



Oregon
Theodore R. Kulongoski, Governor

Department of Land Conservation and Development

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NOTICE OF ADOPTED AMENDMENT

02/18/2014

TO: Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments

FROM: Plan Amendment Program Specialist

SUBJECT: Clackamas County Plan Amendment
DLCD File Number 007-13

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A Copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: Thursday, February 27, 2014

This amendment was submitted to DLCD for review prior to adoption with less than the required 35-day notice. Pursuant to ORS 197.830(2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

***NOTE:** The Acknowledgment or Appeal Deadline is based upon the date the decision was mailed by local government. A decision may have been mailed to you on a different date than it was mailed to DLCD. As a result, your appeal deadline may be earlier than the above date specified. NO LUBA Notification to the jurisdiction of an appeal by the deadline, this Plan Amendment is acknowledged.

Cc: Martha Fritzie, Clackamas County
Jon Jinings, DLCD Community Services Specialist
Jennifer Donnelly, DLCD Regional Representative
Gary Fish, DLCD Transportation Planner

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NOTICE OF ADOPTED CHANGE TO A COMPREHENSIVE PLAN OR LAND USE REGULATION

FOR DLCD USE

File No.: 007-13 (20013)

[17754]

Received: 2014

Local governments are required to send notice of an adopted change to a comprehensive plan or land use regulation **no more than 20 days after the adoption.** (See OAR 660-018-0040). The rules require that the notice include a completed copy of this form. **This notice form is not for submittal of a completed periodic review task or a plan amendment reviewed in the manner of periodic review.** Use Form 4 for an adopted urban growth boundary including over 50 acres by a city with a population greater than 2,500 within the UGB or an urban growth boundary amendment over 100 acres adopted by a metropolitan service district. Use Form 5 for an adopted urban reserve designation, or amendment to add over 50 acres, by a city with a population greater than 2,500 within the UGB. Use Form 6 with submittal of an adopted periodic review task.

Jurisdiction: Clackamas County

Local file no.: **ZDO-246**

Date of adoption: 01/30/2014

Date sent: 02/06/2014

Was Notice of a Proposed Change (Form 1) submitted to DLCD?

Yes: Date (use the date of last revision if a revised Form 1 was submitted): 09/23/2013

No

Is the adopted change different from what was described in the Notice of Proposed Change? Yes No

If yes, describe how the adoption differs from the proposal:

Only non-substantive changes were made to the text of the proposal. Limited changes were made to the prioritization of projects included in the 20-year Capital Improvement Program (CIP).

Local contact (name and title): Karen Buehrig, Supervisor Transportation Planning Division

Phone: 503-742-4683

E-mail: karenb@clackamas.us

Street address: 150 Beaver Creek Rd

City: Oregon City

Zip: 97045

PLEASE COMPLETE ALL OF THE FOLLOWING SECTIONS THAT APPLY

For a change to comprehensive plan text:

Identify the sections of the plan that were added or amended and which statewide planning goals those sections implement, if any:

Ch 5 (Transportation); text, maps, figures, tables & 20-year CIP repealed & replaced in their entirety (Goal 12)

Ch 10 (Community & Design Plans); transportation-related amendments (Goal 12); repealed Kruse Way Plan

Appx B (Supporting Documents); background data

Ch 3 & Ch 4; conforming amendments

For a change to a comprehensive plan map:

Identify the former and new map designations and the area affected:

Change from _____ to _____ acres. A goal exception was required for this change.

Change from _____ to _____ acres. A goal exception was required for this change.

Change from _____ to _____ acres. A goal exception was required for this change.

Change from _____ to _____ acres. A goal exception was required for this change.

Location of affected property (T, R, Sec., TL and address):

The subject property is entirely within an urban growth boundary

The subject property is partially within an urban growth boundary

If the comprehensive plan map change is a UGB amendment including less than 50 acres and/or by a city with a population less than 2,500 in the urban area, indicate the number of acres of the former rural plan designation, by type, included in the boundary.

Exclusive Farm Use – Acres:

Non-resource – Acres:

Forest – Acres:

Marginal Lands – Acres:

Rural Residential – Acres:

Natural Resource/Coastal/Open Space – Acres:

Rural Commercial or Industrial – Acres:

Other: – Acres:

If the comprehensive plan map change is an urban reserve amendment including less than 50 acres, or establishment or amendment of an urban reserve by a city with a population less than 2,500 in the urban area, indicate the number of acres, by plan designation, included in the boundary.

Exclusive Farm Use – Acres:

Non-resource – Acres:

Forest – Acres:

Marginal Lands – Acres:

Rural Residential – Acres:

Natural Resource/Coastal/Open Space – Acres:

Rural Commercial or Industrial – Acres:

Other: – Acres:

For a change to the text of an ordinance or code:

Identify the sections of the ordinance or code that were added or amended by title and number:

Substantive, transportation-related amendments to: Section 202 (Definitions); Section 1005 (Sustainable Site & Building Design); Section 1007 (Roads & Connectivity); and Section 1015 (Parking & Loading)

Conforming amendments to Sections 306, 309, 310, 312, 314, 809, 810, 822, 1009, and 1202

For a change to a zoning map:

Identify the former and new base zone designations and the area affected:

Change from _____ to _____ Acres:

Change from _____ to _____ Acres:

Change from _____ to _____ Acres:

Change from _____ to _____ Acres:

Identify additions to or removal from an overlay zone designation and the area affected:

Overlay zone designation: _____ Acres added: _____ Acres removed: _____

Location of affected property (T, R, Sec., TL and address):

List affected state or federal agencies, local governments and special districts: ODOT, FHWA, Metro

Identify supplemental information that is included because it may be useful to inform DLCD or members of the public of the effect of the actual change that has been submitted with this Notice of Adopted Change, if any. If the submittal, including supplementary materials, exceeds 100 pages, include a summary of the amendment briefly describing its purpose and requirements.

The adopted amendments reflect a major update to the county's Transportation System Plan, including a revised list of 20-year needed capital improvements and policy and regulatory amendments to reflect current needs and to conform to recent state & regional regulatory changes.

NOTICE OF ADOPTED CHANGE – SUBMITTAL INSTRUCTIONS

1. A Notice of Adopted Change must be received by DLCD no later than 20 days after the ordinance(s) implementing the change has been signed by the public official designated by the jurisdiction to sign the approved ordinance(s) as provided in ORS 197.615 and OAR 660-018-0040.

2. A Notice of Adopted Change must be submitted by a local government (city, county, or metropolitan service district). DLCD will not accept a Notice of Adopted Change submitted by an individual or private firm or organization.

3. **Hard-copy submittal:** When submitting a Notice of Adopted Change on paper, via the US Postal Service or hand-delivery, print a completed copy of this Form 2 on light green paper if available. Submit **one copy** of the proposed change, including this form and other required materials to:

Attention: Plan Amendment Specialist
Dept. of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, OR 97301-2540

This form is available here:

<http://www.oregon.gov/LCD/forms.shtml>

4. **Electronic submittals** of up to 20MB may be sent via e-mail. Address e-mails to plan.amendments@state.or.us with the subject line "Notice of Adopted Amendment."

Submittals may also be uploaded to DLCD's FTP site at http://www.oregon.gov/LCD/Pages/papa_submittal.aspx.

E-mails with attachments that exceed 20MB will not be received, and therefore FTP must be used for these electronic submittals. **The FTP site must be used for all .zip files** regardless of size. The maximum file size for uploading via FTP is 150MB.

Include this Form 2 as the first pages of a combined file or as a separate file.

5. **File format:** When submitting a Notice of Adopted Change via e-mail or FTP, or on a digital disc, attach all materials in one of the following formats: Adobe .pdf (preferred); Microsoft Office (for example, Word .doc or docx or Excel .xls or .xlsx); or ESRI .mxd, .gdb, or .mpk. For other file formats, please contact the plan amendment specialist at 503-934-0017 or plan.amendments@state.or.us.

6. **Content:** An administrative rule lists required content of a submittal of an adopted change (OAR 660-018-0040(3)). By completing this form and including the materials listed in the checklist below, the notice will include the required contents.

Where the amendments or new land use regulations, including supplementary materials, exceed 100 pages, include a summary of the amendment briefly describing its purpose and requirements.

7. Remember to notify persons who participated in the local proceedings and requested notice of the final decision. (ORS 197.615)

If you have any questions or would like assistance, please contact your DLCD regional representative or the DLCD Salem office at 503-934-0017 or e-mail plan.amendments@state.or.us.

Notice checklist. Include all that apply:

Completed Form 2

A copy of the final decision (including the signed ordinance(s)). This must include city *and* county decisions for UGB and urban reserve adoptions

The findings and the text of the change to the comprehensive plan or land use regulation

If a comprehensive plan map or zoning map is created or altered by the proposed change:

A map showing the area changed and applicable designations, and

Electronic files containing geospatial data showing the area changed, as specified in OAR 660-018-0040(5), if applicable

Any supplemental information that may be useful to inform DLCD or members of the public of the effect of the actual change



FEB 10 2014

OFFICE OF COUNTY COUNSEL

PUBLIC SERVICES BUILDING

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CERTIFICATE OF MAILING

I hereby certify that the enclosed Ordinance No. ZDO-246 was deposited in the mail on February 6, 2014

Signed: _____

Cheryl J. Cornelison, Administrative Assistant
Clackamas County Counsel's Office
(503) 655-8619

ORDINANCE NO. ZDO-246

An Ordinance amending Chapters 5 and 10 and Appendix B, and making conforming amendments to Chapters 3 and 4 of the Clackamas County Comprehensive Plan; and amending Sections 202, 1005, 1007, and 1015, and making conforming amendments to Sections 306, 309, 310, 312, 314, 809, 810, 822, 1009, and 1202 of the Clackamas County Zoning and Development Ordinance

WHEREAS, in late 2011, the County's Transportation Planning Division began a comprehensive review of its Transportation System Plan (TSP), which had not undergone a major update in more than a decade; and

WHEREAS, the Board of County Commissioners adopted a vision, goals and objectives in April 2012 to guide the development of both projects and policies within the Transportation System Plan update; and

WHEREAS, County staff worked closely for over two years with a Public Advisory Committee and a Technical Advisory Committee and provided numerous opportunities for public input to assess and recommend a set of projects, policies, tables, maps and figures for inclusion the updated TSP; and

WHEREAS, the Planning Director initiated amendments to Chapters 5 and 10 and Appendix B of the Comprehensive Plan and Sections 202, 1005, 1007, and 1015 of the Zoning & Development Ordinance to incorporate the recommended policies, needed transportation projects and other associated elements in the TSP update; and

WHEREAS, the Planning Director initiated conforming numbering and reference amendments to Chapters 3 and 4 of the Comprehensive Plan and to Sections 306, 309, 310, 312, 314, 809, 810, 822, 1009, and 1202 of the Zoning and Development Ordinance; and

WHEREAS, the proposed amendments are consistent with the Clackamas County Comprehensive Plan, the Statewide Planning Goals and Guidelines, the State Transportation Planning Rule, and the Metro Regional Transportation Functional Plan and all other applicable state and federal laws and regulations; and

WHEREAS, after a duly-noticed public hearing on October 28, 2013 and November 4, 2013, the Clackamas County Planning Commission recommended approval of the amendments in ZDO-246, as proposed; except recommended minor amendments to the list of needed transportation projects as follows: remove the Freight Route designation on Beaver Creek Road from Meyers Road to Leland Road; remove the planned multi-use path from Oregon City to Mulino; move two ODOT projects to a higher priority; move portions of the projects within a quarter-mile of a school on SE Clackamas, SE Thiessen, SE Webster

and SE Johnson roads to a higher priority; move the South Molalla Road/Bear Creek Bridge project to a higher priority; and change the description of the project located in Mulino at Passmore Road/Graves Road/Highway 213; and

WHEREAS, the Board of County Commissioners held public hearings on December 4, 2013 and December 11, 2013 at which it approved amendments in ZDO-246, as recommended by the Planning Commission; except directed staff to modify the description of project in Mulino, as recommended by staff; and directed staff to make three minor amendments to the list of needed transportation projects as follows: remove the project on Holly Lane from the list and move the pedestrian/bicycle bridges over I-205 and the Willamette River to lower priorities; and

WHEREAS, staff did amend the project lists and maps per the Board of County Commissioners direction; now therefore

The Board of Commissioners of Clackamas County ordains as follows:

Section 1: Chapter 5 of the Clackamas County Comprehensive Plan is hereby repealed and replaced in its entirety as shown in Exhibit A, hereto attached.

Section 2: Chapters 3, 4 and 10 and Appendix B of the Clackamas County Comprehensive Plan are hereby amended as shown in Exhibit A, hereto attached.

Section 3: Sections 202, 306, 309, 310, 312, 314, 809, 810, 822, 1005, 1007, 1009, 1015 and 1202 of the Clackamas County Zoning and Development Ordinance are hereby amended as shown in Exhibit B, hereto attached.

Section 4: This ordinance shall be effective on March 1, 2014.

ADOPTED this 30th day of January, 2014

BOARD OF COUNTY COMMISSIONERS

Chair

Recording Secretary

Ordinance ZDO-246

Comprehensive Plan Amendments

Chapter 5: TRANSPORTATION SYSTEM PLAN

The Clackamas County Transportation System Plan (TSP) will guide transportation related decisions and identify the transportation needs and priorities in unincorporated Clackamas County from 2013 to 2033. The TSP has been created in coordination with the County's 16 cities, the State of Oregon, area transit providers, and other affected agencies and has been vetted through an extensive public process, including a series of public outreach events and twelve Public Advisory Committee meetings. The public and county staff worked together to develop the following vision for the TSP and six goals to guide implementation of this vision:

Building on the foundation of our existing assets, we envision a well-maintained and designed transportation system that provides safety, flexibility, mobility, accessibility and connectivity for people, goods and services; is tailored to our diverse geographies; and supports future needs and land use plans.

TSP GOALS

- Goal 1: Provide a transportation system that optimizes benefits to the environment, the economy and the community
- Goal 2: Plan the transportation system to create a prosperous and adaptable economy and further the economic well-being of businesses and residents of the County.
- Goal 3: Tailor transportation solutions to suit the diversity of local communities.
- Goal 4: Promote a transportation system that maintains or improves our safety, health, and security.
- Goal 5: Provide an equitable transportation system.
- Goal 6: Promote a fiscally responsible approach to protect and improve the existing transportation system and implement a cost-effective system to meet future needs.

BACKGROUND AND ISSUES

The County's transportation system includes an extensive network of public and private transportation facilities, including roads, railways, airports, pipelines, waterways, and multi-use paths. The system is intended to allow people to travel where they need to go safely and efficiently, while also providing for efficient movement of goods. The County's transportation system is also intended to support sustainable land use patterns and policies to serve a multitude of public needs without sacrificing air and water quality or creating noise pollution.

Government agencies, public and private service providers, and developers are involved in building and maintaining the County's transportation system. Metro, Portland's metropolitan planning organization, sets general policy guidelines for design, distributes regional funding for certain types of projects within its boundary, and sets standards for the operation of the transportation system located within the Portland Metropolitan Urban Growth Boundary (UGB). All transportation facilities must conform to standards and guidelines outlined by federal, state and, in some cases, Metro regulatory documents.

Clackamas County faces several challenges as it attempts to continue to develop and maintain a safe and integrated transportation system, appropriate for and accessible to all potential users.

- Limited funding: Funding levels for roads, the backbone of the transportation system, have not kept pace with the mobility needs of our society. Limited funding makes it a challenge to balance the need for maintenance and management of existing facilities with the need for building new facilities to accommodate increased trip demand. As a result, the backlog of needed road maintenance and construction projects has grown larger.
- Reducing congestion: Community members help reduce traffic congestion when they choose to take the bus, join a carpool, or bicycle and walk to destinations. Reducing congestion decreases the need for costly road construction projects while improving air quality, neighborhood livability and access to goods, services and employment.

Improving the relationship between land uses and transportation can also decrease reliance on automobiles and reduce congestion. Some ways to improve this relationship are to: alter the site design of new construction at or near major transit stops; increase connectivity in transportation systems; provide better pedestrian and bicycle facilities; use land more efficiently; and encourage mixed-use developments.

- Balancing needs: All land-based modes of travel, except rail and pipeline, must share the public rights-of-way. These modes includes autos, trucks, buses, bicycles, pedestrians and, in some localities, equestrians. Balancing the need for mobility (through movement of traffic) with the need for local movement and access to individual properties often creates design and safety challenges for roadways.
- Safety: From 2005 to 2009, there were approximately 160 fatalities and 1,245 serious injuries in Clackamas County due to traffic crashes. One of the County's goals is to improve the safety of its system for all users and reduce the number and severity of crashes for future years. Developing facilities to accommodate all modes of travel will help reduce conflicts that lead to safety problems for some users. The adopted Transportation Safety Action Plan calls for a 50 percent reduction of fatal and serious injury crashes by 2022.
- Fostering economic growth: Monitoring the effects of transportation on employment and economic activity is important during both good and bad economic times. Of particular significance are the ways transportation can be used as a tool to sustain and promote economic development both in the urban industrial and commercial centers and within the county's distinctive rural economy, including agriculture, forestry and equestrian facilities.

- Addressing environmental impacts: Development of transportation infrastructure needs to be sensitive to potential impacts to neighborhoods and to the natural environment, in order to create and maintain livable communities, preserve air and water quality, and conserve energy.

The northwest urban area of the County is within a designated Air Quality Maintenance Area (AQMA). Presently the AQMA meets state and federal air quality standards, but federal law requires the region to implement measures to maintain federal air quality standards. Federal law also prohibits significant degradation of air quality in the Mt. Hood Wilderness.

- Ensuring accessibility: In many areas of the County, transportation disadvantaged populations, such as the elderly, disabled or low-income residents, need improved access to public transit and special transportation services. Clackamas County will ensure that new and rebuilt roads are planned and designed to perform all necessary functions, including being accessible to those who choose not to drive or cannot drive.
- Maintaining and improving rural area roads: Clackamas County also is challenged by the responsibility to maintain and develop a safe and functional road network in rural areas. Upgrades to aging rural roadways are needed to enhance safety and accommodate different modes of travel.

TSP ORGANIZATION

To implement the vision and goals and to address the issues identified above, a series of policies have been created to direct the County in its efforts to build and maintain a multi-modal transportation system. Under each policy category, the countywide policies are listed first, followed by the urban policies, and the rural policies.

The policies are presented in this chapter by major topic or transportation mode as follows:

Foundation and Framework: includes policies relating to coordination; safety; equity, health and sustainability; intelligent transportation systems; and transportation demand management

Land Use and Transportation: includes policies relating to the integration of land use and transportation; parking; rural tourism; and scenic roads.

Active Transportation: includes policies relating to pedestrian and bicycle facilities and multi-use paths.

Roadways: includes policies relating to functional classification; urban and rural roadway considerations; project development; improvements to serve development; and performance evaluation and access standards.

Transit: includes policies relating to transit and transit-supportive amenities.

Freight, Rail, Air, Pipeline and Water Transportation: includes policies relating to general freight movement; freight trucking; rail; airports; pipelines; and water transportation.

Finance and Funding: includes policies relating to funding capital transportation improvements and maintenance.

Transportation Projects and Plans: includes policies relating to the 20-year and five-year capital improvement plans. Also identifies Special Transportation Plans that are adopted by reference as refinements of the TSP and plans or studies that need to be completed in the future to support the TSP.

Definitions: relevant definitions for use within this chapter.

The TSP also contains the following components:

- The County's **20-year Capital Improvement Plan:** a complete list of needed transportation-related projects to address gaps and deficiencies in the transportation network (Tables 5-3[a-d]).
- **Tables, Maps and Figures** illustrating the transportation system and street cross sections, and presenting guidelines and standards for developing the system.
- **Background documents** including detailed findings and conclusions relating to the various components of the transportation system (Appendix B).

FOUNDATION AND FRAMEWORK

Clackamas County's transportation networks serve local communities and also tie into regional networks. Creating a transportation system that is safe and accessible for all users must be done within the context of federal, state, and regional regulations. The system needs to be responsive to new initiatives adopted by these regulatory bodies to ensure the development of a complete and sustainable transportation system. It needs to be responsive to new approaches, techniques and measures developed for assessing the performance of the system. Intelligent Transportation Systems (ITS) and Travel Demand Management (TDM) techniques are two such tools that can be effective in managing the costs of the system and enabling better performance.

Safety is consistently mentioned by citizens as one of the highest concerns related to the transportation system, regardless of individuals' preferred methods of travel. The accessibility of the transportation system for all individuals is also a primary concern. Therefore, prioritizing safety and accessibility is essential in the planning, design, operation and maintenance of the transportation system.

5.A. Compliance and Coordination Policies

- 5.A.1 Support intergovernmental partnerships needed to promote coordination and address multi-jurisdictional transportation needs.
 - 5.A.2 Work collaboratively with federal, state, regional, and local agencies and with County residents to pursue the County's road safety programs and plans.
 - 5.A.3 Work with state and local partners to implement the Oregon Transportation Safety Plan.
 - 5.A.4 Coordinate with the Oregon Department of Transportation (ODOT) in implementing the Oregon Transportation Plan (OTP), Oregon Highway Plan (OHP), Statewide Transportation Improvement Program (STIP), and with other state transportation planning policies, guidelines and programs.
 - 5.A.5 Work with the Oregon Office of Emergency Management to ensure that the TSP supports effective responses to natural and human-caused disasters and emergencies and other incidents, and access during these incidents.
 - 5.A.6 **Urban** Coordinate with Metro and local governments to implement the Regional Transportation Plan (RTP), Regional Transportation Functional Plan (RTFP), Urban Growth Management Functional Plan (UGMFP), and local transportation plans.
 - 5.A.7 **Rural** Pursue formation of an Area Commission on Transportation (ACT) for the portions of Clackamas County outside the Portland Metropolitan Urban Growth Boundary to facilitate a coordinated approach to addressing issues on the state transportation system.
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5.B Road Safety Policies

- 5.B.1 Update the Clackamas County Transportation Safety Action Plan (TSAP) every five years to include necessary changes and document the progress toward the plan's goal of a 50 percent reduction in fatal and serious injury crashes by 2022.
 - 5.B.2 Identify transportation system safety improvements that will reduce fatal and injury crashes for all modes of travel and meet the TSAP goal.
 - 5.B.3 Address the County's top three crash cause factors of Aggressive Driving, Young Drivers (ages 15-25) and Roadway Departure utilizing education, emergency medical services, enforcement, engineering and evaluation.
 - 5.B.4 Support programs, policies, regulations and actions that increase awareness and education about the safety of the transportation system for all users.
 - 5.B.5 Support programs that utilize data-driven approaches to improve safety of the transportation system.
 - 5.B.6 Align County departments, external safety groups, and other public agencies toward common transportation safety goals.
 - 5.B.7 Integrate roadway, safety and traffic data management, health and emergency services data sources.
 - 5.B.8 Integrate Highway Safety Manual (HSM) principles into the planning, engineering, design, operation and maintenance of the transportation system.
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5.C Equity, Health and Sustainability Policies

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- 5.C.1 Support programs and projects, such as pedestrian and bike connections to transit stops, that expand and improve transportation options for residents in areas with identified transportation-disadvantaged populations.
 - 5.C.2 Protect neighborhoods, recreation areas, pedestrian facilities, bikeways and sensitive land uses (such as schools, daycare centers and senior centers whose users are more vulnerable to pollution) from transportation-related environmental degradation. Coordinate transportation and land use planning and use mitigation strategies, such as physical barriers and design features, to minimize transmission of air, noise and water pollution from roads to neighboring land uses.
 - 5.C.3 Work with public agencies, private businesses and developers to increase and improve infrastructure necessary to support use of vehicles that use alternative fuels.
 - 5.C.4 Ensure that programs to encourage and educate people about bicycle, pedestrian, and transit transportation options are appropriate for all County residents, particularly transportation-disadvantaged populations.
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- 5.C.5 Build working partnerships between the County's Public Health and Transportation Divisions and utilize tools, such as health impact assessments, to better connect the effects of transportation projects with the health of communities.
 - 5.C.6 Support the continued provision of public transportation services to County populations that are un-served or under-served, as well as the network of community-based, transportation services for seniors and persons with disabilities.
-

5.D Intelligent Transportation Systems (ITS) Policies

- 5.D.1 Implement a wide range of ITS strategies aligned with the TSP vision and goals by ensuring safe, efficient, and equitable mobility for people and goods.
 - 5.D.2 Update the ITS Action Plan every five years as part of the County's 5-Year Capital Improvement Program.
-

5.E Transportation Demand Management (TDM) Policies

- 5.E.1 Implement Transportation Demand Management techniques—including education, encouragement, and enforcement—appropriate for all County residents, in order to increase efficient use of existing transportation infrastructure and minimize congestion and safety concerns by offering choices of mode, route, and time.
 - 5.E.2 Support and participate in efforts by Metro, the Department of Environmental Quality (DEQ), transit providers, and any area Transportation Management Associations (TMAs) to develop, monitor and fund regional TDM programs.
 - 5.E.3 Provide adequate bicycle and pedestrian facilities to employment areas to encourage use of bicycles or walking for the commute to work and to improve access to jobs for workers without cars.
 - 5.E.4 Support programs that work with schools to identify safe bicycle and pedestrian routes to connect neighborhoods and schools. Seek partnerships and funding to support improvement of these routes.
 - 5.E.5 **Urban** Work with County employers located in concentrated employment areas to develop Transportation Management Associations (TMAs) to coordinate and support private-sector TDM efforts and to work toward mode share targets (Table 5-1) adopted in this Plan.
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- 5.E.6 **Urban** Establish the following year 2040 non-drive-alone targets for growth concept design types (as identified on Map IV-8):

TABLE 5-1
Year 2040 Non-Drive-Alone Modal Targets

Design Type	Non-Drive-Alone Modal Target
Regional Centers Station Communities Corridors	45-55% of all vehicle trips
Industrial Areas Employment Areas Neighborhoods Regionally Significant Industrial Areas	40-45% of all vehicle trips

- 5.E.7 **Rural** Encourage employers and schools outside urban growth boundaries to implement a range of TDM policies to help their employees and students reduce vehicle miles traveled, maximize use of existing transportation facilities, and increase walking, biking and transit use.
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LAND USE AND TRANSPORTATION

Integrating transportation plans with land use plans is a key element in effective management and operation of the entire transportation system. Roads support the wide range of land activities that take place in both the urban and rural areas. Because of the diverse nature of activities and land use types found in Clackamas County, it is of particular importance that the transportation systems are designed to accommodate both urban networks and the different needs of rural area users, including providing safe routes for users of all modes to enjoy the rural area's scenic beauty, and for those participating in agri-tourism and activities related to forestry.

Planning for appropriate amounts of parking supports efficient development of the land within communities. Accommodating on-street parking and planning for off-street parking needs are Transportation System Management (TSM) techniques that are consistent with the Metro Region's 2040 Growth Concept, meet the objectives of the Transportation Planning Rule (TPR), and comply with DEQ's Air Quality Maintenance Plan.

5.F Integration of Land Use and Transportation Policies

- 5.F.1 Land use and transportation policies shall be integrated consistent with state law regarding preservation of farm and forest lands.
 - 5.F.2 Support efforts to enhance and maintain the function of State highways and County arterials through land use policies, access management strategies, and roadway improvements.
 - 5.F.3 Support and promote an integrated approach to land use and transportation planning and implementation that encourages livable and sustainable communities, decreases average trip length and increases accessibility for all modes.
 - 5.F.4 Support and promote transportation investments that support complete and sustainable communities as a long-term strategy to reduce reliance on long commutes out of the County to employment destinations.
 - 5.F.5 Recognize the County's rural economic engine and the importance of moving goods from rural businesses (including farms, nurseries, livestock, and lumber) to distribution centers.
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5.G Parking Policies

- 5.G.1 Set minimum and, where appropriate, maximum limits on allowed off-street parking of motor vehicles relative to building size, location and use, and to adjacent land uses. In the urban area, parking standards shall be coordinated with regional parking requirements.
 - 5.G.2 Require new multi-family, commercial and institutional development to provide
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bicycle parking.

- 5.G.3 Allow shared parking and, where appropriate, on-street parking to be used to comply with parking standards.
- 5.G.4 **Urban** Allow the removal of existing, on-street parking along arterials and collectors to create bikeways, construct travel or turning lanes, or increase sight distance.
- 5.G.5 **Urban** Increase area for on-street parking in residential zoning districts by minimizing the width of driveway accesses.
- 5.G.6 **Urban** Encourage off-street parking in commercial, industrial, and high density residential areas to be located at the sides or rear of buildings, where practical.
- 5.G.7 **Urban** Consider allowing for decreased parking area requirements for development along transit routes, if the development provides pedestrian, bicycle and transit amenities. See Map 5-8a.
- 5.G.8 **Urban** Consider requiring shared parking within mixed-use development and where adjacent land uses are compatible.

5.H Rural Tourism Policies

- 5.H.1 **Rural** Encourage agri-tourism and other commercial events and activities that are related to and supportive of agriculture, in accordance with the provisions of ORS 215. Mitigation of traffic impacts and other event impacts may be required to reduce the effects of these limited land uses on the County road system.

5.I Rural Scenic Roads Policies

- 5.I.1 Implement a County Scenic Road System that is safe and attractive for all users.
- 5.I.2 Promote the protection of recreation values, scenic features and an open, uncluttered character along designated scenic roads.

Developments adjacent to scenic roads shall be designed with sensitivity to natural conditions and:

- a) Scenic roads shall have strict access control on new developments.
- b) Scenic roads should have shoulders wide enough for pedestrians or bicycles, or a separated path where feasible and when funding is available.
- c) Turnouts shall be provided where appropriate for viewpoints or recreational needs.
- d) Design review of developments adjacent to scenic roads shall require visual characteristics and signing appropriate to the setting.
- e) Buildings shall be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer zone.

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- f) Parking areas adjacent to scenic roads shall be separated from the right-of-way by a landscaped buffer.
 - g) Any frontage roads adjacent to scenic roads shall be separated by a vegetative buffer where feasible
 - h) Underground placement of utilities shall be encouraged.

5.1.3 The following facilities shall be designated scenic roads: *(see Map 5-1 Scenic Roads)*

- Wilsonville Road
- Stafford Road (City of Lake Oswego to Mountain Road)
- Schaeffer Road
- Pete's Mountain Road (Schaeffer Road to the Tualatin River)
- SW Mountain Road, Canby Ferry Road, N. Locust, NE 37th, and Holly Street
- Canby-Marquam Highway (City of Canby to Hwy 211)
- Clackamas River Drive
- Springwater Road (Clackamas River Drive to Hayden Road)
- Hayden Road
- Redland Road
- Fischer's Mill Road
- Marmot Road/Barlow Trail Road/
- Ten Eyck Road/SE Lusted Road from Ten Eyck Road to the County line.
- Lolo Pass Road
- Salmon River Road
- Still Creek Road
- Timberline Road and West Leg Road
- I-205 west of the Willamette River
- Highway 99E from Oregon City to New Era Rd
- Oregon City Bypass (Newell Creek Canyon segment)
- Highway 211 (Canby-Marquam Highway to Estacada)
- Highway 224 (Carver to Barton and south of Estacada)
- Highway 26 east of the City of Sandy
- Highway 35/Forest Service Road 386

5.1.4 Support implementation of the Oregon Scenic Byway System, including the Mt. Hood Scenic Byway and the West Cascades Scenic Byway.

ACTIVE TRANSPORTATION

Recognizing the increasing importance of having multiple ways to travel through a community and through the region has led to an increased awareness for designing transportation systems to safely enhance active transportation modes. “Active Transportation” is defined to include walking, bicycling and horseback riding.

The County completed transportation systems planning for pedestrian and bicycle modes in 1995 to implement the state’s Transportation Planning Rule (TPR), particularly the following TPR principles:

1. Land use and transportation are intimately related.
2. Over reliance should not be placed on any one transportation mode.
3. Walking and bicycling reduce the number of motorized vehicle trips.
4. Compact, mixed-use development encourages the use of non-motorized modes.
5. Well-planned, properly designed facilities will encourage people to make trips by non-motorized modes.
6. Facilities for these non-motorized modes are essential for people not having access to an automobile, and constitute desirable elements in a well-designed community that are enjoyed by people who can drive, but choose to walk or bicycle.

These principles underlie the development of the Clackamas County Pedestrian Master Plan and the Clackamas County Bicycle Master Plan, both of which are adopted by reference. Both master plans were prepared under the guidance of the Clackamas County Pedestrian and Bikeway Advisory Committee, which was guided by the following vision:

Create an environment which encourages people to bicycle and walk on networked systems that facilitate and promote the enjoyment of bicycling and walking as safe and convenient transportation modes.

5.J General Active Transportation Policies

- 5.J.1 Coordinate the implementation of pedestrian facilities and bikeways with neighboring jurisdictions and jurisdictions within the county.
 - 5.J.2 Ensure an opportunity for a diverse and representative citizen involvement in the county pedestrian and bicycle planning process by sponsoring the Clackamas County Pedestrian and Bikeway Advisory Committee (CCPBAC) as a forum for public input. Recruit representatives of transportation disadvantaged populations as part of this process.
 - 5.J.3 Monitor and update the Clackamas County Pedestrian Master Plan and Bicycle Master Plan through data collection and evaluation, and review activities necessary to maintain and expand the programs established in these plans.
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- 5.J.4 Support bicycle, pedestrian and transit projects that serve the needs of transportation disadvantaged populations.
 - 5.J.5 Coordinate with pedestrian, bicycle, and trail master plans, and with special transportation plans of the County, Oregon Department of Transportation, the United States Forest Service, Metro, and parks providers to achieve safe and convenient off-road, multi-use path and trail systems connecting to on-road pedestrian facilities and the bikeway networks.
 - 5.J.6 Support the continuation of the “Bikes on Transit” program on all public transit routes.
 - 5.J.7 Inform property owners of their responsibilities for the maintenance of sidewalks and pedestrian pathways.
 - 5.J.8 Identify low traffic volume streets that are appropriate for signing as bicycle routes to enhance safety and connectivity and to supplement the system of bikeways found on the major street system.
 - 5.J.9 **Rural** Support bicycle and pedestrian projects that improve access to public transit stops and provide connections to significant local destinations.
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5.K Design Policies

- 5.K.1 Require bikeways and pedestrian facilities according to the applicable cross section for all new collector or arterial construction or substantial reconstruction, even if not designated on the Planned Bikeway Network (Maps 5-2a and 5-2b), or on the Essential Pedestrian Network (Map 5-3), allowing for flexibility to accommodate characteristics of terrain, scenic qualities, existing development, and environmental constraints, and adopted Special Transportation Plans.
 - 5.K.2 Seek out and implement innovative bicycle and pedestrian treatments that improve the convenience and safety of these facilities.
 - 5.K.3 Improve the safety and appeal of walking and biking by supporting the development of bikeways and pedestrian facilities and networks on low volume or local roads and off of existing street rights-of-way.
 - 5.K.4 **Urban** Identify pedestrian facilities and bikeway improvements necessary to ensure direct and continuous networks of pedestrian facilities and bikeways on the county road system.
 - 5.K.5 **Urban** Identify locations where bicycle and pedestrian access is blocked by rivers and other natural barriers and encourage the creation of bicycle and pedestrian facilities to extend across these barriers.
 - 5.K.6 **Urban** Review development plans to ensure that they provide bicycle and pedestrian access.
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- 5.K.7 **Urban** Create a networked system of pedestrian facilities and bikeways connecting cities, neighborhoods, commercial areas, community centers, schools, recreational facilities, employment centers, other major destinations, regional and city bikeways and pedestrian facilities, and other transportation modes. Utilize separate accessways for pedestrian facilities and bikeways where street connections are impractical or unavailable.
- 5.K.8 **Rural** Support the safe movement of equestrians in rural areas.
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5.L Construction Policies

- 5.L.1 Construct all pedestrian facilities and bikeways according to the current County design standards.
- 5.L.2 Construct all pedestrian facilities, bikeways, and multi-use paths as designated on Maps 5-2a, 5-2b, and 5-3, and as adopted in Special Transportation Plans.
- 5.L.3 **Urban** Require that new development include construction of walkways and accessways within the development and between adjacent developments, where appropriate.
- 5.L.4 **Urban** Construct interim pedestrian facilities and bikeways, as appropriate, on existing streets that are not built to the applicable cross section and where the construction of full street improvements is not practicable or imminent as determined by the County Planning Director and County Road Official or County Engineer.
- 5.L.5 **Rural** In Unincorporated Communities, construct walkways adjacent to or within areas of development (such as schools, businesses, or employment centers) and at rural transit stops.
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5.M Facilities Policies

- 5.M.1 Encourage the provision of appropriate, supportive facilities and services for bicyclists, including showers, lockers, bike racks on buses, bike repair and maintenance information/clinics, and secure bicycle parking.
- 5.M.2 Establish and maintain way-finding systems to facilitate bicycle travel.
- 5.M.3 **Urban** Encourage the provision of street lighting to increase the visibility and personal security of pedestrians and bicyclists.
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5.N Multi-Use Path Policies

- 5.N.1 Support acquisition and development of multi-use paths on abandoned public and private rights-of-way.
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- 5.N.2 Collaborate with the appropriate service providers, such as park providers, to plan for multi-use paths that accommodate equestrian facilities where possible.
- 5.N.3 **Rural** Consider multi-use paths where travel lanes or wide paved shoulders along roadways may not provide adequate safety for pedestrians or bicyclists.
- 5.N.4 **Rural** Consider equestrian uses when designing and constructing multi-use paths. Work with local communities and interest groups to plan, develop and maintain multi-use paths that also provide equestrian features. Plan for parking areas at such multi-use paths that support parking needs of equestrians, as well as needs of other path users.
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ROADWAYS

The County's road system permits the movement of goods and people between communities and regions, using any of a variety of modes of travel. Roads provide access to virtually all property. They support established communities and serve new development. They connect rural communities and urban neighborhoods. Roads give structure to our urban form, define our commuting patterns and influence our perceptions of what is far away or close at hand.

Creating and maintaining a safe, continuous County-wide road system, which accommodates movement by all travel modes, means setting standards for development of new roads and redevelopment of existing roads, including design and access standards for urban and rural roads. To ensure roads continue to meet the transportation demands of the County, a method to measure the ongoing performance of the system is essential. In response to new technologies and financial constraints, recent changes have been made to these standards on the state and regional levels. These changes are reflected in this TSP.

5.0 Functional Classification and Design Policies

- 5.0.1 Designate and develop roadways according to the functional classifications and guidelines illustrated in the County Road Typical Cross Sections (Figures 5-1a through 5-1f, and Figures 5-2a through 5-2f) while allowing flexibility to accommodate characteristics of terrain, scenic qualities, environmental constraints, existing development, and adopted Special Transportation Plans.
 - 5.0.2 Designate freeways, arterials, collectors and connectors as shown on Map 5-4a and Map 5-4b. Roadways that do not presently exist but are shown on these maps are shown in approximate locations.
 - 5.0.3 Maintain and improve roads consistent with their functional classification, and reclassify roads as appropriate to reflect function and use.
 - 5.0.4 Require changes in Comprehensive Plan designation and zoning designation to comply with the Transportation Planning Rule (OAR 660-12). Evaluations of the transportation system for this purpose shall rely on existing transportation facilities and on planned facilities found in the 20-Year Capital Projects list (Table 5-3a). State transportation facilities shall be evaluated according to the Oregon Highway Plan, Regional Transportation Plan, Transportation Planning Rule, and other applicable state requirements.
 - 5.0.5 Develop and implement traffic calming strategies, appropriate for the road functional classification, that will improve the safety and convenience of travel by all modes, particularly in areas with high crash rates or high rates of bicycle and/or pedestrian activity.
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- 5.O.6 **Urban** Consider the Metro Regional Street Design Classifications when designing new county roads or redesigning existing county roads, prior to construction or reconstruction. Map 5-5 shows which roads are designated by each Design Classification.
- 5.O.7 **Urban** Minimize impacts of managing storm water by allowing for Metro's alternative street standards, such as "green streets," as design alternatives.
- 5.O.8 **Urban** Design arterials and collectors to allow safe and convenient passage of buses, bicycles, and pedestrians.
- 5.O.9 **Urban** Streets, alleys, bikeways, pedestrian facilities, multi-use paths, trails and transit stops are allowed uses in all urban zoning districts. Consider all state and County policies relating to these facilities when widening, improving or constructing new transportation infrastructure.
- 5.O.10 **Rural** Plan to support the existing development pattern and through traffic needs of the rural communities, and not to support or promote urbanization.
- 5.O.11 **Rural** Consistent with ORS 215.283(3) and OAR 660, Division 12, County road capital improvement projects may be designed and constructed to improve safety and bring roads up to county standards outside the UGB. If the road capital improvement project is not otherwise allowed and would require expansion of right-of-way exceeding the road improvements allowed in the Agriculture or Forest districts, a goal exception would be required for such a project, as provided for in ORS 215.283(3).
- 5.O.12 **Rural** Streets, alleys, bikeways, pedestrian facilities, multi-use paths, trails and transit stops are allowed uses in all rural zoning districts with the exception of Agricultural and Forest Districts in which they are conditionally allowed by ORS 215.213, 215.283 or OAR Chapter 660, Division 6 (Forest Lands).
- 5.O.13 **Rural** Recognize the importance of resource-related uses such as agriculture and forestry to the local economy, and the need to maintain a transportation system that provides opportunities to harvest agricultural and forest products and deliver them to market.
- 5.O.14 **Rural** Design, construct and reconstruct rural arterials and collectors to allow safe and convenient passage of trucks, buses, pedestrians and bicyclists.
- 5.O.15 **Rural** Support the safe movement of agricultural equipment in rural areas by improving existing roads to county standards and considering design features such as signs, pull-outs for slow-moving vehicles, reduced speeds, and limiting curbs where equipment may move to the shoulder or out of the right-of-way.
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5.P Project Development Policies

- 5.P.1 Before building new roads or adding capacity to existing roads, consider Transportation System Management (TSM) strategies for using the existing road system, including associated pedestrian and bicycle facilities, and system capacity most efficiently.

TSM strategies include:

1. Access Management;
 2. Alternative/Modified Standards (Performance and/or Design Standards);
 3. Intelligent Transportation System (ITS) applications;
 4. Operational Improvements;
 5. Parking Standards;
 6. Enhanced Bicycle and Pedestrian Facilities; and,
 7. Road Diet (*For example, restriping a low volume, 4-lane road to a 3-lane configuration with bicycle and pedestrian facilities*).
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5.Q Access Standard Policies

- 5.Q.1 Ensure safe and convenient access for bicyclists, pedestrians, and transit users for land uses that are open to the public. Apply access management in a flexible manner to allow reasonable access and balance the needs of all roadway users.
- 5.Q.2 Improve multimodal operations and safety by ensuring that Interchange Management Areas and other access plans and projects are coordinated with multimodal connectivity standards and are designed to support safe and convenient access and travel for all modes, when appropriate.
- 5.Q.3 Support the implementation of state access management standards (OAR Chapter 734, Division 51, as amended, and the Oregon Highway Plan) on state highway facilities and within Interchange Management Areas. Coordinate with the Oregon Department of Transportation for access control on state highways.
- 5.Q.4 If feasible, allow only collectors, connectors, or other arterials to intersect arterials.
- 5.Q.5 Access Standards shall be implemented through the Zoning and Development Ordinance and the County Roadway Standards. Where access management standards are adopted by the County in Special Transportation Plans, those standards shall apply.
- 5.Q.6 Developments should be designed to place driveway accesses on streets with the lowest functional classification or the lowest traffic volume.
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5.R Policies on Improvements to Serve Development

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- 5.R.1 Require new development to be served by adequate transportation facilities and access points that are designed and constructed to safely accommodate all modes of travel.
- 5.R.2 For new developments and land divisions, require right-of-way dedication, on-site frontage improvements to the applicable standards as shown in the roadway Cross Sections (Figures 5-1a through 5-1f and Figures 5-2a through 5-2f) and the County Roadway Standards, and off-site improvements necessary to safely handle expected traffic generated by the development and travel by active modes. Where roadway standards are adopted by the County in Special Transportation Plans, those standards shall apply.
- 5.R.3 Assess anticipated off-site traffic impacts caused by new developments. The developer may be required to participate financially or otherwise in the provision of off-site improvements, dedications or other requirements.
- 5.R.4 For new development proposed on a site identified on Map 5-6 (*Potentially Buildable Residential Sites >5 Acres in UGB*), require a conceptual street plan that is consistent with requirements of this section and provides for full street connections at intervals of no more than 530 feet, where feasible.
- 5.R.5 Require new development that will require construction of new streets to provide full street connections at intervals of no more than 530 feet, where feasible. If full street connections are not feasible at such intervals, require accessways for pedestrians, bicyclists or emergency vehicles at intervals of no more than 330 feet. Exceptions may be made where there are barriers, including topography, railroads, freeways, pre-existing development, existing easements, or environmental constraints such as streams and wetlands.
- 5.R.6 New development shall accommodate on-site traffic circulation within the boundaries of the site, not by circulating vehicles on and off the site through multiple access points using the public road system. Internal circulation plans should avoid relying on "backing out" maneuvers for new driveways onto all rural arterials and collectors.
- 5.R.7 **Urban** Require implementation of a road network for undeveloped sites illustrated on Map 5-6. Existing roads shall be extended to provide a direct, connected system.
- 5.R.8 **Urban** Where appropriate, develop and implement neighborhood traffic circulation plans for all modes intended to improve circulation while minimizing safety concerns and exposure to air and noise pollution.
- 5.R.9 **Urban** Discourage motor vehicle through-trips on local, connector and collector roads, and encourage bicycle and pedestrian travel on these roads.
- 5.R.10 **Urban** Allow flexible criteria and standards for local streets that are less than 200
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feet in length, are expected to carry very low traffic volumes, and are not capable of being extended.

