

## Updated Single-Family Housing/ Low Density Residential Capacity and Need

The Technical Resource Group (TRG) and its subcommittee provided a thorough analysis and vetting of assumptions regarding capacity estimates for Low Density Residential (LDR) partially vacant lands. The TRG subsequently recommended that the same robust methodology be applied to vacant lands. This analysis has been completed and the resulting capacity has been updated. Additional updates have also been made and are summarized below:

1. Vacant land capacity revisions:
  - Capacity on vacant lands has been re-analyzed to utilize the methodology developed to analyze partially vacant land capacity as well to utilize the revised net to gross assumption. Based on this, the capacity of vacant lands has been reduced. Specifically, the capacity estimates on land inside the UGB decreased due to reducing the density assumptions with 2.5 dwelling units per acre (du/ac) on sloped land and assuming 1 additional dwelling unit per lot over 900' elevation, as well as assuming a higher net to gross ratio for lots that are less than 1 acre in size and lots that are greater than 5 acres in size (based on review of land division plats between 2001-2008).
  - The revised capacity on vacant lands has led to revised overall density assumptions. Prior to the vacant lands revisions, the ECLA (Eugene Comprehensive Lands Assessment) assumed average density for single-family homes/low density residential was 4.2 dwelling units per acre. Based on the new vacant land capacity analysis, assumed average density for low density residential is 3.8 dwelling units per acre.
2. Translation of planning for single-family dwellings (SFD) to planning for Low Density Residential (LDR) plan designation:
  - The state requires single-family dwelling need to be expressed as a Metro Plan land use designation. The Metro Plan designation Low Density Residential (LDR) includes single-family dwellings, but also recognizes that some multi-family dwellings occur on LDR land.
  - LDR land typically includes some other uses such as neighborhood commercial, public uses (such as parks and infrastructure) and group quarters. "Group quarters" refers to dwellings such as dorms, prisons or nursing homes which are typically provided by institutions (colleges, government agencies and health care corporations) that operate outside what is typically defined as the housing market. While the other uses were factored in to the land need in the earlier analysis, lands for group quarters were not. Updated information from the University of Oregon plans indicates that the future dorms will be provided on existing campus land, therefore the acres for group quarters has been reduced to 8 acres in LDR.
3. Miscellaneous:
  - Public land: The park land need has been adjusted based on recent land acquisitions and assuming a larger amount of future parks land would occur on committed and protected land. This reduces our total parks need inside the UGB from 166 acres to 95 acres. Specifically for LDR land, this reduces our parks need inside the UGB from 160 acres to 90 acres. The amount of public land allocated to LDR is adjusted to reflect updated information from the University of Oregon and public facilities.
  - Capacity on the areas identified for potential re-designation to LDR has been re-analyzed to utilize the methodology developed to determine partially vacant land capacity. Based on this methodology, the range of LDR capacity in the potential Medium Density Residential (MDR) re-designation areas is 79 to 811 units, or 21 to 213 acres of LDR gained inside the UGB.

The LDR need is also shown before and after re-designation, which is detailed in Tables 3-4. Numbers will be refined based on a rerun of the buildable lands inventory in 2012<sup>1</sup>.

**Table 1: LDR Need**

	<b>60 SF/ 40 MF</b>	<b>55 SF/ 45 MF</b>	<b>50 SF/ 50 MF</b>	<b>45 SF/ 55 MF</b>	<b>40 SF/ 60 MF</b>
<b>MDR</b>					
TOTAL LDR CAPACITY	7,114 du <sup>2</sup>	7,114 du	7,114 du	7,114 du	7,114 du
TOTAL LDR DEMAND	2,187 du	1,568 du	892 du	191 du	0 (388 du surplus)
<b>REMAINING LDR DU NEED (before re-designation)</b>	<b>2,187 du</b>	<b>1,568 du</b>	<b>892 du</b>	<b>191 du</b>	<b>0 (388 du surplus)</b>
<b>REMAINING LDR DU NEED (after maximum re-designation)</b>	<b>1,376 du</b>	<b>757 du</b>	<b>81 du</b>	<b>0 (620 du surplus)</b>	<b>0 (1,199 du surplus)</b>
<b>REMAINING LDR DU NEED (after 80% re-designation)</b>	<b>1,529 du</b>	<b>910 du</b>	<b>234 du</b>	<b>0 (467 du surplus)</b>	<b>0 (1,046 du surplus)</b>

<sup>2</sup> Du/ac refers to dwelling units per gross acre and is used to calculate average density. See Table 10 for more information on assumed densities.

