



**JOINT PLANNING COMMISSION / CITY COUNCIL TSP WORKSHOP AGENDA  
SEPTEMBER 28, 2015 6:00 PM  
NEWBERG PUBLIC SAFETY BUILDING  
401 EAST THIRD STREET**

**I. CALL MEETING TO ORDER**

**II. ROLL CALL**

**III. PUBLIC COMMENTS (5-minute maximum per person)**

**IV. TRANSPORTATION SYSTEM PLAN UPDATE WORKSHOP:**

**Meeting Objective:** To review and discuss the Draft TSP and proposed Code Amendments. Key discussion questions include:

- Does the TSP and its identified transportation projects address Newberg's transportation need and vision?
- Are there additional transportation needs that the identified projects do not adequately address?
- Do the proposed code amendments address Newberg's transportation need and vision?

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**Agenda**

- |    |                             |           |
|----|-----------------------------|-----------|
| 1. | Presentation – TSP Overview | 6:10 p.m. |
| 2. | TSP Discussion              | 6:20 p.m. |
|    | • Plan Contents             |           |
|    | • Project Lists             |           |
| 3. | Code Amendments Discussion  | 7:00 p.m. |
| 4. | Wrap up and Next Steps      | 7:55 p.m. |

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**Attachments**

1. Draft Transportation System Plan
2. All Draft Development Code amendments – in track changes
3. Chapter 15.505 Draft Development Code amendments – clean version
4. Draft Comprehensive Plan amendments – in track changes

**ACCOMMODATION OF PHYSICAL IMPAIRMENTS:** In order to accommodate persons with physical impairments, please notify the City Recorder's Office of any special physical or language accommodations you may need as far in advance of the meeting as possible as and no later than 48 business hours prior to the meeting. To request these arrangements, please contact the City Recorder at (503) 537-1283. For TTY services please dial 711.

# Draft Newberg Transportation System Plan

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**(PLACEHOLDER COVER to be replaced)**

Prepared for:

City of Newberg

Oregon Department of Transportation

**DRAFT September 21, 2015**

## Acknowledgements

This report was prepared through the collective effort of the following people:

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Cathy Stuhr (Planning Commissioner)  
Allyn Edwards (Planning Commissioner)  
Art Smith (Chair) (Planning Commissioner)  
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Karl Birky (Traffic Safety Commission)

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Mike Ragsdale (Newberg Downtown Coalition)  
Don Clements (Chehalem Park and Recreation District)  
Jamie Morgan-Stasny (Metropolitan Land Group)  
Scott Steckley (Chehalem Diversified)  
Joe Kavale (Springbrook Properties)  
Ryan Howard (City Council)  
Larry Anderson (Former City Engineer)  
Lori Van Zanten (Providence)  
Brett Baker (Austin Industries)  
Roy Gathercoal (ADA Interests)

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Memo 2: Background Document Review

Memo 3: Goals, Objectives, & Evaluation Criteria

Memo 4: Existing Conditions

Memo 5: Future Forecasting

Memo 6: Future Needs Analysis

Memo 7: Stakeholder Interviews #1

Memo 8: Alternatives Evaluation

Memo 9: Stakeholder Interviews #2

Memo 10: Finance Program

Memo 11: Transportation Standards

Memo 12: Code Amendments

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## Useful Abbreviations and Acronyms

30 HV – 30<sup>th</sup> Highest Hourly Volumes  
AASHTO – American Association of State Highway and Transportation Officials  
ADA – Americans with Disabilities Act  
ADT – Average Daily Traffic  
ATR – Automatic Traffic Recorder  
CAC – Citizen Advisory Committee  
FHWA – Federal Highway Administration  
HCM – Highway Capacity Manual  
HDM – Highway Design Manual  
HSIP – Highway Safety Improvement Program  
LOS – Level of Service  
NTM – Neighborhood Traffic Management  
ODOT – Oregon Department of Transportation  
OHP – Oregon Highway Plan  
ROW – Right of Way  
SPIS – Safety Priority Index System  
TAZ – Transportation Analysis Zone  
TDM – Transportation Demand Management  
TSP – Transportation System Plan  
UGB – Urban Growth Boundary  
URA – Urban Reserve Area  
V/C – Volume to Capacity  
VMT – Vehicle Miles Traveled  
VPH – Vehicles Per Hour

# Introduction

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Newberg, Oregon is a city of about 23,000 residents located in the Willamette Valley between Portland and the Oregon Coast. The City abuts the Willamette River and the renowned vineyards and farmlands of the Willamette Valley. The City was incorporated in 1889, back when the population of Yamhill County was less than 10,000 residents, and it was the boyhood home of President Herbert Hoover.



Photo 1: OR 99W Entering Downtown Newberg

Today, Newberg is the home of George Fox University (3,700 enrolled students), and the city has become a regional destination for wine tourism, with several wine tasting rooms within the city and numerous nearby wineries.

Newberg is a junction for three of Oregon’s highways: OR 99W, OR 240, and OR 219. In addition, Phase 1 of the Newberg-Dundee Bypass (OR 18), which is planned to open in 2017, will provide a major alternate route for through traffic.

## What is a Transportation System Plan

The Transportation System Plan (TSP) provides a long-term guide for City transportation investments by incorporating the vision of the community into an equitable and efficient transportation system. The plan evaluates the current transportation system and outlines policies and projects that are important to protecting and enhancing the quality of life in Newberg through the next 20 years. The TSP represents a collection of past and current ideas, incorporating projects, decisions, and standards from past and current plans into a single document.

A TSP is required by the State of Oregon to help integrate local plans into the statewide transportation system. The plan balances the needs of walking, bicycling, driving, transit, freight, and rail into an equitable and efficient transportation system.

## What has Changed since the Last Plan

Newberg’s previous TSP was adopted in 2005. Since then amendments have been made to the Oregon Transportation Plan, Oregon Highway Plan, and other state regulations, the first phase of the Newberg-

Dundee Bypass is under construction, and other local vision and master plans have been developed. These ten years of regulatory, land use, and transportation system changes have been incorporated in this TSP update.

As part of the TSP update, the travel forecasting model for the Newberg area was updated from its previous 2025 horizon year to reflect expected 2035 land use and street system changes for Newberg, Dundee, and surrounding areas.

One of the most significant changes is related to the opening of Phase 1 of the Newberg-Dundee Bypass, which provides an alternate route to OR 99W from OR 219 in Newberg to just south of Dundee, and is scheduled to open in 2017. The 2005 TSP

evaluated only the full Bypass build-out scenario. However, due to limited funding, the full build-out of the Newberg-Dundee Bypass is uncertain, and the project is not included as a “planned improvement” in ODOT’s 20-year funding horizon. This TSP update assumes that only Phase 1 of the Bypass is built by 2035, and it evaluates the changes to the Newberg transportation system once that facility is open.



**Photo 2: Examples of Street Amenities, Landscaping and On-Street Parking in Downtown Newberg**

## What Issues Still Need to be Resolved

Traffic will increase in the Newberg area through 2035. The first phase of the Newberg-Dundee Bypass will alleviate some pressure on the transportation system; however, it will not resolve all the traffic growth issues, particularly east of Springbrook Road. Major intersections along the highway corridor already have (or are planned to have) a generally built-out footprint, with multiple approach lanes and turn lanes. Continued monitoring and management of the system will be needed to maximize the efficiency of the existing and planned transportation system.

The bypass also brings opportunities for the community to potentially reallocate existing travel lanes through downtown for other purposes to match the local vision. As part of the TSP process, the City considered some options for temporary improvements in downtown Newberg that will be possible after the Bypass opens. The City Council passed a motion<sup>1</sup> supporting a general concept that would remove one lane of travel in each direction along the couplet. The City has initiated a separate planning process to refine options for the Downtown Area, which will commence this year.

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<sup>1</sup> Newberg City Council, File No CPTA4-11-001, February 27, 2015

## Engaging the Public

The Newberg TSP Update was a collaborative process among various public agencies, key stakeholders, and the community. Throughout this process, the project team took time to understand multiple points of view, obtain fresh ideas and resources, and encourage participation from the community through community meetings, stakeholder interviews, and the project website. **Error! Reference source not found.** Figure 1 provides an overview of the public review process.

Project staff hosted five Citizen Advisory Committee (CAC) meetings, met individually with project stakeholders at two key stages during the process, held regular meetings with decision makers, and conversed informally with members of the community. Project staff also held three community meetings at key stages of the TSP process to give residents an opportunity to learn about the project, advise project staff of their concerns about the transportation system, and provide feedback on possible transportation solutions.



Photo 3: Trains Cross OR 99W Daily

## Public Review Process

The TSP update involved gathering information and ideas from residents, business owners, and stakeholders in Newberg through semi-regular meetings of a Citizen Advisory Committee (CAC), two rounds of stakeholder interviews, three community open houses, and public hearings to adopt the updated TSP.

The CAC was comprised of members of the Newberg Planning Commission and a representative from the Traffic Safety Committee. The CAC reviewed the technical memoranda and other documents related to the TSP update, discussed the various issues, and gave feedback to the project team about issues, priorities, and alternatives. The project team then revised the memoranda in accordance with the CAC feedback and posted the documents to the TSP website.

In addition to CAC feedback, the project team relied upon information from stakeholder interviews and from the general public at the community open houses to inform the project. The project team conducted the stakeholder interviews in March 2014 and September 2015. The community open houses were held at different junctures of the update – one to kick off the process and gather initial information in January 2014, one to present the proposed project alternatives and options in December 2014, and one to give an overview of all the data and the draft plan in September 2015.

The complete public review process is summarized below.

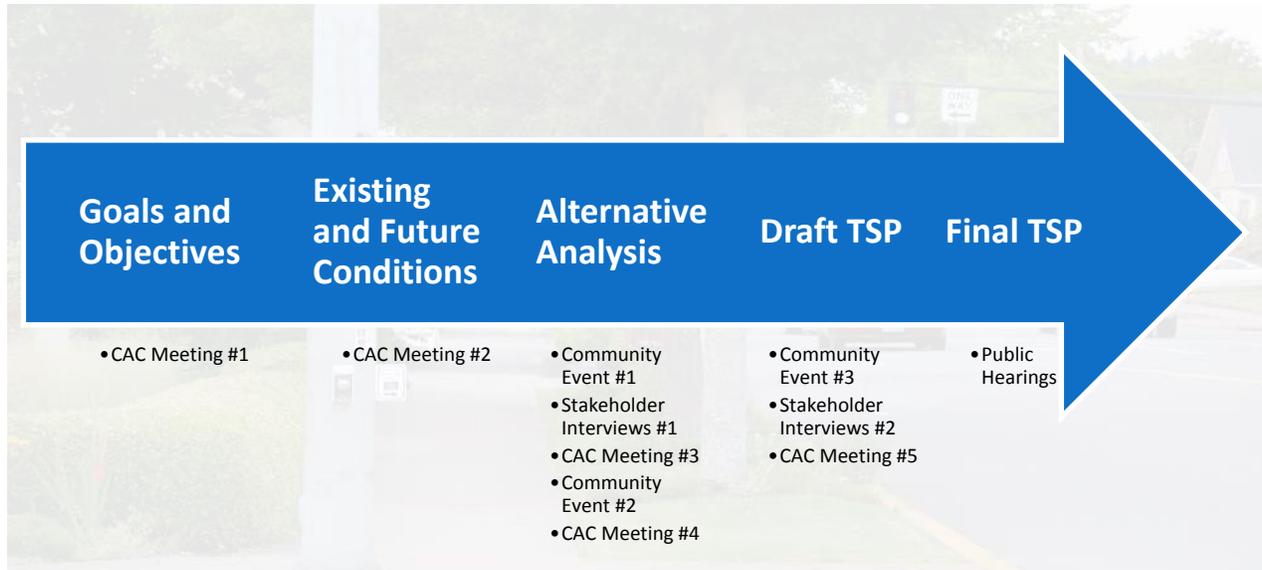


Figure 1: Public Review Process

### Public Website

Throughout the project, a website, [www.newbergtsp.org](http://www.newbergtsp.org), was maintained for the TSP where all project news, documents, and meeting notices were posted. The website also featured a comment map where residents could tell the project team what they thought about the transportation system in the City.

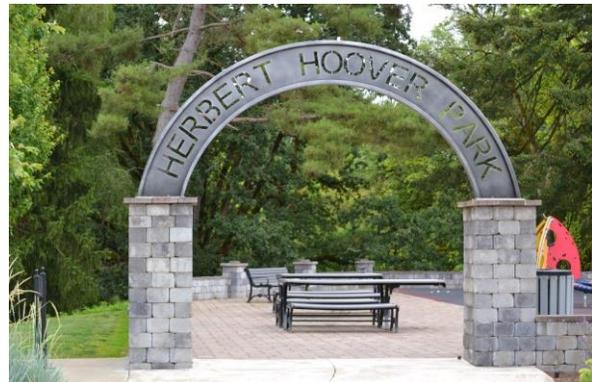


Photo 4: Herbert Hoover Park

### Compliance with Title VI Outreach Requirements

Public Involvement was subject to requirements and guidance found in ODOT’s Title VI (1964 Civil Rights Act) Plan. Specifically, Title VI identifies measures to reach and solicit comments from disadvantaged populations within a community. Although Newberg has relatively limited concentrations of minorities and low-income residents, these populations are present in the city.

Based on The U.S. Census Bureau’s 2009-2013 American Community Survey 5-Year Estimates, the racial makeup of the city was about 79.6% Caucasian and about 14.4% Hispanic. This is a higher percentage of Caucasian and Hispanic,

**Snapshot of Newberg Demographics (2013)**

- Population: 22,300
- Caucasian: 79.6%
- Hispanic: 14.4%
- Asian: 1.6%
- Other: 4.3%
- Persons Below Poverty Level Income: 13.7%

and lower percentages of nearly all other ethnic groups compared to Oregon as a whole.<sup>2</sup> Materials were made available by request for Spanish-speaking community members.

Approximately 13.7% of individuals in the city were recorded as below the poverty line, compared to 16.2% for the state as a whole.<sup>3</sup>

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<sup>2</sup> US Census Bureau, <http://factfinder.census.gov>

<sup>3</sup> Ibid

## TSP Goals

The City identified five transportation goals and supporting objectives to guide development of the transportation system (Volume 2 Appendix – TM 8). The goals are broad, high-level statements describing the community's intentions for the future. The project team evaluated each proposed transportation program and improvement to determine its level of benefit relative to the goals and objectives. Future capital improvement projects should also be consistent with the goals and objectives.



Photo 5: Downtown Newberg Sign

Transportation projects were selected and prioritized with consideration given to the five goals and objectives described in this section. Each project was scored based on evaluation criteria developed for each goal and objective. Project alternatives were compared by summing and weighting the scores for each potential project. Scores for each criterion ranged from +2 to -2 with +2 representing a clear positive impact, 0 indicating no impact, and -2 representing a clear negative impact.

The Transportation System in Newberg will:

- **Goal 1:** Maintain or improve access to existing properties and employment areas; improve freight traffic and/or minimize downtown trips for through traffic; have minimal impact on adjacent properties.
- **Goal 2:** Emphasize visual and aesthetic qualities in their design; minimize any potential energy, social, environmental, and economic impacts; improve rail, water, and air transportation systems where possible.
- **Goal 3:** Enhance access for emergency response; include improvements meant to reduce crash frequency and severity and/or to enhance pedestrian/bicyclist safety.
- **Goal 4:** Include complete street principles with both vehicle and pedestrian/bicycle improvements; improve the connectivity of the street and/or sidewalk system; improve access to public transit.
- **Goal 5:** Provide the most cost effective improvement option and identify stable funding sources for improvements; repair, maintain, and/or improve existing facilities and protect needed right-of-way for future projects; or constructed as a mitigation requirement by private development.

# Trends

The project team reviewed Newberg’s travel patterns and system operating conditions, and projected future traffic forecasts were made to illustrate how conditions will change by 2035.

## Newberg Today

Understanding where Newberg residents want to go is vital for planning a transportation system that meets the City’s needs. This requires an understanding of key travel destinations – locations that create demand for travel because they are where people go to work, school, or take care of other daily needs. These key destinations can be thought of as activity generators or trip attractors. The most common types of activity generators in Newberg are:

- Recreational
- Schools
- Places of employment
- Shopping
- Public transportation

As seen in Figure 2, many Newberg residents either work within Newberg (40%) or commute to Portland (36%). A higher proportion of workers in Newberg have longer commutes (30 minutes and longer) than is the case for typical Oregon workers.<sup>4</sup>

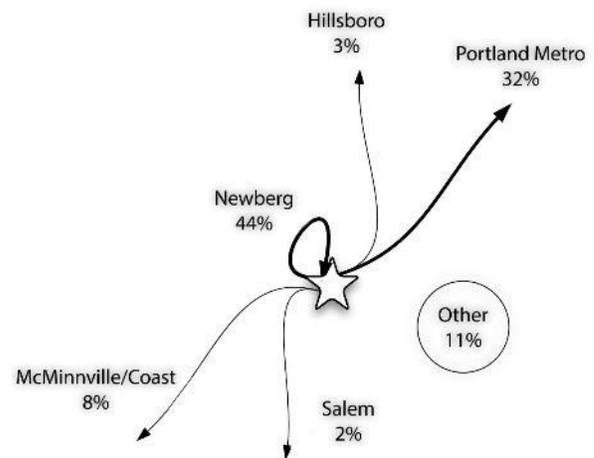


Figure 2: Newberg Commute Patterns

The proportion of Newberg workers driving alone and the percentage carpooling are higher than Oregon as a whole, while the proportion of Newberg residents commuting by public transportation or bicycling is lower than Oregon generally.<sup>5</sup> Newberg residents who work outside the City are more likely to commute by motor vehicle due to the long commute time and distance.

The choice of how to get to a destination involves a variety of factors, including which modes are available and a person’s habits. When considering whether a trip will be taken by motor vehicle, walking, bicycle, or transit, the underlying factors affecting choice are typically ease and convenience of travel, travel cost, and travel time. These factors in turn

**Work Commute Mode Choice:**

- Drive alone: 70%
- Carpool: 15%
- Walk: 7%
- Work from home: 5%
- Public Transit: 1%
- Bicycling: <1%

<sup>4</sup> Census Transportation Planning Products 2006-2010 American Community Survey 5-Year Estimates, <http://ctpp.transportation.org>

<sup>5</sup> US Census Bureau 2009-2013 American Community Survey 5-Year Estimates, <http://factfinder.census.gov>

depend on the particular destination, barriers to travel, and demographic characteristics such as age and income.

## **Transportation Modes**

Newberg residents rely on the City's existing transportation infrastructure to travel to work, school, recreational, and other destinations every day. The infrastructure includes sidewalks, off-street paths, bike lanes, roadways, and transit service.

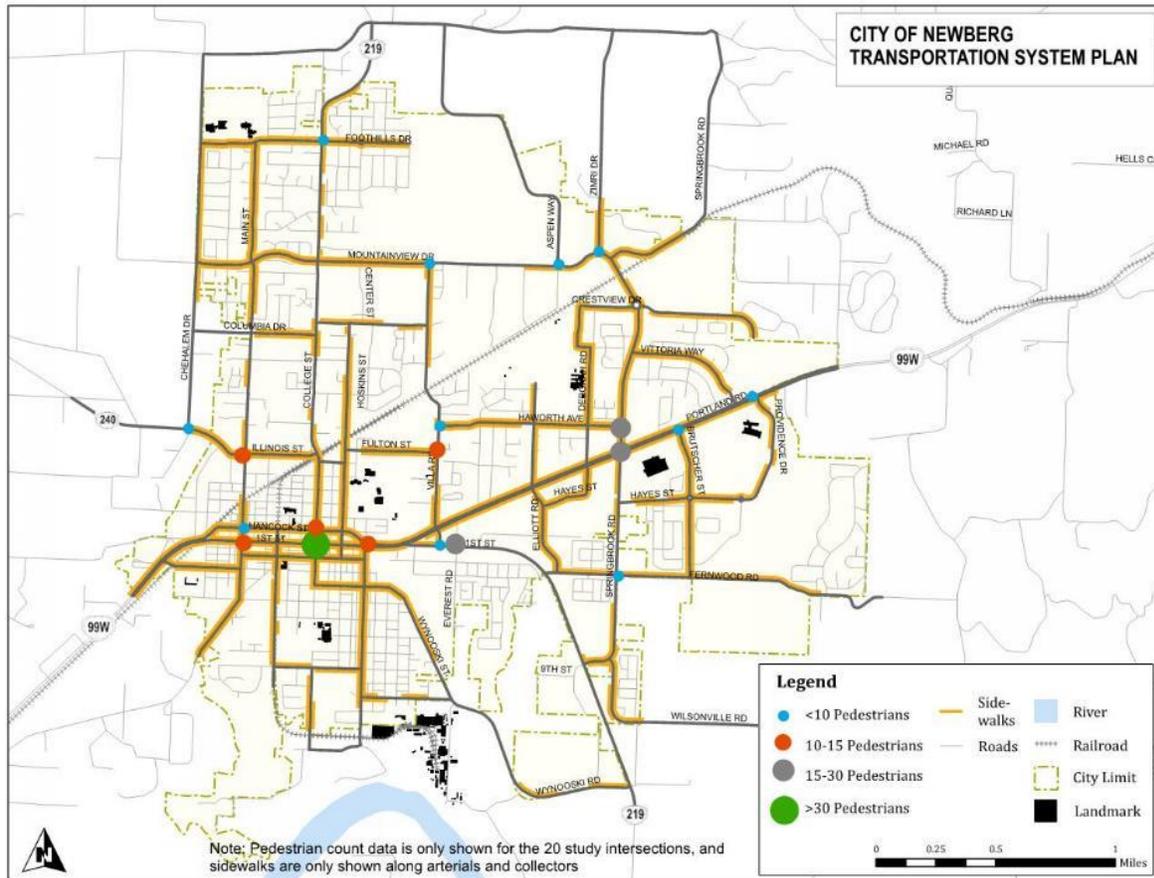
### **Walking and Biking**

People who choose to walk or bike to their destination in Newberg may use sidewalks, shared paths, bike lanes, or roadway shoulders.

### ***Sidewalks and Crosswalks***

Sidewalks on arterial and collector streets are generally available near commercial areas but decrease with distance from downtown. Sidewalks are present along most of OR 99W as it transitions from Portland Road through the downtown area as the Hancock Street and 1<sup>st</sup> Street couplet. New commercial and residential areas have sidewalks, but older areas frequently do not, so there are

numerous gaps in the sidewalk network. Figure 3 shows the existing sidewalk network on collector and arterial streets.



**Figure 3: Pedestrian Volumes and Existing Sidewalk Network**

Downtown Newberg has a fairly complete pedestrian network with sidewalks, curb ramps, pedestrian way finding signage, and amenities such as benches and street trees. Crosswalks are striped for a majority of the intersections downtown and traffic speeds are low, which promotes walking. While crosswalks are provided with ramps at most locations, some of the crosswalks are in poor condition. Additionally, the number of travel lanes along the couplet (three in each direction) and perceived driving behavior (lack of yielding to pedestrians) creates a barrier that makes crossings difficult at unsignalized intersections.

**Shared-Use Paths**

Shared use paths and trails are currently limited within the City of Newberg. However, the Chehalem Park and Recreation District has plans to develop a 70-mile plus system between Dundee and Newberg that will link parks, historical sites, schools, libraries, Willamette River, and regional trails.

**Bike Facilities**

Newberg adopted the *Newberg Bicycle/Pedestrian Plan*, which incorporates ODOT, American Association of State Highway and Transportation Officials (AASHTO), and Manual on Uniform Traffic Control Devices (MUTCD) guidelines to guide bikeway improvements. Figure 4 shows bicycle volumes at study intersections and the existing network of bike facilities in Newberg.

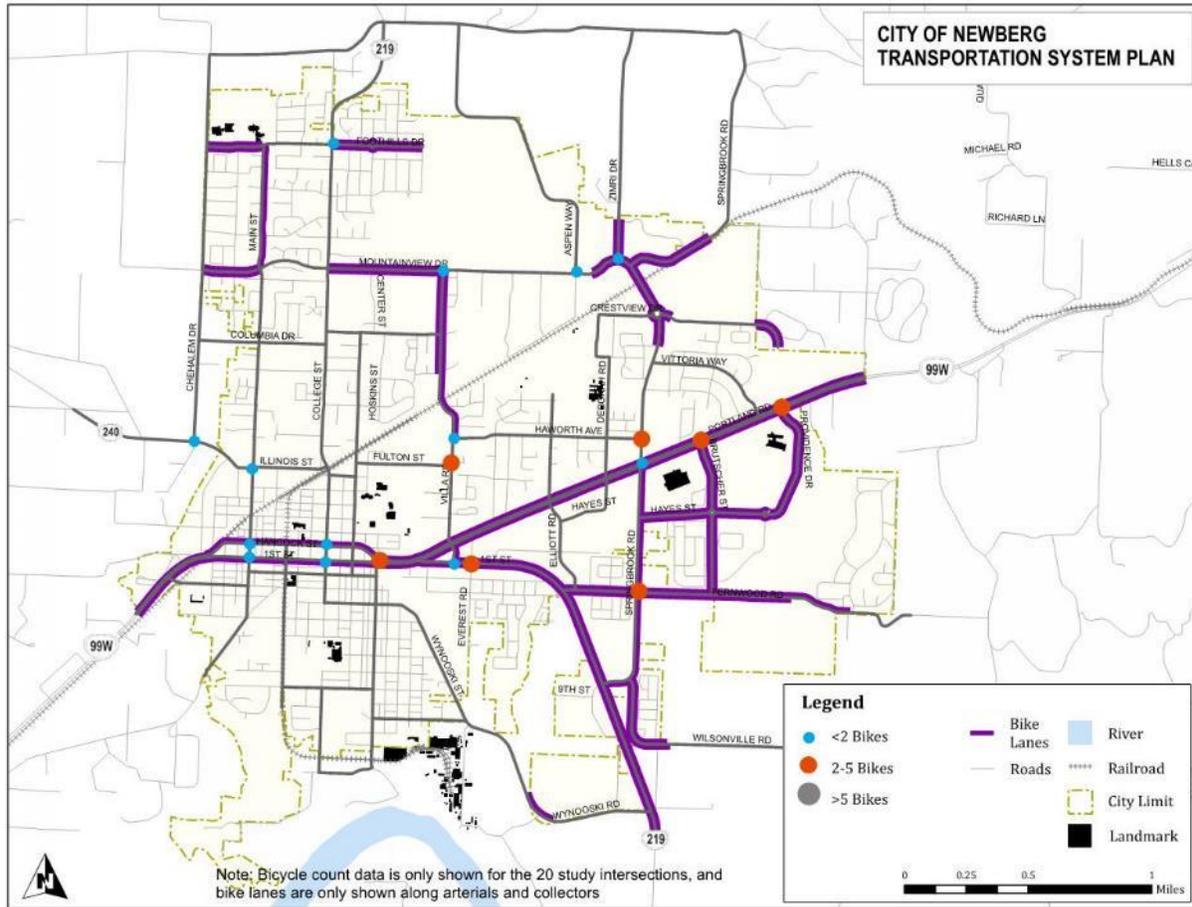


Figure 4: Bicycle Volumes and Existing Bike Network

### Bike Lanes

A bike lane width of six feet is used for most public streets, with six feet recommended for arterials. The bicycle network in Newberg includes several bike lanes on city streets. The most continuous bike path is along OR 99W. Much like with sidewalks in the city, there are bike lanes near the newer commercial and residential areas with fewer bike lanes in the more established areas of town.



Photo 6: Bike Lane on OR 99W

### Shared Roadways

Shared roadways occur where bicycles and motor vehicles share the same travel lane. The most appropriate roadways for this type of shared use are those with low speeds and low traffic volumes (3,000 vehicles per day or fewer)<sup>6</sup>. Signed shared roadways are where facilities are designated and signed as bicycle routes and serve to provide continuity to other bicycle facilities (e.g., bicycle lanes) or to designate a preferred route through a community. Such a route typically has warning signs and often has shared roadway pavement markings.

All local streets in Newberg are low speed, low volume roadways that could be classified as shared roadways. There are several existing locations with bicycle designations, including signed shared roadways in the neighborhood just south of Downtown, a bike boulevard (sharrows and/or bike route signage, wayfinding signage) from Springbrook/Haworth to Ewing Young Park, and on Meridian to Joan Austin Elementary (using Crestview and Center).. These roadways allow cyclists to use quieter, more comfortable streets.

### Bike Parking

Where you store your bike when you get to your destination is an important part of bicycle infrastructure. If there is nowhere safe and secure to park your bike, then you are less likely to ride even if your trip distance and the roadway facilities are right for cycling. Newberg has colored bike racks throughout the downtown area, which have been implemented through the bike rack cost-share program. In addition, the Development Code requires that new development outside of downtown is required to provide off-street bike parking.

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<sup>6</sup> The Federal Highway Administration's *Manual on Uniform Traffic Control Devices* guidance states that shared lane markings should not be placed on roadways with a speed limit above 35 m.p.h. <http://mutcd.fhwa.dot.gov/>

### Transit

Transit service is provided in Newberg by Yamhill County Transit Area (YCTA), which provides bus routes connecting Newberg to destinations along the OR 99W corridor, including McMinnville, Dundee, Sherwood, and Tigard. YCTA provides five transit lines that provide transit to and from various locations within the city. YCTA also provides an Americans with Disabilities Act (ADA) dial-a-ride service.

**Table 1: Newberg Bus Service**

|              | Route 44  | Route 46s              | Route 45x   | Route 5                                  | Route 7                                      |
|--------------|---|------------------------|---|--|--|
| Route        | Downtown McMinnville to Tigard Transit Center with three stops in Newberg northbound near Springbrook Road, Villa Road, and Main Street | Same as Route 44       | Express between McMinnville and Tigard Transit Center | George Fox university to Foothills Drive | Along OR 99W Providence Hospital to downtown |
| Frequency    | One-hour frequency a.m. and p.m. peak hour, and two-hour frequency mid-day  | Four trips each way    | Once a.m. and once p.m.                               | One-hour frequency                       | One-hour frequency                           |
| Hours        | 5:00 a.m. to 7:00 p.m.  | 8:00 a.m. to 7:00 p.m. |   | 7:30 a.m. to 6:00 p.m.                   | 7:00 a.m. to 6:30 p.m.                       |
| Service days | Weekdays  | Saturdays              | Weekdays  | Weekdays                                 | Weekdays                                     |

### Motor Vehicle

Within Newberg, roadways are under the jurisdiction of the City, Yamhill County, and ODOT. Road jurisdiction is shown in Figure 5. OR 99W has by far the highest traffic volumes in Newberg. Other higher volume roads include OR 219, Springbrook Drive, Mountainview Drive, and OR 240. These roads are used by residents to connect to locations outside the city, as well as provide major connections within the city. Newberg also has a network of collector and local roadways that provide access to neighborhoods and direct access to residences.

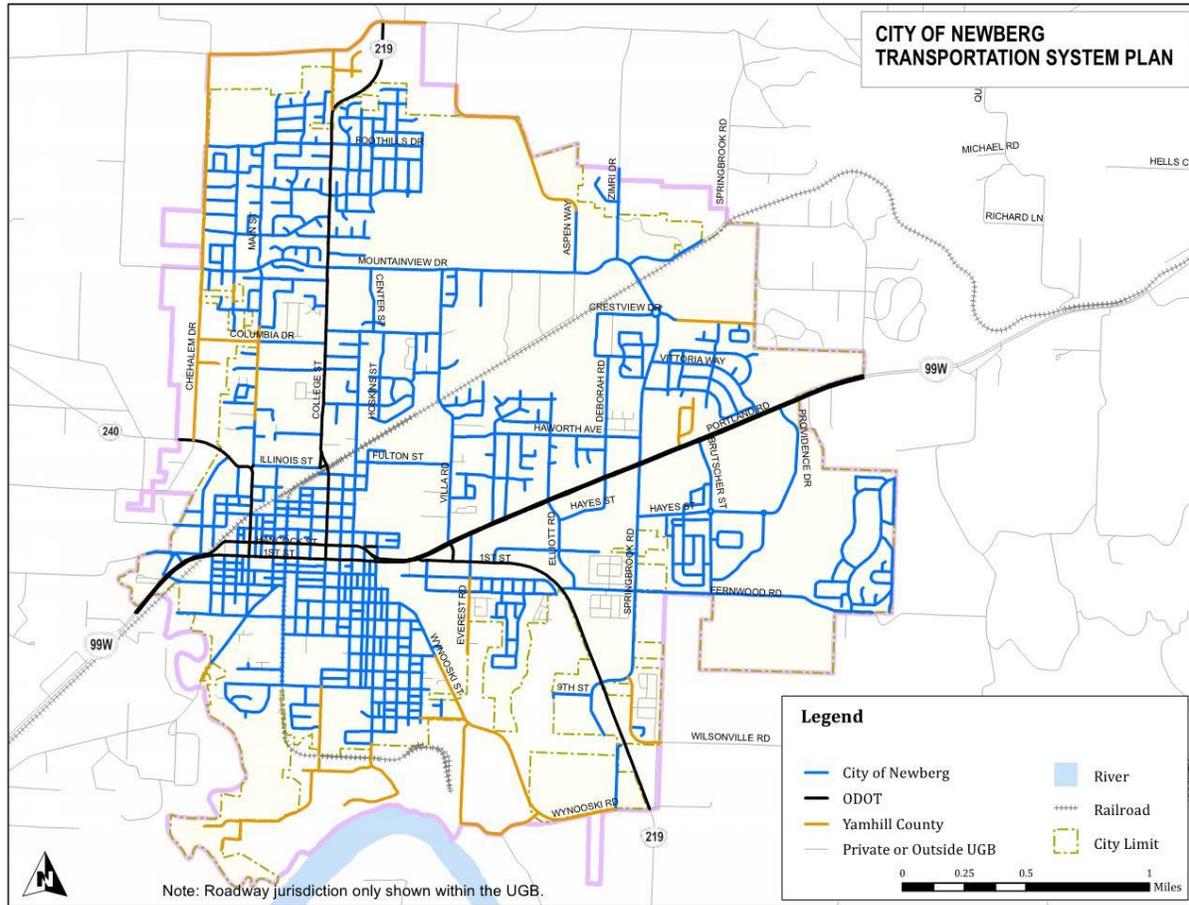


Figure 5: Roadway Jurisdiction

### Freight

Freight traffic in Newberg include traffic traveling through the City as well as shipments to and from locations in the City. ODOT classifies OR 99W as a Statewide Freight Route through the City of Newberg. OR 99W has local and statewide economic significance, providing freight movement to commercial and industrial destinations between the Portland-Vancouver area and the Oregon coast. Medium and heavy trucks make up six to seven percent<sup>7</sup> of the daily traffic on OR 99W, approximately 2,800 trucks per day. Congestion on OR 99W slows freight shipments going to the City and passing through to other destinations. OR 219 and OR 240 also provide routes for trucks traveling to and through the City of Newberg.

### Rail

The Willamette & Pacific Railroad (WPRR) operates a rail line that runs parallel to OR 99W through Newberg. Rail freight originating in the western Willamette Valley is carried on WPRR tracks through Newberg, and on Portland & Western Railroad (PNWR) tracks the rest of the way into Portland. The rail

<sup>7</sup> Newberg-Dundee Bypass Tier II EIS

crosses OR 99W in Newberg at-grade on the west end of the downtown couplet, as well as a spur that runs along Blaine Street.

The Federal Railroad Administration designates six classes for rail tracks to set maximum speeds for the trains based on the conditions of the tracks. The tracks within Newberg are designated as Class 2, which limits freight speeds to 25 miles per hour. The tracks within the City of Newberg are currently used for freight movement, and have one train operating daily in each direction with up to two additional smaller trains operating periodically. There are no passenger rail services near the study area, with the nearest Amtrak stations located in Portland, Oregon City, and Salem.

In 2008, Yamhill County completed a feasibility study for development of an improved rail system for passengers and freight.<sup>8</sup> Objectives were to evaluate infrastructure and develop a ridership estimate for a Yamhill County commuter rail service. One recommendation of this study was to take actions to preserve the integrity of existing rights-of-way to retain and enhance passenger and freight transportation options in the future.

### Air

Within Newberg there is one airport that is privately owned but available for public use. The Sportsman Airpark in the southeast corner of the city has one paved 2,800-foot runway and averages 14,000 operations (takeoffs or landings) per year. Approximately 55 aircraft are based at the airport. The Sportsman Airpark provides general flight instruction and airplane rental and maintenance services, as well as private helicopter and recreational hot-air ballooning services.

A larger general aviation airport is located approximately 20 miles north of Newberg, in Hillsboro. The Hillsboro Airport serves approximately 200,000 operations annually. It is owned by the Port of Portland and has two paved runways (6,600 feet and 4,000 feet). There are three fixed-base operators at the airport, and the airport provides all the facilities to support jet- and propeller-driven aircraft and helicopters.

The nearest airport with scheduled passenger service is the Portland International Airport, located approximately 34 miles northeast of Newberg. This airport is also owned by the Port of Portland and has three runways (7,000 feet, 8,000 feet, and 11,000 feet). The Portland International Airport serves more than 13.7 million passengers and 270,000 tons of cargo annually.

### Waterway

The Willamette River is located south of Newberg and provides potential opportunities for recreational boating. Rogers Landing County Park, operated by Yamhill County Parks and Recreation, takes access to the river at the end of Rogers Landing south of Downtown Newberg. Rogers Landing provides a three-lane boat launch.

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<sup>8</sup> Feasibility Study for Development of an Improved Yamhill County Rail System for Passengers and Freight, Final Report. Yamhill County, 2008.

## Pipeline

Northwest Natural currently runs several high-pressure natural gas transmission lines within the City. The first is a 6-inch high-pressure (400 pounds per square inch) line through Newberg south of OR 99W that feeds the distribution systems within the city. The distributions systems operate at 60 psi or lower and range in size from 1 to 4 inch diameters. Additionally there is a 12-inch high-pressure line that runs south of OR 99W and serves the SP Fiber Tech. This 12-inch line also supplies the 6-inch line that serves the west side of town.