- 5.R.11 **Urban** Private streets may be appropriate in areas with topographic constraints that make construction of a road to County standards not feasible. Private roads are not classified as local roads and are not maintained by the County.
- 5.R.12 **Urban** Require that changes to Comprehensive Plan land use designations within the Interchange Management Areas identified on Map 5-7 be consistent with Oregon Administrative Rules 660-012-0060. If the land uses allowed by the new Comprehensive Plan land use designation would cause the interchange mobility standards to be exceeded, either the change shall be denied or improvements shall be made such that the mobility standards are met.
- 5.R.13 **Rural** Discourage through trips on rural local roadways.

5.5 Performance Evaluation Measure Policies

- 5.S.1 For County roads, establish the method of calculating roadway capacity and the impact of new development on that capacity in the County Roadway Standards.
- 5.S.2 Evaluate capacity needs for roadways within the urban area using the Regional Motor Vehicle Performance Measures shown in Table 5-2a, except as established below. All capital construction shall be designed not to exceed the maximum V/C ratio.

Table 5-2a PERFORMANCE EVALUATION MEASURES FOR THE URBAN AREA
Weekday Mid-day and Weekday PM Peak Periods

Federal and State Principal Arterial Street Segments and Intersections	Maximum Volume to Capacity (V/C) Ratio		
	Mid-day One-Hour Peak	1 st Hour, PM Peak	2 nd Hour, PM Peak
OR 99E from OR 224 interchange north to county line	0.99	1.1	0.99
I-205 I-5 OR 212 OR 224 OR 213	0.90	0.99	0.99
County Street Segments and Intersections by Metro Urban Design Type <i>See Comprehensive Plan Map IV-8</i>			
Regional Centers Town Centers Main Streets Station Communities	0.99	1.1	0.99
Corridors Neighborhoods Employment Areas Industrial Areas Intermodal Facilities	0.90	0.99	0.99

- 5.S.3 Exceptions to the performance evaluation measures for review of development proposed on property within Metro's boundary are established as follows:
- 5.S.3.1 Within the Clackamas Industrial Area, no performance evaluation measures shall apply.
 - 5.S.3.2 For the intersections of SE Park Avenue/OR 99E, SE Park Avenue/SE Oatfield Road, and SE Park Avenue/SE 27th Street, performance evaluation measures of the Station Community Design Type shall apply.
- 5.S.4 Evaluate capacity needs for roadways in the rural area using the performance evaluation measures shown in Table 5-2b.

**Table 5-2b PERFORMANCE EVALUATION MEASURES FOR THE RURAL AREA
Weekday, AM and PM Peak Periods**

County Roads and ODOT Facilities and Intersections based on posted speed and highway classification	Maximum Volume to Capacity (V/C) Ratio	
	1 st Hour, PM Peak Period	2 nd Hour, PM Peak Period
Inside city UGBs	0.80 to 0.95	0.80 to 0.95
Inside Unincorporated Communities	0.70 to 0.80	0.70 to 0.80
All other Rural areas	0.70 to 0.75	0.70 to 0.75
County rural road intersections and road segments outside of rural area cities	Minimum Level of Service (LOS) or Maximum Volume/Capacity Ratio; Weekday Peak Periods	
	AM Peak Hour	PM Peak Hour
Road segments and Unsignalized Intersections	LOS E	LOS E
Signalized and Roundabout Intersections	0.90	0.90

- 5.S.5 Exception to the performance evaluation measures for review of development proposed on property in the rural area is established as follows:
- 5.S.5.1 Within Government Camp Village, no performance evaluation operating standards shall apply.
- 5.S.6 The maximum volume to capacity ratio for the ramp terminals of interchange ramps shall be v/c 0.85. (1999 Oregon Highway Plan, OHP Policy 1F Revisions, Adopted by OTC: Dec. 21, 2011)
- 5.S.7 Where more than one performance measure would apply at an intersection, the measure allowing the higher level of congestion will be used, except for ramp terminal intersections.
- 5.S.8 Evaluate transitioning from transportation concurrency to safety analysis when a traffic impact study (TIS) is required of new development.

5.S.9 The County will work with Metro and ODOT over five years to develop Alternate Road Capacity Performance Standards, required by the Oregon Highway Plan Policy 1.F., to address the following five intersections. These intersections were forecast not to meet the Capacity Performance Standards adopted in the 2013 TSP and there were no projects identified that could make the intersections meet the standards.

- SE Harmony Road/SE Linwood Avenue
 - OR 212/SE 172nd Avenue – ODOT Intersection
 - OR 212/SE 282nd Avenue – ODOT Intersection
 - OR 213/S. Henrici Road – ODOT Intersection (traffic signal or roundabout)
 - OR 224/SE Lake Road/SE Webster Road – ODOT Intersection
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TRANSIT

Public transit service is essential for the mobility of many County residents, and provides an affordable option for others who prefer to use it. The County contains five major public transportation systems. Tri-County Metropolitan Transportation District of Oregon (TriMet), the state's largest transit provider, serves generally the western, more urbanized part of the county. The County also is home to four rural transit providers: South Clackamas Transportation District (SCTD) serving the Molalla area, Sandy Area Metro (SAM), Canby Area Transit (CAT) and Wilsonville's South Metro Area Transit (SMART). Clackamas County also directly supports the Mountain Express service which provides public transit to the Hoodland area along the Highway 26 corridor east of the City of Sandy. All of these services provide public transit as well as specialized services for seniors and persons with disabilities (paratransit) as mandated by the American with Disabilities Act.

Clackamas County participates in the development and implementation of the Coordinated Human Services Transportation Plan which addresses the services available to vulnerable populations throughout the Portland metropolitan area.

The County can influence the type of service provided and the way new developments interface with transit and provide amenities for transit riders. Busses operated by the six districts, as well as each of the school districts in the county must safely share the county's roads with all other users.

5.T Transit Policies

- 5.T.1 Work with transit agencies to identify existing transit deficiencies in the County, needed improvements, and additional park-and-ride lots needed to increase the accessibility of transit services to all potential users.
 - 5.T.2 Emphasize corridor or roadway improvements that help ensure reliable and on-time transit service in the County.
 - 5.T.3 Encourage transit providers to restructure transit service to efficiently serve local as well as regional needs.
 - 5.T.4 Emphasize transit improvements that improve east-west connections; improve service between the County's industrial and commercial areas and neighborhoods; and best meet the needs of all County residents, employees and employers, regardless of race, age, ability, income level and geographic location.
 - 5.T.5 Coordinate with all applicable transit agencies on all new residential, commercial and industrial developments to ensure appropriate integration of transit facilities and pedestrian access to transit facilities.
 - 5.T.6 Require major developments and road construction projects along transit routes to include provisions for transit shelters, pedestrian access to transit and/or bus turnouts, where appropriate.
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- 5.T.7 Promote park-and-ride lots, transit shelters and pedestrian/bikeway connections to transit. Coordinate the location of these facilities with other land uses to promote shared parking and bicycle/ pedestrian-oriented transit nodes.
- 5.T.8 Coordinate and cooperate with transit agencies to provide transportation for seniors, people with disabilities, and other transportation-disadvantaged populations. Provide continued support for paratransit services as required within a three-quarter-mile distance from fixed-route transit stops.
- 5.T.9 Coordinate transit-supportive, roadway improvements with transit-providers to ensure financing and implementation of such improvements.
- 5.T.10 **Urban** Require pedestrian and transit-supportive features and amenities and direct access to transit for new development.
- Pedestrian and transit supportive amenities may include pedestrian/bikeway facilities, street trees, outdoor lighting and seating, landscaping, shelters, kiosks, strict standards for signs, and visually aesthetic shapes, textures and colors. Buildings measuring more than 100 feet along the side facing the major pedestrian/transit access should have more than one pedestrian entrance. Pedestrian access should be provided to connect transit centers or transit stops on bus routes with centers of employment, shopping or medium-to-high density residential areas within one-quarter mile of these routes.
- 5.T.11 **Urban** Coordinate with transit providers to achieve the goal of transit service within one-quarter mile of most residences and businesses within the Portland Metropolitan UGB. Support more frequent service within Regional Centers, Town Centers, Station Communities, and Corridors and Main Streets.
- 5.T.12 **Urban** Work with federal, state and regional agencies to implement high capacity transit in the regional High Capacity Transit (HCT) System Plan in order to help relieve traffic congestion, provide for transportation alternatives to the automobile, and promote the County's economy. See Map 5-8c for the HCT network in the County.
- 5.T.13 **Urban** Site new commercial, institutional, and multi-family buildings at major transit stops as close as possible to transit, with a door facing the transit street or side street, and with no parking between the building and front lot lines.
- 5.T.14 **Rural** Focus safety improvements near existing or planned transit stops.
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FREIGHT, RAIL, AIR, PIPELINE AND WATER TRANSPORTATION

In 2009, Clackamas County adopted “Open for Business – Economic Development Plan (EDP).” This plan provides a comprehensive guiding policy document for the County to improve, diversify and grow the economy in Clackamas County. Crucial to economic development is the infrastructure that supports the businesses and the employees that work in those businesses. Specific goals and actions called out by the Economic Development Plan include:

- Maintain mobility for people and freight in the face of expected growth; and
- Respond to the opportunities and challenges faced by its cities and rural areas, and support them in their efforts to develop quality jobs and businesses,

Freight, rail, air, pipelines and water transportation make significant contributions to the movement of people and goods; improve the quality of life; and support economic development in Clackamas County.

Policies relating to the movement of freight via roads, rail, air, pipelines or water transportation must also respond to new regulations to ensure the highest level of safety.

5.U General Freight Policies

- 5.U.1 Coordinate the planning, development, maintenance and operation of a safe and efficient freight system for all freight modes in Clackamas County with the private sector, ODOT, Metro, the Port of Portland and the cities of Clackamas County.
 - 5.U.2 Promote an inter-modal freight transportation strategy and work to improve multi-modal connections among rail, industrial areas, airports and regional roadways to promote efficient movement of people, materials, and goods.
 - 5.U.3 Work with the private transportation industry, Oregon Economic Development Department, Port of Portland and others to identify and realize investment opportunities that enhance freight mobility and support the County, regional and state economy.
 - 5.U.4 Make freight investments that, in coordination with the County’s economic development strategies, help retain and grow the County’s job base and strengthen the County’s overall economy.
 - 5.U.5 Ensure that freight rail lines and truck routes do not have disproportionately negative impacts on sensitive land uses (places where people with increased risk of adverse impacts from exposure to noise and air pollution are likely to gather, such as schools, senior centers, hospitals, parks, housing). Prioritize mitigation efforts for current sensitive land use areas near freight rail lines and truck routes. Mitigate impacts to sensitive land uses by using vegetative buffers, establishing rail “quiet zones,” and coordinating land use plans.
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5.V Freight Trucking Policies

- 5.V.1 Support the Truck Freight Route System, while not prohibiting the use of other roads for local pickup and delivery of goods and services. (See Maps 5-9a and 5-9b).
 - 5.V.2 Improve and maintain the countywide Truck Freight Route System, the Regional Transportation Plan Freight Routes and Oregon Freight Plan Routes, as shown on Maps 5-9a and 5-9b.
 - 5.V.3 Consider Heavy and Oversize Freight Movement requirements on State and County facilities when developing plans for transportation improvements and land use changes along freight routes designated as ORS 366.215 Corridors, as shown on Maps 5-9c and 5-9d.
 - 5.V.4 Consider the safety of all travel modes that use the Truck Freight Route System when designing improvements to this system.
 - 5.V.5 Accommodate freight travel on the Truck Freight Route System by improving facility design and operations.
 - 5.V.6 Identify street improvements to reduce delays and to improve travel time reliability on roadways in the Truck Freight Route system
 - 5.V.7 Work to improve the safety of Truck Freight Routes for all transportation modes.
 - 5.V.8 Support the development of truck layover facilities/staging areas to reduce the conflicts between parked vehicles and adjoining land uses.
 - 5.V.9 Utilize Intelligent Transportation Systems (ITS) solutions to improve safety and operations of freight movement.
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5.W Rail Policies

- 5.W.1 Support the safe and efficient movement of goods by rail.
 - 5.W.2 Support the reduction of the number of at-grade crossings of arterial and collector streets on main rail lines to reduce conflicts between rail use and other transportation modes, and improve safety.
 - 5.W.3 On new or reconstructed arterials and urban collectors, prohibit at-grade crossings of main rail lines without traffic restrictive safety devices.
 - 5.W.4 Support expansion and maintenance needed to establish reliable, higher speed (110-125 mph) freight rail service and intercity rail passenger service in the Willamette Valley.
 - 5.W.5 Encourage the development of rail-accessible land uses within industrial areas adjacent to main rail lines.
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5.W.6	Support the development of convenient inter-modal facilities such as ramp, terminal and reload facilities for transfers from truck to rail for long-haul freight movement.
5.W.7	Improve the safety and operations of rail transport at at-grade rail crossings and ensure that all at-grade crossings meet the best practices for facilitating safe, multi-modal crossings, as identified in the most recent version of the "Railroad-Highway Grade Crossing Handbook" (Federal Highway Administration [FHWA]).
5.W.8	Identify and protect existing and abandoned rail rights-of-way for future transportation facilities and services.
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5.X Airport Policies

5.X.1	Coordinate with the Port of Portland, the Oregon Department of Aviation, and other affected agencies to implement the Mulino Airport Plan.
5.X.2	Coordinate with Marion County, the City of Wilsonville, the Oregon Department of Aviation, and other affected agencies to develop and implement the Aurora Airport Plan.
5.X.3	Allow new airports as conditional uses in appropriate zoning districts. Require new public use airports to be located within: • one mile of an arterial roadway, and • at least one mile away from urban residential areas.
5.X.4	Cooperate with the Oregon Department of Environmental Quality, Oregon Department of Aviation and Federal Aviation Administration to minimize conflicts between airports and uses of surrounding lands.
5.X.5	Require that new airports, airport expansions, or expansions of airport boundaries, except those limited to use by ultra-lights and helicopters, have a runway at least 1,800 feet long and control at least enough property at the end of each runway through ownership, aviation easement, or long term lease to protect their approach surfaces until the approach surfaces are 50 feet above the terrain. Require the runway to be located so as to achieve at least a 20-foot clearance of the approach surface over a county, city or public road.
5.X.6	Apply a Public-Use Airport and Safety overlay zoning district to public-use airports, consistent with ORS 836.600 through 836.630, and as shown on Map 5-10.
5.X.7	Apply a Private-Use Airport and Safety overlay zoning district to privately-owned, private-use airports that served as the base for three or more aircraft, consistent with ORS 836.600 through 836.630, and as shown on Map 5-10.
5.X.8	Recognize privately-owned, private-use airports that served as the base for one or two aircraft on December 31, 1994, as shown in the records of the Oregon Department of Transportation and as shown on Map 5-10.
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- 5.X.9 Encourage establishment of heliports in industrial areas in conjunction with state and federal standards for heliport design and location.
 - 5.X.10 Support the role Clackamas County airports serve in supporting emergency response and disaster assistance.
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5.Y Pipeline Policy

- 5.Y.1 Work with state and federal regulatory agencies, affected communities and pipeline companies to provide safe, quiet, environmentally sensitive, and efficient transport of bulk commodities.
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5.Z Water Transportation Policies

- 5.Z.1 Maintain safe and convenient, multi-modal land access to the Canby ferry, and to public and commercial docks and boat ramps
 - 5.Z.2 Support efforts to minimize noise and negative impacts caused by river transportation on air and water quality and to habitat for fish migration.
 - 5.Z.3 Support the continued operation and maintenance of the Willamette Falls Locks to facilitate water transportation on the Willamette River.
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FINANCE AND FUNDING

The vast majority of surface transportation funding in the United States is derived from public sources at the federal, state, and local levels and primarily includes gas and vehicle taxes and fees. For a variety of reasons, including more efficient vehicles, trends toward shortening commutes or carpooling, and a general unwillingness to raise gas tax rates, jurisdictions across the nation are facing decreasing levels of available funding for transportation projects. That, combined with rising construction costs, leads to increasing challenges in finding available funds for all the improvements that are needed to the transportation system.

One way to control costs is to spend wisely by focusing on using and maintaining the transportation systems that exist. The County also is committed to identifying and pursuing potential new funding sources for transportation improvements.

5.AA General Finance and Funding Policies

- 5.AA.1 Support continuation of current (or equivalent) federal, state, and local funding mechanisms to construct and maintain County transportation projects. Identify and pursue new, permanent funding mechanisms to construct and maintain County transportation facilities and to support programs and projects identified in the TSP.
- 5.AA.2 Develop dedicated funding sources to implement active transportation projects.
- 5.AA.3 Establish funding for bicycle, pedestrian and transit projects that serve the needs of transportation disadvantaged populations.
- 5.AA.4 Consider a transportation system development charge methodology that calculates person trips to allow pedestrian, transit, and bicycle projects, as well as motor vehicle projects, to be funded by TSDCs.
- 5.AA.5 To the extent practical, invest unrestricted funding sources in a balanced manner between rural and urban areas.
- 5.AA.6 **Urban** Study creating a transportation facility funding program that establishes a "fee in lieu of" process that may be used by developers to pay for all on-site and off-site transportation facilities required as part of the land development process.

5.BB Maintenance Policies

- 5.BB.1 Emphasize maintenance of existing rights-of-way, with improvements where appropriate, to improve traffic flow and safety for all transportation modes at a reasonable cost.
- 5.BB.2 Determine road maintenance needs and priorities and develop an effective and

efficient road maintenance program.

- 5.BB.3 Develop routine maintenance standards and practices for the transportation system, including traffic control devices.
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TRANSPORTATION PROJECTS AND PLANS

The County's Capital Improvement Plan (CIP) includes a 20-year plan for needed transportation improvements and the 5-year programmed projects. The CIP was developed through concentrated and intense scrutiny by County staff and several advisory groups. Needed transportation projects were reviewed and analyzed with respect to how the transportation system is expected to function in 2035; how well each reflected the TSP vision and goals; and based on feedback from the public and several advisory committees. The Public Advisory Committee (PAC) developed the final recommendation to the Planning Commission on the project prioritization.

The purpose of the project prioritization was to identify a set of project that could reasonably be expected to be funded over the next 20 years. The funding forecast completed in 2012 indicates that only around 15% of the funding will be available to construct the needed projects. Therefore, the Capital Improvement Plan is divided into three project lists:

- 20-Year Capital Projects: contains the prioritized list of needed transportation projects that can reasonably be undertaken given the current estimates of available funding.
- Preferred Capital Projects: contains a second group of needed, prioritized transportation projects that the County would undertake if additional funding becomes available during the next 20 years.
- Long-Term Capital Projects: contains the remainder of the needed transportation projects. Although these projects will be needed to meet the transportation needs of the County in the next 20 years, they are not expected to be funded or constructed by the County.

The CIP will be updated as needed, and additional studies will be completed to optimize the work completed in this TSP by finding new ways to address known problems that cannot be solved by the current CIP. Special Transportation Plans include policy recommendations for a specific geographic areas or transportation facilities within the County Where conflicts exist between provisions of Special Transportation Plans and provisions of Chapter 5, provisions in the Special Transportation Plans take precedence.

5.CC Capital Improvement Plan Policies

- 5.CC.1 Fund and build the transportation improvement projects identified as needed to accommodate and appropriately manage future transportation needs. These projects are found in the following lists: 20-Year Capital Projects (Table 5-3a); Preferred Capital Projects (Table 5-3b); and Long-Term Capital Projects (Table 5-3c). Project locations are shown on Maps 5-11a through 5-11f.

- 5.CC.2 Maintain a current and complete 5-Year Capital Improvement Program (CIP), which contains the programmed transportation projects in priority order, with estimated costs and assigned responsibility for funding. Update and adopt the 5-Year Capital Improvement Program periodically.
 - 5.CC.3 Support the construction of prioritized, major transportation improvements in the County as identified by other jurisdictions including the Oregon Department of Transportation, Metro, cities, transit agencies and park providers. The list of needed transportation projects to be built by other jurisdictions is located in Table 5-3d. The project locations are shown on Maps 5-11a through 5-11f.
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5.DD Special Transportation Plans and Studies

- 5.DD.1 Designate the following as Special Transportation Plans:
 - A. The SE 172nd Avenue/ SE 190th Drive Corridor Management Plan, adopted by reference in Appendix A;
 - B. The Clackamas County Pedestrian Master Plan, adopted by reference in Appendix A;
 - C. The Clackamas County Bicycle Master Plan, adopted by reference in Appendix A;
 - D. The Clackamas County Airport Plan, adopted by reference in Appendix A;
 - E. Transportation elements of the Community Plans and Design Plans included in Chapter 10.
 - F. The Exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities & Services) and Goal 14 (Urbanization), pursuant to OAR 660, Division 12, to allow for the Arndt Road improvement, which is substantially complete. (For findings of fact and statement of reasons, see Board Order 2003-76.)
 - G. The Exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities & Services) and Goal 14 (Urbanization), pursuant to OAR 660, Division 12, to allow for the Arndt Road improvement listed as project number 2029 on Table 5-3b and shown on Map 5-11e. (For findings of fact and statement of reasons, see Board Order 2003-104.)
- 5.DD.2 Complete the following studies to develop solutions to problems that were identified during the existing and future conditions analysis of the transportation system, but could not be solved within the scope of the TSP update.

Clackamas County Comprehensive Plan

- A. Conduct an alternatives analysis and land use study to identify and consider roadway improvements to address access to I-5 within the southwest portion of the County and capacity deficiencies along Arndt Road (project #1106).
 - B. Develop alternative performance standards for intersections and alternative mobility standards within the Clackamas Regional Center design plan area. Determine if this area should be designated as a multimodal, mixed-use area (MMA) as provided in the Transportation Planning Rule (OAR 660-012-0060). (project #1017)
 - C. Develop a circulation study for the area west of the Clackamas Town Center and conduct a Transportation Infrastructure Analysis. (project #1018)
 - D. Study the I-205 Multi-use Path gap to identify near term solutions for completing the path. (project #1026)
 - E. Identify bicycle and pedestrian improvements to better connect OR 224 to the Clackamas Regional Center along 82nd Avenue. (project #1032)
 - F. Work with ODOT, the City of Happy Valley and the City of Damascus to review the future need for the Sunrise Unit 2 (parallel to Highway 212, between 172nd Avenue and US 26), identified as a future, planned highway corridor.
 - G. Work with ODOT, Metro, Oregon City, West Linn and any other affected jurisdiction to analyze and develop a solution to the transportation bottleneck on I-205 between Oregon City and the I-205 / Stafford Road Interchange. This process may include undertaking an Environmental Impact Statement to identify a preferred alternative that addresses the transportation congestion and facility operations issues on this portion of the I-205 corridor.
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DEFINITIONS

The following definitions apply to usage within Chapter 5.

Airport, Private Use: An airport restricted, except for aircraft emergencies, to use by the owner and his invited guests. The determination as to whether an airport is private or public-use is made by the Oregon Department of Aviation.

Airport, Public Use: An airport that is open to use by the flying public, with or without a request to use the airport.

Bikeway: A paved facility provided for use by cyclists. There are five types of bikeways.

Shared Roadway: A type of bikeway where motorists and cyclists occupy the same roadway area. Shared roadways are allowed on neighborhood streets and on rural roads and highways.

Shoulder Bikeway: A bikeway which accommodates cyclists on paved roadway shoulder.

Bike Lane: A section of roadway designated for exclusive bicycle use, at the same grade as the adjacent roadway.

Bike Path: A bike lane constructed entirely separate from the roadway.

Cycle Track: An exclusive “grade-separated” bike facility elevated above the street level using a low-profile curb and a distinctive pavement material.

Truck Freight Route System: a set of identified arterials, collectors and State facilities that support the efficient movement of goods throughout the County.

Functional Classification: the process by which streets and highways are grouped into classes, or systems, according to the character of traffic service that they are intended to provide. Functional classifications found in Clackamas County and typical characteristics of each classification follow:

Principal Arterials: (Freeway/Expressway and other designated Principal Arterials). Serves interregional and intraregional trips and carries heavy volume at high speed. Primarily Interstate Freeways and State Highways but also includes other roads designated as Principal Arterials. These roads make up the National Highway System.

Major Arterial: Carries local and through traffic to and from destinations outside local communities and connects cities and rural centers. Moderate to heavy volume; moderate to high speed.

Minor Arterial: Connects collectors to higher order roadways. Carries moderate volume at moderate speed.

Collector : Principal carrier within neighborhoods or single land use areas. Links neighborhoods with major activity centers, other neighborhoods, and arterials. Generally not for through traffic. Low to moderate volume; low to moderate speed.

Connector: Collects traffic from and distributes traffic to local streets within neighborhoods or industrial districts. Usually longer than local streets. Low traffic volumes and speeds. Primarily serves access and local circulation functions. Not for through traffic in urban areas.

Local: Provides access to abutting property and connects to higher order roads. New local roads should intersect collectors, connectors, or, if necessary, minor arterials. Not for through traffic.

Alley: May be public or private, to provide access to the rear of property. Alleys should intersect local roads or connectors. Not for through traffic

Level of service (LOS): A performance measure that represents quality of service of an intersection or roadway segment, measured on an A–F scale, with LOS A representing the best operating conditions from the traveler’s perspective and LOS F the worst.

Major Transit Stop: A transit center, major bus stop, or light rail stop, as identified on Comprehensive Plan Map 5-8a, *Transit, Urban*.

Major Transit Street: A street with a Frequent Service Bus Line, as identified on Comprehensive Plan Map 5-8a, *Transit, Urban*; existing or planned High Capacity Transit, as identified on Comprehensive Plan Map 5-8c, *High Capacity Transit (HCT) System Plan*; or both.

Mode (also “travel mode”): A particular form of travel, for example, walking, bicycling, traveling by automobile, or traveling by bus.

Multi-use Path: A paved path built for bicycle and pedestrian traffic that is physically separated from motor vehicle traffic, and can be either within the road right-of-way or within an independent right-of-way.

Pedestrian Facilities: Sidewalks, pedestrian pathways, or other facilities that are designed specifically for pedestrian use, as identified by functional classification in cross sections (Figures 5-1 through 5-3) or as determined appropriate by the County Planning Director and the County Road Official or County Engineer.

Trail: A hard- or soft-surfaced facility for pedestrians, bicyclists, or equestrians that is separate from vehicular traffic. Trails often go through natural areas and are designed to have a minimal impact on the natural environment.

Transportation Demand Management (TDM): Strategies to achieve efficiency in the transportation system by reducing demand.

Transportation Disadvantaged: Persons who, because of physical or mental disability, income status, or age, are unable to transport themselves or to purchase transportation and are, therefore, dependent upon others to obtain access to health care, employment, education, shopping, social activities, or other life-sustaining activities, or children who are handicapped or high-risk or at-risk

Road: A public or private way created to provide ingress to, or egress from, one or more lots, parcels, areas or tracts of land, or that provides for travel between places by vehicles. A private way created exclusively to provide ingress and egress to land in conjunction with a forest, farm or mining use is not a "road." The terms "street," "access drive" and "highway" for the purposes of this Plan shall be synonymous with the term "road."

Roadway: That portion of a road or alley that has been improved for vehicular and pedestrian traffic.

Rural: Outside the Portland Metropolitan Urban Growth Boundary and outside city limits

Urban: Inside the Portland Metropolitan Urban Growth Boundary

Volume-to-Capacity (v/c) Ratio: A volume-to-capacity ratio compares vehicle volumes (the roadway demand) with roadway supply (carrying capacity). Volume refers to the number of vehicles using a roadway at a specific time period (and length of time), while capacity is the road's ability to support that volume based on its design and number of lanes.

TABLES, FIGURES, AND MAPS

TABLE 5-1 (in text)	Metro 2040 Non-Drive Alone Targets
TABLE 5-2a (in text)	Capacity Performance Evaluation Measures/Urban
TABLE 5-2b (in text)	Capacity Performance Evaluation Measures/Rural
TABLE 5-3a	20 Year Capital Projects
TABLE 5-3b	Preferred Capital Projects
TABLE 5-3c	Long Term Capital Projects
TABLE 5-3d	Regional Capital Projects
FIGURE 5-1(a-f)	Typical Urban Roadway Cross Sections
FIGURE 5-2(a-f)	Typical Rural Roadway Cross Sections
FIGURE 5-3	Typical Multi-Use Path Cross Section
MAP 5-1	Scenic Roads
MAP 5-2a	Planned Bikeway Network/Urban
MAP 5-2b	Planned Bikeway Network/Rural
MAP 5-3	Essential Pedestrian Network
MAP 5-4a	Road Functional Classification/Urban
MAP 5-4b	Road Functional Classification/Rural
MAP 5-5	Metro Regional Street Design Classifications
MAP 5-6	Potentially Buildable Residential Sites > 5 Acres in UGB
MAP 5-7	Interchange Management Areas
MAP 5-8a	Transit/Urban
MAP 5-8b	Transit/Rural
MAP 5-8c	High Capacity Transit (HCT) System Plan
MAP 5-9a	Freight Routes/Urban
MAP 5-9b	Freight Routes/Rural
MAP 5-9c	Over-Dimensional Freight Routes/Urban
MAP 5-9d	Over-Dimensional Freight Routes/Rural
MAP 5-10	Airports
MAP 5-11(a-f)	Capital Improvement Plan

Table 5-3a 20-Year Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
1000	County-wide	ITS Plan Program	N/A	Develop a program to support the implementation of the County's ITS Plan and support the County's efforts to make improvements to traffic operations based on the ITS Plan. Deploy traffic responsive signal timing, ramp metering, traffic management equipment for better routing of traffic during incidents along the three key ODOT corridors - I-205, I-5, 99E. Install signal controller upgrades and update county ITS plan.
1001	County-wide	Transportation Safety Action Plan Program	N/A	Develop a program to support the implementation of the County's TSAP and support the County's efforts to make improvements based on the outcomes of the road safety audits and other safety studies.
1002	5-11a	122nd Ave	Eagle Glen Dr to Hubbard Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1003	5-11a	122nd Ave	Sunnyside Rd to Hubbard Rd	Fill gaps in pedestrian facilities, turn lanes at Mather Rd
1004	5-11a	122nd Ave	Sunnyside Rd to Timber Valley Dr	Add bikeways and turn lanes at major intersections
1005	5-11a	132nd Ave	Sunnyside Rd to OR 212	Add bikeways, pedestrian facilities, traffic calming and turn lanes at major intersections
1006	5-11a	142nd Ave	Sunnyside Rd to OR 212	Add bikeways and pedestrian facilities
1007	5-11a	72nd Ave Multi-Use Path Connection	Thompson Rd to Harmony Rd	Construct multi-use path
1008	5-11a	82nd Dr	OR 212 to Lawnfield Rd	Fill in bikeways and pedestrian facilities gaps
1009	5-11a	85th Ave	Causey Ave to Monterey Ave	Add sidewalks and bikeways
1010	5-11a	92nd Ave	Johnson Creek Blvd to Emmert View Ct	Fill gaps in pedestrian facilities
1011	5-11a	97th Ave / Mather Rd	Lawnfield Rd to Summers Ln	Add bikeways, pedestrian facilities and eastbound left turn lanes at Mather Rd / Summers Ln
1012	5-11a	Boyer Dr	OR 213 to Fuller Rd	Construct new 2 lane roadway with turn lanes at OR 213 and Fuller Rd, bikeways and pedestrian facilities; install flashing yellow arrow for left turns on northbound and southbound approaches at OR 213 intersection.
1013	5-11a	Boyer Dr / 85th Ave / Spencer Dr	OR 213 to I-205 bike path	Add bikeways
1014	5-11a	Causey Ave	Fuller Rd to I-205	Add bikeways and shared facility markings
1015	5-11a	Clackamas Industrial area multi-modal improvements	N/A	Complete bike and pedestrian connections within the Clackamas Industrial area on Jennifer St., Evelyn St., 106 th Ave, 122 nd Ave, 130 th Ave and 135 th Ave.
1016	5-11a	Clackamas Regional Center Bike/Pedestrian Corridors	N/A	Construct pedestrian and bike improvements as described in the Clackamas Regional Center Pedestrian / Bicycle Plan
1017	5-11a	Clackamas Town Center Alternative Performance Standards Study	Clackamas Regional Center	Develop alternative performance standards for the intersections within the Clackamas Regional Center.
1018	5-11a	Clackamas Town Center Circulation Plan	West of the Town Center	Study area circulation and create plan
1019	5-11a	Flavel Dr	Alberta Ave to County boundary	Add bikeways
1020	5-11a	Fuller Rd	Otty St to Johnson Creek Blvd	Add pedestrian facilities, turn lanes, on-street parking, central median and landscaping.

Table 5-3a 20-Year Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
1021	5-11a	Fuller Rd / King Rd Improvements	Fuller Rd / King Rd intersection	Restrict access to right-in/right-out only
1022	5-11a	Harmony Rd	OR 213 to OR 224	Construct bikeways and pedestrian facilities
1023	5-11a	Harmony Rd	Railroad Ave / Linwood Ave / Harmony Rd	Railroad crossing and intersection improvements based on further study of intersection operations including bikeways and pedestrian facilities to be undertake jointly by the City of Milwaukie and the County
1024	5-11a	Harmony Rd / Sunnyside Rd	Harmony Rd / Sunnyside Rd / OR 213 intersection	Extend queue storage on westbound approach and rebuild median; extend queue storage on eastbound approach and install median; convert to right-in-right-out accesses on frontage road.
1025	5-11a	I-205 Multi-Use Path Connection	Between Sunnyside Rd and Sunnybrook Blvd	Construct ADA compliant access to the commercial area from the I-205 Multi-Use Path
1026	5-11a	I-205 Multi-Use Path Gap	OR 224/OR 213 to OR 212	Study the I-205 multi-use path gap to create a plan for connection and path completion
1027	5-11a	Johnson Creek Blvd	55th Ave to I-205	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1028	5-11a	Johnson Creek Blvd	Johnson Creek Blvd near 79th Pl	Add signal to either Johnson Creek Blvd and 79th Pl or 80th Ave
1029	5-11a	Johnson Creek Blvd	55th Ave to Bell Ave	Widen to 3 lanes with bikeways and pedestrian facilities
1030	5-11a	Johnson Creek Blvd	Johnson Creek Blvd / OR 213 intersection	Extend westbound left-turn lane and rebuild median; install dual northbound and southbound left-turn lanes
1031	5-11a	Johnson Creek Blvd	OR 213 to 92nd Ave	Add pedestrian facilities, restripe for bikeways
1032	5-11a	Johnson Rd	SE Lake Rd to North Clackamas Park Trail	Identify bike/pedestrian connections to fill gaps along 82nd Ave
1033	5-11a	Lake Rd	Lake Rd / International Way intersection	Add northbound right-turn lane
1034	5-11a	Linwood Ave	Monroe St to Johnson Creek Blvd	Add pedestrian facilities
1035	5-11a	Monroe St	72nd Ave to Fuller Rd	Add bikeways, pedestrian facilities and traffic calming
1036	5-11a	Monroe St	Linwood Ave to 72nd Ave	Add bikeways and traffic calming
1037	5-11a	Monterey Ave	Stevens Rd to Bob Schumacher Rd	Construct collector roadway with bikeways and pedestrian facilities
1038	5-11a	Monterey Ave	OR 213 to Fuller Rd	Construct new 2 lane extension with pedestrian facilities and bikeways. Install flashing yellow arrow for left-turns on northbound and southbound approaches at OR 213 intersection.
1039	5-11a	North Clackamas Regional Park Trail	Linwood Ave to North Clackamas Park Complex	Construct multi-use path
1040	5-11a	North Clackamas Regional Parks Trail	OR 213 to Linwood Ave	Construct multi-use path
1041	5-11a	Otty Rd	OR 213 to 92nd Ave	Improve to minor arterial standard consistent with Fuller Road Station Plan; improve curb radius; add turn lanes, on-street parking, central median, landscaping, bikeways and pedestrian facilities
1042	5-11a	Otty St	Otty St / OR 213 / Otty Rd	Realign Otty St with Otty Rd at OR 213; install dual westbound left-turn lanes; install flashing yellow arrow for left-turns on northbound and southbound approaches.
1043	5-11a	Southwest Connector Multi-Use Path	North Clackamas Aquatic Center access road to 82nd Ave	Construct multi-use path

Table 5-3a 20-Year Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
1044	5-11a	Springwater Rd	OR 224 to Hattan Rd	Widen to 3 lanes with shoulders and pedestrian facilities; bridge remains two lanes
1045	5-11a	Sunnyside Rd	93rd Ave to 126th Ave	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1046	5-11a	Sunnyside Rd	Sunnyside Rd / Stevens Rd intersection	Intersection improvements, such as additional turn lanes, turn lane extensions, and/or signal timing modifications
1047	5-11a	Tolbert St Overcrossing	82nd Dr to Industrial Way	Construct new 2 lane overcrossing with bikeways and pedestrian facilities
1048	5-11b	282nd Ave	US 26 to OR 212	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1049	5-11b	Amisigger Rd / Kelso Rd	OR 224 to Kelso / Richey Rd	Add paved shoulders; turn lanes at Amisigger/OR 212 and Kelso/Richey; smooth curves.
1050	5-11b	Arrah Wana Blvd	US 26 to Fairway Ave	Add paved shoulders
1051	5-11b	Cazadero Multi-Use Trail	Community of Boring to City of Estacada	Construct multi-use path
1052	5-11b	Compton Rd	US 26 to 352nd Ave	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1053	5-11b	Dodge Park Rd Bridge	~192 feet south of Pipeline Rd	Replace bridge nearing the end of its useful life and include paved shoulders
1054	5-11b	Eagle Creek Rd	Firwood Rd to Duus Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1055	5-11b	Eagle Creek Rd	Currin Rd to Duus Rd	Remove horizontal curve, relocate intersection, add paved shoulders and turn lanes at major intersection; investigate speed zone south of Currin Rd
1056	5-11b	Fairway Ave	Arrah Wana Blvd to Salmon River Rd	Add paved shoulders
1057	5-11b	OR 211	OR 211 / Judd Rd intersection	Realign roadway
1058	5-11b	Richey Rd	Kelso Rd to OR 212	Add paved shoulders and left turn lane at Richey Rd and OR 212
1059	5-11b	Welches Rd	US 26 to Birdie Ln	Add paved shoulders; add pedestrian facilities in Welches rural center
1060	5-11c	Aldercrest Dr	Thiessen Rd to Oatfield Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1061	5-11c	Concord Rd	River Rd to Oatfield Rd	Fill gaps in pedestrian facilities
1062	5-11c	Concord Rd	River Rd to Oatfield Rd	Add turn lanes at major intersections
1063	5-11c	Courtney Ave	OR 99E to Oatfield Rd	Fill gaps in pedestrian facilities and bikeways
1064	5-11c	Courtney Ave	River Rd to OR 99E (McLoughlin Blvd)	Construct pedestrian facilities / complete gaps on the south side; add bikeways
1065	5-11c	Harold Ave	Concord Rd to Roethe Rd	Add pedestrian facilities and traffic calming
1066	5-11c	Hull Ave	Wilmot St to Tims View Ave	Fill gaps in pedestrian facilities
1067	5-11c	Jennings Ave	Webster Rd to OR 99E	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1068	5-11c	Jennings Ave	River Rd to Oatfield Rd	Widen to 2-lane urban minor arterial standard with bikeway and pedestrian facilities infill
1069	5-11c	Oak Grove Blvd	Oatfield Rd to River Rd	Fill gaps in pedestrian facilities and bikeways
1070	5-11c	Oatfield Rd	Jennings Ave to Lake Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1071	5-11c	Oatfield Rd	Oatfield Rd / Park Rd intersection	Install traffic signal and add turn lanes

Table 5-3a 20-Year Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
1072	5-11c	Oatfield Rd	Oatfield Rd / McNary Rd intersection	Add southbound and eastbound left-turn lanes
1073	5-11c	Park Ave	River Rd to OR 99E (McLoughlin Blvd)	Add pedestrian facilities
1074	5-11c	River Rd	Lark St to Courtney Ave	Add pedestrian facilities
1075	5-11c	River Rd	Oak Grove Blvd to Risley Ave	Fill gaps in bikeways and pedestrian facilities
1076	5-11c	School Pedways	Johnson Rd / Clackamas Rd / Webster Rd	Fill gaps in pedestrian facilities on Johnson Rd, Clackamas Rd and Webster Rd within 1/4 mile of schools
1077	5-11c	Thiessen Rd	Thiessen Rd / Aldercrest Rd intersection	Add turn lanes on Thiessen Rd; consider converting to two-way stop controlled
1078	5-11c	Torbark Rd	River Rd to Trolley Trail	Fill gaps in pedestrian facilities
1079	5-11d	65th Ave	65th Ave / Elligsen Rd / Stafford Rd intersection	Construct roundabout
1080	5-11d	Advance Rd	53rd Ave to 43rd Dr	Grade and sight distance improvements
1081	5-11d	Borland Rd	Tualatin city limits to Stafford Rd	Add paved shoulders and turn lanes at major intersections
1082	5-11d	Borland Rd	Stafford Rd to West Linn city limits	Add paved shoulders
1083	5-11d	Carman Dr	Lake Oswego city limits to Roosevelt Ave	Add bikeways and pedestrian facilities; analyze for turn lanes
1084	5-11d	Childs Rd	Sycamore Ave to 65th Ave	Transfer roadway to local jurisdiction
1085	5-11d	French Prairie Bridge	Willamette River near I-5	Construct a bridge consistent with the Connecting Clackamas Plan
1086	5-11d	Rosemont Rd	Stafford Rd to West Linn	Add paved shoulders and turn lanes at major intersections
1087	5-11d	Stafford Rd	I-205 to Boeckman Rd / Advance Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1088	5-11d	Stafford Rd	Rosemont Rd to I-205	Add paved shoulders and turn lanes at major intersections
1089	5-11d	Stafford Rd	Stafford Rd / Childs Rd intersection	Install traffic signal and southbound and northbound turn lanes or roundabout
1090	5-11d	Stafford Rd	Rosemont Rd to I-205	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1091	5-11d	Tonquin Trail	Willamette River through Wilsonville	Construct bike / pedestrian bridge consistent with the Connecting Clackamas Plan
1092	5-11d	Wilsonville Rd / Ladd Hill Rd	Wilsonville Rd / Ladd Hill Rd	Install Collision Countermeasure System
1093	5-11e	Airport Rd	Airport Rd / Miley Rd intersection	Install traffic signal
1094	5-11e	Barlow Rd	Barlow Rd / OR 99E intersection	Add dual left-turn lanes on southbound Barlow Rd
1095	5-11e	Beavercreek Rd	Lower Highland Rd to Butte Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1096	5-11e	Beavercreek Rd	Ferguson Rd to Spangler Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1097	5-11e	Beavercreek Rd	Henrici Rd to Yeoman Rd/Steiner Rd	Add paved shoulders and turn lanes at major intersections

