Citizen Advisory Committee Meeting

September 20, 2018, 3:30 PM – 5:00 PM
Newberg City Hall
414 E First Street, Newberg, OR 97132

Agenda

I. Introductions (5 minutes)

II. Review July 11, 2018 CAC Minutes (5 minutes)

III. Overview of Progress Since Last Meeting (Bob Parker, ECONorthwest, 10 min)

IV. Preliminary Study Area Serviceability Analysis (Bob Parker, ECONorthwest / Meabon Burns, Jacobs 40 - min)

- Overview
- Methodology
- Preliminary Analysis/Findings
- Discussion

V. Land Need Estimates (Bob Parker, ECONorthwest, 25 - min)
- Introduction
- Preliminary Feedback

VI. Next Steps (Doug Rux, City of Newberg / Bob Parker, ECONorthwest, 5 min)

NEWBERG 2030 URBAN GROWTH BOUNDARY
CITIZEN ADVISORY COMMITTEE MEETING MINUTES
JULY 11, 2018, 6:00 PM
NEWBERG CITY HALL (414 E FIRST STREET)

ROLL CALL

Members Attending: Brett Baker, Sid Friedman, Larry Hampton, Todd Engle, Brian Doyle, Lisa Rogers, and Curt Walker.

Members Not in Attendance: Ryan Howard, Claudia Stewart, and Fred Gregory.

Staff, Consultant Team, and Project Management Team: Cheryl Caines, Doug Rux, Brett Musick, Bob Parker (EcoNW), Margaret Raimann (EcoNW), Dave Simmons (Jacobs) , and Angela Carnahan (DLCD)

Public: none

WELCOME/INTRODUCTIONS

Chair Brett Baker opened the meeting at 6:05 p.m. Introductions were made.

Overview of the Project

Doug Rux gave some background on previous Urban Growth Boundary efforts and Phase 1 of the current UGB study, which included a preliminary Buildable Lands Inventory (BLI). Phase 1 was completed in 2017. Newberg is the first community to use the new OAR Division 38 Simplified UGB methodology. He described issues with the methodology discovered during Phase 1 and how the Land Conservation and Development Commission would be preparing technical fixes to the administrative rules. The City has also met with the Yamhill County assessor to work through issues that arise from how property is categorized, which relates to the rules regarding buildable land inventories.

Overview of Division 38

Bob Parker provided a history of the Division 38 rule, the methodology used for this UGB process, and the steps the consultant team will be taking to complete the project. He explained that there would be public hearings with the Newberg Planning Commission and City Council to consider proposed amendments. Doug Rux added that staff will be updating the Commission and Council throughout the process. He also noted that staff has been working on several items related to residential efficiency measures and that DLCD staff confirmed that these can be used to meet the requirements for efficient use of residential lands. These measure included a requirement to include some high density residential land with large annexations, code changes regarding accessory dwelling units, and reduction of lot width standards.

Bob Parker explained some of the differences in this process versus a traditional UGB study. Both are based on population growth but the simplified method looks at a 14 year period instead of the traditional 20 year period. He also noted how this process would be iterative since the team is waiting

for the LCDC technical fixes for buildable lands while still working on study area determination, serviceability, and land needs for Newberg. In addition, there are no other examples to follow for the simplified method.

Study Area Determination

Bob Parker presented a slide showing the potential study area which includes lands within 1 mile and within 1.5 miles of the current Newberg boundary. He explained the process to begin narrowing down the study area through an iterative process. Initial areas to exclude are: lands within Marion County, landslide areas, floodplain, and the Dundee Urban Growth Boundary. This leaves an area of approximately 10,000 acres. Lisa Rogers asked if a buffer area was required between the Newberg and Dundee UGBs. Doug Rux said there has been continual conversations about the separation between the cities over the last few decades and how to maintain unique identities. However there is no buffer requirement.