**Table 2:** The following table shows the updated LDR land need under various housing mix scenarios without the re-designation options discussed below.

	<b>60 SF/ 40 MF</b>	<b>55 SF/ 45 MF</b>	<b>50 SF/ 50 MF</b>	<b>45 SF/55 MF</b>	<b>40 SF/ 60 MF</b>	<b>Notes</b>
<b>LDR Housing Demand</b> (LDR SF/MF)	<b>9,301 du</b> (8,719/582)	<b>8,682 du</b> (7,993/689)	<b>8,006 du</b> (7,266/740)	<b>7,305 du</b> (6,540/765)	<b>6,726 du</b> (5,813/913)	10% of multi-family housing demand occurs on LDR; the amount of single-family vs. multi-family housing types in the LDR demand is shown in ( ) under each mix.
<b>LDR New &amp; Existing Capacity</b>						
Vacant land capacity	4,096 du	Revised vacant land capacity using partially vacant methodology and revised net to gross. (ECLA <sup>3</sup> SF du capacity was 4,300.)				
Partially Vacant capacity	2,374 du	See attachment A.				
Partially Vacant Wastewater / Transportation constrained lots	518 du	This number will become more refined through the TSP. Future service to currently constrained lots is anticipated. See attachment A.				
Redevelopment capacity	589 du	See attachment A.				
Efficiency Measures	160 du	See attachment B.				
<b>TOTAL New &amp; Existing Capacity</b>	<b>7,737 du</b>					
<b>LDR Capacity Reduced from “Other Uses”</b>						
Commercial uses in residential	179 du	Revised from ECLA: Home occupations will be accommodated on existing land therefore the land need for jobs in residential is reduced.				
Public uses in residential	414 du	Revised from ECLA: U of O need decreased per correspondence, public infrastructure increased slightly from review of project lists.				
Group Quarters <sup>4</sup>	30 du	Revised from ECLA: Per U of O, dorms will be accommodated on campus therefore the group quarters land need is reduced.				
<b>TOTAL Capacity Reductions</b>	<b>623 du</b>					
<b>TOTAL CAPACITY</b>	<b>7,114 du</b>					
<b>REMAINING LDR DU NEED</b>	<b>2,187 du</b>	<b>1,568 du</b>	<b>892 du</b>	<b>191 du</b>	<b>0</b> <b>(388 du surplus)</b>	
<b>REMAINING LDR LAND NEED <sup>5</sup></b>	<b>576 ac</b>	<b>413 ac</b>	<b>235 ac</b>	<b>50 ac</b>	<b>0 ac</b> <b>(102 ac surplus)</b>	Revised vacant land capacity decreased the overall du/ac assumptions from ECLA’s 4.2 to 3.8.

**Re-designation Opportunities:**

Some areas of the city are under study for re-designation, to change the planned use of the property from Medium-Density Residential (MDR) to Low-Density Residential (LDR). Re-designating some of these lands would help meet the single family housing need inside the UGB, but would take away some capacity for multi-family housing that may need to be made up elsewhere.

**Table 3:** The following table shows the capacity of the re-designation areas as a range of minimum to maximum re-designation amounts. An additional scenario is shown that represents most of north Eugene and 80% of west Eugene study areas as re-designated.

<b>Potential Re-designation of Medium Density Residential (MDR) to Low Density Residential (LDR) Capacity</b>			
	<b>LDR (du or ac added)</b>	<b>MDR (du or ac lost)</b>	<b>Notes</b>
North Eugene maximum du capacity	79 du	219 du	Combined study area size is 21 acres. Capacity is based on non-committed/protected acreage and assumes a maximum amount of re-designation.
West Eugene maximum du capacity	732 du	2,500 du	Study area is size 271 acres. Analysis is not complete regarding how much area would be re-designated. Capacity based on <u>non-committed/protected acreage</u> and assumes a maximum amount of re-designation.
<b>subtotal range of maximum capacity</b>	<b>79-811 du</b>	<b>219-2,719 du</b>	Range includes north Eugene study area only to north and west Eugene study areas re-designated at maximum amount.
<b>Capacity of 80% re-designated</b>	<b>658 du</b> (north) 19 ac @ 3.8 = 72 du (west) 217 ac @ 2.7 = 586 du	<b>2,194 du</b> (north) 19 ac @ 10.4 = 198 du (west) 217 ac @ 9.2 = 1,996 du	Includes 19 acres of north Eugene and 217 acres (80%) of west Eugene study areas are re-designated. Capacity calculated using average du/ac seen in each study area (rather than the city-wide average for LDR or MDR) and applied to the <u>total</u> lot area.

