Technical Advisory Committee Meeting
July 11, 2018, 3:00 PM
Newberg City Hall
414 E First Street, Newberg, OR 97132

Agenda

I. Introductions (5 minutes)

II. Overview of the Project (Doug Rux, City of Newberg - 10 min)

III. Overview of Division 38 (Bob Parker, ECONorthwest - 10 min)

IV. Study Area Determination (Bob Parker, ECONorthwest - 20 min)
   - Overview
   - Final Study Area Determination
   - Discussion

V. Serviceability Methods (Bob Parker, ECONorthwest / Dave Simmons, Jacobs, 60 min)
   - Overview of rule requirement
   - Outline of potential analysis steps
   - Key considerations

VI. Next Steps (Cheryl Caines City of Newberg / Bob Parker, ECONorthwest, 10 min)
DATE: July 3, 2018
TO: Newberg 2030 Technical Advisory Committee (TAC) and Citizen Advisory Committee (CAC)
CC: Cheryl Caines and Doug Rux
FROM: Bob Parker and Beth Goodman
SUBJECT: DETERMINING THE NEWBERG BUILDABLE LANDS INVENTORY STUDY AREA

This memorandum is a working description of how Newberg will apply the guidance in the Division 38 rule to determine the preliminary and final study area. At this point, we have made a determination of the preliminary study area based on rule guidance, but not the final study area. We will seek TAC/CAC input on several key elements in order to determine the final study area. We expect there will be much more land than needed in the preliminary study area; additional exclusions are possible and may make sense. We seek direction from the TAC and CAC on the following issues:

- Making additional public service exclusions due to slope constraints per OAR 660-038-0160(5)(a)
- Additional exclusions reflecting Phase II of the Newberg-Dundee Bypass per OAR 660-038-0160(5)(b).
- Land that is isolated from existing service networks by physical, topographic, or other impediments to service provision such that it is impracticable to provide necessary facilities or services per OAR 660-038-0160(5)(c) and (5)(d).

1 Background

The City of Newberg is preparing to evaluate the sufficiency of lands within its Urban Growth Boundary (UGB). Newberg is conducting the boundary amendment using the Division 38 (OAR 660-038) simplified urban growth boundary method. The City contracted ECONorthwest and Jacobs to conduct the technical components of the analysis. The first technical component is determining the UGB study area consistent with OAR 660-038-0160:

660-038-0160. Establishment of Study Area to Evaluate Land for Inclusion in the UGB. Cities shall comply with this rule and OAR 660-038-0170 when determining which lands to include within the UGB in response to a deficit of land to meet long-term needs determined under OAR 660-038-0080, 660-038-0150, or both.

In 2017, Newberg contracted with ECONorthwest to conduct a buildable lands inventory consistent with the Division 38 guidance. That effort included a determination of the preliminary UGB study area. This memorandum builds on our previous work, including a step-by-step review of the procedures ECO used in 2017 for the determination. This memorandum also serves as the Task 3 product as described in our scope of work.


2 Study Area Determination

The first step in the inventory process is to determine the study area. The study area for Newberg includes all land within the Newberg urban growth boundary (UGB) as well as lands outside the UGB as defined by Division 38. Because the process involves geographic determinations, ECO used geographic information systems (GIS) technology to conduct the analysis. Table 1 provides a list of GIS data sets used in this process. ECO assembled the data through a range of sources as listed in Table 1.

The study area determination is foundational to the buildable lands inventory (BLI)—Division 38 requires evaluation of lands outside the UGB for their suitability for inclusion in the UGB. The study area defines which lands must be analyzed for their suitability.

2.1 Land within the Newberg UGB

As required by OAR 660-038, the buildable land inventory will include all land within the current Newberg UGB. From a practical perspective, this means that all lands within tax lots identified by the Yamhill County Assessor that fall within the UGB (as shown by the GIS data) will be inventoried. The inventory then builds from the tax lot-level database to estimates of buildable land by plan designation.

Note that the consulting team has not yet started work on updating the BLI completed in 2017 as Phase I of Newberg 2030. That effort will occur later in 2018 contingent on adjustments to the Division 38 rule that address issues identified in the 2017 Newberg Buildable Lands Inventory.

Table 1. Data Sources for Study Area Determination

<table>
<thead>
<tr>
<th>Data</th>
<th>Source</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxlots – Yamhill</td>
<td>Yamhill County Assessor, provided by City of Newberg</td>
<td>Taxlot fabric for entire county. Fabric includes roads.</td>
</tr>
<tr>
<td>Taxlots – Washington</td>
<td>Metro RLIS – ECO subscription</td>
<td>Taxlots</td>
</tr>
<tr>
<td>Taxlots - Marion</td>
<td>Marion County GIS</td>
<td>Taxlots</td>
</tr>
<tr>
<td>City Boundaries</td>
<td>City</td>
<td>Includes city limit, UGB and urban reserve areas</td>
</tr>
<tr>
<td>UGB</td>
<td>Oregon Spatial Explorer</td>
<td>2015 UGBs</td>
</tr>
<tr>
<td>Counties</td>
<td>Oregon Spatial Explorer</td>
<td>2015 County boundaries</td>
</tr>
<tr>
<td>Streets</td>
<td>City of Newberg</td>
<td>City / county roads</td>
</tr>
<tr>
<td>Streams</td>
<td>City of Newberg</td>
<td>Perennial streams</td>
</tr>
<tr>
<td>Zoning</td>
<td>Yamhill County; Metro RLIS (Washington); Marion County GIS</td>
<td>Zoning outside incorporated city boundaries</td>
</tr>
<tr>
<td>Landslide areas</td>
<td>DOGAMI SLIDO 3.2 database</td>
<td>DOGAMI mapped landslide areas</td>
</tr>
<tr>
<td>Special Flood Area</td>
<td>Oregon Spatial Explorer – statewide FEMA FIRM database</td>
<td>Areas of special flood hazard</td>
</tr>
</tbody>
</table>
2.2 Lands outside the Newberg UBG, including Urban Reserves

OAR 660-038-0160 provides detailed guidance on establishing the study area to evaluate land for inclusion in the UGB. The full text of the requirements is included in Appendix A. For this discussion, we focus on the applicable standards. The rule divides the study area determination into two phases: (1) the preliminary study area; and (2) the final study area. OAR 660-038-0160(1) defines the requirements for the preliminary study area. Items underlined apply to Newberg.