## Performance Measures

Maintaining an acceptable level of performance for Newberg's transportation infrastructure requires a variety of analytical tools and assessment types. The measures used to monitor the transportation system include safety analysis and mobility.

## Safety

A safety review was conducted as part of the TSP process for both intersections and roadway segments to identify potential for safety problems.

Collisions at intersections are typically proportional to the number of vehicles entering it. Therefore, a crash rate describing the frequency of crashes per million entering vehicles is used to compare locations and assess if the number of crashes should be considered high. Further, a critical crash rate, a threshold value that allows for a relative comparison among intersections with similar characteristics, is computed for each intersection. The sites that have a higher crash rate than this critical rate are flagged for further review. In Newberg, two intersections were flagged for further review for exceeding the critical crash rate: OR 99W/Springbrook Road and Haworth Avenue/Springbrook Road.

For roadway segments, a crash rate identifying the number of crashes per million vehicle-miles traveled is developed and then compared with similar facilities in Oregon. Both OR 99W and OR 219 through Newberg had greater crash rates than similar ODOT facilities in four of the five years analyzed.

OR 99W in Newberg contains four segments that rank among the top ten percent and two that rank among the top five percent for state highways in Oregon according to the Safety Priority Index System (SPIS) for 2013.

- OR 99W between mile points 21.71 and 21.87 including the Brutscher Street intersection (top 10%).
- OR 99W between mile points 21.95 and 22.14 including the Springbrook Street intersection (top 5%).
- OR 99W between mile points 22.11 and 22.26 including the Deborah Road intersection (top 10%).
- OR99W between mile points 22.36 and 22.54 including the Elliott Road intersection (top 10%).
- OR 219 between mile points 20.71 and 20.82 including the Everest Road intersection (top 10%).
- OR 219 between mile points 21.11 and 21.28 including the OR-219 and 2nd Street intersection (top 5%).

## Mobility

Mobility measures how freely vehicle traffic can move along to its intended destination. In general, roadway systems have their highest degree of conflicts and associated congestion at intersections, so the performance of a system is often defined by how well the intersections function. There are two methods used to gauge these conditions – one is numeric, and one is a letter grade. ODOT uses the numeric volume-to-capacity (v/c) ratio method, while Yamhill County and the City use a letter grade derived from the Level of Service (LOS) method.



Photo 7: Motor Vehicle Traffic on OR 99W

**Volume-to-capacity (v/c) ratio** is a decimal representation (between 0.00 and 1.00) of the proportion of capacity that is being used (i.e., the saturation) at a turn movement, approach leg, or an intersection. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and usually experience excessive queues and long delays. The Oregon Highway Plan (OHP) dictates the mobility target for ODOT roads based on classification and speed (which range from 0.8 to 0.95 in Newberg).

**Level of service (LOS):** A “report card” rating (A through F) based on the average delay experienced by vehicles at the intersection. LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay has become excessive and demand has exceeded capacity. This condition is typically evident in long queues and delays. Newberg’s LOS standard is LOS D, based on the Design Standard and Details and Specifications Manual<sup>9</sup>.

Capacity analysis indicates that the majority of the intersections are meeting mobility targets during peak travel times, as shown in Figure 6. The intersection of Haworth Avenue/Springbrook Road exceeds the Newberg mobility standards. The intersection of 1<sup>st</sup> Street (OR 219)/Everest Road meets mobility standards during the average weekday, however, it exceeds that target during peak seasonal traffic.

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<sup>9</sup> City of Newberg Design Standard and Details and Specifications Manual (2010), [http://www.newbergoregon.gov/sites/default/files/2010\\_DS\\_Final.pdf](http://www.newbergoregon.gov/sites/default/files/2010_DS_Final.pdf)

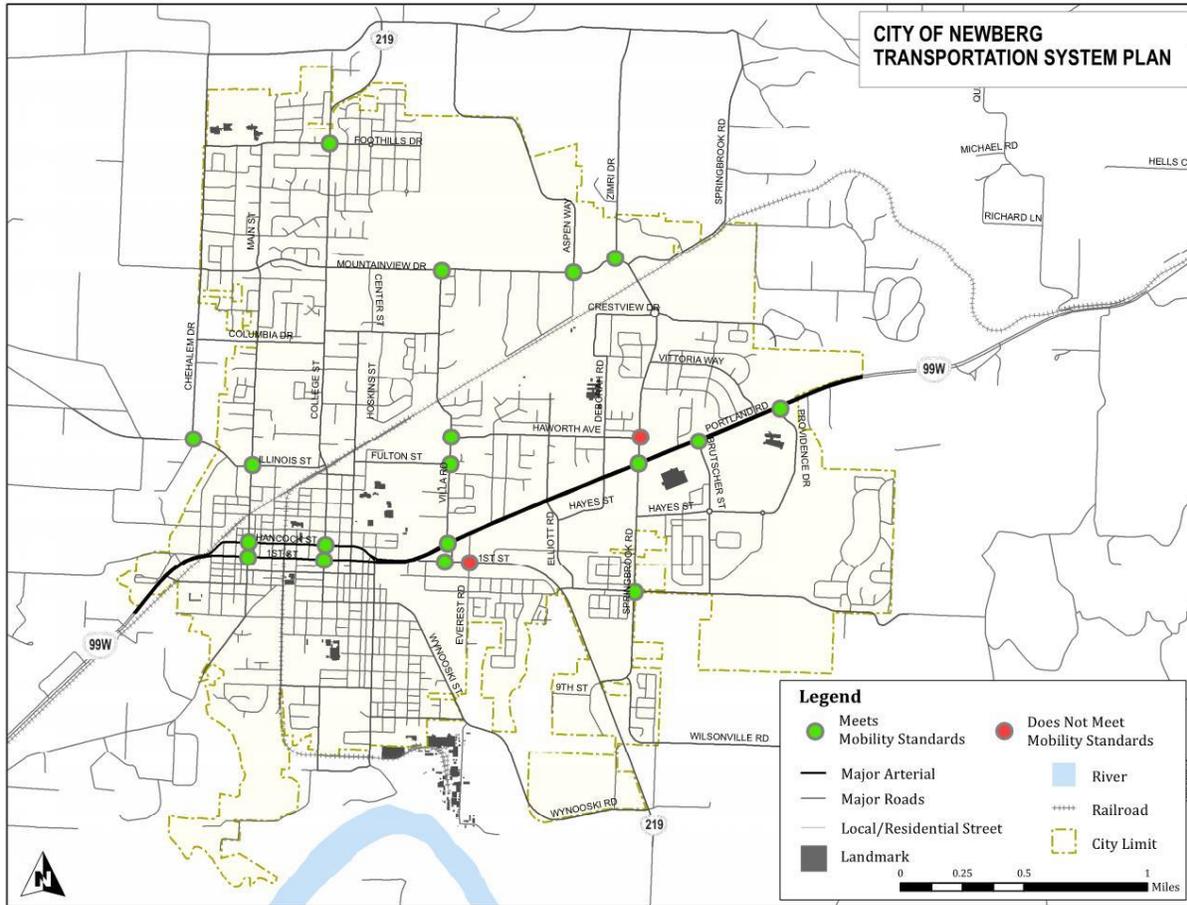


Figure 6: Existing Intersection Mobility (2015 Peak Hour Conditions)

## Newberg in 2035

In 2010, Newberg had about 7,400 households and 7,800 jobs. Both population (households) and employment in Newberg are expected to grow significantly in the coming years. By 2035, Newberg is expected to grow to about 14,050 households and 16,150 jobs, an increase of about 85% from the year 2010<sup>10</sup>. The increase in people and jobs in Newberg, together with the construction of the Newberg-Dundee Bypass, will change travel patterns between 2015 and 2035.

The number of people and jobs in Newberg is expected to grow by 85%

## Population and Employment Growth

Figure 7 provides an overview of anticipated population and employment growth through year 2035<sup>11</sup>. Much of the household growth is expected to occur outside of the downtown core, primarily in the

<sup>10</sup> Memo: Population and Employment Capacity in URA for TSP, Barton Brierley, City of Newberg, May 13, 2013

<sup>11</sup> The distribution of growth shown here is relative to year 2000, which is the base lane use inventory included in the regional travel demand model.

north and southeast parts of town. While some employment growth is expected in the downtown core, most of the future employment growth will occur in the existing employment areas in northeast and southeast Newberg.

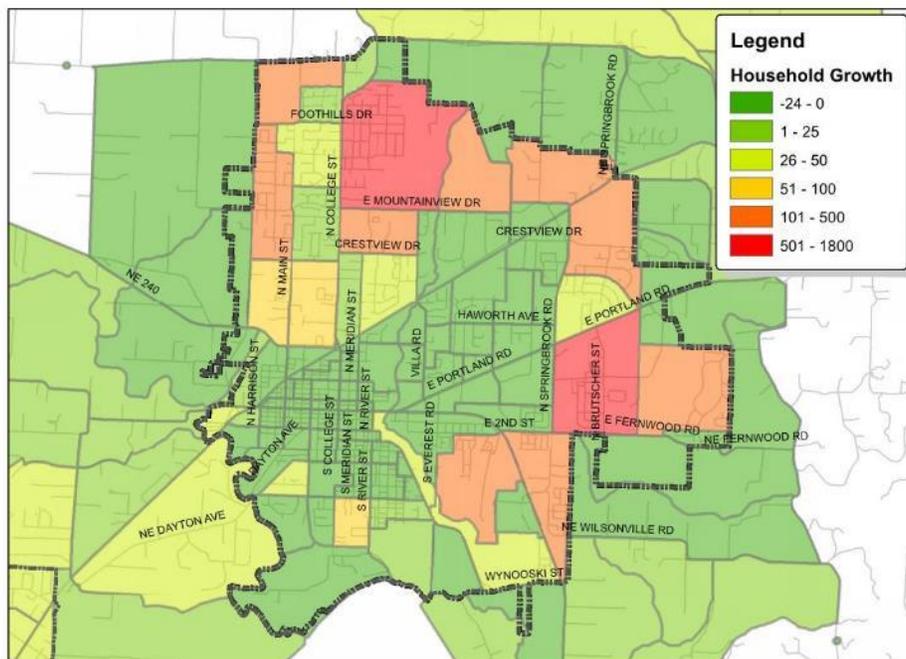
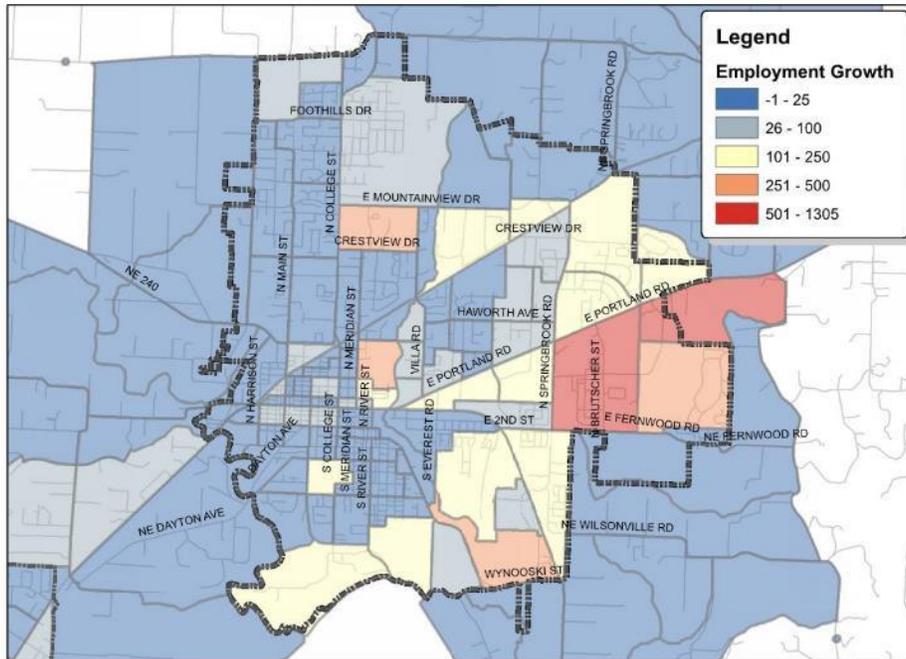
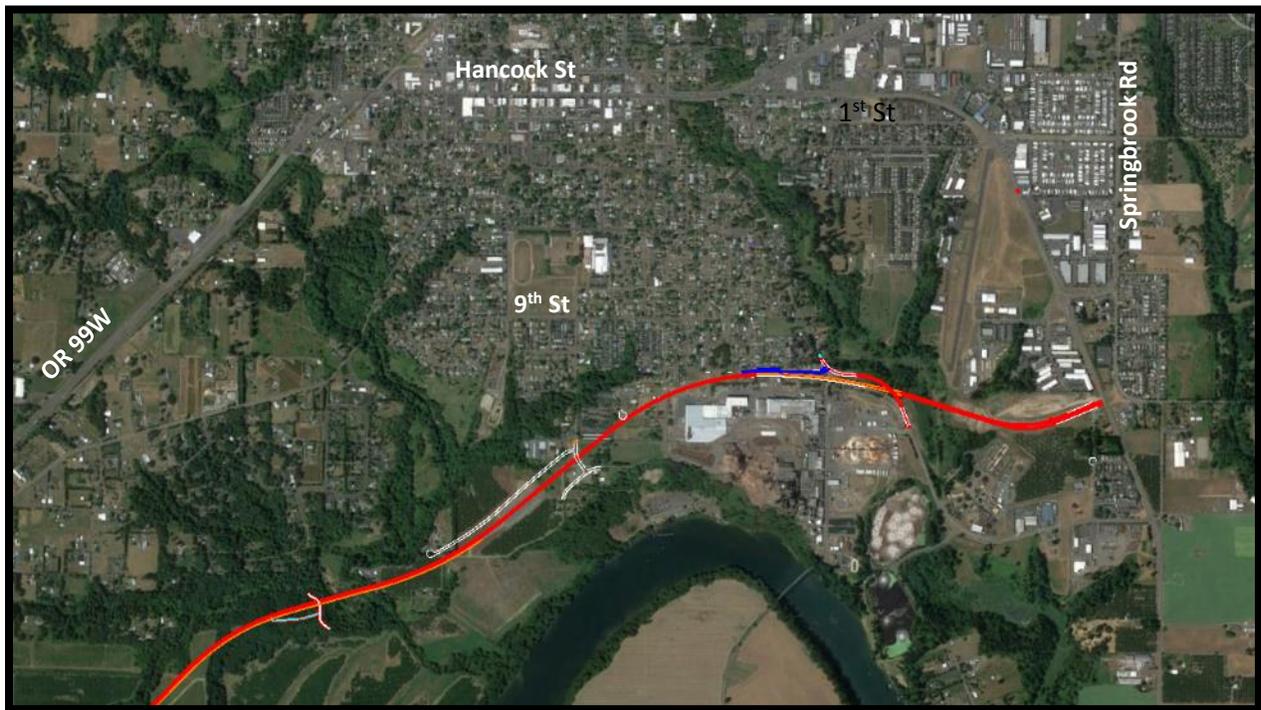


Figure 7: Population and Employment Growth

## Newberg-Dundee Bypass

Phase 1 of the Newberg-Dundee Bypass shown in Figure 8 is a key regional highway improvement that will be completed in 2017 and will service much of the traffic currently passing through the Newberg-Dundee area on OR 99W. The Phase 1 bypass includes one travel lane in each direction from OR 219 in Newberg to south of Dundee. Future potential phases of the bypass (including widening and/or extensions to the north or south) are not currently funded nor considered reasonably likely to be constructed by 2035.



**Figure 8: Newberg-Dundee Bypass Alignment**

Although local traffic in Newberg is expected to increase, the Phase 1 Newberg-Dundee Bypass is expected to temporarily reduce some of the traffic going through downtown Newberg on OR 99W. After the Bypass's opening, traffic levels on OR 99W through downtown Newberg will drop significantly, by approximately 40% from 2015 levels. As the population and employment within Newberg and the surrounding region increases, so too will the amount of traffic on OR 99W downtown, until traffic levels eventually exceed present day conditions.

In the interim while the Phase 1 Bypass reduces traffic through downtown, there is an opportunity to temporarily close or restrict lanes on OR 99W to repurpose the existing right of way (such as making room for long-term temporary pedestrian and bicycle improvements). Eventually, as traffic levels return to pre-bypass levels, these improvements may need to be removed to accommodate traffic growth.

The Phase 1 Bypass will terminate at OR 219 at Wilsonville Road. Traffic continuing east on OR 99W will be routed north on OR 219 and Springbrook Road. Traffic along both of these corridors is expected to

grow significantly from present day levels. The City will continually monitor these corridors as well as parallel routes through neighborhoods in an effort to proactively manage congestion and cut-through traffic problems before they arise. The City will consider using traffic calming and neighborhood traffic management tools to reduce traffic on neighborhood streets.

## Future Needs

The majority of intersections in Newberg are currently meeting mobility targets. A few areas experience significant traffic congestion and vehicle queuing today. While the Newberg-Dundee bypass is expected to divert much of the through traffic away from OR 99W, traffic is expected to increase in the Newberg area over the next 20 years, resulting in traffic volumes significantly higher than today at many locations, as shown in Figure 9.

Traffic volume growth (relative to present conditions) at select locations includes:

- OR 219 (south of Foothills Drive): 110%
- OR 240 (west of Chehalem Drive): 70%
- Springbrook Road (north of Haworth Avenue): 60%
- OR 99W (east of Providence Drive): 45%
- Mountainview Drive (west of Villa Road): 40%
- OR 99W (west of couplet): 20%
- OR 99W (east of Villa Road): 10%
- OR 99W (both directions) west of College Street: -5%

The locations above represent three relative levels of growth:

- Higher Growth Areas – Many of the collector and arterial facilities outside the downtown area will have higher growth due to a combination of lower existing traffic levels and more opportunities for adjacent land use development.
- Moderate Growth Areas – Areas along OR 99W outside the couplet will have higher overall traffic volume increases, but relative to existing traffic, growth is more moderate.
- Lower Growth Areas – Some areas, particularly those near the couplet, will have low future growth due to the traffic that will be diverted onto the Bypass. These areas will experience a reduction in traffic following the completion of the bypass, with traffic returning nearer to present day levels through year 2035.



Photo 8: Elliot Road

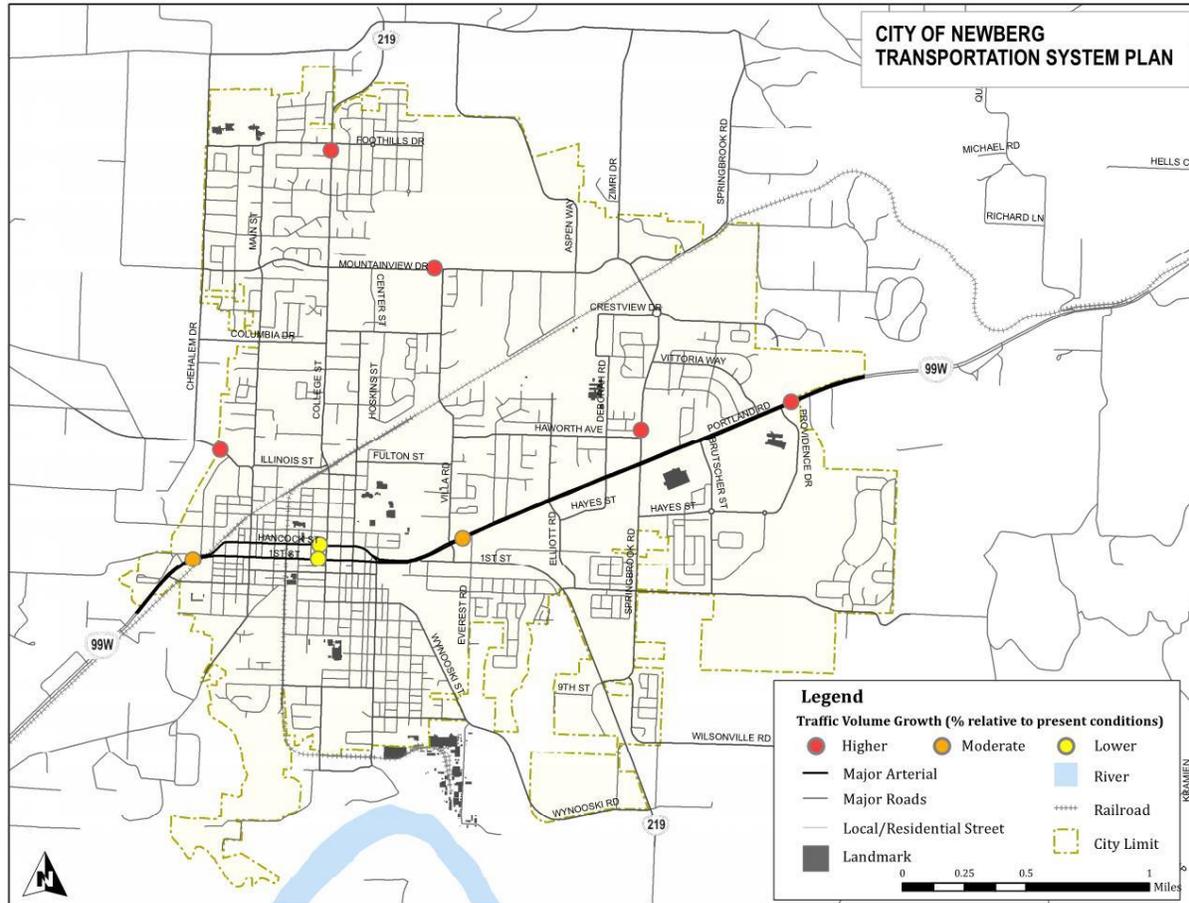


Figure 9: Traffic Volume Growth at Select Locations

### Roadway Capacity Needs

Analysis indicates that many locations will fail to meet ODOT and/or City of Newberg mobility targets in 2035. The details of this analysis can be found in Volume 2, Memo 6: Future Needs Analysis. The general trends Newberg can expect to see in different locations over the next 20 years are:

- **OR 99W (East of Downtown)** – Major intersections along OR 99W east of downtown would degrade due to additional traffic along the corridor. These locations would not be relieved by the bypass and may serve higher turning volumes for trips to and from the bypass.
- **OR 99W (Through Downtown)** – Most of the study intersections through downtown would meet targets. Even with the expected traffic diversion to the Bypass, Hancock at Main Street and Hancock at College Street would both fail to meet mobility targets.
- **Stop-Controlled Approaches along Major Corridors** – Growth along major corridors will increase delay for vehicles turning from side streets. These locations may be candidates for intersection improvements (lane channelization or intersection control) or improvements to parallel corridors to provide other routes that can relieve these corridors. These locations include:

- Mountainview Drive at Villa Road, Aspen Way, and Zimri Drive
- OR 240 at Illinois/Main and Chehalem
- Villa Road at Haworth and Fulton
- Springbrook Road at Haworth
- **Other Spot Locations** – Other locations that are not identified in the preceding groups also have capacity needs:
  - 1<sup>st</sup> Street / Everest Road – This intersection will be impacted by land development in the southeast area and circulation changes related to the OR 219 / 2<sup>nd</sup> Street intersection (restricted side street movements to right-in-right-out). The intersection design solutions will need to also consider the adjacent intersections and traffic flow along OR 219. The intersection meets signal warrants in the near term (approximately three years), based on projected traffic levels.
  - Fernwood Road / Springbrook Road – This intersection will be impacted by potential southeast area land development as well as traffic en route to and from the bypass. Additional signing is planned at this location as part of the bypass improvements. In addition, this intersection is a candidate for improvements such as lane channelization and upgraded traffic control.

### Connectivity Needs

The ability to travel between different areas of the city conveniently and efficiently (a direct route) is an important part of transportation system planning. The following Citywide connectivity issues have been identified for Newberg:

- The extensions of Villa Road to the north and Foothills Drive to the east are planned in the northeast area of Newberg. It will be important to provide these collectors through the development process.
- Springbrook Road provides the only through access between OR 99W and Wilsonville Road. Developments to the east of Springbrook Road have limited access to OR 99W and Wilsonville Road, which are key routes into and out of Newberg.
- Additional connectivity is needed north of OR 99W between Springbrook Road and Benjamin Road in both the north-south and east-west directions.
- Currently, OR 99W and OR 219 are the only regional roads that serve trips between Newberg and locations to the south. Additional major connections are constrained by the Willamette River. However, there may be options for creating additional connections, particularly for non-motorized travel.

There are several barriers to neighborhood connectivity in Newberg: Hess Creek, which bisects the City north to south; the WPRR railroad line, which runs northeast to southwest through the City; and highways OR 99W and OR219. These barriers make it difficult for bicycle and pedestrian traffic to circulate across the city. The following areas have especially constrained connectivity and access to the surrounding transportation system:

- The neighborhood south of 1<sup>st</sup> Street to the west of OR219 is constrained by OR 99W to the north, Hess Creek to the west, Fernwood Pioneer Cemetery to the south, and the airport and OR219 to the east. This neighborhood has only two outlets – N Everest Road and 2<sup>nd</sup> Street. The 2<sup>nd</sup> Street exit is expected to be reconfigured to right-in-right-out only with Phase 1 of the Newberg-Dundee Bypass project. Additional connectivity options, including signaling the N Everest Road/E 1<sup>st</sup> Street intersection, are being explored to improve accessibility and mobility in this neighborhood.
- The Greens neighborhood to the east of the Chehalem Glenn Golf Course has only one outlet at The Greens Avenue and E Fernwood Road. A new connection is proposed to extend The Greens Avenue to NE Corral Creek Road. However, extensions outside the UGB requires a goal exception.

### Walking Needs

Pedestrian activity is likely to increase as population and employment grows, and some non-local traffic is diverted to the Bypass. This means that correcting deficiencies in the pedestrian network becomes even more important.

- Sidewalks should be added along all collectors and arterials when possible.
- Key sidewalk gaps in the arterial and collector system exist on the following routes as shown in Figure 10a:
- All future improvements should meet ADA requirements.

The Chehalem Heritage Trail system being planned by the Chehalem Park and Recreation District (CPRD) should be considered when prioritizing pedestrian improvements in Newberg.<sup>12</sup> This trail system has facilities planned throughout the CPRD area (including both Newberg and Dundee) and includes existing and new or improved facilities for both pedestrians and bicyclists.

The Newberg ADA/Pedestrian/Bike Route Improvement Plan<sup>13</sup> identifies critical routes (Figure 10b) and deficiencies, and spot improvements (Figure 10c) to address ADA needs. Future transportation corridor or other improvements should continue to meet ADA requirements. For locations that are currently ADA deficient and are not included as part of a broader transportation system improvement, the Public Works department maintains a list of priority locations that are addressed through the annual improvement program.

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<sup>12</sup> See the *Chehalem Heritage Trail Strategic Plan*, Chehalem Park and Recreation District, 2010.

<sup>13</sup> <http://www.newbergoregon.gov/planning/page/adapedestrianbike-route-improvement-plan>

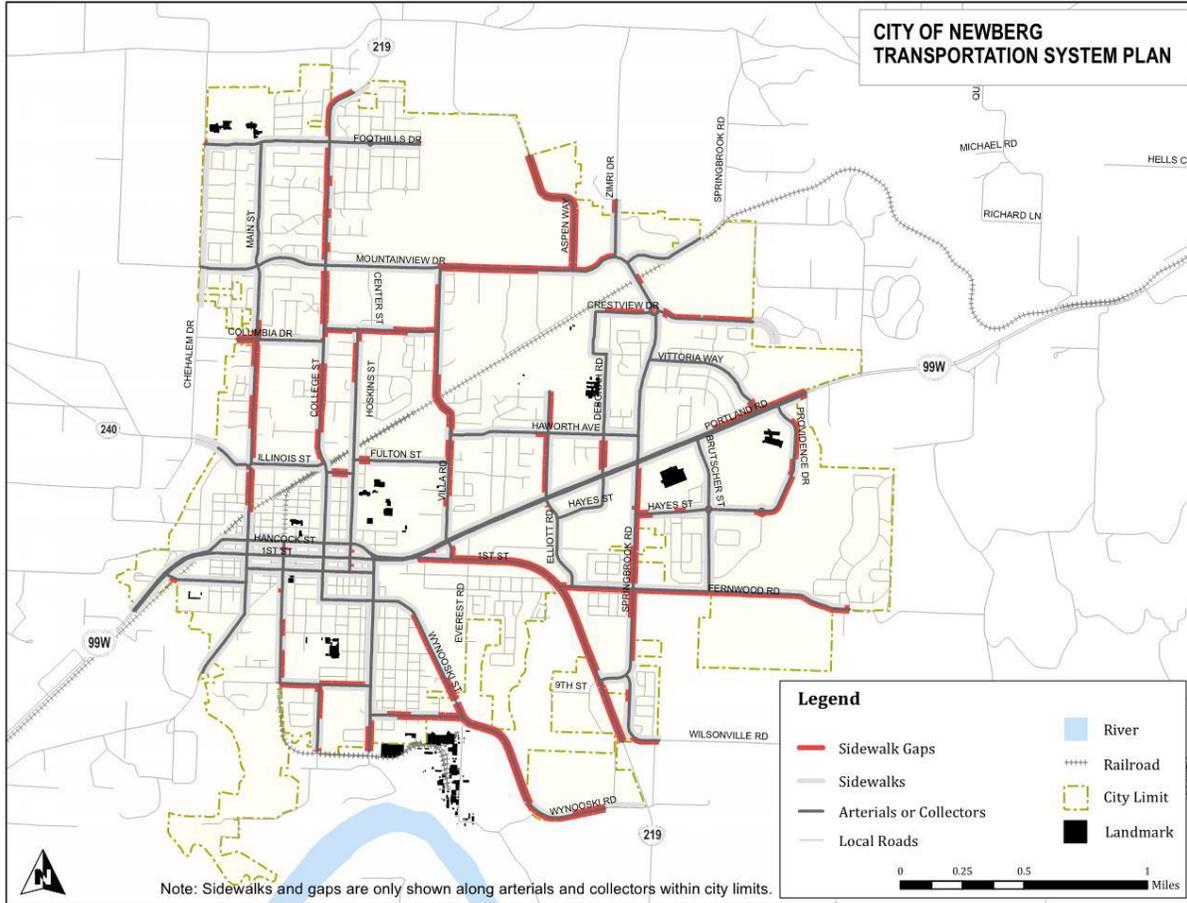


Figure 10a: Walking Needs

Map II-1. Critical Bicycle and Pedestrian Routes



Figure 10b: Critical Bicycle and Pedestrian Routes (Map II-1 of Newberg ADA/Ped/Bike Route Plan)<sup>14</sup>

<sup>14</sup> <http://www.newbergoregon.gov/planning/page/adapedestrianbike-route-improvement-plan>

Map III-2. Newberg Spot Improvements

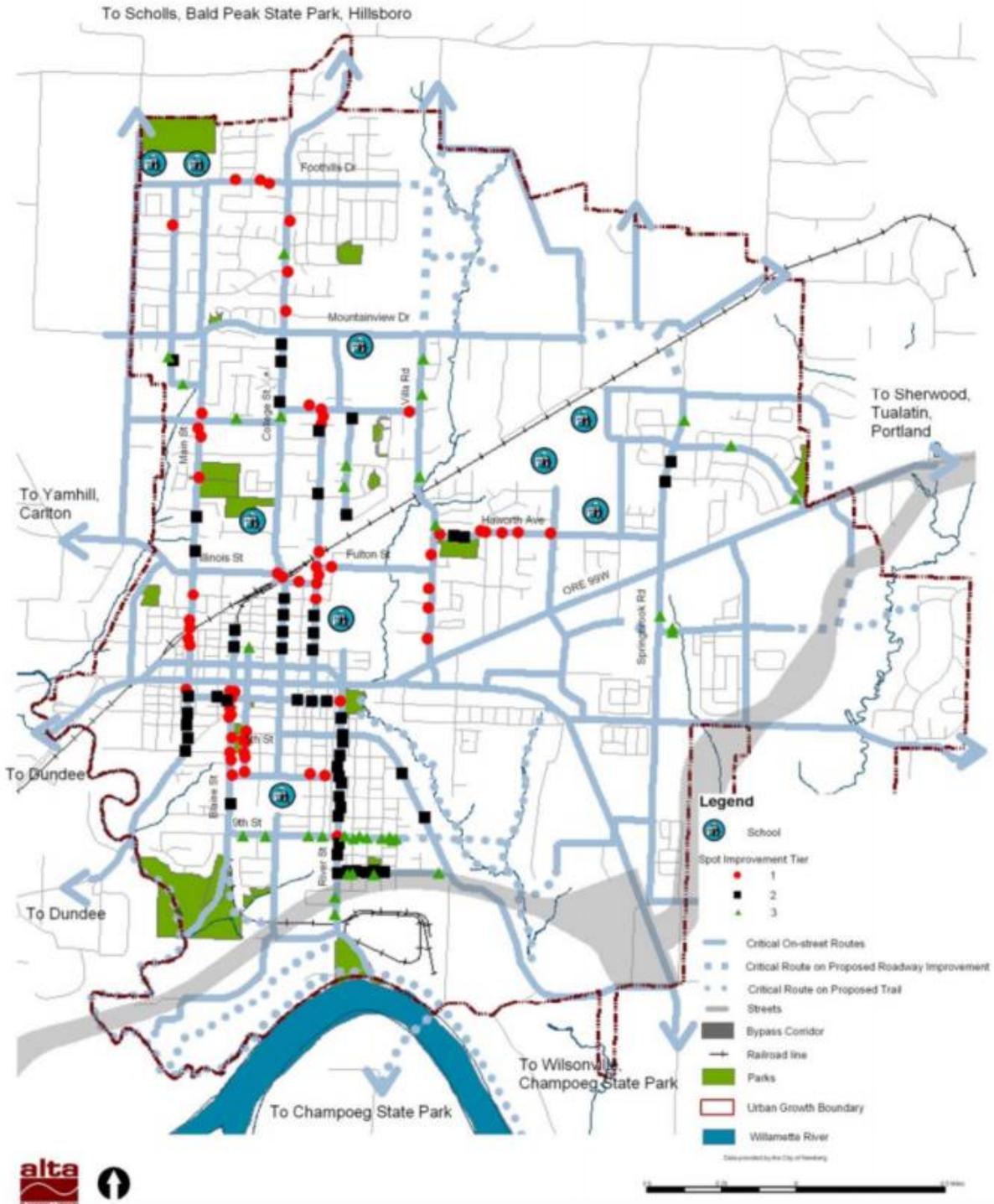


Figure 10c: Identified Spot Improvements (Map III-2 of Newberg ADA/Ped/Bike Route Plan)<sup>15</sup>

<sup>15</sup> <http://www.newbergoregon.gov/planning/page/adapedestrianbike-route-improvement-plan>

## Biking Needs

As both population and employment increase in the Newberg area, more Newberg residents are anticipated to live closer to work. This may spur an increase in the number of commuters biking and walking to work. This means that Newberg has excellent potential to increase the number of people who travel by bike. It also highlights the importance of identifying and improving key bike connections to the city.

- OR 99W provides the most continuous bike route in Newberg with shoulders and/or striped bike lanes through town. The bike lanes are generally at least 5-6 feet wide.
- Newberg's local street system (away from OR 99W) generally features low volumes of motor vehicle traffic, and is suitable for shared use by cyclists. While some routes are marked and/or signed as shared routes, additional bike routes on the local system can provide continuity to other bicycle facilities such as roads with bike lanes and shared use paths.
- Including wayfinding signs will direct cyclists to key destinations such as shopping, employment centers, and schools. Wayfinding signs can also provide directions and distances to key connections to the bike network such as any trails developed as part of the proposed Chehalem Heritage Trail Strategic Plan.<sup>16</sup>
- Bike lanes should be considered on all collector and arterial roadways with a priority for higher motor vehicle volume routes (those in excess of about 3,000 vehicles daily) to provide access from outlying areas to commercial and employment centers in town. Arterials and high volume collector routes lacking bike lanes are shown in Figure 11. Some collectors have alternative bike facilities, including shared lane markings (sharrows) and/or bike route signage, due to existing conditions, low traffic speeds, or low traffic volumes.
- Bicycle facilities identified in the Chehalem Heritage Trails Master Plan within Newberg should be considered for potential bicycle treatments (i.e. bike lanes, shared use paths, etc.).
- Bike parking should continue to be considered at key destinations such as the commercial area on OR 99W in downtown Newberg, and in future development areas.

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<sup>16</sup> See the *Chehalem Heritage Trail Strategic Plan*, Chehalem Park and Recreation District, 2010.

