

## Land Capacity Analysis Methodology and Results

*Land Capacity to Meet Housing and Jobs Targets, Housing Needs by Income Band, ADU and Middle Housing Capacity, Adequate Provisions*

### Background

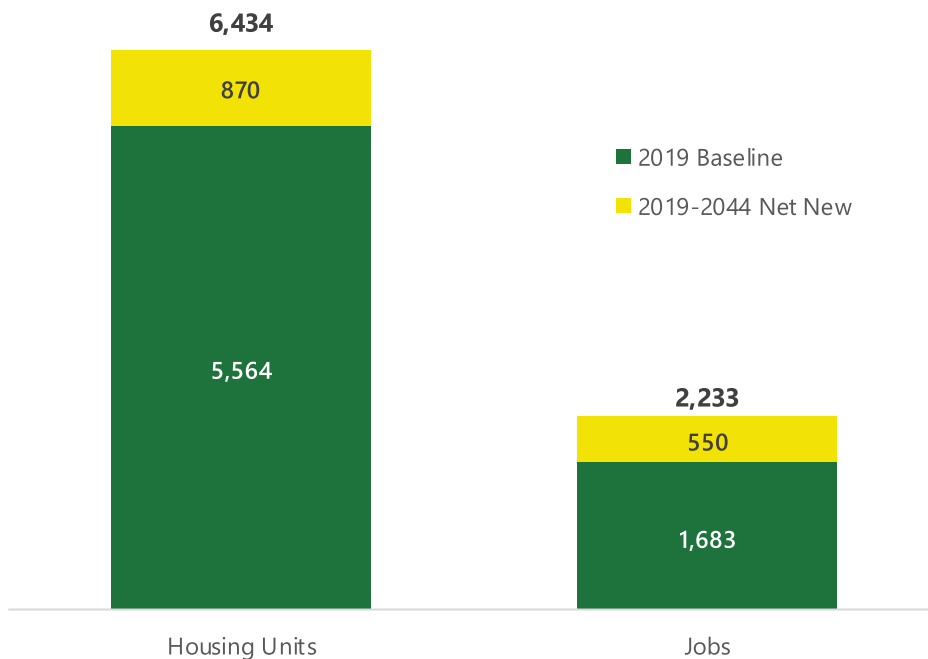
As part of Lake Forest Park’s 2044 Comprehensive Plan update, Leland Consulting Group (LCG) was retained as part of a consultant team led by SCJ Alliance to complete an analysis of land capacity for housing and jobs, including considerations of housing by income band as required by RCW 36.70A.070(2)(c) 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 Targets

Lake Forest Park is required to show **land capacity to meet 2019-2044 targets for housing units and jobs** based on the Washington Office of Financial Management countywide projections as allocated to jurisdictions through the Countywide Planning Policies. Figure 1 below shows Lake Forest Park’s baseline and target housing units and jobs through 2044.