The following table shows the LDR land need under various housing mix scenarios after LDR land need is adjusted assuming re-designation of either the maximum acreage (north and west Eugene study areas) or assuming most of the north Eugene and about 80% of the west Eugene study area acreage is re-designated. Analysis is continuing regarding how much area to re-designate, therefore the impact of re-designation is not known yet. The resulting capacity will be updated at a later date (prior to adoption).

**Table 4a: Maximum Re-designation Option**

	60 SF/ 40 MF	55 SF/ 45 MF	50 SF/ 50 MF	45 SF/ 55 MF	40 SF/ 60 MF	Notes
<b>Remaining LDR DU Need</b>	<b>2,187 du</b>	<b>1,568 du</b>	<b>892 du</b>	<b>191 du</b>	<b>0 (388 du surplus)</b>	
North & West Eugene <u>maximum</u> re-designation capacity added	811 du	811 du	811 du	811 du	811 du	Capacity assumption based on non-committed/protected acreage.
<b>REMAINING LDR DU NEED (After Maximum Re-designation)</b>	<b>1,376 du</b>	<b>757 du</b>	<b>81 du</b>	<b>0 (620 du surplus)</b>	<b>0 (1,199 du surplus)</b>	
<b>REMAINING LDR LAND NEED (After Maximum Re-designation)</b>	<b>362 ac</b>	<b>199 ac</b>	<b>21 ac</b>	<b>0 (163 ac surplus)</b>	<b>0 ac (315 ac surplus)</b>	Assumes an average of 3.8 du/ac. Actual acreage depends on the characteristics of the expansion area.

**Table 4b: 80% Re-designation Option**

	60 SF/ 40 MF	55 SF/ 45 MF	50 SF/ 50 MF	45 SF/ 55 MF	40 SF/ 60 MF	Notes
<b>Remaining LDR DU Need</b>	<b>2,187 du</b>	<b>1,568 du</b>	<b>892 du</b>	<b>191 du</b>	<b>0 (388 du surplus)</b>	
North & 80% of West Eugene re-designation capacity added	658 du	658 du	658 du	658 du	658 du	Capacity <u>added</u> (thus subtracted from the LDR need) was determined assuming the average du/ac seen in each study area. Actual capacity depends on the characteristics of the lots re-designated.
<b>REMAINING LDR DU NEED (After 80% Re-designation)</b>	<b>1,529 du</b>	<b>910 du</b>	<b>234 du</b>	<b>0 (467 du surplus)</b>	<b>0 (1,046 du surplus)</b>	
<b>REMAING LDR LAND NEED (After 80% Re-designation)</b>	<b>402 ac</b>	<b>240 ac</b>	<b>62 ac</b>	<b>0 (123 ac surplus)</b>	<b>0 ac (275 ac surplus)</b>	Assumes an average of 3.8 du/ac. Actual acreage depends on the characteristics of the expansion area.

**NOTES:**

<sup>1</sup> Estimates may not total exactly due to number rounding.

<sup>2</sup> The densities assumed are an average number of dwelling units (du) per gross acre (ac) based on review of developments from 2001-2008 and applied to the property based on property size, slope and constraints. The following table includes a comparison of average densities assumed here compared to the range of densities allowed by plan designation from the Metro Plan:

**Table 5:**

<b>Land Use Plan Designation</b>	<b>Assumed average densities per gross acre</b>	<b>Metro Plan density range per gross acre</b>
<b>Low Density Residential (LDR)</b>	3.8 du/ac	Up to 10 du/ac
<b>Medium Density Residential (MDR)</b>	10.5 du/ac	Between 10 and 20 du/ac

<sup>3</sup> "ECLA" is the Eugene Comprehensive Lands Assessment, a study completed in 2010 that provided preliminary information on land need.

<sup>4</sup> "Group quarters" refers to dwellings such as dorms, prisons or nursing homes which are typically provided by institutions (colleges, government agencies and health care corporations) that operate outside what is typically defined as the housing market.

<sup>5</sup> Acreage figures are estimates only. Actual acreage will be based on a capacity analysis of areas identified for re-designation or expansion.