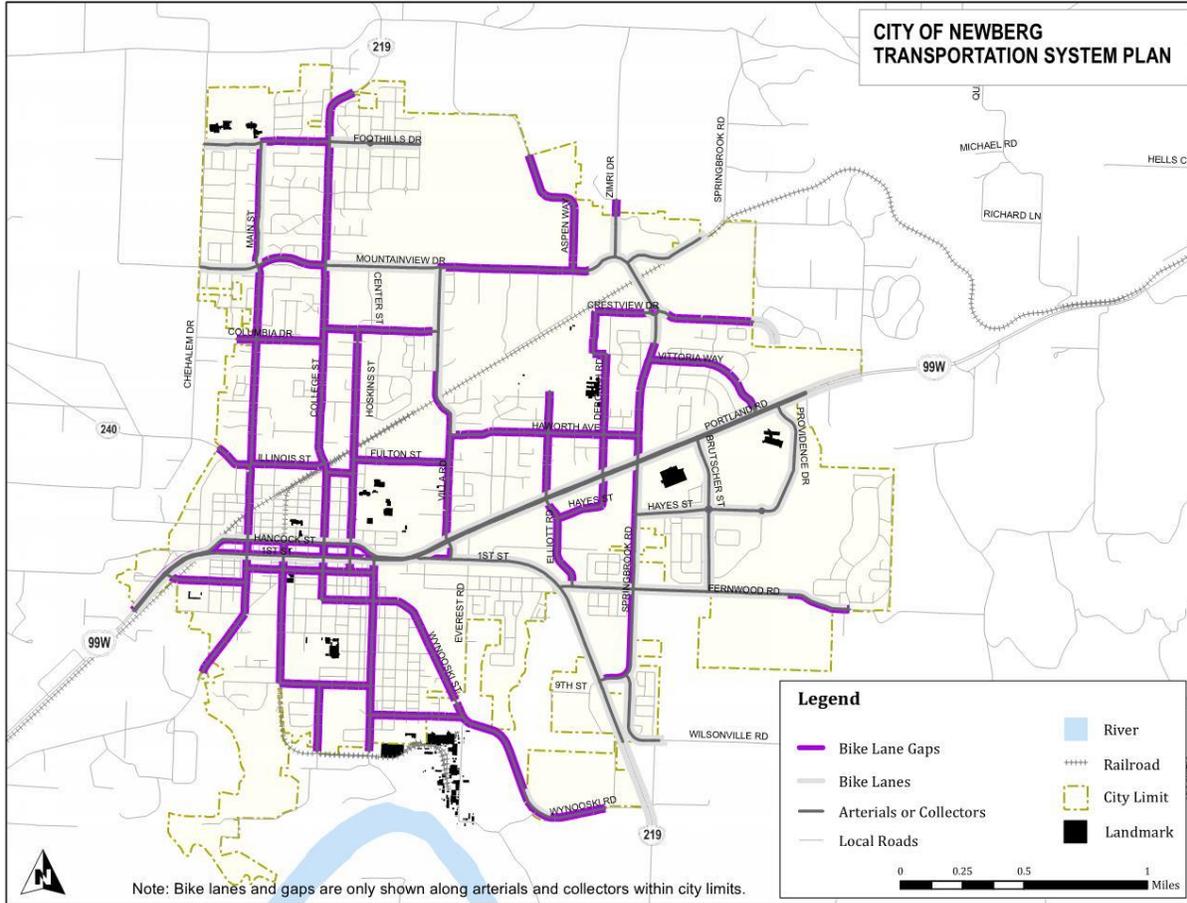


Figure 11: Biking Needs

### Transit Needs

Yamhill County Transit Area (YCTA) provides two fixed bus routes connecting Newberg to destinations along the OR 99W corridor, including McMinnville, Newberg, Sherwood, and Tigard (routes 44/46S/45X). YCTA also provides Americans with Disabilities Act (ADA) dial-a-ride service and two routes within Newberg (routes 5 and 7). The following are future considerations as Newberg grows:

- Route 44/46S/45X, a commuter service with limited stops along OR 99W between McMinnville and Tigard, stops at three locations in Newberg (Safeway, J's Restaurant and Naps Thriftway). Improvements to provide comfortable pedestrian crossings and amenities should be considered in coordination with YCTA.
- Bus stops should be clearly identifiable, with amenities provided, such as shelters and information, where appropriate. Prominent stops help increase local awareness of transit options, and can enhance the street environment.
- Routes 5 and 7 provide local service within Newberg. Expansion of the transit network, and potentially these routes in particular, should be considered for new urban growth areas, particularly in the northeast and southeast parts of town. Connections to transit will be vitally important in southeast Newberg area where both households and employment are expected to grow significantly.
- All current routes provide infrequent service with one to two-hour headways between 6:00 AM and 7:00 PM Monday through Friday. Route 44 also makes four trips between 8:00 AM and 7:00 PM Saturday.

### Freight Needs

Truck freight movements in Newberg involve regional and local shipments. OR 99W is the primary truck route, however OR 219 and OR 240 also serve trucks. Medium and heavy trucks make up approximately six to seven percent of the traffic on OR 99W, about 2800 vehicles per day. It is estimated that approximately 65% of through trucks will divert to the Newberg-Dundee Bypass when it is built. As Newberg attracts more commercial and industrial development in the future, the developments and roadways should be designed to accommodate freight traffic. Turning radii, access points, and pavement design will be important along any future freight routes.

## Impact of Full Bypass

The future forecasts used for the Transportation System Plan update to identify needs and projects were predicated on assumptions about land development and roadway system improvements. The 2035 Base Scenario assumed about 85% growth in jobs and housing plus the first phase of the Newberg-Dundee Bypass being open. These assumptions are consistent with current plans and state regulations, however, the City wanted to understand how sensitive these findings might be relative to extension of the full bypass. This section presents an analysis exploring possible assumptions about impacts greater than the Base Scenario used for the TSP update. This sensitivity analysis evaluates large trends and patterns, and does not evaluate to the same level of detail as the rest of the Transportation System Plan. The primary value of the outcomes from this analysis is to help make better choices about which projects identified in this plan might also work towards also being a benefit to other future growth alternatives.

The full Newberg-Dundee Bypass would extend from the Phase 1 terminus at Springbrook Road eastward to connect to OR 99W near Corral Creek Road. West of Newberg, the bypass would add an interchange to provide access near Fox Farm Road on the north side of Dundee. The bypass would also be extended beyond the Phase 1 southern/western terminus on the south side of Dundee to reach Dayton. The full bypass would include two lanes in each direction, which is wider than the Phase 1 width of 1 lane in each direction. Figure 12 shows the general trends that could result from this scenario:

- Overall, the bypass would become a more attractive route. The bypass (with increased length and capacity) would serve additional traffic.
- The largest magnitude of change would occur east of Springbrook Road. The extended bypass alignment would serve two types of trips: It would remove Phase 1 bypass trips from the adjacent street network (OR 99W and roadways connecting to the Phase 1 terminus at Springbrook Road), and it would carry additional (new) bypass trips due to the extension being a more attractive route.
- West of Springbrook Road, the original (Phase 1) portion of the bypass would serve additional traffic due to the increased attractiveness of the full bypass route. The parallel OR 99W route through the couplet would have less traffic.
- Study intersections impacted by this scenario include two general groups: those along OR 99W (less traffic) and those located north of OR 99W (less traffic).

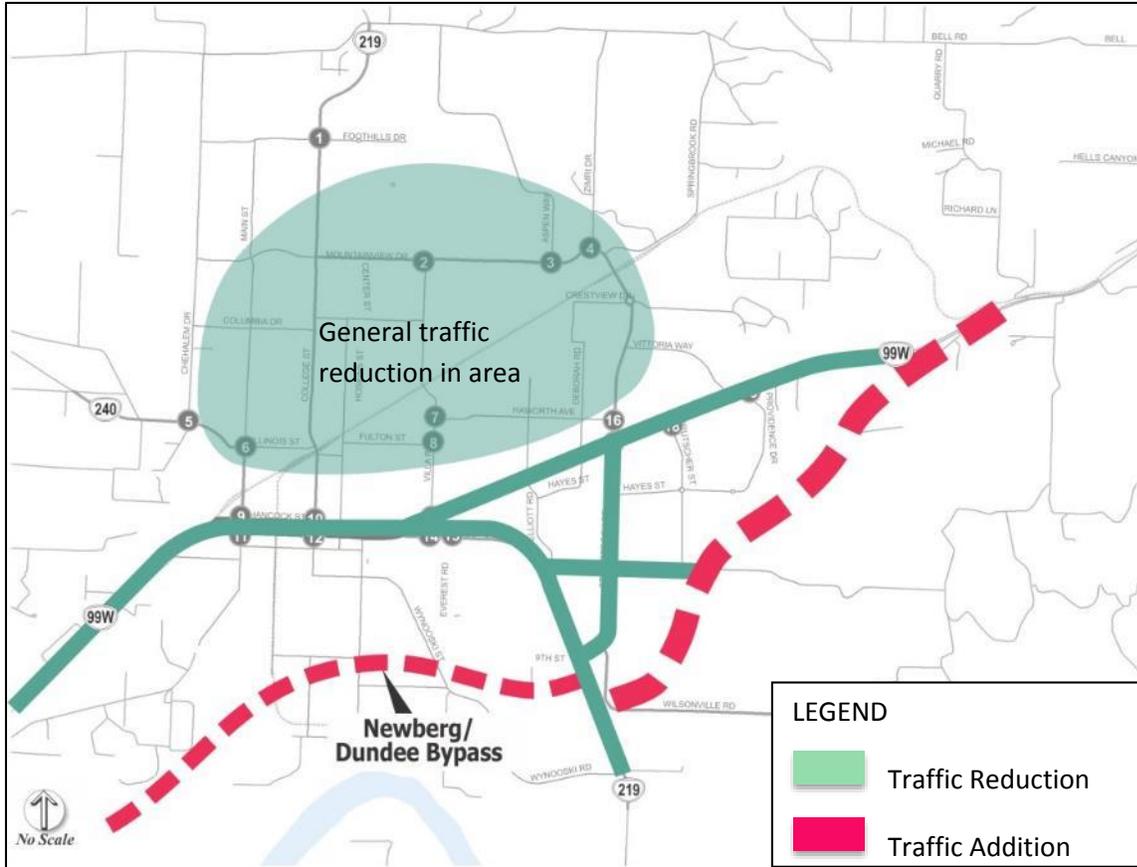


Figure 12: Impacts of Full Bypass Extension

# Standards

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With Newberg’s vision and resulting transportation investment priorities established, this chapter sets out the standards and regulations to ensure that future land development and redevelopment is consistent with this plan.

## Transportation Standards

A transportation system is a hierarchy of streets organized by functional classification and area type. These classifications reflect a scale and design appropriate to the character of the neighborhood, abutting properties and land uses, and also identify design cross-sections that take into account the needs of all travel modes, including pedestrians, bicyclists, transit riders, and motorists. A sound multi-modal street classification system should also enable the city to vary design elements in a manner that is sensitive to the context, character, and constraints of the surrounding property.

### Functional Classification

Traditionally, a roadway is classified based on the type of travel it is intended to serve (local traffic versus through traffic). The roadway functional classification determines the level of mobility for all travel modes, defining its level of access and usage within the City and region. The street functional classification system recognizes that individual streets form a network that works together to serve travel needs on a local and regional level. From highest to lowest intended usage, the classifications are arterials, collectors, and local streets. Roadways with a higher intended usage generally have a classification and related standards that promote more efficient vehicle movement through the City, while roadways with lower intended usage are classified to provide greater access to local destinations such as businesses or residences.

- **Arterial Streets** in Newberg are classified as either Major or Minor Arterials.
  - **Major Arterials** in Newberg include OR 99W, which is owned by ODOT. OR 99W has the highest traffic volumes in Newberg. It is the roadway that residents use to connect to locations outside the City, and the roadway that visitors use to reach and travel through Newberg.
  - **Minor Arterials** in Newberg include ODOT-owned OR 219 and OR 240, City-owned Mountainview Drive and Springbrook Road, and Yamhill County-owned Wilsonville Road. These Minor Arterials also carry some of the higher traffic volumes of any roadway in the City and are used by residents to connect to locations outside the City, as well as provide major connections within the City.

The posted speed along arterials in Newberg may vary from 45 miles per hour as you enter the city to as low as 25 miles per hour through the downtown core.

- **Collector Streets** in Newberg connect the neighborhoods and major activity generators to arterial streets. These streets provide greater accessibility to neighborhoods than arterials, and provide efficient through movement for local traffic. The City of Newberg has two classifications for collectors: Major and Minor Collectors. Villa Road and Haworth Avenue are examples of Major Collector streets providing connections between commercial areas of town and the surrounding neighborhoods. Minor collectors (such as Meridian Street and Columbia Drive) provide the primary connections between neighborhoods and the major road system, but generally span shorter distances than major collectors.
- **Local Streets** provide direct access to residences in Newberg. These roadways are often lined with residences and are designed to serve lower volumes of traffic with posted speeds of 25 miles per hour.

Figure 13 shows the current functional classifications of streets in Newberg.

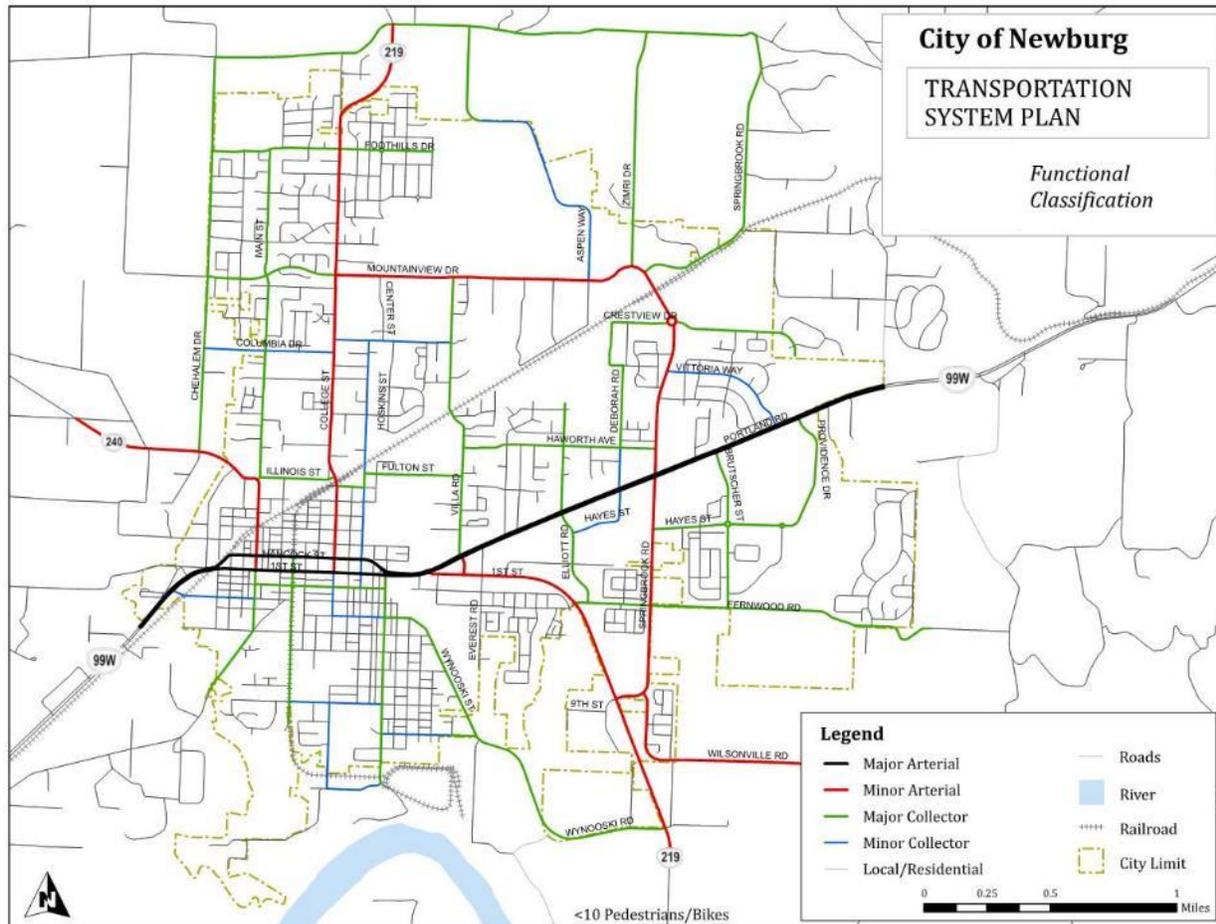


Figure 13: Functional Class Map

## Street Type

In addition to functional class, the surrounding uses provide context for how roads are intended to function for pedestrians, bicyclists, and transit riders. The street type of a roadway defines its cross-section characteristics and determines how users of a roadway interact with the surrounding land use. Since the type and intensity of adjacent land uses and zoning directly influence the level of use by pedestrians, bicyclists, and transit riders, the design of a street (including target speed, intersections, sidewalks, and travel lanes) should reflect its surroundings. The street types attempt to strike a balance between street functional classification, adjacent land use, zoning designation and the competing travel needs by prioritizing various design elements.

- **Mixed-Use Streets** typically have a higher amount of pedestrian activity and are often on a transit route. These streets should emphasize a variety of travel choices such as pedestrian, bicycle, and transit use to complement the development along the street. Since Mixed-Use Streets typically serve pedestrian-oriented land uses, walking should receive the highest priority of all the travel modes. They should be designed with features such as wider sidewalks, pedestrian amenities, transit amenities, attractive landscaping, on-street parking, pedestrian crossing enhancements, and bicycle facilities.
- **Residential Streets** are generally surrounded by residential uses, although various small commercial uses may be embedded within the neighborhood. These streets often connect neighborhoods to local parks, schools and mixed-use areas. They should be designed to emphasize walking, while still accommodating the needs of bicyclists and motor vehicles. A high priority should be given to design elements such as traffic calming, landscaped buffers, walkways/pathways/trails, on-street parking, and pedestrian safety enhancements.
- **Commercial/Industrial Streets** are primarily lined with retail and large employment complexes, and often serve industrial areas. These uses serve customers throughout the City and region and may not have a direct relationship with nearby residential neighborhoods. Although commercial streets will be somewhat auto oriented, they should still accommodate pedestrians and bicyclists safely and comfortably. Roadway widths are typically wider to accommodate a high volume of large vehicles such as trucks, trailers, and other delivery vehicles. Design features should include sidewalks and pedestrian crossing enhancements. Bicycles should be accommodated through shared-lane markings and plentiful bicycle parking. Sidewalks should be constructed in accordance with Newberg's Development Code.

## Multi-Modal Roadway Cross Sections

Street design in Newberg requires attention to many elements of the public right-of-way and considers how the street interacts with adjoining properties. Four zones comprise the cross-section of streets in Newberg: the context zone, walking zone, biking/on-street parking zone, and driving zone. The design of these zones varies based on the functional classification and street type.

- **Context Zone:** The context zone is the point at which the sidewalk interacts with the adjacent buildings or private property. The purpose of this zone is to provide a buffer for land use adjacent to the street and to ensure that all street users have safe interactions.

- **Walking Zone:** This is the zone in which pedestrians travel. The walking zone is determined by the street type and should be a high priority in mixed-use and residential areas. It includes a minimum five foot wide clear throughway for pedestrian and ADA access, an area for street furnishings or landscaping (e.g. benches, transit stops and/or plantings), and a clearance distance between curbside on-street parking and the street furnishing area or landscape strip (so parking vehicles or opening doors do not interfere with street furnishings and/or landscaping). Streets located along a transit route should incorporate furnishings to support transit ridership, such as transit shelters and benches, into the furnishings/landscape strip adjacent to the biking/on-street parking zone.
- **Biking/On-Street Parking Zone:** This is the zone for biking and on-street parking, and is the location where users will access transit. The biking/on-street parking zone is determined by the street type and use. Major streets that exceed speeds and traffic volumes for safe shared lane use should include designated bike lanes. On-street parking may be present in some cases depending on the adjacent uses, available right of way, and presence of surface parking.
- **Driving Zone:** This is the throughway zone for drivers, including cars, buses, and trucks and should be a high priority in commercial/employment and industrial areas. The functional classification of the street generally determines the number of through lanes, lane widths, and median and left-turn lane requirements. However, the route designations (such as transit street or freight route) take precedence when determining the appropriate lane width in spite of the functional classification. Wider lanes (between 13 to 14 feet) should only be used for short distances as needed to help buses and trucks negotiate right-turns without encroaching into adjacent or opposing travel lanes. Streets that require a raised median should include a minimum 6 foot wide pedestrian refuge at marked crossings. Otherwise, the median can be reduced to a minimum of 4 feet at midblock locations, before narrowing at intersections for left-turn lanes (where required or needed).

## Design and Analysis Guidelines

Design and analysis guidelines allow cities to shape the character and functionality of the transportation system. In Newberg, these guidelines are used to provide standards for access spacing, connectivity, roadway and trail cross sections, intelligent transportation systems coordination, traffic impact analysis, neighborhood traffic management, bicycle facilities, enhanced pedestrian crossings, and on-street parking.

### Roadway Access Spacing

Access spacing along Newberg streets is managed through access spacing standards. Access management is a broad set of techniques that balance the need to provide efficient, safe, and timely travel with the ability to allow access to individual destinations. Proper implementation of access management techniques will promote reduced congestion and accident rates, and may lessen the need for additional highway capacity enhancing projects in the future.

Table 2 identifies the minimum private access spacing standards for streets in Newberg. Within developed areas of the City, streets not complying with these standards could be improved with strategies that include shared access points, access restrictions (through the use of a median or channelization islands) or closed access points as feasible. New streets or redeveloping properties must comply with these standards, to the extent practical (as determined by the City Engineer).

**Table 2: Access Spacing**

| Roadway Functional Classification  | Minimum Public Street Intersection Spacing (Feet)* | Frontage Required per Additional Driveway** | Driveway Setback from Intersecting Street† |
|--|--|---|--|
| ODOT Statewide Highway<br>Speeds 30 & 35 (Urban)<br>Speeds 40 & 45 (Urban) | 500<br>800   | NA  | NA   |
| Major arterial<br>Urban (outside CBD)<br>Central Business District         | 500<br>200   | NA  | NA   |
| Minor arterial<br>Urban (outside CBD)<br>Central Business District         | 300<br>100   | 200<br>200                                  | 150<br>150                                 |
| Major collector  | 200  | 150   | 100  |
| Minor collector  | 150  | 75  | 100  |
| Local streets  | 100  | 75  | 50   |

\*Street Spacing measured centerline to centerline

\*\*Requirement is the minimum frontage required per additional driveway beyond the first. Where two driveways are constructed, at least one curb parking space shall separate each driveway approach.

†The setback is based on the higher classification of the intersecting streets. Measured from the curb line of the intersecting street to the beginning of the driveway, excluding flares. If the driveway setback listed above would preclude a lot from having at least one driveway, including shared driveways or driveways on adjoining streets, one driveway is allowed as far from the intersection as possible.

## Roadway Cross Sections

Roadway standards and cross sections depend on functional classification, and are refined further in this section. Table 3 provides a summary of design standards for typical Newberg streets, which are located in the Newberg Street and Transportation Improvements Design Standards<sup>17</sup>. All new and rebuilt streets in Newberg must conform to these design standards. Where a range of values is listed the City will determine the width based on a consideration of the existing constraints and needs for the facility. The required widths of travel lanes, bike lanes, sidewalks, planter strips, and on-street parking can be found in the Newberg Development Code. Illustrations of typical cross sections are shown in Figure 14 through Figure 20.

**Table 3: Functional Classification Design Standards (Typical\*\*\*)**

<sup>17</sup> Newberg Municipal Code Chapter 15.505

| Street Classification       | Minimum ROW (ft) | Street Width (ft) | Travel Lanes | Median Type     | Striped Bike Lane | Sidewalk | On-street Parking | Planter Strip |
|-----------------------------|------------------|-------------------|--------------|-----------------|-------------------|----------|-------------------|---------------|
| Statewide Highway           | ODOT             | ODOT              | ODOT         | ODOT            | ODOT              | ODOT     | ODOT              | ODOT          |
| Major Arterial              | 85-100           | 74                | 4            | TWLTL or median | Yes               | Yes      | No                | Yes           |
| Minor Arterial              | 60-80            | 48                | 2            | TWLTL or none   | Yes               | Yes      | No                | Yes           |
| Major Collector             | 60-80            | 36                | 2            | None            | Yes               | Yes      | No                | Yes           |
| Minor Collector             | 56-65            | 34                | 2            | None            | No*               | Yes      | Yes               | Yes           |
| Local Residential           | 54-60            | 32                | 2            | None            | No                | Yes      | Yes               | Yes           |
| Local Commercial/Industrial | 56-65            | 34                | 2            | No              | No                | Yes      | No                | Yes           |

\*Minor collectors shall provide designated shared space for bicycles instead of bike lanes. See Bicycle Facility Treatment Guidelines later in this section for details.

\*\*Limited residential streets may have parking on both sides, parking on one side only, or no on-street parking.

\*\*\*Actual standards based on the most recently adopted Public Works Design Standards.

†The planter strip may be eliminated on limited residential streets. Curbside sidewalks have additional design requirements.

ODOT: Oregon Department of Transportation-owned facility. The design authority ultimately rests with ODOT.

TWLTL: Two-Way Left Turn Lane

NA: Not Applicable

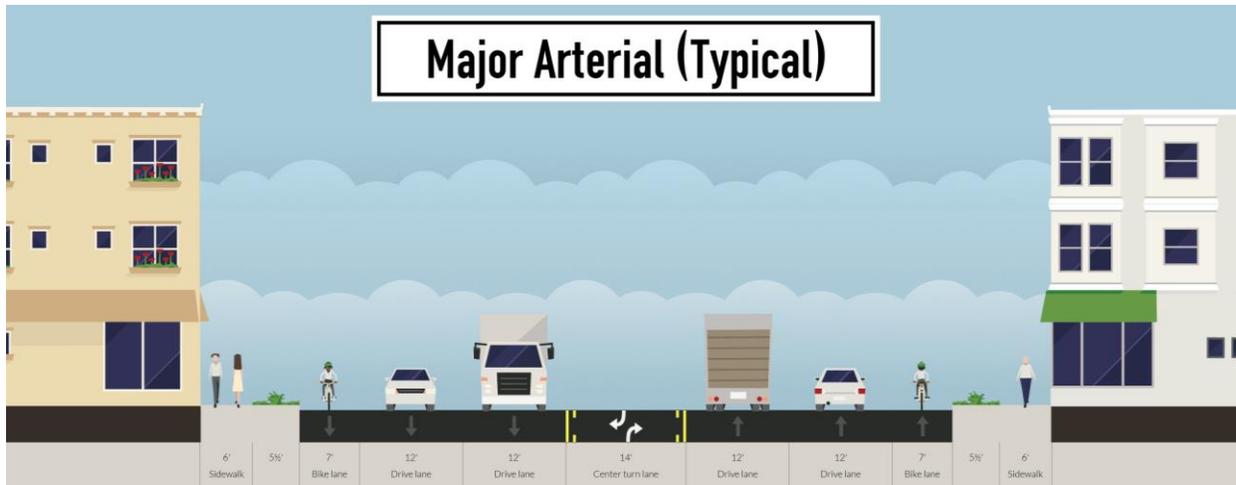


Figure 14: Typical Major Arterial

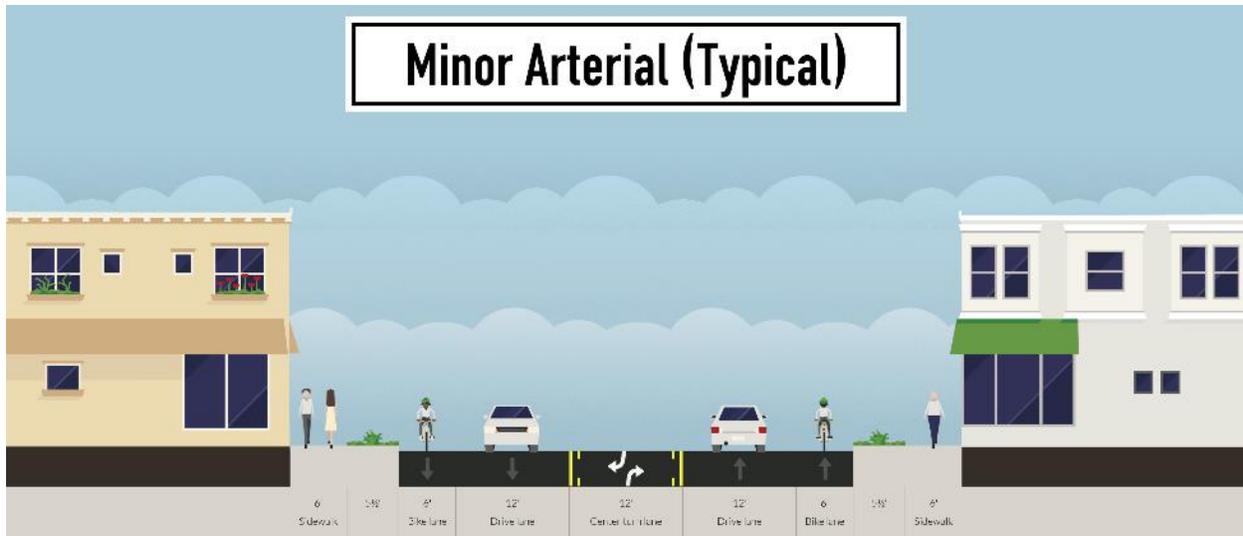


Figure 15: Typical Minor Arterial



Figure 16: Typical Major Collector



Figure 17: Typical Minor Collector



Figure 18: Typical Local Residential

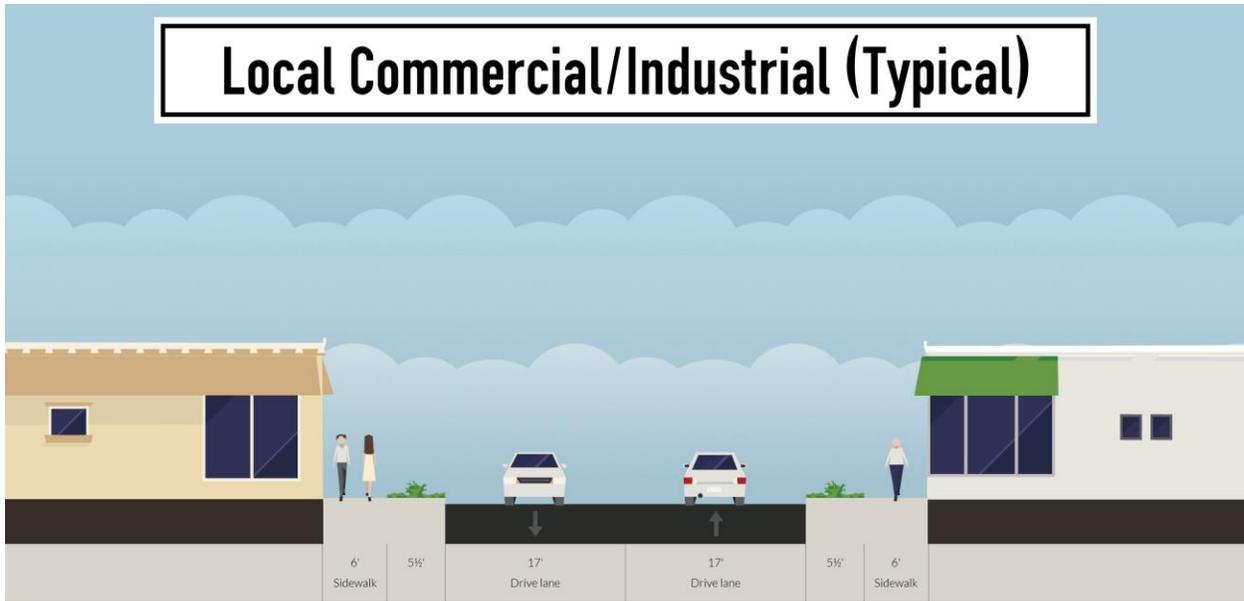


Figure 19: Typical Local Commercial/Industrial

## Shared-Use Path Cross Sections

Shared-use paths provide off-roadway facilities for walking and biking travel. Depending on their location, they can serve both recreational and general travel needs. Widths should provide ample space for both walking and biking and should also be able to accommodate maintenance vehicles. The design criteria for shared-use paths can be seen in Figure 20. The City may reduce the width of the paved shared-use path as necessary in constrained areas located in steep, environmentally sensitive, rural, historic, or development-limited areas of the City. In areas with significant walking or biking demand, the paved shared-use path should be 16 feet wide. In addition, a variety of amenities can make off-street trails more inviting to the user. These amenities (such as interpretive signs, water fountains, benches, lighting, maps, art, and shelters) would not typically be provided along shared-use paths but may be provided for off-street trails in natural settings that have more flexibility with right of way.

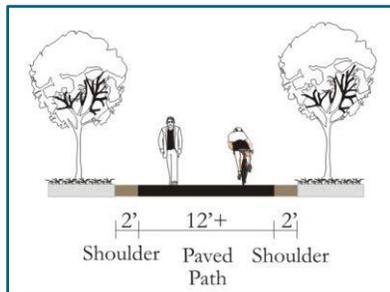


Figure 20: Design Criteria for Shared-Use Paths

## ITS Coordination Guidelines

Intelligent Transportation System (ITS) planning and coordination is important for Newberg to consider. The City should follow the Oregon Statewide ITS Plan<sup>18</sup>, including installing conduits for communications systems when building/rebuilding roads along planned ITS corridors. Incorporating ITS improvements for and existing project and/or providing opportunities for future infrastructure (laying conduit in advance of a fully-operational system) are a cost-effective means to provide additional opportunities for managing the transportation system.

## Traffic Impact Analysis Guidelines

The City Engineer will require a traffic impact analysis report (TIA) as determined by the type of new development or redevelopment and its potential impact to existing street systems. Details for the scope and requirements of the traffic impact analysis report are located in the City of Newberg Municipal Code Chapter 15.220 and the Newberg Public Works Design & Construction Standards<sup>19</sup>.

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<sup>18</sup> <http://www.oregon.gov/ODOT/HWY/ITS/Documents/Oregon%20ITS%20Architecture%20Report%202012.pdf>

<sup>19</sup> Guidance here reflects current requirements, and are subject to change. Always consult current code and standards documents before preparing a TIA.

A traffic analysis will be required at the discretion of the City Engineer, and will generally be required for a development:

- When it will generate in excess of 40 trips per p.m. peak hour, or
- When a development's location, proposed site plan, and traffic characteristics could affect traffic safety, access management, street capacity, or known traffic problems or deficiencies in a development's study area.

### **Neighborhood Traffic Management Tool Guidelines**

Traffic calming is a form of neighborhood traffic management that can be used to create safe, slow streets (primarily in residential and mixed-use areas) without significantly changing vehicle capacity. Traffic calming can mitigate the impacts of traffic on neighborhoods and business districts where a greater balance between safety and mobility is desired. It seeks to influence driver behavior through physical and psychological means, resulting in lower vehicle speeds or through traffic volumes. Physical traffic calming techniques include:

- Narrowing the street by providing curb extensions or bulbouts, or mid-block pedestrian refuge islands.
- Deflecting the vehicle path vertically by installing speed humps, speed tables, or raised intersections.
- Deflecting the vehicle path horizontally with chicanes, roundabouts, or mini-roundabouts.

Narrowing travel lanes and providing visual cues such as placing buildings, street trees, on-street parking, and landscaping next to the street also creates a sense of enclosure that prompts drivers to reduce vehicle speeds.

Traffic calming measures must balance the need to manage vehicle speeds and volumes with the need to maintain mobility, circulation, and function for service providers (e.g. emergency response). Table 2 lists common traffic calming applications and suggests which devices may be appropriate along various streets in the City. Any traffic calming project should include coordination with local emergency response agency staff to ensure public safety is not compromised.

Table 4: Traffic Calming Measures by Street Functional Classification

| Traffic Calming Measure  | Is Measure Appropriate? (per Roadway Classification)** |   |
|--|--|---|
|  | Collector*   | Local Street*   |
| Narrowing travel lanes   | Yes  | Calming measures are generally appropriate on local streets that are infrequent emergency response routes and have more than one way in and out |
| Placing buildings, street trees, on-street parking, and landscaping next to the street | Yes  |   |
| Curb Extensions or Bulbouts  | Yes  |   |
| Roundabouts  | Yes  |   |
| Mini-Roundabouts   | Yes  |   |
| Medians and Pedestrian Islands   | Yes  |   |
| Pavement Texture   | Yes  |   |
| Speed Hump or Speed Table  | No   |   |
| Raised Intersection or Crosswalk   | No   |   |
| Speed Cushion (provides emergency pass-through with no vertical deflection)            | No   |   |
| Choker   | No   |   |
| Traffic Circle   | No   |   |
| Diverter (with emergency vehicle pass through)   | Yes  |   |
| Chicanes   | No   |   |

\*Any traffic calming project should include coordination with emergency agency staff to ensure public safety is not compromised.

\*\* Traffic calming may be considered for state highways but would be required to meet ODOT standards, including any ODOT approved design exceptions.

### Bicycle Facility Treatment Guidelines

A network of family-friendly biking routes is envisioned to connect major destinations and neighborhoods in Newberg. All arterial and major collector streets must have bike lanes. Minor collector streets may be designated as a shared space for bicycles and motor vehicles with shared-lane markings (SLMs), or “sharrows”, or they may warrant bike lanes. Bike lanes and sharrows are not required on local roads, but local roads may be designated as shared facilities if they are part of a designated bike route or critical connection.

Designated bike routes, sometimes referred to as Bicycle Boulevards, modify existing low volume, low speed streets to prioritize the through movement of bicyclists and pedestrians while maintaining local access for automobiles. Bicycle Boulevards typically include wayfinding signage, sharrows, and traffic calming features intended to reduce motor vehicle speeds and volumes. Where these facilities cross major roadways it is important to provide safe and comfortable pedestrian and bicycle crossings.



Photo 9: Bicycle Boulevard with Sharrows

Further enhancements may include “green street” features such as bio-swales and street trees, in addition to wider sidewalks and improved pedestrian amenities (e.g., benches and pedestrian-scale lighting). A network of bicycle boulevards helps encourage active transportation by providing comfortable, low-stress routes between neighborhoods and local parks, schools, and shopping areas. The bicycle boulevard network is generally off the main street system and is more attractive to less experienced walkers and bikers. It is generally envisioned to act like a linear park system linking parks, schools, jobs and other destinations in the City through a network of on-street shared-use streets and off-street shared-use paths.

### **Enhanced Pedestrian Crossing Treatment Guidelines**

Enhanced street crossings are generally required on roadways with high traffic volumes and/or speeds in areas with nearby transit stops, residential uses, schools, parks, shopping, and employment destinations. These crossings should include treatments such as marked crosswalks, beacons or signalization, and curb extensions to improve the safety and convenience of street crossings. Crossings should be provided consistent with the connectivity standards.

### **On-Street Parking Dimensions**

On-street parking should be a high priority along Mixed-Use or Residential streets. On-street parking is generally discouraged along Commercial/Industrial streets that have a primary function of traffic mobility (such as an arterial or major collector), although it may be allowed if the adjacent land use would benefit from it and adequate right-of-way is available. In Newberg, on-street parking is provided along all minor collector and local streets, although parking can be removed or reduced to one side if providing parking on both sides is not feasible.