Figure 1. Lake Forest Park Baseline and Target Housing Units and Jobs, 2019-2044

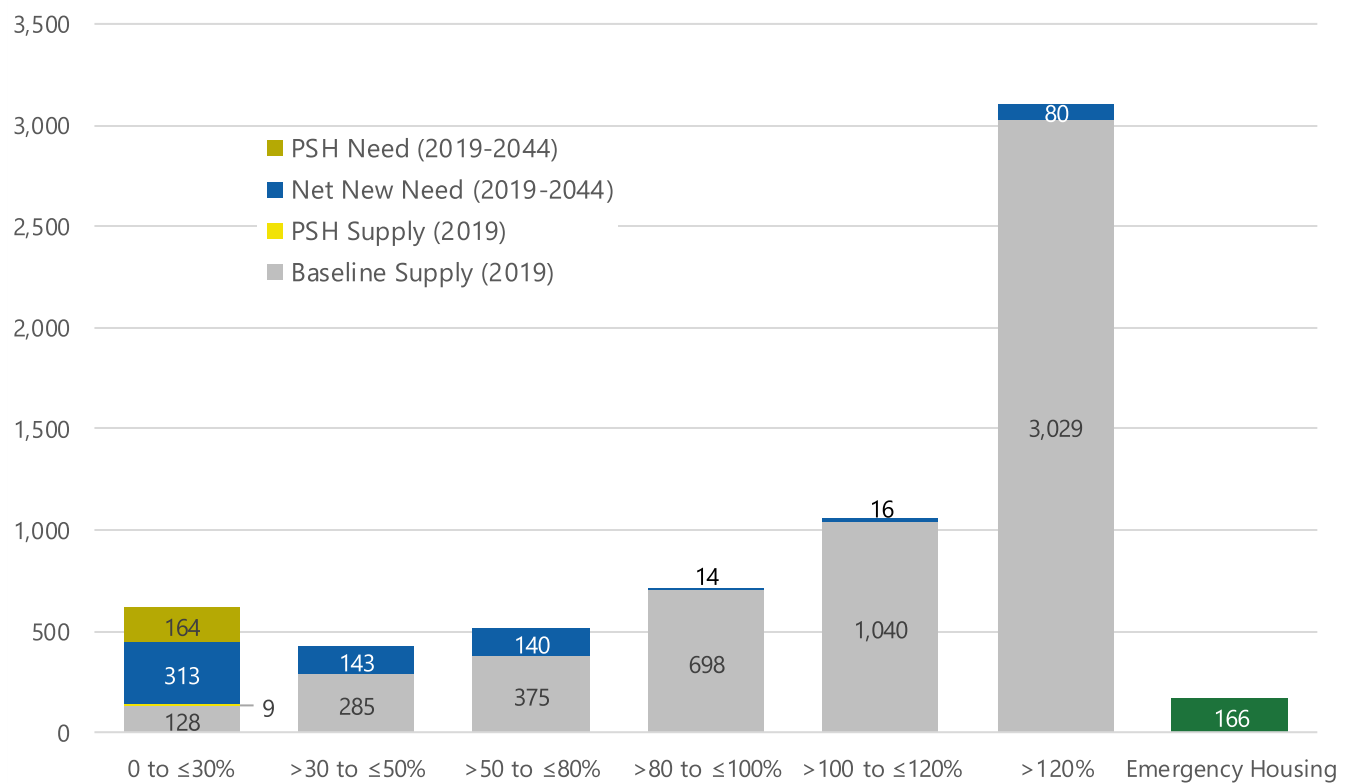


Source: 2021 King County Countywide Planning Policies (as amended 3/2023)

The housing unit baseline and targets are further broken down by what income band the housing units can serve, expressed as a percentage of the HUD Area Median Income (AMI). For reference, the AMI for King County is **\$146,500**. The AMI is determined by the U.S. Department of Housing and Urban Development (HUD), and is generally higher than the Census-reported Median Household income for a given city, since it is a countywide metric and adjusted for household size. The HUD AMI 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.” Each jurisdiction also 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.” Lake Forest Park’s housing baseline and 2044 targets by income band are shown below:

**Figure 2. Lake Forest Park Existing and Target Housing Units by Income Band, 2019-2044**

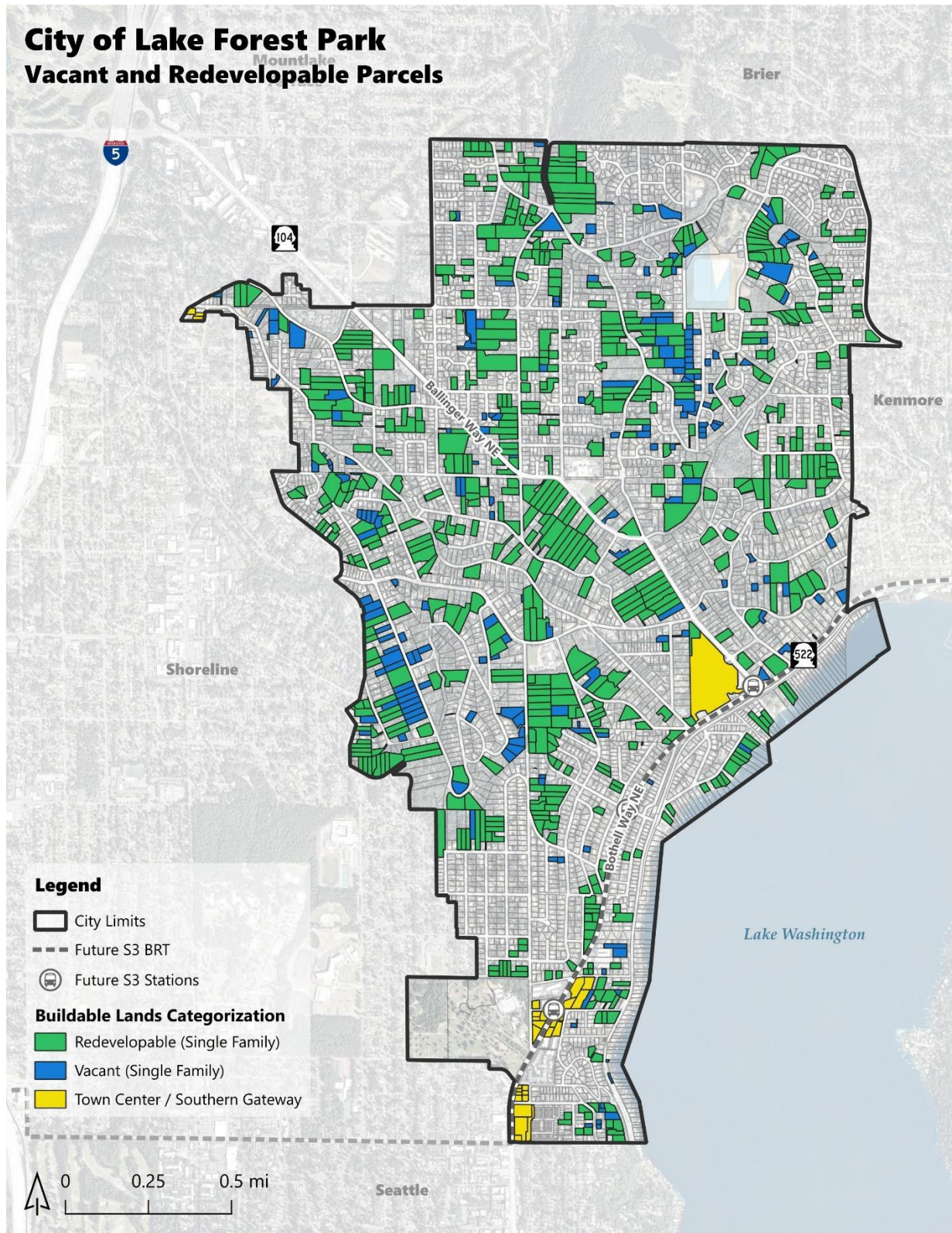


Source: 2021 King County Countywide Planning Policies (as amended 3/2023)

### Vacant and Redevelopable Parcels and Pending Development

The first step in the land capacity analysis is 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 Lake Forest Park 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). The map of vacant and redevelopable parcels is shown below in Figure 3.