Table 5-3a 20-Year Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
1098	5-11e	Beavercreek Rd	Beavercreek Rd / Leland Rd / Kamrath Rd intersection	Construct roundabout with additional analysis
1099	5-11e	Canby-Marquam Highway	Canby-Marquam Hwy / Lone Elder Rd intersection	Reconstruct intersection; install northbound left-turn lane and southbound right-turn lane
1100	5-11e	Canby-Marquam Highway	~1,900 ft south of Barnards Rd	Replace bridge nearing the end of its useful life with 2-lane structure including paved shoulders
1101	5-11e	Clarkes Four Corners Intersection	Beavercreek Rd / Unger Rd	Reconstruct intersection
1102	5-11e	Emerald Necklace Trail	To Canby Ferry	Extend Molalla Forest Rd to Locust St
1103	5-11e	Ferguson Multi-Use Path	Thayer Rd to Ferguson Rd	Multi-use path to connect Ferguson Rd to Thayer Rd
1104	5-11e	Fischers Mill Rd	Fischers Mill / Hattan Rd intersection	Install eastbound left-turn lane
1105	5-11e	Graves Rd/Passmore Rd/Mulino Rd/ OR 213	Graves Rd/Passmore Rd/Mulino Rd/ OR 213	Work in conjunction with the Molalla River School District, ODOT and community stake-holders to complete a safety audit to look at all options for the safe movement of Mulino Elementary School students in relation to the adjacent transportation system. Utilize the results from the audit to develop a list of projects and/or programs to maximize safety for all users.
1106	5-11e	Greater Arndt Rd/I-5/Canby Access Feasibility Study	Southwest County in the vicinity of Arndt Rd/I-5/Canby	Conduct an alternatives analysis and land use study to identify and consider roadway improvements to address access to I-5 within the Southwest County and address capacity deficiencies.
1107	5-11e	Hattan Rd	Hattan Rd / Gronlund Rd intersection	Install southbound right-turn lane
1108	5-11e	Henrici Rd	Beavercreek Rd to Ferguson Rd	Add paved shoulders and turn lanes at major intersections. Remove horizontal and vertical curves
1109	5-11e	Holly St	Territorial Rd to Canby Ferry	Add paved shoulders
1110	5-11e	Hult Rd	OR 211 to Unger Rd	Re-open and improve Hult Rd
1111	5-11e	Klang's Mill Bridge	~1,000 ft north of OR 211	Replace bridge nearing the end of its useful life
1112	5-11e	Lone Elder Rd Bridge	~5,800 feet east of Barlow Rd	Replace bridge (nearing the end of its useful life) and include paved shoulders
1113	5-11e	Maplelane Rd	Beavercreek Rd to Ferguson Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1114	5-11e	Meridian Rd	Meridian Rd / Whiskey Hill Rd intersection	Limit access/egress points to and from school on NE corner of intersection
1115	5-11e	Molalla Ave Flooding	Just south of city of Molalla	Construct bridge to resolve flooding issues
1116	5-11e	Mulino Rd	Mulino Rd / 13th Ave	Relocate intersection to south away from railroad trestle
1117	5-11e	OR 170	OR 99E to Macksburg Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1118	5-11e	Redland Rd	OR 213 to Hattan Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1119	5-11e	Redland Rd	Redland Rd / Springwater Rd intersection	Perform road safety audit or transportation safety review to identify appropriate safety improvements
1120	5-11e	Redland Rd	Redland Rd / Holly Rd intersection	Install traffic signal and westbound and northbound left-turn lanes or roundabout

Table 5-3a 20-Year Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
1121	5-11e	Redland Rd	Redland Rd / Ferguson Rd intersection	Construct roundabout
1122	5-11e	Ridge Rd	~1 miles north of Lower Highland Rd	Fix sinkhole
1123	5-11e	Springwater Rd	Springwater Rd / Clackamas River Dr intersection	Install signal at Clackamas River Dr
1124	5-11e	Springwater Rd	400 ft east of Hattan Rd	Construct bridge to accommodate paved shoulders
1125	5-11e	Springwater Rd	Hattan Rd to Bakers Ferry Rd	Add paved shoulders and turn lanes at major intersections
1126	5-11e	Township Rd	Central Point Rd to Canby City limit	Add paved shoulders and turn lanes at major intersections
1127	5-11e	Union Mills Rd	OR 213 to OR 211	Add turn lanes at major intersections
1128	5-11e	Union Mills Rd	OR 213 to OR 211	Construct a shoulder on the south side of the roadway
1129	5-11e	Upper Highland Rd	Beavercreek Rd to Lower Highland Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements

Table 5-3b Preferred Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
2000	5-11a	Bell Ave / Alberta St / 72nd Ave	King Rd to County line	Add bikeways and pedestrian facilities
2001	5-11a	Clatsop St / Luther Rd	72nd Ave to Fuller Rd	Add turn lanes and signals at OR 213 intersection; add bikeways, pedestrian facilities and traffic calming
2002	5-11a	Evelyn St	OR 224 to Jennifer St	Add bikeways and pedestrian facilities
2003	5-11a	Evelyn St / Mangan Dr	Jennifer St to Water Ave	Add bikeways
2004	5-11a	Hubbard Rd	122nd Ave to 132nd Ave	Fill gaps in pedestrian facilities
2005	5-11a	Jennifer St	82nd Dr to 135th Ave	Add pedestrian facilities
2006	5-11a	Lake Rd	Milwaukie City limits east to OR 224	Fill gaps in pedestrian facilities
2007	5-11a	Linwood Ave	Linwood Ave / Monroe St intersection	Add curbs/sidewalks, improve horizontal alignments
2008	5-11a	Linwood Ave	Queen Rd to Johnson Creek Blvd	Add bikeways
2009	5-11a	Mather Rd	Summers Ln Rd to 122nd Ave	Add bikeways, pedestrian facilities and eastbound left turn lanes at Mather Rd / 122nd Ave
2010	5-11a	Monroe St / 72nd Ave / Thompson Rd	Linwood Ave to Fuller Rd	Add pedestrian facilities
2011	5-11a	Scouters Mountain / Mt Scott Loop Trail	Loop trail through Happy Valley, Damascus, Clackamas County and Portland	Construct multi-use path consistent with the Connecting Clackamas Plan
2012	5-11a	Stevens Rd / Stevens Way	Causey Ave to Idleman Rd	Add pedways and optional traffic calming
2013	5-11a	Strawberry Ln	Strawberry Ln / 82nd Dr intersection	Install traffic signal and eastbound turn lane
2014	5-11a	Sunnybrook Blvd	Sunnybrook Blvd / 82nd Ave intersection	Add dual southbound left-turn lanes, extend queue storage for southbound lefts and westbound lefts
2015	5-11a	Sunnyside Rd	OR 213 to 97th Ave	Modified boulevard treatment including lane redesign, medians, beautification, curb extensions, reconstructed sidewalks, landscaping, south side bikeways. Consider flashing yellow arrow for left-turns at signalized intersections.
2016	5-11b	282nd Ave	282nd / Haley Rd intersection	Install traffic signal and reduce speed limit on 282nd
2017	5-11b	362nd Ave	Skogan Rd to OR 211	Add paved shoulders
2018	5-11b	Eagle Creek Rd	OR 211 to Duus Rd	Add paved shoulders
2019	5-11b	Firwood Rd	Wildcat Mountain Dr to US 26	Add paved shoulders and turn lanes at major intersections.
2020	5-11c	Clackamas Rd	Johnson Rd and Webster Rd	Fill gaps in bikeways and pedestrian facilities
2021	5-11c	Jennings Ave	Oatfield Rd to Webster Rd	Widen to 2-lane urban minor arterial standard with bikeway and pedestrian facilities infill
2022	5-11c	Lake Oswego to Milwaukie Bridge	Between Sellwood and Oregon City	Construct bike/pedestrian crossing over the Willamette River
2023	5-11c	Roots Rd	Webster Rd to McKinley Rd	Add pedestrian facilities
2024	5-11c	Thiessen Rd	Oatfield Rd to Webster Rd	Add bikeways and pedestrian facilities
2025	5-11c	Webster Rd	OR 224 to Gladstone	Fill gaps in bikeways and pedestrian facilities

Table 5-3b Preferred Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
2026	5-11d	Advance Rd	~2,900 ft west of Mountain Rd	Realign roadway and grade improvements
2027	5-11d	Advance Rd	65th Ave to Mountain Rd	Add paved shoulders
2028	5-11d	Stafford Rd / 65th Ave	I-205 to Boeckman Rd / Advance Rd	Add paved shoulders and turn lanes at major intersections
2029	5-11e	Arndt Rd Extension	Barlow to OR 99E	Construct new 2 or 3 lane roadway
2030	5-11e	Barlow Rd	Knights Bridge Rd to OR 99E	Add paved shoulders
2031	5-11e	Beavercreek Multi-Use Path	Loder Rd to Ferguson Rd	Construct multi-use path consistent with the Beavercreek Road Concept Plan
2032	5-11e	Boones Ferry Rd	Boones Ferry Rd / Butteville Rd intersection	Remove bank, remove/decrease horizontal curve
2033	5-11e	Canby - Molalla Railroad Trail	City of Canby to City of Molalla	Construct multi-use path
2034	5-11e	Dryland Rd	Macksburg Rd S to Macksburg Rd N	Realign to form one intersection at Dryland Rd
2035	5-11e	Hattan Rd	Fischers Mill Rd to Gronlund Rd	Add paved shoulders and turn lanes at major intersections
2036	5-11e	Henrici Rd	OR 213 to Beavercreek Rd	Add paved shoulders and turn lanes at major intersections
2037	5-11e	Henrici Rd	Ferguson Rd to Redland Rd	Add paved shoulders and turn lanes at major intersections. Remove horizontal and vertical curves
2038	5-11e	Molalla Forest Rd	City of Canby to City of Molalla	Pave to provide bicycle access
2039	5-11e	Mulino Rd (13th St segment)	Canby city limits to OR 213	Add paved shoulders and turn lanes at major intersections
2040	5-11e	Newell Creek Trail / Oregon City Loop Trail	Loop around the perimeter of Oregon City	Construct multi-use path consistent with the Connecting Clackamas Plan
2041	5-11e	Redland Rd	Redland Rd / Bradley Rd intersection	Install eastbound left-turn lane
2042	5-11e	Redland Rd	Redland Rd / Fischers Mill Rd / Henrici Rd intersection	Install eastbound left-turn, eastbound right-turn and westbound right-turn lanes at Henrici Rd
2043	5-11e	Springwater Rd	Springwater Rd / Bakers Ferry Rd intersection	Install southbound left-turn lane; realign intersection to fix skew

Table 5-3c Long Term Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
3000	5-11a	106th Ave	OR 212 to Jennifer St	Add bikeways and pedestrian facilities
3001	5-11a	152nd Ave Phase 2	Sunnyside Rd to OR 212	Add bikeways, pedestrian facilities and turn lanes at major intersections
3002	5-11a	162nd Ave	Sager Rd north to County line	Add bikeways, pedestrian facilities, turn lanes at major intersections
3003	5-11a	172nd Ave Bridge	~140 feet south of Troge Rd	Replace bridge nearing the end of its useful life
3004	5-11a	82nd Dr	OR 212 to Gladstone	Widen to 5 lane with bikeways and pedestrian facilities
3005	5-11a	84th Ave	Sunnyside Rd to Sunnybrook Blvd	Fill in bikeways and pedestrian facilities gaps
3006	5-11a	93rd Ave	Sunnyside Rd to Sunnybrook Blvd	Add bikeways
3007	5-11a	Cheldelin Rd	Foster Rd to 190th Dr	Add bikeways and pedestrian facilities
3008	5-11a	Cheldelin Rd (Clatsop St extension)	172nd Ave to Foster Rd	Construct new two lane roadway with bikeways and pedestrian facilities
3009	5-11a	Cornwell Ave	OR 213 to Fuller Rd	Add pedestrian facilities; connect to I-205 Multi-Use Path
3010	5-11a	Fuller Rd	Otty Rd to King Rd / OR 213	Construct new 2 lane extension with pedestrian facilities and bikeways
3011	5-11a	Fuller Rd	Johnson Creek Blvd to County line	Add pedestrian facilities
3012	5-11a	Hillcrest St	92nd Ave to Stevens Rd	Add pedestrian facilities
3013	5-11a	I-205 Pedestrian / Bike Overpass	Between Causey Ave and Sunnyside Rd	Construct a bike / pedestrian crossing over I-205 to connect transit services, businesses and residents
3014	5-11a	Idleman Rd	92nd Ave to Westview Ct	Fill gaps in bikeways and pedestrian facilities
3015	5-11a	Jennifer St	106th Ave to 130th Ave	Add bikeways
3016	5-11a	Johnson Creek Blvd	Bell Ave to OR 213	Widen to 3 lanes from Bell Ave to 76th Ave and 5 lanes from 76th Ave to 82nd Ave ; add bikeways and pedestrian facilities
3017	5-11a	King Rd	Milwaukie City Limits to 82nd Ave	Fill gaps in pedestrian facilities
3018	5-11a	Lake Rd	OR 224 west to Milwaukie city limits	Add pedestrian facilities and turn lanes at major intersections
3019	5-11a	Lake Rd	Johnson Rd to Webster Rd	Fill gaps in pedestrian facilities and bikeways
3020	5-11a	Linwood Ave Bridge over Johnson Creek	Bridge	Construct bridge with bike lanes and sidewalks
3021	5-11a	Luther Rd Bridge	Bridge crossing Johnson Creek	Replace bridge
3022	5-11a	Mather Rd	Mather Rd / 122nd Ave intersection	Install traffic signal or compact roundabout
3023	5-11a	Mather Rd	122nd Ave to 132nd Ave	Construct new 2 lane roadway with pedestrian facilities and bikeways
3024	5-11a	Mather Rd	Industrial Way to 98th Ave	Maintain as pedestrian facilities and bikeway. Construct undercrossing at Sunrise Expressway.
3025	5-11a	Michael Dr	72nd Ave to Fuller Ave	Fill gaps in pedestrian facilities
3026	5-11a	Phillips Creek Multi-Use Path	Causey Ave to North Clackamas Regional Parks Trail	Construct multi-use path
3027	5-11a	Sunnyside Rd Adaptive Signal Timing	OR 213 to 172nd Ave	Add adaptive timing to traffic signals
3028	5-11a	Valley View Terrace	Sunnyside Rd to Otty Rd	Add bikeways and pedestrian facilities

Table 5-3c Long Term Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
3029	5-11a	West 82nd Ave Parallel Road	King Rd to Luther Rd	Construct collector road parallel to OR 213 with bikeways and pedestrian facilities
3030	5-11b	282nd Ave	282nd Ave / OR 212 intersection	Add second right-turn lane on 282nd Ave and additional intersection improvements as needed
3031	5-11b	282nd Ave	OR 212 to Multnomah County line	Add paved shoulders
3032	5-11b	352nd Ave / Dunn Rd	Bluff Rd to Bluff Rd	Add paved shoulders
3033	5-11b	362nd Dr	Colorado Rd to Dubarko Rd	Remove or decrease horizontal and vertical curves
3034	5-11b	362nd Dr	362nd Ave / Deming Rd intersection	Remove or decrease vertical curve, relocate intersection
3035	5-11b	Barlow Trail Rd/ Lolo Pass Rd	Between communities of Timberline, Welches and Zig Zag	Add paved shoulders
3036	5-11b	Bluff Rd	Kelso Rd to County line	Add paved shoulders
3037	5-11b	Bull Run Rd	Ten Eyck Rd to Multnomah County line	Add paved shoulders and turn lanes at major intersections.
3038	5-11b	Bull Run Truss	Bull Run truss between Waterworks Rd and Bowman Rd	Replace bridge nearing the end of its useful life
3039	5-11b	Coalman Rd	City of Sandy to US 26	Add paved shoulders
3040	5-11b	Compton Rd	US 26 to 352nd Ave	Remove vertical curve near Orient Dr and relocate intersection; add paved shoulders
3041	5-11b	Coupland Rd	Estacada City limits to Divers Rd	Add paved shoulders and turn lanes at major intersections
3042	5-11b	Eagle Creek Rd	Keegan Rd to Currin Rd	Realign Eagle Creek Rd to remove or decrease downgrade
3043	5-11b	Firwood Rd	Firwood Rd / Trubel Rd intersection	Realign Trubel Rd to remove or decrease downgrade
3044	5-11b	Hayden Rd	Springwater Rd to OR 211	Add paved shoulders
3045	5-11b	Howlett Rd	OR 211 to Wildcat Mountain Dr	Add paved shoulders
3046	5-11b	Kelso Rd	Richey Rd to Orient Dr	Add paved shoulders
3047	5-11b	Kelso Rd	Orient Dr to Sandy Urban Growth Boundary	Remove vertical curve, relocate intersection, add paved shoulders and turn lanes at major intersections; investigate speed zone
3048	5-11b	Lolo Pass Rd	US 26 to Barlow Trail Rd	Safety analysis; add paved shoulders
3049	5-11b	Mt Hood Aerial Transportation Link	Between Ski Bowl, Government Camp Village and Timberline Lodge	Aerial transportation link
3050	5-11b	Orient Dr	US 26 north to County line	Add paved shoulders
3051	5-11b	Porter Rd Bridge over Delph Creek	~100 ft east of Wilcox Rd	Replace bridge
3052	5-11b	Salmon River Rd	US 26 to Welches Rd	Add paved shoulders
3053	5-11b	Springwater Rd	Hayden Rd to OR 211	Add paved shoulders
3054	5-11b	Ten Eyck Rd	Lusted Rd to US 26	Remove vertical curve, relocate intersection, add paved shoulders, turn lanes at major intersections; investigate speed zone

Table 5-3c Long Term Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
3055	5-11b	Tickle Creek Trail	Springwater Corridor to Sandy city limits	Construct multi-use path consistent with the Connecting Clackamas Plan
3056	5-11b	Welches Rd	Birdie Ln to Salmon River Rd	Add paved shoulders
3057	5-11b	Wildcat Mountain Dr	OR 224 to Firwood Rd	Add paved shoulders
3058	5-11c	Aldercrest Dr	Thiessen Rd to Oatfield Rd	Add pedestrian facilities to one side of the road and bikeways
3059	5-11c	Clackamas Rd	Clackamas Rd / I-205 interchange	Construct bike/pedestrian bridge over I-205
3060	5-11c	Hill Rd	Oatfield Rd to Thiessen Rd	Add bikeways and pedestrian facilities
3061	5-11c	Johnson Rd / McKinley Rd	OR 224 to I-205 multi-use path	Bikeway and pedestrian facilities infill
3062	5-11c	McNary Rd / Mabel Ave	Oatfield Rd to Webster Rd	Add bikeways and pedestrian facilities
3063	5-11c	Naef Rd	Oatfield Rd to River Rd	Add pedestrian facilities
3064	5-11c	Oatfield Rd	Oatfield Rd / Hill Rd intersection	Add left-turn lanes, install signal if warranted
3065	5-11c	Oatfield Rd	Milwaukie city limits to Gladstone city limits	Fill gaps in pedestrian facilities and bikeways
3066	5-11c	Oatfield Ridge Connection	Between Jennings Ave and Thiessen Ave over Oatfield Ridge	Construct multi-use path
3067	5-11c	Oetkin Way and Naef Rd	Oatfield Rd and Wallace Rd	Add bikeways
3068	5-11c	Portland Ave	Jennings Ave to Hull Ave	Fill gaps in pedestrian facilities
3069	5-11c	Risley Ave	Arista Dr to Hager Rd	Fill gaps in pedestrian facilities
3070	5-11c	River Rd	Courtney Ave to Oak Grove Blvd	Add pedestrian facilities
3071	5-11c	River Rd	Risley Ave to Rinearson Rd	Add pedestrian facilities
3072	5-11c	Roethe Rd	River Rd to OR 99E (McLoughlin Blvd)	Add bikeways, pedestrian facilities and traffic calming
3073	5-11c	Rusk Rd	OR 224 South to Aldercrest Rd	Add pedestrian facilities on one side of the roadway and bikeways
3074	5-11c	Strawberry Ln	Webster Rd to 82nd Dr	Add pedestrian facilities and fill bikeway gaps
3075	5-11c	Thiessen Rd	Thiessen Rd / Hill Rd intersection	Add right-turn lane on Thiessen Rd; consider converting to two-way stop controlled or installing roundabout
3076	5-11c	View Acres Rd	Oatfield Rd to Hill Rd	Add pedestrian facilities and traffic calming
3077	5-11c	Webster Rd	Webster Rd / Jennings Ave and Webster Rd / Roots Rd intersections	Construct traffic signals, turn lanes
3078	5-11c	Webster Rd	Webster Rd / Strawberry Ln intersection	Add signal; construct southbound and westbound left-turn lane
3079	5-11d	65th Ave	Stafford Rd to Tualatin city limits	Add paved shoulders
3080	5-11d	Baker Rd	Tooez Rd to County line	Add paved shoulders
3081	5-11d	Bell Rd	Ladd Hill Rd to Wilsonville Rd	Add paved shoulders

Table 5-3c Long Term Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
3082	5-11d	Bonita Rd	Carman Dr to I-5	Add bikeways and pedestrian facilities
3083	5-11d	Childs Rd	Stafford Rd to Lake Oswego city limits	Add pedestrian facilities, bikeways and turn lanes at major intersections
3084	5-11d	Graham's Ferry Rd	County line to Westfall Rd	Add paved shoulders
3085	5-11d	Graham's Ferry Rd	Wilsonville Rd to Wilsonville city limits	Add paved shoulders
3086	5-11d	Hoffman Rd / Peach Cove Rd / Riverwood Rd	Mountain Rd to Tualatin River	Add paved shoulders
3087	5-11d	Homesteader Rd	Stafford Rd to Mountain Rd	Add paved shoulders
3088	5-11d	Johnson Rd	Stafford Rd to West Linn city limits	Add paved shoulders and turn lanes at major intersections
3089	5-11d	Ladd Hill Rd	Wilsonville Rd to Washington County line	Add paved shoulders and turn lanes at major intersections
3090	5-11d	Mountain Rd	Stafford Rd to Hoffman Rd	Add paved shoulders
3091	5-11d	Petes Mountain Rd	West Linn city limits to Hoffman Rd	Add paved shoulders and turn lanes at major intersections
3092	5-11d	Pleasant Hill Rd / McConnell Rd / Tooze Rd	Ladd Hill Rd to Westfall Rd	Add paved shoulders
3093	5-11d	Schaeffer Rd	Mountain Rd to Petes Mountain Rd	Add paved shoulders
3094	5-11d	Schatz Rd / 55th Ave / Meridian Way	65th Ave to Stafford Rd	Add paved shoulders
3095	5-11d	Tualatin / Lake Oswego Pedestrian and Bicycle Bridge	Tualatin River Bridge	Construct bike / pedestrian bridge consistent with the Connecting Clackamas Plan
3096	5-11d	Wilsonville Rd	Wilsonville Rd / Bell Rd intersection	Realign roadway and grade improvements
3097	5-11d	Wilsonville Rd	Wilsonville Rd / Edminston Rd intersection	Remove bank, remove horizontal curve, relocate intersection
3098	5-11d	Wilsonville Rd Bridge	~300 feet south of Bell Rd	Replace bridge nearing the end of its useful life
3099	5-11d	Wisteria Rd / Woodbine Rd	Rosemont Rd to Johnson Rd	Add paved shoulders
3100	5-11e	Airport Rd	Arndt Rd to Miley Rd	Add turn lanes at major intersections
3101	5-11e	Bakers Ferry Rd	Springwater Rd to OR 224	Add paved shoulders and turn lanes at major intersections; remove horizontal curve and relocate intersection from Eaden Rd to OR 224
3102	5-11e	Barnards Rd	Meridian Rd to Canby-Marquam Hwy	Add paved shoulders
3103	5-11e	Barnards Rd	Needy Rd to Stuve Rd	Reconstruct bridge and widen to 36 feet
3104	5-11e	Beavercreek Rd	Yeoman Rd/Steiner Rd to OR 211	Add paved shoulders
3105	5-11e	Bradley Rd	Redland Rd to Holcomb Blvd	Add turn lanes at major intersections
3106	5-11e	Bradley Rd	Gronlund Rd to Redland Rd	Add paved shoulders
3107	5-11e	Buckner Creek Rd	Gard Rd to Cochell Rd	Add paved shoulders

Table 5-3c Long Term Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
3108	5-11e	Canby-Marquam Highway	OR 170 / Macksburg Rd intersection	Reconstruct intersection; install southbound left-turn lane and northbound right-turn lane
3109	5-11e	Canby-Marquam Highway	City of Canby to OR 211	Add paved shoulders
3110	5-11e	Carus Rd	Central Point Rd to Beaver Creek Rd	Add paved shoulders
3111	5-11e	Casto Rd	Spangler Rd to Central Point Rd	Add paved shoulders and turn lanes at major intersections
3112	5-11e	Central Point Rd	Parrish Rd to Mulino Rd	Add paved shoulders; smooth curves
3113	5-11e	Clackamas River Dr	Oregon City limits to Springwater Rd	Add paved shoulders and turn lanes at Springwater Rd and Forsythe Rd
3114	5-11e	Fellows Rd	Redland Rd to Lower Highland Rd	Add paved shoulders and turn lanes at major intersections
3115	5-11e	Ferguson Rd	Beaver Creek Rd and Henrici Rd	Reduce the speed limit and install traffic calming
3116	5-11e	Fischers Mill Rd	Redland Rd to Springwater Rd	Add paved shoulders
3117	5-11e	Forsythe Rd	Oregon City line to Bradley Rd	Add paved shoulders
3118	5-11e	Forsythe Rd	Oregon City limit to Bradley Rd	Add center turn lane and paved shoulders
3119	5-11e	Forsythe Rd	Forsythe Rd / Victory Rd intersection	Realign, widen Victory Rd; remove or decrease curves along Forsythe Rd; relocate intersection
3120	5-11e	Gard Rd	~100 ft south of Old Clarke Rd	Construct bridge to accommodate paved shoulders
3121	5-11e	Gronlund Rd / Hattan Rd	Bradley Rd to Springwater Rd	Add paved shoulders and turn lanes at major intersections
3122	5-11e	Henrici Rd	Between Driftwood Dr and Shore Vista Dr	Widen bridge to accommodate paved shoulders
3123	5-11e	Holcomb Blvd	Edenwild Ln to Bradley Rd	Add paved shoulders and turn lanes at Holcomb Blvd / Bradley Rd
3124	5-11e	Kamrath Rd	Carus Rd to Spangler Rd	Safety analysis at Carus Rd, add paved shoulders, remove or decrease horizontal curves north of Spangler Rd
3125	5-11e	Knights Bridge Rd Bridge	~3,200 feet east of Barlow Rd	Replace bridge (nearing the end of its useful life)
3126	5-11e	Leland Rd	Oregon City line to Beaver Creek Rd	Add paved shoulders
3127	5-11e	Leland Rd	~1,000 ft north of Warnock Rd	Construct bridge to accommodate paved shoulders
3128	5-11e	Lone Elder Rd	County line to Canby-Marquam Hwy	Add paved shoulders
3129	5-11e	Lower Highland Rd	Beaver Creek Rd to Fellows Rd	Add paved shoulders and turn lanes at major intersections
3130	5-11e	Macksburg Rd	Canby Marquam Hwy to OR 213	Add paved shoulders and turn lanes at major intersections
3131	5-11e	Maplelane Rd	~1,800 ft west of Walker Rd	Add paved shoulders
3132	5-11e	Maplelane Rd	Oregon City Urban Growth Boundary to Ferguson Rd	Add paved shoulders
3133	5-11e	Mattoon Rd	Fischers Mill Rd to Redland Rd	Add paved shoulders and turn lanes at major intersections; remove vertical curves, remove horizontal curves north of Redland Rd
3134	5-11e	Meridian Rd	Lone Elder Rd to OR 211	Add paved shoulders

Table 5-3c Long Term Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
3135	5-11e	Meridian Rd	Elliott Prairie Rd to Barlow Rd	Add paved shoulders; remove or decrease horizontal and vertical curves
3136	5-11e	Miley Rd	Airport Rd to Eilers Rd	Add paved shoulders
3137	5-11e	Molalla Ave	OR 213 to Molalla City limits	Add paved shoulders
3138	5-11e	New Era Rd / Haines Rd	OR 99E to Leland Rd	Add paved shoulders
3139	5-11e	Redland Rd	Fischers Mill Rd to Springwater Rd	Add paved shoulders
3140	5-11e	Redland Rd	~900 ft west of Holly Ln	Widen to include shoulders and bikeways
3141	5-11e	Redland Rd	~400 ft west of Holly Ln	Widen to include shoulders and bikeways
3142	5-11e	Redland Rd	Henrici Rd to Oregon City limit	Add paved shoulders
3143	5-11e	Redland Rd	Henrici Rd to Springwater Rd	Add paved shoulders and turn lanes at major intersections
3144	5-11e	Ridge Rd	Lower Highland Rd to Redland Rd	Add paved shoulders
3145	5-11e	Rock Creek (Kropf Rd) Bridge	~3,500 ft north of Gibson Rd	Replace bridge
3146	5-11e	S Killdeer Rd	Ferguson Road and Yeoman Road	Extend S Killdeer Rd to connect with S. Ivel Rd. and provide bike/pedestrian access
3147	5-11e	South End Rd	Oregon City limits to OR 99E	Smooth curves; add paved shoulders
3148	5-11e	Spangler Rd	Casto Rd to Beaver Creek Rd	Add paved shoulders and turn lanes at major intersections
3149	5-11e	Springwater Rd	Bakers Ferry Rd to Hayden Rd	Add paved shoulders and turn lanes at major intersections
3150	5-11e	Thayer Rd/Ferguson Rd	Oregon City line to Redland Rd	Add paved shoulders
3151	5-11e	Toliver Rd	Dryland Rd to Molalla city Limits	Add paved shoulders
3152	5-11e	Unger Rd	Beaver Creek Rd to OR 211	Add paved shoulders and turn lanes at major intersections
3153	5-11e	Union Hall Rd	Central Point Rd to El Dorado Rd	Add paved shoulders
3154	5-11f	Bird Rd	Groshong Rd to Wilhoit Rd	Add paved shoulders and turn lanes at major intersections
3155	5-11f	Blair Rd	Groshong Rd to Maple Grove Rd	Add paved shoulders and turn lanes at major intersections
3156	5-11f	Callahan Rd S (beginning on Ramsby Rd)	Dickey Prairie Rd to Fernwood Rd	Add paved shoulders and turn lanes at major intersections
3157	5-11f	Dhooghe Rd	OR 211 to Fernwood Rd	Add paved shoulders and turn lanes at major intersections
3158	5-11f	Fernwood Rd	Dhooghe Rd to Callahan Rd	Add paved shoulders and turn lanes at major intersections
3159	5-11f	Gray's Hill Rd	Green Mountain Rd to OR 211	Add paved shoulders
3160	5-11f	Maple Grove Rd	Nowlens Bridge Rd to Sawtell Rd	Add paved shoulders and turn lanes at major intersections
3161	5-11f	Nowlens Bridge Rd	OR 213 to Maple Grove Rd	Add paved shoulders and turn lanes at major intersections

Table 5-3c Long Term Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description
3162	5-11f	Sawtell Rd	Maple Grove Rd to Wilhoit Rd	Add paved shoulders and turn lanes at major intersections
3163	5-11f	Wildcat Rd	Wilhoit Rd to OR 213	Add paved shoulders and turn lanes at major intersections
3164	5-11f	Wright Rd	OR 211 to Callahan Rd	Add paved shoulders

Table 5-3d Regional Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description	Priority
4000	County-wide	TSP Refinement	State facility locations applicable where mobility target is not met in 2035	TSP Refinement to develop alternative mobility targets for state facilities consistent with Oregon Highway Plan (OHP) 1F3.	High
4001	5-11a	I-205 / Sunnyside Road interchange	I-205 / Sunnyside Road interchange	Add dual northbound right-turns; install bike signal.	High
4002	5-11a	OR 212	OR 212 / 172nd Ave intersection	Add second eastbound left-turn lane	High
4003	5-11a	OR 212	SE 162nd to Anderson Rd	Add bikeways, pedestrian facilities ways, and landscape pedestrian facilities buffer; widen to 6 lanes within Happy Valley; add center turn lane within Damascus	High
4004	5-11a	OR 213	Sunnybrook Blvd to Portland City Limits	Extend fiberoptic communications, CCTV at key intersections and adaptive signal timing	High
4005	5-11a	OR 224	OR 224 / Lake Rd / Webster Rd intersection	Add turn-lanes, including second left-turn lane on westbound OR 224, second left-turn lane and right-turn lane on northbound SE Webster Rd, and second left-turn lane on southbound SE Lake Rd	High
4006	5-11a	OR 224	OR 224 / Johnson Rd intersection	Add second left-turn lane on westbound OR 224	High
4007	5-11a	OR 224	OR 224 / Hubbard Rd / 135th Ave intersection	Add intersection improvements, including right-turn lanes	High
4008	5-11a	OR 224	Springwater Rd / OR 224 intersection	Add signal and turn lanes on all approaches	High
4009	5-11a	OR 224	Rock Creek Junction to Midway St	Widen to four lanes; add bikeways.	High
4010	5-11a	Sunrise Project - Preliminary Engineering	Webster Rd/ OR 224 to 172nd Ave / OR 212	Preliminary engineering from Webster Rd to 172nd Ave	High
4011	5-11a	Sunrise Project - Right-of-Way	Webster Rd/ OR 224 to 172nd Ave / OR 212	Acquire right-of-way to accommodate 6 lane expressway plus auxiliary lanes	High
4012	5-11a	SunriseProject - Multi-use Path	122nd to Rock Creek Junction	Construct multi-use path from 122nd to Rock Creek Junction parallel to the Sunrise project consistent with FEIS.	High
4013	5-11b	OR 224	OR 224 /232nd Ave Intersection	Install traffic signal or roundabout	High
4014	5-11b	OR 224	Eaglecreek Rd / OR 224 intersection	Install signal	High
4015	5-11c	OR 99E	Milwaukie city limit to Gladstone city limit	Add bikeways, pedestrian facilities ways, median enhancements, crosswalks and pedestrian facilities refuges	High
4016	5-11d	I-205	SW Stafford Rd to OR 99E	Work with ODOT, Metro, Oregon City, West Linn and any other effect jurisdiction to analyze and develop a solution to the transportation bottle neck on I-205 between Oregon City and I-205 / Stafford Road Interchange. Possible solutions include widening to 3-lanes in each direction.	High
4017	5-11e	I-205	Willamette River to West Linn city limit	Add southbound truck climbing lane	High
4018	5-11e	I-205	I-205 Corridor	Corridor-wide operational improvements	High
4019	5-11e	OR 211	Beavercreek Rd, Union Hall Rd to Dhooche Rd	Widen to include shoulders, bikeways, add passing lanes where needed and turn lanes at major intersections	High
4020	5-11e	OR 213	OR 213 / Spangler Rd intersection	Install traffic signal to replace existing two-way stop	High
4021	5-11e	OR 213	OR 213 / Henrici Rd intersection	Install traffic signal or roundabout and additional intersection improvements as needed	High

Table 5-3d Regional Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description	Priority
4022	5-11e	OR 213	OR 213 / Leland Rd intersection	Add northbound through auxiliary lane	High
4023	5-11e	OR 213	Leland Rd / Union Hall Rd intersection	Add southbound auxiliary lane	High
4024	5-11e	OR 213	Mulino to Molalla	Perform road safety audit or transportation safety review to identify appropriate safety improvements	High
4025	5-11e	OR 99E	OR 99E / Barlow Rd intersection	Add left-turn lane on southbound Barlow Rd - To widen Barlow Rd to add a southbound left turn lane on the north approach would need to modify the existing railroad crossing warning system	High
4026	5-11a	I-205 / Johnson Creek Blvd interchange	I-205 / Johnson Creek Blvd interchange	Add loop ramp and northbound on-ramp; realign southbound off-ramp and install dual right-turn lanes	Medium
4027	5-11a	I-205 / OR 212/224 Interchange	In vicinity of Roots Rd and McKinley Ave	Connect bikeways	Medium
4028	5-11a	OR 212	Rock Creek Junction to 172nd	Construct climbing lane	Medium
4029	5-11a	OR 212	OR 212 / SE 162nd Ave intersection	Add left-turn pockets and traffic signal	Medium
4030	5-11a	OR 213	Sunnyside Rd to Sunnyside Rd	Widen to 7 lanes with boulevard treatments	Medium
4031	5-11a	OR 213	OR 213 / Harmony Rd / Sunnyside Rd intersection	Add bikeways, pedestrian facilities ways, dual northbound and southbound left-turn lanes, and lighting; convert driveways north of intersection to right-in / right-out	Medium
4032	5-11a	OR 224	OR 224 / Rusk Rd off-ramp	Extend right-turn lane on OR 224	Medium
4033	5-11a	OR 224	Milwaukie city limits to I-205	Construct multi-use path as parallel route to OR 224	Medium
4034	5-11a	OR 224	Lake Rd / Johnson Rd / Pheasant Ct	Realign Lake Rd / Johnson Rd to provide southern OR 224 access via Pheasant Ct; add turn lanes at OR 224 / Pheasant Ct intersection; close access at Lake / Webster south of OR 224	Medium
4035	5-11a	OR 99E	OR 99E / Jennings Ave intersection	Determine safe connection of Trolley Trail at OR 99E / Jennings Ave intersection	Medium
4036	5-11a	Sunrise Project	I-205 to 172nd Ave	Construct improvements to 172nd	Medium
4037	5-11b	OR 211	Hayden Rd to OR 224	Widen to rural arterial standard with shoulders, bikeways and turn lanes at major intersections	Medium
4038	5-11b	US 26	Govt. Camp Loop W to OR 35	Implement Finding of Mt Hood Multimodal Study including phased safety improvements	Medium
4039	5-11b	US 26	OR 35 Junction to Wasco County line	Widen roadway to include bikeways /shoulders, add passing lanes where needed and turn lanes at major intersections	Medium
4040	5-11e	OR 211	OR 170 (Canby-Marquam Hwy) / OR 211 intersection	Install eastbound and westbound left-turn lanes, and eastbound right-turn lane; remove or decrease horizontal curve	Medium
4041	5-11e	OR 211	Marion County line to OR 170 (Canby-Marquam Hwy)	Widen to include shoulders, bikeways, add passing lanes where needed and turn lanes at major intersections	Medium
4042	5-11e	OR 99E	Barlow Rd to Marion County line	Four lane widening with median, left-turn lanes from mile post 24.05	Medium
4043	5-11e/f	OR 213	Oregon City boundary to Marion County line	Add shoulders and bikeways	Medium
4044	5-11a	OR 212	I-205 to OR 224	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low

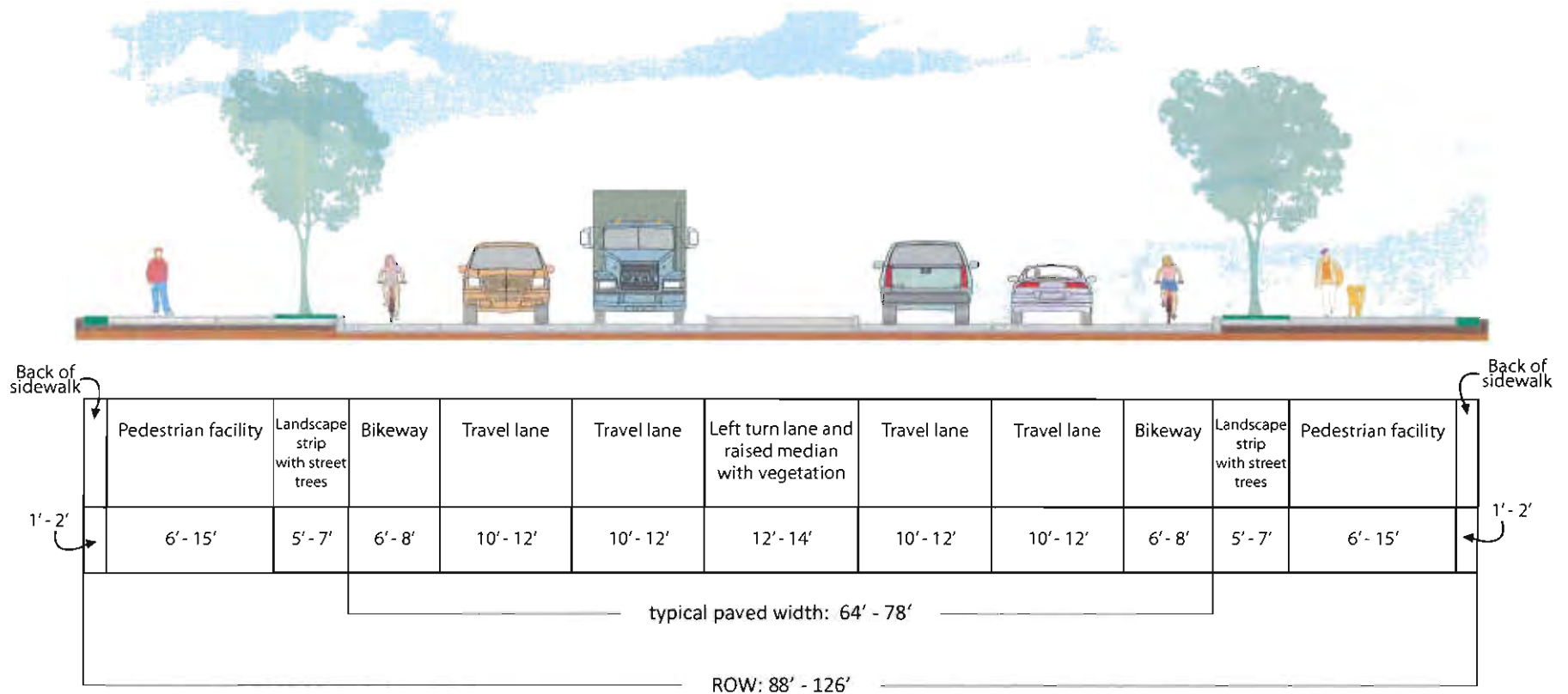
Table 5-3d Regional Capital Projects

Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description	Priority
4045	5-11a	OR 212	Within the Damascus City Limits (Armstrong Cr to 257th)	Obtain right-of-way for future 4 lane facility with planted median and 5 lanes at major intersections; build as major development occurs and apply access management to reduce number of driveways.	Low
4046	5-11a	OR 213	Clatsop St to Sunnyside Rd	OR 213/82nd Avenue Boulevard Design Improvements - Widen to add sidewalks, lighting, central median, planting strips and landscaping; fill gaps in the bike and pedestrian facilities network. 2014 ODOT OR 213 paving project programmed King to OR 224.	Low
4047	5-11a	OR 213 (82nd Ave)	Luther Road to Sunnybrook Blvd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4048	5-11a	OR 224	Webster Rd and 82nd Ave	Provide frontage connection on the north side of OR 244	Low
4049	5-11a	OR 224	Springwater Rd to 232nd Dr	Shoulder widening, horizontal realignment, realignment of roadway to bluff	Low
4050	5-11b	OR 211	OR 224 to eastbound US 26	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4051	5-11b	OR 211	OR 224 to Hillcockburn Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4052	5-11b	OR 211	Tickle Creek Rd/OR 211 intersection	Remove or decrease horizontal curve, relocate intersection	Low
4053	5-11b	OR 211	362nd Dr / OR 211 intersection	Remove or decrease vertical curve and remove vegetation	Low
4054	5-11b	OR 211	Eagle Creek Rd to Tickle Creek Rd	Widen to include bikeways /shoulders and add passing /climbing lanes where needed	Low
4055	5-11b	OR 211	0.14 miles east of Coop Rd to Jackknife Rd	Widen to add shoulder / bikeways; realign to remove horizontal and vertical curves	Low
4056	5-11b	OR 211	Tickle Creek Rd to 362nd Dr	Widen to include bikeways /shoulders and add passing /climbing lanes where needed	Low
4057	5-11b	OR 211	Bornstedt Rd to City of Sandy	Add shoulders and bikeways	Low
4058	5-11b	OR 224	232nd Ave to OR 211	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4059	5-11b	OR 224	Fish Creek Rd to National Forest Rd 46	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4060	5-11b	OR 224	Bakers Ferry Rd / OR 224 intersection	Add eastbound right-turn lane	Low
4061	5-11b	OR 224	Amisigger Rd / OR 224 intersection	Install traffic signal; add southbound and eastbound left-turn lanes and westbound right-turn lane	Low
4062	5-11b	OR 224	Heiple Rd / OR 224 intersection	Add southbound right-turn lane	Low
4063	5-11b	OR 224	Bakers Ferry Rd to Estacada city limits	Widen to include shoulders and bikeways; add passing lanes where needed	Low
4064	5-11b	OR 224	OR 212 to City of Estacada	Add shoulders and bikeways	Low
4065	5-11b	US 26	US 26 / Haley Rd intersection	Develop a plan to address to address access and safety issues on US 26 at this intersection and implement that plan	Low
4066	5-11b	US 26	Kelso Rd to Duncan Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4067	5-11b	US 26	Duncan Rd to Langensand Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4068	5-11b	US 26	Firwood Rd to Sleepy Hollow Dr	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4069	5-11b	US 26	Rhododendron to OR 35	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low