The width of on-street parking should typically be eight feet, but can be reduced to seven feet where circumstances warrant with City Engineer approval.

# The Investments

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The Newberg approach to developing transportation solutions placed more value on investments in smaller, cost-effective solutions for the transportation system rather than larger, more costly ones, consistent with statewide and Newberg transportation goals. The approach helped to encourage multiple travel options, increase street connectivity, and promote a more sustainable transportation system. The projects in this plan fall within one of several categories:

**Walking** projects for sidewalk infill, providing seamless connections for pedestrians throughout the City. Newberg identified 48 walking projects. Of these projects, 30 are covered by other projects in this TSP, and 18 are standalone projects. The 18 standalone projects would cost the City a combined total of \$1.9 million to complete.

**Biking** projects include an integrated network of bicycle lanes and marked on-street routes that facilitate convenient travel citywide. Newberg identified 33 biking projects. Of these projects, 14 are standalone projects and 19 are covered by other projects in the TSP. The 14 standalone projects would cost the City a combined total of \$11.2 million to complete.

**ADA** Improvements should be a component of all project types identified in other categories as future improvements. Other ADA needs that do not overlap with these projects will be addressed through the Public Works department's ongoing ADA improvement program in order to provide a continuous, connected ADA route through Newberg

**Chehalem Trail** projects include trails identified under the Chehalem Heritage Trails Master Plan. These trails will provide pedestrian and bicycle connectivity between Newberg and Dundee. There are six Chehalem Trail projects, four within or partially within Newberg, and two within Dundee or Yamhill County. The trail segments within Newberg are expected to cost approximately \$12.4 million to complete.

**Intersection** projects include safety and mobility improvements for intersections in Newberg. Newberg identified 13 intersection projects with a combined total cost of \$4.7 million to complete.

**Expansion** projects are those that add or extend new roads or add more lanes to existing roads. Newberg identified 19 expansion projects that are expected to cost \$44.4 million to complete. Many of these expansion projects would be paid for by new development in undeveloped areas of Newberg.

**Safety and Standards** projects are those that bring an existing facility up to Newberg's most current roadway standards, or address a known safety need. Newberg identified 39 Safety and Standards project that are expected to cost \$62.0 million to complete. Some of these projects would be paid for by new or infill development along existing facilities.

**Transit** projects are those that expand or add amenities to existing transit service, or that add new transit routes within the City. Newberg identified two transit projects with a total cost of \$85,000.

Figure 21 illustrates the breakdown of all projects by the number of projects in each category and the total expense of the projects in each category.

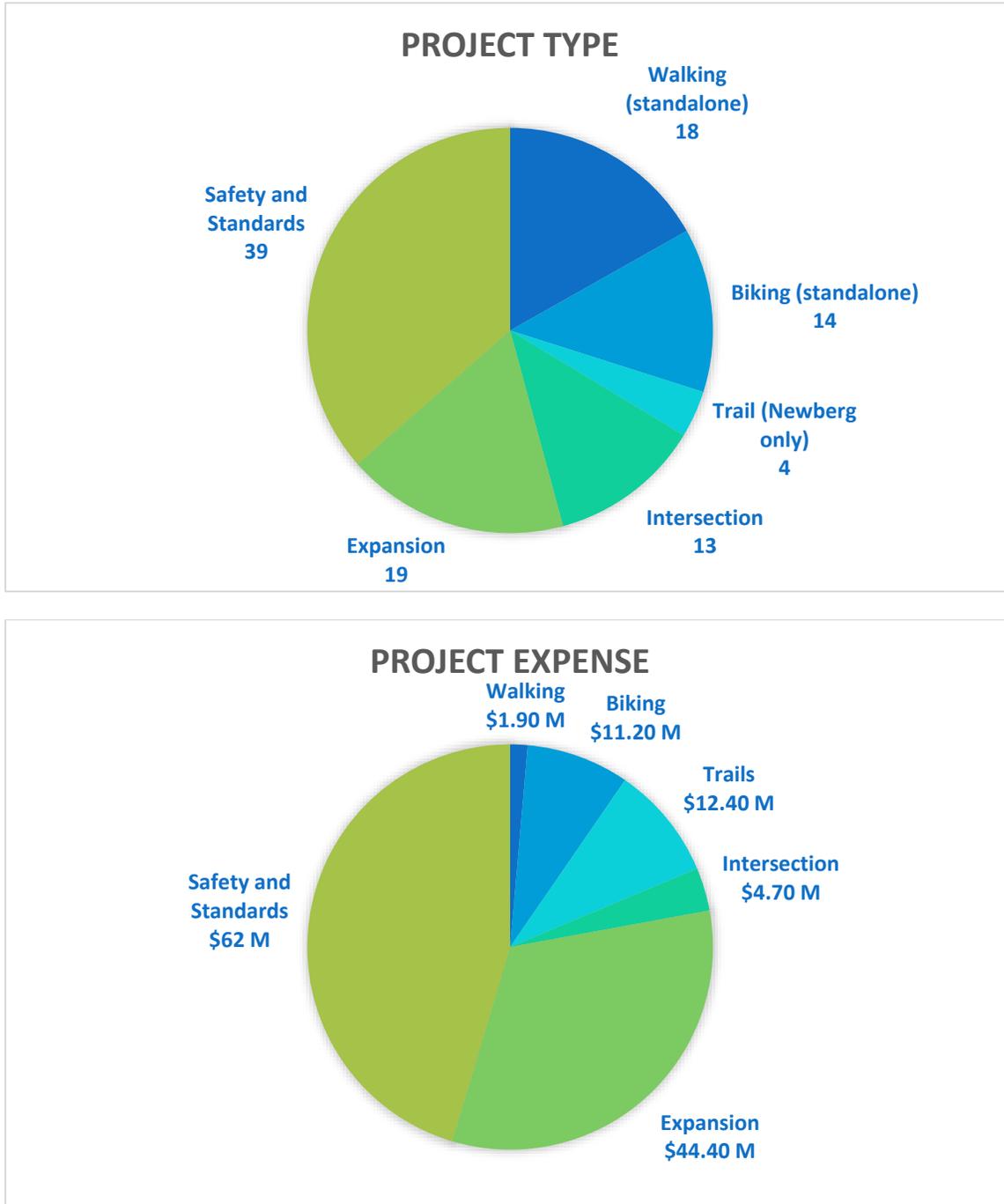


Figure 21: Project Type and Project Expense

# Funding

With an estimated \$137 million worth of transportation solutions identified, Newberg must make investment decisions to develop a set of transportation improvements reasonably likely to be funded to meet identified needs through 2035. As shown in Table 5, Newberg is expected to have approximately \$18.7 million available for capital expenditures through 2035 with current funding sources and maintenance/operations expenditures.

Table 5: Newberg Transportation Funding

| Revenue Source  | Average Annual Amount | Estimated Through 2035 |
|---|-----------------------|------------------------|
| State Highway Trust Fund (Gas Taxes and Registration Fees)            | \$820,600             | \$16,400,000           |
| Bikeway Taxes (portion of State Highway Trust Fund)                   | \$12,400              | \$250,000              |
| System Development Charges  | \$286,700             | \$20,700,000           |
| <b>Total Revenues</b>   | <b>\$1,100,000</b>    | <b>\$37,300,000</b>    |
| Expenditures  | Average Annual Amount | Estimated Through 2035 |
| Operations and Maintenance  | \$930,000             | \$18,600,000           |
| <b>Revenue over Expenditures (Available for Capital Improvements)</b> |                       | <b>\$18,700,000</b>    |

## Current Newberg Funding Sources

Two general funding sources are utilized by the City for transportation: the State Highway Trust Fund and System Development Charges (SDCs). In addition to City-funded projects, new private development will construct and/or fund some of the proposed transportation projects in Newberg. Federal transportation funds received by the City (approximately \$250,000 annually) go towards the debt exchange to pay for a portion of the local contribution of the Newberg-Dundee Bypass.

State Highway Trust Fund monies come from state motor vehicle gas tax, vehicle registration fees and truck weight-mile fees, and are distributed on a per capita basis to cities and counties. By statute, the money may be used for any road-related purpose, including walking, biking, bridge, street, signal, and safety improvements. The state gas tax funds have previously failed to keep up with cost increases and inflation. With increased fuel efficiency of vehicles and the State's emphasis on reducing vehicle miles traveled, the real revenue collected has gradually eroded over time. The gas tax in Oregon increased on January 1, 2011 by six cents, to 30 cents per gallon. This was the first increase in the state gas tax since 1993.

System Development Charges (SDCs) are fees collected from new development and used as a funding source for all capacity adding projects for the transportation system. The funds collected can be used to construct or improve portions of roadways impacted by applicable development such as upgrading an existing collector road to add additional capacity to serve growth. The SDC is collected from new development and is a one-time fee. The fee is based on the proposed land use and size, and is

proportional to each land use's potential weekday vehicle trip generation. Newberg collects \$3,052 per single-family residence and slightly less for multi-family residences. Commercial and industrial developments are charged based on Institute of Transportation Engineers (ITE) trip generation rates.

## Revenue

Current revenue sources are expected to provide about \$18.7 million through 2035. Over the past three years, Newberg averaged \$821,000 in State Highway Fund shared revenue and \$287,000 in SDC revenue. As a conservative estimate,<sup>20</sup> the same levels for State Highway Fund revenue (\$821,000 per year) was assumed in the future, for a total of about \$16.4 million through 2035.

Newberg is expected to receive \$20.7 million from SDC charges through 2035. This figure was calculated by determining the expected household and commercial growth in Newberg over the planning horizon and using Newberg's existing SDC rates. State law requires that SDC revenue be used only on capacity increasing capital projects that increase the level of performance of an existing facility or provide new facilities.

State law requires that a minimum of one percent of the State gas tax and vehicle registration funds received must be set aside for construction and maintenance of walking and bicycling facilities. In Newberg, this represents approximately \$12,000 per year and over \$240,000 through 2035.

## Expenditures

Current operations and maintenance expenditures are expected to top \$18.6 million through 2035 (based on expenditures over the past three years).

## Funds for Transportation Improvements

In addition to Newberg funds, ODOT has determined that it is reasonable to assume that \$10 million in state discretionary funds will be available to fund new projects in Newberg over the next 20 years<sup>21</sup>. Many of the identified transportation improvements are expected to be funded, at least in part, by new development. About \$50 million of the identified projects would be development-led.

### ODOT Highway Safety Improvement Program (HSIP) Funding

With Oregon's funding under HSIP increased significantly and direction from the Federal Highway Administration to address safety challenges on all public roads, ODOT will increase the amount of funding available for safety projects on local roads. Safety funding will be distributed to each ODOT

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<sup>21</sup> ODOT has not committed any future funding for projects in Newberg. This estimate is based on assuming that Newberg will receive a reasonable share of the state/federal funding projected to be available over the 20-year planning horizon in Region 2 and based on ODOT sustaining their current revenue structure. It is used to illustrate the degree of financial constraints faced by ODOT as of the writing of this document. Actual funding through state and federal sources may be higher or lower than the range of this estimate. This estimate does not include projects that might be funded through the federal Highway Safety Improvement Program (HSIP).

region, which will collaborate with local governments to select projects that can reduce fatalities and serious injuries, regardless of whether they lie on a local road or a state highway.

To maintain commitments in the current Statewide Transportation Improvement Program (STIP) for 2013-2015 and because the development of 2016-2018 STIP is well underway, a reasonable expectation is to start the jurisdictionally blind safety approach in 2017. Meanwhile, ODOT intends to implement a transition plan for 2013-2016. The transition will be developed to bridge the gap. Funding for local roads will be allocated to primarily focus on a few systemic low cost fixes that can be implemented in the shorter timeframe.<sup>22</sup>

## Potential Additional Funding Sources

Additional transportation funding options include local taxes, assessments and charges, and state and federal appropriations, grants, and loans. All of these resources can be constrained based on a variety of factors, including the willingness of local leadership and the electorate to burden citizens and businesses; the availability of local funds to be dedicated or diverted to transportation issues from other competing City programs; and the availability of state and federal funds. Nonetheless, it is important for the City to consider all opportunities for providing, or enhancing, funding for the transportation improvements included in the TSP.

The following sources have been used by cities to fund the capital and maintenance aspects of their transportation programs. There may be means to begin to or further utilize these sources, as described below, to address existing or new needs identified in the TSP.

### Transportation Utility Fee

A transportation utility fee is a recurring monthly charge that is paid by all residences and businesses within the City. The fee can be based on the number of trips a particular land use generates, or as a flat fee per unit. It can be collected through the City's regular utility billing. Existing law places no express restrictions on the use of transportation utility fee funds, other than the restrictions that normally apply to the use of government funds.<sup>23</sup> Some cities utilize the revenue for any transportation-related project, including construction, improvements, and repairs. However, many cities choose to place self-imposed restrictions or parameters on the use of the funds, which may designate fund use for a specific purpose (such as street maintenance or overlays, pedestrian/bicycle improvements, or other specific transportation needs).

Assuming a flat fee of \$10.00 per month per residential water meter, the City could collect an additional \$1.5 million for transportation-related expenses through 2035. Additional revenue could be collected from businesses.

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<sup>22</sup> ODOT Jurisdictionally Blind Safety Program

<sup>23</sup> Implementing Transportation Utility Fees, League of Oregon Cities

## **Local Fuel Tax**

Fourteen cities and two counties in Oregon have adopted local gas taxes ranging from one to five cents per gallon. The taxes are paid to the city monthly by distributors of fuel. Newberg may want to consider implementing a local fuel tax. The process for presenting such a tax to voters would need to be consistent with Oregon State law as well as the laws of the City.

## **ODOT Statewide Transportation Improvement Program (STIP) Enhance Funding**

ODOT has modified the process for selecting projects that receive STIP funding. The new process follows a jurisdictionally blind approach, meaning local agencies can receive funding for projects off the state system. Preferred projects are expected to be those that enhance system connectivity and improve multi-modal travel options. With the updated TSP, the City will be well positioned to apply for STIP funding.

## **Local Hotel/Lodging Tax**

Many Oregon jurisdictions impose a local hotel tax. State law requires that 70 percent of the hotel tax revenue be used for tourism facilities and promotion and 30 percent go to the general fund. Tourism facilities could potentially include transportation projects such as public parking or pedestrian improvement projects that benefit tourism.

## **General Fund Revenues**

At the discretion of the City Council, the City can allocate General Fund revenues to pay for its Transportation program (General Fund revenues primarily include property taxes, use taxes, and any other miscellaneous taxes and fees imposed by the City). This allocation is completed as a part of the City's annual budget process, but the funding potential of this approach is constrained by competing community priorities set by the City Council. General Fund resources can fund any aspect of the program, from capital improvements to operations, maintenance, and administration. Additional revenues available from this source are only available to the extent that either General Fund revenues are increased or City Council directs and diverts funding from other City programs.

## **Urban Renewal District**

An Urban Renewal District (URD) would be a tax-funded district within the City. The URD would be funded with the incremental increases in property taxes resulting from construction of applicable improvements. This type of tax increment financing has been used in Oregon since 1960. Use of the funding includes, but is not limited to, transportation improvements, which are funded by the incremental taxes rather than fees.

## **Local Improvement Districts**

Local Improvement Districts (LIDs) can be formed to fund capital transportation projects. LIDs provide a means for funding specific improvements benefiting a specific group of property owners. LIDs require owner/voter approval and a specific project definition. Assessments are placed against benefiting properties to pay for improvements. LIDs can be matched against other funds where a project has

system wide benefit beyond benefiting the adjacent properties. LIDs are often used for sidewalks and pedestrian amenities that provide local benefit to residents along the subject street.

### **Debt Financing**

While not a direct funding source, debt financing can be used to mitigate the immediate impacts of significant capital improvement projects and spread costs over the useful life of a project. Though interest costs are incurred, the use of debt financing can serve not only as a practical means of funding major improvements, but is also viewed as an equitable funding strategy, spreading the burden of repayment over existing and future customers who will benefit from the projects. The obvious caution in relying on debt service is that a funding source must still be identified to fulfill annual repayment obligations.

# The Plan

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As detailed in the Funding section, the City is expected to have approximately \$18.7 million in City funds to cover the City’s public portion of project costs (\$65.9 million) if no additional funding sources are developed. Therefore, most of the transportation solutions identified for the City are not reasonably likely to be funded through 2035. For this reason, the transportation solutions were divided into two categories:

- **Likely Funded** projects are those projects that the City believes are reasonably likely to be funded during the 20-year planning horizon based on the funding threshold established through the City’s funding analysis.
- **Aspirational** projects include all identified projects for improving Newberg’s transportation system that are not reasonably likely to be funded during the 20-year planning horizon, but do address an identified problem and are supported by the City.

## Identifying the Investments

Using the five goals identified previously in the TSP, the transportation solutions were evaluated and compared to one another. Greater value was placed on projects stakeholders felt were most important to the community. The investment recommendations attempted to balance projects between different modes, selecting some of the highest rated projects from each mode. Complex and costly capital projects were disfavored compared with low cost projects with more immediate impact and the ability to spread investment benefits Citywide.

Additionally, the City will actively monitor key routes through neighborhoods that may be impacted by the Phase 1 Bypass. Future phases of the Newberg-Dundee Bypass are not likely to be built within the funding horizon, and the Phase 1 Bypass will likely alter travel patterns on several routes throughout the City. ODOT may set aside funds that may be used for improvements and traffic control on routes impacted by the Bypass, and improvements to reduce cut-through traffic through neighborhoods. This approach seeks to actively manage the transportation system after construction of the Phase 1 Bypass.

## The Likely Funded Plan

The Likely Funded Plan identifies the transportation solutions that are reasonably expected to be funded by 2035 and have the highest priority for implementation. Figure 22 shows the breakdown of different funding sources for the plan, and Table 6 lists all projects by type of improvement and identifies the likelihood of the project being funded (“Likely” or “Aspirational<sup>24</sup>”). The City is assumed to spend \$8

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<sup>24</sup> “Aspirational” designation denotes that the project is included in the plan to address a transportation need in the community but due to limited funding is not assumed to be funded during the planning horizon (2035) under current funding conditions. However, additional funding opportunities such as partnerships or grants may allow these projects to be pursued before 2035.

million on improvements, while ODOT could contribute approximately \$10 to 15 million<sup>25</sup>, Chehalem Park and Recreation District (CPRD) would be responsible for \$4 million of investments, and Yamhill County would be responsible for approximately \$2 million of investments. Additionally, \$34 million worth of investments are assumed to be development-led.

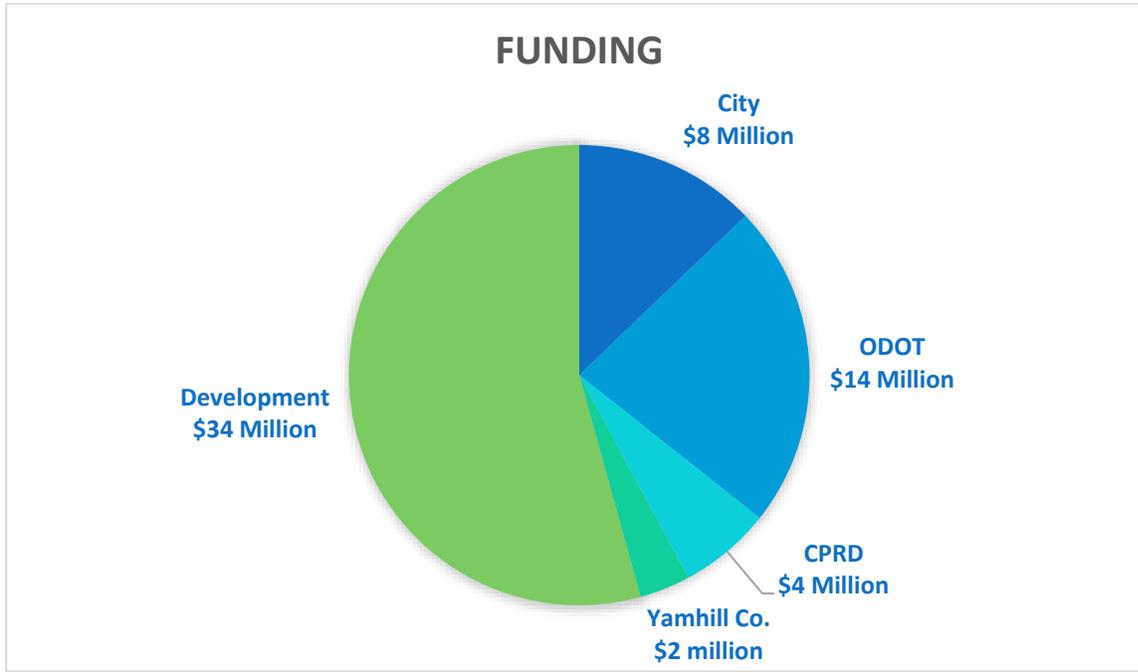


Figure 22: Funding for the Likely Funded Plan

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<sup>25</sup> ODOT has not committed any future funding for projects in Newberg. This estimate is based on assuming that Newberg will receive a reasonable share of the state/federal funding projected to be available over the 20-year planning horizon in Region 2 and based on ODOT sustaining their current revenue structure. It is used to illustrate the degree of financial constraints faced by ODOT as of the writing of this document. Actual funding through state and federal sources may be higher or lower than the range of this estimate. This estimate does not include projects that might be funded through the federal Highway Safety Improvement Program (HSIP).

**Table 6: Transportation Improvement Projects**

| Project #                 | Project Name                               | Project Description  | Project Lead | Total Cost  | Funding      |
|---------------------------|--|--|--------------|-------------|--------------|
| <b>Expansion Projects</b> |  |  |              |             |              |
| E01                       | OR 240 Minor Arterial Improvement          | Reconstruct OR 240 for approximately 0.36 miles between the west edge of the Urban Reserve Area and Main Street to full, 3-lane minor arterial street standards.             | ODOT         | \$2,160,000 | Aspirational |
| E02                       | Hancock Street Arterial Improvement        | Reconstruct Hancock Street to major arterial street standards between Harrison Street and Main Street to include sidewalks and bicycle lanes on each side of Hancock Street. | ODOT         | \$135,000   | Aspirational |
| E03                       | N Main Street (OR240) Arterial Improvement | Reconstruct to full minor arterial standards between Illinois and 1st to include three travel lanes, bike lanes, and sidewalks.  | ODOT         | \$1,350,000 | Aspirational |
| E04                       | Blaine St Extension                        | Construct new street between 9th St and River St to major collector standards.   | City         | \$135,000   | Aspirational |
| E05                       | College St Arterial Improvement            | Reconstruct to minor arterial street standards between 1st St and Bell Rd to include sidewalks and bicycle lanes on each side of College Street.                             | ODOT         | \$8,835,750 | Aspirational |
| E06                       | Rogers Landing Rd Extension                | Construct Rogers Landing Rd from Willamette River to UGB to major collector standards.   | City         | \$1,215,000 | Aspirational |
| E07                       | Foothills Dr Extension                     | Construct Foothills Dr from Aldersgate to Villa Rd.  | Developer    | \$135,000   | Likely       |
| E08                       | Villa Rd Extension                         | Construct Villa Rd from Mountainview Dr to Aspen Way and construct to major collector standards with sidewalks and bike lanes.   | Developer    | \$2,835,000 | Likely       |
| E09                       | New Camelia Dr                             | Construct a new local street connection between Aspen Way and Zimri Dr, as development occurs.   | Developer    | \$2,700,000 | Likely       |
| E10                       | New Kincaid Rd                             | Construct a new local street connection between Aspen Way and Springbrook Rd, as development occurs.   | Developer    | \$3,510,000 | Likely       |
| E11                       | Mountainview Dr Arterial Improvement       | Reconstruct Mountainview Dr between Villa Rd and Aspen Way to minor arterial standards. Include bike lanes and sidewalks on both sides.                                      | Developer    | \$2,430,000 | Likely       |

Table 6: Transportation Improvement Projects (continued)

| Project #                                    | Project Name                        | Project Description  | Project Lead | Total Cost          | Funding      |
|--|-------------------------------------|--|--------------|---------------------|--------------|
| <b>Expansion Projects</b>                    |                                     |  |              |                     |              |
| E12  | New North-South Local St            | Construct a new local street connection between Bell Rd and New Kincaid Rd extension (#6 above), as development occurs.  | Developer    | \$1,620,000         | Likely       |
| E13  | Putman Rd Extension                 | Construct approximately 0.42 miles of new Putman Rd between Springbrook St and Putman St to local street standards.  | Developer    | \$1,620,000         | Likely       |
| E14  | Crestview Dr Extension              | Construct Crestview Dr from southern terminus to OR 99W. Construct to major collector standards  | Developer    | \$1,830,000         | Likely       |
| E15  | Hayes St Extension                  | Construct Hayes St from its eastern terminus at Deborah St to Springbrook St to minor collector street standards   | Developer    | \$540,000           | Likely       |
| E16  | Springbrook St Arterial Improvement | Reconstruct to minor arterial standards between OR 99W and Wilsonville Road. Include sidewalks and bike lanes.   | Developer    | \$3,915,000         | Likely       |
| E17  | Hancock St Extension                | Construct Hancock St between Elliot Rd and Springbrook Rd to local street standards. Reconstruct eastern terminus of Hancock at Springbrook to local street standards. | Developer    | \$675,000           | Aspirational |
| E18  | OR219 Arterial Improvement          | Reconstruct OR219 to arterial standards between 1st Street and the UGB to include sidewalks and bicycle lanes on each side of OR219.                                   | ODOT         | \$7,965,000         | Likely       |
| E19  | New Greens Drive                    | Construct a new local street connection between Eagle Street and Corral Creek Rd, as development occurs.   | Developer    | \$838,350           | Aspirational |
| <b>Total (All Expansion Projects)</b>        |                                     |  |              | <b>\$44,444,100</b> |              |
| <b>Total (Likely Expansion Projects)</b>     |                                     |  |              | <b>\$26,670,000</b> |              |
| <b>Total (Not Likely Expansion Projects)</b> |                                     |  |              | <b>\$17,774,100</b> |              |

Table 6: Transportation Improvement Projects (continued)

| Project #                   | Project Name                     | Project Description  | Project Lead | Total Cost  | Funding      |
|-----------------------------|----------------------------------|--|--------------|-------------|--------------|
| <b>Standards and Safety</b> |                                  |  |              |             |              |
| S01                         | Dayton Ave Collector Improvement | Reconstruct Dayton Avenue to major collector street standards between 5th Street and Newberg city limits to include sidewalks and bicycle lanes on each side of Dayton Avenue  | City         | \$13,500    | Aspirational |
| S02                         | 3rd St Collector Improvement     | Reconstruct 3rd Street to minor collector street standards between OR 99W and Main Street to include sidewalks and on-street parking on each side of 3rd Street  | City         | \$27,000    | Aspirational |
| S03                         | OR 99W Arterial Improvement      | Reconstruct OR 99W to major arterial street standards between Harrison Street and 3rd Street to include sidewalks and bicycle lanes on each side of OR 99W.  | ODOT         | \$135,000   | Aspirational |
| S04                         | Downtown Street Redevelopment    | Pedestrian enhancements such as improved crossings, wider sidewalks, and curb extensions should be considered on 1st St and Hancock St in the downtown   | City         | \$1,100,000 | Aspirational |
| S05                         | Remove RT Lane on Hancock        | Remove right turn lane onto Main St, add back-in diagonal parking  | City         | \$5,000     | Aspirational |
| S07                         | Downtown Road Diet               | Remove one lane each from Hancock St and 1st St to use for additional enhancement to pedestrian, bicycle, or other amenities. This may be implemented after completion of the Phase 1 Bypass on a temporary basis pending future capacity needs. | ODOT         | \$4,500,000 | Likely       |
| S08                         | S Main St Collector Improvement  | Reconstruct to major collector street standards between 1st St and 5th St to include sidewalks and bicycle lanes on each side.   | City         | \$27,000    | Aspirational |
| S09                         | 2nd St Collector Improvement     | Reconstruct 2nd St to major collector street standards between Main St and River St to include sidewalks, bicycle lanes, and on-street parking on each side of 2nd Street  | City         | \$27,000    | Aspirational |
| S10                         | Blaine St Collector Improvement  | Reconstruct Blaine St to major collector street standards between Hancock St and 9th St to include sidewalks and bicycle lanes on each side of Blaine Street.  | City         | \$2,025,000 | Likely       |

Table 6: Transportation Improvement Projects (continued)

| Project #                   | Project Name                          | Project Description   | Project Lead | Total Cost  | Funding      |
|-----------------------------|---------------------------------------|---|--------------|-------------|--------------|
| <b>Standards and Safety</b> |                                       |   |              |             |              |
| S11                         | Chehalem Dr Collector Improvement     | Reconstruct Chehalem Dr between OR240 and North Valley Rd to major collector street standards to include bicycle lanes and sidewalks on both sides of the street. Yamhill County and City of Newberg jurisdictions. | Developer    | \$4,428,000 | Likely       |
| S12                         | N Main St Collector Improvement       | Reconstruct to full major collector street standards between Illinois St and Mountainview Dr to include sidewalks and bicycle lanes on each side of Main St.  | City         | \$1,350,000 | Aspirational |
| S13                         | Illinois St Collector Improvement     | Reconstruct Illinois St between Main St and College St to major collector street standards to include on-street parking, bicycle lanes, and sidewalks on each side of the street.                                   | City         | \$945,000   | Aspirational |
| S14                         | Columbia Dr Collector Improvement     | Reconstruct Columbia Dr between Chehalem Dr and College St to minor collector street standards to include a travel lane in each direction, and sidewalks and on-street parking on both sides of the street.         | Developer    | \$1,512,000 | Likely       |
| S15                         | OR 219 Routing                        | Add signs for routing traffic using OR 219 through Newberg to reduce neighborhood cut through   | ODOT         | \$25,000    | Likely       |
| S16                         | North Valley Rd Collector Improvement | Reconstruct North Valley Rd to major collector street standards between College St and Chehalem Dr to include sidewalks and bicycle lanes on each side of North Valley Rd.  | Developer    | \$2,295,000 | Aspirational |
| S17                         | Foothills Dr Collector Improvement    | Reconstruct to major collector street standards between Main St and Aldersgate Dr to include sidewalks and bicycle lanes on each side.  | City         | \$3,240,000 | Aspirational |
| S18                         | Crestview Dr Collector Improvement    | Reconstruct Crestview Dr to minor collector street standards between College St and Villa Rd to include sidewalks and on-street parking.  | City         | \$1,620,000 | Aspirational |
| S19                         | Meridian St Traffic Calming           | Meridian St Traffic Calming   | City         | \$90,000    | Aspirational |

Table 6: Transportation Improvement Projects (continued)

| Project #                   | Project Name                            | Project Description  | Project Lead | Total Cost  | Funding      |
|-----------------------------|---|--|--------------|-------------|--------------|
| <b>Standards and Safety</b> |   |  |              |             |              |
| S20                         | Vermillion St Collector Improvement     | Reconstruct Vermillion St between Meridian St and College St to major collector standards to provide bicycle lanes and sidewalks on each side of the street.                   | City         | \$405,000   | Aspirational |
| S21                         | Fulton St Collector Improvement         | Reconstruct Fulton St between Meridian St and Villa Rd to major collector standards, providing bicycle lanes and sidewalks on each side of the street.                         | City         | \$13,500    | Aspirational |
| S22                         | River St Collector Improvements         | Reconstruct to major collector street standards between 1st St and Rogers Landing Rd to include sidewalks and bicycle lanes on each side of River St.                          | City         | \$3,105,000 | Aspirational |
| S23                         | Rogers Landing Rd Collector Improvement | Reconstruct Rogers Landing Rd to major collector street standards between River St and the Willamette River to include sidewalks and bicycle lanes on each side of the street. | City         | \$540,000   | Aspirational |
| S24                         | Villa Rd Wayfinding                     | Improve wayfinding on OR219 directing traffic bound for 99W onto Villa Rd  | City         | \$5,000     | Aspirational |
| S25                         | Villa Rd Collector Improvement          | Reconstruct Villa Rd to major collector street standards between OR 99W and Fulton St to include sidewalks and bicycle lanes on each side of Villa Rd.                         | Developer    | \$1,080,000 | Aspirational |
| S26                         | Villa Rd Collector Improvement          | Reconstruct to major collector street standards between Fulton St and Crestview Dr to include sidewalks and bicycle lanes on each side of Villa Rd.                            | City         | \$2,376,000 | Likely       |
| S27                         | Haworth Ave Collector Improvement       | Reconstruct Haworth Ave to major collector street standards between Villa Rd and Springbrook St to include sidewalks and bicycle lanes on each side of Haworth St.             | City         | \$27,000    | Aspirational |
| S28                         | Villa Rd Collector Improvement          | Reconstruct Villa Rd to major collector street standards between Aspen Way and Bell Rd to include sidewalks and bicycle lanes on each side of Villa Rd.                        | Developer    | \$1,215,000 | Aspirational |

Table 6: Transportation Improvement Projects (continued)

| Project #                   | Project Name                            | Project Description  | Project Lead | Total Cost  | Funding      |
|-----------------------------|---|--|--------------|-------------|--------------|
| <b>Standards and Safety</b> |   |  |              |             |              |
| S29                         | Aspen Way Collector Improvement         | Reconstruct Aspen Way to minor collector standards between Villa Rd and Mountainview Dr to include sidewalks and on-street parking on each side of Aspen Way                 | Developer    | \$4,995,000 | Likely       |
| S30                         | Bell Rd Collector Improvement           | Reconstruct Bell Rd to major collector street standards between College St and Springbrook St to include sidewalks and bicycle lanes on each side of Bell Rd.                | Developer    | \$4,320,000 | Aspirational |
| S31                         | Springbrook St Collector Improvement    | Reconstruct Springbrook to major collector standards between Mountainview and Bell Road,   | City         | \$3,442,500 | Aspirational |
| S32                         | Elliott Rd Collector Improvement        | Reconstruct to full, major collector street standards between OR 99W and Newberg High School to include sidewalks and bicycle lanes on each side of Elliot Rd.               | City         | \$1,215,000 | Likely       |
| S33                         | Hayes St Collector Improvement          | Reconstruct Hayes Street to minor collector street standards between Elliott Road and Deborah Street to include sidewalks and on-street parking on each side of Hayes Street | City         | \$27,000    | Aspirational |
| S34                         | Hancock Street - Local Improvement      | Reconstruct Hancock between Sitka and Elliot to include sidewalks and on-street parking on each side.  | City         | \$945,000   | Aspirational |
| S35                         | Fernwood Rd Collector Improvement       | Reconstruct Fernwood Rd between Springbrook St and Creek to major collector standards to include bicycle lanes and sidewalks on each side of the street                      | Developer    | \$972,000   | Aspirational |
| S36                         | OR 99W Arterial Improvement             | Reconstruct OR 99W to major arterial street standards between Vittoria Way and Harmony Ln to include sidewalks and bicycle lanes on each side of OR 99W.                     | ODOT         | \$270,000   | Likely       |
| S37                         | Wynooski St Collector Improvement       | Reconstruct Wynooski Street to major collector street standards between River Street and Bypass to include sidewalks and bicycle lanes on each side of Wynooski Street       | City         | \$4,050,000 | Aspirational |
| S38                         | Zimri Dr Collector Improvement - in UGB | Improve Zimri Dr within the UGB to major collector standards, providing bicycle lanes and sidewalks on each side of the street   | Developer    | \$2,160,000 | Likely       |

Table 6: Transportation Improvement Projects (continued)

| Project #                   | Project Name                                    | Project Description  | Project Lead | Total Cost  | Funding      |
|-----------------------------|---|--|--------------|-------------|--------------|
| <b>Standards and Safety</b> |   |  |              |             |              |
| S39                         | Zimri Dr Collector Improvement - outside UGB    | Improve Zimri Dr from UGB to Bell Rd to major collector standards, providing bicycle lanes and sidewalks on each side of the street  | Developer    | \$4,320,000 | Aspirational |
| S40                         | Crestview Drive Improvements                    | Reconstruct Crestview Drive to collector street standards between Springbrook and the City limits.   | Developer    | \$          | Likely       |
| S41                         | Local System Bypass Monitoring and Enhancements | Monitor traffic use and performance on local system adjacent to bypass (south of OR 99W and east of Springbrook Road) to determine if unintended cut-through traffic between OR 99W and bypass require mitigation. Potential mitigation (placeholder project) may include traffic-calming and/or capacity enhancements, depending on the nature of the impacts | ODOT         | \$500,000   | Likely       |

**Total (All Standards and Safety Projects)**

**\$63,972,500**

**Total (Likely Standards and Safety Projects)**

**\$22,766,000**

**Total (Not Likely Standards and Safety Projects)**

**\$41,206,500**

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Table 6: Transportation Improvement Projects (continued)

| Project #                    | Project Name  | Project Description   | Project Lead | Total Cost | Funding |
|------------------------------|---|---|--------------|------------|---------|
| <b>Intersection Projects</b> |   |   |              |            |         |
| I01                          | College St/Illinois St Intersection Safety              | Bar left turns or add bypass lane to prevent queuing vehicles from going across RR tracks   | City         | \$40,000   | Likely  |
| I02                          | Foothills Dr/College St Intersection                    | Intersection control upgrade (roundabout or traffic signal) to address mobility needs   | City         | \$825,000  | Likely  |
| I03                          | Mountainview Dr/Villa Rd Intersection Improvement       | Add traffic signal and left turn lanes on all approaches.   | Developer    | \$860,000  | Likely  |
| I04                          | Villa/Haworth Intersection Improvements                 | Add left turn lanes on Villa to improve safety and operations   | City         | \$320,000  | Likely  |
| I05                          | Villa/Fulton Intersection Improvements                  | Add SB right turn lane and NB left turn lane on Villa Rd. Monitor for control upgrade (roundabout or traffic signal)  | City         | \$345,000  | Likely  |
| I06                          | RIRO at OR219/2nd                                       | Restrict intersection movements (close all left turns and through traffic on 2 <sup>nd</sup> ) to allow right in right out (RIRO) and through movements along OR 219 at 2 <sup>nd</sup> Street to improve intersection safety | ODOT         | \$75,000   | Likely  |
| I07                          | Mountainview Dr/Zimri Dr Intersection Improvements      | Add SB left turn lane to Zimri Dr   | Developer    | \$135,000  | Likely  |
| I08                          | Springbrook Rd/Mountainview Dr Intersection Improvement | Traffic Signal.   | Developer    | \$270,000  | Likely  |
| I09                          | Springbrook Rd/Haworth Ave Intersection Improvement     | Traffic Signal and left turn lanes on Haworth   | City         | \$400,000  | Likely  |