Doug Rux asked if land described included the current status of the Newberg Dundee Bypass Phase II which includes funding for design and ODOT is talking to property owners about right of way acquisition. He explained that this land could be excluded since it would not likely be available for development in the future. Goal exceptions have been approved for the whole Bypass corridor from Dayton to Rex Hill. Doug Rux said Phase II of the Bypass and railroads in the study area create barriers. He suggested removing the isolated areas they create from the study areas. Sid Freedman said that may or may not be true. It depends on the existing infrastructure and what could be done with reasonable infrastructure improvements. Doug said the big question is whether or not these areas are serviceable. The corridor is a big constraint along with re-alignment of Wilsonville Road.

Larry Hampton asked about the mill site and the role that plays in this process. Doug Rux mentioned that the mill site is within the Riverfront area currently being planned by the City. These are parallel planning efforts that will need to be closely coordinated. The City is also looking for ways to efficiently use the land it has. Bob Parker noted that the Division 38 rules are not clear on how to consider the mill site (vacant/partially vacant). The assessor valuations don't reflect reality in such a case.

Lisa Rogers asked if the City would be designating land for both residential and employment uses in this process. Doug Rux confirmed it would. Larry Hampton asked if the efficiencies the City is working on are only related to residential land.

Doug Rux said that Newberg is losing five companies because there is no industrial land for expansion. This lack of land also makes it difficult to recruit new industrial businesses. Larry Hampton said this illustrates the fact that there are no efficiencies for non-residential land. Sid Freedman said there are efficiencies measures related to commercial land such as loosening up parking regulations. Doug Rux noted that mixed use is also a way to efficiently combine commercial and multi-family development.

Brian Doyle asked how the Yamhill County landfill site along the Willamette River is classified. Doug Rux said it is public but not developable. This site is also within the Riverfront. Bob Parker asked if what we've discussed seems reasonable to everyone. Committee members agreed – yes.

Serviceability Methods

Bob Parker explained the rules regarding serviceability. He said DLCD staff had interpreted that the serviceability analysis only includes areas being brought into the UGB. The requirement is to show a supply of serviceable land for at least a 7 year period and that all land in the UGB expansion is serviceable in a 14 year period. The point is to not bring in land that the City cannot serve.

Key issues to discuss include: interpretation of the rule that serviceability analysis is only required for lands brought into the UGB and that analysis is high level and engineered models are not required for specific infrastructure improvements. Master plan updates are not required. Only conceptual planning is required identifying major improvements.

Sid Friedman asked if the approach would be to identify a final study area, identifying the UGB expansions area based on the need, and then doing a serviceability analysis. If lands are not serviceable, then where are alternative lands? Bob Parker agreed. He said it seems inevitable that the City will look to Urban Reserve Areas for residential land, and that there is limited land in exception areas for industrial. He and Sid Friedman discussed - land need that can be accommodated within the existing UGB, then the finding could be that existing functional plans to show how these lands are serviceable. Doug Rux said that Newberg has an updated Transportation System Plan, Water Master Plan, and Wastewater Master Plan for the existing UGB.

Next Steps

Bob Parker said the next committee meeting will be the week of September 17th. The two main agenda items will be a proposed serviceability method and assumptions for land needs. The committee members also agreed that an earlier meeting time was preferred.

Adjournment

The meeting was adjourned at 7:24.

Approved by the Newberg 2030 Citizen Advisory Committee this 20th day of September, 2018.

_____ _____

Larry Hampton, Vice Chair Cheryl Caines, Senior Planner

Memorandum

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Subject	**City of Newberg Division 38 Preliminary Study Area Analysis - Serviceability**
Attention	Bob Parker/ECONorthwest
From	Meabon Burns Dave Simmons
Date	7 September 2018 (DRAFT)
Copies to	Margaret Raimann/ ECONorthwest Mark Anderson/Jacobs

1. Purpose

The purpose of this memorandum is to describe the infrastructure improvements required to provide service to the lands identified for the City of Newberg (City) Division 38 Preliminary Study Area Analysis. This information will be used to inform any additional land area exclusions and identify the Final Study Area based on:

- Phase II of the Newberg-Dundee Bypass per OAR 660-038-0160(5)(b)
- Areas 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).

