

**DATE:** May 8, 2024  
**TO:** Karen Guillén-Chapman, Madeline Phillips, and Jenna Hughes  
**FROM:** Beth Goodman  
**SUBJECT:** Buildable Lands Inventory: Partially Vacant Land and Redevelopment Potential

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This memorandum provides information about, definitions of, and examples of partially vacant land, infill, and redevelopment analysis used in buildable lands inventories by Oregon cities.

## Partially Vacant Land

Partially vacant land is an important category of buildable land for housing studies in Oregon. In our experience, between one-third to half of unconstrained buildable land is typically partially vacant, on average, for Oregon cities. The remainder of unconstrained buildable land is vacant.

Generally speaking, partially vacant land is land with existing housing development on it where it can be further developed within the current zoning standards. Partially vacant lots can be relatively large, such as a 5 acre (or larger) parcel with one dwelling on it. Partially vacant lots are also fairly small, such as a one-half acre parcel with one dwelling on it. If land is identified as partially vacant in the BLI, then the unconstrained portion of the lot is assumed to have development capacity for additional housing, consistent with densities allowed and achieved in the zone. Exhibit 1 to Exhibit 6 show examples of partially vacant parcels.

## Existing Definitions of Partially Vacant Land

The definition of partially vacant land can be derived from existing administrative rules and housing planning guidance documents, as described in this section.

While Division 8 (Oregon Administrative Rule 660-008) does not provide a definition of partially vacant land, it provides the following definition of buildable land:

*(2) “Buildable Land” means residentially designated land within the urban growth boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available and necessary for residential uses...*

Existing administrative rules and guidance provide information about the definition of partially vacant land. These rules demonstrate that partially vacant land is an important consideration in inventorying land within the UGB and land for potential inclusion in a UGB, as part of a UGB expansion.

OAR 660-024 Urban Growth Boundaries includes the following safe harbor assumption for use in determining the capacity of buildable lands to accommodate housing needs:

*(2) As safe harbors, a local government, except a city with a population over 25,000 or a metropolitan service district described in ORS 197.015(13), may use the following assumptions to inventory the capacity of buildable lands to accommodate housing needs:*

*(a) The infill potential of developed residential lots or parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling and assuming that the remainder is buildable land;*

*(b) Existing lots of less than one-half acre that are currently occupied by a residence may be assumed to be fully developed.<sup>1</sup>*

OAR 660-024 also includes the following rules for conducting an analysis of UGB expansion, as part of the process of evaluating land within the UGB study area for inclusion in the UGB:

*(5) With respect to section (1), a city must assume that vacant or partially vacant land in a particular priority category is “suitable” to satisfy a need deficiency identified in OAR 660-024-0050(4) unless it demonstrates that the land cannot satisfy the specified need based on one or more of the conditions described in subsections (a) through (g) of this section...*

*(6) For vacant or partially vacant lands added to the UGB to provide for residential uses:*

*(a) Existing lots or parcels one acre or less may be assumed to have a development capacity of one dwelling unit per lot or parcel. Existing lots or parcels greater than one acre but less than two acres shall be assumed to have an aggregate development capacity of two dwelling units per acre.*

*(b) In any subsequent review of a UGB pursuant to this division, the city may use a development assumption for land described in subsection (a) of this section for a period of up to 14 years from the date the lands were added to the UGB.<sup>2</sup>*

OAR 660-038-0060 includes the following rules for conducting a BLI as part of the Simplified UGB Expansion Process:<sup>3</sup>

*(3) The city must identify all partially vacant lots and parcels with a residential comprehensive plan designation, as follows:*

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<sup>1</sup> OAR 660-024-0050(2)

<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3074>

<sup>2</sup> OAR 660-024-0067(5) and OAR 660-024-0067(6)

<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3074>

<sup>3</sup> The Simplified UGB Expansion Process in Division 38 is an optional methodology for evaluating and amending a UGB for a city outside of Metro.