Table 5-3d Regional Capital Projects

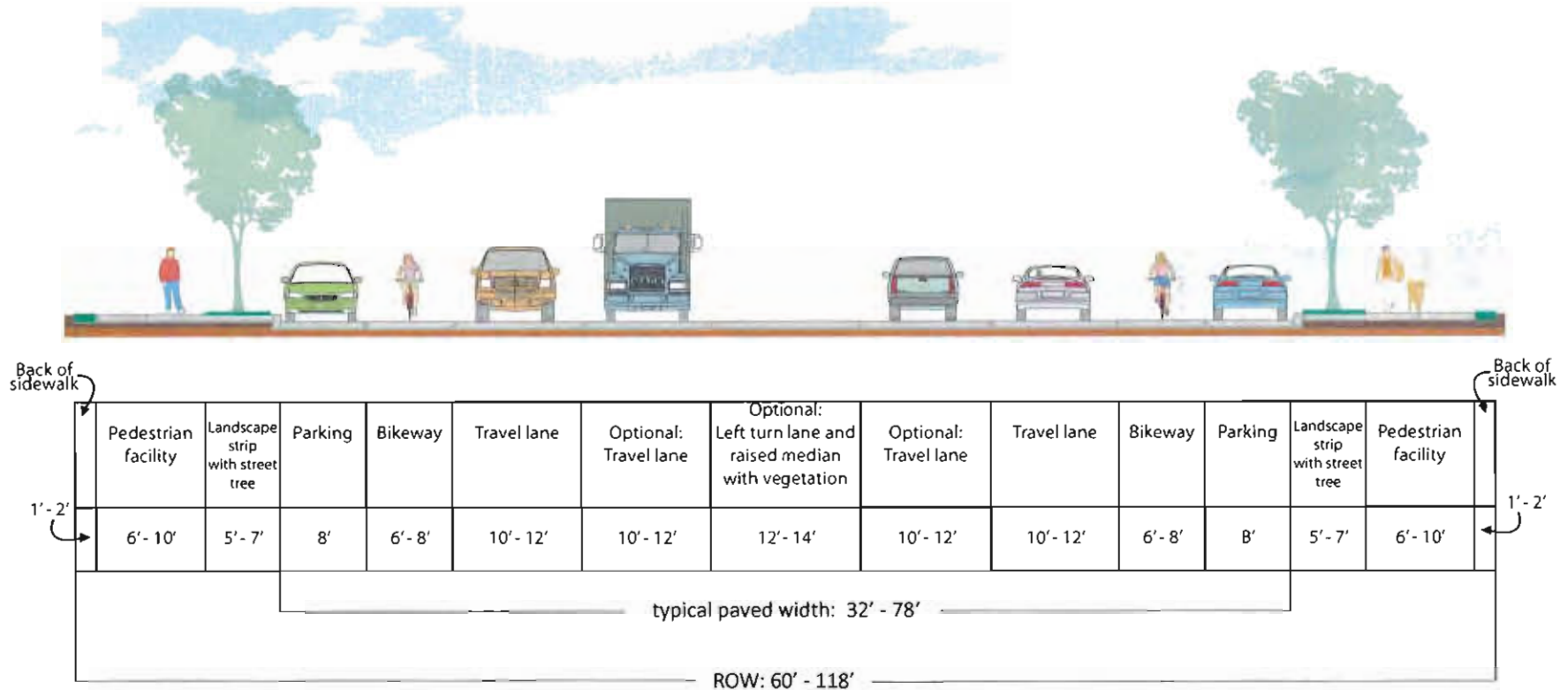
Project ID	Map	Project Name / Street Name	Segment / Locations	Project Description	Priority
4070	5-11b	US 26	US 26 / Firwood Rd intersection	Add eastbound right-turn lane	Low
4071	5-11b	US 26	US 26 / Brightwood Loop W	Add westbound right-turn lane	Low
4072	5-11b	US 26	US 26 / Brightwood Loop E	Add westbound right-turn lane	Low
4073	5-11b	US 26	Lolo Pass Rd to Govt. Camp Loop Rd. W	Implement Finding of Mt Hood Multimodal Study including ITS approach with variable speed signage	Low
4074	5-11c	OR 99E	Park Ave to Gladstone city limits	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4075	5-11d	OR 43	Lake Oswego to Portland	Develop active transportation connection consistent with the Connecting Clackamas Plan	Low
4076	5-11e	OR 211	Dhooche Rd / OR 211 intersection	Remove or decrease horizontal curve, relocate intersection	Low
4077	5-11e	OR 211	OR 170 (Canby-Marquam Hwy) to City of Molalla	Add shoulders and bikeways	Low
4078	5-11e	OR 211	Needy Rd to 0.6 miles west of Needy Rd	Remove or decrease vertical curve to allow passing zone, add passing lane in one or both directions, possible relocation of intersection	Low
4079	5-11e	OR 211	Molalla city limits to Estacada city limits	Widen to rural arterial standard (2 lanes) with shoulders and bikeways	Low
4080	5-11e	OR 211	Beavercreek Rd to Upper Highland Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4081	5-11e	OR 213	OR 213 / Carus Rd intersection	Install traffic signal to replace existing two-way stop See U339	Low
4082	5-11e	OR 213	OR 213 / Beavercreek Rd intersection	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4083	5-11e	OR 213	Carus Rd / OR 213 intersection	Install southbound left-turn and right-turn lanes	Low
4084	5-11e	OR 213	Macksburg Rd to Liberal Way	Widen shoulders to state standards	Low
4085	5-11e	OR 99E	Oregon City to Canby	Add shoulders and bikeways	Low
4086	5-11e	OR 99E	Sequoia Parkway to Lone Elder Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
4087	5-11e	OR 99E	Territorial Rd to Metro boundary	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low

Figure 5 - 1a
Typical Urban Major Arterial Cross Section



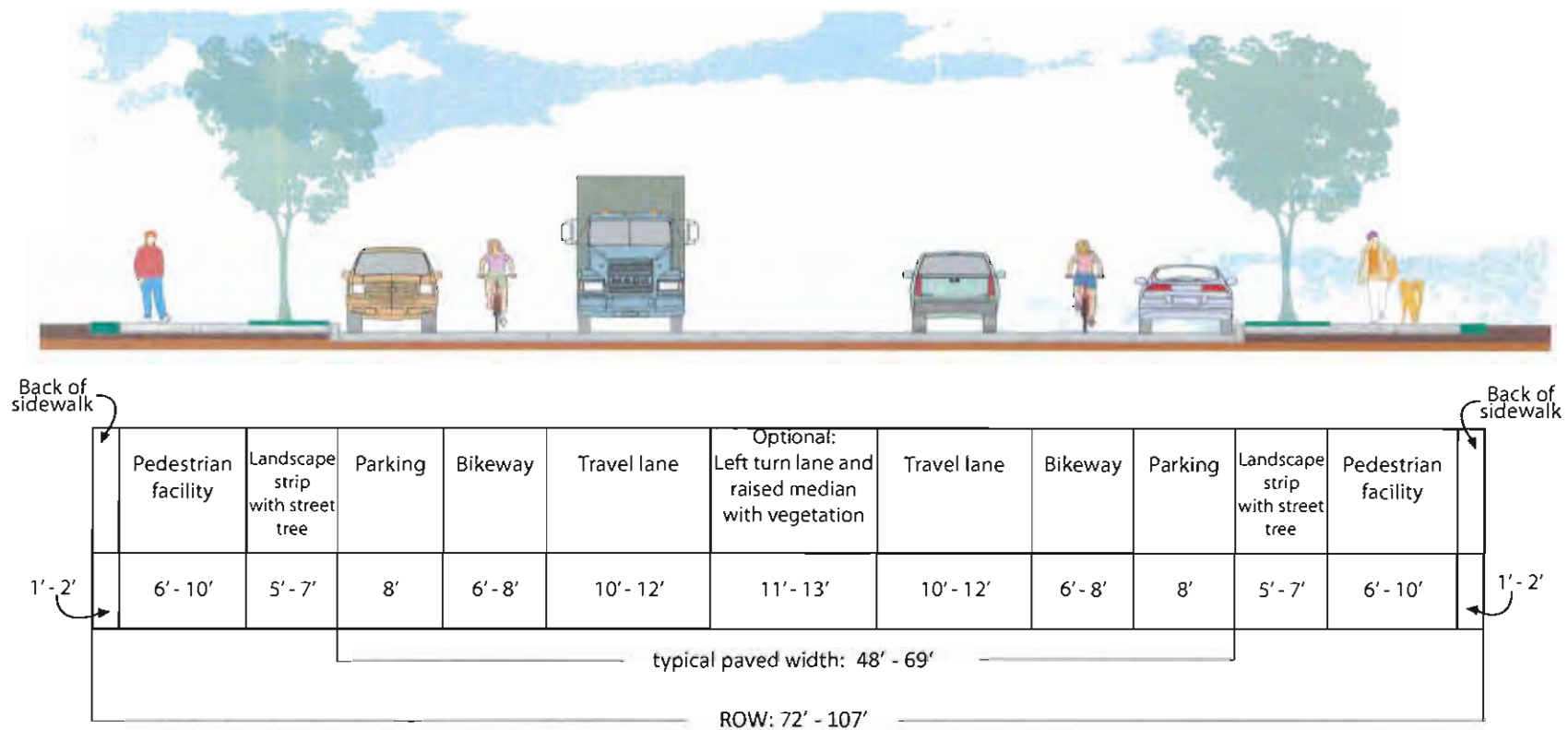
- Notes:
1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
 2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
 3. Cross section may vary to accommodate *Regional Transportation Functional Plan 3.08.110 Street System Design* or to accommodate topographical or environmental constraints.
 4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
 5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.

Figure 5 - 1b
Typical Urban Minor Arterial Cross Section



- Notes:
1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
 2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
 3. Cross section may vary to accommodate *Regional Transportation Functional Plan 3.08.110 Street System Design* or to accommodate topographical or environmental constraints.
 4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
 5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.

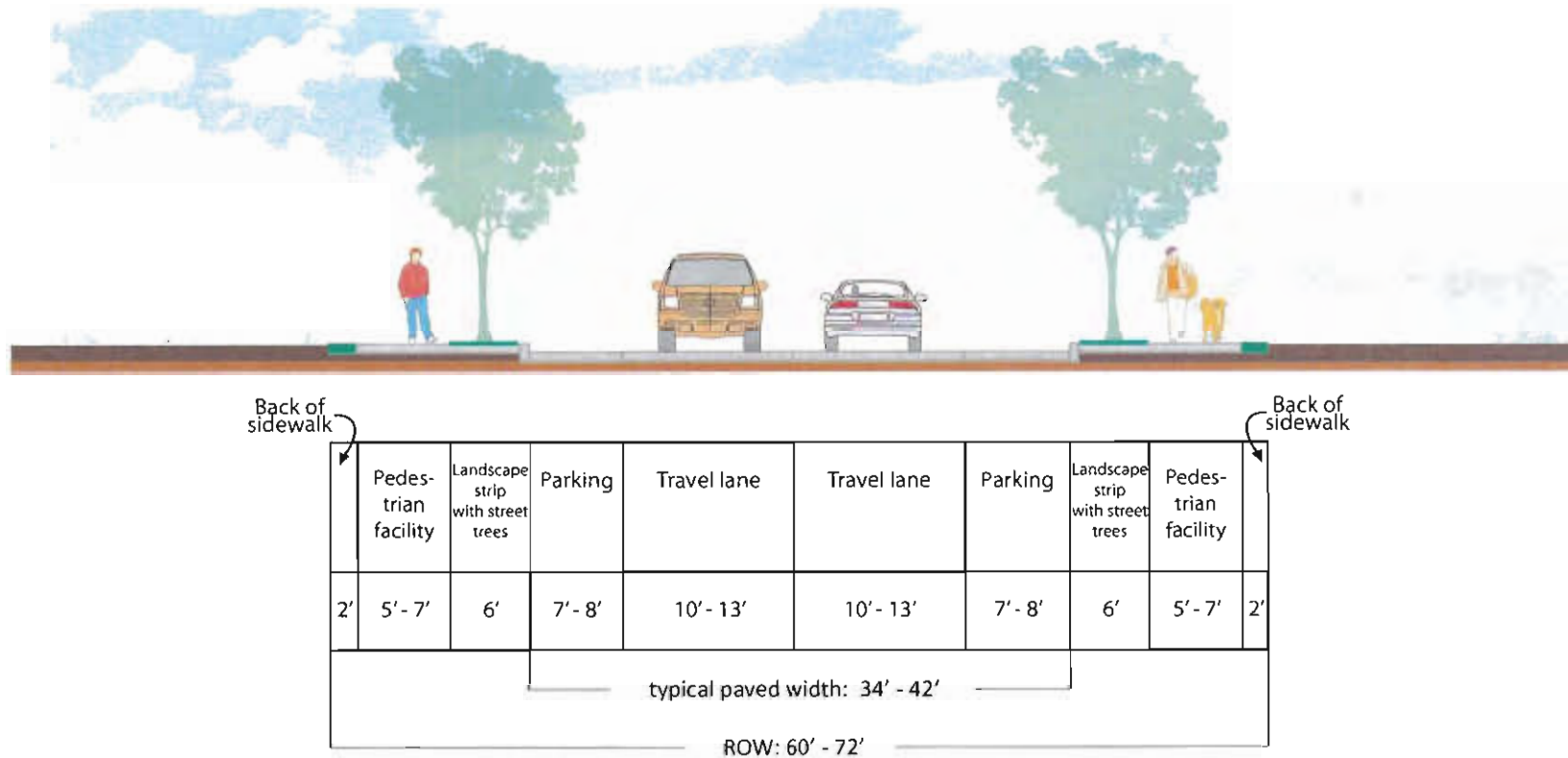
Figure 5 - 1c
Typical Urban Collector Cross Section



Notes:

1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
3. Cross section may vary to accommodate *Regional Transportation Functional Plan 3.08.110 Street System Design* or to accommodate topographical or environmental constraints.
4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.

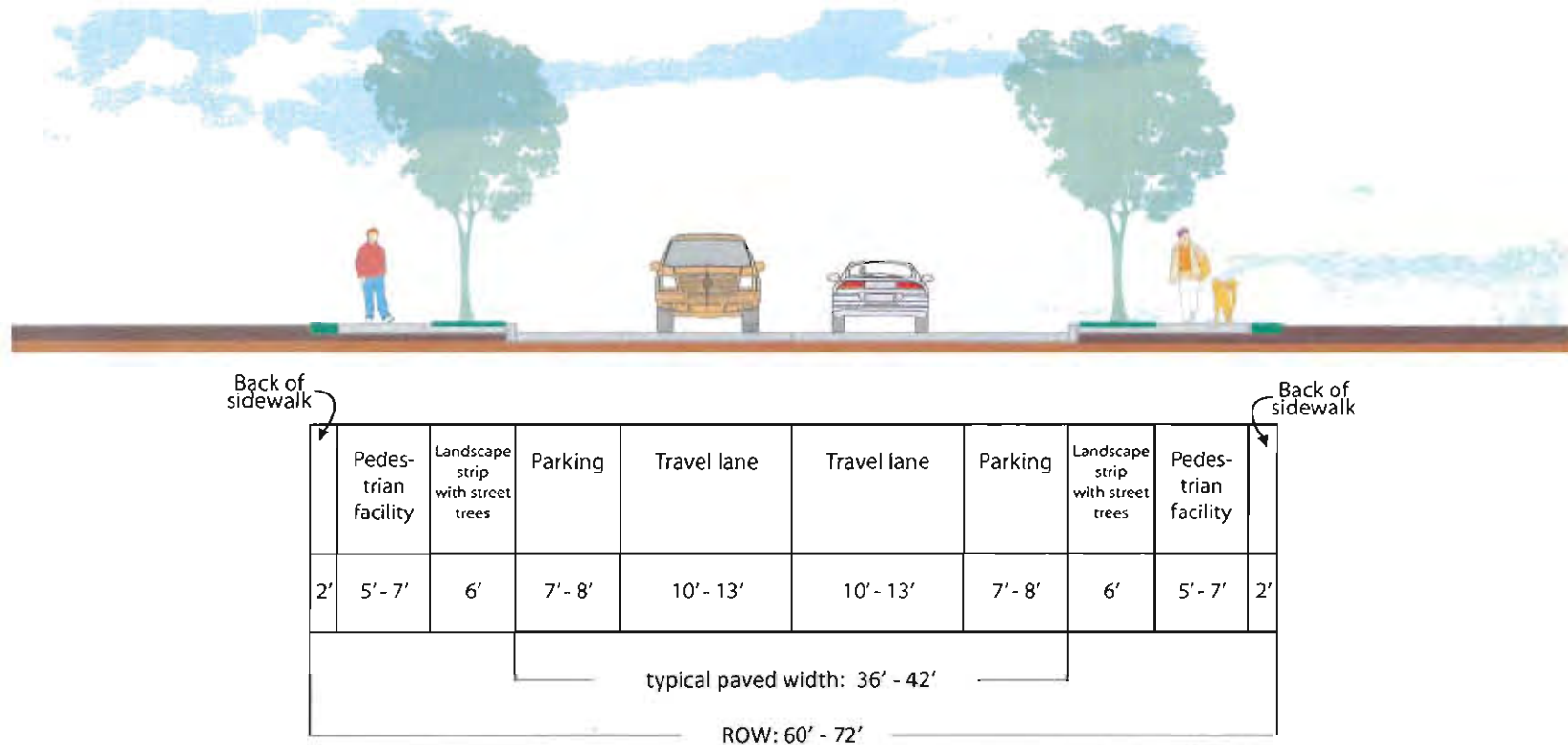
Figure 5 - 1d
Typical Urban Connector Cross Section



Notes:

1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
3. Cross section may vary to accommodate *Regional Transportation Functional Plan 3.08.110 Street System Design* or to accommodate topographical or environmental constraints.
4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.

Figure 5 - 1e
Typical Urban Local Cross Section



Notes:

1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
3. Cross section may vary to accommodate *Regional Transportation Functional Plan 3.08.110 Street System Design* or to accommodate topographical or environmental constraints.
4. Within the range stated, precise dimensions typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.

Figure 5 - 1f
Typical Urban Alley Roadway Section

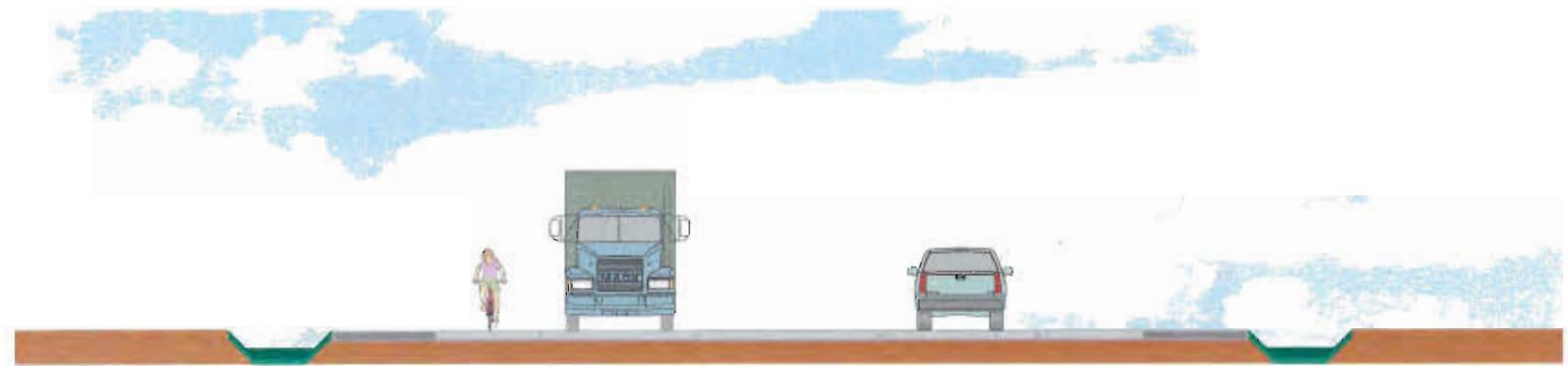


Alley Travel lane	Alley Travel lane
8'	8'

Notes:

1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
3. Cross section may vary to accommodate *Regional Transportation Functional Plan 3.08.110 Street System Design* or to accommodate topographical or environmental constraints.

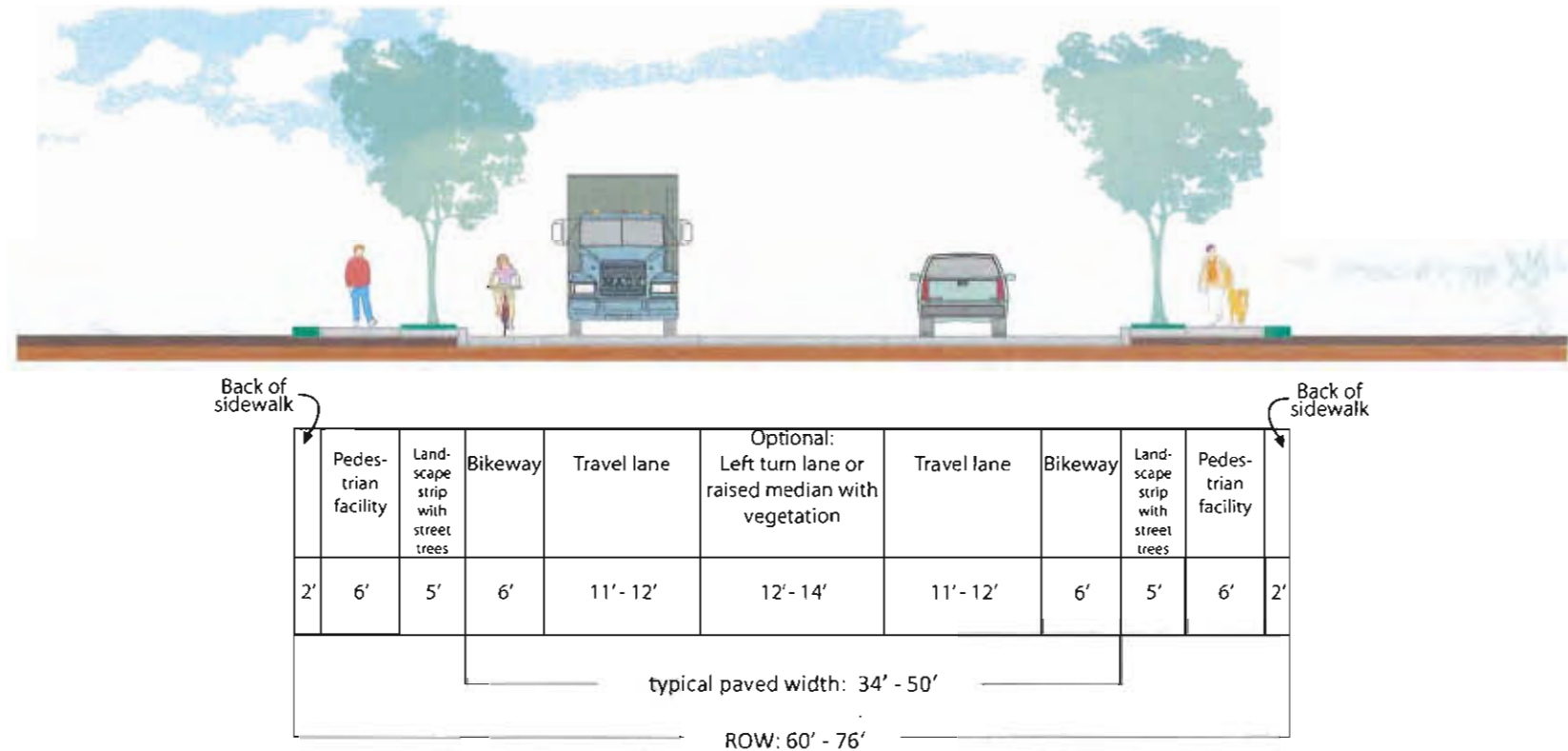
Figure 5 - 2a
Typical Rural Arterial Cross Section



Ditch	Gravel shoulder	Paved shoulder / bikeway	Travel lane	Optional: Left turn lane	Travel lane	Paved shoulder/ bikeway	Gravel shoulder	Ditch
8'	5' - 8'	6' - 8'	11' - 12'	12' - 14'	11' - 12'	6' - 8'	5' - 8'	8'
typical paved width: 34' - 50'								
ROW: 60' - 86'								

- Notes:
1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
 2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
 3. Cross section may vary depending on topographic or environmental constraints.
 4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
 5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.
 6. Cross sections must comply with ORS 215.283.

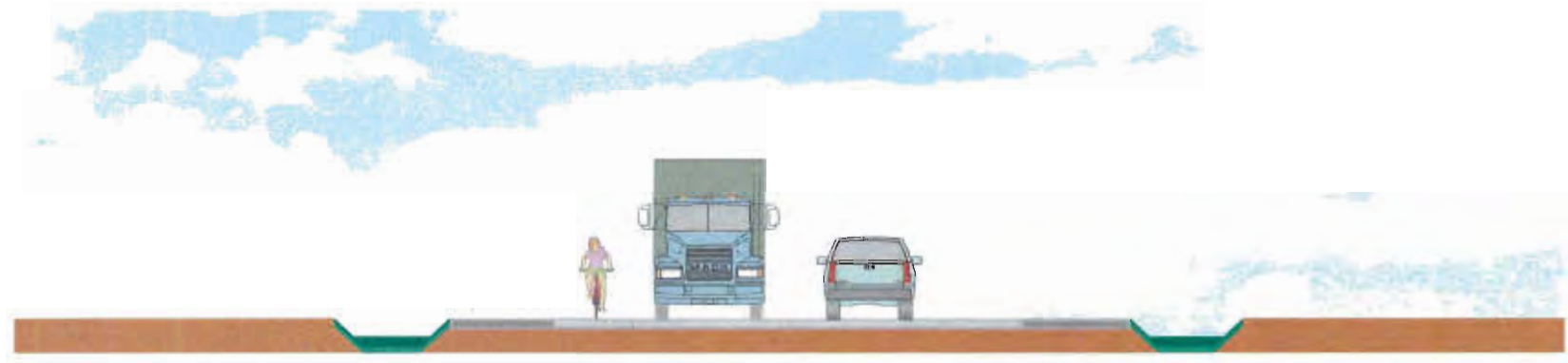
Figure 5 - 2b
Typical Rural Arterial Cross Section
Unincorporated Communities



Notes:

1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
3. Cross section may vary depending on topographic or environmental constraints.
4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
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6. Cross sections must comply with ORS 215.283.

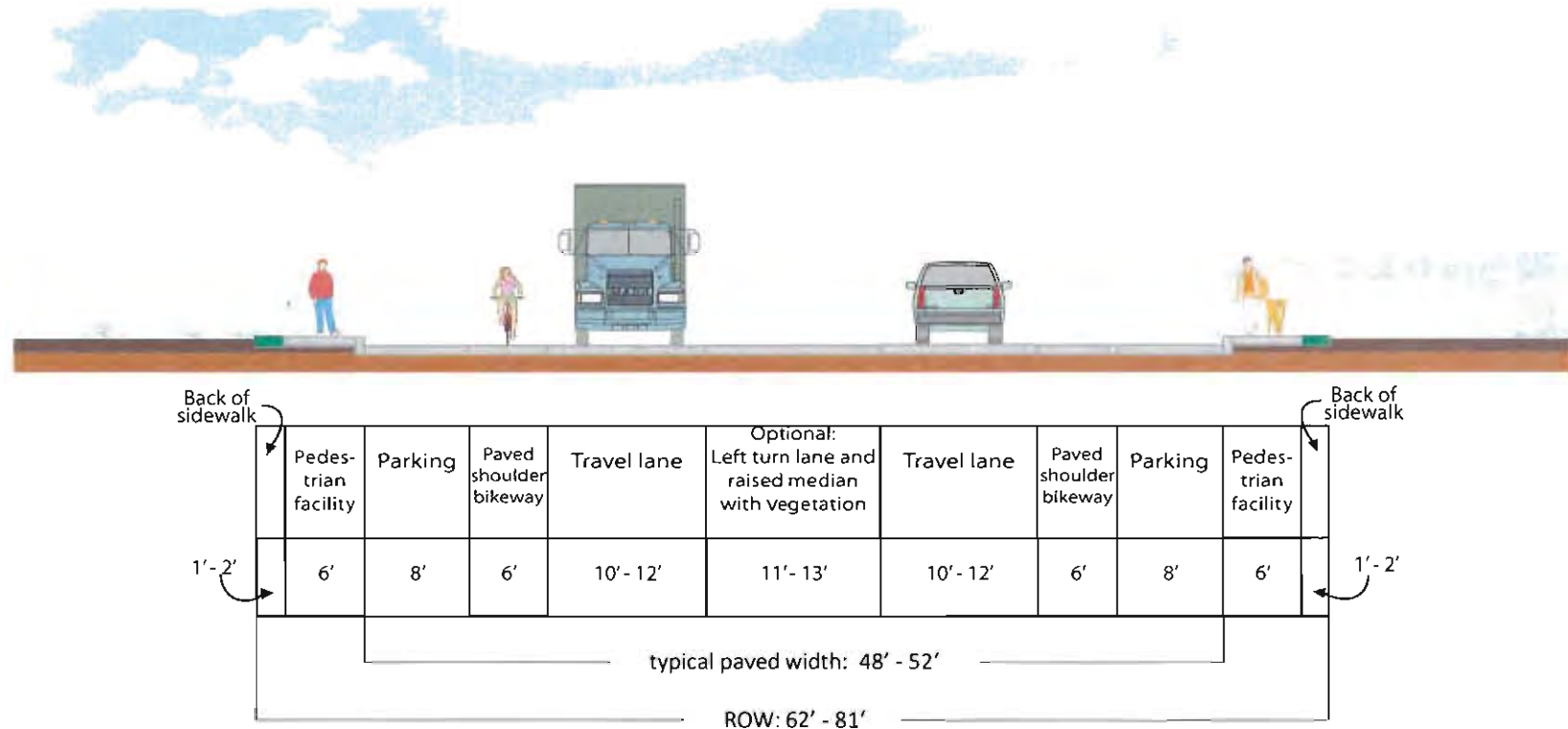
Figure 5 - 2c
Typical Rural Collector Cross Section



Ditch	Gravel shoulder	Paved shoulder bikeway	Travel lane	Travel lane	Paved shoulder bikeway	Gravel shoulder	Ditch
9'	5' - 8'	6'	10' - 12'	10' - 12'	6'	5' - 8'	9'
typical paved width: 32' - 36'							
ROW: 60' - 70'							

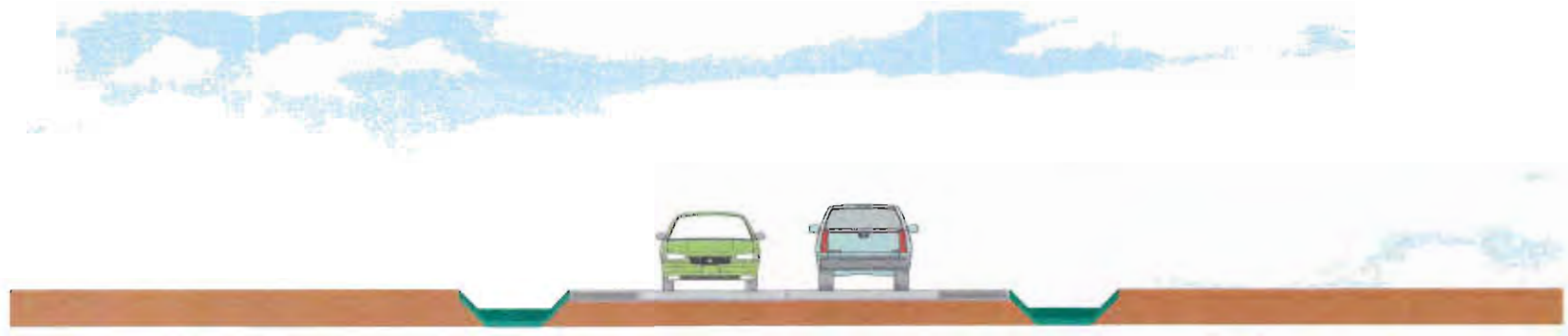
- Notes:
1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
 2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
 3. Cross section may vary depending on topographic or environmental constraints.
 4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
 5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.
 6. Cross sections must comply with ORS 215.283.

Figure 5 - 2d
Typical Rural Collector Cross Section
Unincorporated Communities



- Notes:
1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
 2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
 3. Cross section may vary depending on topographic or environmental constraints.
 4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
 5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.
 6. Cross sections must comply with ORS 215.283.

Figure 5 - 2e
Typical Rural Connector Cross Section

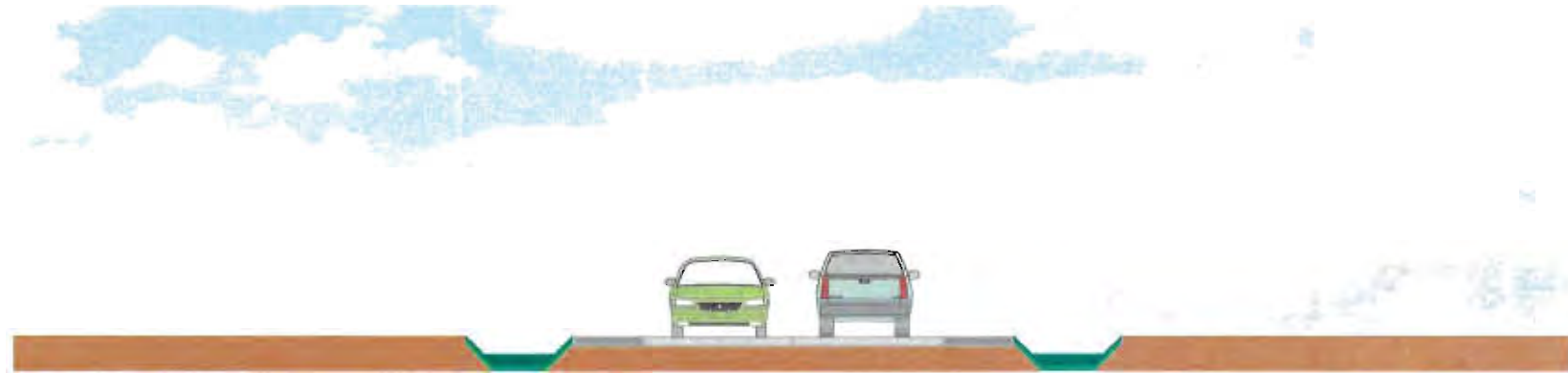


Ditch	Gravel shoulder	Travel lane	Travel lane	Gravel shoulder	Ditch
6' - 8'	2' - 5'	10' - 11'	10' - 11'	2' - 5'	6' - 8'
typical paved width: 32' - 36'					
ROW: 56' - 64'					

Notes:

1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
3. Cross section may vary depending on topographic or environmental constraints.
4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.
6. Cross sections must comply with OR5 215.283.

Figure 5 - 2f
Typical Rural Local Cross Section

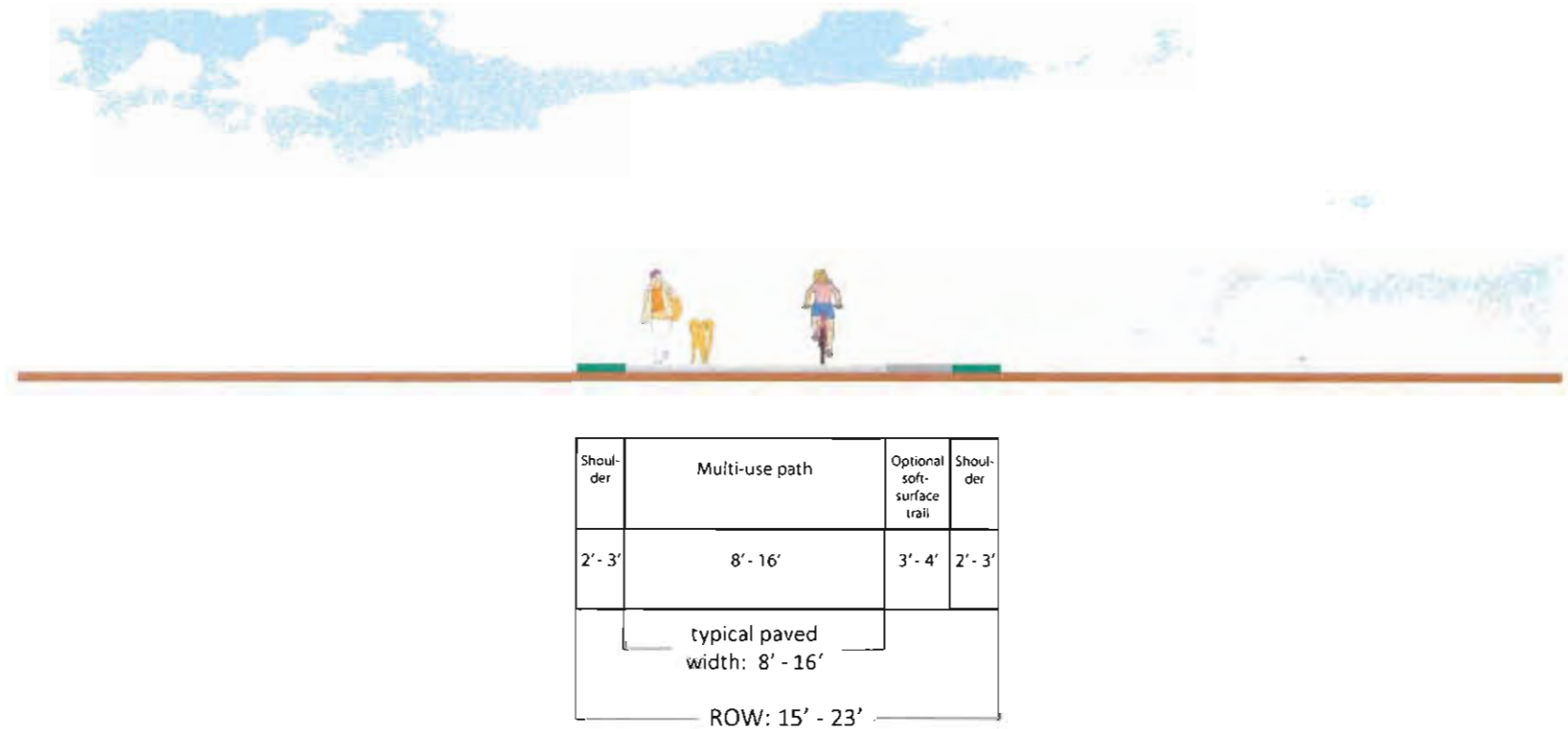


Ditch	Gravel shoulder	Travel lane	Travel lane	Gravel shoulder	Ditch
6' - 8'	2' - 5'	10' - 11'	10' - 11'	2' - 5'	6' - 8'
typical paved width: 22' - 28' ROW: 46' - 56'					

Notes:

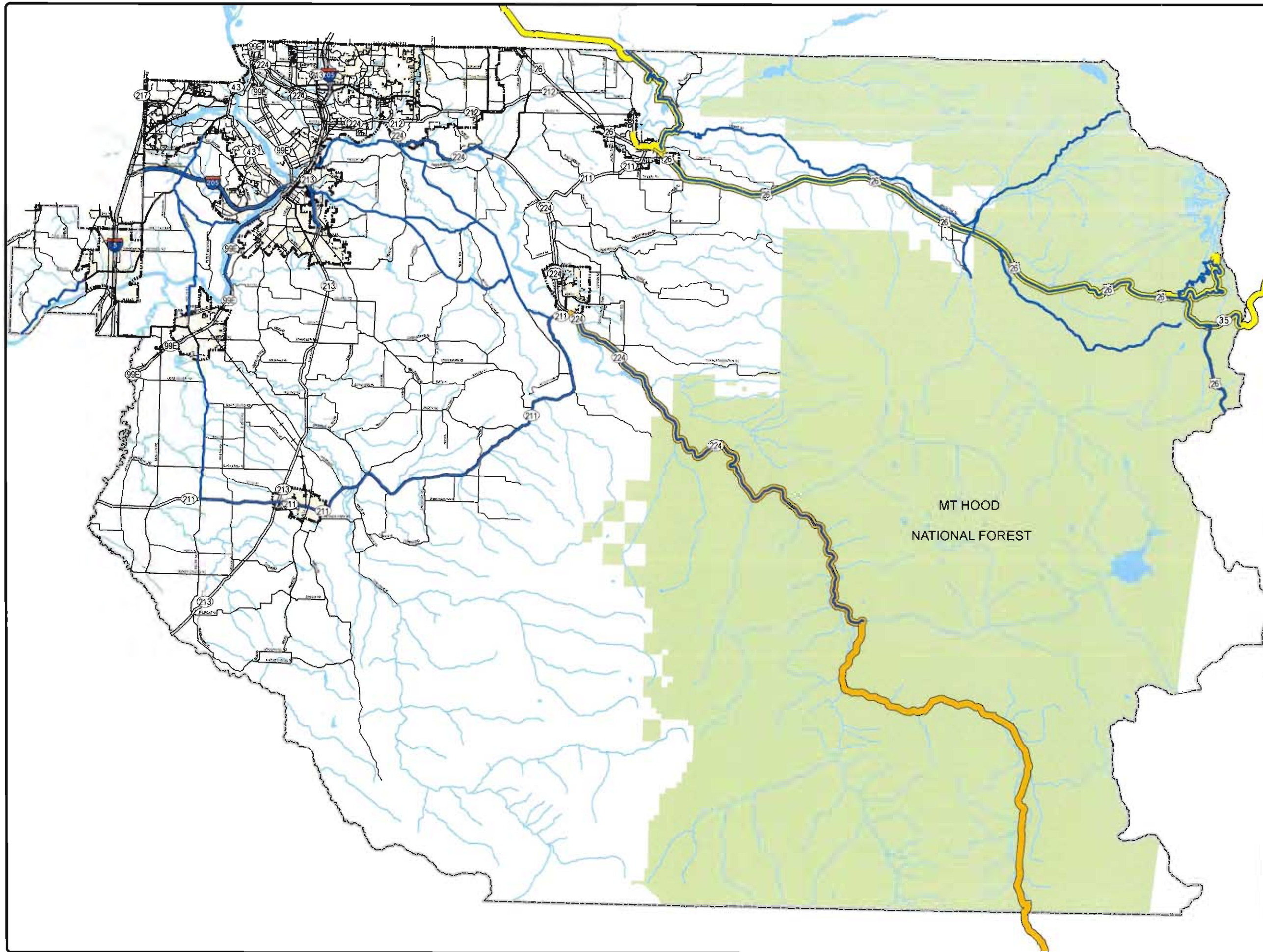
1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
3. Cross section may vary depending on topographic or environmental constraints.
4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
5. Medians, pedestrian refuges, islands, curb extensions, parking, left turn lanes or right turn lanes shall be provided per the Comprehensive Plan, Capital Improvement Projects or as warranted by Roadway Standards. These improvements may require additional right-of-way.
6. Cross sections must comply with ORS 215.283.

Figure 5 - 3
Typical Multi-Use Path Cross Section



Notes:

1. This standard cross section shall apply except where a Special Transportation plan in Chapter 5 specifies a different cross section.
2. For more detailed information on the implementation of this Cross Section - see the Zoning and Development Ordinance and/or the County Roadway Standards.
3. Cross section may vary to accommodate *Regional Transportation Functional Plan 3.08.110 Street System Design* or to accommodate topographical or environmental constraints.
4. Within the range stated, precise dimensions of typical paved width shall be determined by Engineering based upon adjacent land use, vehicle traffic volume, existing travel lane width, design speed and crash history.
5. The optional soft-surface trail can replace the shoulder on one side of the multi-use path.