Figure 3. Vacant and Redevelopable Parcels in Lake Forest Park, 2023



Source: King County, City of Lake Forest Park, Leland Consulting Group

## Critical Areas

Lake Forest Park contains a large amount of critical areas, including steep slopes, creeks and streams and their buffers, and wetlands. Although some development may occur in these areas through the use of a Reasonable Economic Use Exemption, the constrained parcel acreage was removed for the purposes of this analysis, in order to make a conservative assumption of land capacity and ensure that Lake Forest Park can reach its housing targets without needing to develop in critical areas. The total vacant and redevelopable acreage, constrained, and unconstrained acreage by zone is shown below.

**Figure 4. Critical Area Acreage by Zone in Lake Forest Park, 2023**

	<b>Gross Vacant/ Redevelopable Acres</b>	<b>Environmentally Constrained</b>	<b>Net (Unconstrained) Vacant/Redevelopable Acres</b>
<b>Single-Family</b>			
RS-20	118	73.1	44.9
RS-15	57.4	34.7	22.7
RS-10	47.9	16.7	31.2
RS-9.6	124.9	92.3	32.6
RS-7.2	186.4	11.1	175.3
<b>Multifamily</b>			
RM-3600	0.0		
RM-2400	0.0		
RM-1800	0.0		
RM-900	0.0		
<b>Town Center / Southern Gateway</b>			
TC	17.6		17.6
SG-SFR	0.0		0.0
SG-T	0.8		0.8
SG-C	11.7		11.7
<b>Commercial</b>			
BN	2.5	1.4	1.1
<b>TOTAL</b>	<b>567.2</b>	<b>229.3</b>	<b>337.9</b>

Source: King County, City of Lake Forest Park, Leland Consulting Group

## Market Reduction Factor

Commerce’s HB 1220 guidance indicates that jurisdictions should reduce the amount of net 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 for single-family zones based on recent development trends in each zone to arrive at a reasonable estimate of redevelopment capacity in the city without overestimating the potential for redevelopment in these zones. Larger-scale redevelopment has been envisioned through long-term subarea planning processes in both the Town Center and Southern Gateway zones. Therefore, these areas were considered redevelopable and reduced by the Commerce-recommended 25% market factor reduction. The reduction factors are shown below in Figure 5.

Figure 5. Market Factor by Zone in Lake Forest Park

	Vacant			Redevelopable		
	Gross Acres	Deduction Factor	Net Acres	Gross Acres	Deduction Factor	Net Acres
<b>Single-Family</b>						
RS-20	4.4	89%	0.5	40.5	90%	4.1
RS-15	2.8	86%	0.4	19.9	90%	2.0
RS-10	2.7	93%	0.2	28.5	90%	2.9
RS-9.6	4.4	87%	0.6	28.2	90%	2.8
RS-7.2	7.9	88%	0.9	167.4	90%	16.7
<b>Multifamily</b>						
RM-3600	0.0	15%	0.0	0.0	25%	0.0
RM-2400	0.0	15%	0.0	0.0	25%	0.0
RM-1800	0.0	15%	0.0	0.0	25%	0.0
RM-900	0.0	15%	0.0	0.0	25%	0.0
<b>Town Center / Southern Gateway</b>						
TC	0.0	15%	0.0	17.6	25%	13.2
SG-SFR	0.0	15%	0.0	0.0	25%	0.0
SG-T	0.0	15%	0.0	0.8	25%	0.6
SG-C	0.0	15%	0.0	11.7	25%	8.8
<b>Commercial</b>						
BN	0.0	15%	0.0	1.1	25%	0.8
<b>TOTAL</b>	<b>22.2</b>		<b>2.6</b>	<b>315.7</b>		<b>51.8</b>

Source: King County, City of Lake Forest Park, HUD Building Permit Data, WA Department of Commerce, Leland Consulting Group