As such, the infrastructure improvement descriptions will be high level and based on readily available information.

2. Background and Assumption

2.1 Water Serviceability

The primary source of information regarding water serviceability is the City's current Water Master Plan (Murraysmith, May 2017). The planning period for the Water Master Plan is 20 years (through 2035). For the purposes of this analysis, it is assumed that this Master Plan sufficiently addresses future water rights and water treatment capacity needs. Therefore, the described infrastructure improvements required for water serviceability will focus on water storage and distribution system capacity up to the areas proposed for inclusion in the City's Urban Growth Boundary (UGB).

2.2 Sewer Serviceability

The primary source of information about sewer serviceability is the City's current Wastewater Master Plan (Keller Associates, May 2018). The planning period for the Wastewater Master Plan is 20 years (through

2037). For the purposes of this analysis, it is assumed that this Master Plan sufficiently addresses future wastewater treatment capacity needs. Therefore, the described infrastructure improvements required for sewer serviceability will focus on the sewer collection system capacity up to the areas proposed for inclusion in the City's UGB.

2.3 Transportation Serviceability

The primary source of information about transportation serviceability is the City's current Transportation System Plan (DKS Associates, December 2016). The planning period for the Transportation System Plan (TSP) is 20 years (through 2035). For the purposes of this analysis, it is assumed that this TSP sufficiently addresses future transportation needs within the current UGB. Therefore, the infrastructure improvements required for transportation serviceability will focus on connectivity to the areas proposed for inclusion in the City's UGB and anticipated level of service impacts.

Information was also collected from the Yamhill County TSP (DKS Associates, November 2015), which utilizes the same 2035 planning horizon.

In addition to the System Plans, current information about the Newberg-Dundee Bypass (Bypass) was obtained from the Oregon Department of Transportation (ODOT). Phase I of the Bypass was opened January 2018. Both TSPs assumed that construction of Phase II would not be complete within the planning period. Funding has been identified for design and selective right-of-way acquisition, but not for construction. While it is unclear when Phase II of the Bypass will be constructed, it has been assumed that construction will be completed within the 14-year planning period dictated by Division 38. By design, the Bypass will have limited connections to local roadways, and, therefore, create a significant impact on connectivity and level of service for the areas under consideration for inclusion within the City's UGB.

3. Area A

Area A is bounded by Highway (Hwy) 99W and an at-grade railroad line to the northwest, Chehalem Creek and the current UGB to the east, the new Phase I Bypass to the southeast, resource land to the south, and the City of Dundee's UGB to the west. The elevations variance across this area is approximately 210 feet.

3.1 Water

3.1.1 Potable Water

Providing potable water to Area A would require a connection to the City's existing distribution system. Given that this area is separated from the City's existing UGB by the Chehalem Creek any connection would either need to be mounted to an existing roadway bridge or cross beneath the creek itself.

One existing bridge is Hwy 99W. A 12-inch water line crosses Highway 99W within Pressure Zone 1 adjacent to Area A. A water main could be installed within the Highway 99W roadway across the bridge over Chehalem Creek. After crossing the creek, the main would turn south, pass beneath the existing railroad tracks into the northern portion of Area A. It is unknown if the existing bridge structure can carry a water main or if a structural retrofit would be required. This route would also require utilizing trenchless construction methods to tunnel beneath the railroad tracks. The existing 12-inch pipeline would also likely need to be upsized from the connection point back through the distribution system approximately 4,300 linear feet (LF) to an existing 18-inch main to provide sufficient capacity.