<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3088>



*(a) For lots and parcels at least one-half acre in size that contain a single-family residence, the city must subtract one-quarter acre for the residence, and count the remainder of the lot or parcel as vacant land, and*

*(b) For lots and parcels at least one-half acre in size that contain more than one single-family residence, multiple-family residences, non-residential uses, or ancillary uses such as parking areas and recreational facilities, the city must identify vacant areas using an orthophoto or other map of comparable geometric accuracy. For the purposes of this identification, all publicly owned park land shall be considered developed. If the vacant area is at least one-quarter acre, the city shall consider that portion of the lot or parcel to be vacant land.*

*(4) The city must determine the amount and mapped location of low density, medium density, and high density vacant and partially vacant land in residential plan or zone districts within the city's UGB.*

The existing guidance for conducting a housing capacity analysis is: Planning for Residential Growth: A Workbook for Oregon's Urban Areas, June 1997. It provides the following guidance about partially vacant land:

*A partially vacant parcel has improvements on it, but the remainder of the property, generally exceeding, one-half acre has none. (one-quarter acre is removed for an existing residential structure).<sup>4</sup>*

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<sup>4</sup> Planning for Residential Growth: A Workbook for Oregon's Urban Areas, June 1997, pages 14-15  
[https://www.oregon.gov/lcd/UP/Documents/planning\\_for\\_residential\\_growth.pdf](https://www.oregon.gov/lcd/UP/Documents/planning_for_residential_growth.pdf)



## Examples of Partially Vacant Land

The following maps show examples of partially vacant land from the Madras Buildable Lands Inventory analysis (2023). These examples are meant to be illustrative of the types of partially vacant lands typically seen in cities. These examples show that some partially vacant land will be easier to develop than other partially vacant lots.

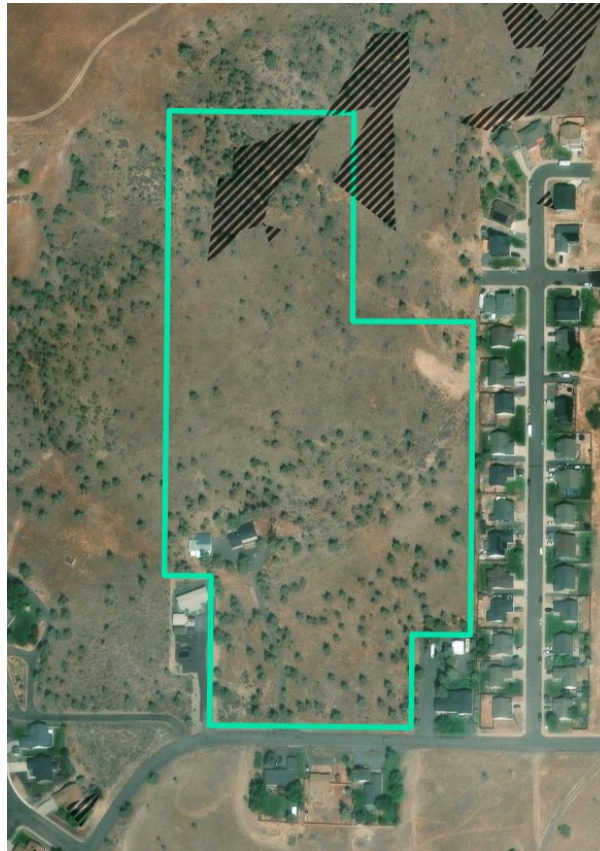
### 16 acre parcel with one dwelling unit

0.8 acres of constraints (in the hash marks)

14.9 acres of buildable land, excluding 0.25 acres of land for the existing house

The existing dwelling is in a corner of the parcel. It seems probable that the parcel could further subdivide for additional housing development.

### Exhibit 1. Large partially vacant parcel



Source: Madras Housing Capacity Analysis, Buildable Lands Inventory by ECOnorthwest.