## Housing and Job Density Assumptions

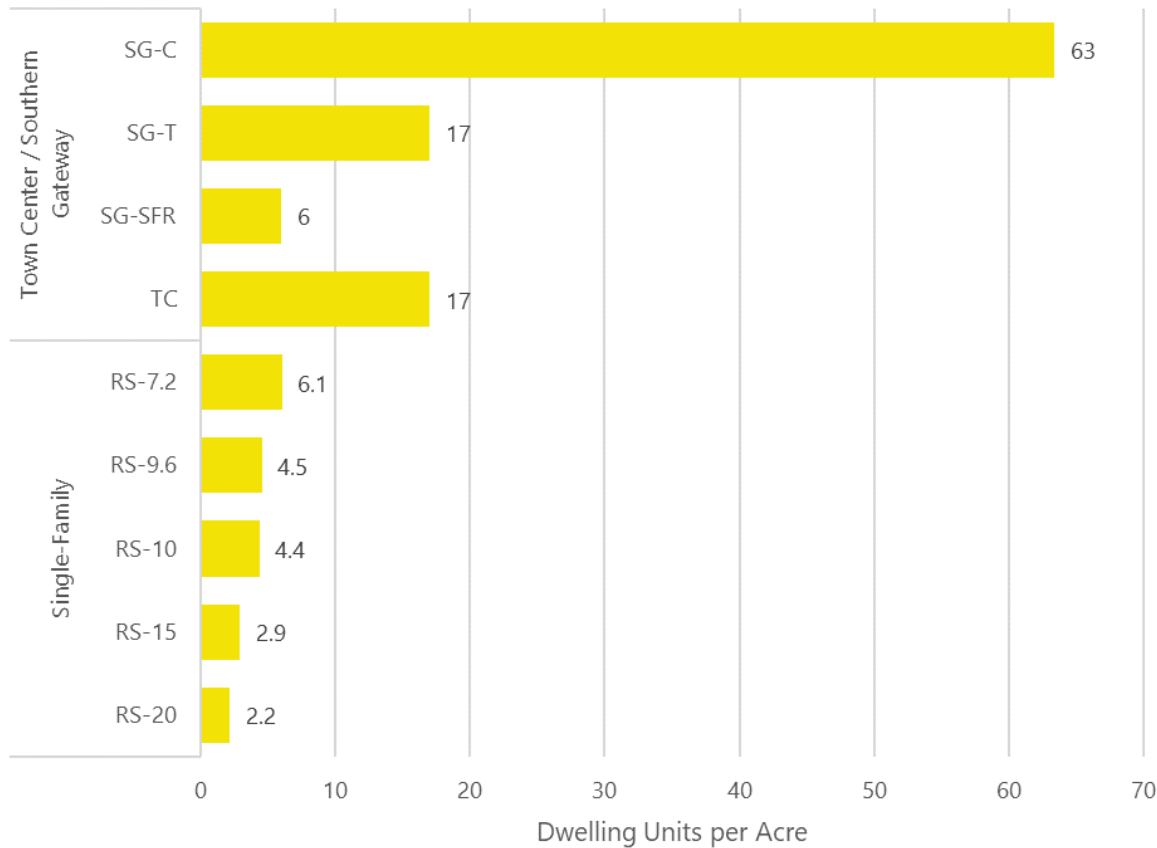
Having established the amount of available developable acreage, the next step in the analysis is to estimate the density at which that acreage could redevelop. This was calculated in different ways for single-family and multifamily development:

- Density of development in the Single-Family zones was determined by the minimum lot size in the Lake Forest Park zoning code.
- Density in the Town Center is capped at 17 units per acre by ordinance.
- Density in the Southern Gateway Transition Zone is assumed to be similar in character to the Town Center.
- In the Southern Gateway Corridor, density was calculated based on a mix of townhomes at about 25 units/acre and podium development at about 100 units per acre. Examples of these densities are shown at right for illustration of scale of development (not for architectural or design elements). The table below in Figure 7 shows the density assumptions for housing, for zones which allow housing.

Figure 6. Redevelopment Prototype Examples for SG-C Zone



**Figure 7. Housing Density Assumptions for Lake Forest Park Land Capacity Analysis (units/acre)**



Source: Lake Forest Park Zoning Code, Urban Footprint, Leland Consulting Group

For **employment density**, various assumptions were used for redevelopable parcels in three areas with potential for commercial development – the BN zone, Southern Gateway, and Town Center:

- In the BN zone, an assumption of **28** jobs per acre was used, based on traditional 1-story retail prototypes developed using Urban Footprint, a scenario planning tool with an extensive database of building statistics and typologies. This job density took into account the BN zone’s maximum lot coverage of 35 percent.
- For the Southern Gateway, an assumption of **33** jobs per acre was used, based on a variety of low-rise mixed-use building prototypes from the west coast, also developed using Urban Footprint.
- For the Town Center, the average of the two action alternative scenarios presented in the Lake Forest Park Town Center DEIS estimated that at full build-out, the area could contain about 256,000 square feet of commercial development (after accounting for square footage lost to redevelopment). Using the Lake Forest Park assumption of 465 square feet per job found in the 2021 King County Urban Growth Capacity Report, this would equate to **552 jobs** in the Town Center, an average of 42 jobs per acre. This job density aligns with regional mixed-use prototypes.

These housing and employment density assumptions were then applied to the net vacant and redevelopable acreage (after critical area and market factor deductions) by zone shown above in Figure 5, to determine total housing and jobs capacity. Results are discussed below after a discussion of additional ADU and middle housing capacity, which was calculated separately on a parcel level.

## 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 Lake Forest Park. Parcels in the RS-20, RS-15, RS-10, RS-9.6, and RS-7.2 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. Critical areas were also removed for this analysis. Assuming at least 1,000 square feet would be required to construct an ADU, this resulted in a total of **2,104 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, resulting in an **ADU capacity of 42 units**. This would average out to about 2.1 ADUs per year, compared to 1.5 ADUs per year which have been permitted on average since 2016, according to city data. This is a reasonable increase given the forthcoming liberalization of ADU standards resulting from HB 1337.