(1) The city shall determine which land to add to the UGB by evaluating alternative locations within a “study area” established pursuant to this rule. To establish the study area, the city must first identify a “preliminary study area” which shall not include land within a different UGB or the corporate limits of a city within a different UGB. The preliminary study area shall include:

(a) All lands in the city’s acknowledged urban reserve, if any;

(b) All lands that are within the following distance from the acknowledged UGB, except as provided in subsection (d):
   
   (A) For cities with a UGB population less than 10,000: one-half mile;
   
   (B) For cities with a UGB population equal to or greater than 10,000: one mile;

(c) All exception areas contiguous to an exception area that includes land within the distance specified in subsection (b) and that are within the following distance from the acknowledged UGB:

   (A) For cities with a UGB population less than 10,000: one mile;

   (B) For cities with a UGB population equal to or greater than 10,000: one and one-half miles;

(d) At the discretion of the city, the preliminary study area may include land that is beyond the distance specified in subsections (b) and (c).

According to the Population Research Center at Portland State University, Newberg’s 2017 population was 23,480. Thus, the provisions for cities with populations over 10,000 apply to Newberg.

Based on OAR 660-038-0160(1), Newberg must include the following areas within the preliminary UGB study area:

- Established urban reserve areas (URAs). Newberg has 551 acres (521 acres in tax lots) in acknowledged URAs.
- All lands within one mile of the UGB (and not in a UGB—portions of the Dundee UGB are within the 1.0- and 1.5-mile buffer).
- Exceptions areas within 1.5 miles of the UGB that are contiguous to land within the one-mile buffer.

Map 1 shows the preliminary study area boundaries based on these requirements.

Map 1. Study Area Buffers

NEWBERG BLI 2016
Newberg UGB, URA, and Study Area Buffers

(2) The city may exclude land from the preliminary study area if it determines that any of the conditions in this section apply to the land:

(a) Based on the standards in section (5) of this rule, it is impracticable to provide necessary public facilities or services to the land;

(b) The land is subject to significant development hazards, due to a risk of:

(A) Landslides: The land consists of a landslide deposit or scarp flank that is described and mapped on the Statewide Landslide Information Database for Oregon (SLIDO) Release 3.2 Geodatabase published by the Oregon Department of Geology and Mineral Industries (DOGAMI) December 2014, provided that the deposit or scarp flank in the data source is mapped at a scale of 1:40,000 or finer. If the owner of a lot or parcel provides the city with a site-specific analysis by a certified engineering
geologist demonstrating that development of the property would not be subject to significant landslide risk, the city may not exclude the lot or parcel under this paragraph;

(B) Flooding, including inundation during storm surges: the land is within the Special Flood Hazard Area (SFHA) identified on the applicable Flood Insurance Rate Map (FIRM);

This section has several other provisions that are either not applicable to Newberg or which the City has chosen not to apply. Based on these provisions, the City removed the following areas from further consideration:

- **Areas in Marion County.** The Willamette River is the boundary between Yamhill and Marion County. A portion of the Newberg UGB is adjacent to the river. Moreover, areas within the one- and 1.5-mile buffers fall within Marion County. The City finds that it is impracticable to provide necessary public services to these areas as described in OAR 660-038-0160(7)(b).

- **Landslide areas.** Several areas within the one- and 1.5-mile buffer are identified in DOGAMI’s SLIDO 3.2 database. These were removed from further consideration pursuant to OAR 660-038-0160(2)(b)(A).

- **Flood areas.** Several areas within the one- and 1.5-mile buffer are identified in the Special Flood Hazard Area by FEMA. These were removed from further consideration pursuant to OAR 660-038-0160(2)(b)(B).

- **Dundee UGB.** Consistent with OAR 660-038-0160(1) areas within the Dundee UGB are removed from further consideration.

Map 2 shows areas excluded from the preliminary study area.
The final step in defining the preliminary study area is to identify exception areas (e.g., lands zoned rural residential, commercial, or industrial) between the one and 1.5-mile buffer that are contiguous to exception areas within the one-mile buffer. Map 3 shows taxlots included in the preliminary study area. The City does not anticipate splitting taxlots based on the buffers. The city chose not to include lands outside the 1.5-mile buffer as part of the preliminary study area.

With respect to lands shown on Map 3:

- Lands in acknowledged urban reserve areas are included in the preliminary study area.
- Lands not shown within the 1.5-mile buffer are resource lands and are not required to be included in the preliminary study area.
- The full area of lots that intersect the one- and 1.5-mile buffers were included. The rule does not explicitly require the city evaluate these lands.
Table 1 summarizes lands in Newberg’s URAs and the Division 38 preliminary study area. Newberg’s URAs have a total of 527 acres in 122 tax lots. The average tax lot size in the URAs is 4.3 acres. Excluding the URAs, the Division 38 determined preliminary study area includes 10,109 acres in 1,697 tax lots. The average tax lot size in the UGB study area is 6.0 acres.