Note: The black hash marks denote a physical constraint, such as flood hazard, steep slope, or land slide hazard



**4.7 acre parcel with one dwelling unit**

0.9 acres of constraints (in the hash marks)  
3.6 acres of buildable land, excluding 0.25 acres of land for the existing house

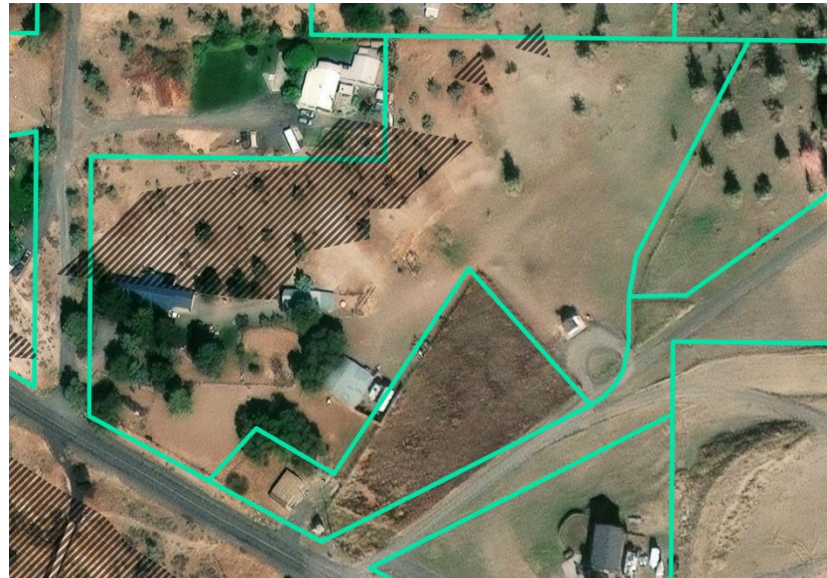
The existing dwelling is in the bottom half of the parcel, near the land slide hazard. It seems probable that top portion of the parcel could further subdivide for additional housing development.

**1.3 acre parcel with one dwelling unit**

0.01 acres of constraints (in the hash marks)  
1 acre of buildable land, excluding 0.25 acres of land for the existing house

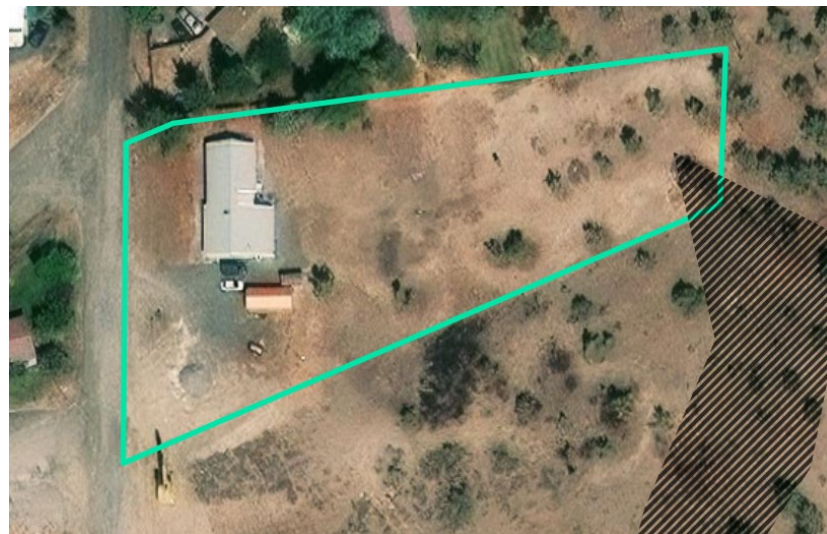
The existing dwelling is in the left portion of the lot. It seems probable that a portion of the lot could further subdivide for additional housing development.

**Exhibit 2. Large partially vacant parcel**



Source: Madras Housing Capacity Analysis, Buildable Lands Inventory by ECONorthwest.  
Note: The black hash marks denote a physical constraint, such as flood hazard, steep slope, or land slide hazard

**Exhibit 3. Smaller, mostly unconstrained partially vacant parcel**



Source: Madras Housing Capacity Analysis, Buildable Lands Inventory by ECONorthwest.  
Note: The black hash marks denote a physical constraint, such as flood hazard, steep slope, or land slide hazard



