APPENDIX D

FUTURE RESIDENTIAL GROWTH ESTIMATE METHODOLOGY

Appendix D. Future Residential Growth Estimates Methodology

This appendix summarizes the methodology used to estimate Louisville's potential future housing growth for the Comprehensive Plan. The analysis provides a sound, reality-based foundation for long-range planning and is not a prediction of actual development. Rather, it reflects a theoretical maximum buildout, adjusted to account for real-world development constraints, market behavior, and local context.

The Future Land Use Map assigns Placetypes to all areas of the city, and each Placetype includes a range of allowable residential densities. The following steps describe how those density ranges were translated into a citywide estimate of potential housing units and future population.

Step 1: Establish Gross Developable Area

For each Placetype, the total acreage was calculated excluding rights-of-way, public land, schools, City facilities, parks, and other non-developable properties. This yields the gross acreage where residential use could occur under the Future Land Use Map.

Step 2: Apply Density Ranges

The midpoint of each Placetype's residential density range (dwelling units per acre) was multiplied by the gross acreage in that Placetype. This midpoint approach provides a reasonable planning assumption that reflects neither minimum nor maximum theoretical density.

Step 3: Adjust for Realistic Development Potential

Because not all sites develop at their maximum allowable density, a set of development likelihood factors (sometimes referred to as a "density buffer") was applied. This recognizes market realities, site constraints, parcel configuration, redevelopment feasibility, and existing investments. Across Colorado and nationally, studies show that zoning capacity often exceeds what actually gets built due to infrastructure limits, market economics, environmental constraints, and community design factors.[1] The following development likelihood categories were applied:

- High likelihood of development/redevelopment with broadest multifamily/attached housing potential:
    - Assume 70-80% of maximum density would be achieved.
    - This includes vacant parcels within Opportunity Areas and locations with strong redevelopment indicators for future residential or mixed use.

[1] The Colorado Department of Local Affairs (DOLA), in its 2024 technical white paper prepared to support implementation of HB24-1313, notes that typical redevelopment in transit-served areas achieves 10–20% of theoretical zoning capacity due to market feasibility and parcel constraints.

- High likelihood of development/redevelopment with more limited multifamily/attached housing potential:
    - Assume 50% of maximum density would be achieved.
    - These areas may redevelop but with more constrained building envelopes, market conditions, or infrastructure.
- Lower likelihood of development/redevelopment:
    - Assume 10% of maximum density would be achieved.
    - Applies to areas with substantial existing buildings expected to remain for most of the plan horizon (e.g., stable commercial centers, existing multifamily complexes).
- Residential–Low Density Placetypes (existing established low density residential areas): Assume 2% of existing single-family homes will add an ADU within 10 years.[2]
- Sites with active development proposals:
    - Where development concepts are already under discussion, estimates were adjusted to reflect the most current information. For example, the future hospital parcel within Redtail Ridge was assigned zero residential units.

Step 4: Calculate Potential Buildout and Growth Distribution

After applying the density and development-likelihood adjustments, future residential capacity was calculated for each Placetype and each Opportunity Area, where the most significant redevelopment potential exists.

The sum of these estimates reflects Louisville's maximum estimated potential residential capacity under the Future Land Use Map—not a projection of actual development. These estimates help the City align infrastructure, utilities, transportation, parks, and public services with a realistic range of possible growth.

[2] This aligns with Colorado and Denver metro ADU production rates documented by the City and County of Denver's 2021 ADU Study, which found ADU construction at approximately 1–3% of eligible single-family lots over comparable periods.