Another existing bridge is Dayton Avenue. A 2-inch water line dead ends on Dayton Avenue near the bridge over Chehalem Creek. A water main could be installed at this location and run across the bridge into the eastern edge of Area A. It is unknown if the existing bridge structure can carry a water main or if a structural retrofit would be required. The existing 2-inch pipeline would also need to be upsized from the connection point back through the distribution system approximately 3,800 LF to an existing 18-inch main to provide sufficient capacity.

An alternative approach would be to cross beneath Chehalem Creek. Such a crossing could be achieved using an open trench, which would require temporarily bypassing the creek during construction, or utilizing trenchless construction methods to tunnel beneath the creek. This approach would also require connecting to the existing distribution system and upsizing a water line back to an existing main.

3.1.2 Non-potable Reuse Water

The existing non-potable reuse water distribution system is currently limited to the east side of Newberg. It is supplied by non-potable water from Otis Springs in the northeast or with reuse water from the City's Wastewater Treatment Plant (WWTP) in the southeast. The City's current Water Master Plan explores alternatives for expanding this system, but the preferred alternative does not provide service beyond the southeastern, eastern, and northern edges of the City's UGB.

3.1.3 Additional Considerations

There are two existing independent water districts within Area A. Expansion of the City's UGB into this area would likely require negotiated agreements with the existing water districts for service provision.

3.2 Sewer

Providing sewer to Area A would require a connection to the City's existing collection system. Given that this area is separated from the City's existing UGB by the Chehalem Creek any connection would either need to cross via a pump station and pressurized bridge-mounted pipeline or cross beneath the creek itself.

One existing bridge is Hwy 99W. A sewer main could be installed within the Highway 99W roadway across the bridge over Chehalem Creek. After crossing the creek, the main would turn south, pass beneath the existing railroad tracks into the northern portion of Area A. It is unknown if the existing bridge structure can carry a sewer main or if a structural retrofit would be required. This route would also require utilizing trenchless construction methods to tunnel beneath the railroad tracks.

Another existing bridge is Dayton Avenue. A sewer main could be installed at this location and run across the bridge into the eastern edge of Area A. It is unknown if the existing bridge structure can carry a sewer main or if a structural retrofit would be required.

A creek crossing would require installation of a sewer siphon with an open trench, which would require temporarily bypassing the creek during construction, or utilizing trenchless construction methods to tunnel beneath the creek.

Once across the creek, the connection to the existing collection system would be within one of the City's lift station basins. Either one of the existing lift station capacities would need to be increased along with

the associated force main or a new lift station and force main would need to be installed. Improvements may also need to be made to a portion of the existing gravity collection system.

3.3 Transportation

Transportation connectivity to Area A is limited by the railroad, Chehalem Creek and the Bypass. Dayton Avenue bisects Area A, connecting Newberg with Dundee. Classified as a Major Collector in the City and County TSPs, Dayton Avenue connects the study area via Main Street with Hwy 99W (a Major Arterial) and Hwy 240 (a Minor Arterial) near the northeast end of the study area and with Hwy 99W at the southwest end of the study area. More generally, the gently rolling topography allows for flexibility in the placement of roads within the study area.

Development of Area A would require improvements to Dayton Avenue to meet current road standards or development of a new collector roadway to serve as the primary transportation link. Dayton Avenue is narrow and lacks bike lanes and sidewalks; as a result, it records an above average number of accidents, which is described in the County TSP.

Access to Area A via Dayton Avenue northeast through the City would be best suited as a secondary route for passenger vehicles, bicyclists and pedestrians. The existing street network and adjacent land use within the City are not well suited to accommodate significant increases in traffic, particularly freight traffic. Replacing the narrow Chehalem Creek bridge would be necessary at some point, regardless of the development that occurs with Area A, to provide standard travel lanes, bike lanes, and sidewalks.

Access to 99W would also need to be improved with a signalized intersection with Hwy 99W and Fox Farm Road. Depending on the intensity and type of development, additional direct access to Hwy 99W between Newberg and Dundee could also be explored. This would require a new railroad crossing, which may be feasible if several of the private crossings can be closed and/or consolidated.