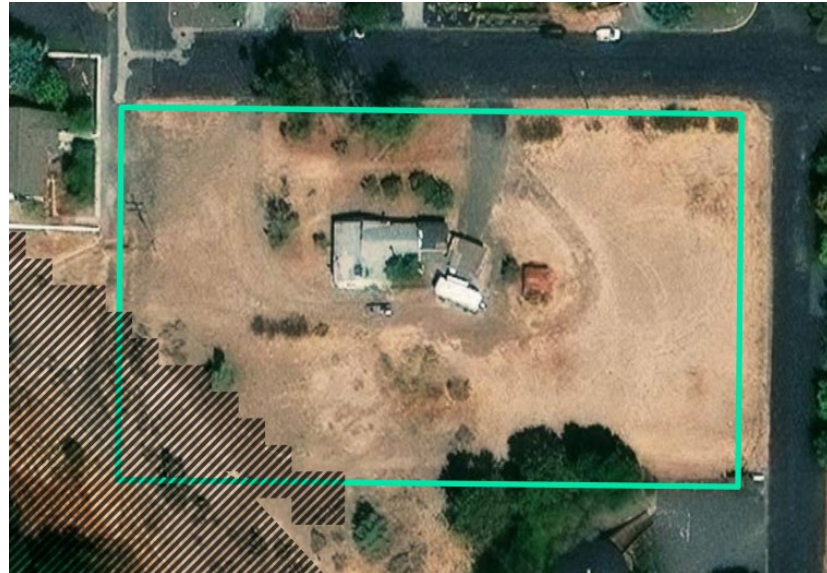
**1.7 acre parcel with one dwelling unit**

0.1 acres of constraints (in the hash marks)

1.3 acre of buildable land, excluding 0.25 acres of land for the existing house

The existing dwelling is in the middle of the lot. It seems probable that a portion of the lot, especially that to the right of the dwelling, could further subdivide for additional housing development. The existing dwelling placement, combined with the constraint, make subdivision of the parcel to the left and behind the house more challenging

**Exhibit 4. Smaller partially vacant parcel with the existing dwelling in the middle of the lot**



Source: Madras Housing Capacity Analysis, Buildable Lands Inventory by ECOnorthwest.

Note: The black hash marks denote a physical constraint, such as flood hazard, steep slope, or land slide hazard



**1.4 acre parcel with one dwelling unit**

0.8 acres of constraints (in the hash marks)

0.4 acre of buildable land, excluding 0.25 acres of land for the existing house

This parcel is more than half covered with constraints. There is an existing small portion of the lot, in the upper left side of the lot, that could subdivide and have more housing.

**Exhibit 5. Smaller partially vacant parcel with constraints**



Source: Madras Housing Capacity Analysis, Buildable Lands Inventory by ECONorthwest.

Note: The black hash marks denote a physical constraint, such as flood hazard, steep slope, or land slide hazard



### 0.8 acre parcel with one dwelling unit

0.3 acres of constraints (in the hash marks)  
0.3 acre of buildable land, excluding 0.25 acres of land for the existing house

This parcel has constraints in multiple areas. There is an existing small portion of the lot, on the right side of the lot, that could subdivide and have more housing.

### Exhibit 6. Smaller partially vacant parcel with constraints



Source: Madras Housing Capacity Analysis, Buildable Lands Inventory by ECONorthwest.

Note: The black hash marks denote a physical constraint, such as flood hazard, steep slope, or land slide hazard

## Additional Considerations

Additional considerations in identifying a definition and methodology for identifying partially vacant land include (but are not limited to):

- ◆ Development of partially vacant land, especially smaller partially vacant lots depends, in part, on market pressure for development. The market pressure for developing partially vacant land will vary among cities. A city with little buildable land, where housing prices are higher (such as Bend, Hood River, or McMinnville) may be more likely to see development of more partially vacant land. Cities with less development pressure or a large residential land base (such as Roseburg, Canby, or Lakeview) may see less development of partially vacant land.
- ◆ Development of partially vacant land depends on owner willingness to subdivide land for additional residential development. The landowner of a parcel with a dwelling that has lower-than-average value may be more likely to sell the “excess” land on their parcel, especially on larger partially vacant lots. On the other hand, the landowner of a parcel with a higher-value dwelling may be less likely to sell the “excess” land on their parcel, even on medium-sized and larger partially vacant lots.
  - Metro considered the value of existing residences when estimating “infill” potential of lots with existing development. The 2018 Metro [Urban Growth](#)