Scenic Roads

-  West Cascades Scenic Highway
-  Mt Hood Scenic Byway
-  Clackamas County Scenic Roads
-  Incorporated City
-  Urban Growth Boundary
-  Mt Hood National Forest



0 2 4 8 Miles

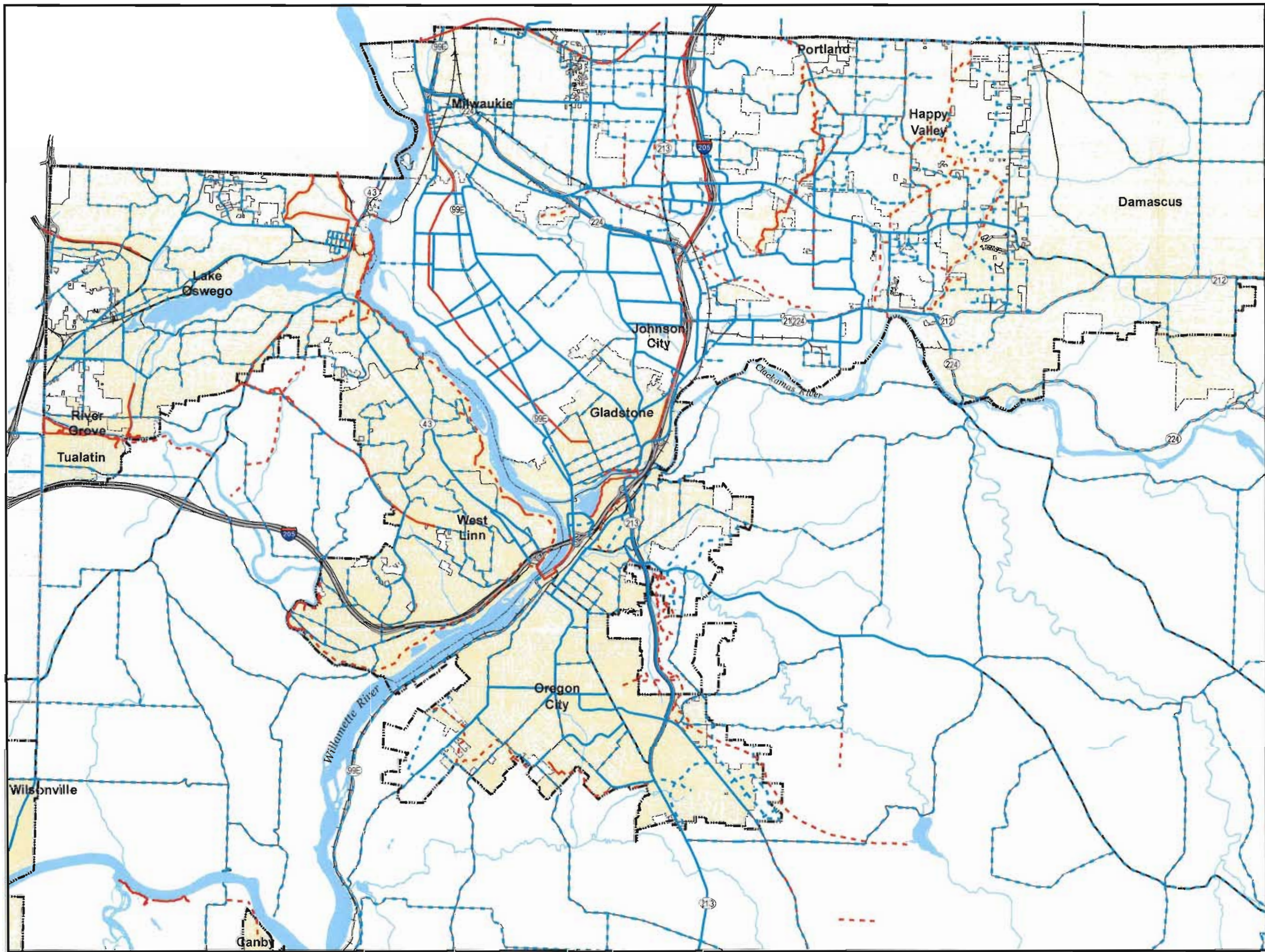
Ordinance ZDO-246: Exhibit A
Last Amended March 1, 2014



Department of Transportation & Development
150 Beavercreek Rd Oregon City, OR 97045

CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-1



Planned Bikeway Network

Urban

- Existing Bikeway
- Planned Bikeway
- Existing Multi-Use Path
- Planned Multi-Use Path
- Incorporated City
- Urban Growth Boundary



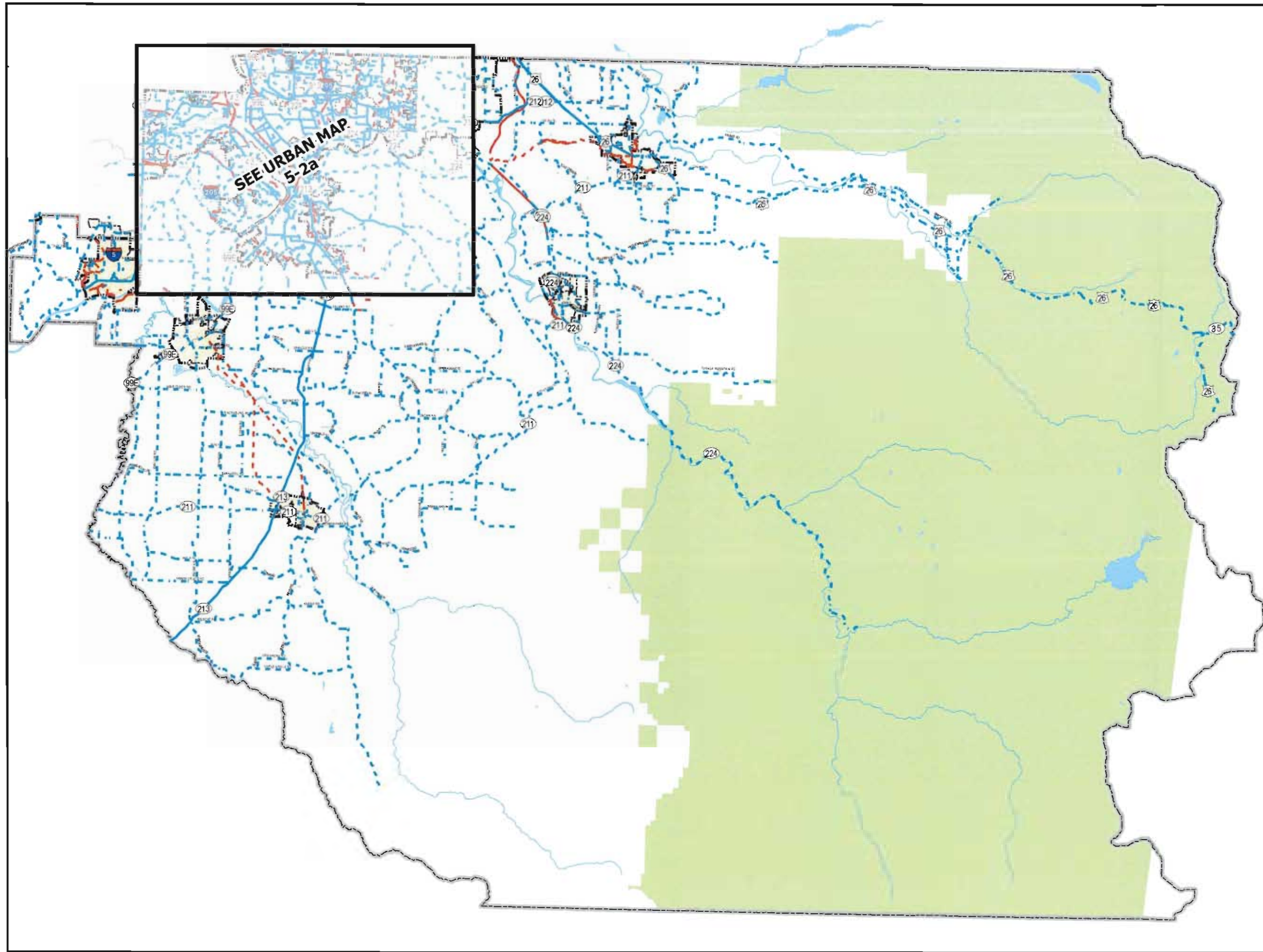
0 0.5 1 2 Miles

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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-2a



Planned Bikeway Network

Rural

- Existing Bikeway
- - - Planned Bikeway
- Existing Multi-Use Path
- - - Planned Multi-Use Path
- Incorporated City
- Urban Growth Boundary
- Mt Hood National Forest



0 2 4 8 Miles

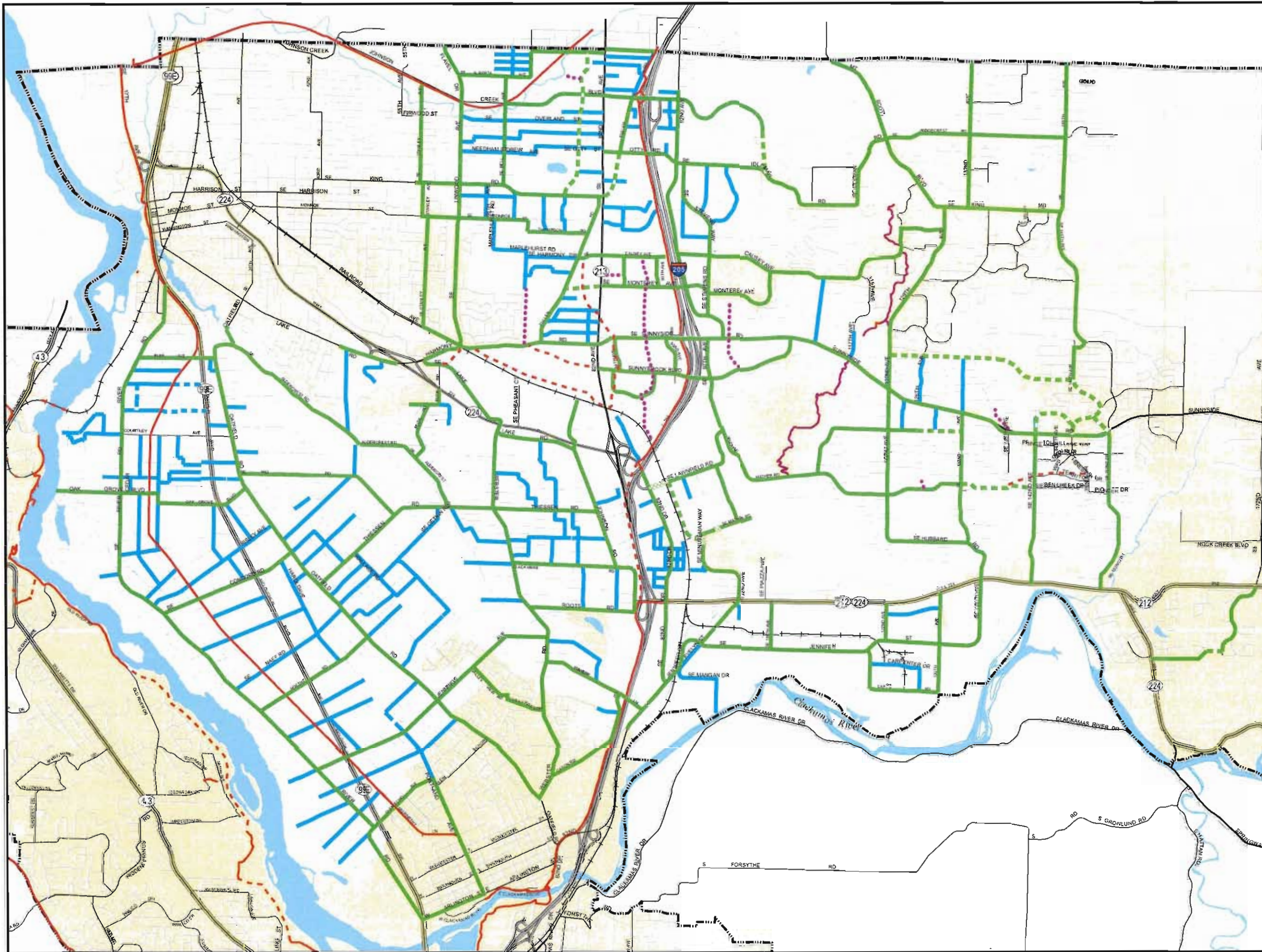
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150 Beaver Creek Rd. Oregon City, OR 97045

CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-2b



Essential Pedestrian Network

- Existing Arterial
- - - Proposed Arterial
- x x x Arterial To Be Removed
- Existing Local Road
- - - Proposed Local Road
- Existing Multi-Use Path
- - - Proposed Multi-Use Path
- Pedestrian-Only Trail
- x x x Pedestrian Connection
- = State Highway
- Other Local Roads
- Incorporated City
- Urban Growth Boundary



0 0.25 0.5 1 Miles

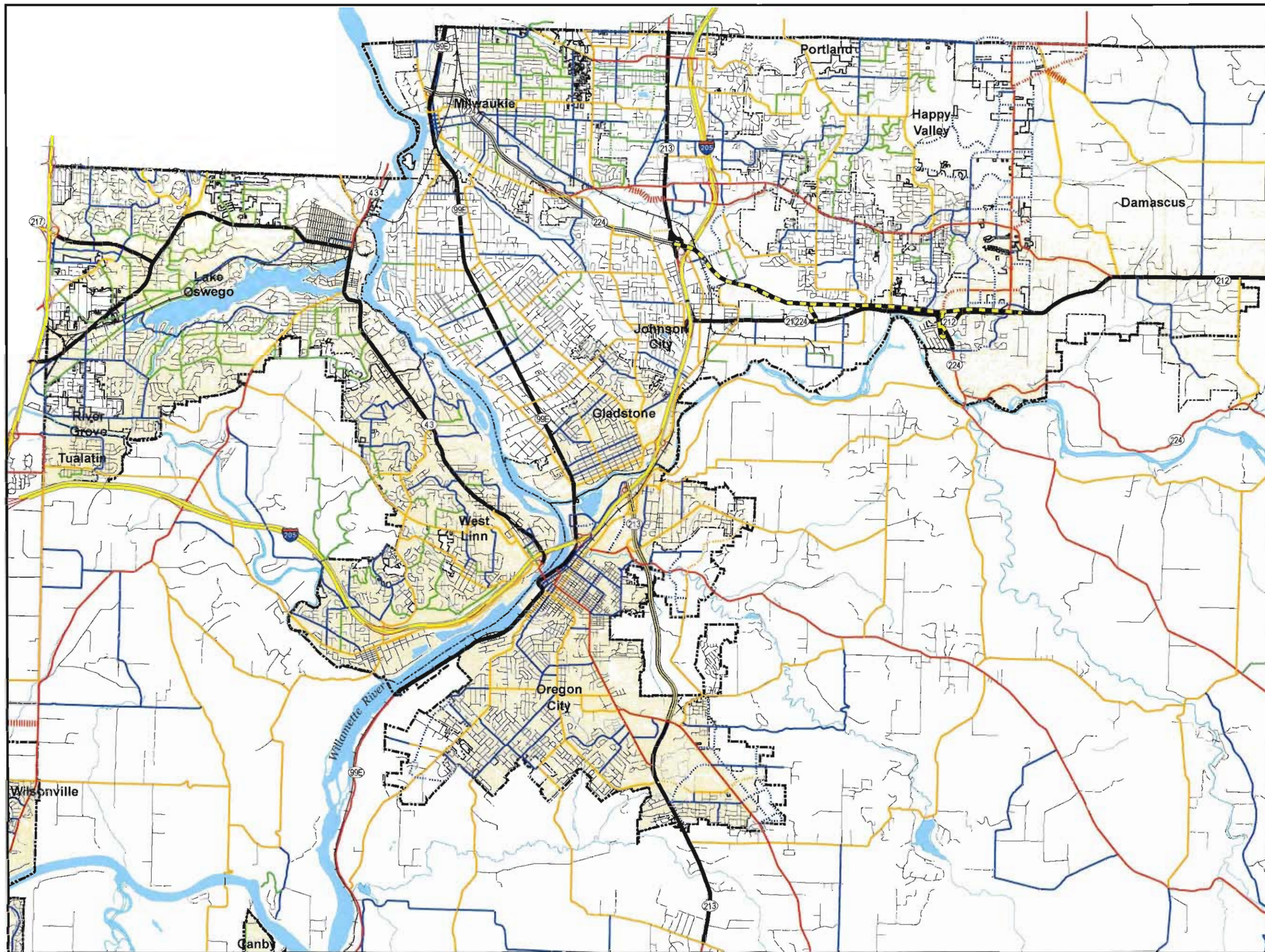
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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-3



Road Functional Classification

Urban

- Principal Freeway
- Principal Expressway
- Planned Expressway
- Other Principal Arterial
- Major Arterial
- Planned Major Arterial
- Minor Arterial
- Planned Minor Arterial
- Collector
- Planned Collector
- Connector
- Planned Connector
- Local
- Planned Local
- To Be Removed

- Urban Growth Boundary
- Incorporated City



0 0.5 1 2 Miles

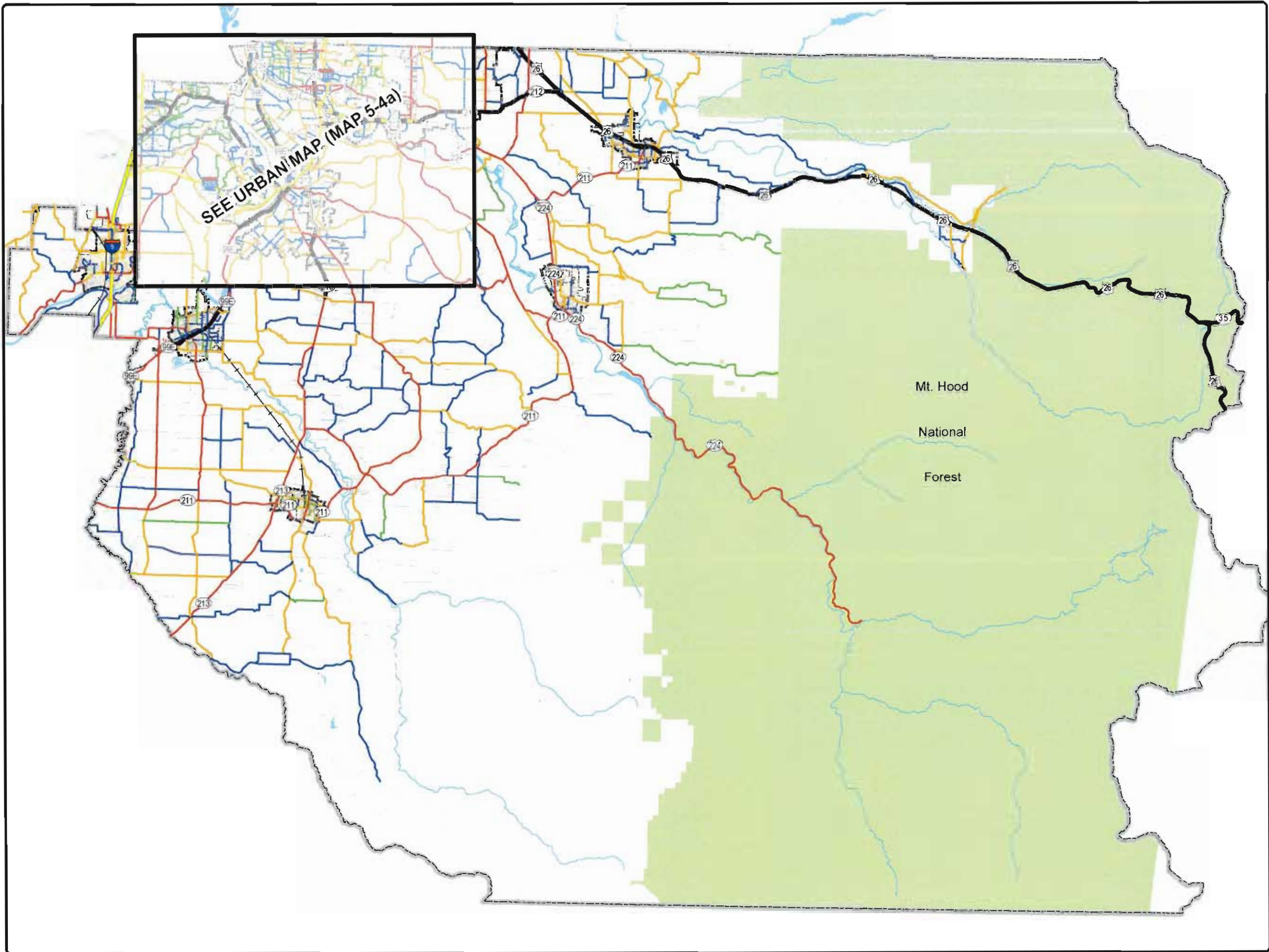
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COMPREHENSIVE PLAN

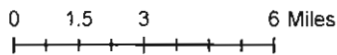
MAP 5-4a



Road Functional Classification

Rural

- Principal Freeway
- Principal Expressway
- Other Principal Arterial
- Major Arterial
- Planned Major Arterial
- Minor Arterial
- Planned Minor Arterial
- Collector
- Planned Collector
- Connector
- Planned Connector
- Local
- Planned Local
- Railroad
- Incorporated City
- Urban Growth Boundary
- Mt Hood National Forest



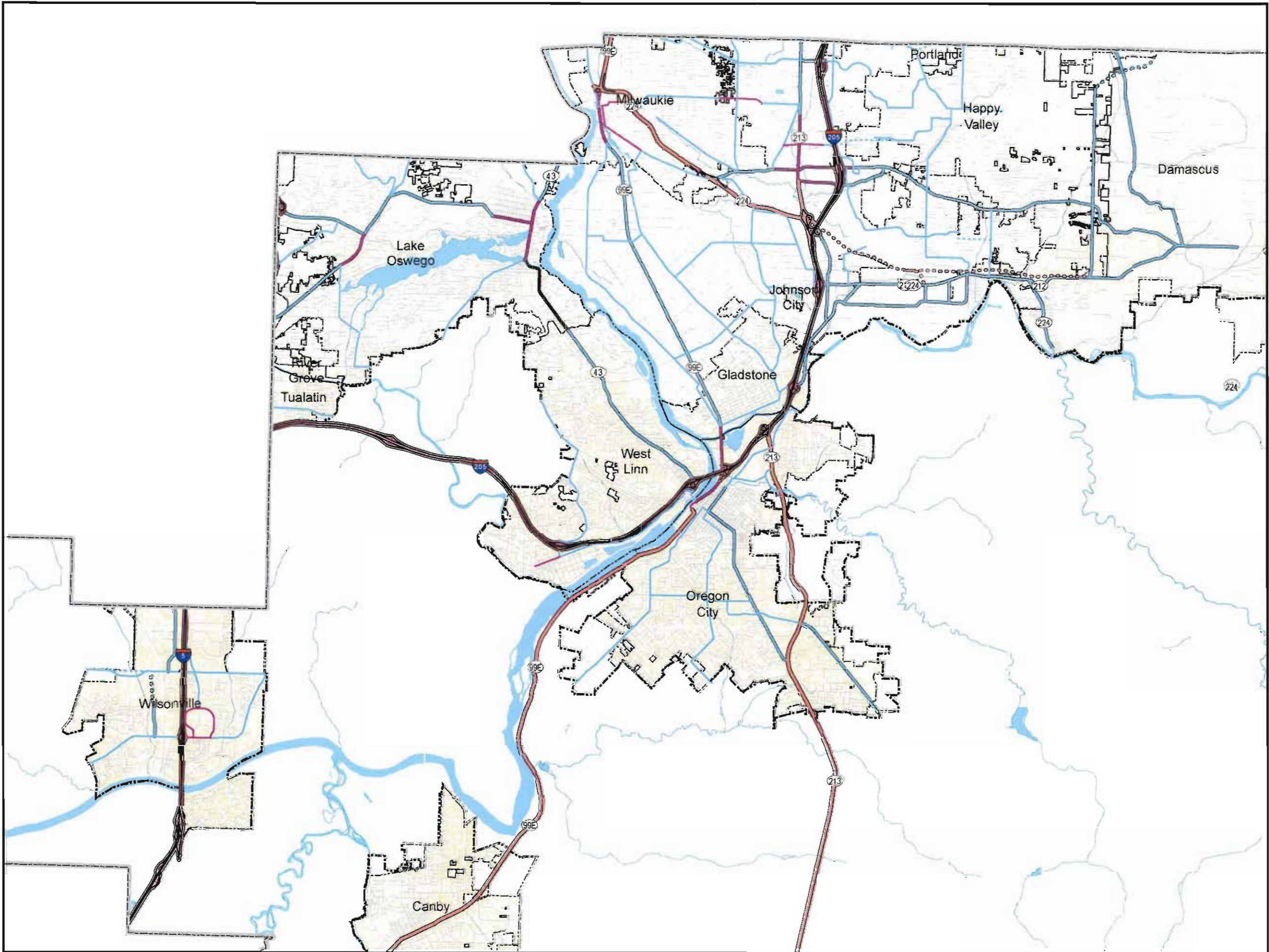
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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-4b



Metro Regional Street Design Classifications

- Freeway; Highway
- Planned Highway
- Regional Boulevard
- Community Boulevard
- Planned Community Boulevard
- Regional Street
- Planned Regional Street
- Community Street
- Planned Community Street
- Urban Road
- Rural Road
- Incorporated City



0 0.75 1.5 3 Miles

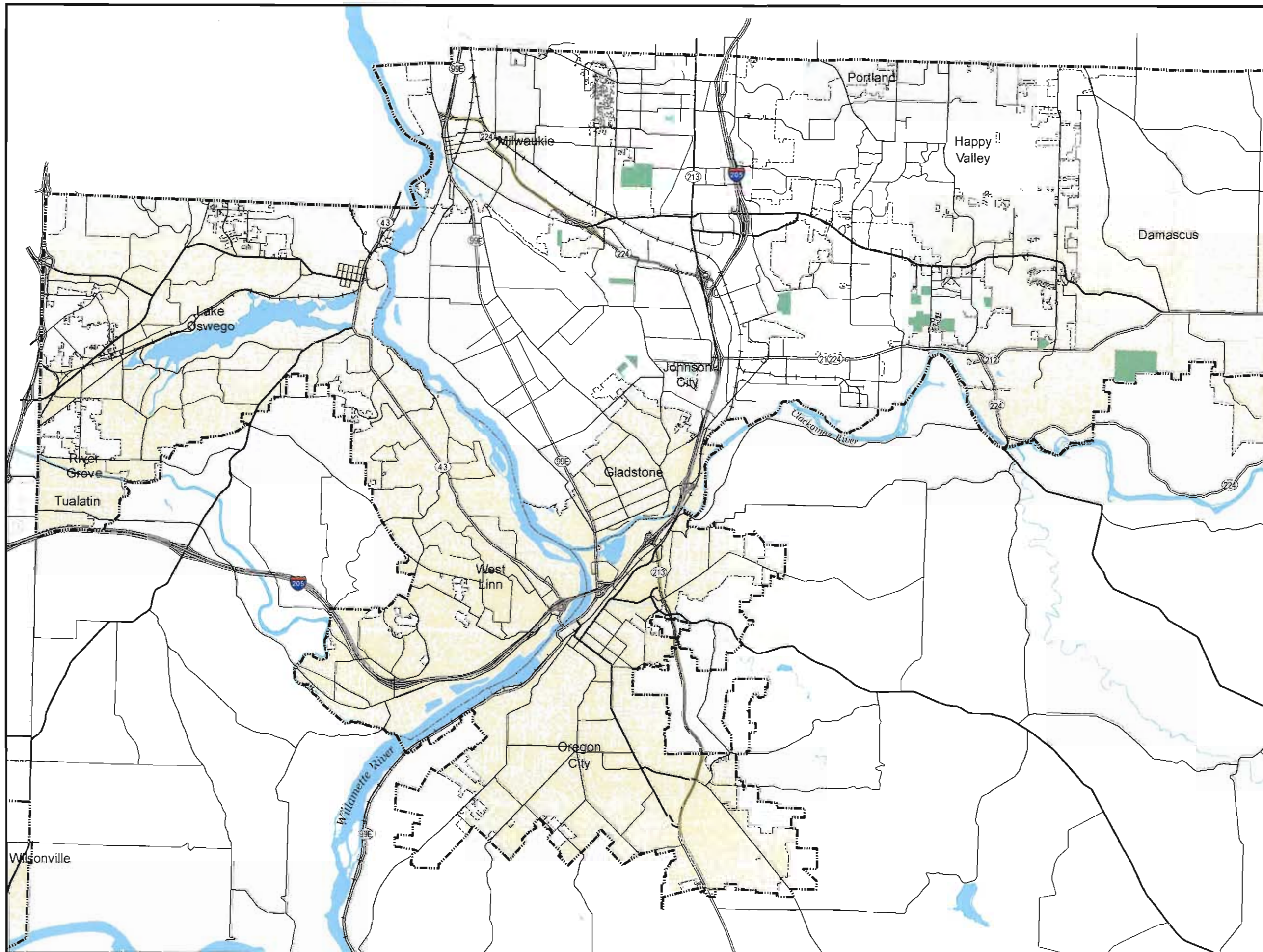
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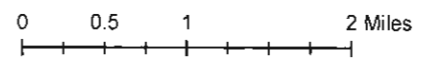
CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-5



**Potentially Buildable
Residential Sites
> 5 Acres in UGB**

- Potentially Buildable Residential Sites > 5 Acres
- Urban Growth Boundary
- Incorporated City

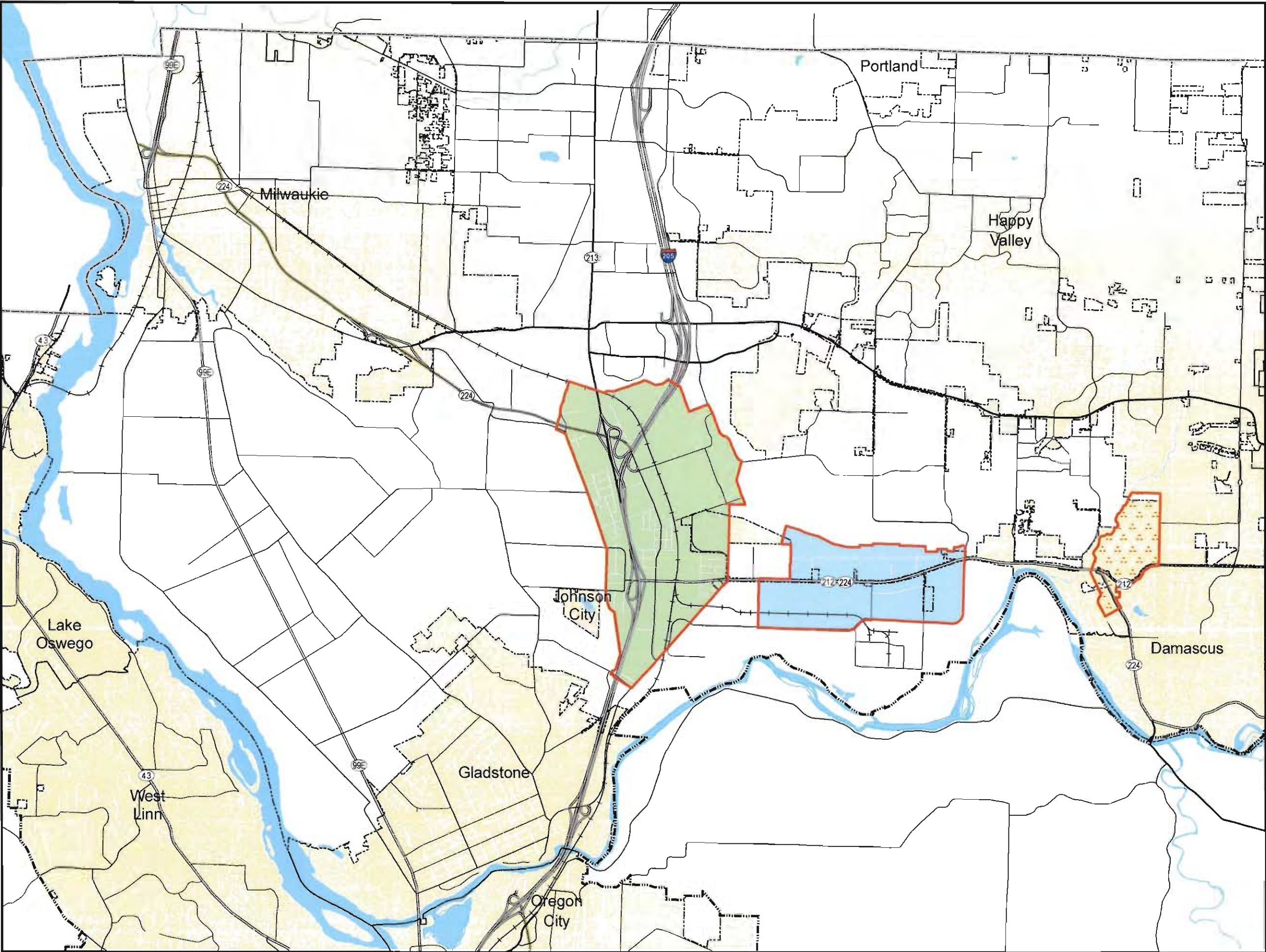


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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-6



**Interchange
Management
Areas**

-  Sunrise West IAMP Area
-  Midpoint IAMP Area
-  Rock Creek IAMP Area
-  Incorporated City
-  Urban Growth Boundary



0 0.25 0.5 1 Miles

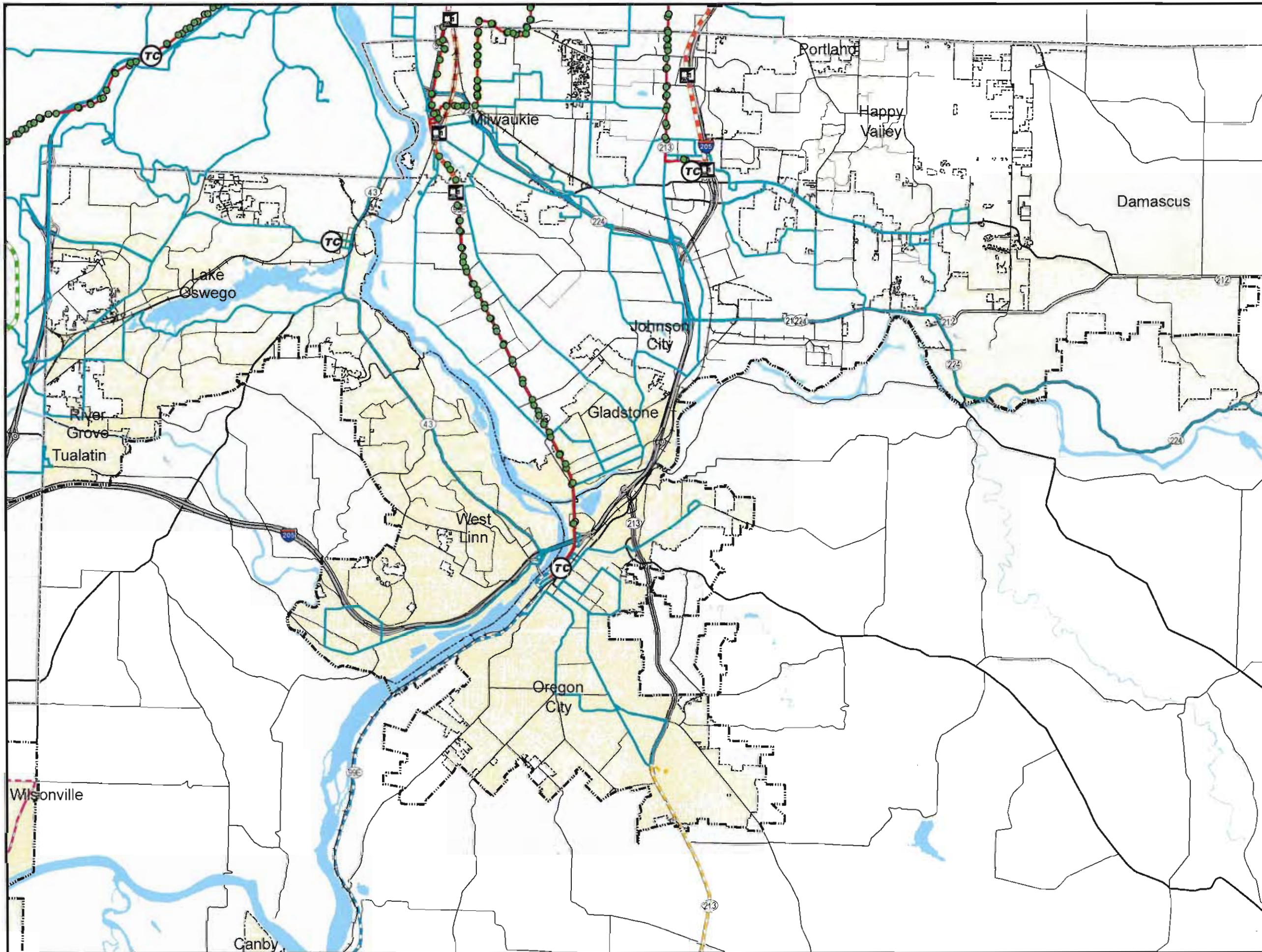
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Department of Transportation & Development
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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-7



Transit

Urban

- TC** Transit Centers
- TriMet Frequent Service
Bus Line (20 minute or less peak hour service)
- Major Bus Stop
- TriMet Standard Service
Bus Line
- South Metro Area Regional
Transit (SMART) Bus Line
- South Clackamas
Transportation District
(SCTD) Bus Line
- Canby Area Transit (CAT) Bus Line

Light Rail

- MAX
- WES
- Light Rail Stop

Railroad

- Union Pacific, BN & SF, etc



0 0.5 1 2 Miles

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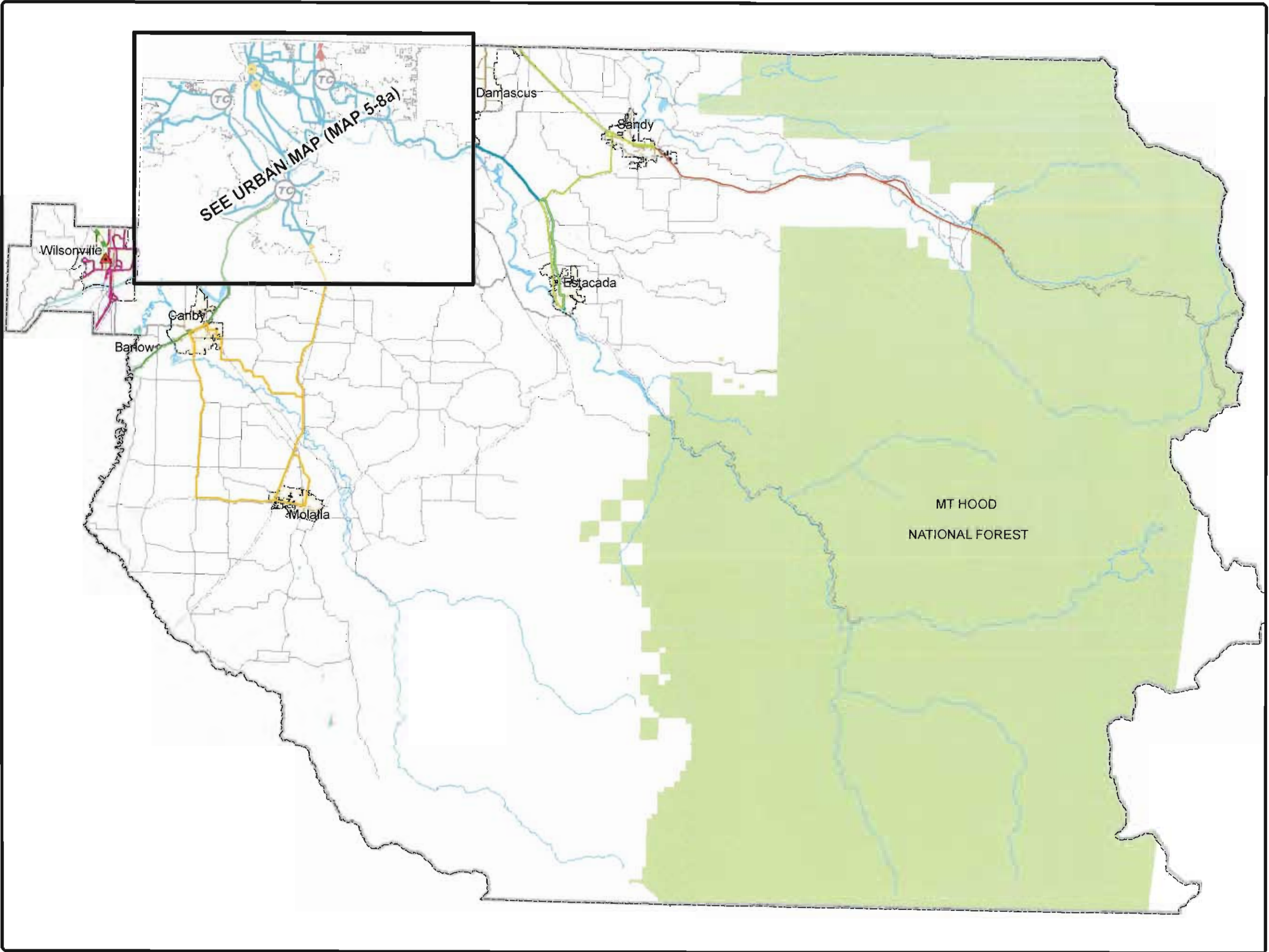


**CLACKAMAS
COUNTY**

Department of Transportation & Development
150 Beaver Creek Rd Oregon City, OR 97045

CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-8a



Transit

Rural

- TriMet Bus Lines
- Sandy Area Metro (SAM) Bus Line
- Mountain Express Bus Line
- South Clackamas Transportation District (SCTD) Bus Line
- Canby Area Transit (CAT) Bus Line
- South Metro Area Regional Transit (SMART) Bus Line

Light Rail Lines

- Existing, MAX
- Existing, WES

TC Transit Centers

Mt Hood National Forest



0 2 4 8 Miles

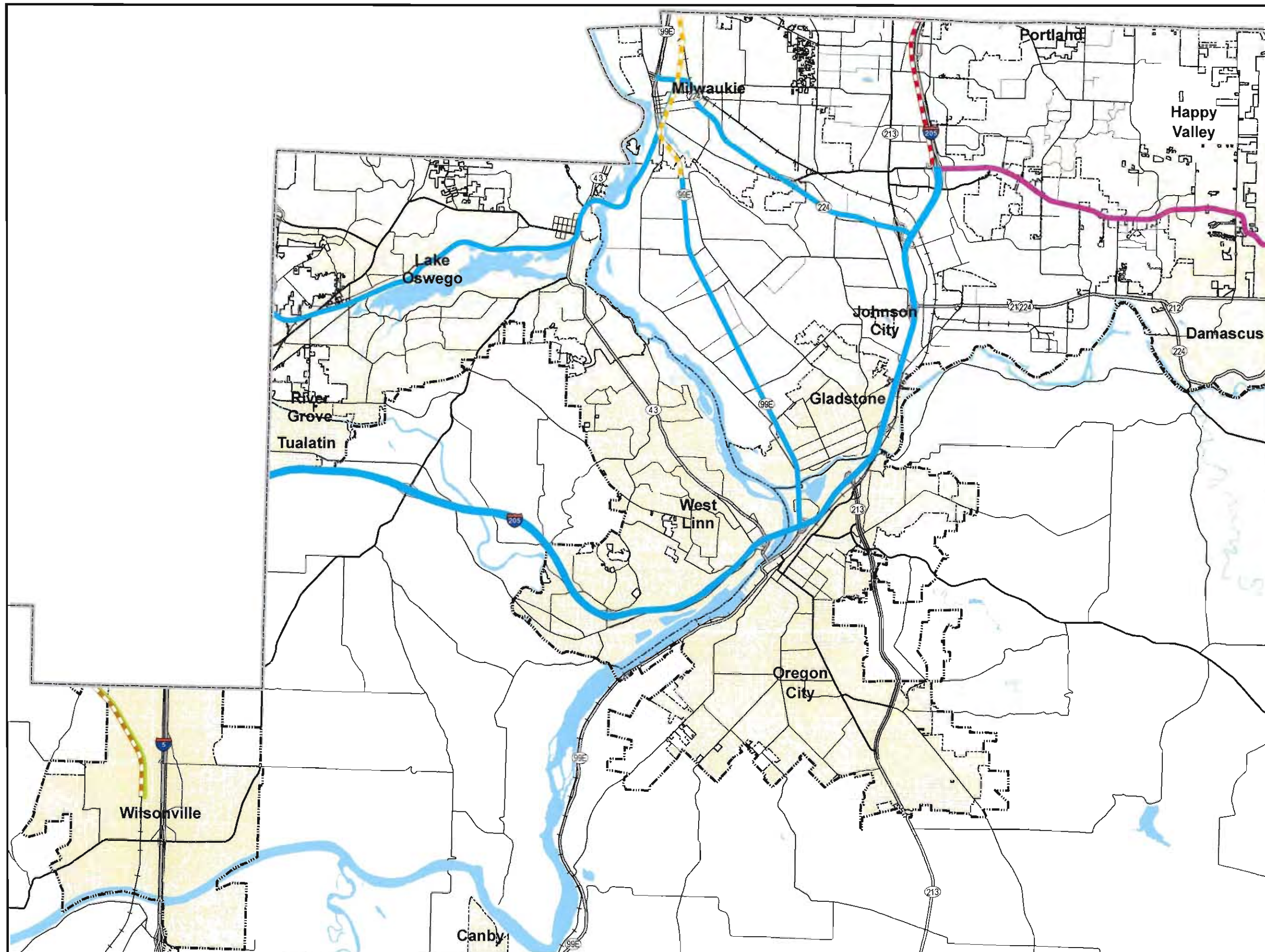
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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-8b