The Bypass would not be accessible from Area A.

4. Area B

Area B is bounded by Hwy 99W to the northwest, the Washington/Yamhill County line to the north, steep terrain and landslide areas to the east, resource land and to the south, and resource land to the west. The elevations variance across this area is approximately 945 feet and includes numerous ravines and ridgelines.

4.1 Water

4.1.1 Potable Water

The City's Corral Creek Reservoir, which provides service pressure and storage for customers in Pressure Zone 1 (below elevation 310 feet) is located on the western edge of Area B. Service to this area could be made by connecting to the 24-inch water main that feeds the Corral Creek Reservoir. Since Area B itself is located between elevation 138 feet and 1,083 feet, providing service to this area would also require pump stations supplying zone pressure with gravity storage and/or pump stations supplying constant pressure to zone elevations. Standby power facilities (i.e., on-site backup generator) would also be required for constant pressure stations and for pump stations serving pressure zones with inadequate emergency storage capacity.

The City current has two pressure zones and two planned pressure zones.

- Pressure Zone 1 (under elevation 310 feet)
- Pressure Zone 2 (between elevation 310 feet and 350 feet)
- Future Pressure Zone 3 (between elevation 350 feet and 440 feet)
- Future Pressure Zone 4 (above elevation 440 feet)

Providing service within Area B will likely require additional pressure zones above Zone 4.

4.1.2 Non-potable Reuse Water

The existing non-potable reuse water distribution system is currently limited to the east side of Newberg. It is supplied by non-potable water from Otis Springs in the northeast or with reuse water from the City's Wastewater Treatment Plant (WWTP) in the southeast. Area B is adjacent to Otis Springs, which is located north of Hwy 99W at the foot of Rex Hill. A non-potable water line could be installed across Hwy 99W into Area B. While there is likely not sufficient capacity to provide service to the entire area, service could be provided to a subset of customers. Providing this service would probably require a pump station to provide constant pressure or a pump station and storage reservoir dues to the steep terrain within Area B.

4.2 Sewer

Providing sewer to Area B would require a connection to the City's existing collection system. The closest point of connection would be within an existing lift station basin located on the eastern edge of the City. Infrastructure required for this connection would include either increasing the capacity of the existing lift station along with the adjacent force main or a new lift station and force main would need to be installed. Given the numerous ravines and ridgelines, lift stations would likely also be required to provide service within Area B itself.

4.3 Transportation

Transportation connectivity to Area B is provided via Hwy 99W to the north, Wilsonville Road (a Minor Arterial) to the south and Fernwood Road to the east. Fernwood Road is classified as a Major Collector in the City TSP and a Minor Collector in the County TSP. Along the easterly edge of Area B, Corral Creek Road and Renne Road are Minor Collectors that connect Hwy 99W with Fernwood Road and Wilsonville Road. Corral Creek Road transitions to a local road as it turns east; along with Old Parrett Mountain Road, it serves the local transportation needs of Area B.

Development within Area B would require significant investments in transportation infrastructure as none of the existing roads meet current standards, with narrow travel lanes and no bicycle or pedestrian facilities; several roads are also gravel.

Options to provide additional connections to Hwy 99W and Hwy 219 would be limited by Phase II of the Bypass. While construction funding for Phase II has not been identified, partial funding for right-of-way acquisition has been programmed, with the goal of securing the land and limiting access along the new Bypass alignment prior to construction and along Hwy 99W. No access to Phase II of the Bypass is planned between a proposed interchange at Hwy 219 and a proposed interchange at Hwy 99W. Access to Hwy 99W will also be limited within ¼ mile of the proposed Hwy 99W interchange, with a series of frontage roads proposed to intersect Coral Creek Road, Old Parrett Mountain Road and Haugen Road.