Report used the following approach to identify lots that with existing development where additional housing could be developed:

*“There are a finite number of single-family tax lots in the region. As a result, over the next 20-year period, it may become increasingly attractive for homeowners of oversized SF tax lots to subdivide. Any single family zoned tax lot with a developed SF home was subjected to 1) an oversize tax lot screen to determine if the tax lot exceeded today’s zoned minimum lot size (per Metro’s regionalized zoning crosswalk table); 2) if the ratio of entire tax lot square footage to the minimum zoned lot size is between 2.5 and 5, an additional economic-based filter is used to remove from the BLI any lots with high-valued SF homes meeting this criteria. A \$300,000 building value is assumed as an appropriate threshold for removal from the SF infill supply. The intent is to recognize that owners of large tax lots with relatively expensive homes are not likely to subdivide their tax lot.”<sup>5</sup>*

- ECONorthwest has used similar approaches for some other cities.
- The approach of using value of existing dwellings may pose equity challenges. Using the approach above, a partially vacant lot with a high-value home is not considered partially vacant (because it is less likely to subdivide) but a vacant lot with a lower-value home is considered partially vacant (because it may be more likely to subdivide based on economic necessity of the land owner). How do we account for this the acute impacts on lower socio-economic groups (i.e. rental tenants, owners of lower value units)?
- ◆ Development of smaller partially vacant parcels can be more difficult (and comparatively expensive) because of the limited number of dwellings that can be developed on the partially vacant land. Assembling multiple parcels of partially vacant land into one larger development parcel would be extremely complicated, with multiple land owners and different conditions (i.e., location of the existing dwelling) on each parcel.

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<sup>5</sup> Urban Growth Report, December 3, 2018, Appendix 2 – 2018 Buildable Land Inventory, pages 29 and 30  
[https://www.oregonmetro.gov/sites/default/files/2018/12/03/Appendix2-BuildableLandsInventory\\_12032018.pdf](https://www.oregonmetro.gov/sites/default/files/2018/12/03/Appendix2-BuildableLandsInventory_12032018.pdf)



## Infill Development

Infill development is sometimes used interchangeably to mean further development of a parcel with existing development or development of a small parcel (without existing development) in an area with other surrounding development. The first definition is a variation of partially vacant land. And the second is development of a vacant parcel.

In a buildable lands inventory, it is important to be able to clearly classify a parcel into a mutually exclusive definition, such as: developed, vacant, or partially vacant. These types of land may have sub-definitions, such as a developed parcel that is potentially re-developable over the 20-year planning period.

Existing statutes, administrative rules, and guidance provide little in the way of definitions for infill. Based on the following and the examples, we propose that infill is a type of development that occurs on small parcels surrounded by other development, either partially vacant or vacant parcels. Infill is not a term that would be used in a buildable lands inventory to classify land into a land status.

OAR 660-024 Urban Growth Boundaries includes the following safe harbor assumption for use in determining the capacity of buildable lands to accommodate housing needs:

*(2) As safe harbors, a local government, except a city with a population over 25,000 or a metropolitan service district described in ORS 197.015(13), may use the following assumptions to inventory the capacity of buildable lands to accommodate housing needs:*

*(a) The infill potential of developed residential lots or parcels of one-half acre or more may be determined by subtracting one-quarter acre (10,890 square feet) for the existing dwelling and assuming that the remainder is buildable land;*

*(b) Existing lots of less than one-half acre that are currently occupied by a residence may be assumed to be fully developed.<sup>6</sup>*

OAR 660-038-0060 includes the following rules for conducting a BLI as part of the Simplified UGB Expansion Process, which could include a infill parcel:

*(2) The city must identify all vacant lots and parcels with a residential comprehensive plan designation. A city shall assume that a lot or parcel is vacant if it is at least 3,000 square feet with a real market improvement value of less than \$10,000.*

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<sup>6</sup> OAR 660-024-0050(2)

<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3074>



## Examples of Infill

### 0.2 acre parcel with no dwelling unit

This parcel is surrounded by other residential development but is vacant.