To define the study area, we included the entire area of any tax lot that was within or intersected the required 1.0- and 1.5-mile buffers. Analyzed by zoning, the study area includes 4,337 acres in 1,293 tax lots considered exceptions areas. The average tax lot size for exceptions lands within the UGB study area is 3.4 acres. The study area also includes 5,772 acres in 404 tax lots with resource zoning (e.g., exclusive farm or forest zones). Not surprisingly, the average size of tax lots with resource zoning was, at 14.3 acres, much larger than exceptions lands.
Table 1. Summary of Lands in Newberg Urban Reserve Areas and Division 38 UGB Preliminary Study Area

<table>
<thead>
<tr>
<th>Area</th>
<th>Tax Lots</th>
<th>Acres</th>
<th>Average Lot Size (ac)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Reserve</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All land in taxlots</td>
<td>122</td>
<td>527</td>
<td>4.3</td>
</tr>
<tr>
<td>UGB Study Area (outside URA)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All land in taxlots</td>
<td>1,697</td>
<td>10,109</td>
<td>6.0</td>
</tr>
<tr>
<td>Exceptions Areas</td>
<td>1293</td>
<td>4,337</td>
<td>3.4</td>
</tr>
<tr>
<td>Resource land</td>
<td>404</td>
<td>5,772</td>
<td>14.3</td>
</tr>
</tbody>
</table>

2.3 Final Study Area Determination

We have not made the final study area determination and will seek TAC/CAC input of several key elements. We expect there will be much more land than needed in the preliminary study area; additional exclusions are possible and may make sense. These include:

- Making additional public service exclusions due to slope constraints per OAR 660-038-0160(5)(a)
- Additional exclusions reflecting Phase II of the Newberg-Dundee Bypass per OAR 660-038-0160(5)(b).
- Land that is isolated from existing service networks by physical, topographic, or other impediments to service provision such that it is impracticable to provide necessary facilities or services per OAR 660-038-0160(5)(c) and (5)(d).

Additional lands may be removed from consideration in the final study area. For example, a possible impediment could be the railroad located in the northeastern area of the study area. Division 38 provides the following guidance on additional exclusions (OAR 660-038-0160(3-8). The full text is included in the appendix.

This section outlines the potential exclusions and provides some commentary.

(3) After excluding land from the preliminary study area under section (2), the city must adjust the study area, if necessary, so that it includes an amount of land that is at least twice the amount of land needed to satisfy the combined need deficiency determined under OAR 660-038-0080 and 660-038-0150. Such adjustment shall be made by expanding the applicable distance specified under section (1) and applying section (2) to the expanded area.

Comment: While we have not estimated the potential land deficit, we expect it will be considerably less than the 10,000+ acres identified in the preliminary study area. Thus, we expect to make additional exclusions in the final study area determination.
(4) For purposes of evaluating the priority of land under OAR 660-038-0170, the “study area” shall consist of all land that remains in the preliminary study area described in section (1) of this rule after adjustments to the area based on sections (2) and (3).

(5) For purposes of subsection (2)(a), the city may consider it impracticable to provide necessary public facilities or services to the following lands:

(a) Contiguous areas of at least five acres where 75 percent or more of the land has a slope of 25 percent or greater; provided that contiguous areas 20 acres or more that are less than 25 percent slope may not be excluded under this subsection. Slope shall be measured as the increase in elevation divided by the horizontal distance at maximum ten-foot contour intervals;

Comment: Map 4 shows the preliminary study area with buffers, zoning and some exclusion areas. It also shows slope. The map suggests that “Contiguous areas of at least five acres where 75 percent or more of the land has a slope of 25 percent or greater” may exist in the preliminary study area.

Map 4. Newberg Study Area, Buffers, Zoning, and Exclusion Areas (including 10% and 25% Slope Constraint)
(b) Lands requiring the construction of a new freeway interchange, overpass, underpass, or similar improvement to accommodate planned urban development providing such improvement is not currently identified in the Statewide Transportation Improvement Program (STIP) for construction within the planning period;

**Comment:** Funding for portions of Phase II of the Newberg-Dundee Bypass is now in the STIP (Statewide Transportation Improvement Program). The specific areas are east of the UGB and will connect the bypass from the current terminus at Highway 219, to a proposed interchange at Rex Hill at Highway 99. We are collecting information about the Phase II alignment, ODOT right-of-way acquisitions and other relevant information.

(c) Land that is isolated from existing service networks by physical, topographic, or other impediments to service provision such that it is impracticable to provide necessary facilities or services to the land within the planning period. The city’s determination shall be based on an evaluation of:

(A) The likely amount of development that could occur on the land within the planning period;

(B) The likely cost of facilities and services; and,

(C) Any substantial evidence collected by or presented to the city regarding how similarly situated land in the region has, or has not, developed over time.

(d) As used in this section, “impediments to service provision” may include but are not limited to:

(A) Major rivers or other water bodies that would require new bridge crossings to serve planned urban development;

(B) Topographic features such as canyons or ridges with slopes exceeding 40 percent and vertical relief of greater than 80 feet;

(C) Freeways, rail lines, or other restricted access corridors that would require new grade separated crossings to serve planned urban development;

(D) Significant scenic, natural, cultural or recreational resources on an acknowledged plan inventory and subject protection measures under the plan or implementing regulations, or on a published state or federal inventory, that would prohibit or substantially impede the placement or construction of necessary public facilities and services.

**Comment:** Areas north of, and outside, the current UGB and URA may meet the standard of being “isolated from existing service networks by physical, topographic, or other impediments to service provision...” We propose to look more carefully at these lands and make a determination of whether some should be excluded in the final determination.
(6) Land may not be excluded from the preliminary study area based on a finding of impracticability that is primarily a result of existing development patterns. However, a city may forecast development capacity for such land as provided in OAR 660-038-0170(1)(d).

**Comment:** Consistent with the rule, the City does not propose to exclude any lands on the basis of existing development patterns.
3  Appendix A: Division 38 Determination of Study Area

660-038-0160: Establishment of Study Area to Evaluate Land for Inclusion in the UGB

Cities shall comply with this rule and OAR 660-038-0170 when determining which lands to include within the UGB in response to a deficit of land to meet long-term needs determined under OAR 660-038-0080, 660-038-0150, or both.