Table 6: Transportation Improvement Projects (continued)

| Project #                    | Project Name                                     | Project Description   | Project Lead | Total Cost | Funding |
|------------------------------|--|---|--------------|------------|---------|
| <b>Intersection Projects</b> |  |   |              |            |         |
| I10                          | Springbrook Rd/Hayes St Intersection Improvement | Traffic Signal. Add 4th lane on Springbrook.                                      | Developer    | \$270,000  | Likely  |
| I11                          | Vittoria Way/OR 99W Intersection Improvement     | Modify intersection to restrict turning movements to RIRO                         | ODOT         | \$27,000   | Likely  |
| I12                          | Crestview Dr/OR 99W Intersection Improvement     | Traffic signal modification to add north leg of Crestview when extended to north. | Developer    | \$380,000  | Likely  |
| I13                          | Everest Rd/1st St Intersection Improvements      | Traffic Signal and left turn lanes on all approaches                              | ODOT         | \$735,000  | Likely  |

|   |                    |
|---|--------------------|
| <b>Total (All Intersection Projects)</b>        | <b>\$4,682,000</b> |
| <b>Total (Likely Intersection Projects)</b>     | <b>\$4,607,000</b> |
| <b>Total (Not Likely Intersection Projects)</b> | <b>\$75,000</b>    |

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Table 6: Transportation Improvement Projects (continued)

| Project #                                   | Project Name                 | Project Description                     | Project Lead | Total Cost         | Funding      |
|---|------------------------------|---|--------------|--------------------|--------------|
| <b>Sidewalk Projects</b>                    |                              |   |              |                    |              |
| P02   | OR 99W Sidewalks             | From UGB to 3rd Street                  | ODOT         | \$174,150          | Likely       |
| P03   | 1st St Sidewalks             | From UGB to Ore 99W                     | City         | \$74,250           | Likely       |
| P08   | 9th St Sidewalks             | From Blaine St to River St              | City         | \$66,150           | Likely       |
| P09   | 14th St Sidewalks            | From College St to River St             | Developer    | \$63,180           | Likely       |
| P12   | 11th St Sidewalks            | From River St to Wynooski St            | City         | \$59,400           | Likely       |
| P13   | College St Sidewalks         | From 9th St to 14th St                  | City         | \$171,450          | Likely       |
| P15   | Meridian St Sidewalks        | From Hancock Street to 2nd Street       | City         | \$45,900           | Likely       |
| P23   | Meridian St Sidewalks        | From Crestview Dr to Fulton St          | City         | \$133,650          | Likely       |
| P32   | Springbrook Rd Sidewalks     | From S of Benjamin Rd to UGB            | City         | \$295,000          | Likely       |
| P33   | Crestview Dr Sidewalks       | From Emery St to Springbrook St         | Developer    | \$49,950           | Likely       |
| P34   | Emery St Sidewalks           | From Crestview Drive to Douglas Ave     | City         | \$35,100           | Aspirational |
| P35   | Douglas Ave Sidewalks        | From Emery St to Springbrook Way        | City         | \$39,150           | Aspirational |
| P36   | Springbrook Way Sidewalks    | From Douglas Ave to 100 ft S of Douglas | City         | \$1,350            | Likely       |
| P37   | Deborah St Sidewalks         | From Douglas Ave to Haworth Ave         | City         | \$63,450           | Aspirational |
| P38   | Springbrook Rd Sidewalks     | From Crestview Drive to Ore 99W         | Developer    | \$112,050          | Likely       |
| P42   | Hayes St Sidewalks           | From Springbrook St to Burl St          | City         | \$166,050          | Aspirational |
| P44   | S Elliott Rd Sidewalk Infill | From OR 99W to 2nd St                   | City         | \$295,000          | Likely       |
| P48   | OR 99W Sidewalk Infill       | From Brustcher Street to Vittoria Way   | ODOT         | \$86,400           | Likely       |
| <b>Total (All Sidewalk Projects)</b>        |                              |   |              | <b>\$1,931,630</b> |              |
| <b>Total (Likely Sidewalk Projects)</b>     |                              |   |              | <b>\$1,627,880</b> |              |
| <b>Total (Not Likely Sidewalk Projects)</b> |                              |   |              | <b>\$303,750</b>   |              |

Table 6: Transportation Improvement Projects (continued)

| Project #                                 | Project Name                                     | Project Description   | Project Lead | Total Cost         | Funding      |
|---|--|---|--------------|--------------------|--------------|
| <b>Biking Projects</b>                    |  |   |              |                    |              |
| B02                                       | Main St Bike Lanes - with S12, E03, S08          | From 5th St to Mountainview Dr.   | City         | \$3,760,000        | Aspirational |
| B05                                       | 9th St Bike Boulevard                            | From Blaine St to River St  | City         | \$102,600          | Likely       |
| B12                                       | Jaquith Park Path                                | New pedestrian/bicycle pathway adjacent to Jacquith Park between Main St and College St   | CPRD         | \$135,000          | Likely       |
| B19                                       | 11th St Bike Boulevard                           | East of River St  | City         | \$103,950          | Likely       |
| B20                                       | Hess Creek Path                                  | New pedestrian/bicycle pathway along Hess Creek can serve recreational and school bicyclists and pedestrians.   | CPRD         | \$580,500          | Likely       |
| B22                                       | New Willamette River Pedestrian-Bicycle Bridge   | Extended from Rogers Landing Drive across to Champoeg Park. This new connection would link the Newberg bicycle-pedestrian system with that of Champoeg Park and Marion County | CPRD         | \$1,215,000        | Likely       |
| B25                                       | Springbrook Road Bike Lanes - Partially with E16 | South of OR 99W on west side and north of OR 99W between Haworth and Middlebrook  | City         | \$60,000           | Likely       |
| B27                                       | Hancock St Bike Lanes                            | West of Springbrook   | City         | \$32,400           | Likely       |
| B29                                       | Vittoria Way Bike Lanes                          | From Springbrook to OR 99W  | City         | \$145,800          | Aspirational |
| B30                                       | Aspen Way Bike Lanes                             | From Mountainview Dr to Springbrook   | City         | \$130,950          | Likely       |
| B31                                       | Benjamin Rd Bike Lanes                           | From the railroad to UGB  | City         | \$37,800           | Aspirational |
| B33                                       | Wynooski St Bike Lanes                           | From Willamette St to OR219   | Yamhill Co.  | \$2,225,000        | Aspirational |
| B100                                      | Path Improvement                                 | Improve existing path from Hancock to Fulton  | CPRD         | \$                 | Likely       |
| B101                                      | Trail  | Add connection from Ewing Young Park to 14 <sup>th</sup> St   | CPRD         | \$                 | Likely       |
| <b>Total (All Biking Projects)</b>        |  |   |              | <b>\$8,529,000</b> |              |
| <b>Total (Likely Biking Projects)</b>     |  |   |              | <b>\$4,623,200</b> |              |
| <b>Total (Not Likely Biking Projects)</b> |  |   |              | <b>\$3,905,800</b> |              |

Table 6: Transportation Improvement Projects (continued)

| Project #                                | Project Name                  | Project Description   | Project Lead | Total Cost          | Funding      |
|--|-------------------------------|---|--------------|---------------------|--------------|
| <b>Trail Projects</b>                    |                               |   |              |                     |              |
| CH01                                     | Central Newberg Trail Segment | Bicycle boulevard connections to the Chehalem Cultural Center, Newberg Library, Newberg City Hall, city center shops, George Fox University, local parks, and other places. Includes Sheridan, Howard, and Meridian Street. | CPRD         | \$2,034,936         | Likely       |
| CH03                                     | Dayton Ave                    | Combination of bicycle boulevards, bike lanes/bike shoulders, and multi-use paths to connect Memorial Park in Newberg to Billick Park in Dundee.  | CPRD         | \$80,908            | Likely       |
| CH05                                     | Hess Creek Path               | Off-street multi-use trail along Hess Creek   | CPRD         | \$9,941,076         | Aspirational |
| <b>Total (All Trail Projects)</b>        |                               |   |              | <b>\$12,056,920</b> |              |
| <b>Total (Likely Trail Projects)</b>     |                               |   |              | <b>\$2,115,844</b>  |              |
| <b>Total (Not Likely Trail Projects)</b> |                               |   |              | <b>\$9,941,076</b>  |              |

| Project #                                  | Project Name            | Project Description   | Project Lead | Total Cost      | Funding |
|--|-------------------------|---|--------------|-----------------|---------|
| <b>Transit Projects</b>                    |                         |   |              |                 |         |
| T01  | Bus Stop Improvements   | Amenities and improved pedestrian crossings at bus stops along 99W  | City         | \$70,000        | Likely  |
| T02  | Route 5 and 7 Expansion | Expand routes 5 and 7 to new urban growth areas   | YCTA         | \$15,000        | Likely  |
| T03  | Rider Information       | Enhance information available to riders, including placement of route information and stop location descriptions. Information may include a combination of posted material at stops and brochures for riders. | YCTA         | \$20,000        | Likely  |
| <b>Total (All Transit Projects)</b>        |                         |   |              | <b>\$85,000</b> |         |
| <b>Total (Likely Transit Projects)</b>     |                         |   |              | <b>\$85,000</b> |         |
| <b>Total (Not Likely Transit Projects)</b> |                         |   |              | <b>\$0</b>      |         |

Table 6: Transportation Improvement Projects (continued)

|                                   |               |
|-----------------------------------|---------------|
| GRAND TOTAL (All Projects)        | \$135,701,150 |
| GRAND TOTAL (Likely Projects)     | \$62,494,924  |
| GRAND TOTAL (Not Likely Projects) | \$73,206,226  |

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## The Aspirational Plan

The projects outlined within the Likely Funded Plan will significantly improve Newberg's transportation system. If the City is able to implement a majority of the Likely Funded Plan, nearly two decades from now Newberg residents will have access to a safer, more balanced multimodal transportation network.

The Aspirational Plan identifies those transportation solutions that are not reasonably expected to be funded by 2035, but will remain very important to the transportation system and have City support if funding does become available. Table 6 lists all projects by type of improvement, those identified as not likely to be funded comprise the Aspirational Plan. The Aspirational Plan includes approximately \$73.2 million worth of investments.

## Mapping the Projects

The proposed transportation solutions are mapped in Figure 23 through Figure 26. The project numbers are denoted as follows:

- Sidewalk (P)
- Biking (B)
- Intersection (I)
- Expansion (E)
- Standards (S)
- ADA (A)

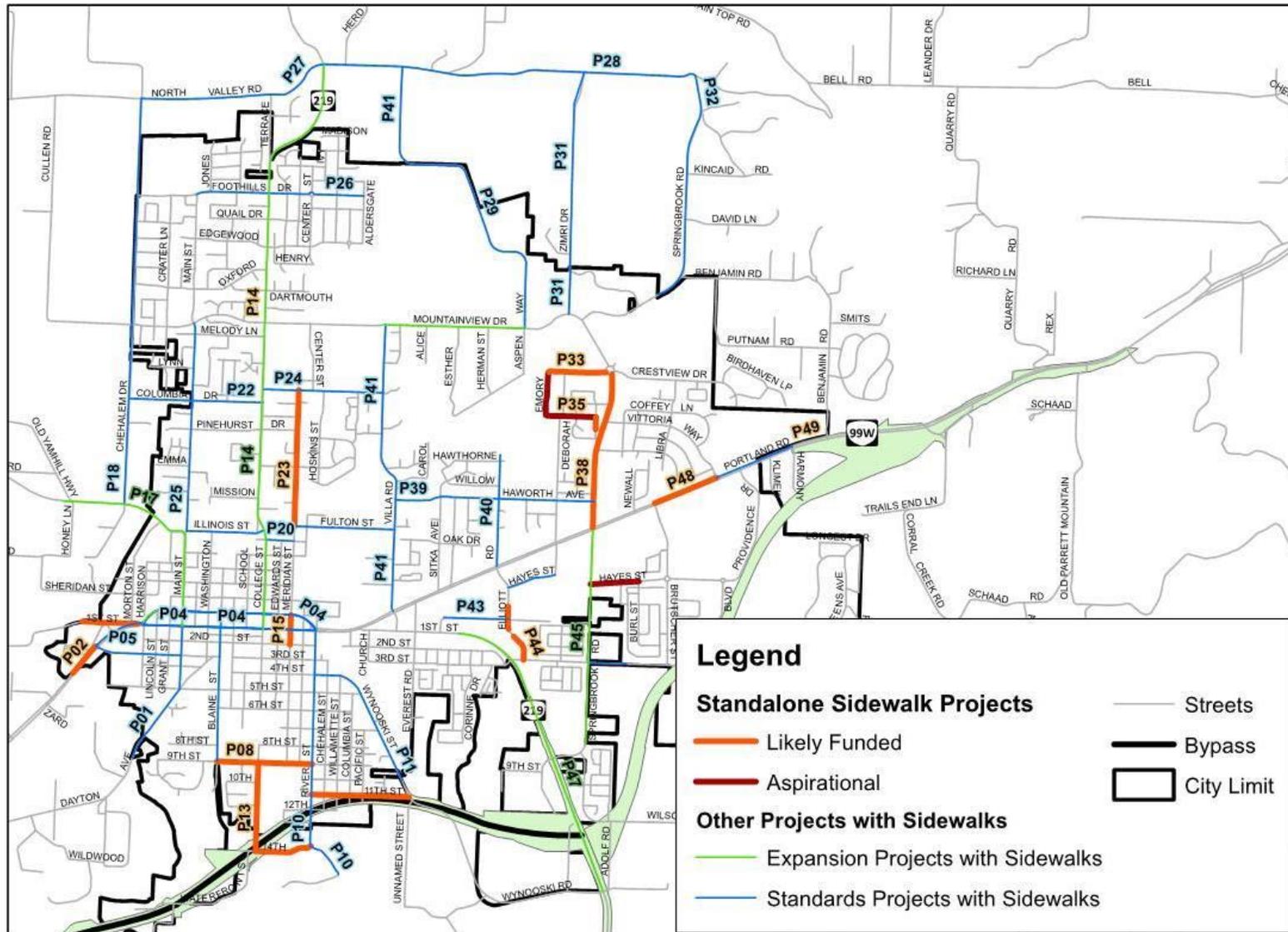


Figure 23: Walking Projects

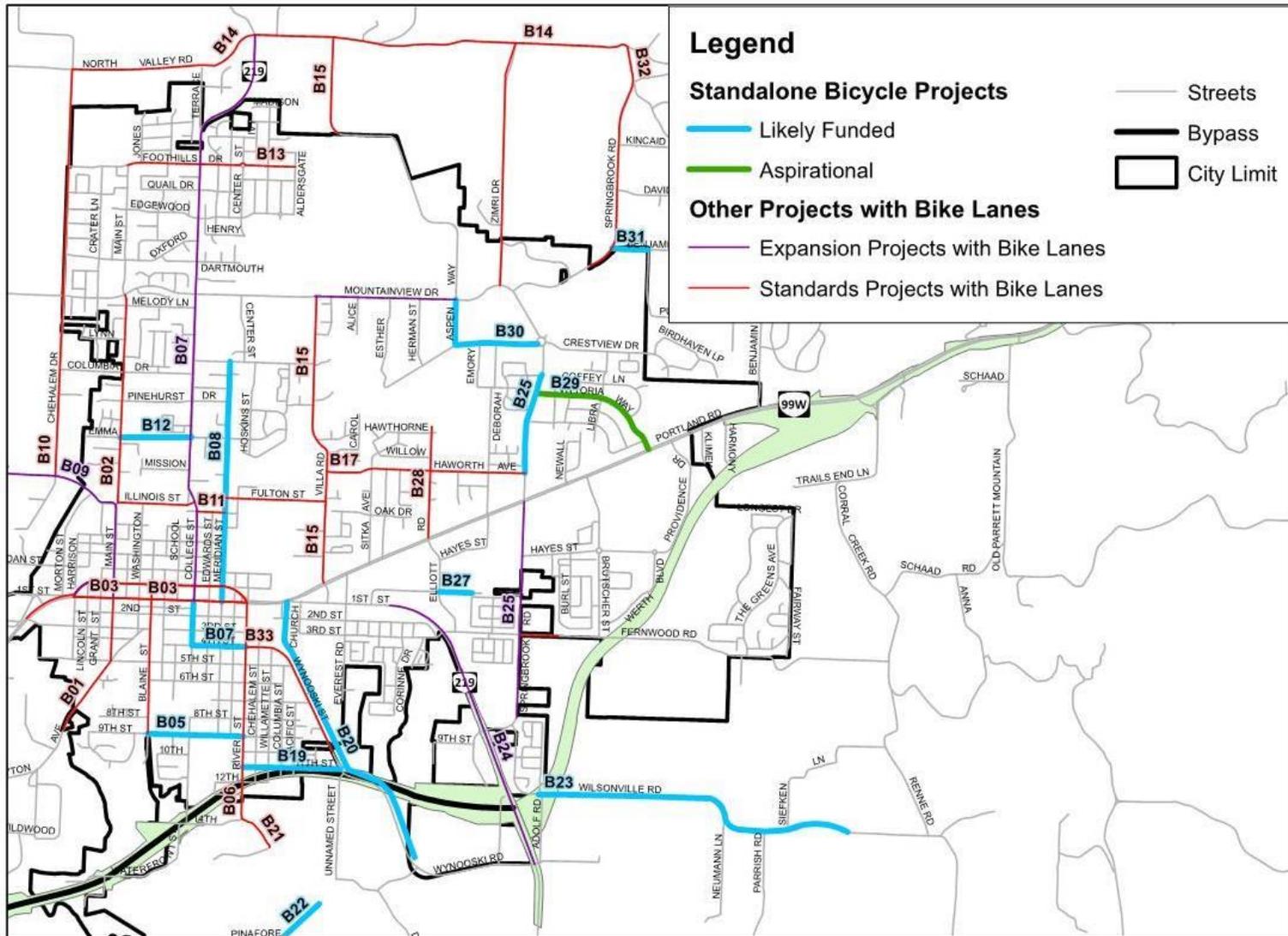


Figure 24: Biking Projects

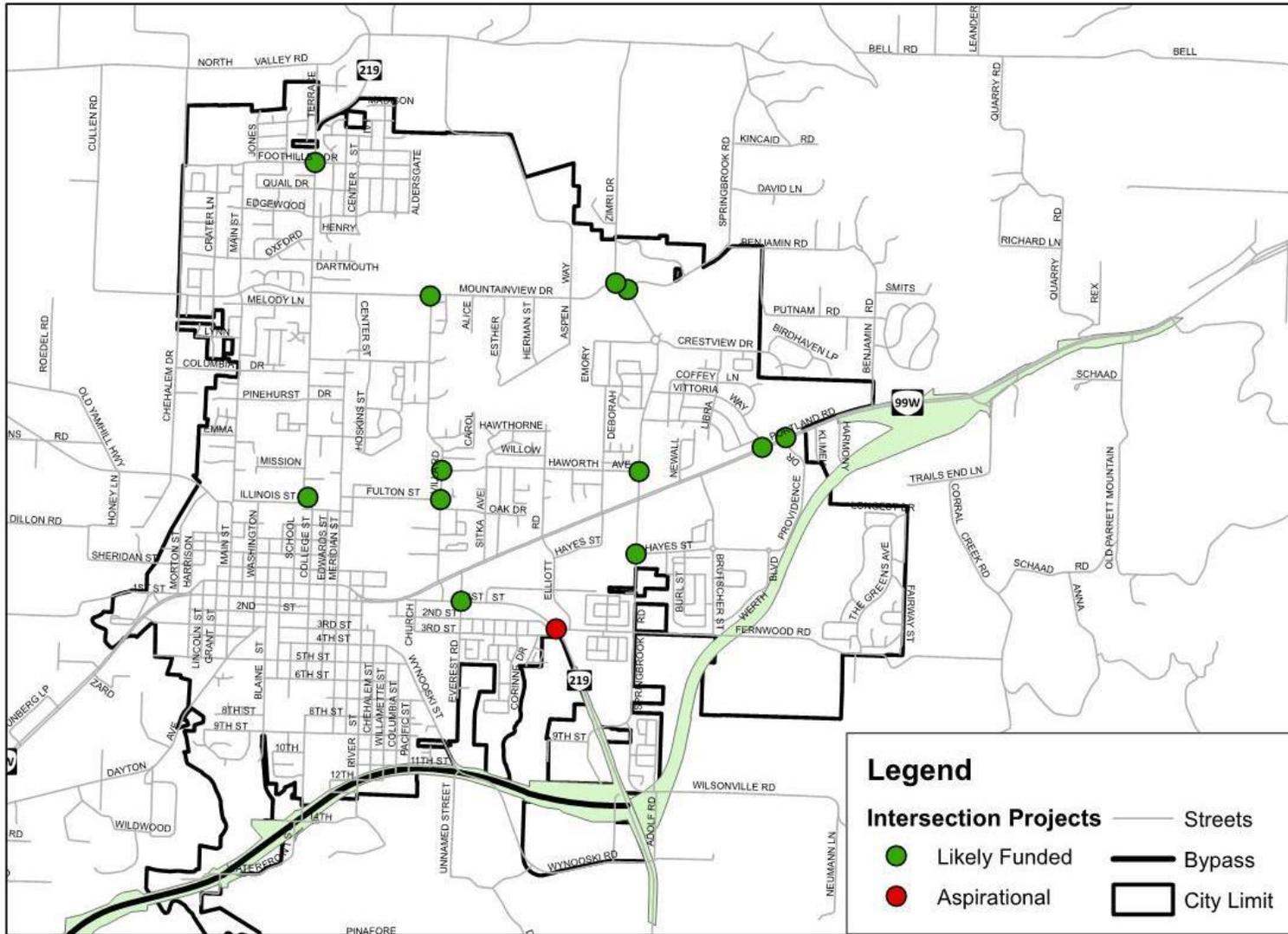


Figure 25: Intersection Projects

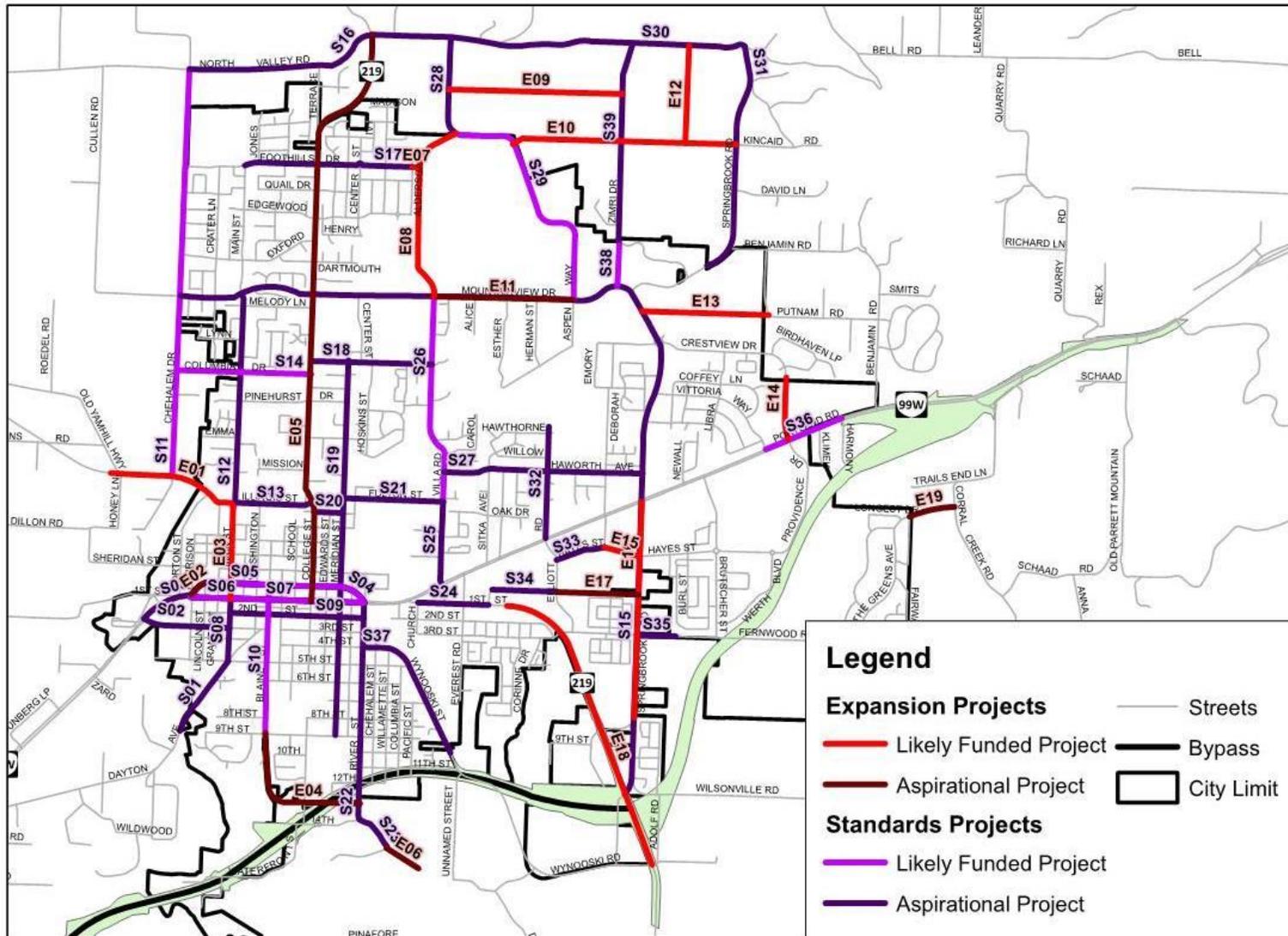


Figure 26: Roadway Projects

Map III-2. Newberg Spot Improvements

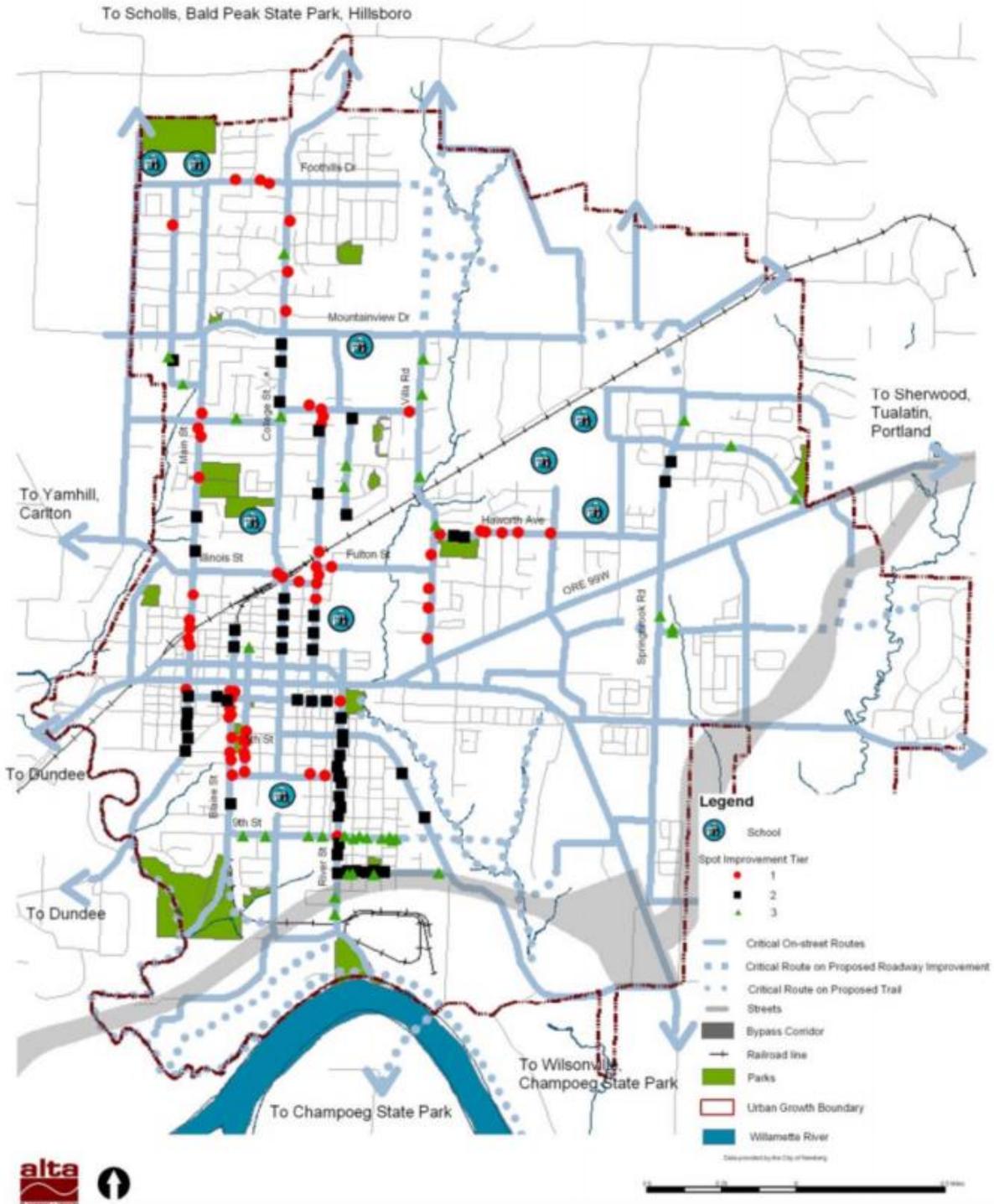


Figure 10c: Identified Spot Improvements (Map III-2 of Newberg ADA/Ped/Bike Route Plan)<sup>26</sup>

<sup>26</sup> <http://www.newbergoregon.gov/planning/page/adapedestrianbike-route-improvement-plan>

# The Outcome

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This section summarizes the trends and condition of the transportation system in 2035 and future items for consideration.

## The 2035 Transportation System

The following general trends are expected in Newberg with the planned transportation projects and strategies included in the TSP:

- **Increased travel options** – Filling gaps in the pedestrian and bicycle system (including connections to transit routes) and expanding the trail system will provide alternatives to driving a motor vehicle.
- **Downtown opportunities** – In the near term, the completion of Phase 1 of the bypass will present an opportunity to reclaim a travel lane along the downtown couplet to use for pedestrian and bicycle improvements, additional street seating, or other amenities. This can make the area more comfortable and attractive, while improving the livability of Newberg.
- **Improved connectivity** – Future street extensions will reduce out of direction travel and provide relief to congested parallel routes.
- **Local system mobility maintained** – The planned roadway improvements will maintain mobility to address growth in most areas of the City. The eastern portion of OR 99W will face additional congestion without further bypass improvements beyond Phase 1. The city will monitor the local street system to address unintended congestion on the City's system related to cut-through traffic using the bypass.

## The Planning Horizon and Beyond

In addition to the investment decisions in this TSP, further issues will need to be explored through 2035 and beyond.

### Future Uncertainty of Bypass and Development

The uncertainty of future land use and bypass changes beyond the planning horizon of 2035 could significantly affect traffic conditions. In order to provide flexibility for the future, it is important to not preclude future improvements that may be needed to address other future scenarios. Preserving future right of way for the bypass will improve construction opportunities in the event that funding becomes available. Maintaining mobility along collectors and arterials will be important in order to support future growth opportunities.

### Geologic Hazards

All proposed new streets or street extensions included in the TSP are shown with conceptual alignments. These alignments represent a planning level illustration of the street connectivity

enhancements that are needed in these areas. Before construction of any of the projects can begin, more detailed surveys will need to be undertaken to identify hydrologic, topographic, or other geologic constraints that could hinder the alignment of the planned streets. Final street alignments will be identified after these surveys have been completed.

### **Policy Considerations**

Newberg's future policy decisions will shape the implementation of the TSP and the future transportation system. The following items may be considered as along with the TSP update or through future actions to update relevant transportation policies:

- **Downtown Visioning** – The Newberg Downtown Improvement Plan is a planning process that will start this year and will further explore potential options for improving livability in the downtown area. As part of the TSP process, the City Council has already motioned for support of removing a lane in each direction along the couplet. While additional coordination, outreach and refinements would be needed, there may be related policies that need to be considered as this process evolves.
- **Local Transportation Fund Opportunities** – Several potential funding mechanisms exist that the City could further explore.
  - **Street Utility Fee** - The City has explored funding opportunities for improving the condition of local streets. A street fee could be considered to address shortfalls in street maintenance or supplement other transportation programs and needs.
  - **Local SDC** – The City's SDC program currently collects funds from new development. The program should be updated to address current projected transportation growth needs identified in the TSP to ensure that sufficient funds are available for the identified projects. Along with the rate update, the methodology may be updated.
  - **Other Local Funds** – In addition to a street fee and SDC, other funds could be considered, such as a local gas tax.

# DRAFT Development Code Amendments – TSP Update

*Adoption of the updated Transportation System Plan (TSP) includes corresponding Development Code and Comprehensive Plan amendments. There are proposed Development Code amendments to Chapters 15.440, 15.505, and 15.510 as part of the TSP update process. Note that Chapter 15.510 of the Development Code would be deleted in its entirety, with its content rolled into the updated Chapter 15.505. The proposed amendments do the following things: streamline and modernize the existing code for clarity and usability; help implement the provisions of the state Transportation Planning Rule; and make the public utility section of the code more robust and usable.*

## **15.440.010 Required off-street parking.**

A. Off-street parking shall be provided on the development site for all R-1, C-1, M-1, M-2 and M-3 zones. In all other zones, the required parking shall be on the development site or within 400 feet of the development site which the parking is required to serve. All required parking must be under the same ownership as the development site served except through special covenant agreements as approved by the city attorney, which bind the parking to the development site.

B. Off-street parking is not required in the C-3 district, except for:

1. Dwelling units meeting the requirements noted in NMC 15.305.020.
2. New development which is either immediately adjacent to a residential district or separated by nothing but an alley.

C. Within the C-4 district, the minimum number of required off-street parking spaces shall be 50 percent of the number required by NMC 15.440.030, except that no reduction is permitted for residential uses.

D. All commercial, office, or industrial developments that have more than 20 off-street parking spaces and that have designated employee parking must provide at least one preferential carpool/vanpool parking space. The preferential carpool/vanpool parking space(s) must be located close to a building entrance.

\_[Ord. 2763 § 1 (Exh. A § 15), 9-16-13; Ord. 2564, 4-15-02; Ord. 2561, 4-1-02; Ord. 2451, 12-2-96. Code 2001 § 151.610.]

Penalty: See NMC 15.05.120.

## **15.440.060 Parking area and service drive improvements.**

All public or private parking areas, outdoor vehicle sales areas, and service drives shall be improved according to the following:

A. All parking areas and service drives shall have surfacing of asphaltic concrete or portland cement concrete or other hard surfacing such as brick or concrete pavers. Other durable and dust-free surfacing materials may be

approved by the director for infrequently used parking areas. All parking areas and service drives shall be graded so as not to drain storm water over the public sidewalk or onto any abutting public or private property.

B. All parking areas shall be designed not to encroach on public streets, alleys, and other rights-of-way. Parking areas shall not be placed in the area between the curb and sidewalk or, if there is no sidewalk, in the public right-of-way between the curb and the property line. The director may issue a permit for exceptions for unusual circumstances where the design maintains safety and aesthetics.

C. All parking areas, except those required in conjunction with a single-family or two-family dwelling, shall provide a substantial bumper which will prevent cars from encroachment on abutting private and public property.

D. All parking areas, including service drives, except those required in conjunction with single-family or two-family dwellings, shall be screened in accordance with NMC 15.420.010(B).

E. Any lights provided to illuminate any public or private parking area or vehicle sales area shall be so arranged as to reflect the light away from any abutting or adjacent residential district.

F. All service drives and parking spaces shall be substantially marked and comply with NMC 15.440.070.

G. Parking areas for residential uses shall not be located in a required front yard, except as follows:

1. Attached or detached single-family or two-family: parking is authorized in a front yard on a service drive which provides access to an improved parking area outside the front yard.
2. Three- or four-family: parking is authorized in a front yard on a service drive which is adjacent to a door at least seven feet wide intended and used for entrance of a vehicle (see Appendix A, Figure 12).

H. A reduction in size of the parking stall may be allowed for up to a maximum of 30 percent of the total number of spaces to allow for compact cars. For high turnover uses, such as convenience stores or fast-food restaurants, at the discretion of the Director, all stalls will be required to be full-sized.

I. Affordable housing projects may use a tandem parking design, subject to approval of the planning and building director.

J. Portions of off-street parking areas may be developed or redeveloped for transit-related facilities and uses such as transit shelters or park-and-ride lots, subject to meeting all other applicable standards, including retaining the required minimum number of parking spaces.

# Chapter 15.505 Public Improvements Standards

## DRAFT EDITS

### Sections:

15.505.010 Purpose

15.505.020 Applicability

15.505.030 Street Standards

15.505.040 Utility Standards

15.505.050 Storm Drainage

### 15.505.010 Purpose.

~~The purpose of this chapter is to provide planning and design standards for streets and other transportation facilities. Streets are the most common public spaces, touching virtually every parcel of land. One of the primary purposes of this chapter is to provide standards for attractive and safe streets that can accommodate vehicle traffic from planned growth, and provide a range of transportation options, including options for driving, walking and bicycling. This chapter is also intended to implement the Newberg transportation system plan. [Ord. 2619, 5-16-05. Code 2001 § 151.680.]~~

This chapter provides standards for public infrastructure and utilities installed with new development, consistent with the policies of the City of Newberg Comprehensive Plan and adopted city master plans. The standards are intended to minimize disturbance to natural features, promote energy conservation and efficiency, minimize and maintain development impacts on surrounding properties and neighborhoods, and ensure timely completion of adequate public facilities to serve new development.