### Exhibit 7. Smaller vacant infill parcel



Source: Madras Housing Capacity Analysis, Buildable Lands Inventory by ECONorthwest.

Note: The black hash marks denote a physical constraint, such as flood hazard, steep slope, or land slide hazard



**0.8 acre parcel with no dwelling unit**

This parcel is surrounded by other residential development, has an existing dwelling, and has capacity for another dwelling unit as a partially vacant parcel.

**Exhibit 8. Small partially vacant infill parcel**



Source: Madras Housing Capacity Analysis, Buildable Lands Inventory by ECONorthwest.

Note: The black hash marks denote a physical constraint, such as flood hazard, steep slope, or land slide hazard



## Redevelopment

While BLIs focus on identifying unconstrained vacant and partially vacant land (and showing this land on a map), they also consider redevelopment potential. In the context of a BLI, redevelopment occurs when existing housing is replaced (demolished) by housing that adds units. For instance, replacement of a single-unit detached dwelling with a duplex, a cottage cluster, or multi-unit housing are all examples of redevelopment. Replacement of a single-unit detached dwelling with another single-unit dwelling (where no housing capacity is added) is not considered redevelopment for the purposes of a BLI.

Redevelopable land is a sub-set of developed land. Any land with existing development on it could redevelop. The relevant question is how likely is land to redevelop over the housing capacity analysis planning period of 20 years or within the housing production strategy period of eight years? Land with high-value built housing is less likely to redevelop in the next 20-years than land with older or low-value development on it, such as a surface parking lot or an older house on a parcel where middle housing or multi-unit housing could develop.

There are multiple approaches to estimating redevelopment, such as:

- ◆ **Qualitative assessment** of redevelopment potential based on a planner's knowledge of discussions for redevelopment within the city. This involves identifying specific parcels where redevelopment is or has recently been under discussion.
- ◆ **Quantitative analysis** of comparison of
  - Improvement (building) values with land value analysis considers the ratio of improvement and land values. Where the land value is equal to or higher than the improvement value, redevelopment may be more likely.
  - Residual land value assessment is an evaluation of development feasibility based on the difference of the value of a development project (based on either its sales price or rent), less the costs (including purchasing property) to build that unit. A residual land value approach to feasibility determines how much a developer would be willing to pay for a property after all other costs to construct the project, including the developer's profit, are accounted for in the feasibility calculation. This cost, less the land, is then compared to the assumed total value of the development when complete. If the value of the development is higher than all costs of development, then there is a positive residual land value, which indicates redevelopment potential. The value of a project is based on how much income (either the assumed sales price for a house or rental revenue for apartments) the project would realize and accounts for the assumed rate of return for the developer when the project is sold.
  - Strike price method determines potential for redevelopment based on a ratio of total real market value (land and improvements) divided by area of the tax



lot (square feet). If the real market value per square foot is less than the threshold price, the tax lot is assumed eligible for redevelopment.

ECONorthwest has used these and other approaches for identifying potentially redevelopable land. Metro's 2018 Urban Growth Report used a strike price method for identifying potentially redevelopable land.

The key issue with any of these approaches to redevelopment is that redevelopment is highly uncertain. Redevelopment is complex, requiring the coordination of landowners (often multiple land owner), access to finance, and market conditions that support redevelopment. Land owner preferences figure strongly into whether a parcel will redevelop, regardless of the economic incentives to redevelop. The quantitative approaches to estimating redevelopment potential are highly dependent on assumptions about housing and land market conditions, which can change rapidly.