Based on preliminary design information available from ODOT about the Bypass, Coral Creek Road would be realigned to cross under the interchange with a new connection north to an extension of Crestview Drive. Old Parrett Mountain Road and Haugen Road would be connected via a new frontage road and routed east along Hwy 99W to a new access point approximately ¼ mile to the east of the interchange. This will limit access to Area B from the west to Fernwood Road, which will have a grade separated crossing of the Bypass, and to the north with a new combined single access to Hwy 99W for Old Parrett Mountain/Haugen Roads.

Access to the south via Renne and Wilsonville Roads to Hwy 219 would be available. A new connection for Wilsonville Road with Hwy 219 south of the proposed interchange with the Bypass is planned.

Access to the east is limited due to the topography, as Area B is located on the western slope of Parrett Mountain, and improving transportation infrastructure within Area B would be difficult. The steep terrain limits the feasibility and flexibility for placement of new roads, and the resulting road grades would limit access for freight traffic.

5. Preliminary Serviceability Analysis

*Qualitative description of relative serviceability to be added once all of the Preliminary Study areas have been evaluated.

6. References

DKS Associates, November 2015. *Yamhill County Transportation System Plan*. <http://www.co.yamhill.or.us/sites/default/files/Yamhill%20Co.%20TSP%20FINAL.pdf>.

DKS Associates, December 2016. *City of Newberg Transportation System Plan*. <https://www.newbergoregon.gov/planning/page/transportation-system-plan-update-0>.

Keller Associates, May 2018. *City of Newberg, Oregon Wastewater Master Plan*. <https://www.newbergoregon.gov/engineering/page/sewerage-master-plan-update>.

Murraysmith, May 2017. *Water Master Plan for City of Newberg*. <https://www.newbergoregon.gov/engineering/page/water-distribution-system-master-plan>.

Oregon Department of Transportation, 28 August 2018. Region 2 (Willamette Valley and Coast): Highway 99W Newberg Dundee Bypass. <http://oregonjta.org/region2/?p=highway99w>.

ECONorthwest
ECONOMICS • FINANCE • PLANNING

DATE: September 14, 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 Margaret Raimann, ECONorthwest
SUBJECT: ASSUMPTIONS IN DIVISION 38 LAND NEED ESTIMATES

Part of the Division 38 Simplified Urban Growth Boundary method is to develop land need estimates for residential and employment land. DLCD created a calculator that automatically provides the fixed inputs for these calculations for cities and counties in Oregon. While the calculator is in the test phase, we did not identify any immediate concerns with either the structure or the arithmetic and anticipate that DLCD will move towards requiring cities use the calculator for Division 38 boundary review processes.

The Division 38 rule outlines several assumptions related to land need estimates. While many of the assumptions are coded into both the rule and the calculator, the Division 38 rule provides cities with discretion over some assumptions. In short, for both residential and employment land need, cities need to develop assumptions for some of the inputs, in addition to results of the buildable lands inventory, to complete the calculations. Our interpretation of the rule is that the values used are at the city's discretion and do not require any supporting evidence or findings.

This memorandum provides a description of the assumptions, legal basis, and recommendations to help the City of Newberg determine the land need estimates in the Division 38 process. The purpose of this memorandum is to inform the TAC and CAC of the assumptions that City staff will consider for the calculator inputs. A summary of the potential ranges for the assumptions, as defined in Division 38, is provided below:

Residential land:

- Housing need
  - Mixed Use & Redevelopment: 5%-15%
  - Accessory Dwelling Units: 1%-3%
- Housing mix change
  - Medium Density: 0%-10%
  - High Density: 1%-11%
- Future dwelling units per acre
  - Low Density: 6-7
  - Medium Density: 10-12
  - High Density: 15-24

Employment land:

- Employment density (jobs per acre)
    - Efficiency gain: 3%-5%.

Residential

The City of Newberg needs to provide assumptions for the residential land need estimates related to housing need, housing mix, and land need.