### 15.505.020 Applicability

The provision and utilization of public facilities and services within the City of Newberg shall apply to all land developments in accordance with this chapter. No development permit shall be approved unless the following improvements are provided for prior to occupancy or operation, unless future provision is assured in accordance with section 15.505.030.E. of this chapter.

- A. Public Works Design and Construction Standards. The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall comply with the requirements of the most recently adopted public works design and construction standards for the city of Newberg.
- B. Street Improvements. All projects subject to a Type II design review, partition, or subdivision approval must construct street improvements necessary to serve the development.
- C. Water. All developments, lots, and parcels within the City of Newberg shall be served by the municipal water system as specified in NMC 13.15 and the Newberg Public Works Design and Construction Standards.

- D. Wastewater. All developments, lots, and parcels within the City of Newberg shall be served by the municipal wastewater system as specified in NMC 13.10 and the Newberg Public Works Design and Construction Standards.
- E. Stormwater. All developments, lots, and parcels within the City of Newberg shall manage stormwater runoff as specified in NMC 13.20 and 13.25 and the Newberg Public Works Design and Construction Standards.
- F. Utility Easements. Utility easements shall be provided as necessary and required by the review body to provide needed facilities for present or future development of the area.
- G. City Approval of Public Improvements Required. No building permit may be issued until all required public facility improvements are in place and approved by the city engineer, or are otherwise bonded for in a manner approved by the review authority, in conformance with the provisions of this code and the public works design and construction standards.

### 15.505.030 Street Standards

#### A. Purpose. The purpose of this section is to:

1. Provide for safe, efficient, and convenient multi-modal transportation within the City of Newberg.
2. Provide adequate access to all proposed and anticipated developments in the City of Newberg. For purposes of this section, “adequate access” means direct routes of travel between destinations; such destinations may include residential neighborhoods, parks, schools, shopping areas, and employment centers.
3. Provide adequate area in all public rights-of-way for sidewalks, sanitary sewer and water lines, stormwater facilities, natural gas lines, power lines, and other utilities commonly and appropriately placed in such rights-of-way. For purposes of this section, “adequate area” means space sufficient to provide all required public services to standards defined in this code and in the Newberg Public Works Design and Construction Standards.

#### B. Applicability. The provisions of this section apply to:

1. The creation, dedication, and/or construction of all new public streets, bike facilities, or pedestrian facilities in all subdivisions, partitions, or other developments in the City of Newberg.
2. The extension or widening of existing public street rights-of-way, easements, or street improvements including those which may be proposed by an individual or the city, or which may be required by the city in association with other development approvals.
3. The construction or modification of any utilities, pedestrian facilities, or bike facilities in public rights-of-way.

4. The designation of planter strips. Street trees are required subject to NMC 15.420.

5. Developments outside the city that tie into or take access from city streets.

**15.505.020 C. Layout of streets, alleys, bikeways, and walkways.**

**A.** Streets, alleys, bikeways, and walkways shall be laid out and constructed as shown in the Newberg transportation system plan or in adopted future street plans.

**B.** In areas where the transportation system plan or future street plans do not show specific transportation improvements, roads and streets shall be laid out so as to conform to previously approved subdivisions, partitions, and other developments ~~previously approved~~ for adjoining ~~property properties, as to width, general direction and in other aspects,~~ unless it is found in the public interest to modify these patterns. ~~In addition, t~~Transportation improvements shall conform to the standards within ~~this code.~~ the Newberg Municipal Code, the Newberg Public Works Design and Construction Standards, the Newberg Transportation System Plan, and other adopted city plans. ~~[Ord. 2619, 5-16-05. Code 2001 § 151.681.]~~

**~~15.505.030 Construction of new streets and alleys.~~**

~~D. Construction of new streets. The land divider or developer shall grade and pave all streets and alleys in the subdivision, partition or development to the width specified in NMC 15.505.060, and provide for drainage of all such streets and alleys, construct curbs and gutters within the subdivision, partition or development in accordance with specifications adopted by the city council under NMC 15.510.030. Such improvements shall be constructed to specifications of the city under the supervision and direction of the director. It shall be the responsibility of the land divider or developer to provide street signs. [Ord. 2619, 5-16-05; Ord. 2451, 12-2-96. Code 2001 § 151.682.] Where new streets are necessary to serve a new development, subdivision, or partition, full street improvements shall be required. Three-quarter streets may be approved in lieu of full street improvements when the city finds it to be practical to require the completion of the other one-quarter street improvement when the adjoining property is developed; in such cases, three-quarter street improvements may be allowed by the city only where all of the following criteria are met:~~

- ~~1. The land abutting the opposite side of the new street is undeveloped and not part of the new development; and~~
- ~~2. The adjoining land abutting the opposite side of the street is within the city limits and the urban growth boundary.~~

~~Penalty: See NMC 15.05.120.~~

**15.505.040E. Improvements to existing streets.**

- ~~1. A subdivision, partition or development requiring a Type II design review abutting or adjacent to an existing road of inadequate width shall dedicate additional right of way to and improve the street to the width specified in NMC 15.505.060. All projects subject to partition, subdivision, or Type II design review~~

approval shall dedicate additional right-of-way sufficient to improve the street to the width specified in NMC 15.505.060.

2. All projects subject to partition, subdivision, or Type II design review approval must construct a minimum of a three-quarter street improvement to all existing streets adjacent to, within, or necessary to serve the development. The city engineer may waive or modify this requirement where the applicant demonstrates that the condition of existing streets to serve the development meets city standards and is in satisfactory condition to handle the projected traffic loads from the development. Where a development has frontage on both sides of an existing street, full street improvements are required.
3. In lieu of the street improvement requirements outlined in 15.505.040.B., the review authority may elect to accept from the applicant monies to be placed in a fund dedicated to the future reconstruction of the subject street(s). The amount of money deposited with the city shall be 100 percent of the estimated cost of the required street improvements (including any associated utility improvements), and 10% of the estimated cost for inflation. Cost estimates used for this purpose shall be based on preliminary design of the constructed street provided by the applicant's engineer and shall be approved by the city engineer.

~~{Ord. 2619, 5-16-05; Ord. 2451, 12-2-96. Code 2001 § 151.683.}~~

~~Penalty: See NMC 15.05.120.~~

#### **15.505.050 F. Improvements relating to impacts.**

Improvements required as a condition of development approval shall be roughly proportional to the impact of the development on public facilities and services. The review body must make findings in the development approval that indicate how the required improvements are roughly proportional to the impact. Development may not occur until required transportation facilities are in place or guaranteed, in conformance with the provisions of this code. If required transportation facilities cannot be put in place or be guaranteed, then the review body shall deny the requested land use application. ~~{Ord. 2619, 5-16-05. Code 2001 § 151.684.}~~

#### **15.505.060 G. Street width and design standards.**

1. ~~A.~~ Design Standards. All streets shall conform with the standards contained in Table 15.505.~~G.060~~. Where a range of values is listed, the director shall determine the width based on a consideration of the total street section width needed, existing street widths, and existing development patterns. Preference shall be given to the higher value. Where values may be modified by the director, the overall width shall be determined using the standards under subsections (~~B~~2) through (~~10~~) of this section.

**Table 15.505, ~~G-060~~**

**Street Design Standards**

| Type of Street   | Right-of-Way Width          | Curb-to-Curb Pavement Width | Motor Vehicle Travel Lanes | Center Turn Lane  | Striped Bike Lane (Both Sides) | On-Street Parking  |
|--|-----------------------------|-----------------------------|----------------------------|-------------------|--------------------------------|--------------------|
| <b>Arterial Streets</b>  |                             |                             |                            |                   |                                |                    |
| Expressway**   | <del>**100 – 120 feet</del> | <del>**80 feet</del>        | <del>**2 to 4 lanes</del>  | <del>**Yes*</del> | <del>**Yes</del>               | <del>**No</del>    |
| Major arterial   | 85 – 100 feet               | 74 feet                     | 4 lanes                    | Yes               | Yes                            | No*                |
| Minor arterial   | 60 – 80 feet                | 46 feet                     | 2 lanes                    | Yes*              | Yes                            | No*                |
| <b>Collectors</b>  |                             |                             |                            |                   |                                |                    |
| Major  | 60 – 80 feet                | 34 feet                     | 2 lanes                    | No*               | Yes                            | No*                |
| Minor  | 56 – 65 feet                | 34 feet                     | 2 lanes                    | No*               | <del>No</del> Yes*             | Yes*               |
| <b>Local Streets</b>   |                             |                             |                            |                   |                                |                    |
| Local residential  | 54 – 60 feet                | 32 feet                     | 2 lanes                    | No                | No*                            | Yes                |
| Limited residential, parking both sides  | 44 – 50 feet                | 28 feet                     | 2 lanes                    | No                | No                             | Yes                |
| Limited residential, parking one side  | 40 – 46 feet                | <del>24</del> 26 feet       | 2 lanes                    | No                | No                             | One side           |
| Limited residential, no parking  | 36 – 42 feet                | 20 feet                     | 2 lanes                    | No                | No                             | No                 |
| Local commercial/-industrial   | 56 – 65 feet                | 34 feet                     | 2 lanes                    | No*               | No*                            | <del>No</del> Yes* |
| * May be modified with approval of the director. Modification will change overall curb-to-curb and right-of-way width. |                             |                             |                            |                   |                                |                    |
| ** All standards shall be per ODOT expressway standards.   |                             |                             |                            |                   |                                |                    |

2. ~~B.~~ Motor Vehicle Travel Lanes. Collector and arterial streets shall have a minimum width of 12 feet. ~~Where circumstances warrant, the director may allow a reduction of this width to 11 feet.~~

3. ~~C.~~ Bike Lanes. Striped bike lanes shall be a minimum of five feet wide. ~~Where circumstances warrant, the director may allow a reduction of this width to four feet.~~ Bike lanes shall be provided where shown in the Newberg transportation system plan.

- ~~4. D. Parking Lanes. Where on-street parking is allowed on collector and arterial streets, the parking lane shall be a minimum of eight feet wide. Where circumstances warrant, the director may allow a reduction of this width to seven feet.~~
- ~~5. E. Center Turn Lanes. Where a center turn lane is provided, it shall be a minimum of 12 feet wide.~~
- ~~6. F. Limited Residential Streets. Limited residential streets shall be allowed only at the discretion of the review body, and only in consideration of the following factors:~~
- ~~a. 1. The requirements of the fire marshal shall be followed.~~
  - ~~b. 2. The estimated traffic volume on the street is low, and in no case more than 600 average daily trips.~~
  - ~~c. 3. Use for through streets or looped streets is preferred over cul-de-sac streets.~~
  - ~~d. 4. Use for short blocks (under 400 feet) is preferred over longer blocks.~~
  - ~~e. 5. The total number of residences or other uses accessing the street in that block is small, and in no case more than 30 residences.~~
  - ~~f. 6. On-street parking usage is limited, such as by providing ample off-street parking, or by staggering driveways so there are few areas where parking is allowable on both sides.~~
  - ~~— 7. Streets with no on-street parking or parking on one side will be allowed only where providing parking both sides is not feasible, and where there is a strong likelihood the no-parking area will be self-enforcing, such as where the street abuts the back sides of houses that access a different street. For parking one-side streets, the plans shall designate which side of the street is designated no parking.~~
- ~~7. G. Sidewalks. Sidewalks shall be provided on both sides of all public streets. Minimum width is five feet.~~
- ~~8. H. Planter Strips. Except where infeasible, a planter strip shall be provided between the sidewalk and the curb line. This strip shall be landscaped in accordance with the standards in NMC 15.420.020. Curb-side sidewalks may be allowed on limited residential streets. Where curb-side sidewalks are allowed, the following shall be provided ~~where possible~~:~~
- ~~a. 1. Additional reinforcement is done to the sidewalk section at corners.~~
  - ~~b. 2. Sidewalk width is six feet.~~
- ~~9. I. Slope Easements. Slope easements shall be provided adjacent to the street where required to maintain the stability of the street.~~
- ~~10. Intersections and street design. The street design standards in the Newberg Public Works Design and Construction Standards shall apply to all public streets, alleys, bike facilities, and sidewalks in the city.~~
- ~~11. J. The planning commission may approve modifications to ~~public~~ street standards for the purpose of ingress or egress to a minimum of three and a maximum of six lots through a conditional use permit. [Ord. 2763 § 1 (Exh. A § 19), 9-16-13; Ord. 2736 § 1 (Exh. A § 1), 3-21-11; Ord. 2619, 5-16-05; Ord. 2507, 3-1-99; Ord. 2494, 4-6-98; Ord. 2451, 12-2-96. Code 2001 § 151.685.]~~

Penalty: See NMC 15.05.120.

**H. Modification of Street Right-of-Way and Improvement Width.** The director, pursuant to the Type II review procedures of NMC 15.220, may allow modification to the public street standards of subsection G of this section, when the criteria in both subsections H.1 and H.2 of this section are satisfied:

1. The modification is necessary to provide design flexibility in instances where:
  - a. Unusual topographic conditions require a reduced width or grade separation of improved surfaces; or
  - b. Lot shape or configuration precludes accessing a proposed development with a street which meets the full standards of this section; or
  - c. A modification is necessary to preserve trees or other natural features determined by the city to be significant to the aesthetic character of the area; or
  - d. A planned unit development is proposed and the modification of street standards is necessary to provide greater privacy or aesthetic quality to the development.
2. Modification of the standards of this section shall only be approved if the city engineer finds that the specific design proposed provides adequate vehicular access based on anticipated traffic volumes

**~~15.505.070 Interim street improvements.~~ I. Interim street improvements.**

1. A. Temporary Interim Street Improvements. Three-quarter width quarter width streets may be provided temporarily to access lots where a full street will eventually be provided when all abutting lots are developed, unless otherwise approved as a half-street width improvement by the director and fire chief.
2. Temporary Turnarounds. Where a street will be extended as part of a future phase of a development, or as part of development of an abutting property, the street may be terminated with a temporary turnaround in lieu of a standard street connection or circular cul-de-sac bulb. The director and fire chief shall approve the temporary turnaround. It shall have an all-weather surface, and may include a hammerhead-type turnaround meeting fire apparatus access road standards, a paved or graveled circular turnaround, or a paved or graveled temporary access road. For streets extending less than 150 feet and/or with no significant access, the director may approve the street without a temporary turnaround. [Ord. 2619, 5-16-05; Ord. 2507, 3-1-99; Ord. 2494, 4-6-98; Ord. 2451, 12-2-96. Code 2001 § 151.686.]

—Penalty: See NMC 15.05.120.

**~~15.505.080 Reserve block.~~**

~~The director may require the land divider to create a reserve block controlling the access to a street, said block to be placed under the jurisdiction of the city if the director determines that a block is necessary.~~

~~A. To prevent access to abutting land at the end of a street in order to assure the proper extension of the street pattern and the orderly development of land lying beyond the street.~~

~~B. To prevent access to the side of a street on the side where additional width is required to meet the right-of-way standards provided in this code.~~

~~C. To prevent access to land abutting a street of the partition or subdivision, but not within the partition or subdivision itself.~~

~~D. To prevent access to land unsuitable for building development.~~

~~Local Street Width~~

| <del>Local Street Standard</del>   | <del>Intended Land Use Type</del> | <del>Maximum Amount of Development with Street Access*</del> | <del>Maximum Block Length*</del> | <del>Comments</del>  |
|--|-----------------------------------|--|----------------------------------|--|
| <del>32' parking both sides 54' to 65' right-of-way</del>  | <del>Single-family</del>          | <del>Y</del> No maximum                                      | <del>500 feet</del>              | <del>34' in commercial areas if substantial on-street truck parking is anticipated</del>   |
|  | <del>Multifamily dwelling</del>   | <del>Y</del> No maximum                                      |                                  |  |
|  | <del>Commercial</del>             | <del>Y</del> 40,000 sq. ft. floor area                       |                                  |  |
|  | <del>Industrial</del>             | <del>N</del> NA  |                                  |  |
| <del>44' parking both sides 65' right-of-way</del>   | <del>Single-family</del>          | <del>N</del> NA  | <del>500 feet</del>              | <del>Intended for community commercial (C-2 zone) and industrial areas with significant large truck traffic</del>  |
|  | <del>Multifamily dwelling</del>   | <del>N</del> NA  |                                  |  |
|  | <del>Commercial</del>             | <del>Y</del> No maximum                                      |                                  |  |
|  | <del>Industrial</del>             | <del>Y</del> No maximum                                      |                                  |  |
| <del>45' radius cul-de-sac</del>   | <del>Single-family</del>          | <del>Y</del> 18 units  | <del>400 feet</del>              | <del>35' radius may be allowed if the street has no parking, a mountable curb, attached sidewalks and sprinkler systems in every building along the street</del> |
|  | <del>Multifamily dwelling</del>   | <del>Y</del> No maximum                                      |                                  |  |
|  | <del>Commercial</del>             | <del>N</del> NA  |                                  |  |
|  | <del>Industrial</del>             | <del>N</del> NA  |                                  |  |
| <del>* —With direct driveway access and/or indirect access via a common parking area or driveway to the street</del> |                                   |  |                                  |  |
| <del>** —Block length is the distance between public streets that have a minimum clear width of 20 feet</del>        |                                   |  |                                  |  |

[Ord. 2513, 8-2-99; Code 2001 § 151.687.]

**~~15.505.090 Intersections of streets.~~**

~~A. Angles. Streets shall intersect one another at an angle as near to the right angle as is practicable considering topography of the area and previous adjacent layout; where not so practicable, the right-of-~~

~~way and street paving within the acute angle shall have a minimum of 30 feet centerline radius where such angle is not less than 75 degrees. In the case of streets intersecting at an angle of less than 75 degrees, then of such minimum as the director may determine in accordance with the purpose of this code.~~

~~B. Offsets. Intersections shall be so designed that no offset dangerous to the traveling public is created as a result of staggering of intersections, and in no case shall there be an offset of less than 100 feet centerline to centerline.~~

~~C. New or improved intersection construction shall incorporate the minimum intersection curb return radii requirements shown in the following table:~~

| <del>Minimum Curb Return Radii (Feet) Edge of Pavement/Curb</del>   |  |
|---|--|
| <del>Lowest Street Classification of Two Intersection Streets</del> | <del>Minimum Curb Return Radius*</del> |
| <del>Major arterial</del>   | <del>30 feet</del>                     |
| <del>Minor arterial</del>   | <del>30 feet</del>                     |
| <del>Major collector</del>  | <del>25 feet</del>                     |
| <del>Minor collector</del>  | <del>25 feet</del>                     |
| <del>Local residential street</del>                                 | <del>15 feet</del>                     |
| <del>Local commercial/ industrial street</del>                      | <del>30 feet</del>                     |

| <del>Minimum Curb Return Radii (Feet) Edge of Pavement/Curb</del>                                       |  |
|---|--|
| <del>Lowest Street Classification of Two Intersection Streets</del>                                     | <del>Minimum Curb Return Radius*</del> |
| <del>* If bicycle lane or on-street parking exists, the turning radii may be reduced by five feet</del> |  |

~~**[Ord. 2513, 8-2-99; Ord. 2451, 12-2-96. Code 2001 § 151.688.]**~~

~~**Penalty: See NMC 15.05.120.**~~

~~**15.505.100 Topography. J. Topography.**~~

~~The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of this code. **[Ord. 2451, 12-2-96. Code 2001 § 151.689.]**~~

**~~15.505.110-K.~~ Future extension of streets.**

All new streets required for a subdivision, partition, or a project requiring site design review shall be constructed to be “to and through”: through the development as necessary and to the edges of the project site to serve adjacent properties for future development.

~~Where the subdivision or partition is adjacent to land likely to be divided in the future, streets shall continue through to the boundary lines of the area under the same ownership of which the subdivision or partition is a part, where the director determines that such continuation is necessary to provide for the orderly division of such adjacent land or the transportation and access needs of the community. [Ord. 2494, 4-6-98; Ord. 2451, 12-2-96. Code 2001 § 151.690.]~~  
**~~15.505.120-L.~~ Cul-de-sacs.**

1. A. Cul-de-sacs shall only be permitted when one or more of the circumstances listed in this section exist. When cul-de-sacs are justified, public walkway connections shall be provided wherever possible to connect with another street, greenwaywalkway, school, or similar destination ~~unless one or more of the circumstances listed in this section exist.~~

a. 1. Physical or topographic conditions make a street ~~or walkway~~ connection impracticable. These conditions include but are not limited to controlled access streets, railroads, steep slopes, wetlands, or water bodies where a connection could not be reasonably made.

b. 2. Buildings or other existing development on adjacent lands physically preclude a connection now or in the future, considering the potential for redevelopment.

c. 3. Where streets or accessways would violate provisions of leases, easements, or similar restrictions.

d. 4. Where the streets or accessways abut the urban growth boundary and rural resource land in farm or forest use, except where the adjoining land is designated as an urban reserve area.

2. B. ~~There shall be no cul-de-sacs~~ Cul-de-sacs shall be no more than 400 feet long (measured from the centerline of the intersection to the radius point of the bulb).

3. Cul-de-sacs shall not ~~or serving~~ more than 18 single-family dwellings.

~~C.~~ Each cul-de-sac shall have a circular end with a minimum diameter of 90 feet, curb-to-curb, within a 103-foot minimum diameter right-of-way. For residential uses, a 35-foot radius may be allowed if the street has no parking, a mountable curb, attached-curbside sidewalks, and sprinkler systems in every building along the street. [Ord. 2619, 5-16-05; Ord. 2494, 4-6-98; Ord. 2451, 12-2-96. Code 2001 § 151.691.]

~~Penalty: See NMC 15.05.120.~~

**~~15.505.130~~**

**M. Street names and street signs.**

Streets that are in alignment with existing named streets shall bear the names of such existing streets. Names for new streets ~~that are~~ not in alignment with existing streets are subject to approval by the director and the fire chief and shall not unnecessarily duplicate or resemble the name of any existing or platted street in the city. It shall be the responsibility of the land divider to provide street signs. [Ord. 2451, 12-2-96. Code 2001 § 151.692.]

Penalty: See NMC 15.05.120.

~~15.505.140 Grades and curves.~~

~~Unless otherwise approved by the director because topographical conditions will not reasonably permit, grades shall not exceed six percent on arterials, 10 percent on collector streets, or 12 percent on all other streets. Centerline radii on curves shall not be less than 300 feet on arterials, or 230 feet on all other streets. [Ord. 2451, 12-2-96. Code 2001 § 151.693.]~~

Penalty: See NMC 15.05.120.

~~15.505.150 Platting~~**N. Platting standards for alleys.**

- ~~1. A. Dedication. An alley may be required to be dedicated and constructed to provide adequate access for a development, as deemed necessary by the City Engineer. The director may require adequate and proper alleys to be dedicated to the public by the land divider of such design and in such location as necessary to provide for the access needs of the subdivision or partition in accordance with the purpose of this code.~~
2. **B. Width.** The right-of-way ~~W~~**width of right-of-way** and paving design for alleys shall be not less than 20 feet ~~wide,~~ except that for an alley abutting land not in the subdivision or partition, a lesser width may be allowed at the discretion of the director where the land divider presents a satisfactory plan whereby such alley will be expanded to the width otherwise required. Slope easements shall be dedicated in accordance with specifications adopted by the city council under NMC 15.510.010 et seq.
3. ~~C. Corner Cut-Offs.~~ Where two alleys intersect, 10-foot corner cut-offs shall be provided.
4. ~~D. Grades and Curves.~~ Unless otherwise approved by the ~~director~~**City Engineer** where topographical conditions will not reasonably permit, grades shall not exceed 12 percent on alleys, and centerline radii on curves shall be not less than 100 feet.
5. ~~E. Other Requirements.~~ All provisions and requirements with respect to streets identified in this code shall apply to alleys the same in all respects as if the word “street” or “streets” therein appeared as the word “alley” or “alleys” respectively. ~~[Ord. 2451, 12-2-96. Code 2001 § 151.694.]~~

Penalty: See NMC 15.05.120.

~~15.505.160 O. Platting standards for blocks.~~

~~A.~~

Purpose. Streets and walkways can provide convenient travel within a neighborhood and can serve to connect people and land uses. Large, uninterrupted blocks can serve as a barrier to travel, especially walking and biking. Large blocks also can divide rather than unite neighborhoods. To promote connected neighborhoods and to shorten travel distances, the following minimum standards for block lengths are established.

1. ~~B.~~**Maximum Block Length and Perimeter.** The maximum length and perimeters of blocks in the zones listed below shall be according to the following table. The review body for a subdivision, partition, conditional use permit, or a Type II design review may require installation of streets or walkways as necessary to meet the standards below.

| Zone(s)         | Maximum_Block Length | Maximum_Block Perimeter |
|-----------------|----------------------|-------------------------|
| R-1             | 800 feet             | 2,000 feet              |
| R-2, R-3, RP, I | 1,200 feet           | 3,000 feet              |

**2. ~~C.~~ Exceptions.**

- a. ~~1.~~** If a public walkway is installed mid-block, the maximum block length and perimeter may be increased by 25 percent.
- b. ~~2.~~** Where a proposed street divides a block, one of the resulting blocks may exceed the maximum block length and perimeter standards provided the average block length and perimeter of the two resulting blocks do not exceed these standards.
- c. ~~3.~~** Blocks in excess of the above standards are allowed where access controlled streets, street access spacing standards, railroads, steep slopes, wetlands, water bodies, preexisting development, ownership patterns or similar circumstances restrict street and walkway location and design. In these cases, block length and perimeter shall be as small as practical. Where a street cannot be provided because of these circumstances but a public walkway is still feasible, a public walkway shall be provided.
- d. ~~4.~~** Institutional campuses located in an R-1 zone may apply the standards for the institutional zone.
- e. ~~5.~~** Where a block is in more than one zone, the standards of the majority of land in the proposed block shall apply.
- f. ~~6.~~** Where a local street plan, concept master site development plan, or specific plan has been approved for an area, the block standards shall follow those approved in the plan. In approving such a plan, the review body shall follow the block standards listed above to the extent appropriate for the plan area. ~~[Ord. 2736 § 1 (Ex. A § 4), 3-21-11; Ord. 2619, 5-16-05; Ord. 2494, 4-6-98; Ord. 2451, 12-2-96. Code 2001 § 151.695.]~~

Penalty: See NMC 15.05.120.

**~~15.505.170 Guidelines for locating major street alignments.~~**

~~A. The director shall determine the location of major streets, including collectors, minor arterials, and arterials, which do not have a set alignment, by applying the guidelines defined in this section. A major street location shall be prepared which addresses each of these guidelines. The director shall use a Type II process as outlined in this development code to establish the street alignment after the director determines that the guidelines have been adequately addressed by the applicant.~~

~~B. Guidelines for locating major streets which do not have a set alignment are as follows:~~

~~1. Availability or Existence of Right-of-Way. An evaluation of the cost of purchase versus dedicating the right-of-way.~~

~~2. Efficiency of the identified route versus other routes as defined by the following:~~

~~a. Commercial and Industrial Access and Circulation.~~

~~i. Route does not traverse local streets.~~

~~ii. Route minimizes out-of-direction travel.~~

~~iii. Route reduces or maintains travel time and trip length.~~

~~b. Residential Circulation.~~

~~i. Route does not traverse local streets.~~

~~ii. Route minimizes out-of-direction travel.~~

~~c. Number of stops and starts.~~

~~d. Route minimizes traffic conflict and access points.~~

~~3. Safety enhancements provided by the proposed route.~~

~~4. Reduction in number or improvement to rail crossings.~~

~~a. Route minimizes the number of railroad tracks to be crossed.~~

~~b. Route minimizes interference with railroad operations.~~

~~c. Route improves crossing angle and/or visibility at crossing.~~

~~5. Neighborhood Compatibility.~~

~~a. Route provides a buffer between adjacent neighborhoods and traffic.~~

~~b. Route is used to separate different land uses.~~

~~6. Compatibility with city plans.~~

~~7. Alternative mode enhancements. Route improves bicycle and pedestrian access.~~

~~8. Stream corridor impacts are minimized and in compliance with this development code.~~

~~9. Cost of the Route. Cost factors are evaluated including right-of-way acquisition, design and construction costs based on the length and efficiency of the route. [Ord. 2494, 4-6-98. Code 2001 § 151.700.]**15.505.180-P.**~~

**Private streets.**

New private streets, as defined in NMC 15.05.030, shall not be created. ~~{Ord. 2507, 3-1-99. Code 2001 § 151.701.}~~

~~Penalty: See NMC 15.05.120.~~

**~~15.505.190~~ Q. Traffic calming.**

- ~~1. A.~~ The following roadway design features may be required in new street construction where traffic calming needs are anticipated:
  - ~~a. 1.~~ Serpentine alignment.
  - ~~b. 2.~~ Curb extensions.
  - ~~c. 3.~~ Traffic diverters/circles.
  - ~~d. 4.~~ Raised medians and landscaping.
  - ~~e. 5.~~ Other methods shown effective through engineering studies.
- ~~2. B.~~ Traffic-calming measures such as speed humps ~~and additional stop signs~~ should be applied to mitigate traffic operations and/or safety problems on existing streets. They should not be applied with new street constructions. ~~{Ord. 2513, 8-2-99. Code 2001 § 151.702.}~~

**~~15.505.200~~ Vehicular R. Vehicular access standards.**

- ~~1. A.~~ Purpose. The purpose of these standards is to manage vehicle access to maintain traffic flow, safety, roadway capacity, and efficiency. They help to maintain an adequate level of service consistent with the functional classification of the street. Major roadways, including arterials, and collectors, serve as the primary system for moving people and goods within and through the city. Access is limited and managed on these roads to promote efficient through movement. Local streets and alleys provide access to individual properties. Access is managed on these roads to maintain safe maneuvering of vehicles in and out of properties and to allow safe through movements. If vehicular access and circulation are not properly designed, these roadways will be unable to accommodate the needs of development and serve their transportation function.
- ~~2. B.~~ Access Spacing Standards. Public street intersection and driveway spacing shall follow the standards in table Table 15.505.R below. ~~∴The Oregon Department of Transportation (ODOT) has jurisdiction of some roadways within the Newberg city limits, and ODOT access standards will apply on those roadways.~~

**Table 15.505.R. Access Spacing Standards**

| Roadway Functional Classification | Area <sup>1</sup> | Minimum Public Street Intersection Spacing (Feet) <sup>2</sup>                                       | Frontage Required per Additional Driveway <sup>3</sup> | Driveway Setback from Intersecting Street <sup>4</sup> | Typical Median Treatment               | Minimum Spacing of Median Openings |
|-----------------------------------|-------------------|--|--|--|--|------------------------------------|
| Expressway                        | All               | <del>As shown in the Newberg transportation system plan</del> Refer to ODOT Access Spacing Standards | NA   | NA   | Recessed swale and/or crash barrier    | NA                                 |
| Major arterial                    | Urban<br>CBD      | <del>600</del> Refer to ODOT Access Spacing Standards  | <del>300</del><br>300                                  | <del>150</del><br>100                                  | Raised median or center-left-turn lane | <del>600</del><br>NA               |
| Minor arterial                    | Urban<br>CBD      | 300<br>100   | <del>200</del><br>200                                  | <del>100</del><br>150<br>100                           | Raised median or center-left-turn lane | 300<br>NA                          |
| Major collector                   | All               | 200  | 150  | <del>100</del><br>150                                  | Center-left-turn lane                  | NA                                 |
| Minor collector                   | All               | 150  | 75   | <del>75</del><br>100                                   | None                                   | NA                                 |
| Local streets                     | All               | 100  | 75   | 50   | None                                   | NA                                 |

<sup>1</sup> "Urban" refers to intersections inside the city urban growth boundary outside the central business district (C-3 zone).

"CBD" refers to intersections within the central business district (C-3 zone).

"All" refers to all intersections within the Newberg urban growth boundary.

<sup>2</sup> Measured centerline to centerline.

~~<sup>3</sup> Requirement is the minimum frontage required per additional driveway beyond the first. Where two driveways are constructed, at least one curb parking space shall separate each driveway approach.~~

**Table 15.505.R. Access Spacing Standards**

| Roadway Functional Classification | Area <sup>1</sup> | Minimum Public Street Intersection Spacing (Feet) <sup>2</sup> | <del>Frontage Required per Additional Driveway<sup>2</sup></del> | Driveway Setback from Intersecting Street <sup>4</sup> | <del>Typical Median Treatment</del> | Minimum Spacing of Median Openings |
|-----------------------------------|-------------------|--|--|--|-------------------------------------|------------------------------------|
|-----------------------------------|-------------------|--|--|--|-------------------------------------|------------------------------------|

<sup>4</sup> The setback is based on the higher classification of the intersecting streets. Measured from the curb line of the intersecting street to the beginning of the driveway, excluding flares. If the driveway setback listed above would preclude a lot from having at least one driveway, including shared driveways or driveways on adjoining streets, one driveway is allowed as far from the intersection as possible.

- ~~3. C-~~ Properties with Multiple Frontages. Where a property has frontage on more than one street, access shall be limited to the street with the lesser classification.
- ~~4. D-~~ Driveways. More than one driveway is permitted on a lot as long as there is at least 40 feet of lot frontage separating each driveway approach.
- 5. Alley Access. Where a property has frontage on an alley and the only other frontages are on collector or arterial streets, access shall be taken from the alley only. The review body may allow creation of an alley for access to lots that do not otherwise have frontage on a public street provided all of the following are met:
  - ~~a. 1-~~ The review body finds that creating a public street frontage is not feasible.
  - ~~b. 2-~~ The alley access is for no more than six dwellings and no more than six lots.
  - ~~c. 3-~~ The alley has through access to streets on both ends.
  - ~~d. 4-~~ One additional parking space over those otherwise required is provided for each dwelling. Where feasible, this shall be provided as a public use parking space adjacent to the alley.
- ~~6. E-~~ Closure of Existing Accesses. Existing accesses that are not used as part of development or redevelopment of a property shall be closed and replaced with curbing, sidewalks, and landscaping, as appropriate.
- 7. F- Shared Driveways.
  - ~~a. 1-~~ The number of driveways onto arterial streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The city shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes. Where there is an abutting developable property, a shared driveway shall be provided as appropriate. When shared driveways are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway temporarily ends at the property line, but may be accessed or extended in the future as the adjacent parcel develops. "Developable" means that a ~~parcel is parcel is~~ either

- vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).
- ~~b. 2-~~ Access easements (i.e., for the benefit of affected properties) and maintenance agreements shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.
  - ~~c. 3-~~ No more than three lots may access one shared driveway.
  - ~~d. 4-~~ Shared driveways shall be posted as no parking fire lanes where required by the fire marshal.
  - ~~e. 5-~~ Where three lots or three dwellings share one driveway, one additional parking space over those otherwise required shall be provided for each dwelling. Where feasible, this shall be provided as a common use parking space adjacent to the driveway.
- ~~8. G-~~ Frontage Streets and Alleys. The review body for a ~~design review or subdivision~~ partition, subdivision, or design review may require construction of a frontage street to provide access to properties fronting an arterial or collector street.
- ~~9. ODOT right-of-way. Where a property abuts an ODOT right-of-way, the applicant for any development project shall obtain an access permit from ODOT.~~
- ~~10. H-~~ Exceptions. The director may allow exceptions to the access standards above in any of the following circumstances:
- ~~a. 1-~~ Where existing and planned future development patterns or physical constraints, such as topography, parcel configuration, and similar conditions, prevent access in accordance with the above standards.
  - ~~b. 2-~~ Where the proposal is to relocate an existing access for existing development, where the relocated access is closer to conformance with the standards above and does not increase the type or volume of access.
  - ~~c. 3-~~ Where the proposed access results in safer access, less congestion, a better level of service, and more functional circulation, both on street and on site, than access otherwise allowed under these standards.
- ~~11.~~ Where an exception is approved, the access shall be as safe and functional as practical in the particular circumstance. The director may require that the applicant submit a traffic study by a registered engineer to show the proposed access meets these criteria. ~~[Ord. 2736 § 1 (Exh. A § 3), 3-21-11; Ord. 2619, 5-16-05; Ord. 2513, 8-2-99. Code 2001 § 151.703.]~~

**~~15.505.210 Sidewalks.~~**

~~Sidewalks shall be located and constructed in accordance with the provisions of NMC 15.510.030. Minimum width is five feet. [Ord. 2619, 5-16-05; Ord. 2451, 12-2-96. Code 2001 § 151.704.]~~

~~Penalty: See NMC 15.05.120.~~

**~~15.505.220 S.~~ Public walkways.**

- ~~1. Projects subject to Type II design review, partition, or subdivision approval may be required to provide public walkways where necessary for public safety and convenience, or where necessary to meet the standards of this code. A. The review body for a design review or land division may require easements for and construction of public walkways where such walkway is needed for the public~~

~~safety and convenience or where the walkway is necessary to meet the standards of this code or a walkway plan.~~ Public walkways are meant to connect ~~to cul-de-sacs~~ to adjacent areas, to pass through oddly shaped or unusually long blocks, to provide for networks of public paths according to adopted plans, or to provide access to schools, parks or other community destinations or public areas ~~of such design, width, and location as reasonably required to facilitate public use.~~ Where possible, ~~said dedications~~ public walkway easements and locations may also be ~~employed~~ used to accommodate public utilities.