## Existing Definitions of Redevelopable Land

Division 8 (Oregon Administrative Rule 660-008) includes the concept of redevelopment potential the following definition of buildable land and defines redevelopable land in OAR 660-008-0005:

*(2) "Buildable Land" means residentially designated land within the urban growth boundary, including both vacant and developed land likely to be redeveloped, that is suitable, available and necessary for residential uses...*

*(12) "Redevelopable Land" means land zoned for residential use on which development has already occurred but on which, due to present or expected market forces, there exists the strong likelihood that existing development will be converted to more intensive residential uses during the planning period.*

OAR 660-038-0030 (Residential land need) proposes the following approaches to estimating redevelopment potential, based adjusting number of needed dwelling units forecast for the city:

*(6) The city must account for projected redevelopment expected to occur in residentially zoned areas, and for mixed use residential development expected to occur in commercially zoned areas, as follows: multiply the result calculated in section (5) by the applicable percentage in subsections (a) through (c) of this section.*

*(a) For cities with a current UGB population less than 10,000, the percentage shall be within a range from one percent to 10 percent of the result calculated in section (5).*



*(b) For cities with a current UGB population equal to or greater than 10,000 and less than 25,000, the percentage shall be within a range from five percent to 15 percent of the result calculated in section (5).*

*(c) For cities with a current UGB population equal to or greater than 25,000, the percentage shall be within a range from five percent to 25 percent of the result calculated in section (5).*

Oregon Revised Statute 197A.270(3)(c) (Determination of housing capacity and accommodation of needed housing by cities with population of 25,000 or greater) requires: *“Except for land that may be used for residential infill or redevelopment, the local government shall create a map or document that may be used to verify and identify specific lots or parcels that have been determined to be buildable lands.”*

The existing guidance for conducting a housing capacity analysis is: Planning for Residential Growth: A Workbook for Oregon’s Urban Areas, June 1997. It provides the following guidance about redevelopable land:

*Re-developable acres are developed parcels that are likely to re-develop within the planning period. One rule of thumb for defining "re-developable" is parcels with building values that are 30 percent or less of the total property value (building + land). Another rule is to use building value per acre of land value." Also, it is important to consider surrounding land uses and values to assess the land price needed by a developer to redevelop the property.*

*If other methods are used to define re-developable acres, list assumptions. For example, the criteria used in the recent update of the Eugene-Springfield residential lands analysis are: medium or high density residential tax lots; existing buildings on the lot are single family, duplex or mobile home; the improvement value is less than or equal to the land value; and the improvement value is less than \$100,000 per acre.<sup>7</sup>*

The approach of using value of existing improvements to identifying redevelopment may pose equity challenges. Using the qualitative approaches above, redevelopment potential is based on the value of the existing improvements on the lot. Lower value dwellings may be more likely to be identified as potentially redevelopable than high value dwellings because there is more return on investment for redeveloping a lower-value dwelling. For example, a mobile home park may have relatively low improvement values (for the mobile homes) but at the same time provide relatively affordable homeownership opportunities. If the mobile home park is redeveloped, that will displace existing residents, very likely leaving them without opportunities for alternative affordable homeownership opportunities. How do we account for this the acute impacts on lower socio-economic groups ?

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<sup>7</sup> Planning for Residential Growth: A Workbook for Oregon’s Urban Areas, June 1997, pages 18-19  
[https://www.oregon.gov/lcd/UP/Documents/planning\\_for\\_residential\\_growth.pdf](https://www.oregon.gov/lcd/UP/Documents/planning_for_residential_growth.pdf)



## Examples

The following are a few examples of how cities have addressed redevelopment potential in their housing capacity analysis.

### **GRESHAM 2021 HOUSING CAPACITY ANALYSIS**

The Housing Capacity Analysis says:

“While Gresham has a surplus of residential land in all zoning district groupings, the City also has key opportunity sites for redevelopment including the Rockwood Triangle, Downtown (specifically, sites at the Gresham Town Fair, Hogan/Burnside, and Beech Street), and in the Civic Neighborhood District (specifically, the K-Mart site and Metro-owned properties near the MAX station).”

### **MILWAUKIE 2023 HOUSING CAPACITY ANALYSIS**

The Milwaukie HCA identified specific opportunities for redevelopment in downtown, based on staff identification of sites for mixed-use redevelopment based on local knowledge and property owner/developer interest. These sites are identified on Exhibit 9.





### Exhibit 9: Potential Redevelopment Sites and Pipeline Projects in Downtown and Central Milwaukie