## Additional Duplex Capacity

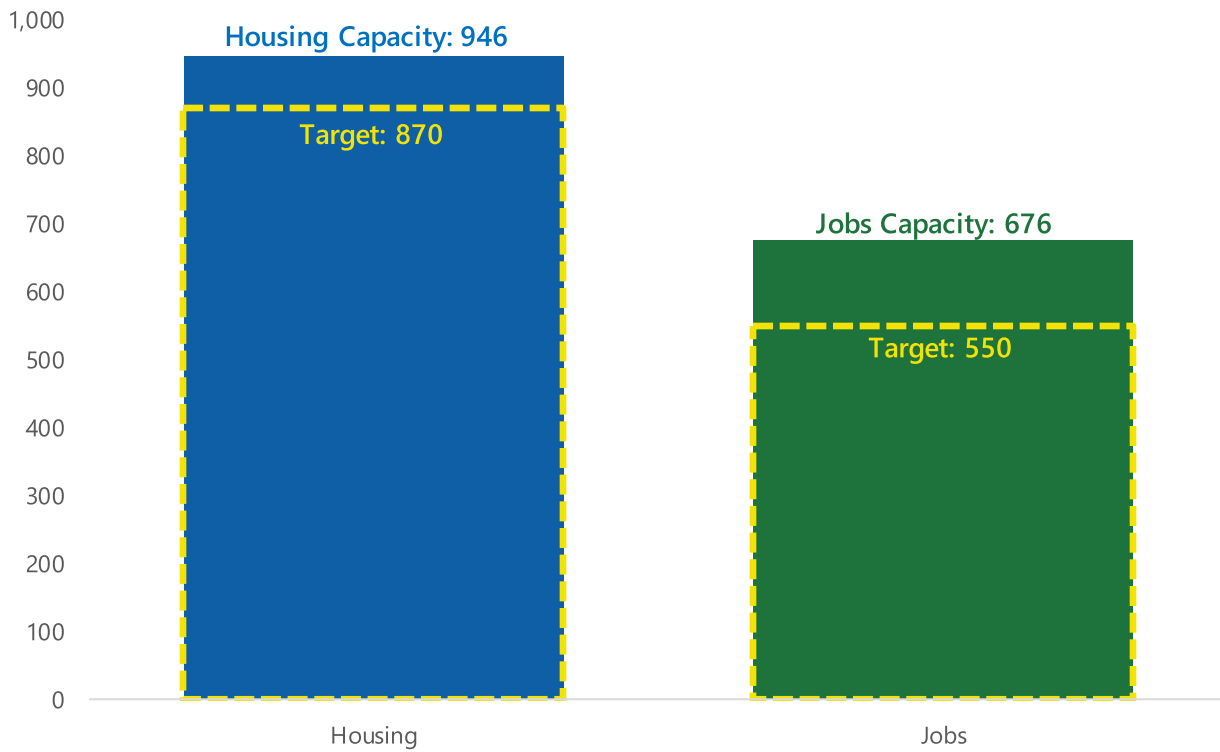
HB 1110, also passed by the legislature in 2023, requires that Lake Forest Park allow at least duplexes on all lots in low-density residential zones. To determine the potential for added units, LCG conducted a high-level feasibility analysis of parcels in the RS-20, RS-15, RS-10, RS-9.6 and RS-7.2 zones. 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 a duplex. Critical areas parcel acreage was also removed for this analysis, as in the ADU analysis. Although HB 1110 does allow cities the option to exclude all parcels which contain any critical area or critical area buffer acreage, Lake Forest Park will not be making a decision on whether to apply that exemption until after the adoption of this Comprehensive Plan. Therefore, since current regulations do allow the development of housing on non-constrained parcel acreage, only the actual constrained acreage, rather than all parcels which contain any critical area acreage, was removed for this analysis.

Next, LCG undertook a high-level feasibility analysis to determine a reasonable subset of parcels based on land value where it may be financially feasible to build a duplex based on the Department of Commerce's Middle Housing Pro Forma tool and Leland Consulting Group's study of development costs in the Puget Sound region. This resulted in a total of 53 parcels where a duplex may be feasible. Nearly all of these parcels were classified as vacant or redevelopable in the King County Buildable Lands report. An assumption that 50% of these parcel owners would choose to build a duplex over the next 20 years after the implementation of HB 1110, based on trends seen in other cities who have recently implemented such changes, results in an additional **26 units** of housing capacity in Lake Forest Park's single family zones.

## Results

As shown below in Figure 8, Lake Forest Park has sufficient land capacity to meet both its overall housing and jobs targets, after taking into account critical area constraints, future market factor reductions, and using density assumptions from the zoning code and regional development prototypes. The next section further breaks down housing capacity by income band, as required by HB 1220.

Figure 8. Net New Housing and Jobs Targets and Capacity in Lake Forest Park, 2019-2044