- ~~2. B.~~ Public walkways shall be located within a public access easement that is a minimum of 15 feet in width.
- ~~3. C.~~ A walk strip, not less than five-ten feet in width, shall be paved in the center of all public walkway easements. Such paving shall conform to specifications ~~adopted by the city council under NMC 15.510.030 in the Newberg Public Works Design and Construction Standards.~~
- ~~4. D.~~ Public walkways shall be designed, ~~as far as practical,~~ to meet the Americans with Disabilities Act requirements.
- ~~5. E.~~ Public walkways connecting one right-of-way to another shall be designed to provide as short and straight of a route as practical.
- ~~6. F.~~ The developer of the public walkway ~~shall~~ may be required to provide a homeowners' association or similar entity to maintain the public walkway and associated improvements.
- ~~7. G.~~ Lighting may be required for public walkways in excess of 250 feet in length.
- ~~8. H.~~ The review body may modify these requirements where it finds that topographic, preexisting development, or similar constraints exist. ~~{Ord. 2619, 5-16-05; Ord. 2451, 12-2-96. Code 2001 § 151.705.}~~

#### **T. Street trees.**

Street trees shall be provided for all projects subject to Type II design review, partition, or subdivision. Street trees shall be installed in accordance with the provisions of NMC 15.420.010(B)(4).

**U. Transit improvements.** Development proposals for sites that include or are adjacent to existing or planned transit facilities, as shown in the Newberg Transportation System Plan or adopted local or regional transit plan, shall be required to provide any of the following, as applicable and required by the review authority:

1. Reasonably direct pedestrian connections between the transit facility and building entrances of the site. For the purpose of this section, "reasonably direct" means a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for users.
2. A transit passenger landing pad accessible to disabled persons.
3. An easement of dedication for a passenger shelter or bench if such facility is in an adopted plan.
4. Lighting at the transit facility.

Penalty: See NMC 15.05.120.

### 15.505.040 Public Utility Standards

**A. Purpose.** The purpose of this section is to provide adequate services and facilities appropriate to the scale and type of development.

**B. Applicability.** This section applies to all development where extension or improvement of water, sanitary sewer, storm drainage, or private utilities is required to serve the development or use of the subject property.

#### **C. General Standards.**

1. The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall conform to the city's public works design and construction standards.

2. The location, design, installation and maintenance of all utility lines and facilities shall be carried out with minimum feasible disturbances of soil and site. Installation of all proposed public and private utilities shall be coordinated by the developer and be approved by the city to ensure the orderly extension of such utilities within public right-of-way and easements.

**D. Standards for Water Improvements.** All development that has a need for water service shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary sanitary sewer and storm drainage facilities, as applicable.

1. All developments shall be required to be linked to existing water facilities adequately sized to serve their intended area by the construction of water distribution lines, reservoirs and pumping stations which connect to such water service facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.

2. Specific location, size and capacity of such facilities will be subject to the approval of the city engineer with reference to the applicable water master plan. All water facilities shall conform with existing city pressure zones and shall be looped where necessary to provide adequate pressure and fire flows during peak demand at every point within the system in the development to which the water facilities will be connected. Installation costs shall remain entirely the developer's responsibility.

3. The design of the water facilities shall take into account provisions for the future extension beyond the development to serve adjacent properties, which, in the judgment of the city, cannot be feasibly served otherwise.

4. Design, construction and material standards shall be as specified by the city engineer for the construction of such public water facilities in the city.

**E. Standards for Sanitary Sewer Improvements.** All development that has a need for sanitary sewers shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary water services and storm drainage facilities, as applicable.

1. All septic tank systems and on-site sewage systems are prohibited.

2. All properties shall be provided with gravity service to the city sanitary sewer system, except for lots that have unique topographic or other natural features that make gravity sewer extension impractical as determined by the city engineer. Where gravity service is impractical, the developer shall provide all necessary pumps/lift stations and other improvements, as determined by the city engineer.

3. All developments shall be required to be linked to existing sanitary sewer collection facilities adequately sized to serve their intended area by the construction of sewer lines which connect to existing adequately sized sewer facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.

4. Specific location, size and capacity of sewer facilities will be subject to the approval of the city engineer with reference to the applicable sewer master plan. All sewer facilities shall be sized to provide adequate capacity during peak flows from the entire area potentially served by such facilities. Installation costs shall remain entirely the developer's responsibility.

5. Temporary sewer service facilities, including pumping stations, will be permitted only if the city engineer approves the temporary facilities, and the developer provides for all facilities that are necessary for transition to permanent facilities.

6. The design of the sewer facilities shall take into account provisions for the future extension beyond the development to serve upstream properties, which, in the judgment of the city, cannot be feasibly served otherwise.

7. Design, construction and material standards shall be as specified by the city engineer for the construction of such sewer facilities in the city.

**F. Street Lights.** All developments shall include underground electric service, light standards, wiring and lamps for street lights according to the specifications and standards of the public works design standards. The developer shall install all such facilities and make the necessary arrangements with the serving electric utility as approved by the city. Upon the city's acceptance of the public improvements associated with the development, the street lighting system, exclusive of utility-owned service lines, shall be and become property of the city unless otherwise designated by the city through agreement with a private utility.

**G. Easements.** Easements for public and private utilities shall be provided as deemed necessary by the city, special districts, and utility companies. Easements for special purpose uses shall be of a width deemed appropriate by the responsible agency. Such easements shall be recorded on easement forms approved by the city and designated on the final plat of all subdivisions and partitions. Minimum required easement width and locations are as provided in the public works design and construction standards.

#### **15.505.050 Storm drainage.**

**A. Purpose.** The purpose of this section is to provide for the drainage of surface water from all residential, commercial and industrial development; to minimize erosion; and to reduce degradation of water quality due to sediments and pollutants in storm water runoff.

**B. Applicability.** The provisions of this section apply to all developments subject to site development review or land division review and to the reconstruction or expansion of such developments that increases the flow or changes the point of discharge to the city storm drainage system. Additionally, the provisions of this section shall apply to all drainage facilities that impact any public storm drain system, public right-of-way or public easement, including but not limited to off-street parking and loading areas.

**C. General Requirement.** All storm water runoff shall be conveyed to a public storm sewer or natural drainage channel having adequate capacity to carry the flow without overflowing or otherwise causing damage to public and/or private property. The developer shall pay all costs associated with designing and constructing the facilities necessary to meet this requirement.

**D. Plan for Storm Drainage and Erosion Control.** No construction of any facilities in a development included in subsection (B) of this section shall be permitted until an engineer registered in the state of Oregon prepares a storm drainage and erosion control plan for the project. This plan shall contain at a minimum:

- 1. The methods to be used to minimize the amount of runoff, siltation, and pollution created from the development both during and after construction.**

2. Plans for the construction of storm sewers and other facilities that depict line sizes, profiles, construction specifications, and other such information as is necessary for the city to review the adequacy of the storm drainage plans.

3. Design calculations shall be submitted for all drainage facilities. These drainage calculations shall be included on the site plan drawings and shall be stamped by a licensed professional engineer in the state of Oregon. Peak design discharges shall be computed using the rational formula and based upon the design criteria outlined in the public works design standards for the city.

**E. Development Standards.** Development subject to this section shall be planned, designed, constructed, and maintained in compliance with the city of Newberg public works design and construction standards.

Chapter 15.510  
~~IMPROVEMENTS AND SPECIFICATIONS~~

~~**15.510.010 Submitting specifications.**~~

~~The director shall prepare and submit to the city council specifications and amendments for construction of streets and alleys, construction of curbs and gutters, dedication of slope easements for streets and alleys, construction of drainage facilities, and construction of pedestrian ways in subdivisions and partitions. Such specifications shall conform to proper relevant engineering standards, and be so devised as to facilitate provision for the health, safety and welfare needs of the city and area affected, in accordance with this code. [Ord. 2451, 12-2-96. Code 2001 § 151.715.]~~

~~**15.510.020 Procedure.**~~

~~The procedure of preparing, submitting, and adopting all such specifications and amendments thereto, including notice and hearing, shall conform to that required by law for the enactment of resolutions. [Ord. 2451, 12-2-96. Code 2001 § 151.716.]~~

~~**15.510.030 Adoption of specifications.**~~

~~Upon adoption by the city council of any such specifications and amendments thereto, as from time to time may be submitted by the director, a copy of the specifications shall be filed with the city recorder and a copy shall be kept in the office of the director, for the use and information of the general public. [Ord. 2451, 12-2-96. Code 2001 § 151.717.]~~

~~**15.510.040 Water supply.**~~

~~All lots and parcels within subdivisions and partitions shall be served by the water system of the city. [Ord. 2451, 12-2-96. Code 2001 § 151.718.]~~

~~**15.510.050 Wastewater.**~~

~~All lots and parcels within subdivisions and partitions shall, where practicable, as determined by the director, in accordance with the provisions of this code, be served by the wastewater system of the city. [Ord. 2451, 12-2-96. Code 2001 § 151.719.]~~

~~**15.510.060 Land surface drainage.**~~

~~Such grading shall be done and such drainage facilities shall be constructed by the land divider as are adequate for the purpose of proper drainage of the partition or subdivision, of areas affected thereby, and for the preservation of healthful and convenient surroundings and conditions for residents of the subdivision or partition, and for the general public, in accordance with specifications adopted by the city council under NMC 15.510.030. [Ord. 2451, 12-2-96. Code 2001 § 151.720.]~~

~~Penalty: See NMC 15.05.120.~~

~~**15.510.070 Street trees.**~~

~~Street trees shall be provided adjacent to all public rights-of-way abutting or within a subdivision or partition, or as required as part of a design review or other development. Street trees shall be installed in accordance with the provisions of NMC 15.420.010(B)(4). [Ord. 2451, 12-2-96. Code 2001 § 151.725.]~~

~~Penalty: See NMC 15.05.120.~~

~~**15.510.080 Easements for utilities.**~~

~~Dedication of easements for stormwater systems, and for access thereto for maintenance, in order to safeguard the public against flood damage and the accumulation of surface water and maintenance, and dedication of easements for other public utilities, may be required of the land divider at sufficient widths for their intended uses, by the director along lot or parcel rear lines or side lines, or elsewhere as necessary to provide needed facilities for present or future development of the area in accordance with the purpose of this code. [Ord. 2733 Att. A, 2-7-11; Ord. 2619, 5-16-05; Ord. 2494, 4-6-98; Ord. 2451, 12-2-96. Code 2001 § 151.726.]~~

~~Penalty: See NMC 15.05.120.~~

# Chapter 15.505 Public Improvements Standards

## DRAFT EDITS

### Sections:

|                   |                          |
|-------------------|--------------------------|
| <b>15.505.010</b> | <b>Purpose</b>           |
| <b>15.505.020</b> | <b>Applicability</b>     |
| <b>15.505.030</b> | <b>Street Standards</b>  |
| <b>15.505.040</b> | <b>Utility Standards</b> |
| <b>15.505.050</b> | <b>Storm Drainage</b>    |

### [15.505.010 Purpose.](#)

This chapter provides standards for public infrastructure and utilities installed with new development, consistent with the policies of the City of Newberg Comprehensive Plan and adopted city master plans. The standards are intended to minimize disturbance to natural features, promote energy conservation and efficiency, minimize and maintain development impacts on surrounding properties and neighborhoods, and ensure timely completion of adequate public facilities to serve new development.

### [15.505.020 Applicability](#)

The provision and utilization of public facilities and services within the City of Newberg shall apply to all land developments in accordance with this chapter. No development permit shall be approved unless the following improvements are provided for prior to occupancy or operation, unless future provision is assured in accordance with section 15.505.030.E. of this chapter.

- A. **Public Works Design and Construction Standards.** The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall comply with the requirements of the most recently adopted public works design and construction standards for the city of Newberg.
- B. **Street Improvements.** All projects subject to a Type II design review, partition, or subdivision approval must construct street improvements necessary to serve the development.
- C. **Water.** All developments, lots, and parcels within the City of Newberg shall be served by the municipal water system as specified in NMC 13.15 and the Newberg Public Works Design and Construction Standards.
- D. **Wastewater.** All developments, lots, and parcels within the City of Newberg shall be served by the municipal wastewater system as specified in NMC 13.10 and the Newberg Public Works Design and Construction Standards.
- E. **Stormwater.** All developments, lots, and parcels within the City of Newberg shall manage stormwater runoff as specified in NMC 13.20 and 13.25 and the Newberg Public Works Design and Construction Standards.

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- F. Utility Easements. Utility easements shall be provided as necessary and required by the review body to provide needed facilities for present or future development of the area.
- G. City Approval of Public Improvements Required. No building permit may be issued until all required public facility improvements are in place and approved by the city engineer, or are otherwise bonded for in a manner approved by the review authority, in conformance with the provisions of this code and the public works design and construction standards.

### 15.505.030 Street standards

**A. Purpose.** The purpose of this section is to:

1. Provide for safe, efficient, and convenient multi-modal transportation within the City of Newberg.
2. Provide adequate access to all proposed and anticipated developments in the City of Newberg. For purposes of this section, “adequate access” means direct routes of travel between destinations; such destinations may include residential neighborhoods, parks, schools, shopping areas, and employment centers.
3. Provide adequate area in all public rights-of-way for sidewalks, sanitary sewer and water lines, stormwater facilities, natural gas lines, power lines, and other utilities commonly and appropriately placed in such rights-of-way. For purposes of this section, “adequate area” means space sufficient to provide all required public services to standards defined in this code and in the Newberg Public Works Design and Construction Standards.

**B. Applicability.** The provisions of this section apply to:

1. The creation, dedication, and/or construction of all new public streets, bike facilities, or pedestrian facilities in all subdivisions, partitions, or other developments in the City of Newberg.
2. The extension or widening of existing public street rights-of-way, easements, or street improvements including those which may be proposed by an individual or the city, or which may be required by the city in association with other development approvals.
3. The construction or modification of any utilities, pedestrian facilities, or bike facilities in public rights-of-way.
4. The designation of planter strips. Street trees are required subject to NMC 15.420.
5. Developments outside the city that tie into or take access from city streets.

**C. Layout of streets, alleys, bikeways, and walkways.** Streets, alleys, bikeways, and walkways shall be laid out and constructed as shown in the Newberg transportation system plan or in adopted future street plans. In areas where the transportation system plan or future street plans do not show specific transportation improvements,

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roads and streets shall be laid out so as to conform to previously approved subdivisions, partitions, and other developments for adjoining properties, unless it is found in the public interest to modify these patterns.

Transportation improvements shall conform to the standards within the Newberg Municipal Code, the Newberg Public Works Design and Construction Standards, the Newberg Transportation System Plan, and other adopted city plans.

**D. Construction of new streets.** Where new streets are necessary to serve a new development, subdivision, or partition, full street improvements shall be required. Three-quarter streets may be approved in lieu of full street improvements when the city finds it to be practical to require the completion of the other one-quarter street improvement when the adjoining property is developed; in such cases, three-quarter street improvements may be allowed by the city only where all of the following criteria are met:

1. The land abutting the opposite side of the new street is undeveloped and not part of the new development; and
2. The adjoining land abutting the opposite side of the street is within the city limits and the urban growth boundary.

**E. Improvements to existing streets.**

1. All projects subject to partition, subdivision, or Type II design review approval shall dedicate additional right-of-way sufficient to improve the street to the width specified in NMC 15.505.060.
2. All projects subject to partition, subdivision, or Type II design review approval must construct a minimum of a three-quarter street improvement to all existing streets adjacent to, within, or necessary to serve the development. The city engineer may waive or modify this requirement where the applicant demonstrates that the condition of existing streets to serve the development meets city standards and is in satisfactory condition to handle the projected traffic loads from the development. Where a development has frontage on both sides of an existing street, full street improvements are required.
3. In lieu of the street improvement requirements outlined in 15.505.040.B., the review authority may elect to accept from the applicant monies to be placed in a fund dedicated to the future reconstruction of the subject street(s). The amount of money deposited with the city shall be 100 percent of the estimated cost of the required street improvements (including any associated utility improvements), and 10% of the estimated cost for inflation. Cost estimates used for this purpose shall be based on preliminary design of the constructed street provided by the applicant's engineer and shall be approved by the city engineer.

**F. Improvements relating to impacts.** Improvements required as a condition of development approval shall be roughly proportional to the impact of the development on public facilities and services. The review body must make findings in the development approval that indicate how the required improvements are roughly proportional to the impact. Development may not occur until required transportation facilities are in place or guaranteed, in conformance with the provisions of this code. If required transportation facilities cannot be put in place or be guaranteed, then the review body shall deny the requested land use application.

**G. Street width and design standards.**

1. Design Standards. All streets shall conform with the standards contained in Table 15.505.G.. Where a range of values is listed, the director shall determine the width based on a consideration of the total street section width needed, existing street widths, and existing development patterns. Preference shall be given to the higher value. Where values may be modified by the director, the overall width shall be determined using the standards under subsections (2) through (10) of this section.

**Table 15.505.G Street Design Standards**

| Type of Street   | Right-of-Way Width | Curb-to-Curb Pavement Width | Motor Vehicle Travel Lanes | Center Turn Lane | Striped Bike Lane (Both Sides) | On-Street Parking |
|--|--------------------|-----------------------------|----------------------------|------------------|--------------------------------|-------------------|
| <b>Arterial Streets</b>  |                    |                             |                            |                  |                                |                   |
| Expressway**   | 100 – 120 feet     | 80 feet                     | 2 to 4 lanes               | Yes*             | Yes                            | No                |
| Major arterial   | 85 – 100 feet      | 74 feet                     | 4 lanes                    | Yes              | Yes                            | No*               |
| Minor arterial   | 60 – 80 feet       | 46 feet                     | 2 lanes                    | Yes*             | Yes                            | No*               |
| <b>Collectors</b>  |                    |                             |                            |                  |                                |                   |
| Major  | 60 – 80 feet       | 34 feet                     | 2 lanes                    | No*              | Yes                            | No*               |
| Minor  | 56 – 65 feet       | 34 feet                     | 2 lanes                    | No*              | Yes*                           | Yes*              |
| <b>Local Streets</b>   |                    |                             |                            |                  |                                |                   |
| Local residential  | 54 – 60 feet       | 32 feet                     | 2 lanes                    | No               | No*                            | Yes               |
| Limited residential, parking both sides  | 44 – 50 feet       | 28 feet                     | 2 lanes                    | No               | No                             | Yes               |
| Limited residential, parking one side  | 40 – 46 feet       | 26 feet                     | 2 lanes                    | No               | No                             | One side          |
| Limited residential, no parking  | 36 – 42 feet       | 20 feet                     | 2 lanes                    | No               | No                             | No                |
| Local commercial/industrial  | 56 – 65 feet       | 34 feet                     | 2 lanes                    | No*              | No*                            | Yes*              |
| * May be modified with approval of the director. Modification will change overall curb-to-curb and right-of-way width. |                    |                             |                            |                  |                                |                   |
| ** All standards shall be per ODOT expressway standards.   |                    |                             |                            |                  |                                |                   |

2. Motor Vehicle Travel Lanes. Collector and arterial streets shall have a minimum width of 12 feet.

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3. Bike Lanes. Striped bike lanes shall be a minimum of five feet wide. Bike lanes shall be provided where shown in the Newberg transportation system plan.
4. Parking Lanes. Where on-street parking is allowed on collector and arterial streets, the parking lane shall be a minimum of eight feet wide.
5. Center Turn Lanes. Where a center turn lane is provided, it shall be a minimum of 12 feet wide.
6. Limited Residential Streets. Limited residential streets shall be allowed only at the discretion of the review body, and only in consideration of the following factors:
  - a. The requirements of the fire marshal shall be followed.
  - b. The estimated traffic volume on the street is low, and in no case more than 600 average daily trips.
  - c. Use for through streets or looped streets is preferred over cul-de-sac streets.
  - d. Use for short blocks (under 400 feet) is preferred over longer blocks.
  - e. The total number of residences or other uses accessing the street in that block is small, and in no case more than 30 residences.
  - f. On-street parking usage is limited, such as by providing ample off-street parking, or by staggering driveways so there are few areas where parking is allowable on both sides.
7. Sidewalks. Sidewalks shall be provided on both sides of all public streets. Minimum width is five feet.
8. Planter Strips. Except where infeasible, a planter strip shall be provided between the sidewalk and the curb line. This strip shall be landscaped in accordance with the standards in NMC 15.420.020. Curb-side sidewalks may be allowed on limited residential streets. Where curb-side sidewalks are allowed, the following shall be provided:
  - a. Additional reinforcement is done to the sidewalk section at corners.
  - b. Sidewalk width is six feet.
9. Slope Easements. Slope easements shall be provided adjacent to the street where required to maintain the stability of the street.
10. Intersections and street design. The street design standards in the Newberg Public Works Design and Construction Standards shall apply to all public streets, alleys, bike facilities, and sidewalks in the city.
11. The planning commission may approve modifications to street standards for the purpose of ingress or egress to a minimum of three and a maximum of six lots through a conditional use permit.

**H. Modification of Street Right-of-Way and Improvement Width.** The director, pursuant to the Type II review procedures of NMC [15.220](#), may allow modification to the public street standards of subsection G of this section, when the criteria in both subsections H.1 and H.2 of this section are satisfied:

1. The modification is necessary to provide design flexibility in instances where:
  - a. Unusual topographic conditions require a reduced width or grade separation of improved surfaces; or
  - b. Lot shape or configuration precludes accessing a proposed development with a street which meets the full standards of this section; or
  - c. A modification is necessary to preserve trees or other natural features determined by the city to be significant to the aesthetic character of the area; or

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- d. A planned unit development is proposed and the modification of street standards is necessary to provide greater privacy or aesthetic quality to the development.
2. Modification of the standards of this section shall only be approved if the city engineer finds that the specific design proposed provides adequate vehicular access based on anticipated traffic volumes

**I. Interim street improvements.**

1. Interim Street Improvements. Three-quarter width streets may be provided temporarily to access lots where a full street will eventually be provided when all abutting lots are developed, unless otherwise approved as a half-street width improvement by the director and fire chief.
2. Temporary Turnarounds. Where a street will be extended as part of a future phase of a development, or as part of development of an abutting property, the street may be terminated with a temporary turnaround in lieu of a standard street connection or circular cul-de-sac bulb. The director and fire chief shall approve the temporary turnaround. It shall have an all-weather surface, and may include a hammerhead-type turnaround meeting fire apparatus access road standards, a paved or graveled circular turnaround, or a paved or graveled temporary access road. For streets extending less than 150 feet and/or with no significant access, the director may approve the street without a temporary turnaround.

**J. Topography.** The layout of streets shall give suitable recognition to surrounding topographical conditions in accordance with the purpose of this code.

**K. Future extension of streets.** All new streets required for a subdivision, partition, or a project requiring site design review shall be constructed to be “to and through”: through the development as necessary and to the edges of the project site to serve adjacent properties for future development.

**L. Cul-de-sacs.**

1. Cul-de-sacs shall only be permitted when one or more of the circumstances listed in this section exist. When cul-de-sacs are justified, public walkway connections shall be provided wherever possible to connect with another street, walkway, school, or similar destination.
  - a. Physical or topographic conditions make a street connection impracticable. These conditions include but are not limited to controlled access streets, railroads, steep slopes, wetlands, or water bodies where a connection could not be reasonably made.
  - b. Buildings or other existing development on adjacent lands physically preclude a connection now or in the future, considering the potential for redevelopment.
  - c. Where streets or accessways would violate provisions of leases, easements, or similar restrictions.
  - d. Where the streets or accessways abut the urban growth boundary and rural resource land in farm or forest use, except where the adjoining land is designated as an urban reserve area.
2. Cul-de-sacs shall be no more than 400 feet long (measured from the centerline of the intersection to the radius point of the bulb).
3. Cul-de-sacs shall not serve more than 18 single-family dwellings.

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Each cul-de-sac shall have a circular end with a minimum diameter of 90 feet, curb-to-curb, within a 103-foot minimum diameter right-of-way. For residential uses, a 35-foot radius may be allowed if the street has no parking, a mountable curb, curbside sidewalks, and sprinkler systems in every building along the street.

**M. Street names and street signs.** Streets that are in alignment with existing named streets shall bear the names of such existing streets. Names for new streets not in alignment with existing streets are subject to approval by the director and the fire chief and shall not unnecessarily duplicate or resemble the name of any existing or platted street in the city. It shall be the responsibility of the land divider to provide street signs.

**N. Platting standards for alleys.**

1. An alley may be required to be dedicated and constructed to provide adequate access for a development, as deemed necessary by the City Engineer.
2. The right-of-way width and paving design for alleys shall be not less than 20 feet wide. Slope easements shall be dedicated in accordance with specifications adopted by the city council under NMC 15.510.010 et seq.
3. Where two alleys intersect, 10-foot corner cut-offs shall be provided.
4. Unless otherwise approved by the City Engineer where topographical conditions will not reasonably permit, grades shall not exceed 12 percent on alleys, and centerline radii on curves shall be not less than 100 feet.
5. All provisions and requirements with respect to streets identified in this code shall apply to alleys the same in all respects as if the word "street" or "streets" therein appeared as the word "alley" or "alleys" respectively.

**O. Platting standards for blocks.**

Purpose. Streets and walkways can provide convenient travel within a neighborhood and can serve to connect people and land uses. Large, uninterrupted blocks can serve as a barrier to travel, especially walking and biking. Large blocks also can divide rather than unite neighborhoods. To promote connected neighborhoods and to shorten travel distances, the following minimum standards for block lengths are established.

1. Maximum Block Length and Perimeter. The maximum length and perimeters of blocks in the zones listed below shall be according to the following table. The review body for a subdivision, partition, conditional use permit, or a Type II design review may require installation of streets or walkways as necessary to meet the standards below.

| Zone(s)         | Maximum Block Length | Maximum Block Perimeter |
|-----------------|----------------------|-------------------------|
| R-1             | 800 feet             | 2,000 feet              |
| R-2, R-3, RP, I | 1,200 feet           | 3,000 feet              |

2. Exceptions.
  - a. If a public walkway is installed mid-block, the maximum block length and perimeter may be increased by 25 percent.

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- b. Where a proposed street divides a block, one of the resulting blocks may exceed the maximum block length and perimeter standards provided the average block length and perimeter of the two resulting blocks do not exceed these standards.
- c. Blocks in excess of the above standards are allowed where access controlled streets, street access spacing standards, railroads, steep slopes, wetlands, water bodies, preexisting development, ownership patterns or similar circumstances restrict street and walkway location and design. In these cases, block length and perimeter shall be as small as practical. Where a street cannot be provided because of these circumstances but a public walkway is still feasible, a public walkway shall be provided.
- d. Institutional campuses located in an R-1 zone may apply the standards for the institutional zone.
- e. Where a block is in more than one zone, the standards of the majority of land in the proposed block shall apply.
- f. Where a local street plan, concept master site development plan, or specific plan has been approved for an area, the block standards shall follow those approved in the plan. In approving such a plan, the review body shall follow the block standards listed above to the extent appropriate for the plan area.

**P. Private streets.**

New private streets, as defined in NMC 15.05.030, shall not be created.

**Q. Traffic calming.**

1. The following roadway design features may be required in new street construction where traffic calming needs are anticipated:
  - a. Serpentine alignment.
  - b. Curb extensions.
  - c. Traffic diverters/circles.
  - d. Raised medians and landscaping.
  - e. Other methods shown effective through engineering studies.
2. Traffic-calming measures such as speed humps should be applied to mitigate traffic operations and/or safety problems on existing streets. They should not be applied with new street constructions.

**R. Vehicular access standards.**

1. Purpose. The purpose of these standards is to manage vehicle access to maintain traffic flow, safety, roadway capacity, and efficiency. They help to maintain an adequate level of service consistent with the functional classification of the street. Major roadways, including arterials and collectors, serve as the primary system for moving people and goods within and through the city. Access is limited and managed on these roads to promote efficient through movement. Local streets and alleys provide access to individual properties. Access is managed on these roads to maintain safe maneuvering of vehicles in and out of properties and to allow safe through movements. If vehicular access and circulation are not properly designed, these roadways will be unable to accommodate the needs of development and serve their transportation function.

2. Access Spacing Standards. Public street intersection and driveway spacing shall follow the standards in Table 15.505.R below. The Oregon Department of Transportation (ODOT) has jurisdiction of some roadways within the Newberg city limits, and ODOT access standards will apply on those roadways.

**Table 15.505.R. Access Spacing Standards**

| Roadway Functional Classification | Area <sup>1</sup> | Minimum Public Street Intersection Spacing (Feet) <sup>2</sup> |  | Driveway Setback from Intersecting Street <sup>4</sup> |  |  |
|-----------------------------------|-------------------|--|--|--|--|--|
| Expressway                        | All               | Refer to ODOT Access Spacing Standards                         |  | NA   |  |  |
| Major arterial                    | Urban CBD         | Refer to ODOT Access Spacing Standards                         |  |  |  |  |
| Minor arterial                    | Urban CBD         | 300<br>100   |  | 150<br>100   |  |  |
| Major collector                   | All               | 200  |  | 150  |  |  |
| Minor collector                   | All               | 150  |  | 100  |  |  |
|                                   |                   |  |  |  |  |  |

<sup>1</sup> “Urban” refers to intersections inside the city urban growth boundary outside the central business district (C-3 zone).

“CBD” refers to intersections within the central business district (C-3 zone).

“All” refers to all intersections within the Newberg urban growth boundary.

<sup>2</sup> Measured centerline to centerline.

<sup>4</sup> The setback is based on the higher classification of the intersecting streets. Measured from the curb line of the intersecting street to the beginning of the driveway, excluding flares. If the driveway setback listed above would preclude a lot from having at least one driveway, including shared driveways or driveways on adjoining streets, one driveway is allowed as far from the intersection as possible.

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3. Properties with Multiple Frontages. Where a property has frontage on more than one street, access shall be limited to the street with the lesser classification.
4. Driveways. More than one driveway is permitted on a lot as long as there is at least 40 feet of lot frontage separating each driveway approach.
5. Alley Access. Where a property has frontage on an alley and the only other frontages are on collector or arterial streets, access shall be taken from the alley only. The review body may allow creation of an alley for access to lots that do not otherwise have frontage on a public street provided all of the following are met:
  - a. The review body finds that creating a public street frontage is not feasible.
  - b. The alley access is for no more than six dwellings and no more than six lots.
  - c. The alley has through access to streets on both ends.
  - d. One additional parking space over those otherwise required is provided for each dwelling. Where feasible, this shall be provided as a public use parking space adjacent to the alley.
6. Closure of Existing Accesses. Existing accesses that are not used as part of development or redevelopment of a property shall be closed and replaced with curbing, sidewalks, and landscaping, as appropriate.
7. Shared Driveways.
  - a. The number of driveways onto arterial streets shall be minimized by the use of shared driveways with adjoining lots where feasible. The city shall require shared driveways as a condition of land division or site design review, as applicable, for traffic safety and access management purposes. Where there is an abutting developable property, a shared driveway shall be provided as appropriate. When shared driveways are required, they shall be stubbed to adjacent developable parcels to indicate future extension. "Stub" means that a driveway temporarily ends at the property line, but may be accessed or extended in the future as the adjacent parcel develops. "Developable" means that a parcel is either vacant or it is likely to receive additional development (i.e., due to infill or redevelopment potential).
  - b. Access easements (i.e., for the benefit of affected properties) and maintenance agreements shall be recorded for all shared driveways, including pathways, at the time of final plat approval or as a condition of site development approval.
  - c. No more than three lots may access one shared driveway.
  - d. Shared driveways shall be posted as no parking fire lanes where required by the fire marshal.
  - e. Where three lots or three dwellings share one driveway, one additional parking space over those otherwise required shall be provided for each dwelling. Where feasible, this shall be provided as a common use parking space adjacent to the driveway.
8. Frontage Streets and Alleys. The review body for a partition, subdivision, or design review may require construction of a frontage street to provide access to properties fronting an arterial or collector street.
9. ODOT right-of-way. Where a property abuts an ODOT right-of-way, the applicant for any development project shall obtain an access permit from ODOT.
10. Exceptions. The director may allow exceptions to the access standards above in any of the following circumstances:

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- a. Where existing and planned future development patterns or physical constraints, such as topography, parcel configuration, and similar conditions, prevent access in accordance with the above standards.
  - b. Where the proposal is to relocate an existing access for existing development, where the relocated access is closer to conformance with the standards above and does not increase the type or volume of access.
  - c. Where the proposed access results in safer access, less congestion, a better level of service, and more functional circulation, both on street and on site, than access otherwise allowed under these standards.
11. Where an exception is approved, the access shall be as safe and functional as practical in the particular circumstance. The director may require that the applicant submit a traffic study by a registered engineer to show the proposed access meets these criteria.

**S. Public walkways.**

1. Projects subject to Type II design review, partition, or subdivision approval may be required to provide public walkways where necessary for public safety and convenience, or where necessary to meet the standards of this code. Public walkways are meant to connect cul-de-sacs to adjacent areas, to pass through oddly shaped or unusually long blocks, to provide for networks of public paths according to adopted plans, or to provide access to schools, parks or other community destinations or public areas. Where possible, public walkway easements and locations may also be used to accommodate public utilities.
2. Public walkways shall be located within a public access easement that is a minimum of 15 feet in width.
3. A walk strip, not less than ten feet in width, shall be paved in the center of all public walkway easements. Such paving shall conform to specifications in the Newberg Public Works Design and Construction Standards.
4. Public walkways shall be designed to meet the Americans with Disabilities Act requirements.
5. Public walkways connecting one right-of-way to another shall be designed to provide as short and straight of a route as practical.
6. The developer of the public walkway may be required to provide a homeowners' association or similar entity to maintain the public walkway and associated improvements.
7. Lighting may be required for public walkways in excess of 250 feet in length.
8. The review body may modify these requirements where it finds that topographic, preexisting development, or similar constraints exist.

**T. Street trees.**

Street trees shall be provided for all projects subject to Type II design review, partition, or subdivision. Street trees shall be installed in accordance with the provisions of NMC 15.420.010(B)(4).

Penalty: See NMC 15.05.120.

### 15.505.040 Public Utility Standards

**A. Purpose.** The purpose of this section is to provide adequate services and facilities appropriate to the scale and type of development.

**B. Applicability.** This section applies to all development where extension or improvement of water, sanitary sewer, storm drainage, or private utilities is required to serve the development or use of the subject property.

**C. General Standards.**

1. The design and construction of all improvements within existing and proposed rights-of-way and easements, all improvements to be maintained by the city, and all improvements for which city approval is required shall conform to the city's public works design and construction standards.
2. The location, design, installation and maintenance of all utility lines and facilities shall be carried out with minimum feasible disturbances of soil and site. Installation of all proposed public and private utilities shall be coordinated by the developer and be approved by the city to ensure the orderly extension of such utilities within public right-of-way and easements.

**D. Standards for Water Improvements.** All development that has a need for water service shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary sanitary sewer and storm drainage facilities, as applicable.

1. All developments shall be required to be linked to existing water facilities adequately sized to serve their intended area by the construction of water distribution lines, reservoirs and pumping stations which connect to such water service facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.
2. Specific location, size and capacity of such facilities will be subject to the approval of the city engineer with reference to the applicable water master plan. All water facilities shall conform with existing city pressure zones and shall be looped where necessary to provide adequate pressure and fire flows during peak demand at every point within the system in the development to which the water facilities will be connected. Installation costs shall remain entirely the developer's responsibility.
3. The design of the water facilities shall take into account provisions for the future extension beyond the development to serve adjacent properties, which, in the judgment of the city, cannot be feasibly served otherwise.

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4. Design, construction and material standards shall be as specified by the city engineer for the construction of such public water facilities in the city.

**E. Standards for Sanitary Sewer Improvements.** All development that has a need for sanitary sewers shall install the facilities pursuant to the requirements of the city and all of the following standards. Installation of such facilities shall be coordinated with the extension or improvement of necessary water services and storm drainage facilities, as applicable.

1. All septic tank systems and on-site sewage systems are prohibited.

2. All properties shall be provided with gravity service to the city sanitary sewer system, except for lots that have unique topographic or other natural features that make gravity sewer extension impractical as determined by the city engineer. Where gravity service is impractical, the developer shall provide all necessary pumps/lift stations and other improvements, as determined by the city engineer.

3. All developments shall be required to be linked to existing sanitary sewer collection facilities adequately sized to serve their intended area by the construction of sewer lines which connect to existing adequately sized sewer facilities. All necessary easements required for the construction of these facilities shall be obtained by the developer and granted to the city pursuant to the requirements of the city.

4. Specific location, size and capacity of sewer facilities will be subject to the approval of the city engineer with reference to the applicable sewer master plan. All sewer facilities shall be sized to provide adequate capacity during peak flows from the entire area potentially served by such facilities. Installation costs shall remain entirely the developer's responsibility.

5. Temporary sewer service facilities, including pumping stations, will be permitted only if the city engineer approves the temporary facilities, and the developer provides for all facilities that are necessary for transition to permanent facilities.

6. The design of the sewer facilities shall take into account provisions for the future extension beyond the development to serve upstream properties, which, in the judgment of the city, cannot be feasibly served otherwise.

7. Design, construction and material standards shall be as specified by the city engineer for the construction of such sewer facilities in the city.

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**F. Street Lights.** All developments shall include underground electric service, light standards, wiring and lamps for street lights according to the specifications and standards of the public works design standards. The developer shall install all such facilities and make the necessary arrangements with the serving electric utility as approved by the city. Upon the city's acceptance of the public improvements associated with the development, the street lighting system, exclusive of utility-owned service lines, shall be and become property of the city unless otherwise designated by the city through agreement with a private utility.

**G. Easements.** Easements for public and private utilities shall be provided as deemed necessary by the city, special districts, and utility companies. Easements for special purpose uses shall be of a width deemed appropriate by the responsible agency. Such easements shall be recorded on easement forms approved by the city and designated on the final plat of all subdivisions and partitions. Minimum required easement width and locations are as provided in the public works design and construction standards.

#### 15.505.050 Storm drainage.

**A. Purpose.** The purpose of this section is to provide for the drainage of surface water from all residential, commercial and industrial development; to minimize erosion; and to reduce degradation of water quality due to sediments and pollutants in storm water runoff.

**B. Applicability.** The provisions of this section apply to all developments subject to site development review or land division review and to the reconstruction or expansion of such developments that increases the flow or changes the point of discharge to the city storm drainage system. Additionally, the provisions of this section shall apply to all drainage facilities that impact any public storm drain system, public right-of-way or public easement, including but not limited to off-street parking and loading areas.