Housing Need

For the "adjusted gross new dwelling units needed" calculation, the City will need to provide assumptions to "subtract dwelling units not needing additional residential land," such as units in mixed use or redevelopment and accessory dwelling units, consistent with OAR 660-038-0030(6):

> **660-038-0030 (6).** Enter the percentage of residential units located on commercial land ("mixed use") expected during the planning period.

and (7):

> **660-038-0030 (7).** Enter the percentage of accessory dwelling units expected during the planning period.

Newberg will need to determine assumptions for each within the following ranges:

- Mixed Use & Redevelopment: 5%-15%
- Accessory Dwelling Units: 1%-3%

Assessment: Despite policies that encourage mixed-use and redevelopment, Newberg has not experienced significant mixed-use or redevelopment in the recent past. Assumptions towards the lower end of the rate will better reflect likely trends in the 14-year planning period (assume mixed use and redevelopment between 5% and 7%).

Accessory dwellings have not accounted for a significant portion of the city's housing stock in the past. Assumptions at the lower end of the range will likely better reflect actual trends over the planning period (1% or so). This is consistent with development patterns, policies, and existing areas available for mixed use and redevelopment in Newberg.

Housing Mix

Based on existing housing mix calculations from American Community Survey data (provided in the calculator), Newberg will need to determine assumptions for medium and high density, consistent with OAR 660-038-0040 (3):

> **OAR 660-038-0040(3).** Enter the projected change in housing mix by density. The percentage of low density will be calculated based on the percentages entered in the other column(s).

Newberg will need determine assumptions for the **increase** in housing mix change for each density within the following ranges:

- Medium Density: 0%-10%
- High Density: 1%-11%

Assessment. The existing housing mix in Newberg is: 62.1% (Low Density), 22.4% Medium Density, and 15.5% High Density. We have looked at mix shifts in many cities over many Goal 10 studies. While shifts in mix occur over time, they tend to occur slowly. In short, within a 14-year period, most cities do not see a large shift in housing mix change. Assumptions in the 1%-3% range in both Medium and High Densities would be a reasonable expectation to establish. This would result in a housing mix change of Medium Density between 22.6% and 23.8%, High Density between 15.6% and 15.9%, and the remainder in Low Density between 61% and 61.8%.

Land Need

The land need estimates also require a calculation of the number of dwelling unites needed. Newberg will need to provide assumptions for the dwelling units per acre, consistent with OAR 660-038-0050(1):

> **OAR 660-038-0050(1).** Enter the projected number of net dwelling units per acre for each density category.

The City will need to determine dwelling units per acre for each density within the following ranges:

- Low Density: 6-7
- Medium Density: 10-12
- High Density: 15-24

Assessment. The target densities for each classification in Newberg's current comprehensive plan are 4.4 units per gross acre in Urban Low Density; 9 units per gross acre in Urban Medium Density; and 16.5 units per gross acre in Urban High Density. It is reasonable to assume that these densities will either increase slightly to meet the Division 38 requirements or remain at the current density. Based on the Division 38 requirements, Newberg would need to increase Low Density to 6 dwelling units per acre, as well as increase Medium Density to 10 units per acre. High Density can remain at 16.5 units per acre, as it is within the range of 15 to 24.

Employment

The City of Newberg needs to provide assumptions for the employment land need estimates related to employment density for commercial land.

Employment Density (jobs per acre)

In addition to the results of the buildable lands inventory, the City will need to provide one additional assumption for the employment land needs estimates, in the employment density section, consistent with OAR 660-038-0100:

660-038-0100. Enter an efficiency gain for commercial density. The calculator displays the permissible range for the selected city allowed by rule.

For the City of Newberg, the "permissible range" for efficiency gain is 3%-5%.

Assessment: Research shows that employment densities vary considerably by specific types of uses. It is very difficult to forecast trends in the retail industry. Assumptions on the lower end of the range will be more conservative in terms of density trends.