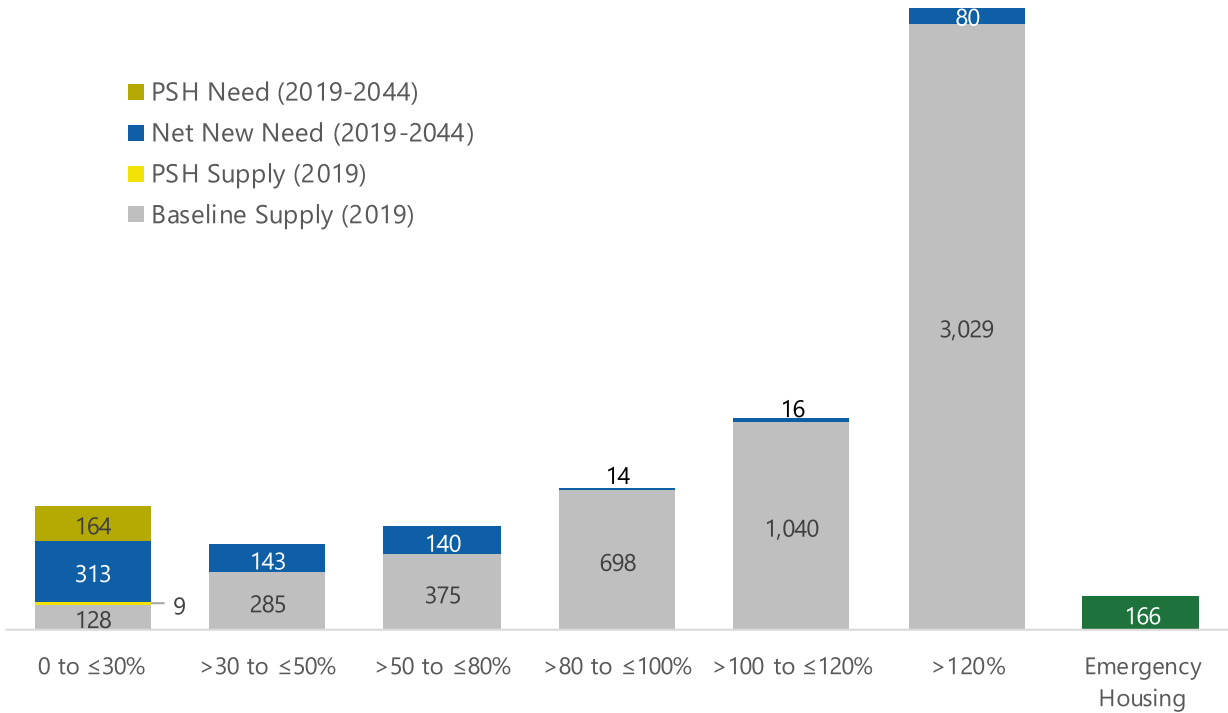




# Housing Needs by Income Band

HB 1220 requires jurisdictions to analyze their housing capacity by the household income level that new units can serve. Each county establishes income-based targets for each city within the county, 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. Lake Forest Park’s existing and target housing units for the 2019-2044 period are shown below in Figure 9.

**Figure 9. Lake Forest Park Existing and Target Housing Units by Income Band, 2019-2044**



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

## Land Capacity by Income Band

The first 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**. This classification is shown below.

### 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)

Figure 10. Lake Forest Park Zone Category Classification

Zone	Housing Types Allowed	Zone Capacity	Zone Category	Lowest Income Level Served
<b>Single-Family</b>				
RS-20	Single-Family, Manufactured Home, ADU	8	Low Density	<b>High-Income (120% AMI+)</b>
RS-15	Single-Family, Manufactured Home, ADU	5		
RS-10	Single-Family, Manufactured Home, ADU	10		
RS-9.6	Single-Family, Manufactured Home, ADU	8		
RS-7.2	Single-Family, Manufactured Home, ADU	86		
<b>Town Center / Southern Gateway</b>				
TC	Multifamily	224	Mid-Rise	<b>Low-Income (0-80% AMI)</b>
SG-SFR	Single-Family, ADU	0	Low Density	<b>High-Income (120% AMI+)</b>
SG-T	Multifamily, Single-Family (with restrictions), Senior apartments, nursing homes	10	Low-Rise	<b>Low-Income (0-80% AMI)</b>
SG-C	Multifamily, Senior apartments, nursing homes	527	Mid-Rise	<b>Low-Income (0-80% AMI)</b>
<b>Additional Housing Types</b>				
ADUs		42		<b>Moderate-Income (80-120% AMI)</b>
Duplexes		26		<b>Moderate-Income (80-120% AMI)</b>

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. The results are shown below in Figure 11. As shown, Lake Forest Park has sufficient capacity to accommodate its housing targets by income band through multifamily development capacity in the Southern Gateway and Town Center, and Middle Housing and ADUs throughout the city, as well as some single-family development on vacant lots and potentially through some subdivision of larger lots.

Figure 11. Lake Forest Park Housing Targets and Capacity by Income Band, 2019-2044