**C. General Requirement.** All storm water runoff shall be conveyed to a public storm sewer or natural drainage channel having adequate capacity to carry the flow without overflowing or otherwise causing damage to public and/or private property. The developer shall pay all costs associated with designing and constructing the facilities necessary to meet this requirement.

**D. Plan for Storm Drainage and Erosion Control.** No construction of any facilities in a development included in subsection (B) of this section shall be permitted until an engineer registered in the state of Oregon prepares a storm drainage and erosion control plan for the project. This plan shall contain at a minimum:

1. The methods to be used to minimize the amount of runoff, siltation, and pollution created from the development both during and after construction.

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2. Plans for the construction of storm sewers and other facilities that depict line sizes, profiles, construction specifications, and other such information as is necessary for the city to review the adequacy of the storm drainage plans.

3. Design calculations shall be submitted for all drainage facilities. These drainage calculations shall be included on the site plan drawings and shall be stamped by a licensed professional engineer in the state of Oregon. Peak design discharges shall be computed using the rational formula and based upon the design criteria outlined in the public works design standards for the city.

**E. Development Standards.** Development subject to this section shall be planned, designed, constructed, and maintained in compliance with the city of Newberg public works design and construction standards.

# Comprehensive Plan Amendments – DRAFT

## J. URBAN DESIGN

**GOAL 1:** To maintain and improve the natural beauty and visual character of the City.

### 1. General Policies

- a. Design review should be performed at the staff level.
- b. Design review should be provided for all new developments more intensive than duplex residential use.
- c. Non-residential uses abutting residential areas should be subject to special development standards in terms of setbacks, landscaping, sign regulations, building heights and designs.
- d. The City should impose a design overlay zone on those areas adjacent to major and minor arterial streets.
- e. Developments should respect the natural ground cover of their sites to the extent possible and plans should be made to preserve existing mature, non-hazardous trees in healthy condition.
- ~~f. The planting of street trees should be required in conjunction with a list of City-approved trees.~~
- gf. Community appearance should continue to be a major concern and subject of a major effort in the area. Street tree planting, landscaping, sign regulations and building improvements contribute to community appearance and should continue to be a major design concern and improvement effort.
- hg. Landscaping ~~shall~~should be required along street frontage strips within the street right-of-way in order to soften the appearance of commercial and industrial developments. Street trees should be planted along street frontages in accordance with a list of City-approved trees.
- ~~i. The City shall encourage tree planting for aesthetic purposes.~~
- jh. Curbs, gutters, and sidewalks are to be required in all new developments.
- ki. Curb ramps will be required at intersections and pedestrian crosswalks wherever new curbs are installed. These ramps improve access for the elderly and handicapped, as well as for strollers, bicycles and other wheeled vehicles.
- lj. The City shall encourage compatible architectural design of new structures in the community.
- mk. The City shall encourage the use of planned unit developments.

- n. The City shall encourage innovative design and ensure that developments consider site characteristics and the impact on surrounding areas.
- m. The City shall encourage flexibility in design review and interpretation of policies and regulations by ensuring that functional design and community benefit remain as the principal review criteria. Consider variance procedures where interpretation of regulations impede fulfillment of these criteria.
- n. Public and private properties located along entrances should be attractively landscaped in order to reinforce the sense of gateway into Newberg.
- o. The City shall develop and adopt a design review manual.
- p. Developments of medium or high density shall be of a quality and design which will effectively offset the greater density.
- q. The City shall ensure that City review processes do not unnecessarily delay development of projects.
- r. The City shall encourage residential-professional uses as a buffer between intensive commercial uses and less intensive residential uses.

**2. Industrial Areas Policies**

- a. Industrial development should be encouraged to locate in industrial parks offering good access, buffering and landscaping.
- b. Industrial developments should be well landscaped and maintained and existing trees should be preserved where possible.
- c. Where industrial uses abut residential zones or uses, special development standards relating to setbacks, screening, signs, building height and architectural review should be established.

**3. Commercial Areas Policies**

- a. Where commercial development is permitted, such development should be subject to design requirements for ingress and egress, landscaping and sign control.
- b. Existing development shall be encouraged to follow the same general design standards as new commercial development.
- c. The City shall maintain sign regulations to help create a business environment that is attractive to customers and citizens. The City and appointed committees shall seek to eliminate signs that detract from the aesthetics of commercial areas and that violate adopted sign design regulations. (Ordinance 98-2499, November 2, 1998).
- d. Residents of the City should have access to neighborhood commercial facilities, and these uses should conform to the character of the area in which they are located. The Neighborhood Commercial designation and the corresponding C-1 Zone should be allowed only on property with the following characteristics:

- A distance, measured along public streets, of at least 1/4 mile from any other properties designated for commercial use; and
  - A location at an intersection of a local street and either a collector or arterial street.
- e. Off-street parking should be provided in adequate amounts. (Ordinance 99-2513, August 2, 1999).

**4. Residential Areas Policies**

- a. The City will require buffering and landscaping to minimize impacts between housing and potentially conflicting uses.
- b. The City will evaluate and encourage various innovative and alternative approaches to zoning, including but not limited to the following: zero lot lines, cluster and density zoning, planned unit developments, performance standards and condominiums.
- c. Solar rights of residences should be protected where possible. Lot designs should provide for maximum design flexibility in landscaping and building.
- d. Special development and design standards shall be adopted in the Development Code to ensure that multi-family, attached single-family and manufactured home park/subdivision projects are aesthetically-pleasing and compatible with nearby lower-density residential development.

**5. Downtown Policies**

- a. The City shall encourage improvement of the central business district as the economic, cultural, business and governmental center of the Newberg area.
- b. The City shall encourage federal, state and local government to maintain or locate their offices and related facilities in the central business district.
- c. The City shall encourage a variety of commercial and service activities to locate in the central business district.
- d. The City shall discourage the use of the central business district for non-intensive land uses or uses which have a low floor area to site size ratio.
- e. The City shall encourage a higher utilization of downtown space, encouraging intensive use of all building levels.
- f. A concerted effort should be made to revitalize the central business district through rehabilitation or redevelopment of existing areas.
- g. The City shall consider:
  - ~~Reconstruction of First Street and both sidewalks to accommodate a two-way flow of traffic with diagonal and parallel parking.~~

- -Creation of a major attraction in the downtown retail core to showcase Yamhill County's agriculture, industry, arts, culture and history.
- -Retention of a post office within the downtown and continued occupancy of the existing post office building.
- -Adequate off-street parking to serve retail and institutional needs.

~~-Construction of a new one-way eastbound couplet to encourage downtown core development.~~

- -Adoption of a downtown design ordinance, instituted to review and control all private and public improvements.
- -Various options to make the downtown area more pedestrian friendly, particularly as traffic volumes change with the opening of the Phase 1 Bypass.

- h. Benches, street trees, and other pedestrian-scaled amenities shall be planned for and encouraged in the downtown area.

#### **6. Riverfront District Policies**

- a. The City will encourage a mix of employment, housing, and retail uses serving the neighborhood and the surrounding community to enhance the Riverfront's identity as a vital and attractive City asset and to ensure an active, pedestrian friendly and thriving Riverfront area.
- b. Development and land uses will be encouraged that promote the Riverfront area as a convenient and attractive environment for residents of Newberg as well as for visitors from other cities and the region as a whole.
- c. The development of storefront scale commercial uses will be encouraged in the Riverfront area along 14<sup>th</sup>, College, and River Streets.
- d. The City will encourage the use of a common language of design elements for new and/or improved development in the Riverfront District in order to create a sense of identity that is unique to this area of Newberg.
- e. The City will permit land uses with design features along River Street Between 12<sup>th</sup> and 14<sup>th</sup> Streets that are compatible with or provide a buffer to SP Newsprint.
- f. The City will encourage new commercial and mixed use development in the Riverfront District to step down in scale in the western and northern portions of the planning area in order to relate to the scale and character of the adjacent established neighborhoods.
- g. The City will encourage commercial structures within the Riverfront District that are small in scale and suitable for river-oriented businesses.
- h. On-street parking will be encouraged on streets with commercial or mixed use development to provide a buffer between pedestrians on the sidewalk and auto traffic.
- i. Businesses and other property owners will be encouraged to minimize the number of off-street parking spaces and to share off-street parking facilities.

- j. The City shall re-evaluate the inclusion of the old municipal sewage treatment plant (tax lot 3219-2700) within the stream corridor overlay. (Ordinance 2002-2564, April 15, 2002)

**7. Specific Plans**

- a. The City shall encourage the use of specific plans to coordinate development and create neighborhood identity. Specific plans are intended to serve as master plans for land development or redevelopment and may be applied to one parcel or multiple parcels. Specific Plans will be used to promote coordinated planning concepts and pedestrian oriented mixed use development. (Ordinance 2379, April 19, 1994).
- b. The Zoning Ordinance shall set forth the process and procedure for adoption of and amendments to specific plans. Approval of new specific plans will require Comprehensive Plan Map amendments to apply the SP (Specific Plan) plan district overlay to the affected property. (Ordinance 2379, April 19, 1994).

**GOAL: 2 To develop and maintain the physical context needed to support the livability and unique character of Newberg.**

**POLICIES:**

- a. Maintain Newberg's individuality as a community with a proud agricultural heritage.
- b. Provide for a sense of small, local neighborhoods, while also providing for commerce and industry.
- c. Neighborhoods should be designed to promote safety and interaction with neighbors, with items such as walking paths and neighborhood parks.
- d. Community commercial centers are preferred to a large, regional shopping center.
- e. Measures should be taken to prevent having areas east and southeast of the proposed bypass isolated from the rest of the City. Substantial development of complete neighborhoods should occur on both sides of the proposed bypass. (Ordinance 2006-2634, January 3, 2006)

**K. TRANSPORTATION**

**GOAL 1: Establish cooperative agreements to address transportation based planning, development, operation and maintenance.**

**POLICIES:**

- a. The City shall coordinate with the [State-Oregon](#) Department of Transportation to manage access to the state highway system and to implement the State Highway Improvement Program.
- b. The City shall work to ensure that the transportation system is developed in a manner consistent with state and federal standards for the protection of air, land and water quality, including the

State Implementation Plan for complying with the Clean Air Act and the Clean Water Act. (Ordinance 2005-2619, May 16, 2005)

- c. The City shall coordinate its Transportation System Plan with the planning process of other jurisdictions to assure adequate connections to streets and transportation systems outside City boundaries.
- d. The City shall participate in the planning efforts to bring rail transit to Newberg. The City will work with public and private entities to plan and, if feasible, establish commuter rail service between the Portland Metro area and communities in Yamhill County. (Ordinance 2005-2619, May 16, 2005)
- e. The City shall promote transportation improvements which would result in less through automobile and truck traffic on First Street and maintain the option of future development of rail transit to serve the downtown core area. (Ordinance 2005-2619, May 16, 2005)
- f. The City shall coordinate with Yamhill County and the State on the development of the Newberg-Dundee Bypass.
- ~~g. The City will work with public and private entities to plan and, if feasible, establish commuter rail service between the Portland Metro area and communities in Yamhill County. (Ordinance 2005-2619, May 16, 2005)~~

**GOAL 2: Establish consistent policies which require concurrent consideration of transportation/land use system impacts.**

**POLICIES:**

- a. Transportation improvements shall be used to guide urban development and shall be designed to serve anticipated future needs.
- b. The City shall adopt zoning and development overlay regulations to manage land uses and access in the vicinity of Newberg-Dundee Bypass interchanges that are consistent with the primary function of the bypass to serve through traffic and that are consistent with the Oregon Highway Plan. Highway oriented development and retail commercial shall be precluded at proposed access points.
- c. As necessary to implement the Transportation System Plan, the City in conjunction with ODOT, shall maintain intersection/interchange management plans and/or corridor plans to establish a framework for managing land uses along major transportation facilities, such as the Newberg-Dundee Bypass.
- d. The City shall maintain development regulations that provide adequate off-street parking and truck loading areas for commercial and industrial uses, especially in areas adjacent to arterial and collector routes, to promote efficient traffic movement through the city. (Ordinance 2005-2619, May 16, 2005)

- e. The City will encourage the development of retail development within the downtown area. (Ordinance 2005-2619, May 16, 2005)

**GOAL 3: Promote reliance on multiple modes of transportation and reduce reliance on the automobile.**

**POLICIES:**

- a. Design the transportation system and related facilities to accommodate multiple modes of transportation where appropriate and encourage their integrated use; (Ordinance 2005-2619, May 16, 2005)
- 1) The City shall plan for a network of transportation facilities and services including but not limited to air, water, rail, auto, pedestrian, bicycle, and public transit.
  - 2) The City shall encourage the continued operation of the existing public transit system.
  - 3) All local and commuter transit services must implement the accessible transportation requirements established by the Americans with Disabilities Act of 1990.
  - 4) The City should work with local and regional partners to conduct a market assessment to determine the demand and needs for commuter transit service from Newberg and McMinnville to the Portland area. The City should evaluate the market assessment and if it is financially feasible, support the development of commuter transit service to the Portland area.
  - ~~5) The City should evaluate the market assessment and if it is financially feasible, support the development of commuter transit service to the Portland area.~~
  - ~~6)5) The City will work to help establish a regional transit service district in Yamhill County to address transportation needs of disadvantaged residents.~~
  - ~~7)6) The City will support efforts to develop a long term funding base for local and commuter transit service within the region to include federal and state funding sources for capital and operating expenses.~~
  - ~~8)7) The City will work to establish appropriate cooperation agreements between local transit service providers and Tri-Met for improving commuter service connections within the Tri-Met service district.~~
  - ~~9)8) The City shall encourage more efficient use of existing transportation systems by implementing programs that reduce single occupancy vehicle use, including carpooling, park and ride stations and commuter bus or rail service.~~
- b. Modifications should be made to the City's land use plan and development ordinances that will decrease trip length and encourage non-auto oriented development.
- 1) The City shall encourage neighborhood medium density and mixed use commercial development nodes.
  - 2) The City shall encourage higher density development in residential areas near transit corridors, commercial areas and employment centers, including the downtown.
- c. The City shall develop and implement a transportation demand management strategy that provides incentives for the use, such as: flex time, carpooling, staggered shifting and

telecommuting by public and private employers, if and when overall operating conditions in the city fall below acceptable levels and depending on the availability of state funding to support these programs. The City will encourage the use of demand management strategies by public and private employers in certain locations when operating conditions warrant their consideration.

**GOAL 4: Minimize the impact of regional traffic on the local transportation system.**

**POLICIES:**

- a. Enhance the efficiency of the existing collector/arterial street system to move local traffic off the regional system. (Ordinance 2005-2619, May 16, 2005)
- b. Provide for alternate routes for regional traffic. (Ordinance 2004-2602, September 20, 2004)
- ~~c. Identify and analyze options for the re-routing of 219 in conjunction with ODOT, with the goal of minimizing through traffic, including truck traffic, in downtown. (Ordinance 2004-2602, September 20, 2004)~~
- ~~d. Before choosing the 219 re-route to be included in the City's Capital Improvement program, hold public hearings to determine which re-route alternative is most satisfactory to the public. (Ordinance 2004-2602, September 20, 2004)~~
- ~~e. Include re-route alternative most favorable to the public in the City's Capital Improvement Plan, Transportation Section. (Ordinance 2005-2619, May 16, 2005)~~
- fc. A special design study shall be conducted prior to improving College Street from Hancock Street to the railroad. The purpose of this study will be to maintain and enhance the aesthetic and historic character of this area. Alternatives bike lane, street width and other configurations will be considered to preserve significant street trees, and additional street trees, and preserve and enhance historic features. (Ordinance 2005-2619, May 16, 2005)
- gd. Minimize the use of local and minor collector streets for regional traffic through application of traffic calming measures as traffic operations and/or safety problems occur. (Ordinance 99-2513, August 2, 1999).
- he. The City actively supports the development of the Bypass in the southern location corridor described in the Tier 2 Environmental Impact Statement (EIS) process. (Ordinance 2005-2619, May 16, 2005, Ordinance 2008-2708, December 1, 2008, Ordinance 2011-2734, March 7, 2011).
- if. The City supports the designation of the Bypass as a moderate to high-speed statewide expressway and freight route as defined in the Oregon Highway Plan. The Bypass and interchanges will be fully access controlled and no direct access will be allowed from private properties onto the Bypass. The primary function of the Bypass is to provide for moderate to high-speed statewide and regional trips and to relieve congestion through the downtown Newberg and Dundee. (Ordinance 2004-2602, September 20, 2004, Ordinance 2011-2734, March 7, 2011)
- ig. The functions of the Bypass are to accommodate and divert longer-distance statewide through trips around the Newberg-Dundee urban area and to serve regional trips going to and from

Newberg or Dundee (ie. Those trips with either an origin or destination outside of the Newberg-Dundee urban area). The function of the planned intermediate interchanges is to provide access between Newberg or Dundee and other regions (e.g. McMinnville, Portland or the coast). It is not the function of the interchanges to provide for or attract regional commercial or highway commercial development in the vicinity of the interchanges. In general, needs for commercial development should be accommodated in areas planned for commercial development within Newberg. Plan amendments and zone changes shall be consistent with the function of the bypass and interchanges as set forth in this policy. (Ordinance 2004-2602, September 20, 2004, Ordinance 2011-2734, March 7, 2011)

- kh. For the purposes of compliance with the Transportation Planning Rule, OAR 660-12-0060 and in order to support the goal exception that Yamhill County took to advance construction of the Bypass, the City of Newberg acknowledges that reliance upon the full Bypass as a planned improvement to support comprehensive plan amendments or zone changes is premature. (Ordinance 2008-2708, December 1, 2008, Ordinance 2011-2734, March 7, 2011)

~~The Phase 1 Bypass is considered a planned improvement for the 20-year planning horizon and may be relied upon for planning purposes. The City of Newberg will continue to work with ODOT on improvements to the local transportation system in accordance with post-Phase 1 Bypass impacts. In accordance with OAR 660-012-0060, the Bypass will be considered a planned improvement that is reasonably likely to be constructed during the 20-year planning horizon when the OTP includes all or a specific phase of the Bypass in the construction section of the Statewide Transportation Improvement Program (STIP), or when ODOT provides a written statement that the improvements are reasonably likely to be provided by the end of the planning period. ODOT expects to provide such a letter upon receiving a record of decision for the design level EIS if it results in a record of decision authorizing a full Bypass or a specific Bypass phase that can be funded within the 20-year planning horizon. During the period before the Bypass can be considered a planned improvement, the City of Newberg will work with ODOT to pursue interim measures to comply with OAR 660-12-0060. This may include adopting alternative mobility standards for Oregon 99W and Oregon 219. For purposes of the Newberg TSP, alternative mobility standards are consistent with the planned function of Oregon 99W through Newberg as a lower speed local arterial intended to provide access to businesses and residences and a more pedestrian friendly environment. Alternative mobility standards may continue to be necessary on Oregon 99W and Oregon 219 until the full Bypass can be completed. (Ordinance 2008-2708, December 1, 2008, Ordinance 2011-2734, March 7, 2011)~~

- hi. The City will coordinate with ODOT, Yamhill County and affected property owners to develop an Interchange Area Management Plan (IAMP) for the East Newberg and Oregon 219 Interchanges as a means to help protect the function and capacity of the interchanges for at least a 20 to 25-year planning period. The IAMP must be adopted by the Oregon Transportation Commission (OTC) before construction of the respective interchange, consistent with the requirements of the 1999 Oregon Highway Plan and OAR 734-051-0155(7). (Ordinance 2008-2708, December 1, 2008, Ordinance 2011-2734, March 7, 2011))

- mi. To protect the function of the Bypass to serve primarily longer-distance statewide and regional through trips, the City of Newberg will apply an Interchange Overlay District to lands that are within the Newberg city limits and within approximately ¼ mile of the East Newberg and Oregon

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219 interchange ramps. (Ordinance 2004-2602, September 20, 2004, Ordinance 2011-2734, March 7, 2011)

nk. Permitted and conditional uses that are authorized under existing base city zones will generally be allowed within the Interchange Overlay, with certain limitations on commercial uses in the industrial zones. (Ordinance 2008-2708, December 1, 2008)

el. The Bypass location corridor was selected to avoid displacement of the Sportsman Airpark. The City supports the continued operation of the airport. The airport is located within the Newberg UGB, is within ¼ mile of the Oregon 219 interchange and is currently under Yamhill County jurisdiction. If the airport property is annexed, the City intends to apply an Airport Zone that maintains the ongoing use of the facility as an airport. The City will not support conversion of the airport property to commercial zoning or uses. The Bypass itself should be designed to avoid conflicts with existing air transportation corridors.

pm. The City of Newberg will coordinate with ODOT on any development proposal within the Bypass location corridor and Interchange Overlay District through the City's established Site Design Review process. Development planning should consider and complement the intended function of the bypass. Land use decisions should consider the planned corridor location and avoid conflicts where feasible. (Ordinance 2008-2708, December 1, 2008)

qn. The City recognizes that the Oregon Highway Plan seeks to avoid UGB expansions along Statewide Highways and around interchanges unless ODOT and the appropriate local governments agree to an Interchange Area Management Plan to protect interchange operation or an access management plan for segments along the highways. [OHP Action 1B.8]. Thus, the City will work with ODOT, property owners, and citizens finalize the East Newberg and Oregon 219 IAMPs prior to construction of the full Bypass or a phase of the Bypass, as appropriate. Each IAMP must be consistent with the local comprehensive plan and adopted by the Oregon Transportation Commission. (Ordinance 2008-2708, December 1, 2008, Ordinance 2011-2734, March 7, 2011)

ro. Special planning and efforts shall be made to replace affordable housing displaced by construction of the bypass within the community. ODOT shall be encouraged to provide relocation assistance to the maximum extent allowed under Federal law. (Ordinance 2004-2602, September 20, 2004)

sp. Special planning and efforts shall be made to retain and create livable and desirable neighborhoods near the bypass. This shall include retaining or creating street connections, pedestrian paths, recreational areas, landscaping, noise attenuation, physical barriers to the bypass, and other community features.

tg. The Newberg Transportation System Plan shall be amended to show the changes to local circulation and access that are included in the Tier 2 EIS and are necessary to support mitigation for local roads and access that are severed or disrupted by the Bypass. This action shall be documented with both a TSP figure and text. (Ordinance 2011-2734, March 7, 2011)

**GOAL 5: Maximize pedestrian, bicycle and other non-motorized travel throughout the City.**

**POLICIES:**

- a. The City shall provide safe, convenient and well-maintained bicycle and pedestrian transportation systems that connect neighborhoods with identified community destinations, such as schools, parks, neighborhood commercial centers, and employment centers. (Ordinance 2005-2619, May 16, 2005)
- b. Bicycle parking facilities shall be required for all new and improved commercial, institutional, office, industrial, and multi-family development.
- c. All new and improved commercial, office, institutional, and multi-family development shall be conveniently and directly accessible from the public right-of-way by bicycle and on foot.
- d. Public sidewalks shall be provided along all public street frontages. Pedestrian traffic shall be separated from automobile traffic whenever possible.
  - 1) Sidewalks should be provided whenever there is development of abutting properties.
  - 2) Sidewalks should be constructed when any new road is constructed
  - 3) When existing roads are widened or improved, sidewalks should be provided.
- e. The City will develop a capital improvement program for filling existing gaps in the pedestrian system. Priority shall go to:
  - 1) Areas near schools or other pedestrian traffic generators.
  - 2) Areas frequently used by pedestrians or disabled persons.
  - 3) Areas where modest improvements are needed to create continuous pedestrian systems.
  - 4) Roads with high traffic volumes and/or narrow shoulders.(Ordinance 2005-2619, May 16, 2005)
- f. All sidewalks, corner ramps, and other transportation improvements shall meet ~~applicable~~the standards of the Americans with Disabilities Act. (Ordinance 2005-2619, May 16, 2005)
- g. The City shall encourage pedestrian access throughout commercially zoned areas.
- h. On-street bike lanes or parallel bikeways will be provided on all designated major collector and arterial roadways, and on certain ~~neighborhood~~minor collectors if warranted from a bicycle system connectivity standpoint.
- i. A bicycle path shall be provided along or near the bypass.
- j. The City will develop a capital improvement program for providing bicycle paths planned in the transportation plan. Priority shall go to:
  - 1) Areas near schools, parks, commercial areas, or other bicycle traffic generators.
  - 2) Paths that go between facilities used by bicyclists, such as schools, parks, and libraries.
  - 3) Areas frequently used by bicyclists.
  - 4) Areas where small gaps need to be filled to provide continuous bicycle paths.
  - 5) Areas where modest improvements are needed to provide planned bicycle paths, such as roads where additional pavement with is not needed to stripe bike lanes.
  - 6) Roads with high traffic volumes and/or narrow shoulders.(Ordinance 2005-2619, May 16, 2005)

**GOAL 6: Provide effective levels of non-auto oriented support facilities (e.g. bus shelters, bicycle racks, etc.).**

**POLICIES:**

- a. The City shall develop land use, density, and design standards to encourage development patterns that accommodate pedestrian, bicycle and transit uses.
- b. New development shall be designed to accommodate integrated multiple modes of transportation. (Ordinance 2005-2619, May 16, 2005)
- c. The City, in cooperation with public transit agencies and commuter service providers, shall develop park and ride facilities at the locations specified in the Transportation System Plan or other adopted master plans. (Ordinance 2005-2619, May 16, 2005)
- d. The City shall provide a transportation system (traffic, bicycle, pedestrian and transit) with facilities that are accessible to all people, complying in the process with applicable provisions of the Americans with Disabilities Act (ADA). (Ordinance 2005-2619, May 16, 2005)

**GOAL 7: Minimize the capital improvement and community costs to implement the transportation plan.**

**POLICIES:**

- a. The Transportation System Plan shall identify short and long term needed improvements to the collector/arterial street system, the public transit system, the pedestrian/bicycle system and the air, rail, water, and pipeline systems. Improvements should be identified as likely funded or aspirational projects for the 20-year planning horizon.
- b. The list of improvement projects in the Transportation System Plan shall guide development of the city's capital improvement plan for transportation projects.
- c. The City will prioritize the list of transportation-related capital improvements to be included in the City's Capital Improvement Plan (CIP) including phasing for major transportation system improvements.
- d. For those priority transportation projects included in the City's (CIP), provide updated cost estimates, each time the project list is revised.
- e. Adverse economic, social, environmental, and energy impacts from transportation system improvements on adjacent properties shall be minimized as far as practical.
- f. Future public rights-of-way should be identified in undeveloped areas through a Future Street Plan or a specific area plan, to facilitate right-of-way acquisition and dedication with minimal disruption and cost. A Future Street Plan is usually prepared by a private party to show street and bike/pedestrian connectivity for development projects when transportation connectivity is needed through adjoining private properties and neighborhoods. A Specific Area Plan is usually prepared by the City in collaboration with affected property owners to show street and

bike/pedestrian connectivity for planned land uses in undeveloped or partially developed areas.  
.Corridor plans are a type of specific area plan.

- g. The City may require preparation of a Future Streets Plan for all commercial and industrial developments and residential development projects greater than 1 acre to serve as a guide in the decision-making process on new development requests.
- h. Transportation facilities will be designed to minimize impacts on:
  - 1) Present and Planned Land Use patterns;
  - 2) Natural and Scenic Resources;
  - 3) Air Resource Quality, including noise;
  - 4) Water and Land Resource Quality; and
  - 5) Existing and Planned Transportation Facilities.
- i. New development and existing development undergoing expansion or modification shall be designed to accommodate planned long-term transportation improvement projects in the vicinity of the development.  
(Ordinance 2005-2619, May 16, 2005)

**GOAL 8: Maintain and enhance the City's image, character and quality of life.**

**POLICIES:**

- a. Adopt transportation and land use design standards that emphasize visual and aesthetic quality.
- b. New office park and commercial developments shall provide for pedestrian circulation by clustering buildings, constructing pedestrian pathways, making use of walkways and skywalks, and other similar techniques that make walking convenient for people accessing and working within the development.
- c. The City shall work cooperatively with the business community to ensure there is an adequate supply of on-street and off street parking in the downtown. The City shall prepare and periodically update a public parking management plan for the central business district.
- d. The City will encourage development that protects the integrity of existing neighborhoods, commercial, and industrial areas using the following design techniques.
  - 1) New development and new transportation facilities shall be designed to meet the street classification, design, and access standards identified in the Transportation System Plan.
  - 2) City arterials should include sound walls and/or landscaping buffers between residential areas and the street.
  - 3) Make use of on-street parking and buildings that abut the street frontage in the central business district and designated neighborhood commercial areas to create pedestrian friendly retail and commercial service environments.  
(Ordinance 2005-2619, May 16, 2005)

**GOAL 9: Create effective circulation and access for the local transportation system.**

**POLICIES:**

- ~~a. Analyze Alternative routes for the re-routing of 219 to facilitate both local and regional traffic.~~
- ~~ba.~~ Enhance existing routes and add alternative routes for local travel.
- 1) The City development code shall encourage the development of a continuous interconnected street pattern that connects adjacent developments and minimizes the use of cul-de-sacs.
  - 2) The City shall implement standards for cul-de-sac design.
  - 3) The City shall coordinate the development of an integrated bike and pedestrian system that provides for connections between and through adjacent development and that provides convenient links to community destinations.
  - 4) The City will actively pursue development of park and ride lots for the convenience of area residents making use of carpooling, van pooling, and commuter transit.
  - 5) The City will support efforts to increase public transit options for area residents.  
(Ordinance 2005-2619, May 16, 2005)
- ~~eb.~~ Develop a system of roads that provide for efficient movement of traffic, ~~considering the general design guidelines below. Specific design guidelines for the different classifications of roadways is found in the Transportation System Plan and the Newberg Public Works Design and Construction Standards. The functional classifications of roadways in the city of Newberg includes the following:~~
- ~~1) Expressway.~~ Expressways shall be designed to expedite the movement of regional traffic through the urban area; they function as freeways with limited access points and no private development access points. ~~Intersections shall be grade separated and access shall be provided only at grade separated interchanges. General design criteria are summarized as follows:~~
- ~~• 100 to 120 feet of right of way~~
  - ~~• 80 feet curb to curb cross-section~~
  - ~~• No direct access from adjoining private property~~
  - ~~• Limited access points, preferably at grade separated interchanges~~
  - ~~• Separated pedestrian and bicycle facility on one side of the facility~~
  - ~~• No parking; emergency shoulder for disabled vehicle use only~~
  - ~~• Sound buffering provided to protect existing and future residential property as necessary~~
  - ~~• Roadway designed for travel speeds exceeding 55 m.p.h.~~
- ~~2)1)~~ Within the City of Newberg, the **Highway 99W Bypass Corridor** is intended to be an expressway, which is generally aligned east/west along the southern alignment route depicted in the Newberg/Dundee Bypass Location Environmental Impact Statement. The length of the Highway 99W Bypass within the City is approximately 3 miles. Expressways shall be designed to ODOT guidelines.
- ~~Highway 219 (Hillsboro Silverton Highway) from First Street to the southern urban boundary is also a major arterial that is generally aligned north/south. The length of Highway 219 within Newberg (south of Villa Road) is approximately 3.0 miles.~~

3)2) Major Arterials. Major Arterials expedite the movement of traffic to and from major trip generators and between communities, collect and distribute traffic from principal arterials to collector streets, or directly to traffic generators. The functional emphasis is on the movement of people, goods, and services through the city, therefore consolidating access points, minimizing parking, and managing traffic flow to promote through-travel is the desired condition. Exceptions may occur in the central business district and in designated neighborhood commercial areas. Within the City of Newberg, **Highway 99W** is a major arterial that is generally aligned east/west. The length of Highway 99W within the City is approximately 3.3 miles.

~~General design criteria are summarized as follows:~~

- ~~● 85 to 100 feet of right-of-way.~~
- ~~● 70 feet curb to curb cross-section.~~
- ~~● Direct access is minimized (no residential access).~~
- ~~● Signalization at intersections with arterials, and collectors as warranted.~~
- ~~● Bicycle lanes shall be provided on both sides of street. Bicycle lanes should be four to six feet wide. Alternatively, a parallel bikeway may be provided on one side of the street when bike lanes are not feasible.~~
- ~~● Seven foot sidewalks and curbs are required on both sides of the street.~~
- ~~● Parking is generally not allowed except in special designated areas, such as the downtown; no parking allowed within twenty feet of curb return.~~
- ~~● Sound buffering or landscape buffers may be required to protect existing and future residential property where deemed necessary.~~

~~General street design criteria shall be as follows:~~

- ~~● 60 to 80 feet of right of way.~~
- ~~● 46 feet curb to curb.~~
- ~~● Signalization at intersections with major arterials and collector streets as warranted.~~
- ~~● A 5-foot bicycle lane in each direction adjacent to the curb.~~

- ~~• Seven-foot curb sidewalks. In commercial areas sidewalks preferred from curb to property line. Sidewalks and curbs required on both sides of street. Five foot sidewalks in non-commercial areas.~~
- ~~• On street parking is generally not allowed except in the downtown and other areas where special circumstances warrant. No parking will be allowed within 20 feet of curb return.~~

~~4)3) Minor Arterial. Minor Arterials collect and distribute traffic from major arterials to collector and local streets; and, and facilitate traffic movement between neighborhoods. **Highway 219 (Hillsboro-Silverton Highway)** from First Street to the southern urban boundary is also a major minor arterial that is generally aligned north/south. The length of Highway 219 within Newberg (south of Villa Road) is approximately 3.0 miles. **Springbrook Road and Mountainview Drive** are other examples of minor arterials.~~

~~5) Major Collectors. Major collectors serve multi-neighborhood areas. They are intended to channel traffic from local streets and/or minor collectors to the arterial street system. A major collector can also provide access to abutting properties.~~

~~6) 60 to 80 feet of right of way with ten foot public utility easements.~~

~~7) 34 to 46 feet curb to curb cross-section.~~

~~8) Five-foot bike lanes on both sides of the street.~~

~~9) On street parking is generally not allowed except in the downtown and other areas where special circumstances warrant. No parking will be allowed within 20 feet of curb return.~~

~~10) A minimum six-foot planter strip and six-foot sidewalk on both sides of the street.~~

~~4) **Villa Road, Haworth Avenue, and Wynooski Road** are all examples of major collectors.~~

~~11) Minor Collectors. A minor collector provides access to abutting properties and serves the local access needs of neighborhoods by channeling traffic to the major collector and arterial street system. A minor collector is not intended to serve through traffic.~~

~~12) 56 to 65 feet of right of way with 10 foot public utility easements.~~

~~13) 34 to 42 feet curb to curb.~~

~~14) Parking on both sides of the street, replaced by bike lanes where needed.~~

~~15) A minimum four and one-half (4 1/2) foot planter strip and five-foot sidewalk on both sides of the street.~~

~~5) **Meridian Street, Columbia Drive, and Vittoria Way** are all examples of minor collectors.~~

Local Streets. Local streets provide direct access to adjoining properties and connect to collector streets. ~~The system design criteria for local streets include:~~

- ~~• 54-65 feet of right-of-way with 10 foot public utility easements.~~
- ~~• For standard residential streets, standard 32-foot curb-to-curb with parking on both sides.~~
- ~~• A minimum four and one-half foot wide planting strip and five-foot wide sidewalk on both sides of the street.~~
- ~~• Where approved, limited residential streets may have narrower dimensions (Ordinance 2011-2736, March 21, 2011)~~

6) Most neighborhood residential streets are local streets.

~~16) New private streets shall not be allowed.~~

dc. The City shall apply appropriate access spacing criteria as part of its Engineering Design Public Works Design and Construction Standards to enhance traffic operation and safety on City streets. The access spacing standards apply to traffic signals, public street intersections, private driveways, and non-traversable median openings. The standards shall be applied to new street construction, reconstruction of existing streets, and new street access associated with development. (Ordinance 99-2513, August 2, 1999).

d. New private street shall not be allowed.

**GOAL 10: Maintain the viability of existing rail, water and air transportation systems.**

**POLICIES:**

- a. Encourage and support compatible transportation and land use development.
- b. Evaluate and mitigate potential losses whenever possible.
  - 1) The City shall maintain the viability of existing rail, water, and air transportation systems.
  - 2) The City shall maintain an airport overlay zone as long as there is an operating airport in or near the City.
  - 3) Adequate open space and landscaping shall be provided by all new development around the airport to reduce the noise impact of airport operations on surrounding residential areas.
  - 4) The City shall encourage the use of properties adjacent to the airport for industrial parks, related commercial activities and community facilities in order to maximize airport services and provide a buffer for surrounding residences.

**GOAL 11: Establish fair and equitable distribution of transportation improvement costs.**

**POLICIES:**

- a. Define appropriate phasing and funding which relates to the benefits received.
- b. The City shall utilize the Transportation Improvement Funding policies outlined in the Transportation System Plan for determining responsibilities and costs for funding improvements.

~~(Ordinance 94-2384, August 1, 1994, Ordinance 1998-2494, April 6, 1998. Ordinance 94-2384, August 1, 1994 also adopted the Newberg Transportation System Plan, a technical supplement to the Comprehensive Plan).~~

**GOAL 12: Minimize the negative impact of a Highway 99 bypass on the Newberg community.**

- a. The bypass should be located within the study area as far from the Willamette River as practical.
- b. Pedestrian/bike trails, streets, and rail lines should have access across the bypass route. The bypass should not block access to the Willamette Greenway or the Chehalem Creek corridor and Ewing Young Park. Trails connecting across the bypass should be welcoming and pedestrian-friendly amenities, such as benches, decorative lighting, decorative walkway paving materials, and special landscaping.
- c. The bypass route should be located as far north as practical within the study area to consolidate the Riverfront District residential and commercial land on the south side of the bypass.
- ~~d. The bypass should be below grade through the riverfront area.~~
- ~~ed.~~ Significant landscaping should be located along the bypass, including trees.
- ~~fe.~~ Measures should be taken to minimize noise in adjacent residential, tourist commercial and recreational areas.
- ~~gf.~~ Impacts to Scott Leavitt Park shall be mitigated to significantly enhance the function of the park after construction of the bypass.
- ~~hg.~~ Safe pedestrian and bicycle connections shall be maintained between the riverfront area and downtown.