(1) The city shall determine which land to add to the UGB by evaluating alternative locations within a “study area” established pursuant to this rule. To establish the study area, the city must first identify a “preliminary study area” which shall not include land within a different UGB or the corporate limits of a city within a different UGB. The preliminary study area shall include:

(a) All lands in the city’s acknowledged urban reserve, if any;

(b) All lands that are within the following distance from the acknowledged UGB, except as provided in subsection (d):

(A) For cities with a UGB population less than 10,000: one-half mile;

(B) For cities with a UGB population equal to or greater than 10,000: one mile;

(c) All exception areas contiguous to an exception area that includes land within the distance specified in subsection (b) and that are within the following distance from the acknowledged UGB:

(A) For cities with a UGB population less than 10,000: one mile;

(B) For cities with a UGB population equal to or greater than 10,000: one and one-half miles;

(d) At the discretion of the city, the preliminary study area may include land that is beyond the distance specified in subsections (b) and (c).

(2) The city may exclude land from the preliminary study area if it determines that any of the conditions in this section apply to the land:

(a) Based on the standards in section (5) of this rule, it is impracticable to provide necessary public facilities or services to the land;

(b) The land is subject to significant development hazards, due to a risk of:

(A) Landslides: The land consists of a landslide deposit or scarp flank that is described and mapped on the Statewide Landslide Information Database for Oregon (SLIDO) Release 3.2 Geodatabase published by the Oregon Department of Geology and Mineral Industries (DOGAMI) December 2014, provided that the deposit or scarp flank in the
data source is mapped at a scale of 1:40,000 or finer. If the owner of a lot or parcel provides the city with a site-specific analysis by a certified engineering geologist demonstrating that development of the property would not be subject to significant landslide risk, the city may not exclude the lot or parcel under this paragraph;

(B) Flooding, including inundation during storm surges: the land is within the Special Flood Hazard Area (SFHA) identified on the applicable Flood Insurance Rate Map (FIRM);

(C) Tsunamis: the land is within a tsunami inundation zone established pursuant to ORS 455.446.

(c) The land consists of a significant scenic, natural, cultural or recreational resource described in this subsection:

(A) Land that is designated in an acknowledged comprehensive plan prior to initiation of the UGB amendment, or that is mapped on a published state or federal inventory at a scale sufficient to determine its location for purposes of this rule, as:

   (i) Critical or essential habitat for a species listed by a state or federal agency as threatened or endangered;

   (ii) Core habitat for Greater Sage Grouse; or

   (iii) Migration corridors or big game winter range, except where located on lands designated as urban reserves or exception areas;

(B) Federal Wild and Scenic Rivers and State Scenic Waterways, including Related Adjacent Lands described by ORS 390.805, as mapped by the applicable state or federal agency responsible for that scenic program;

(C) Designated Natural Areas on the Oregon State Register of Natural Heritage Resources;

(D) Wellhead protection areas described under OAR 660-023-0140 and delineated on a local comprehensive plan;

(E) Aquatic areas subject to Statewide Planning Goal 16 that are in a Natural or Conservation management unit designated in an acknowledged comprehensive plan;

(F) Lands subject to acknowledged comprehensive plan or land use regulations that implement Statewide Planning Goal 17, Coastal Shoreland, Use Requirement 1;

(G) Lands subject to acknowledged comprehensive plan or land use regulations that implement Statewide Planning Goal 18, Implementation Requirement 2.
(d) The land is owned by the federal government and managed primarily for rural uses.

(3) After excluding land from the preliminary study area under section (2), the city must adjust the study area, if necessary, so that it includes an amount of land that is at least twice the amount of land needed to satisfy the combined need deficiency determined under OAR 660-038-0080 and 660-038-0150. Such adjustment shall be made by expanding the applicable distance specified under section (1) and applying section (2) to the expanded area.

(4) For purposes of evaluating the priority of land under OAR 660-038-0170, the “study area” shall consist of all land that remains in the preliminary study area described in section (1) of this rule after adjustments to the area based on sections (2) and (3).

(5) For purposes of subsection (2)(a), the city may consider it impracticable to provide necessary public facilities or services to the following lands:

   (a) Contiguous areas of at least five acres where 75 percent or more of the land has a slope of 25 percent or greater; provided that contiguous areas 20 acres or more that are less than 25 percent slope may not be excluded under this subsection. Slope shall be measured as the increase in elevation divided by the horizontal distance at maximum ten-foot contour intervals;

   (b) Lands requiring the construction of a new freeway interchange, overpass, underpass, or similar improvement to accommodate planned urban development providing such improvement is not currently identified in the Statewide Transportation Improvement Program (STIP) for construction within the planning period;

   (c) Land that is isolated from existing service networks by physical, topographic, or other impediments to service provision such that it is impracticable to provide necessary facilities or services to the land within the planning period. The city’s determination shall be based on an evaluation of:

      (A) The likely amount of development that could occur on the land within the planning period;

      (B) The likely cost of facilities and services; and,

      (C) Any substantial evidence collected by or presented to the city regarding how similarly situated land in the region has, or has not, developed over time.

   (d) As used in this section, “impediments to service provision” may include but are not limited to:

      (A) Major rivers or other water bodies that would require new bridge crossings to serve planned urban development;
(B) Topographic features such as canyons or ridges with slopes exceeding 40 percent and vertical relief of greater than 80 feet;

(C) Freeways, rail lines, or other restricted access corridors that would require new grade separated crossings to serve planned urban development;

(D) Significant scenic, natural, cultural or recreational resources on an acknowledged plan inventory and subject protection measures under the plan or implementing regulations, or on a published state or federal inventory, that would prohibit or substantially impede the placement or construction of necessary public facilities and services.

(6) Land may not be excluded from the preliminary study area based on a finding of impracticability that is primarily a result of existing development patterns. However, a city may forecast development capacity for such land as provided in OAR 660-038-0170(1)(d).

(7) A city that has a population of 10,000 or more that evaluates or amends its UGB using a method described in this division, must notify districts and counties that have territory within the study area in the manner required by ORS 197A.315 and meet other applicable requirements in that statute.