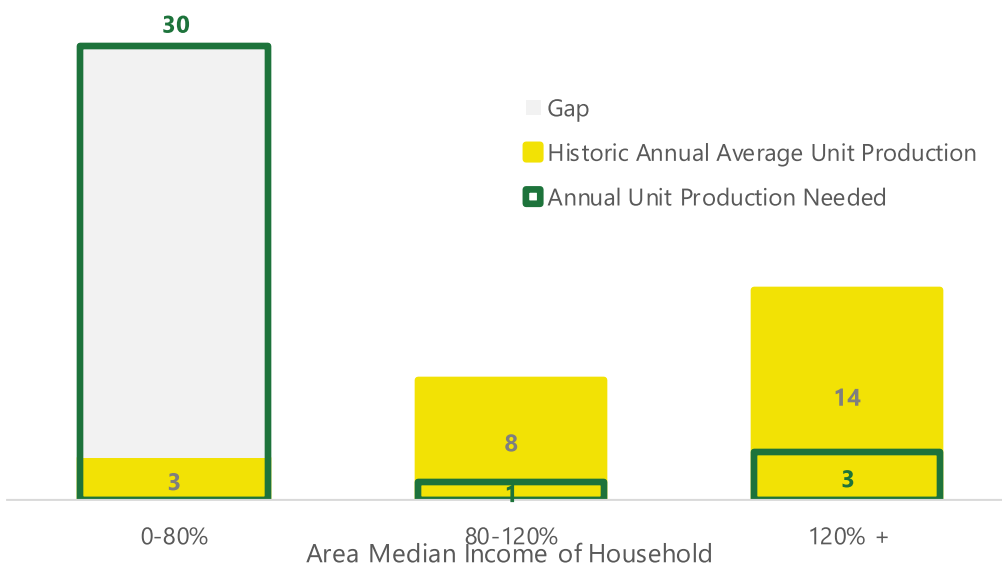
Income Band (% of AMI)	Zone Category	Housing Needs	Aggregated Housing Needs	Total Capacity	Surplus/ Deficit
0-30 PSH	Mid-Rise, Low-Rise	164	760	761	1
0-30 Non PSH		313			
30-50		143			
50-80		140			
80-100	ADUs, Middle Housing	14	30	68	12
100-120		16			
120+	Low Density	80	80	117	37
<b>TOTAL</b>		<b>870</b>	<b>870</b>	<b>946</b>	<b>76</b>

Source: Leland Consulting Group

## Adequate Provisions

In addition to this analysis by income band, HB 1220 also requires cities to show that their housing element “[m]akes adequate provisions for existing and projected needs of all economic segments of the community.” This analysis requires a **comparison of the historic rate of housing production to the rate of housing production needed to meet housing targets by income band**. The results of this analysis are shown below in Figure 12, using historic production data from the City, Census building permit survey, and PSRC’s Income-Restricted Housing Inventory. Similar to the analysis above, the income levels are correlated with housing types based on LCG’s analysis of housing prices affordable to various income levels in Lake Forest Park. As shown below, historic production trends indicate a deficit of production of units serving households earning 80 percent of the AMI and below – an average of 3 have been built per year since 2012, compared with 30 per year needed by 2044 to meet the housing target.

**Figure 12. Historic and Target Housing Production Trends in Lake Forest Park, 2012-2023**



Source: King County, City of Lake Forest Park, U.S. Census Building Permit Survey, PSRC Income-Restricted Housing Inventory

In order to address this shortfall, Commerce has developed a checklist for cities to address four categories of barriers to housing production:

- Development regulations
- Process obstacles
- Limited land availability and environmental constraints
- Funding gaps

There is an additional checklist for cities to address additional potential barriers to the construction of Permanent Supportive Housing (PSH) and emergency housing. Cities should document how these barriers may be affecting the production of units at the income level specified using this checklist, and document the potential steps they could take to overcome the barriers. **Note that cities to not need to implement these steps as part of the comprehensive plan update, but the noted actions are meant to guide goal and policy development, and potential regulatory changes, to support further housing production, and cities will be required to produce a report documenting their progress towards increasing housing production five years after the adoption of the comprehensive plan.**

Both of these checklists and potential actions to remove barriers to housing production are found in Appendix A.

# Appendix A: Adequate Provisions Checklist

## Exhibit B2: Low-Rise or Mid-Rise housing barrier review checklist

Barrier	Is this barrier likely to affect housing production? (yes or no)	Why or why not? Provide evidence.	Actions needed to address barrier.
<b>DEVELOPMENT REGULATIONS</b>			
<b>Unclear development regulations</b>	No	Development regulations are clear and easy to understand	
<b>High minimum lot sizes</b>	Yes	While the minimum lot sizes are not particularly high in the City's residential multifamily zones, the minimum lot size per unit significantly restricts what can be built. For instance, although multifamily is allowed in the RM-3600 zone, just two units would be allowed on a 7,200 SF lot because 3,600 SF of lot area is required per unit. The current lot size per unit in multifamily zones results in a range of 12-48 units per acre - this would not allow for anything more dense than townhomes and garden-style apartments.	Regulate density via units per acre rather than minimum lot area per unit. Ensure that the density is high enough to allow for multifamily housing on a typical lot, and that feasible multifamily types are allowed.
<b>Low maximum densities or low maximum FAR</b>	Yes	Density in the multifamily zones is dictated by minimum lot area per unit rather than typical density or FAR metrics.	See above
<b>Low maximum building heights</b>	Yes	The height in all multifamily zones is limited to 35 feet. This is enough for roughly three stories of housing. This is likely to negatively impact	Consider increasing building heights to allow for four to five stories, particularly in zones that

Barrier	Is this barrier likely to affect housing production? (yes or no)	Why or why not? Provide evidence.	Actions needed to address barrier.
		feasibility on smaller lots, especially in zones where higher unit densities are permitted.	allow for higher densities, like RM-900.
<b>Large setback requirements</b>	Yes	The City's code requires 20-foot front and rear yard setbacks. Side yard setbacks range from 10 to 20 feet. Large setbacks, especially when combined with other restrictions like height and lot coverage, significantly impact the feasibility of multifamily development.	Consider reducing front and rear setbacks in multifamily zones. Limit side setbacks to no more than 10 feet.
<b>High off-street parking requirements</b>	Yes	One and a half parking spaces are required for each multifamily unit in Lake Forest Park, regardless of the unit size or number of bedrooms. Structured parking is extremely expensive to build, and surface parking significantly limits what can be built on a site. Requiring parking at this ratio would significantly impact the feasibility of multifamily.	Developers will typically build parking whether or not it is required - lower minimum parking requirements ensure that developers have the flexibility to meet market demand. Lake Forest Park should consider eliminating parking requirements, or at least reducing the minimum to no more than 1 per unit, particularly in areas close to transit.
<b>High impervious coverage limits</b>	Yes	The maximum lot coverage allowed in multifamily zones ranges from 35% to 55%. Combined with other code requirements like maximum building heights, this is likely to have a negative impact on	Increase maximum lot coverage requirements to no less than 50%. Consider increasing further for zones targeted for higher density, like RM-900.