## Low Density Residential Partially Vacant Lands Summary

Enclosed is a table summarizing the results of the committee work and staff analysis of partially vacant lands with a plan designation of LDR Low Density Residential. All lots identified as partially vacant will be assigned capacity as part of the revised Buildable Lands Inventory (BLI). It is important to note that the language utilized in this document is meant to be broadly descriptive and does not represent legal or findings-level language. Some of the key assumptions of this analysis are as follows:

- The analysis is much more detailed than the safe harbor provisions for partially vacant lands and represents a methodology that the committee members felt was more thorough and reasoned than the safe harbor assumptions would have been. (see end of document for list of methodologies/variables that were considered but discarded)
- All lots that were in a non-residential use (church, neighborhood commercial, etc.) were excluded from the analysis.
- All lots under 1 acre in size will not be identified as partially vacant lands, nor will they be included on a list or map of partially vacant lands. While some of these lots are assumed to have additional capacity, this capacity will be assigned to the entire pool of lots and will be based on recent trends for similar lots. These trends suggest that 589 dwelling units will be produced on these lands in the next 20 years.
- All lots over 1 acre in size were examined individually. All lots are assumed to have some partially vacant capacity, dependent on their location and their size, with the following exceptions:
  - Developed with or owned by a non-residential use
  - Needs to be reclassified from “developed” to “vacant” land
- Densities were applied using the densities identified during the ECLA process with the following exception:
  - The one exception to the ECLA densities applies to lots over 1 acre and above 5% slope. It is assumed that most of these lots will develop as part of a Planned Unit Development (PUD). Recent data shows that densities achieved in PUD’s are slightly lower than those achieved outside of PUD’s, so this lower density will be applied to these lots.
- Lots with wastewater constraints are in areas that are not currently served by wastewater utilities. There are two options for how these lots will be treated at the conclusion of Envision Eugene:
  - The City believes that these areas can be served during the planning period and will document this in relevant plans if it is not already adequately documented. The lots will be categorized as partially vacant and will be assigned capacity.
  - The City does not believe that these areas can be served during the planning period. The lots will not be assigned partially vacant capacity. Further work would be needed to determine what additional actions may be necessary to address these areas.

- Lots with transportation constraints are in areas that due to ODOT regulations may have limited or no ability to have additional capacity. There are two options for how these lots will be treated at the conclusion of Envision Eugene:
  - ODOT (and the City as necessary) believe that these areas can be served with adequate transportation infrastructure during the planning period that will support additional capacity on these lots. The lots will be categorized as partially vacant and will be assigned capacity.
  - ODOT (and the City as necessary) does not believe that these areas can be served with adequate transportation infrastructure during the planning period that will support additional capacity on these lots. This may impact the partially vacant capacity of these lots, with the potential result that no capacity would be assigned. Further work would be needed to determine what additional actions may be necessary to address these areas.
- There are no lots currently categorized at this time as stormwater constrained. This category of lots is representative of the fact that lots may become stormwater constrained within the next five years as a result of new state and/or city regulations. At that time, the capacity of some lots that are currently categorized as partially vacant could be reduced in part or entirely.

Methodologies or Variables that were Considered but Discarded

The following represent ideas that were considered as part of the process in pursuit of a way to categorize similar lots that may have potentially had similar capacity characteristics. While informative, each of these methodologies was discarded for various reasons including that the number of similar lots was too small, data was incomplete or not sufficient or that the lots did not differ from a larger pool of lots in a significant way.

- Improvement value (high or low)
- Land to improvement value ratio
- Lots lacking an address point
- Lot frontage (eligibility for subdivision/partition)
- Proximity to developable (vacant) land
- Surrounding development pattern
- Lots larger than 5 acres

**Table A.1 Summary of LDR Lots Considered for Categorization as Partially Vacant**

Category	Partially Vacant Lots <sup>2</sup>	Partially Vacant Acres	Deduction for Existing Development (amount per lot) <sup>3</sup>	Buildable Acreage	Density of Infill Lots Created <sup>4</sup>	Dwelling Units Produced <sup>5</sup>
Tax Lots > or = 1 acre:						
Lots > 900' elevation (SHS) <sup>6</sup>	33	57	NA	NA	1.0	54
Lots straddling 900' elevation (SHS) <sup>6</sup>	4	12	NA	NA	varies	16
Lots < 5% slope (500')	158	360	0.33	308	4.1-4.4	1,572
Lots > 5% slope (500')	151	327	0.5	251	2.35-2.55	732
Lots with wastewater constraints (Willow Creek area) <sup>7</sup>	35	122	0.5	105	2.9-4.1	332
Lots with transportation constraints <sup>8</sup>	24	50	0.33	42	4.1-4.4	186
Lots with stormwater constraints	Unknown	Unknown	NA	NA	NA	NA
<b>Total</b>						2,891
<b>Total (without wastewater and transportation constrained lots)</b>						2,373

Notes:

<sup>1</sup>“Total Lots” includes all ECLA developed tax lots that have all or a portion of the tax lot designated LDR. This is the total base for consideration.