Statutory/Other Authority: ORS 197.040, 197A.305, 197A.320 & 197.235
Statutes/Other Implemented: ORS 197A.300, 197A.302, 197A.305, 197A.310, 197A.312, 197A.315, 197A.320 & 197A.325
History:
LCDD 6-2015, f. 12-29-15, cert. ef. 1-1-16
DATE: July 5, 2018  
TO: Newberg 2030 Technical Advisory Committee (TAC) and Citizen Advisory Committee (CAC)  
CC: Cheryl Caines and Doug Rux, City of Newberg  
FROM: Bob Parker and Beth Goodman—ECONorthwest; Dave Simmons—Jacobs  
SUBJECT: DRAFT METHODOLOGY FOR NEWBERG DIVISION 38 SERVICEABILITY ANALYSIS

This memorandum is a working description of how Newberg will apply the guidance in the Division 38 rule to determine and conduct the required serviceability analysis. It provides interpretations of key elements of the rule, as well as an outline of the proposed approach. We intentionally do not propose a final method; we want committee direction on key issues related to the analysis before we finalize the approach.

We seek direction from the TAC and CAC on the following issues:

- Agreement with rule interpretation
- How much detail is required to meet the rule intent?
- Does the rule require site specific analysis of expansion areas?

Again, the key question here is about the level of amount of analysis that is required to meet the standard. The language of OAR 660-038-0200 suggests that the analysis only applies to lands proposed for inclusion in the UGB. Thus, we propose to proceed by only analyzing those lands proposed for inclusion. No previous analyses exist, so we have no examples to build from. Committee member perspectives will be useful in working through both the methodology and the analysis.

With respect to the level of detail, we propose to use a conceptual planning approach to meet the rule intent. That means identifying major infrastructure needs and analyzing the city’s ability to provide that infrastructure.

**Background**

The City of Newberg is preparing to evaluate the sufficiency of lands within its Urban Growth Boundary (UGB). Newberg is conducting a boundary amendment analysis using the Division 38 (OAR 660-038) simplified urban growth boundary method. The City contracted with ECONorthwest and Jacobs to conduct the technical components of the analysis. A key technical component is the serviceability analysis. The rule describes it as follows:

**660-038-0200: Serviceability.** A city that amends its UGB using this division shall demonstrate that lands included within the UGB: (a) Provide sufficient serviceable land for at least a seven-year period, and (b) Can all be serviceable over a 14-year period.
The serviceability is the most complex and least clear element of this project. Moreover, no other cities have used the approach, so we have no examples to guide the analysis. As a result, the City chose to prioritize the serviceability analysis and move it into the earliest parts of the project. To address this complexity in relation to the serviceability analysis, we start with an exploration of potential methods to conduct the serviceability analysis.

Task 4 of our work program requires us to develop a memorandum that describes how we propose to operationalize the rule requirements around serviceability. This memorandum is an early draft of the framework for the serviceability analysis and the proposed methods. We expect to add considerable detail to the approach as we refine the methods. The administrative rule guidance (OAR 660-038-0200) is included in Appendix A.

This early draft is also intended to inform discussion at the July 11 Technical Advisory Committee (TAC) and Citizen Advisory Committee (CAC) meetings. To facilitate committee input, we include internal notes/comments to highlight areas for discussion.

Rule Intent

Our interpretation of the broad intent of the analysis is for cities to demonstrate that they have adequate public facilities available, or planned, to service lands included in UGB expansions under the rule. The rule is clear that the analysis only applies to lands included in the UGB (or proposed for inclusion):

(1) Pursuant to ORS 197A.310(3) or 197A.312(3), a city that amends its UGB using this division shall demonstrate that lands included within the UGB:

(a) Provide sufficient serviceable land for at least a seven-year period, and
(b) Can all be serviceable over a 14-year period.

The applicability of the rule requirement is important as it effects both how much land must be evaluated as well as which land must be evaluated. From a process perspective, this means that the City will need to work through many other steps prior to the serviceability analysis. Functionally, the City will need to complete the buildable land inventory, the land need calculations, and the alternatives analysis, including the required findings, to identify which areas it proposes to expand into. The City will then need to conduct the serviceability analysis on lands proposed to be included in the UGB.

Exhibit 1 provides a broad overview of the Division 38 process.
Exhibit 1. Overview of Division 38 Process

I. Determine land sufficiency in current UGB

Residential Land

- Forecast needed housing
  660-038-0050 (DCDD model)
- Determine mix of housing
  660-038-0050
- Determine amount of land needed for each housing type
  660-038-0050
- Conduct residential BLI
  660-038-0050
- Adjust inventory for constrained lands
  660-038-0070

Employment Land Need

- Forecast employment
  660-038-0090
- Based on population growth
  660-038-0090
- Adjust inventory for constrained lands
  660-038-0130
- Based on OED forecast
  660-038-0130
- Determine if UGB expansion is required to meet needs
  660-038-0140

If step I determines a deficit of employment or residential lands, then continue to step II

II. Evaluate lands for inclusion in UGB

1A. Establish UGB Study Area
  660-038-0050

- Establish "preliminary" UGB Study Area
  660-038-0041

- Identify preliminary UGB study area exclusions
  660-038-0050

- Identify lands in preliminary study area that are impracticable to serve
  660-038-0050

- If necessary, adjust UGB Study Area to include at least 2X the land need
  660-038-0050

1B. Evaluate land for inclusion in UGB
  660-038-0170

- Identify study area units (<100 ac)
  660-038-0050

- Apply priority scheme
  660-038-0170

- Apply Goal 15 factors, then comprehensive plan criteria
  660-038-0170

For Priority 1, Screen for suitability if insufficient priority 1 lands exist, then look at priority 2 and so on

III. Serviceability analysis

1. Analysis for 7-year period (660-038-0002)

- Identify type/amount of needed capacity
- Step 3: Identify system improvements required
- Step 4: Identify funding methods

2. Analysis for 7-year period (660-038-0200)

- Repeat steps for each service: Water, Wastewater, Transportation

III. Findings and Adoption

- Adopt findings supporting the UGB amendment
  660-038-0170
The rule is specific on which public facilities must be analyzed: Sewer, Water, and Transportation. OAR 660-038-0200(2) states:

“…a city shall demonstrate adequate sewer, water and transportation capacity to serve at least seven years of planned urban development based on system capacity and system improvements that are identified and described in an acknowledged public facilities plan, an acknowledged Transportation System Plan, a capital improvement plan, or the findings adopted by a city in support of a decision to amend its UGB. This shall consist of sewer, water and transportation capacity that is available or can be provided.”