Barrier	Is this barrier likely to affect housing production? (yes or no)	Why or why not? Provide evidence.	Actions needed to address barrier.
		the feasibility of multifamily construction.	
<b>Lack of alignment between building and development codes</b>	No	There is not a lack of alignment between building and development codes	
<b>Other (for example: ground floor retail requirements, open space requirements, complex design standards, tree retention regulations, historic preservation requirements)</b>	N/A		
<b>PROCESS OBSTACLES</b>			
<b>Conditional use permit process</b>	No	Multifamily is not a conditional use in the RM zones	
<b>Design review</b>	No	Existing design review process is administrative and has not been documented as a barrier to development	
<b>Lack of clear and accessible information about process and fees</b>	No	An updated fee schedule is available on the city's website and the Help Topics page is linked there, with information on the permitting process.	
<b>Permit fees, impact fees and utility connection fees</b>	No	The permit, impact, and utility connection fees do not appear to be significantly higher than other jurisdictions	
<b>Process times and staffing challenges</b>	Yes	Lack of planning staff has proven to be a challenge both in current and long-range planning	Additional planning staff and/or process expediting for certain types of development

Barrier	Is this barrier likely to affect housing production? (yes or no)	Why or why not? Provide evidence.	Actions needed to address barrier.
			(i.e., affordable housing, middle housing. Etc.)
SEPA process	No	SEPA is required in most WA jurisdictions. A planned action ordinance would remove the need for SEPA review and help reduce the cost and uncertainty of development.	
<b>LIMITED LAND AVAILABILITY AND ENVIRONMENTAL CONSTRAINTS</b>			
Lack of large parcels for infill development	Yes	There are many large parcels in Lake Forest Park, but most of these are built out with high-value homes, or are constrained by environmentally critical areas.	Allow for lot division that would free up additional land for development. Allow multifamily housing in more areas of the city.
Environmental constraints	Yes	There are significant slope and wetland constraints throughout Lake Forest Park.	Increase the number of lots that are zoned for multifamily development, especially in areas with fewer environmental constraints.

## Exhibit B3: Supplementary barrier review checklist for PSH and emergency housing

Barrier	Is this barrier likely to affect housing production? (yes or no)	Why or why not? Provide evidence.	Actions needed to address barriers.
<b>DEVELOPMENT REGULATIONS</b>	Yes	Emergency housing & PSH not currently allowed under City code	
<b>Spacing requirements (for example, minimum distance from parks, schools or other emergency/PSH housing facilities)<sup>1</sup></b>	Yes	Emergency housing & PSH not currently allowed under City code	
<b>Parking requirements</b>	Yes	The parking requirements for multifamily housing are 1.5 per dwelling unit, while the requirement for rooming houses is one space per four beds (or per two sleeping units). There is no specific distinction for PSH, but if 1.5 spaces are required for each unit, this would be a major barrier to feasibility.	Either reduce parking requirements to conform with rooming house requirements (0.5 spaces per unit) or eliminate parking minimums for PSH/emergency housing.
<b>On-site recreation and open space requirements</b>	Yes	Emergency housing & PSH not currently allowed under City code	
<b>Restrictions on support spaces, such as office space, within a transitional or PSH building in a residential zone</b>	Yes	Office/retail uses are not permitted in the RM-3600, RM-2400, RM-1800, or RM-900 zones, where presumably PSH would likely be built.	Ensure that supplementary uses like service providers are allowed in PSH and emergency housing facilities in these zones

<sup>1</sup> Note that RCW 35A.21.430 expressly states requirements on occupancy, spacing, and intensity of use may not prevent the siting of a sufficient number of permanent supportive housing, transitional housing, indoor emergency housing or indoor emergency shelters necessary to accommodate each code city's projected need for such housing and shelter under RCW 36.70A.070(2)(a)(ii). The restrictions on these uses must be to protect public health and safety.



Barrier	Is this barrier likely to affect housing production? (yes or no)	Why or why not? Provide evidence.	Actions needed to address barriers.
<b>Arbitrary limits on number of occupants (in conflict with RCW <a href="#">35A.21.314</a>)</b>	Yes	Emergency housing & PSH not currently allowed under City code	
<b>Requirements for PSH or emergency housing that are different than the requirements imposed on housing developments generally (in conflict with <a href="#">RCW 36.130.020</a>)</b>	Yes	Emergency housing & PSH not currently allowed under City code	
<b>Other restrictions specific to emergency shelters, emergency housing, transitional housing and permanent supportive housing</b>	Yes	Emergency housing & PSH not currently allowed under City code	