<sup>2</sup>“Partially Vacant Lots” are partially vacant tax lots that are >= 1 acre. Tax lots determined not to be partially vacant include those that are:

- Completely residentially developed;
- Developed with or owned by a non-residential use; or
- Needs to be reclassified from “developed” to “vacant” land

<sup>3</sup> Deduction for existing development accounts for existing houses or structures on the lot. This acreage, as well as any committed/protected acreage or acreage under a different plan designation, is removed from the total lot acreage. Only the remaining acreage on the lot is assigned density.

<sup>4</sup> Range in density is due to different densities based on lot size. Buildable areas from 1-5 acres would receive the smaller density, while areas larger than 5 acres would receive the larger density. This accounts for the greater net to gross deduction for larger lots, as documented in ECLA. Densities are based on documented densities from the 2001-2008 period, as established during ECLA. Staff will analyze data from development during the 2009-2010 period to determine if the density data should be updated. As such, minor changes to this density data may result.

<sup>5</sup> All numbers are approximate for purposes of creating a preliminary estimate of dwelling units. Estimates are based on aggregate acreage. Ranges are not a result of uncertainty in assumptions but rather that different densities will be applied to individual lots based on their buildable area size

(1-5 acres or 5+ acres). Final values will be based on a lot by lot assignment of capacity, which is not expected to produce results substantially different from the number of dwelling units shown above.

<sup>6</sup> The South Hills Study (SHS) limits development above 900' and is addressed in the Eugene Code.

<sup>7</sup> Lots with wastewater constraints are primarily over 5% slope, thus the use of 0.5 ac deduction. The final capacity assignment on these lots (and all lots) would be done on a lot-specific basis, thus the deduction for existing development could be 0.33 for lots that have less than 5% slope.

<sup>8</sup> Lots with transportation constraints are all in areas with below 5% slope.

Potential Single Family Housing / Low Density Residential Land Use Efficiency Strategies

Table B.1

Efficiency Measure	Impact on single-family land need based on ECLA assumptions	Analysis	Rationale
<p><b>Allow lots to be created off of an alley in LDR instead of only off a street</b></p>	<p><b>62 units (&gt;15 gross acres)</b></p>	<ul style="list-style-type: none"> <li>selected all lots that are R-1 zoned, 9,000 square feet or more and abut a street and an alley, and have at least 50 ft of frontage on an alley (improved or unimproved)</li> <li>counted each lot as eligible that has a potential alley lot depth of at least 50' in an area that is either vacant or occupied by a minimal accessory structure, and 3,000 square feet for an alley lot in the back.</li> <li>assumed that only 25% would actually develop</li> <li>Analysis A: 453 out of 678 are eligible, 25% of 453 is 113 are likely.</li> <li>Analysis B: all of the above plus the parent lot is within 150' of a street/alley intersection; 248 out of the 453 are w/in 150' of intersection, 25% of 248 is 62 are likely.</li> </ul>	<p>(Original estimate of "small" affect on land need is based on professional judgment and our knowledge of Eugene's land-base. The rationale is based on:</p> <ul style="list-style-type: none"> <li>There are a limited number of alley lots that could be developed.</li> <li>The lots would be developed at the underlying allowed densities, most likely R-1.</li> <li>Some alley lots would have no additional development capacity because of the size of the lot or placement of the existing dwelling on the lot.)</li> </ul> <p>See lot specific analysis conducted under Analysis column.</p>
<p><b>Remove barriers to developing secondary dwelling units in LDR (adjusting SDCs)</b></p>	<p><b>100 SDUs (20 gross acres)</b></p>	<p>looked at the data regarding development of SDUs over the 2001-2008 period and found that:</p> <ul style="list-style-type: none"> <li>About 1% of new dwelling units were SDUs (71 SDUs)</li> <li>Eugene averaged about 10 SDUs per year</li> </ul>	<p>We assumed that decreasing the SDCs for SDUs could increase production of SDUs by some amount. This assumption is, in part, based on the fact that Eugene does not have enough housing that is affordable to lower income households, suggesting that there would be demand for SDUs. A reasonable assumption is that SDU production would increase by 50%, with an average of an additional 5 SDUs produced per year (for an average of a total of 15 SDUs produced annually), resulting in 100 additional SDU produced over the 20 year period.</p>

6/20/11 TRG Meeting

Note:

Alley access lots and secondary dwelling units efficiency strategies would be undertaken in accordance with the goals and recommendations of the Infill Compatibility Standards and Opportunity Siting Task Teams.

Technical Resource Group- 3/5/12