Our interpretation of the rule is that subsection 2 addresses required analysis for the seven-year period, and subsection 3, for the 14-year period. The following sections describe the 7- and 14-year requirements.

**Seven-year period (subsection 2)**

It is worthwhile parsing out the elements of subsection 2 and the related language in the subsections. Subsections 2(a) and 2(b) appear to provide two pathways for the analysis. We note that the rule states “This shall consist of sewer, water and transportation capacity that is available or can be provided based on subsection (a) or (b) of this section, or both.”

Emphasis in the following sections is provided by the authors.

- *A city shall demonstrate adequate sewer, water and transportation capacity.* The operational term here is *adequate*. Subsection 2(a) provides additional guidance.

(a) *Capacity is available:* existing sewer, water and transportation system capacity sufficient to serve some or all of the anticipated seven-year demand is available. To demonstrate available sewer and water capacity, a city may rely upon the system capacity documentation contained in the *acknowledged Public Facilities Plan* adopted pursuant to OAR chapter 660, division 11, and documentation from city or other service provider records of current system condition and demand. To demonstrate available transportation system capacity, a city may rely upon the system capacity documentation contained in an *acknowledged Transportation System Plan (TSP)* adopted pursuant to OAR chapter 660, division 12.

This pathway appears to require use of acknowledged plans is sufficient to demonstrate capacity or documentation from service providers about current condition and demand. We parse the language in more detail below:

- *To serve at least seven years of planned urban development.* The rule requires the city demonstrate it can provide sufficient land for at least a seven-year period; and that all lands included in a UGB be serviceable over a 14-year period (subsection 3).
• Based on system capacity and system improvements that are identified and described in an acknowledged public facilities plan, an acknowledged Transportation System Plan, a capital improvement plan, or the findings adopted by a city in support of a decision to amend its UGB. Acknowledged plans are preferred; cities may also develop additional findings related to serviceability in support of a UGB amendment.

• **This shall consist of sewer, water and transportation capacity that is available or can be provided.** Cities must demonstrate that capacity to accommodate additional growth is either currently available or can be provided. We interpret this portion of the rule to mean that capacity can be provided within the seven- or 14-year period.

Subsection 2(b) provides an alternative pathway:

(b) **Capacity can be provided** within seven years: sewer, water and transportation system capacity sufficient to serve the anticipated seven-year demand can be provided by identified system improvements that:

(A) Are fully funded and scheduled for construction within a seven-year period;

(B) Can be made subject to committed financing, which means a city or other service provider has one or more dedicated funding mechanisms in place that will generate sufficient revenue to fund the construction of such improvements within a seven-year period; or

(C) Can have committed financing in place, which means a city or other service provider does not have dedicated funding mechanisms in place but has identified funding sources and methods that will be implemented by the city or other service provider, and that will generate sufficient revenues to fund the construction of such improvements within a seven-year period.

The subsection 2(b) pathway focuses more on the city’s financial capacity.

**Comment:** We believe the Land Conservation and Development Commission’s intent was that the analysis be done at the planning level. The language suggests that reviewing existing plans is a starting point. We note that existing plans will not address lands outside the UGB; thus, additional findings will be required to address any proposed expansion areas.

The key question here is about the level of amount of analysis that is required to meet the standard. No previous analyses exist, so we have no examples to build from. Committee member perspectives will be useful in working through both the methodology and the analysis.

**14-year period (subsection 3)**

The rule also establishes a 14-year standard—that all lands included in the UGB can be in place within 14 years. Subsection 3 states:
(3) For purposes of subsection (1)(b) of this rule, to demonstrate that adequate sewer, water and transportation capacity can be in place for that portion of the 14-year period for which capacity has not been demonstrated in accordance with section (2) of this rule, a city shall:

(a) Identify the type and amount of the needed capacity;

(b) Identify the system improvements required to provide the needed capacity; and,

(c) Identify the funding method(s) that is or can be in place to provide committed financing in an amount sufficient to provide the needed capacity within the 14-year period. This identification shall include:

(A) The type of proposed funding method(s);

(B) The statutory or other legal authority for establishing the proposed funding method(s);

(C) The timing of the establishment of the proposed funding method(s); and,

(D) The projected revenues to be generated by the proposed funding method(s).

Comments: Our interpretation of this language is that it intends for the city to document needed infrastructure to fully service the 14-year land supply. Subsection 3 requires what amounts to a funding plan for the lands. Our interpretation of this is that it will require a detailed review of city budget documents as well as detailed documentation of the city’s financial capacity.

Implicit in the language is that a determination of funding deficiencies is determined. It does not, however, have specific language that requires cost estimates of the infrastructure required to service the lands.

Again, the key question here is about the level of amount of analysis that is required to meet the standard. No previous analyses exist, so we have no examples to build from. Committee member perspectives will be useful in working through both the methodology and the analysis.

General Comments and Questions

Our review of the rule raises a broader question about the burden of proof – is it generally for all lands in the current and proposed UGB (e.g., at the landscape level), or does it require site specific analysis of expansion areas? Our interpretation is it is both. Subsection (1) states: “...a city that amends its UGB using this division shall demonstrate that lands included within the UGB...”

The interpretation of this language has important implications with respect to how much detail is required to meet these standards.
In the 2017 BLI we identified more than 10,000 acres in the preliminary study area. Consistent with the last question above, the rule suggests that all of these lands must be evaluated. Our back-of-the-envelope estimate is that the cost of such an analysis would run into seven figures.