High Capacity Transit (HCT) System Plan

High Capacity Transit Corridors

- Next Phase Regional Priority Corridors
- Near-Term Regional Priority Corridors
- Regional Vision Corridors

Light Rail Lines

- Existing, MAX
- Existing, WES
- Under construction, MAX

Urban Growth Boundary



0 0.5 1 2 Miles

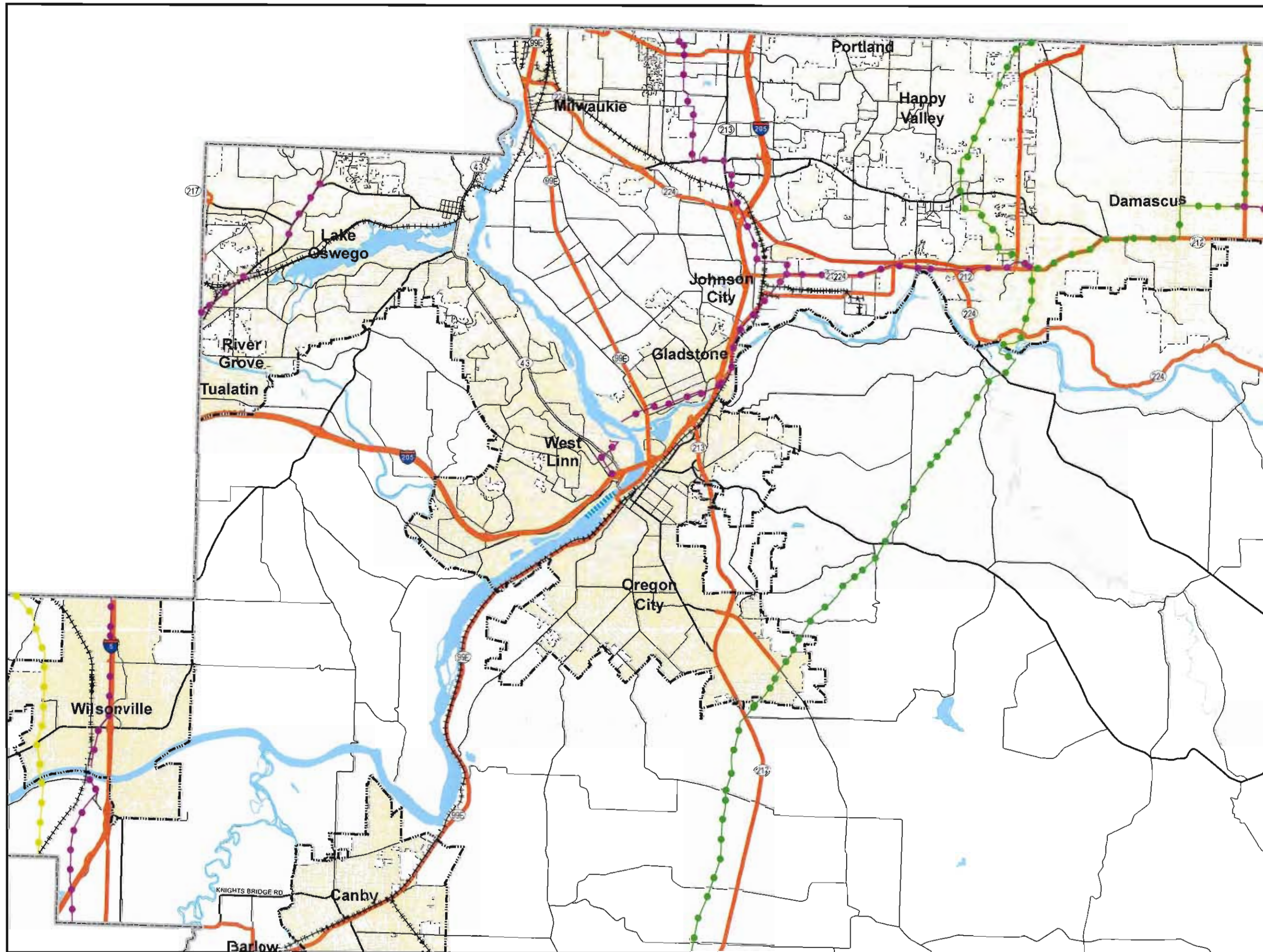
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Department of Transportation & Development
150 Beavercreek Rd Oregon City, OR 97045

CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-8c



Freight Routes

Urban

-  Truck Freight Route
-  Northwest Natural Gas
-  Williams Pipeline Corp. (Gas)
-  Kinder Morgan Liquid Petroleum
-  Railroad
-  Incorporated City
-  Urban Growth Boundary



0 0.5 1 2 Miles

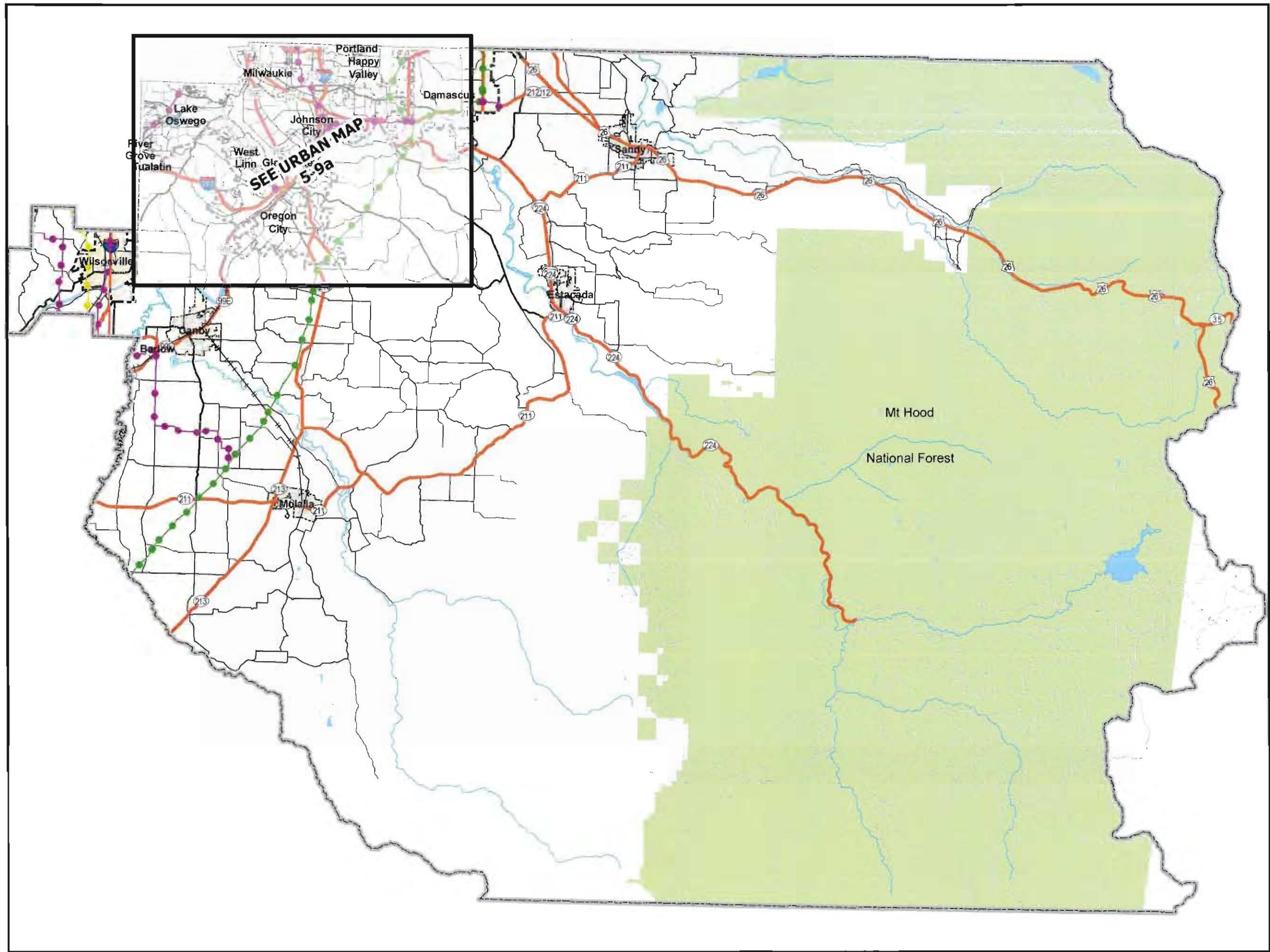
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Department of Transportation & Development
150 Beavercreek Rd Oregon City, OR 97045

CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-9a



Freight Routes

Rural

- Truck Freight Route
- Railroad
- Pipelines**
 - Northwest Natural Gas
 - Williams Pipeline Corp (Gas)
 - Kinder Morgan Liquid Petroleum
- Incorporated City
- Urban Growth Boundary
- Mt Hood National Forest



0 2 4 8 Miles

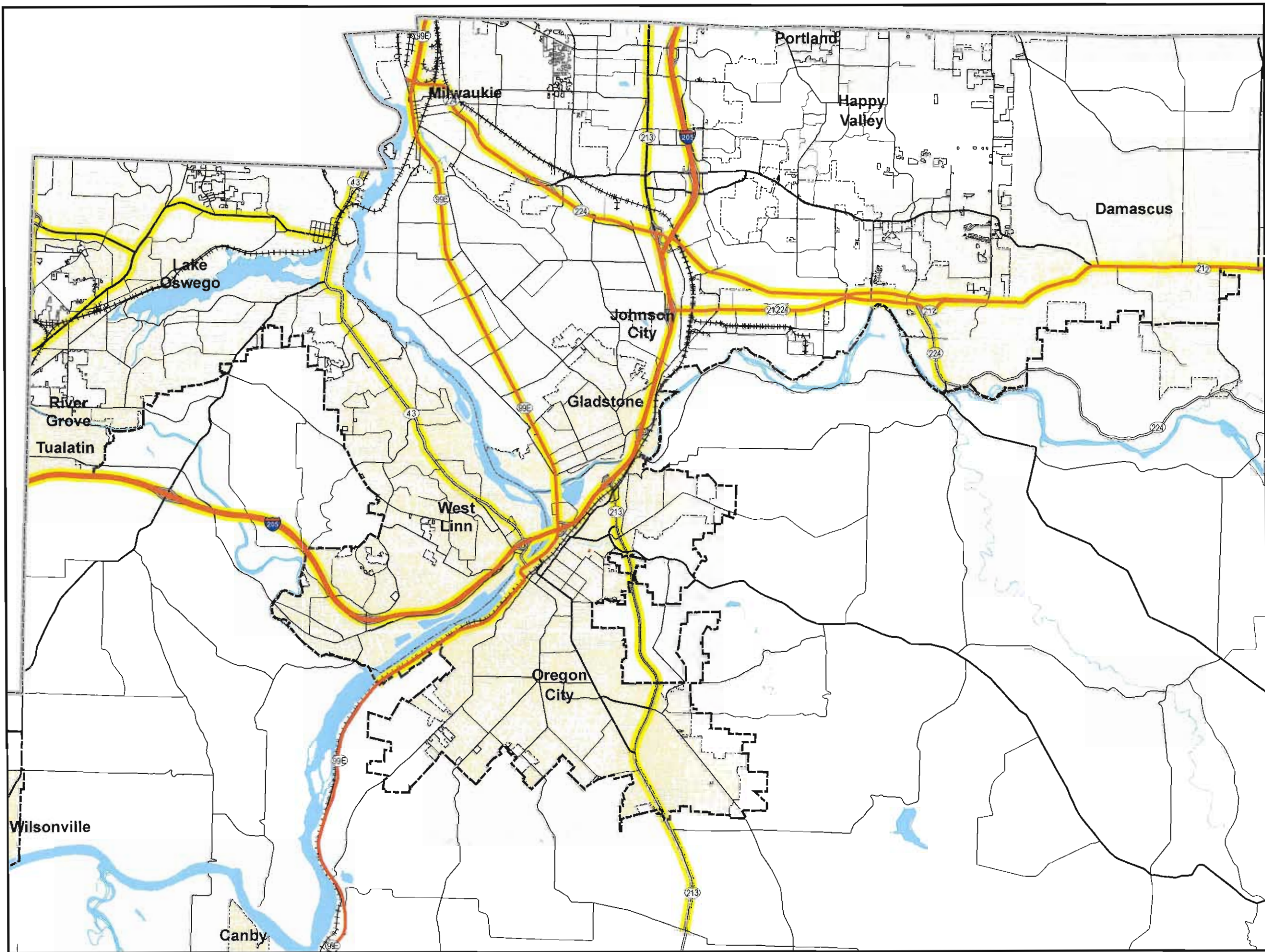
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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-9b



**Over-Dimensional
Freight Routes**

Urban

- ORS 366.215 Corridors
- National Highway System
- Incorporated City
- Metro Urban Growth Boundary



0 0.5 1 2 Miles

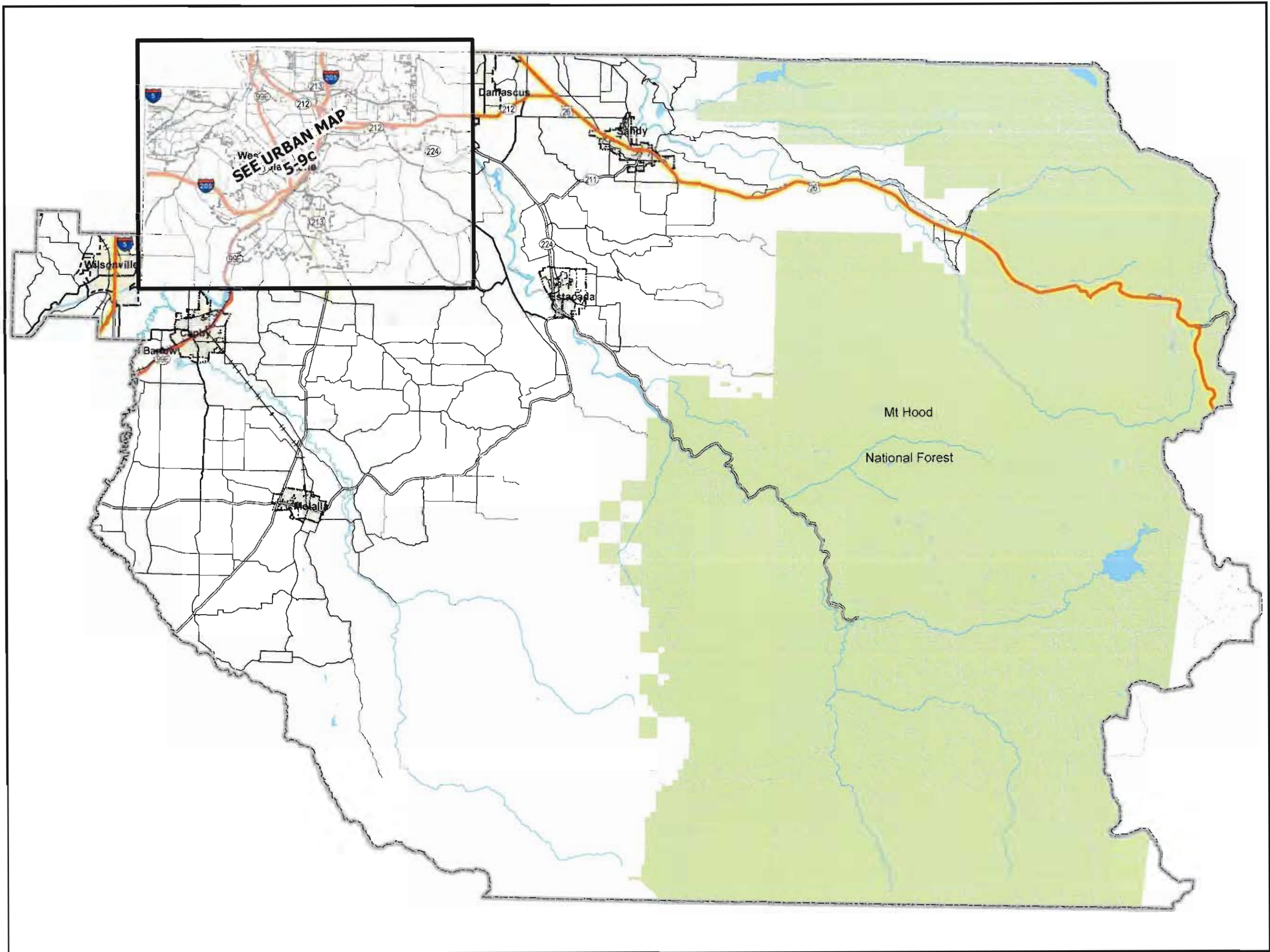
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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-9c



**Over-Dimensional
Freight Routes**

Rural

- ORS 366.215 Corridors
- National Highway System
- Urban Growth Boundary
- Mt Hood National Forest



0 2 4 8 Miles

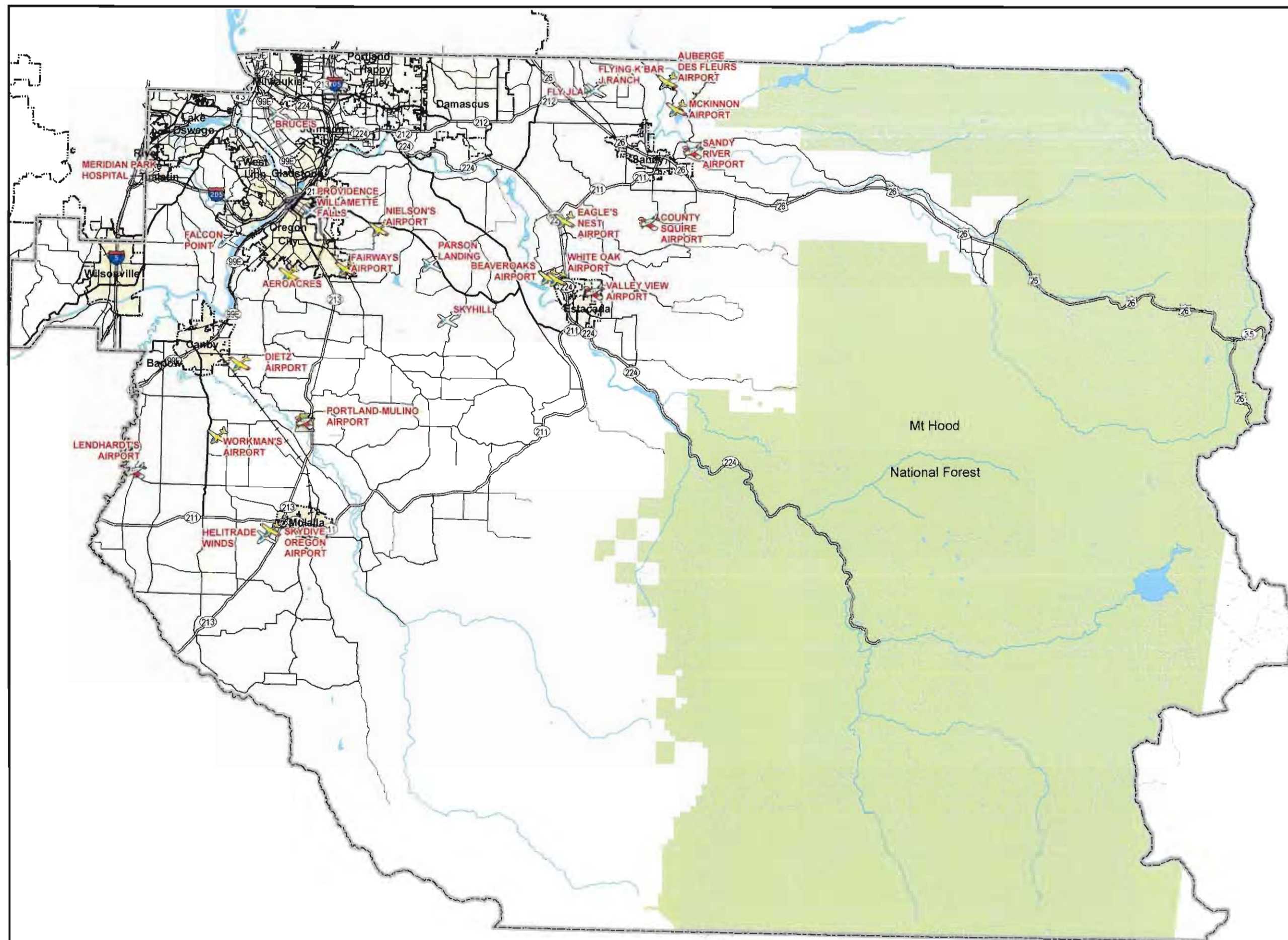
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Department of Transportation & Development
150 Beaver Creek Rd Oregon City, OR 97045

CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-9d



Airports

Public Use Airports

-  Privately Owned
-  Publicly Owned

Private Use Airports

-  Privately Owned
(3 or more aircraft)
-  2 or Fewer Based Aircraft

Mt Hood National Forest

☐ Incorporated City

Urban Growth Boundary



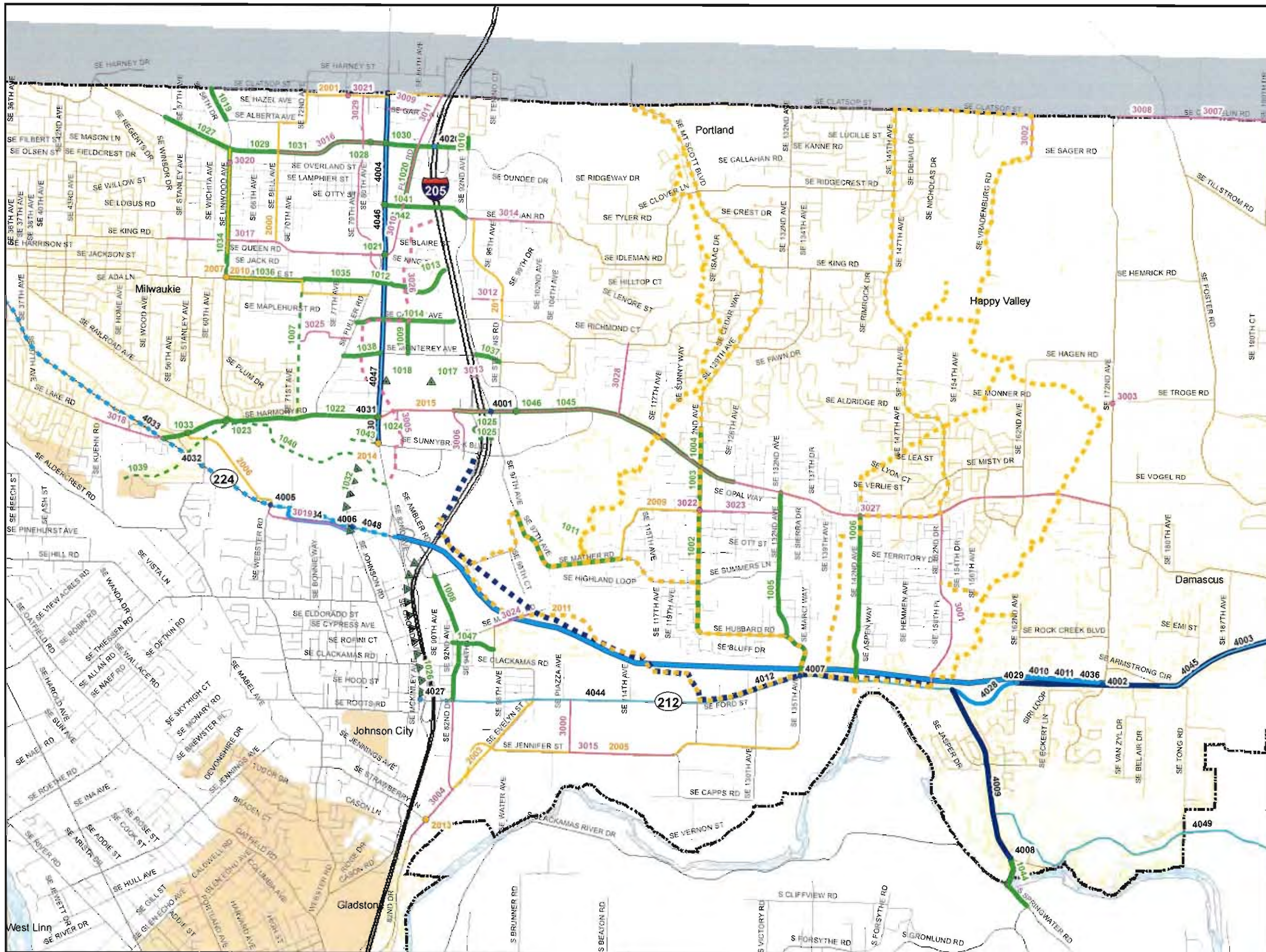
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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-10



Capital Improvement Plan

Greater Clackamas Regional Center / Industrial Area

Priority

- 20-Year Capital Projects (Table 5-3a)
- Preferred Capital Projects (Table 5-3b)
- Long-Term Capital Project Needs (Table 5-3c)

Projects on Non-County Facilities

Priority

- High (Table 5-3d)
- Medium (Table 5-3d)
- Low (Table 5-3d)



Study*

Multi-Use Path*

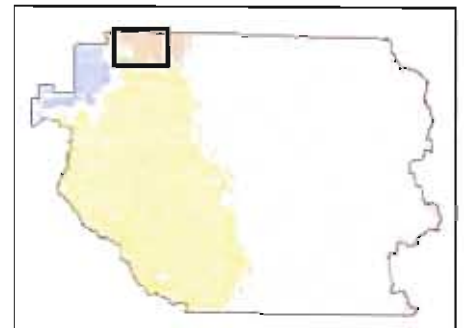
Incorporated City

Metro Urban Growth Boundary

*Symbol color consistent with Priority

symbolologies shown above

0 0.25 0.5 1 Miles

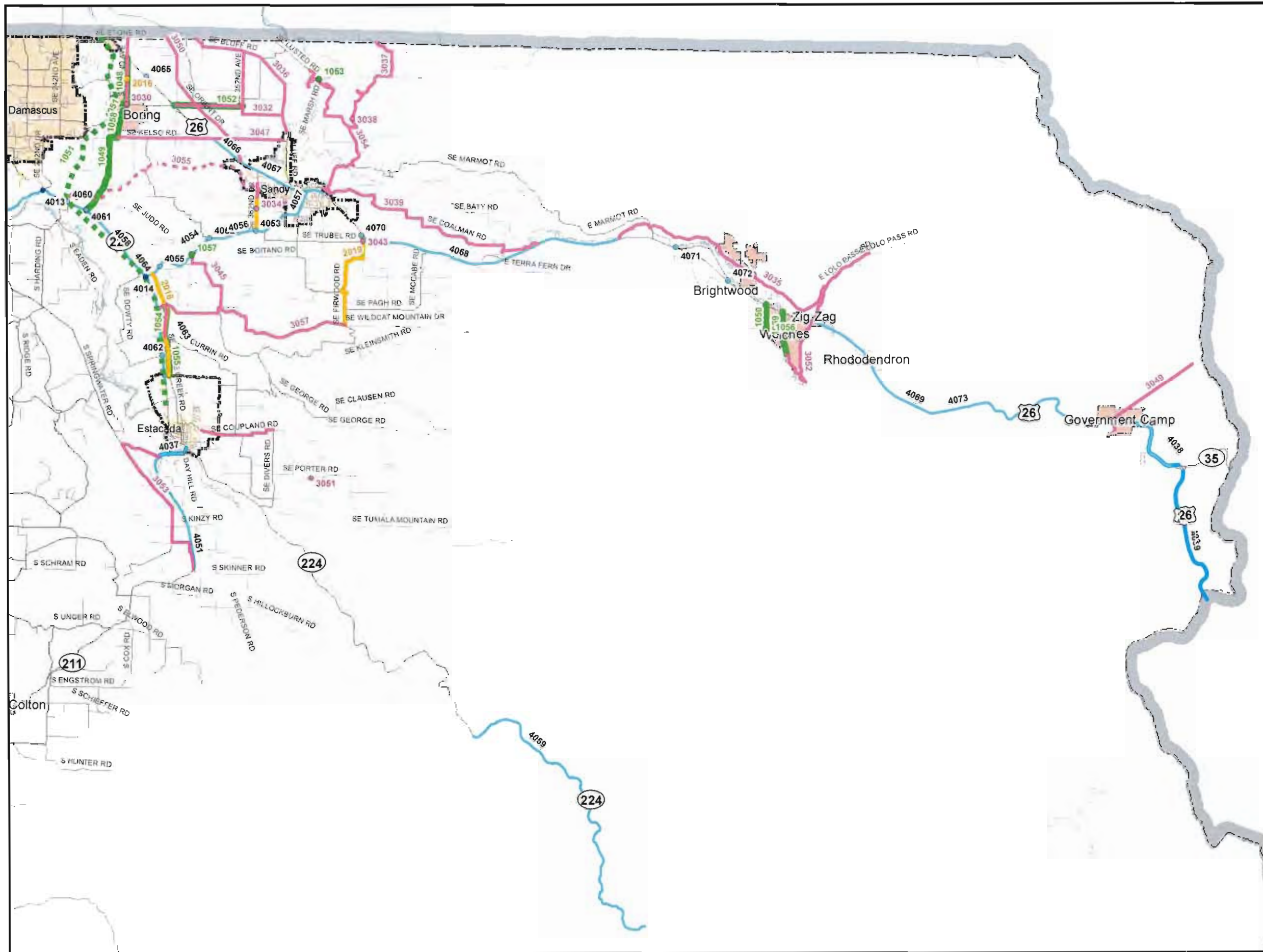


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CLACKAMAS
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Department of Transportation & Development
150 Beaver Creek Rd. Oregon City, OR 97045

CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-11a



Capital Improvement Plan

East County

Priority

- 20-Year Capital Projects (Table 5-3a)
- Preferred Capital Projects (Table 5-3b)
- Long-Term Capital Project Needs (Table 5-3c)

Projects on Non-County Facilities

Priority

- High (Table 5-3d)
- Medium (Table 5-3d)
- Low (Table 5-3d)

▲ Study*

■ ■ ■ Multi-Use Path*

— Incorporated City

--- Metro Urban Growth Boundary

*Symbol color consistent with Priority symbolologies shown above

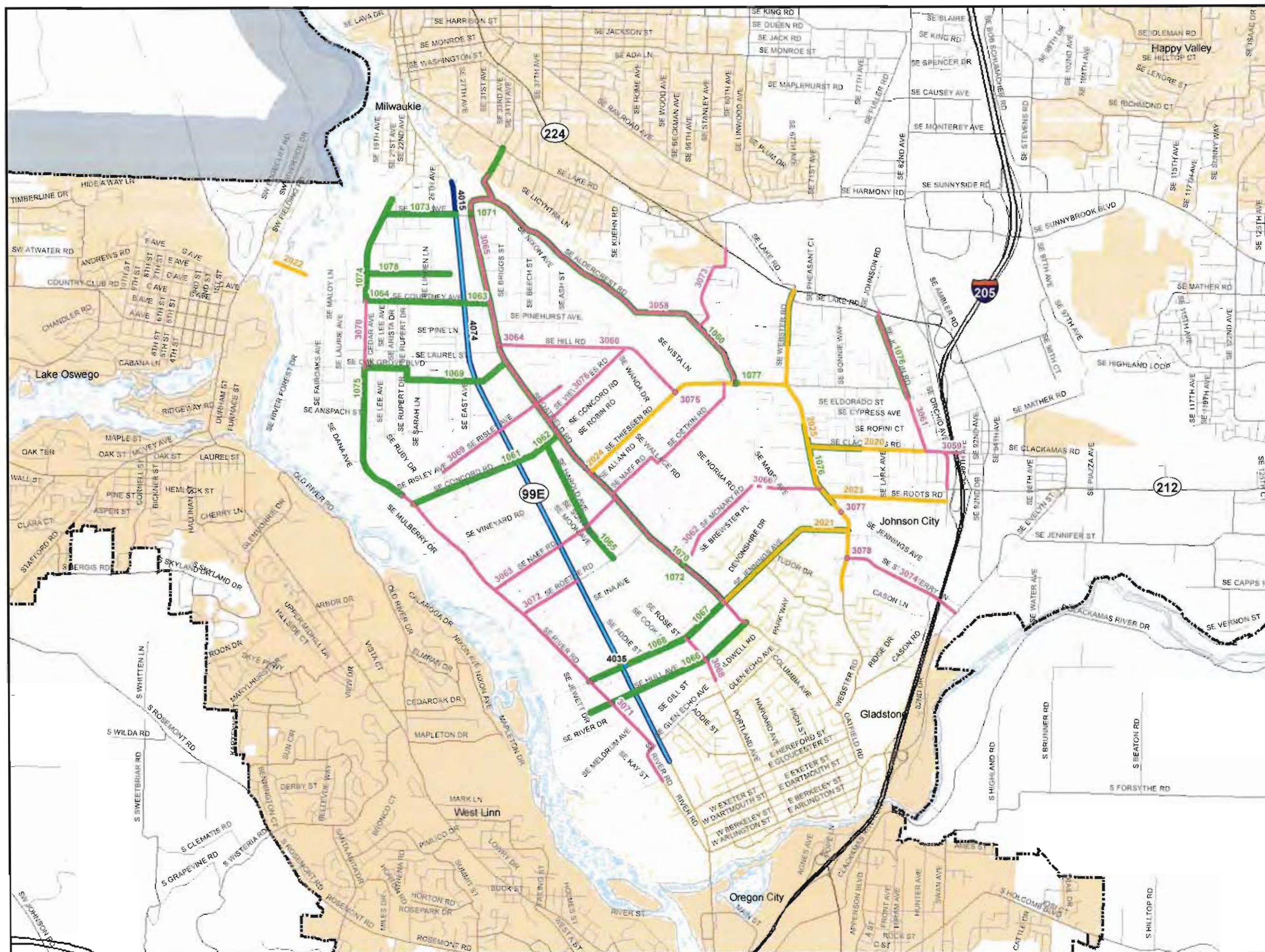
0 1.25 2.5 5 Miles

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Department of Transportation & Development
150 Beavercreek Rd Oregon City, OR 97045

CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-11b



Capital Improvement Plan

Greater McLoughlin Area

Priority

-  20-Year Capital Projects (Table 5-3a)
- Preferred Capital Projects (Table 5-3b)
-  Long-Term Capital Project Needs (Table 5-3c)

Projects on Non-County Facilities

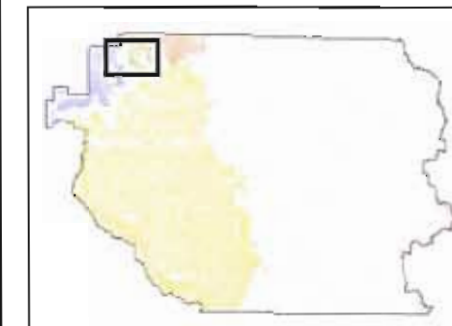
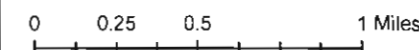
Priority

-  High (Table 5-3d)
-  Medium (Table 5-3d)
-  Low (Table 5-3d)



-  Study*
 Multi-Use Path*
 Incorporated City
 Metro Urban Growth Boundary

*Symbol color consistent with Priority symbolologies shown above

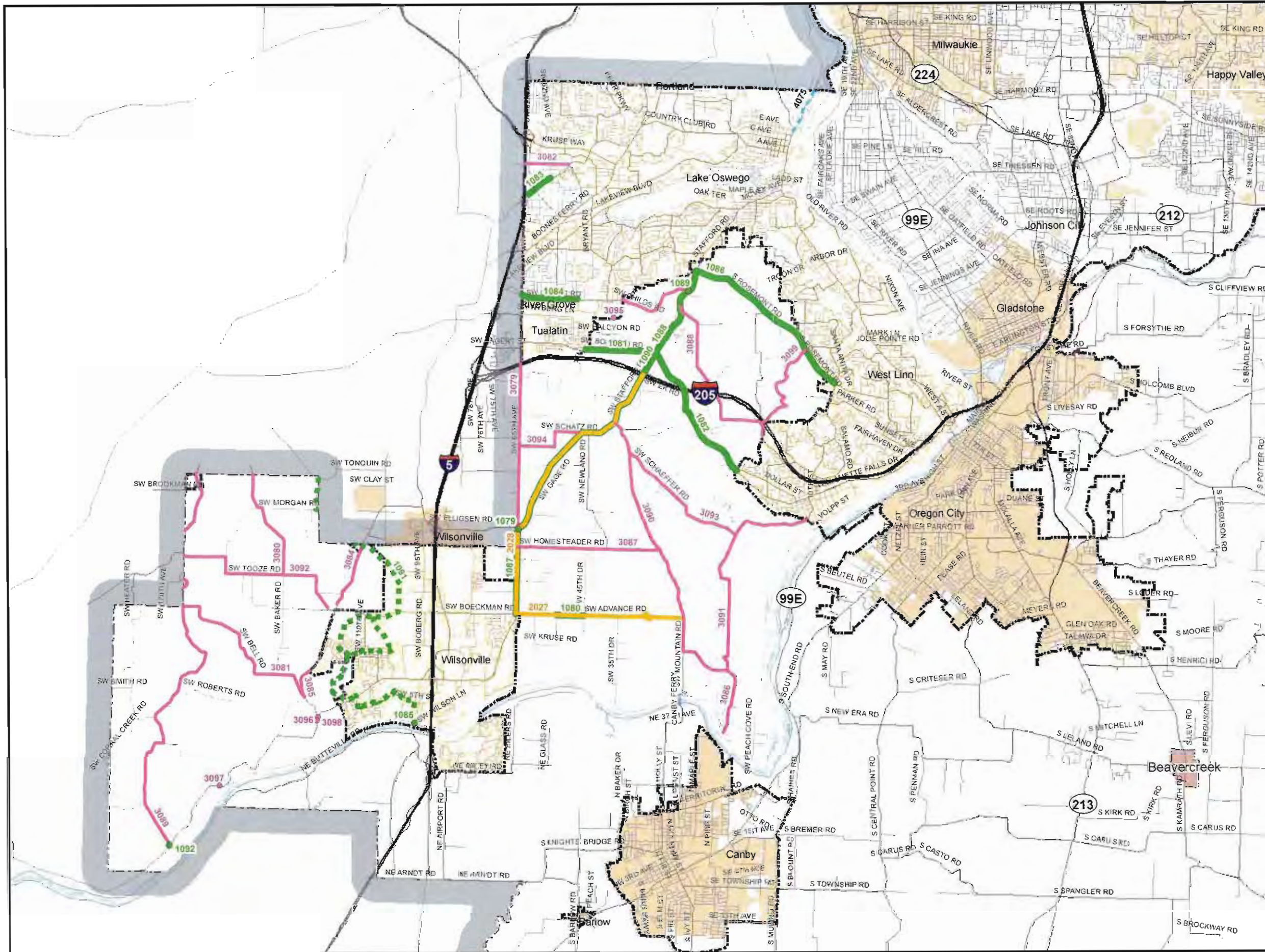


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CLACKAMAS COUNTY
COMPREHENSIVE PLAN**MAP 5-11c**



Capital Improvement Plan

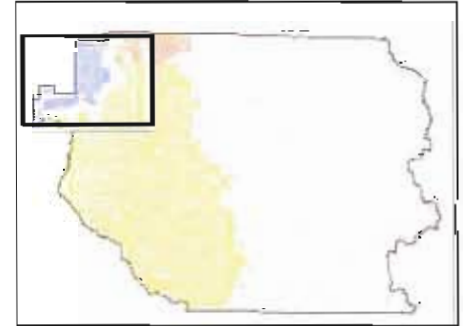
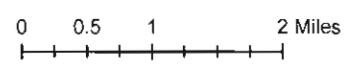
Northwest County

- Priority**
- 20-Year Capital Projects (Table 5-3a)
 - Preferred Capital Projects (Table 5-3b)
 - Long-Term Capital Project Needs (Table 5-3c)

Projects on Non-County Facilities

- Priority**
- High (Table 5-3d)
 - Medium (Table 5-3d)
 - Low (Table 5-3d)

- ▲ Study*
 - Multi-Use Path*
 - Incorporated City
 - Metro Urban Growth Boundary
- *Symbol color consistent with Priority symbolologies shown above

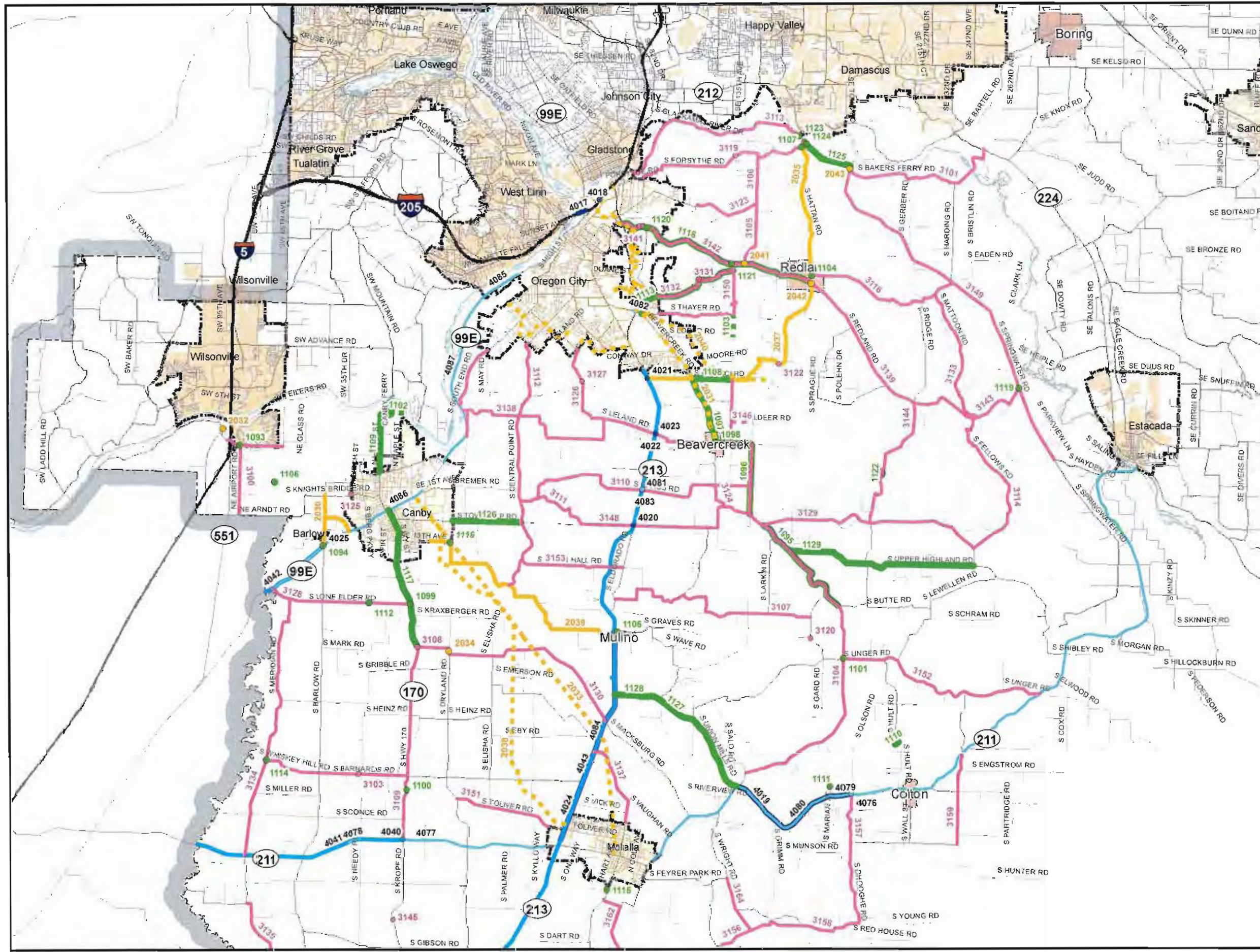


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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-11d



Capital Improvement Plan

Southwest County - Northern Portion

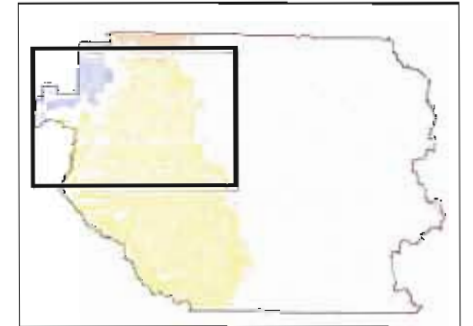
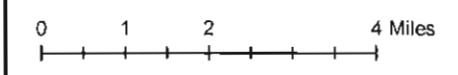
- Priority**
- 20-Year Capital Projects (Table 5-3a)
 - Preferred Capital Projects (Table 5-3b)
 - Long-Term Capital Project Needs (Table 5-3c)

Projects on Non-County Facilities

- Priority**
- High (Table 5-3d)
 - Medium (Table 5-3d)
 - Low (Table 5-3d)

- Study*
- Multi-Use Path*
- Incorporated City
- Metro Urban Growth Boundary

*Symbol color consistent with Priority symbolologies shown above

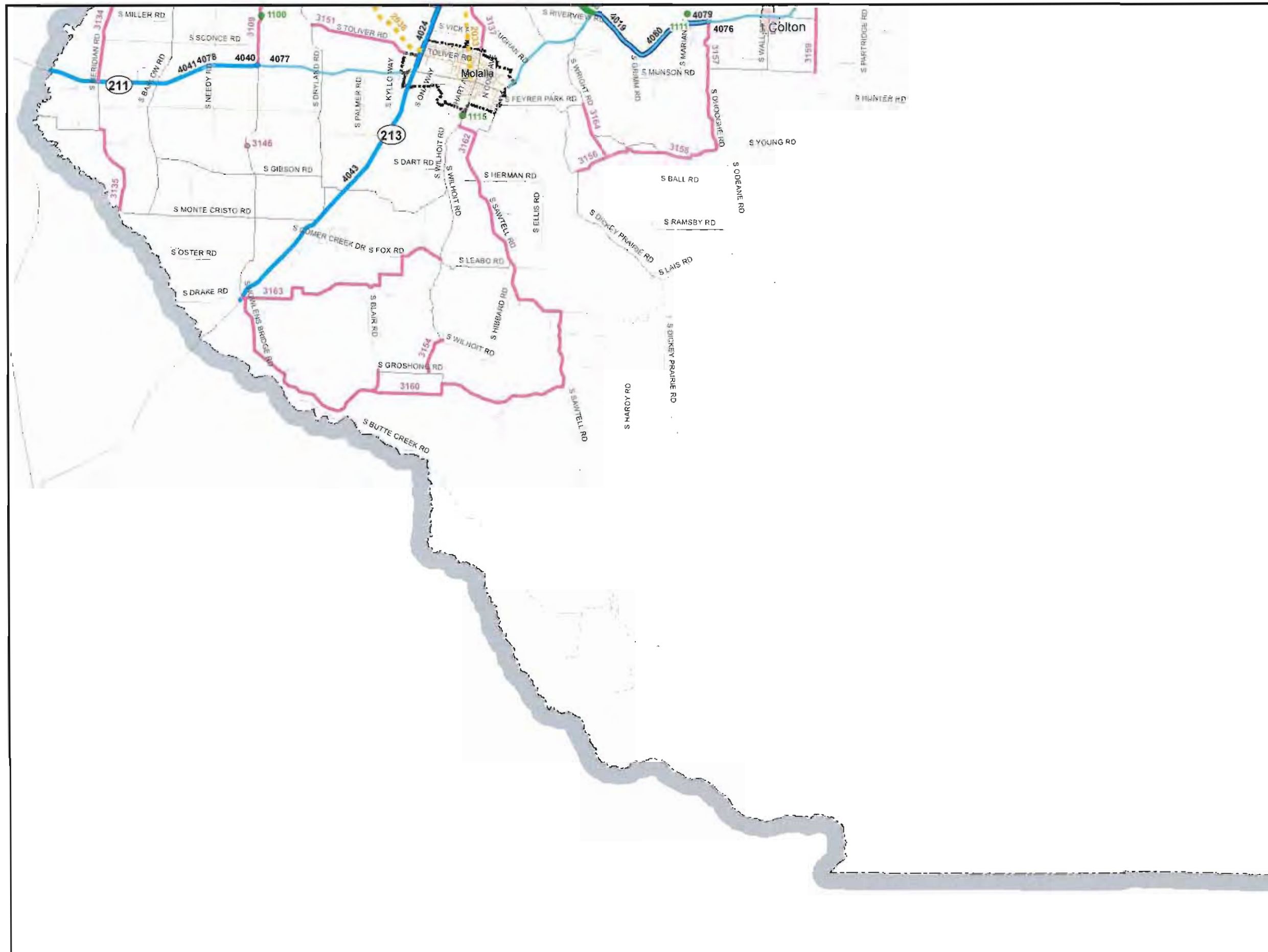


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CLACKAMAS COUNTY
COMPREHENSIVE PLAN

MAP 5-11e



Capital Improvement Plan

Southwest County - Southern Portion

Priority

-  20-Year Capital Projects (Table 5-3a)
-  Preferred Capital Projects (Table 5-3b)
- Long-Term Capital Project Needs (Table 5-3c)

Projects on Non-County Facilities

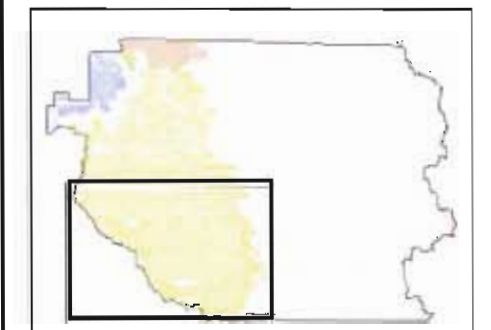
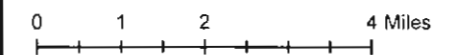
Priority

- High (Table 5-3d)
Medium (Table 5-3d)
Low (Table 5-3d)



-  Study*
 Multi-Use Path*
 Incorporated City
 Metro Urban Growth Boundary

*Symbol color consistent with Priority symbologies shown above



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Department of Transportation & Development
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CLACKAMAS COUNTY
COMPREHENSIVE PLAN**MAP 5-11f**

This section is excerpted from Chapter 4: Land Use. The only proposed change in this chapter is to remove a policy that is more appropriate for and included in Chapter 5: Transportation.

