CBD zone developed in the past five years are subsidized affordable units serving low-income households. Therefore, in the "No-Action" scenario, 4 percent of the CBD zone's future land capacity was assumed to serve low-income households. In the "Action" scenario, up to **20 percent of the CBD zone's units were assumed to serve low-income households.** This is based on Woodinville's existing MFTE program which requires 20% of units be affordable at 85 and 65 percent AMI, and an assumption that future developers in the zone would likely take advantage of this program. In the EMU rezone area, **capacity was assigned to the low-income category**, since it represents the lowest possible income level served, following Commerce guidance as described above, and because the future mix of units in a newly rezoned area is uncertain. Woodinville's zone category classification is shown on the following page.

Figure 13. Woodinville Zone Category Classification

Zone	Housing Type Allowed	Zone Category	Lowest Income Level Served
R-1	Single-Family	Low Density	High-Income (120% AMI+)
R-4	Single-Family, Duplex, Townhomes		
R-6	Detached and Attached Single-Family	Moderate Density	Moderate-Income (80-120% AMI)
R-8	Detached and Attached Single-Family		
All R- Zones	ADUs (parcel level analysis)		
All R- Zones	Duplexes (parcel level analysis)		
R-12	Low-Density Duplexes, Multifamily, Townhomes	Low-Rise	Low-Income (0-80% AMI)
R-18	Low-Density Duplexes, Multifamily, Townhomes		
R-24	Multifamily	Mid-Rise	Low- and Moderate-Income (0-120% AMI)
R-48	Multifamily		
TB	Multifamily, Mixed-Use		
CBD	Multifamily, Mixed-Use		
EMU Rezone	Multifamily, Mixed-Use		

Source: Leland Consulting Group

Finally, the aggregated housing needs for each income band from King County are compared with the total pending units and additional land capacity by income band. As shown below, **without the EMU rezone, the city does not have sufficient capacity to serve the expected demand for low-income units, despite having an overall surplus as discussed previously.** With the EMU rezone, there is sufficient capacity to serve these households, but further steps beyond just rezoning the area would need to be taken in order to incentivize affordable housing construction in this area, such as height bonuses, reduced parking requirements, etc. This will be discussed further under "Adequate Provisions."

Figure 14. Woodinville Housing Targets by Income With and Without EMU Rezone

Income Band	Housing Unit Target	Units Built Since 2019, Planned, or Under Construction	Without EMU Rezone		With EMU Rezone	
			Additional Unit Capacity on Vacant/ Redevelopable Land	Surplus	Additional Unit Capacity on Vacant/ Redevelopable Land	Surplus
Low-Income (0-80% AMI)	1,813	146	79	(1,588)	1,867	200
Moderate-Income (80-120% AMI)	62	2,755	2,099	4,792	1,937	4,630
High-Income (120% AMI+)	158	592	196	630	196	630
Total	2,033	3,493	2,375	3,835	4,000	5,460