The rule, however, requires the city have a study area that is at least twice as large as land need. While we have not calculated land need at this time, we expect it will be much less than 5,000 acres. Thus, we want to discuss the possibility of substantially reducing lands in the final study area through substantial screening using the study area rule criteria. **Our interpretation of the rule is that it only requires lands proposed for inclusion in the UGB to be analyzed under the OAR 660-038-0200 serviceability requirements.**

**Potential Methods**

This section parses out the potential steps to conduct a serviceability analysis. These are intentionally not fully formed at this point and amount to a sketch outline of how the consulting team might approach the analysis.

**Step 1: Determine Growth Increments**

This is the basic growth forecast – population, housing units and jobs, built space. These also convert to acres, but acreages are probably not very useful for service demand.

There is no specific guidance in the serviceability section about this – it is addressed in other areas of the rule.

**Step 2: Identify the type and amount of the needed capacity**

(3)(a) Identify the type and amount of the needed capacity;

This is a dimensional analysis that converts new people into dwelling units by type, and jobs into built space, and then into the appropriate metric (wastewater generation, water demand, transportation demand).

**Step 3: Identify system improvements required to provide the needed capacity**

This loops in both sections 2 and 3:

(a) **Capacity is available:** existing sewer, water and transportation system capacity sufficient to serve some or all of the anticipated seven-year demand is available;

And,

(b) **Capacity can be provided** within seven years:

(3)(b) Identify the system improvements required to provide the needed capacity
Step 4: Identify funding methods

(b) Capacity can be provided within seven years:

(A) Are fully funded and scheduled for construction within a seven-year period;

(B) Can be made subject to committed financing,

(C) Can have committed financing in place

(3)(c) Identify the funding method(s) that is or can be in place to provide committed financing in an amount sufficient to provide the needed capacity within the 14-year period. This identification shall include:

(A) The type of proposed funding method(s);

(B) The statutory or other legal authority for establishing the proposed funding method(s);

(C) The timing of the establishment of the proposed funding method(s); and,

(D) The projected revenues to be generated by the proposed funding method(s).

Steps 2-4 get repeated three times – one for each service. Following is the guidance on each service.

Wastewater; Water

(a) Sewer capacity, which consists of wastewater treatment facility capacity and collection system capacity, including interceptors, lift or pump stations, force mains, and main sewer lines;

(b) Water capacity, including:

(A) Available water rights;

(B) Water treatment capacity;

(C) Water storage capacity, including system reserves needed for fire suppression; and,

(D) Distribution system capacity, including pumping facilities, primary and secondary feeders, and distributor mains

Comments: One possible interpretation is that master plan updates would effectively be required for the water and wastewater systems. The current master plans do not consider lands that are not already part of the UGB. The Water System Master Plan does note four urban reserve areas (URAs) outside of the UGB; however, the plan notes that these areas were not modelled for serviceability because those areas are anticipated to be developed outside of the 20-year planning horizon for that plan. Both the water and wastewater master plans would
need to be updated in order to identify the impacts of developing additional areas to the water distribution and treatment systems and the wastewater collection and treatments systems.

**Transportation**

Transportation capacity, including:

(A) Networks of pedestrian, bicycle, transit, and street facilities; and

(B) Performance of the planned transportation system measured against adopted transportation performance standards set forth in the applicable acknowledged TSP.

**Comments:** The way the rule is written, it could be interpreted that a Transportation System Plan (TSP) update would effectively be required. A problem with the rule below 2A - to demonstrate available transportation system capacity, a city may rely upon the system capacity documentation contained in an acknowledged TSP adopted pursuant to OAR chapter 660, division 12: TSPs do not consider lands that are not already part of the UGB at the time of the plan’s creation, unless the City is anticipating concurrent updates to its comprehensive plan to include new UGB expansion areas, which would then reasonably be included in the TSP analysis. Thus, a City cannot utilize an existing TSP to show that it has enough capacity to handle new UGB additions that were never considered in TSP development.

This analysis would require a series of professional judgements/assumptions about the distribution and impact of the UGB additions on system travel. This continues to raise the question of what is the burden of proof required to meet the intent of the rule.

Another issue is around performance standards: in theory, a jurisdiction could revise performance standards based on the results of either of the two studies proposed above (or could do it arbitrarily!) to just accept higher levels of congestion. This would not address the issue of state mobility standards on any state facilities potentially affected.

**Financing**

(5) For purposes of this rule, “committed financing” means financing methods for which a city or other service provider has identified and documented the following: the authority to establish and implement the method, the amount of funding to be generated, the purpose to which the funding will be dedicated, and the repayment method and schedule for any bonded or credit indebtedness is identified and documented. Committed financing includes, but is not limited to, funding that is:

(a) Included in the adopted budget of the service provider;

(b) Designated for projects included in the Statewide Transportation Improvement Program;

(c) Provided by the Department of Interior through the Bureau of Indian Affairs Tribal Transportation Plan (TTP) program pursuant to 25 CFR Part 170;
(d) Provided through a development agreement entered into pursuant to ORS 94.504 to 94.528;

(e) Provided by system development charges established pursuant to ORS 223.997 to 223.314 or by other authorized development fees, conditions of approval or exactions;

(f) Provided by utility fees;

(g) Provided through Local Improvement District or Reimbursement District assessments; or

(h) Provided by revenue bonds, financing agreements, voter approved general obligation bonds or other authorized debt instruments.

Comments: At a minimum, this implies a funding strategy analysis. ECO conducted such a study for the South Industrial Area of Sherwood, Tualatin, and Wilsonville in 2016; that study cost $60,000. Some of the language could be interpreted as requiring a funding plan. As a foundation, specific improvements and cost estimates are necessary to develop funding plans. Following is a general overview of the infrastructure funding and development process.

The process for getting projects funded and built has three sequential and overlapping phases: (1) planning; (2) funding and financing; and (3) project development. Exhibit 1 shows these phases and relevant steps within each phase. This process can apply to water, wastewater and transportation? infrastructure.