CHAPTER 4: LAND USE

UNINCORPORATED COMMUNITIES

POLICIES

- 1.0 The following areas may be designated Unincorporated Communities:
 - 1.1 Land which has been acknowledged as a Statewide Planning Goal 3 or 4 exception area and historically considered to be part of the community provided the land only includes existing, contiguous concentrations of:
 - commercial, industrial, or public uses; and/or
 - dwelling units and associated residential lots at a greater density than exception lands outside Unincorporated Communities;
 - 1.2 Lands planned and zoned for farm or forest use provided such land:
 - is contiguous to Statewide Planning Goal 3 or 4 exception lands included in the community boundary;
 - was occupied as of October 28, 1994 by one or more of the following uses: church, cemetery, school, park, playground, community center, fire station, museum, golf course, or utility facility;
 - includes only that portion of the lot or parcel that is occupied by the use(s) above; and
 - remains planned and zoned for farm or forest use.
- 2.0 Prohibit the expansion of Unincorporated Communities into areas of natural hazards.
- 3.0 Guide management of land use patterns in Unincorporated Communities by policies in this Plan and by those in community plans which are prepared as part of the County's continuing planning program as described in Chapter 11.
- 4.0 Require development to be contingent upon the ability to provide public services

(e.g., school, water, fire, telephone).

- 5.0 Develop roads in a manner and to a level compatible with Unincorporated Communities.
- 6.0 Residential uses should be allocated in a manner and to a level which supports the commercial and industrial uses and provides housing opportunities to meet needs while maintaining compatibility with adjacent land use designations.
- 7.0 Limit industrial uses to:
 - 7.1 Uses authorized under Statewide Planning Goals 3 and 4;
 - 7.2 Expansion of a use existing on December 5, 1994;
 - 7.3 Small-scale, low- impact industrial uses; as defined in Oregon Administrative Rules (OAR) 660-022-0030(11);
 - 7.4 Uses that require proximity to a rural resource, as defined in OAR 660-004-0022(3)(a);
 - 7.5 New uses that will not exceed the capacity of water and sewer service available to the site on December 5, 1994, or, if such services are not available to the site, the capacity of the site itself to provide water and absorb sewage;
 - 7.6 New uses more intensive than those allowed under Policies 7.1 through 7.5, provided an analysis set forth in this Plan demonstrates, and land use regulations ensure:
 - a. That such uses are necessary to provide employment that does not exceed the total projected work force within the community and the surrounding rural area;
 - b. That such uses would not rely upon a work force employed by uses within urban growth boundaries; and
 - c. That the determination of the work force of the community and surrounding rural area considers the total industrial and commercial employment in the community and is coordinated with employment projections for nearby urban growth boundaries.
 - 7.7 Industrial uses, including accessory uses subordinate to industrial development, sited on an abandoned or diminished industrial mill site, as defined in the Clackamas County Zoning and Development Ordinance, provided the uses will be located only on the portion of the mill site that is

zoned for industrial uses.

- 8.0 Limit commercial uses to:
 - a. Uses authorized under Statewide Planning Goals 3 and 4;
 - b. Small-scale, low-impact uses as defined in Chapter 660, Division 22 of the Oregon Administrative Rules;
 - c. Uses intended to serve the community and surrounding rural area or the travel needs of people passing through the area.
- 9.0 Encourage commercial and industrial uses to locate in Unincorporated communities to provide employment opportunities to residents of the communities and the surrounding non-urban area.
- 10.0 Require design review for commercial and industrial development.
- 11.0 Public facilities in Unincorporated Communities should be expanded or developed only when consistent with maintaining the rural character of the community.
- 12.0 Increased water service to an area shall not be used in and of itself to justify reduced lot sizes.
- 13.0 Sewerage systems shall be contained within urban growth boundaries or Unincorporated Community boundaries, and shall not be allowed to expand to land outside of such boundaries, except as provided by the Oregon Revised Statutes for abandoned or diminished mill sites.
- ~~14.0 Provide bikeways/pedestrian pathways for roads that have a collector or higher classification.~~

Appendix B

SUMMARY OF SUPPORTING DOCUMENTS

CITIZEN INVOLVEMENT

Citizen and Agency Involvement Program.

Clackamas County Citizen Involvement Program. Comprehensive Plan Chapter 2.

Committee for Citizen Involvement Bylaws.

Committee for Citizen Involvement Roster.

Community Planning Organization Leaders. Lists and maps of CPO areas.

NATURAL RESOURCES AND ENERGY

Clackamas County Energy Project Publications, 1983:

1. An Energy Anthology
2. Clackamas County Energy Use and Supply Background Data
3. Clackamas County Energy Management Plan
4. Technical Memorandum, Energy Emergency Planning
5. Technical Memorandum, County Buildings
6. Technical Memorandum, County Motor Fleet
7. Technical Memorandum, County Organization

Clackamas County Resources Atlas, Clackamas County Dept. of Environmental Services, Planning Division. Includes maps of the following:

General Resources

Agricultural Land Types and Major Production Areas

Forest Zones and Vegetative Types

Cubic Foot Forest Site Classes

Forest Ownerships

Urban Forest Cover

Detailed SCS Soil Mapping Index

Unique National and Scenic Features

Open Urban Land Inventory

Park and Recreation Facilities; Historic and Cultural Sites

Fisheries and Wildlife Habitats

Aggregate Sites

Groundwater Studies Index

Geologic Hazards, Northwest Clackamas County

River Corridors, Existing Conditions and Management Strategies

Precipitation and Physiography

Draft Third Biennial Energy Plan, Action Plan and Recommendations, Oregon Department of Energy, October 1988.

Environmental Geology of the Kellogg Creek-Mt. Scott Creek and Lower Clackamas River Drainage Areas, Northwestern Clackamas County, Oregon, M.S. Thesis, Matthew John Brunego, March, 1978.

Federal Land Resource/Management Plans - Mt. Hood National Forest, Draft EIS, U.S. Forest Service, 1988; and Eastside Salem District Planning Area Land Use Plan (Clackamas Unit), Bureau of Land Management, 1982.

Fish and Wildlife Habitat Protection Plan for Clackamas County, Oregon Department of Fish and Wildlife, 1979.

Geologic Hazards of the Bull Run Watershed, Multnomah and Clackamas Counties, Oregon, Oregon Bulletin 82. Oregon Department of Geology and Mineral Industries, 1974.

Geology and Geologic Hazards of Northwestern Clackamas County, Oregon Bulletin 99, Oregon Department of Geology and Mineral Industries, 1979.

Geology and Ground Water of the Molalla-Salem Slope Area, Northern Willamette Valley, Oregon, U.S. Geological Survey, 1967.

Ground Water Resources in the French Prairie Area, Northern Willamette Valley, Oregon, U.S. Geological Survey, 1967.

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Text to be added is underlined. Text to be deleted is ~~struck through~~.

CHAPTER 10

MOUNT HOOD COMMUNITY PLAN

The Mt. Hood area is unique, and the policies of the Mt. Hood Community Plan recognize this character. The economy of the community is dependent upon the conservation of the environment, which creates the setting so attractive to both residents and visitors. The Mt. Hood Community Plan, in conjunction with the Clackamas County Comprehensive Plan, provides the guidelines to assure reasonable development potential consistent with the need for environmental conservation.

The Clackamas County -Comprehensive Plan is applicable to the Mt. Hood area; however, the Mt. Hood Community Plan takes precedence where conflicts between the two documents exist.

The Mt. Hood Community Plan contains some policies ~~which~~ that are in addition to, or different from, the County Comprehensive Plan in four subject areas: Land Use, Public Facilities, Transportation, and Planning Process.

LAND USE

In the Mt. Hood area, the Forest, Agriculture, Rural, Rural Commercial, Urban Low Density Residential, Community Commercial, and Open Space designations of the Comprehensive Plan are applicable. Additionally, the Mountain Recreation designation may be applied. All land designated Urban in the Mt. Hood area is Immediate Urban. The three village districts of Government Camp, Rhododendron and Wemme/Welches are recognized for their separate character and individual environment.

VILLAGES

1.0 Government Camp

- 1.1 The Government Camp Village is -identified as an Urban Unincorporated Community in compliance with Chapter 660, Division 22 of the Oregon Administrative Rules (OARs).
- 1.2 Provide for a high intensity development character in Government Camp Village.
- 1.3 Development of US Forest Service lands inside the Government

Camp Urban Unincorporated boundary may occur only if it complies with the US Forest Service regulations. Upon completion of a land transfer to private ownership, development of these lands may occur only if it complies with the provisions of this Plan.

- 1.4 Provide for pedestrian circulation and access within the business center.
- 1.5 Require new commercial or residential development of more than three units to provide a plan for snow removal and stockpiling.
- 1.6 Require one on-site parking space for each single-family residence developed on a lot of record existing prior to the adoption of this provision.
- 1.7 Require all new residential development of more than three units to provide covered parking.
- 1.8 Limit building height to seventy (70) feet, within the Low Density Residential and Mountain Recreation designations within Government Camp. Allow modification procedures to accommodate understructure parking.

2.0 **Rhododendron**

- 2.1 Provide for a development character of low intensity (See development level chart, page 3).
- 2.2 Encourage development of crosswalks, signals, or a pedestrian overpass or underpass to facilitate movement across Highway 26.

3.0 **Wemme/Welches**

- 3.0 Provide for a development character of medium intensity (See development level chart, page 3).
- 3.1 Orient new development away from Highway 26, which is designated a scenic highway.
- 3.2 Encourage development of recreational-resort facilities to provide accommodations for the users of the area's recreational amenities.

- 3.3 Encourage development of a shuttle bus system to provide access to the ski areas.

RESIDENTIAL

- 1.0 Property may be zoned Recreational Residential in areas designated Rural within the Mount Hood Community Plan, when all of the following criteria are met:
 - a. Parcels are generally two acres or smaller,
 - b. The area is significantly affected by development, and
 - c. There are no natural hazards and the topography and soils conditions are well-suited for the location of homes.
- 2.0 Allow density bonuses within the Low Density Residential and Mountain Recreation designations pursuant to the County Comprehensive Plan and the Zoning and Development Ordinance. In the Mountain Recreation designation, units allowed through the density bonus provisions shall be developed with the same unit size mixture as provided in the base density for the development. For example, if a development is proposed with a mixture of 50 units of 700 square feet each, and 50 units of 500 square feet each, and a bonus density of 10 units is allowed -- the ten units shall include 5 units of 700 square feet each, and 5 units of 500 square feet.
- 3.0 The Low Density Residential designation of the Comprehensive Plan may be applied within the Mt. Hood urban area, according to the policies for designation stated in the Comprehensive Plan.
- 4.0 Implement the Low Density Residential designation by application of only the Hoodland Residential (HR) zone, which shall allow a maximum density of four (4) units per acre.
- 5.0 The Mountain Recreation areas provide overnight housing for the users of the recreational facilities in the Mt. Hood area, in addition to providing for a variety in housing types at a density higher than allowed in the Low Density Residential areas. Uses allowed include multifamily residential structures, resort housing and motels.
 - 5.1 The Mountain Recreation designation may be applied within the Mt. Hood urban area, when all of the following criteria are met:
 - a. The land is located within a village district,

- b. Public sewer and a State approved water system are available and adequate to support the development potential of this designation, and
 - c. The pattern and character of development within the area would not be adversely affected by uses allowed by this designation.
- 5.2 Encourage a variety of housing types and individual unit sizes within the Mountain Recreational Resort zoning district by calculating density based on floor area. The unique character of individual village districts shall be recognized by varying density according to the village.
- 5.3 Government Camp Densities: Mountain Recreational Resort zoning district - 22 units per acre. Rural Tourist Commercial zoning district - 50 units per acre for resort accommodations.
- 5.31 The following development level chart establishes the densities for other village districts:

Floor Area per unit in sq. ft.	No. of units per acre at development levels	
	<u>Wemme/Welches</u>	<u>Rhododendron</u>
1200+	6	4
1000-1199	7	5
800-999	8	6
600-799	10	8
400-599	14	12
200-399	32	22

- 5.4 Allow incidental commercial uses within a development in the Mountain Recreation area, as a limited use.
- 5.5 Implement the Mountain Recreation designation with the Mountain Recreational Resort zone.
- 6.0 Establish density standards for fragile or hazardous areas within the Mt. Hood urban area as follows:
- a. Land within the 100 year floodplain shall be excluded from land area calculations; there is no density credit allowed for this area.
 - b. Except as modified by policy 6.1, identified land movement areas, wetlands, and slopes over 25% shall not be developed; 50% of the density allowed by zoning may be transferred to an unrestricted

area within the development.

- c. Except as modified by policy 6.1, development shall not occur within stream corridor areas; 100% of the density allowed by zoning may be transferred to an unrestricted area.

- 6.1 Notwithstanding Policy 6.0, one single family residence may be developed on a lot of record, provided that such development is otherwise consistent with the provisions of the Comprehensive Plan and the Zoning and Development Ordinance. The policies stated in 6.0 above apply only to residential development; all other development shall be controlled by the provisions of the Comprehensive Plan and Zoning and Development Ordinance.

COMMERCIAL

- 1.0 The Community Commercial designation of the Comprehensive Plan may be applied within the Mt. Hood urban area, according to the criteria for designation stated in the Comprehensive Plan.
 - 1.1 Implement the Community Commercial designation by application of only the Rural Tourist Commercial (RTC) zoning district.
- 2.0 The Rural Commercial designation of the Comprehensive Plan may be applied outside of the Mt. Hood urban area, according to the criteria for designation stated in the Comprehensive Plan.
- 3.0 The Neighborhood Commercial zone shall not be applied in the Mt. Hood area.

OPEN SPACE

- 1.0 All areas within the 100 year floodplain, wetlands and slopes exceeding 25% in the Mt. Hood area shall be designated Resource Protection Open Space. See Maps X-MH-1, X-MH-2, X-MH-3.
- 2.0 For the Government Camp Urban Unincorporated Community, there are two (2) Open Space designations that are implemented through the Government Camp Open Space Management District: (1) Public and Community Use, and (2) Buffer areas.
 - 2.1 Designate Public and Community Use areas for utility facilities and public and private recreation uses and structures, including ski facilities, ice skating arenas, and indoor and other outdoor athletic and sport training facilities.

- 2.2 Designate buffer areas as open to maintain the area's environmental character and residential privacy. Development shall be minimized in these areas to the fullest possible extent.
- 3.0 Open space uses shall not substantially contribute to vehicular trip generations.

PUBLIC FACILITIES

- 1.0 Prohibit lot divisions or development requiring subsurface disposal systems, within the Mt. Hood urban area, except for:
 - a. Remodeling or additions to existing development, when such remodeling would not require any alteration or expansion of the subsurface disposal system, or
 - b. Parcels with unique topographic or other natural features which make sewer extension impractical.
- 2.0 Insure that subsurface sewage disposal systems in non-urban areas are allowed only when lot sizes give maximum assurance that no failures will occur that could require annexation to the Hoodland Service District.
- 3.0 Extension of sanitary sewer service to lands outside an unincorporated community boundary may be allowed in the Hoodland Service District or Government Camp Sanitary District boundary only under the following circumstances:
 - a. The property is located within an acknowledged unincorporated community boundary or the sanitary sewer line extension is the only practicable alternative to resolve a health hazard as defined by the State of Oregon; or

- b. The sanitary sewer extension provides service to an existing, committed nonforest public use area, such as Timberline Lodge and its related facilities, Silcox Hut, or a Boy Scout lodging facility provided: (1) these uses are approved as an exception to Goal 4 of the Statewide Planning Goals; and (2) the extension is approved as an exception to Goal 11 of the Statewide Planning Goals.

4.0 The Government Camp Water System Master Plan, dated July 2000, shall be acknowledged as the water element of the Government Camp Facilities Plan.

5.0 The Government Camp Sanitary District Wastewater Facilities Plan, dated October 1995, shall be acknowledged as the sanitary sewer element of the Government Camp Facilities Plan.

~~6.0 The Rural Transportation System Plan, approved February 14, 2001, shall be acknowledged as the transportation element of the Government Camp Facilities Plan.~~

7.0 6.0 Clackamas County shall acknowledge periodic updates of the sanitary sewer, water and transportation elements of the Government Camp Facilities Plan.

~~8.0~~ 7.0 Review of development applications shall be coordinated with all service agencies to ensure facility service capacity is available to new developments.

TRANSPORTATION

In addition to those policies which form a part of the Comprehensive Plan for the County, the development of the roads shall be in accordance with the following policies.

1.0 The functional classification and other design requirements found in Chapter 5, *Transportation*. Designate the following roads as:

1.1 Major Arterials

a. Highway 26

b. Highway 35

1.2 Minor Arterial

- a. ~~East Barlow Trail Road~~
- b. ~~East Lolo Pass Road~~
- c. ~~Salmon River Road to the U.S. Forest Service Boundary~~

1.3 Collector

- a. ~~East Welches Road~~
- b. ~~East Brightwood Loop~~
- c. ~~East Government Camp Loop~~
- d. ~~East Arrah Wanna Blvd.~~
- e. ~~East Sleepy Hollow Drive~~
- f. ~~East Fairway Avenue~~
- g. ~~S.E. Cherryville Drive~~
- h. ~~Multopor Drive~~

2.0 Encourage intersection improvements at the following intersections with Highway 26:

- A. East Brightwood Loop
- B. East Lolo Pass Road
- C. East Welches Road
- D. Highway 35
- E. Entrance to Multopor Ski Bowl facilities.
- F. Government Camp Loop

- 3.0 Encourage development of a loop road south of Highway 26 in Government Camp. The loop would complete access from the west to the east side of Government Camp, and would improve access to the Multotorpor/Ski Bowl facilities. Interchanges should be developed at the intersections with Highway 26.
- 4.0 Cooperate with the Oregon Department of Transportation to maintain a reasonable level of service and safety on US 26, in the Mt. Hood Corridor.
 - 4.1 Limit access to Highway 26, and encourage shared access where access to Highway 26 is necessary.
 - 4.2 Encourage redesign of older platted areas along Highway 26, to reduce the number of access points.
 - 4.3 Encourage the development of alternatives to automobile transportation to ski facilities, to reduce parking needs at ski areas and to reduce congestion on Highway 26. Individual developers and existing resort facilities should be encouraged to provide shuttle systems and/or other facilities such as an aerial tram between Government Camp and Timberline Lodge.
 - 4.4 Coordinate with the community and Oregon Department of Transportation to design safe and convenient pedestrian and bicycle crossings across Hwy 26.
- 5.0 Cooperate with the State Highway Department to provide a rest area and information center between Sleepy Hollow and Zig Zag.
- 6.0 Encourage development of a community-wide network of pedestrian trails.
 - 6.1 Ensure continued public access to recreation trails shown on Map X-MH-5 and located within the Government Camp Urban Unincorporated Community boundary. Provisions may be made through appropriate legal documents, and may include requirements such as retaining conservation easements on these lands.
 - 6.2 Encourage the efficient connection of Forest Service trails located outside the Government Camp Urban Unincorporated Community Boundary to trail systems located within the boundary, to provide an integrated network of walkways, bikeways and trails.

PLANNING PROCESS

- 1.0 The Clackamas County Comprehensive Plan is applicable to the Mt. Hood area; however, the Mt. Hood Community Plan takes precedence where conflicts between the two documents exist.
- 2.0 The statements of issues and alternatives and the inventories and data of the 1976 Mt. Hood Community Plan, the 1976 Mt. Hood Planning Unit Draft Environmental Statement, 1989 Government Camp Village Revitalization Plan and Report, 1999 Government Camp Village Design Incentives Plan, 1980 Summit Ski Area Expansion Environmental Assessment Report, 1981 Multnomah Ski Bowl Master Plan, 1995 Government Camp Sanitary District Wastewater Facility Plan, 2000 Government Camp Water System Master Plan, 2000 Rural Transportation System Plan, Mt. Hood Corridor Plan-Final Environmental Impact Statement, and the revisions and additions to these documents are adopted as background reports for the policies and designations of the Mt. Hood Community Plan.

MAPS

(Maps are not included in this package because no change is proposed)

Mount Hood Community Plan

Map X-MH-1	Resource Protection Open Space, Zigzag Village-Rhododendron
Map X-MH-2	Resource Protection Open Space, Wemme-Welches
Map X-MH-3	Resource Protection Open Space, Wildwood-Timberline
Map X-MH-4	Government Camp Village Plan, Land Use Plan and Boundary
Map X-MH-5	Government Camp Village Plan, Resource Protection & Open Space
Map X-MH-6	Government Camp Village Plan, Recreation Trails & Facilities

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KRUSE WAY DESIGN PLAN

Clackamas County's Comprehensive Plan and implementing ordinances for the northwest urban-unincorporated area provide for design plans for special areas:

The design plans are general framework plans which allow a unique focus, prior to specific development proposals or applications, on public facilities, capital improvements, land use, and distinctive natural areas. Design plans are not intended to be site specific. They provide a general framework plan from which applicants develop site specific proposals. The design plan brings together Comprehensive Plan and Zoning and Development Ordinance provisions, and other public policies that relate to a specific geographic area.

Both Clackamas County and the City of Lake Oswego share a deep interest in the land uses and public facilities for the Kruse Way Corridor. In recognition of that common interest, the County and City in September, 1980 established a Dual Interest Area Agreement that provides for coordination, notice to the City or County land use hearings, and for development of a design plan for the Kruse Way area.

In late 1982, Lake Oswego joined the County and property owners in the Kruse Way Corridor to work with a traffic consultant that the County hired to analyze traffic and transportation. The result of that cooperation is the Buttke Traffic circulation and transportation management program. The document was received in January 1983 and was presented to the Board of County Commissioners, Lake Oswego City Council, and the City and County Planning Commissions on April 4, 1983. This design plan incorporates the intersection improvements and capital improvements recommended by that report, and consolidates County policy to guide the development allowed by the Comprehensive Plan for the area.

The Kruse Way Design Plan covers approximately 110 acres of the unincorporated area west of Lake Oswego. The approximately five-acre area north of Kruse Way and on the east side of Carmen Drive is designated and zoned Medium Density Residential (MR-1). In the area south of Kruse Way from Carman Drive to Bangy Road, approximately 50 acres is designated and zoned Campus Industrial (CI); approximately 40 acres is General Commercial (C-3); and approximately 15 acres is High Density Residential (HDR).

According to the Buttke report, the assumed future land uses in the southwest quadrant of the Kruse Way Corridor are 200 multifamily dwellings, 300 hotel rooms, 193 thousand gross square feet (TGSF) of buildings for

Service/Commercial (General retail, service retail, banks, restaurants); and 2,355 TGSF of Office. See Table 1, page 7 of Buttke report.

The area covered by this design plan is shown on Map X-KW-14.

LAND USE

Design Plan Area

Design plan areas are designated where superior transit service and pedestrian traffic are planned in conjunction with commercial, industrial, and multifamily residential uses. Transit and pedestrian-oriented uses are encouraged in these areas.

Plan Policies

Encourage pedestrian and transit-oriented development, employment uses and their supporting commercial and residential uses.

2.0 — Protect the Carter Creek and Kruse Way resource protection areas, as shown on the northwest urban land use plan map, through application of the Protection of Natural Features provisions in Section 1000 of the Zoning and Development Ordinance.

Protect the boulevard designation of Kruse Way through application of the landscaping provisions in Section 1000 of the Zoning and Development Ordinance.

TRANSPORTATION

Implementation Strategies

The land uses which are allowed in this area are such that increased traffic will be generated. It is Clackamas County's goal as set forth in its Comprehensive Plan to provide for roadway and intersection improvements sufficient to allow the land use designations to develop compatibility with other areas in the metropolitan region while continuing to maintain operable levels of traffic on the roadways.

In line with this goal Clackamas County hired Carl H. Buttke, Inc. Consulting Transportation engineer to study the Kruse Way area, analyze land uses and their traffic generations and devise a system of roadway improvements and traffic management techniques to resolve future traffic conflicts. The goal of the study was to determine what improvements and other management techniques would be necessary to maintain a satisfactory level of operation of the roadways during p.m. peak hours in accordance with the land uses allowed in the Clackamas County's and Lake Oswego Comprehensive Plans. (See report on Traffic Circulation and a Transportation Management program Kruse Way Corridor, Carl H. Buttke, Inc.).

Based on the results of Mr. Buttke's study the following implementation strategies shall be applied to roadways and intersections in the Kruse Way Design Plan area.

Traffic Operations Improvements

See Map X-KW-2 titled, "Recommended Number of Approach Lanes to Intersections Throughout Corridor".

1. All the intersections along Kruse Way between the I-5 southbound ramps and Boones Ferry Road shall be signalized and interconnected on a coordinated system. Traffic signals shall be installed that intersections of Garman Drive at Meadows/Quarry Roads and at Bonita/Waluga Roads, and at the intersection of Bangy Road and Meadows Road with this signal interconnected to the system along Kruse Way.

2. Kruse Way and Boones Ferry Road

The northbound travel operation of Boones Ferry Road through the intersection with Kruse Way shall be modified by converting the inside through lane to a combination through and left turn lane.

3. Kruse Way and Garman Drive

Garman Drive shall be widened at the intersection with Kruse Way to provide a left turn lane, one through lane, and a right turn lane on both the north and southbound approaches to this intersection. It is anticipated that the left turn lanes in Garman Drive will be required during the early stages of development within the Corridor and that the right turn lanes will be necessary when the Corridor is approximately 40 to 50 percent developed or by about 1988 to 1990. Far side bus pullout lanes shall be added on Kruse Way.

4. Kruse Way and Westlake Drive

~~Right turn lanes shall be installed on each approach of Kruse Way to the intersection with Westlake Drive. Far-side bus pullout lanes shall be provided on each side of Kruse Way at this intersection. The bus pullout lanes must be of sufficient length to accommodate the proposed bus transfer activity at this location.~~

~~The northbound approach to Kruse Way will require two left turn lanes and combination through and right turn lane. The design of Westlake Drive indicates a 40-foot roadway at the intersection and the design for the Broadbent access road indicates two inbound lanes, a ten-foot landscaped median, and three outbound lanes. These designs satisfy the lane requirements, but do not match with each other. Therefore, as development occurs within the corridor coordination between these two projects will be necessary.~~

~~A six-phase traffic signal shall be installed to control traffic at this intersection. Left turn phases are recommended on Kruse Way and a separate phase for the southbound movement and a separate phase for the northbound movement. These intersection improvements shall be made with the initial development of the property or with the construction of the approach roadways. Initially, the northbound approach to Kruse Way shall be striped for one left turn lane, one through lane, and one right turn lane.~~

~~5. Kruse Way and Liberty Park/Westlake Access~~

~~The north and southbound approaches from Liberty Park and Westlake to Kruse Way shall be developed with one left turn lane and one combination right turn and through lane. Right turn lanes shall be installed on each approach of Kruse Way to this intersection and farside bus pullout lanes be provided on each side of Kruse Way. This intersection shall be signalized with a five-phase traffic signal to provide left turn phases on Kruse Way and one phase to control the north-south approaches. These improvements shall be made as properties develop.~~

6. — Kruse Way and Bangy Road

~~The eastbound approach of Highway 217 to the intersection with Bangy Road/I-5 northbound ramps shall be widened by 12 feet to provide a double left turn lane (east bound to northbound movement). This modification would require widening the Highway 217 bridge over I-5 by approximately ten feet at the east end and tapering back to the existing width at the west end. Kruse Way shall be widened on the southside to form a taper east of the intersection. The taper would be approximately six feet wide at the intersection and extend easterly for approximately 200 to 300 feet. The northbound on-ramp to I-5 shall be widened from one to two lanes for approximately 500 feet north of the intersection. It is estimated that this double left turn lane would be needed by approximately 1990.~~

~~The northbound approach of Bangy Road shall provide for two left turn lanes and a combination through and right turn lane. This modification to Bangy Road is estimated to be required by approximately 1986 or 1987.~~

~~The existing signal phasing at the intersection with a separate phase for the northbound approach and a separate phase for the southbound approach shall remain, because it is required to adequately control the intersection traffic.~~

7. — Bangy Road and Meadows Road

~~Bangy Road shall be widened at the intersection with Meadows Road to provide for a southbound left turn lane and two northbound lanes. Meadows Road is estimated to function properly with two westbound approach lanes (one right turn lane and one left turn lane). A three phase traffic signal will be required.~~

~~The southbound left turn lane shall be installed at the time Meadows Road is constructed. The additional northbound lane and traffic signal will not be necessary until the double left turn lane is installed in Bangy Road at Kruse Way or by about 1996 or 1987. The added northbound lane is recommended to begin approximately 300 feet south of Meadows Road.~~

8. ~~Carman Drive and Meadows/Quarry Roads~~

~~Carman Drive shall be widened to provide left turn lanes at the intersection with Meadows/Quarry Roads. Between Kruse Way and Meadows Road, the left turn lane shall be striped as a continuous left turn lane. This widening is recommended to occur with the initial development of the adjacent properties.~~

~~A southbound right turn lane in Carman Drive to meadows Road will be required by about 1990.~~

~~Meadows Road shall be constructed to provide a left turn lane, a through lane, and a right turn lane at the intersection with Carman Drive. Meadows Road has been designed to accommodate these three lanes.~~

~~Quarry Road shall be developed with one eastbound lane, a continuous left turn lane between Carman Drive and Galewood Street, a through lane, and a right turn lane between Galewood Street and Carman Drive (westbound).~~

~~This intersection with Carman Drive will require signalization with either a six or eight phase traffic signal between 1985-1990.~~

9. ~~Carman Drive and Bonita/Waluga Roads~~

~~Traffic signalization of the intersection between Carman Drive and Bonita/Waluga Roads will be required sometime after 1990 or when traffic signal warrants are met.~~

10. ~~Meadows Road~~

~~A local improvement district has been formed by property owners and construction is nearing completion for a street which meets County industrial collector standards, and includes underground electricity, sewer, water and storm drainage facilities.~~

TRANSPORTATION MANAGEMENT

1. ~~Traffic generation limitations will be placed on development to assist in maintaining the capacity of Kruse Way at p.m. peaks with consideration given to the Lake Oswego Comprehensive Plan General Policy VIII, 2a, which states "Congested Travel during peak hours will be acceptable, at D level of service, where other community policies put priority on minimum street widths".~~

2. ~~A developer proposing a development which generates more traffic than the assumptions in the Buttke report (see page 7, Table 1 Assumed Future Land Use), shall submit a traffic management analysis to the~~

County which demonstrates that any increased traffic is compatible with the Buttkie report conclusions.

3. ~~A traffic management program shall be submitted with each initial development application. The program may include, but is not limited to, physical site controls on exiting traffic, p.m. peak-hour exiting traffic limitations traffic monitoring, restrictions on the number of parking spaces, flextime and staggered work hours. The use of management mechanisms such as transit ridership programs, car and van pools, and similar ride share programs can be utilized by the developer when such mechanisms are in common use in the region, and are available on the Kruse Way Corridor.~~
4. ~~At the time of approval of each phase of a development the developer will provide to the county information from a qualified transportation professional on the current p.m. peak service level status or volume to capacity ratio of the Kruse Way intersection(s) that will be affected directly by the development and also information on the p.m. peak traffic that will be generated by the development.~~
5. ~~Traffic management programs will be implemented when traffic at the identified intersection consistently exceeds a volume to capacity ratio of 80%.~~

Public Transportation Service

1. ~~Coordinate with Tri-Met to improve service to and throughout the area as the corridor develops. Additional service could be provided by providing peak period shuttle buses between the Corridor and other transit stations and for circulation throughout the Corridor. It is recommended that passenger shelters be provide at each bus stop throughout the Corridor and that a central transfer point be established on Kruse Way at Westlake Drive. Map X-KW-3 depicts "Suggested Future Transit Service".~~

Pedestrian & Bicycle Improvements

1. ~~Pedestrian overcrossings of Kruse Way shall be installed if and when conflicts between pedestrian and turning vehicles occur and require this separation to reduce accident hazards or to increase street capacity.~~
2. ~~Require each development to provide its share of an interconnected system of pedestrian/bikeways which links transit facilities and development and is separated from the improved portion of the right-of-way.~~
3. ~~All pedestrian/bikeways shall be developed to ODOT standards.~~

4. ~~Require each development to provide covered bicycle racks near building entrances, where appropriate.~~
5. ~~Require each development to provide 8 foot sidewalks along all County road rights-of-way pursuant to the criteria in Section 1007.05B(2) of the Clackamas County Zoning and Development Ordinance.~~

~~PUBLIC FACILITIES~~

1. ~~Sanitary sewer service is provided by the Unified Sewerage Agency (Washington County).~~
2. ~~Water service is provided by the Lake Grove Water District.~~
3. ~~Storm Drainage and Erosion Control Plans shall conform to Section 1008 of the Clackamas County Zoning and Development Ordinance.~~
4. ~~Encourage provision of street lighting for all developments within the Kruse Way area.~~
5. ~~Street lighting is required, and subject to Section 1006 of the Clackamas County Zoning and Development Ordinance.~~
6. ~~Fire protection is provided by Tualatin Fire District #64, and Lake Grove Fire District #57.~~

~~FINANCIAL ALTERNATIVES~~

~~Implementation of improvements cannot be achieved without coordination of a variety of funding sources. Realistically in the years to come, financing through federal, state, regional and traditional local government sources will be reduced. General county revenues and county road funds have increasing difficulty meeting committed needs because of reduction in revenue and escalating costs of material, equipment, and labor. The county road fund is being used exclusively for maintenance. Therefore, the developer, through development and redevelopment of properties within the area, will be the major source of funding for projects identified in this plan.~~

~~Future implementation of this plan may include funding sources not listed here, or combinations of ones that are listed.~~

~~Local Revenue Alternatives~~

~~Several local revenue sources have been identified. A summary of the revenue alternatives follows:~~

1. ~~Developer Contributions~~

~~The Comprehensive Plan and Zoning and Development Ordinance require developers to dedicate land and to pay for public improvements. In the Kruse Way area off-site improvements will be required.~~

2. ~~Service District~~

~~State law allows the formation of a service district and assessment district to finance a variety of improvements. A service district could be formed to finance necessary roadway and intersection improvements.~~

~~Both assessment and tax levy could be used to finance initial improvements and to make improvements as the need arises.~~

~~All land in the County and City which benefits from the improvements should be included.~~

3. ~~Local Improvement District (LIDs)~~

~~State law allows local improvement costs for roads, sidewalks, street lights, underground wiring, sanitary sewer, storm sewer, water, off street parking, flood control, parks, and "any other local improvement for which an assessment may be made against the property specially benefited" to be assessed against the property.~~

Traditionally, local improvement districts (LIDs) have been formed by groups of property owners through petitioning the county. At least 50% of the property owners representing at least 50% of the assessed value in the area of affected property must sign the petition. Once the petition signatures have been verified, the Board of County Commissioners approves the LID formation, the County does the engineering, develops an equitable assessment formula, does the property work, determines the final bill, and notifies each property owner of their assessment. Normally bonds are sold, allowing property owners to spread payment over 10 to 20 years. The bonds are repaid by assessments against properties, and secured by liens against affected properties. LID formation is a technique to fund public projects with below market interest rate bonds to be repaid by the property owners that directly benefit.

4. Local Development Corporation (LDC)

A Local Development Corporation (LDC) is a type of "businessman's" self-help organization. It has no authority to tax and may be either a profit or private non-profit organization.

Clackamas Business Promotions Company is an LDC for Clackamas County and can obtain lower cost financing from the Small Business Administration. The LDC does not generate revenue for needed public improvements, but arranges low interest financing for development and redevelopment.

Federal, State and Regional Revenue Alternatives

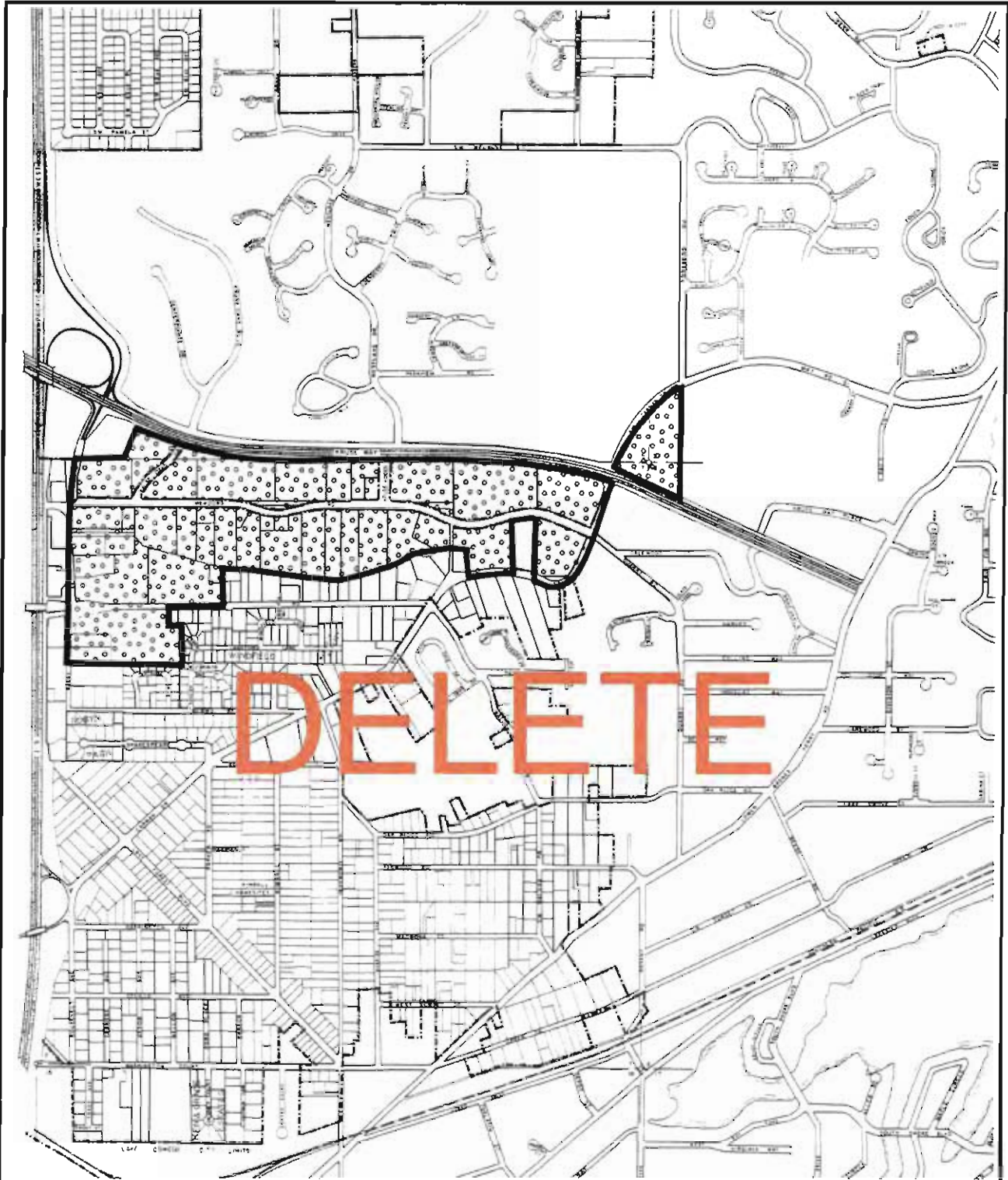
1. Funding for the I-5/Kruse Way interchange area improvements is included in the Oregon Department of Transportation Six-Year Plan.
2. Tri-Met, utilizing federal and regional revenues, may be able to finance some transit facilities.