**Exhibit 1. Infrastructure Development Process**

A funding strategy provides a road map for completing the second phase of the infrastructure development process—funding and financing. The funding and financing phase of infrastructure planning include:

- Identifying the potential funding sources available, and evaluating their relevance and funding capacity.
Creating a broad strategy for the study area as a whole, identifying and selecting preferred local funding sources, clarifying expectations for state and federal sources that could be leveraged, and determining what funding and financing mechanisms could be used.

Creating specific funding plans that define what funding sources will be used and how much each source will contribute.

Funding plan implementation including determining allocations, securing funding, and financing projects.

**Comment:** Our interpretation of the rule is that it requires analysis that looks more like a funding strategy than a funding plan. It would be very difficult to develop a funding plan without site specific development concepts and the infrastructure projects and project cost estimates needed to support that development.
Appendix A: Division 38 Serviceability Analysis

660-038-0200: Serviceability

(1) Pursuant to ORS 197A.310(3) or 197A.312(3), a city that amends its UGB using this division shall demonstrate that lands included within the UGB:

(a) Provide sufficient serviceable land for at least a seven-year period, and

(b) Can all be serviceable over a 14-year period.

(2) For purposes of subsection (1)(a) of this rule, a city shall demonstrate adequate sewer, water and transportation capacity to serve at least seven years of planned urban development based on system capacity and system improvements that are identified and described in an acknowledged public facilities plan, an acknowledged Transportation System Plan, a capital improvement plan, or the findings adopted by a city in support of a decision to amend its UGB. This shall consist of sewer, water and transportation capacity that is available or can be provided based on subsection (a) or (b) of this section, or both:

(a) Capacity is available: existing sewer, water and transportation system capacity sufficient to serve some or all of the anticipated seven-year demand is available. To demonstrate available sewer and water capacity, a city may rely upon the system capacity documentation contained in the acknowledged Public Facilities Plan adopted pursuant to OAR chapter 660, division 11, and documentation from city or other service provider records of current system condition and demand. To demonstrate available transportation system capacity, a city may rely upon the system capacity documentation contained in an acknowledged Transportation System Plan (TSP) adopted pursuant to OAR chapter 660, division 12;

(b) Capacity can be provided within seven years: sewer, water and transportation system capacity sufficient to serve the anticipated seven-year demand can be provided by identified system improvements that:

(A) Are fully funded and scheduled for construction within a seven-year period;

(B) Can be made subject to committed financing, which means a city or other service provider has one or more dedicated funding mechanisms in place that will generate sufficient revenue to fund the construction of such improvements within a seven-year period; or

(C) Can have committed financing in place, which means a city or other service provider does not have dedicated funding mechanisms in place but has identified funding sources and methods that will be implemented by the city or other service provider, and that will generate sufficient revenues to fund the construction of such improvements within a seven-year period.
(3) For purposes of subsection (1)(b) of this rule, to demonstrate that adequate sewer, water and transportation capacity can be in place for that portion of the 14-year period for which capacity has not been demonstrated in accordance with section (2) of this rule, a city shall:

(a) Identify the type and amount of the needed capacity;

(b) Identify the system improvements required to provide the needed capacity; and,

(c) Identify the funding method(s) that is or can be in place to provide committed financing in an amount sufficient to provide the needed capacity within the 14-year period. This identification shall include:

   (A) The type of proposed funding method(s);

   (B) The statutory or other legal authority for establishing the proposed funding method(s);

   (C) The timing of the establishment of the proposed funding method(s); and,

   (D) The projected revenues to be generated by the proposed funding method(s).

(4) For purposes of this rule, “sewer, water and transportation capacity for planned urban development” includes:

(a) Sewer capacity, which consists of wastewater treatment facility capacity and collection system capacity, including interceptors, lift or pump stations, force mains, and main sewer lines;

(b) Water capacity, including:

   (A) Available water rights;

   (B) Water treatment capacity;

   (C) Water storage capacity, including system reserves needed for fire suppression; and,

   (D) Distribution system capacity, including pumping facilities, primary and secondary feeders, and distributor mains; and

(c) Transportation capacity, including:

   (A) Networks of pedestrian, bicycle, transit, and street facilities; and

   (B) Performance of the planned transportation system measured against adopted transportation performance standards set forth in the applicable acknowledged TSP.
(5) For purposes of this rule, “committed financing” means financing methods for which a city or other service provider has identified and documented the following: the authority to establish and implement the method, the amount of funding to be generated, the purpose to which the funding will be dedicated, and the repayment method and schedule for any bonded or credit indebtedness is identified and documented. Committed financing includes, but is not limited to, funding that is:

(a) Included in the adopted budget of the service provider;

(b) Designated for projects included in the Statewide Transportation Improvement Program;

(c) Provided by the Department of Interior through the Bureau of Indian Affairs Tribal Transportation Plan (TTP) program pursuant to 25 CFR Part 170;

(d) Provided through a development agreement entered into pursuant to ORS 94.504 to 94.528;

(e) Provided by system development charges established pursuant to ORS 223.997 to 223.314 or by other authorized development fees, conditions of approval or exactions;

(f) Provided by utility fees;

(g) Provided through Local Improvement District or Reimbursement District assessments; or

(h) Provided by revenue bonds, financing agreements, voter approved general obligation bonds or other authorized debt instruments.

(6) For lands that are added to a UGB pursuant to a method described in this division but not made “serviceable” within 20 years after the date of their inclusion:

(a) The lands must be removed from within the UGB the next time the city evaluates the UGB; or

(b) If there have been significant increases in the cost of making the lands serviceable, the planned development capacity of the lands must be reduced by an amount based on such costs the next time the city evaluates the need for land in the UGB.

Statutory/Other Authority: ORS 197.040, 197A.305, 197A.320 & 197.235

Statutes/Other Implemented: ORS 197A.300, 197A.302, 197A.305, 197A.310, 197A.312, 197A.315, 197A.320 & 197A.325

History:

LCDD 6-2015, f. 12-29-15, cert. ef. 1-1-16