Approximate Implementation and Cost Schedule			
	Immediate or w/Developm ent	When Ne ed ed	Estimated 1989 Cost
Carman Drive left turn lanes at Kruse Way & Meadows	✓		\$140,000
Bangy Road left turn lane at Meadows	✓		\$40,000
Bangy Road double left turn lane at Kruse Way and added northbound lane	✓		\$140,000
Signalize Bangy Road & Meadows	✓		\$80,000
Signalize Carman Drive & Meadows	✓	✓	\$80,000
Carman Drive and Bonita Road		✓	\$110,000
Pedestrian Overpasses			

MAPS

Kruse Way Design Plan

Map X-KW-1	Kruse Way Design Plan Area
Map X-KW-2	Kruse Way Recommended Approach Lanes
Map X-KW-3	Kruse Way Suggested Future Transit Service



**KRUSE WAY DESIGN PLAN AREA
VICINITY MAP**

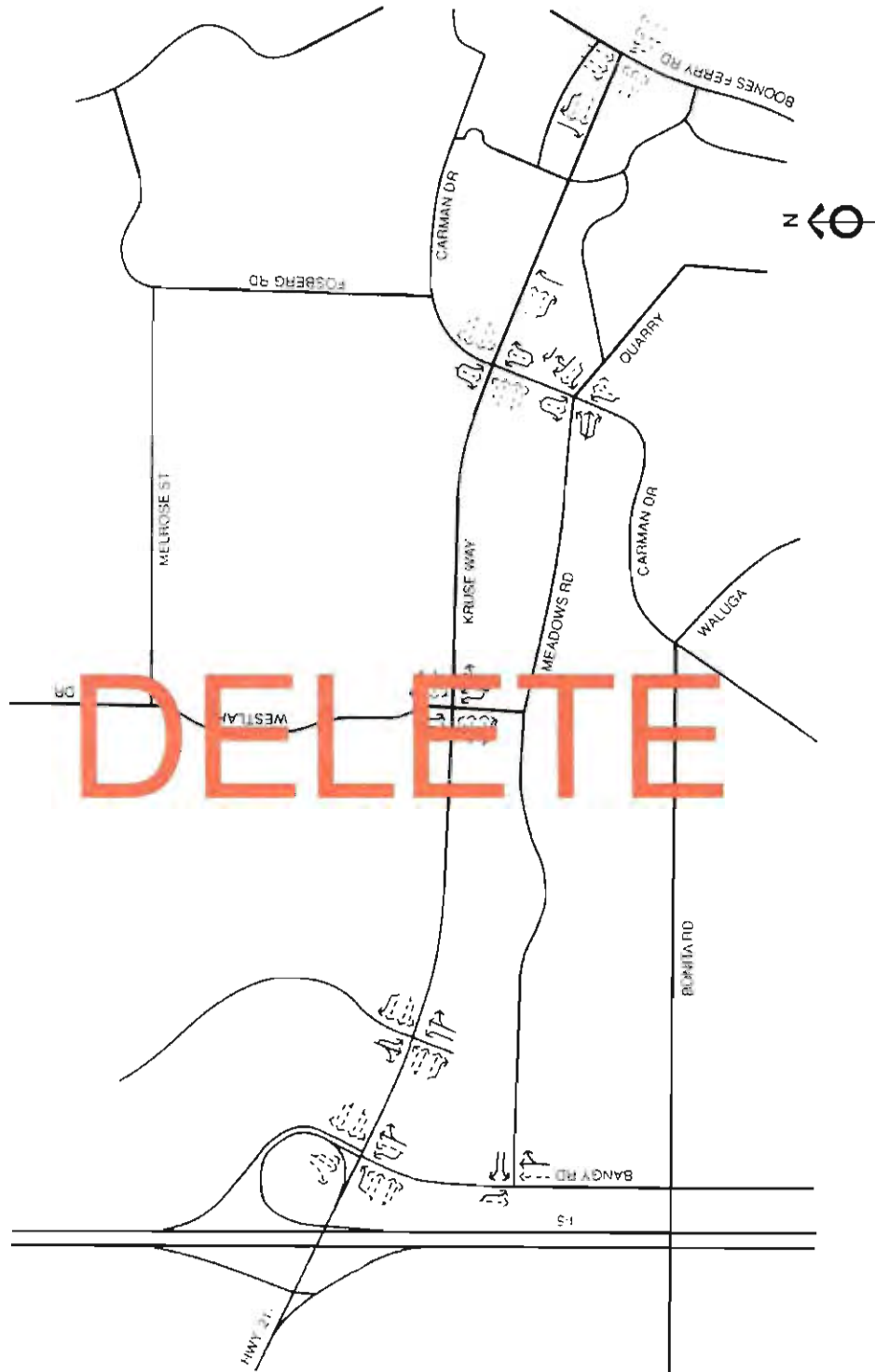
 Design Plan Area

CLACKAMAS COUNTY
COMPREHENSIVE PLAN



MAP X-KW-1

Ordinance ZDO-246, Exhibit A



KRUSE WAY DESIGN PLAN AREA

RECOMMENDED NUMBER OF APPROACH LANES
TO INTERSECTIONS THROUGHOUT CORRIDOR

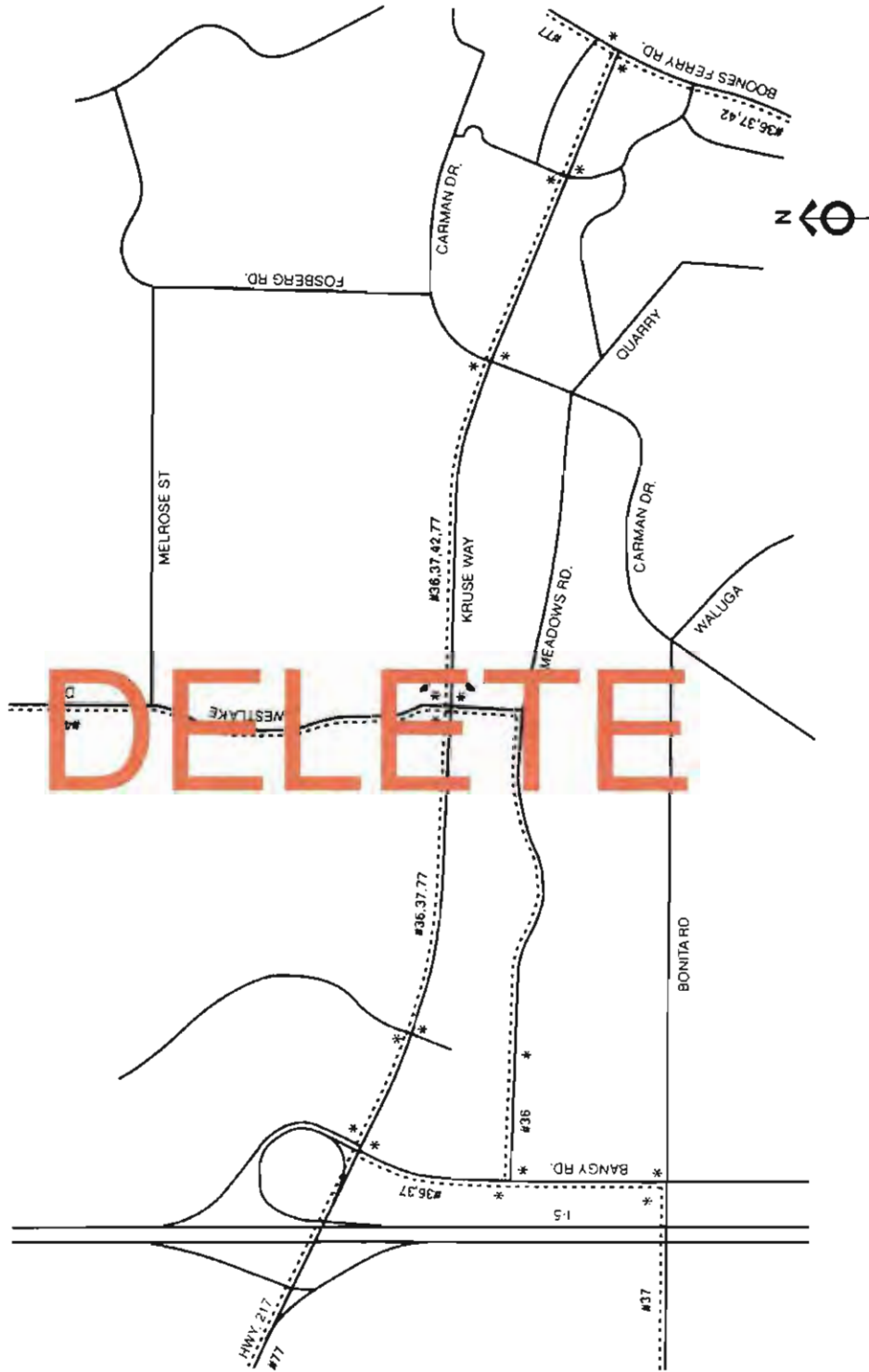
--- Existing Lanes

→ Recommended Lanes

CLACKAMAS COUNTY
COMPREHENSIVE PLAN



MAP X-KW-2



KRUSE WAY DESIGN PLAN AREA **SUGGESTED FUTURE TRANSIT SERVICE**

* Bus Stop

◆ Transfer Point

CLACKAMAS COUNTY
 COMPREHENSIVE PLAN

MAP X-KW-3

SUNNYSIDE VILLAGE PLAN

INTRODUCTION

The Sunnyside Road area of Clackamas County east of I-205 to 152nd Avenue has seen rapid residential growth during the past 10 years. This growth has raised several issues. A lack of parks, open space, and transit, as well as pedestrian and bicycle facilities, have been identified by many residences of the area. Also absent are a variety of housing types and range in housing prices. Along with these concerns, recent State Land Use and Transportation Planning rules now require Clackamas County to implement development techniques to reduce per capita vehicle miles traveled. These requirements are intended to manage growth by increasing urban densities to facilitate transit usage, preserving open spaces, and integrating land uses with the transportation network, thus improving overall livability.

The Sunnyside Village Plan was developed through an extensive citizen involvement effort to address these issues. With the recent construction of the Sieben sewer line, development will soon occur in the last large undeveloped urban area of Clackamas County.

The focus of this plan is to address the issues described above through several planning and design elements. These elements include land use mix, density, street patterns, pedestrian circulation, open space, and architectural character, all directed towards the creation of a sense of community.

The Clackamas County Comprehensive Plan is applicable to the Sunnyside Village; however, the Sunnyside Village Plan takes precedent where conflicts between the two documents exist. The Sunnyside Village Plan contains policies which are in addition to, or different than, the County Comprehensive Plan, in five subject areas: Land Use, Public Facilities, Transportation, Parks and Open Space, and Planning process.

GOALS

- Provide a strong sense of place through community design.
- Ensure the efficient use of land and urban services.
- Provide a mix of housing types and price ranges to accommodate neighborhood diversity.
- Ensure adequate parks and the protection of sensitive natural areas.

- Provide the opportunity for jobs and services within the village to reduce trip lengths.
- Integrate land use and transportation to encourage transit, bicycle and pedestrian use.
- Provide a transportation network that emphasizes connections within the village.

POLICIES

I. Residential

- 1.0 Ensure a range of densities which promotes an efficient use of the land and a variety of housing choices. For purposes of calculating individual lot sizes, areas within Resource Protection areas shall not be included.
 - a. Standard Lot Single Family shall include a density between a minimum of 6 units per acre and a maximum of 9 units per acre.
 - b. Small Lot Single Family shall include a density between a minimum of 9 units per acre and a maximum of 11 units per acre.
 - c. Village Townhouse shall include a density between a minimum of 15 units per acre and a maximum of 22 units per acre.
 - d. Village Apartment shall include a density between a minimum of 18 units per acre and a maximum of 30 units per acre.
- 2.0 All residential development including front doors and porches shall be oriented towards the street and have reduced setbacks.
- 3.0 Garages, driveways and off-street parking areas shall be a scale that is subordinate to the residence.
- 4.0 Building location and design shall consider pedestrian scale orientation.
- 5.0 Provide opportunity for accessory dwelling units within the Standard Lot Single Family, Small Lot Single Family, and Townhouse designated areas. Density calculations shall not include accessory dwelling units.
- 6.0 Ensure higher residential densities close to the village core through the following locational criteria.
 - a. Standard Lot Single Family shall be located on the periphery of the village.

- b. Small Lot Single Family shall be located between the Standard Lot Single Family and the Village Townhouses and Village Apartments.
- c. Village Townhouses and Village Apartments shall be located adjacent to, or within convenient walking distance of the village core.

II. Village Office

- 1.0 The Village Office designation shall be adjacent to Sunnyside Road and 142nd Avenue and shall be within a convenient walking distance of the village core.
- 2.0 Ensure that development is designed to human scale in a series of low rise buildings.
- 3.0 Require that office development is oriented towards the primary streets and the adjacent apartment and townhouse uses to better integrate with the neighborhood.
- 4.0 Provide incentives for employees to carpool, use transit, bike or walk.

III. Village Commercial

- 1.0 The Village Commercial is the heart of the village core and shall be easily accessible from the surrounding neighborhood by walking, biking or auto.
- 2.0 Ensure that the commercial buildings are designed to human scale in a series of low rise buildings.
- 3.0 Ensure that non-anchor, small ancillary shops ~~be~~are located adjacent to the street right-of-way; large anchor stores may be set back from the street to allow some parking adjacent to streets.
- 4.0 Require that all anchor stores be located north of the east/west pedestrian connection. Front entries in this portion of the retail area shall be oriented toward the north/south extension of 147th Avenue.
- 5.0 Permit residential units above commercial uses.
- 6.0 Ensure the integration of transit service with the Village Commercial.

IV. Resource Protection Area

The protection of resource areas are provided by policies in Chapter 9 of the County's Comprehensive Plan and the following policies.

- 1.0 Apply a resource protection designation to all land that is within high voltage power line easements.
- 2.0 Allow development within resource areas not to exceed one (1) dwelling unit per net acre.
- 3.0 Allow the transfer of density from the Resource Protection area to more suitable building areas on the site. Transfer of density shall not exceed the next highest land use category, i.e.e.g., Small Lot Single Family to Townhouses.

V. Parks

The Sunnyside Village Plan provides for the acquisition, development and maintenance of six (6) neighborhood parks. The policies in Chapter 9 of the County's Comprehensive Plan and the following policies apply.

- 1.0 Provide a level of parks to adequately serve the demands of the village.
- 2.0 Provide parks that are equitably distributed and accessible throughout the village as depicted on Map X-SV-4.
- 3.0 Develop a mechanism to acquire these sites either through dedications or fee in lieu of dedication.
- 4.0 Parks depicted on Map X-SV-4 may be altered in their location and dimensions during the development review process. Modifying park location shall occur only when it can be shown that access, topographic conditions, the need to accommodate lotting patterns and site planning, or extreme engineering costs make the depicted location impractical to develop. Park sizes are shown as minimums.
- 5.0 Park site #6 as depicted on Map X-SV-4 shall be split proportionally based upon the lot sizes of the two parcels ~~which~~that the park is to be located on.

- 6.0 All park land acquisitions shall be immediately included within the North Clackamas Parks District park land inventory. The District will be responsible for development and maintenance of these parks. The District will also be responsible for maintaining the center landscaped portion of the Village Circle north of the Village Green.
- 7.0 A connector or higher level street shall be located along one side of Park site #2.

VI. Roads

The Sunnyside Village Plan provides for the integration of land use and transportation network. The policies in Chapter 5 of the County's Comprehensive Plan and the following policies apply.

- | 1.0 All new developments shall build streets in the locations depicted on the Sunnyside Village Plan Map X-SV-1.
- 2.0 Streets depicted as Connectors (with or without bikeway) on Map X-SV-3 may be altered in their location during the development review process. Modifying these streets must occur only when it can be shown that due to wetlands, topographic conditions, resource areas, the need to accommodate lotting patterns and site planning, or extreme engineering costs make the depicted street impractical to develop.
- 3.0 Alleys shall be allowed in all residential districts.
- 4.0 All alleys shall be private streets and shall be constructed as depicted in Figure X-SV-6.
- | 5.0 All public streets within the Sunnyside Village shall be constructed to the street standards as depicted in Figure X-SV-1 through X-SV-5.
- 6.0 Orient local streets whenever practical so that at least 50% of the lots face north/south taking advantage of solar access.
- | 7.0 All street intersections that do not connect with Sunnyside Road, 142nd Avenue, or 152nd Avenue shall be constructed to the standards depicted on Figure X-SV-7.
- 8.0 The traffic circle located adjacent to the Village Commercial shall comply with the design standards depicted on Figure X-SV-8.
- | 9.0 The precise location of Summers Lane to 142nd Avenue shall be defined during preliminary engineering. The feasibility of partial alignment through the existing PGE easement shall be considered.

- 10.0 Develop a mechanism to pay for the cost of 1/2 street improvements of all Connector and local streets adjacent to parks sites 3, 4, 5 and the east/west Connector road adjacent to the south property line of the school on SE 152nd Avenue as depicted on Map X-SV-4.
- 11.0 Reimbursements of costs for the realignment of ~~152nd~~ 152nd Drive shall be granted to the extent that they are eligible under the SDC ordinance. For properties with frontage along SE 152nd Drive, adjacent to the proposed realignment of SE 152nd Drive, the applicant's share of costs associated with the realignment of 152nd Drive shall be limited to the dedication of required on-site right-of-way for the realignment of SE 152nd Drive as a collector street, and the guarantee of financing for the required on-site improvements, to collector-street standards, according to the requirements of the County Engineer.
- 12.0 The County will develop a list of transportation projects for the village based on a comprehensive transportation analysis for the entire Sunnyside area. The County will seek additional funding for those projects as well as improvements to 142nd Avenue, 152nd Avenue, and Sunnyside Road.
- 13.0 An analysis of the present alignment of 147th and its connection to Sunnyside Road shall be considered. This project should be included in the County's Capital Improvement Plan as a "high priority" safety project.

VII. Trails and Pedestrian Connections

- 1.0 All pedestrian accessways and trails shall be constructed to standards established by the North Clackamas Parks District at the time of development.
- 2.0 All pedestrian accessways and trails identified on Map X-SV-1 shall be either dedicated or an easement be granted to the North Clackamas Parks District.
- 3.0 The North Clackamas Parks District shall be responsible for the ongoing maintenance of all pedestrian accessways and trails.

VIII. Amendments to Village Boundary

The Sunnyside Village Boundary may be amended to include property within the Sunnyside Village Boundary when all of the following criteria are met:

- 1.0 The property is contiguous to the Sunnyside Village Boundary.
- 2.0 The property is designated by Metro as an "Urban Reserve" or the property is located within the Metro Urban Growth Boundary.
- 3.0 The property has been under the same continuous ownership as adjacent land within the Sunnyside Village Boundary since prior to adoption of the Sunnyside Village Boundary by the Clackamas County Board of County Commissioners on August 26, 1993, ~~except for property located in the Potential Expansion Area shown in Map SV-2.~~
- 4.0 ~~Before all or a portion of the area shown in Map SV-2 is included within the Sunnyside Village, a comprehensive plan amendment shall be adopted in accordance with the Sunnyside Village neotraditional design standards and guidelines identifying the transportation network, park locations and appropriate zoning necessary to accommodate the area shown in Map SV-2 and mitigate the impacts of the Potential Expansion Area upon the existing Sunnyside Village and the surrounding area.~~
- 5.0 4.0 The public sewer system serving land within the Sunnyside Village Boundary is available to serve the property by gravity flow and is adequate to support the development potential of the property. In addition, the surface water requirements of Clackamas County Service District #1 shall be met.
- 6.0 5.0 The public water system serving land within the Sunnyside Village Boundary is available and adequate to support the development potential of the property.
- 7.0 6.0 The transportation facilities and roadway network within the Sunnyside Village Boundary are either available or acknowledged by Clackamas County, through an approved master plan, as available in the future and are adequate to support the development potential of the property.

- | 8.0 7.0 When property is proposed to be annexed, a neighborhood park site, shall be (or has been) adequately and proportionately increased in size within the existing Sunnyside Village Boundary or a new park(s) designated according to Section 1602.03 (Park Dedication or Fees in Lieu of Dedication) within the property proposed to be annexed to the Sunnyside Village to compensate for the inclusion of the property within the Sunnyside Village Boundary.

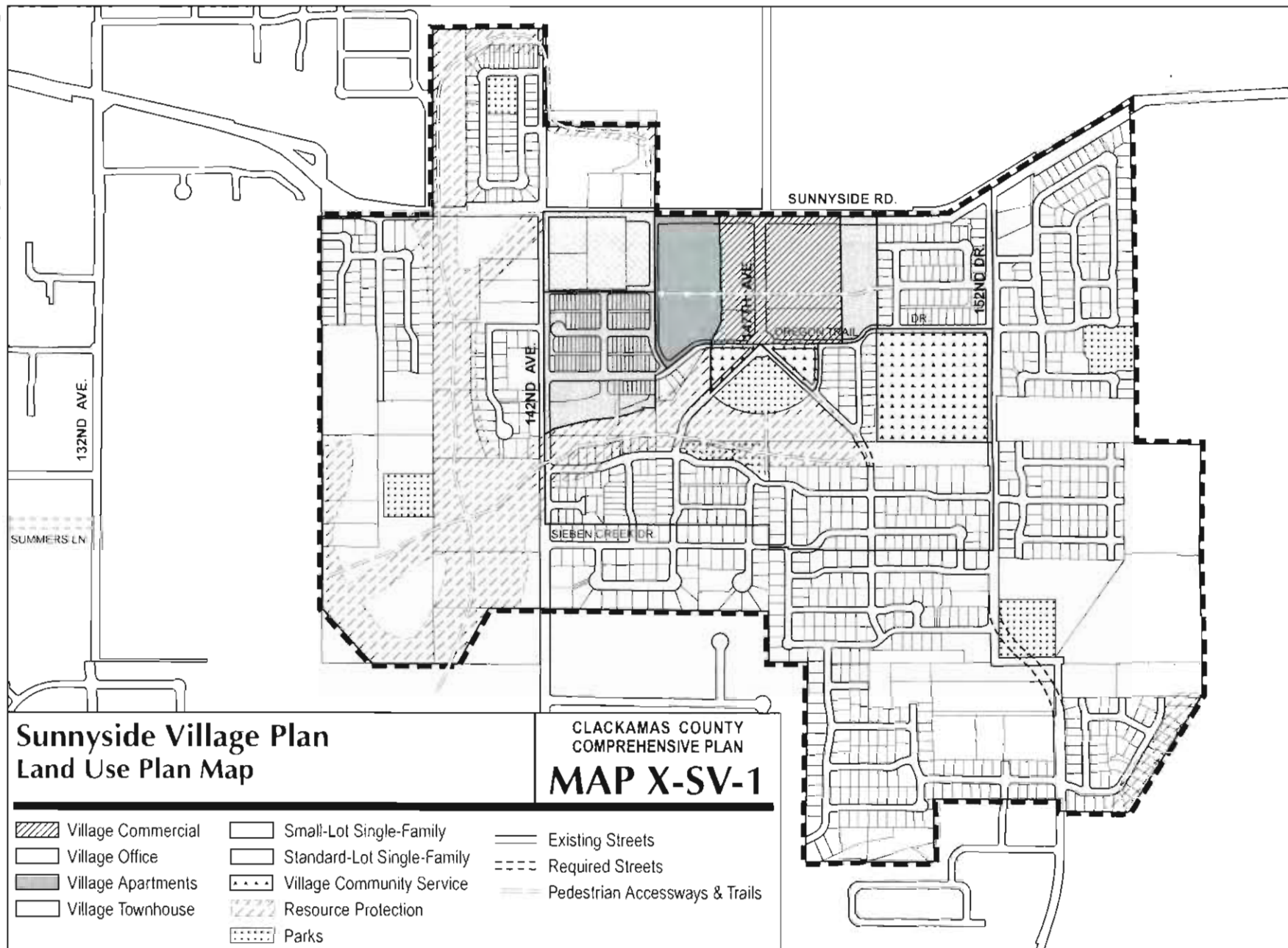
- | 9.0 8.0 The proposed extended boundary shall not extend beyond a major topographical break such as a ravine, steep hillside, stream corridor, etc. The determination of the topographical break shall be determined by the Department of Transportation and Development.

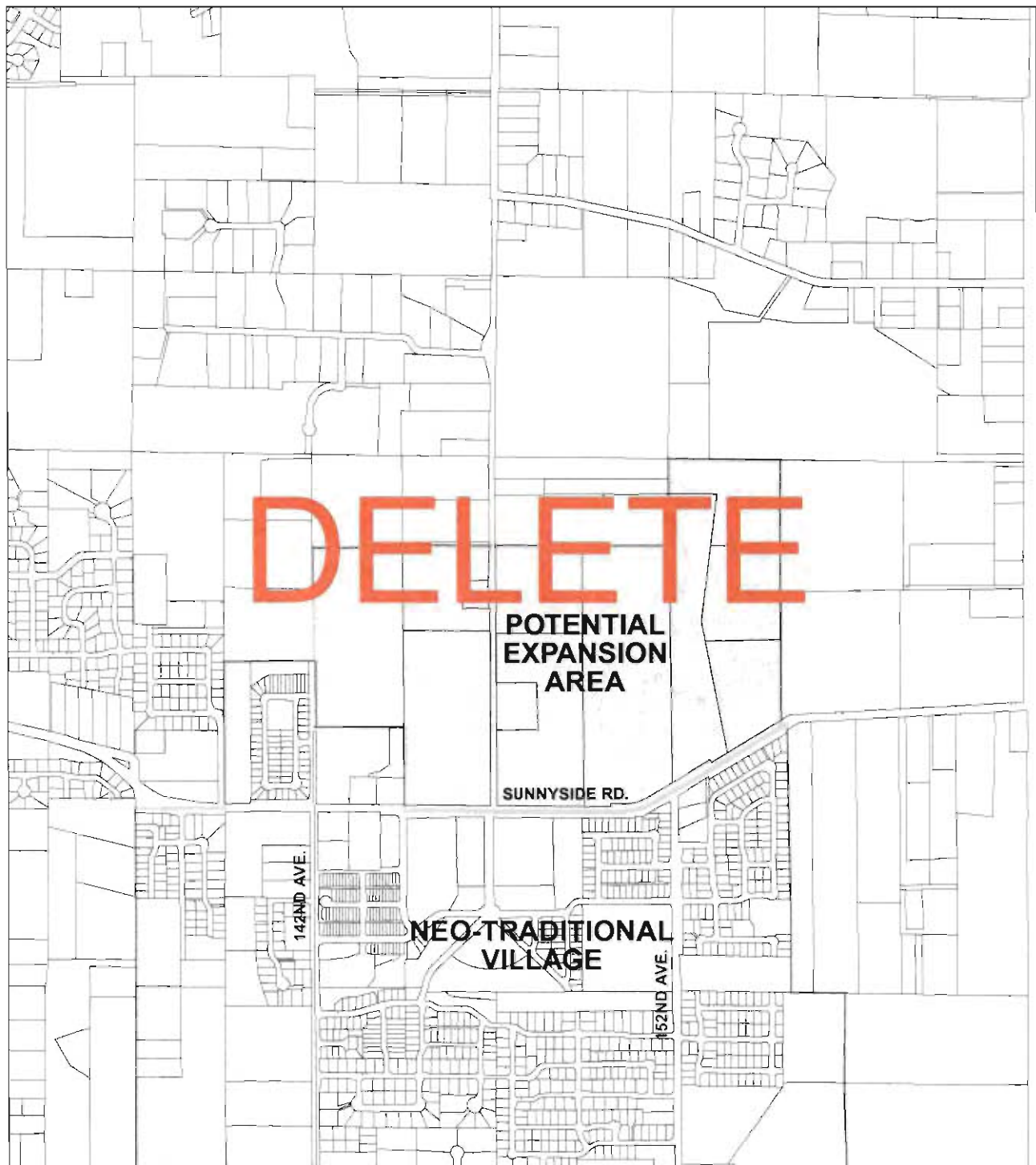
MAPS & FIGURES

(Only maps are included in this package. Figures are not included because no change is proposed).

Sunnyside Village Plan

Map X-SV-1	Sunnyside Village Plan Land Use Plan Map
~~Map X-SV-2~~	~~Sunnyside Village Plan Potential Expansion Area~~
Map X-SV-3	Sunnyside Village Plan Street Classifications
Map X-SV-4	Sunnyside Village Plan Park Locations & Sizes
Figure X-SV-1	Connector Street with Planting Strips & Bike Lanes
Figure X-SV-2	Connector Street with Planting Strips
Figure X-SV-3	Typical Connector Street Plan
Figure X-SV-4	Choker & Curb Extension Design: Connector Street
Figure X-SV-5	Local Street with Planting Strips
Figure X-SV-6	Alleys
Figure X-SV-7	Minimum Curb Radius at Intersections
Figure X-SV-8	Traffic Circle
Figure X-SV-9	Alternative Horizontal Curve for Local Streets

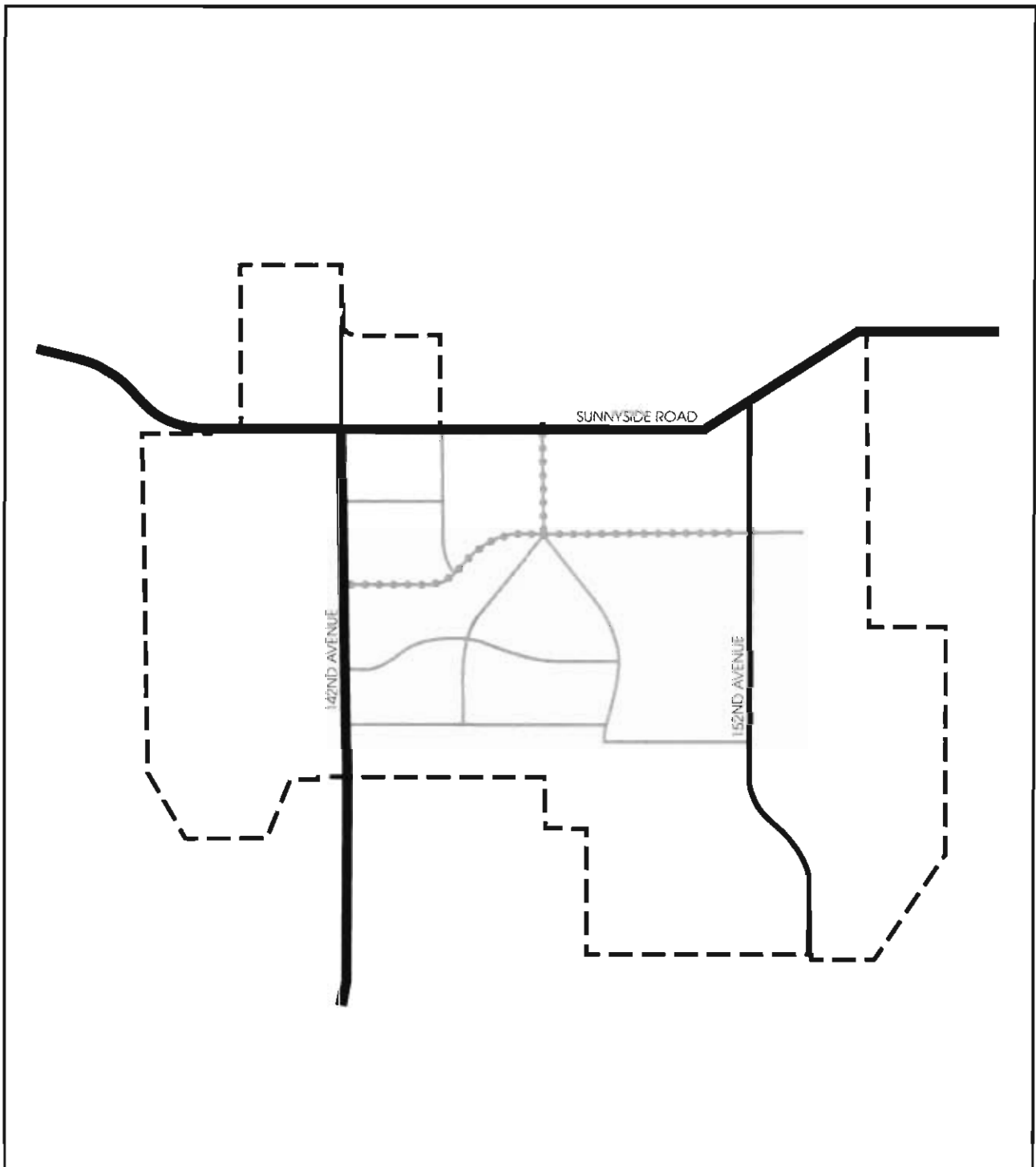




Sunnyside Village Plan
Potential Expansion Areas

CLACKAMAS COUNTY
COMPREHENSIVE PLAN
MAP X-SV-2

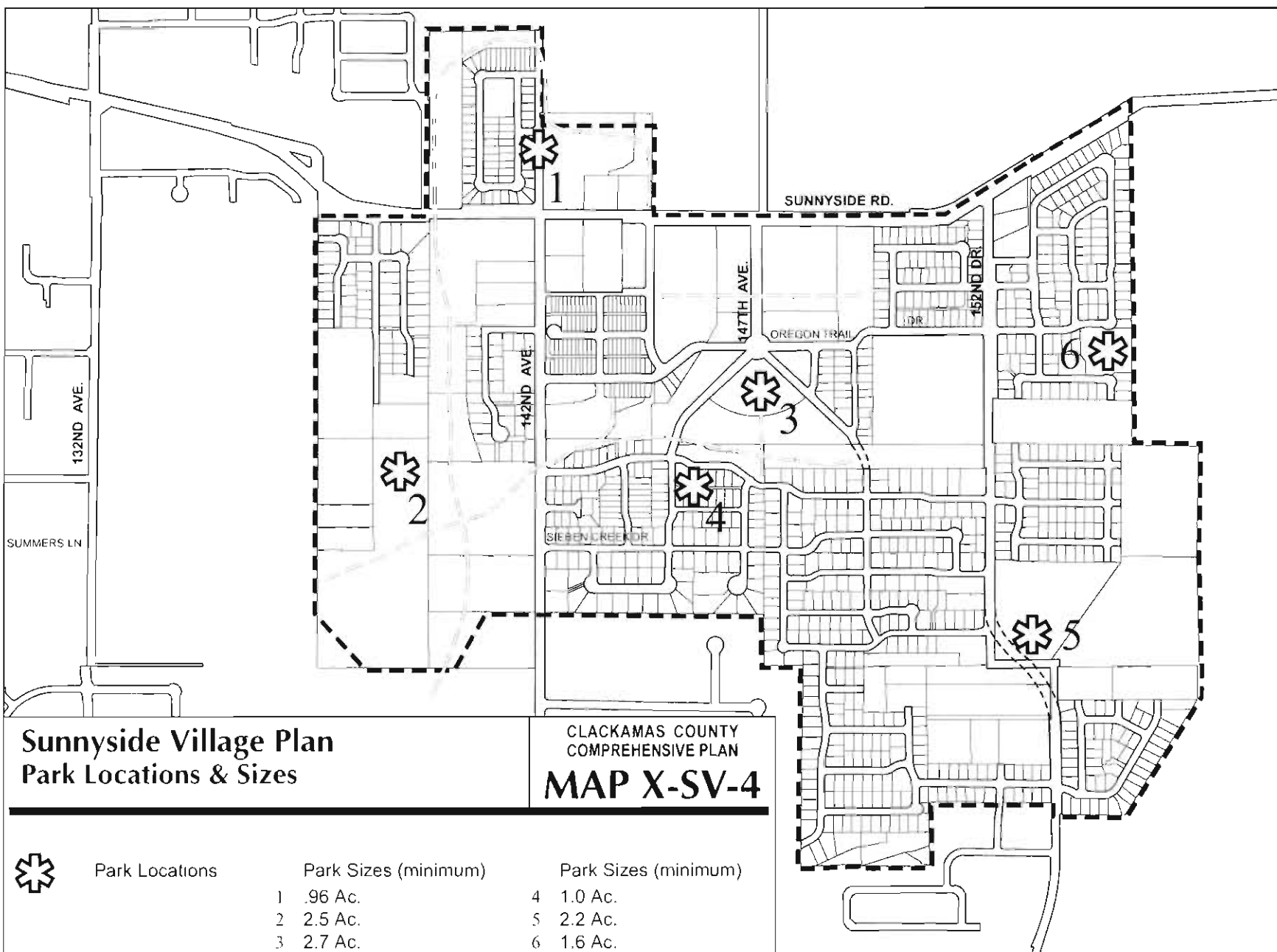
Ordinance ZDO-246, Exhibit A



Sunnyside Village Plan **Street Classifications**

CLACKAMAS COUNTY
 COMPREHENSIVE PLAN
MAP X-SV-3

-  ARTERIAL
-  COLLECTOR
-  CONNECTOR
-  CONNECTOR WITH BIKE LANE
-  RESIDENTIAL LOCAL



CLACKAMAS INDUSTRIAL AREA AND NORTH BANK OF THE CLACKAMAS RIVER DESIGN PLAN

INTRODUCTION

The Clackamas Industrial area is the largest concentration of industrial land in unincorporated Clackamas County and is a critical location for jobs and business opportunities. The north bank of the Clackamas River is impacted by development in the Clackamas Industrial Area and has been targeted for preservation of open spaces to protect water quality and natural resource values.

POLICIES

I. Highway 212 Beautification

- 1.0 Support the development and implementation of the Highway 212 Beautification Project to enhance visual cohesiveness and economic viability of the Clackamas Industrial area.
 - 1.1 Establish design standards for selected streets.
 - 1.2 Establish "Gateway" sites to enhance the identification of the industrial area.

II. The North Bank of the Clackamas River Greenway

The Clackamas River is a regionally significant natural area providing unique fish and wildlife habitat, a municipal water supply for nearly 200,000 people and varied recreational opportunities. A Greenway along the north bank of the Clackamas River between Gladstone and Carver will be beneficial over the long term because it will: provide an open space greenbelt along the river in a growing urban area; enhance and protect fish and wildlife habitat; provide undeveloped areas for flood storage; protect and enhance water quality for drinking water; preserve unique and ecologically sensitive areas; protect and enhance scenic beauty; and where appropriate allow areas for public recreation.

Full protection of the natural resources along the Clackamas River is best attained through public acquisition of property along the Greenway (on a willing seller, willing buyer basis only). Once under public ownership, stewardship and management by appropriate agencies needs to be master planned.

The Clackamas River Greenway between the city limits of Gladstone and Carver is shown on Map X-CR-1. Greenway lands are predominantly within the flood plain of the Clackamas River. Lands are currently under both public and private ownership. The Greenway Plan and Map is a guide for future public acquisition on a willing seller, willing buyer basis. Condemnation of lands is not a part of the Greenway program, nor is a linear trail along the entire north bank of the Clackamas River.

- 2.0 Plan for a Greenway along the north bank of the Clackamas River based on the following goals:
 - 2.1 Provide for long term protection of the natural resources along the river bank and floodplain of the river.
 - 2.2 Maintain or improve high water quality in the river.
 - 2.3 Protect the floodplain for flood storage.
 - 2.4 Protect and improve habitat for current or expanded populations of fish and wildlife.
 - 2.5 Plan for public acquisition of Greenway lands on a willing seller, willing buyer basis.
 - 2.6 Preserve and protect ecologically significant areas along the Clackamas River.
 - 2.7 Provide linkages to tributaries and adjacent natural areas including: Cow Creek, Sieben Creek and Rock Creek.
 - 2.8 Preserve the visual quality of the Clackamas River including the floodplain and river bluffs.
 - 2.9 Recreational access to and use of the Clackamas River is subordinate to natural resource protection.
 - 2.10 Provide for limited recreation and public access to the Clackamas River.
 - 2.11 Point access to the river is preferable to linear trails in most cases.
 - 2.12 Trails shall only be on public property or on easements dedicated through the development process.

- 3.0 Adopt the Greenway Map illustrating lands targeted for public ownership and management.
- 4.0 Adoption of the Greenway Map does not:
 - a. Place any additional regulations on private properties,
 - b. Change the underlying land use and zone.
- 5.0 Adoption of the Greenway Map is to be used as a guide by open space and parks providers and other appropriate public agencies to acquire properties, from willing sellers over time, for the purpose of preservation of open space, water quality, scenic and wild life values as well as some passive and active recreation.
- 6.0 Recreational use should be planned through a public master planning process to develop a long term management and recreation plan for the area.
- 7.0 Greenway lands when under public ownership, will be considered eligible for Open Space Management zoning, for their long term preservation.

MAP

(Map is not included in this package because no change is proposed)

Clackamas Industrial Area & North Bank of the Clackamas River Design Plan

Map X-CR-1 North Bank of the Clackamas River Greenway

CLACKAMAS REGIONAL CENTER AREA DESIGN PLAN

INTRODUCTION

Moving Towards a Preferred Future

The Clackamas Regional Center area, comprising about 2,100 acres, is a vital and growing part of the County. It is a major hub for the residential and business communities in the southeast Portland metropolitan area. The area has grown rapidly as urban services have been provided, and is poised for even more growth. Forecasts indicate that there will be 36,500 jobs within the study area and 7,600 housing units by the year 2017. This will about double the amounts present in 1994. As this change occurs over the next twenty years, the area is envisioned to transition to even more intensive uses, more mixes of land uses, better access for all modes of transportation and a more attractive visual character.

The Clackamas Regional Center Area Design Plan sets the framework for decision-making to meet the challenge of planning for growth and guiding the area to a preferred future identified by citizens, the business community, and public service providers.

The overall Clackamas County Comprehensive Plan is applicable to the Clackamas Regional Center Area. This chapter of the Comprehensive Plan describes the goals and policies that are specific to the Clackamas Regional Center Area. This chapter takes precedence where conflicts exist between it and the remainder of the Comprehensive Plan.

The area of application for the Clackamas Regional Center Area Design Plan is shown on Map X-CRC-1.

REGION 2040 GROWTH CONCEPT PLAN DESIGN TYPES

The Clackamas Regional Center Area Design Plan focuses on three design-types identified in the Region 2040 Growth Concept Plan and Urban Growth Management Functional Plan: a “regional center,” segments of three “corridors” and a “station community.”

Regional Center

An area with the Clackamas Town Center as its focus point is designated a “regional center”. The boundary is shown on Map X-CRC-1. The Clackamas Regional Center is intended to be the focus of the most intense development and highest densities of employment and housing in unincorporated, urban Clackamas County, with high quality transit service and a multi-modal street network.

Corridors

Corridors are less dense than ‘regional centers’ and are intended to feature a high quality pedestrian environment and convenient access to transit, while continuing to meet the needs of the automobile. The corridors in the Clackamas Regional Center Design Plan Area are designated “regional streets” in the Region 2040 Functional Plan, and as such are expected to continue to support high levels of through and local vehicular traffic. The corridor areas are expected to transition to higher densities through infill and redevelopment. Designated corridors are SE 82nd Avenue, Johnson Creek Boulevard, and Sunnyside Road.

Station Community

Station communities are areas of development centered on a light-rail or high capacity transit station that feature housing, offices and other employment, and a variety of shops and services that are easily accessible to pedestrians, bicyclists and transit users, as well as vehicles. There are two light rail transit stations in the I-205 MAX line in the Clackamas Regional Center Design Plan Area; adjacent to I-205 near SE Fuller Road, between SE Johnson Creek Boulevard and SE Otty Road, and adjacent to I-205, between SE Monterey Avenue and SE Sunnyside Road. A Station Community has been designated in the area around the Fuller Road station.

VISION AND GOALS

A Vision of how the area should look and function in 20 years was the first step in creating this plan. The Vision established the foundation upon which the plan was built. The Clackamas Regional Center Area Task Force developed and endorsed the following Vision for the Clackamas Regional Center Area in 1995:

Vision

Over the next 20 to 50 years the Clackamas Regional Center Area will be:

- The dominant commercial and business center for the east Portland metropolitan area;
- A cultural, civic and transportation center for the east Portland metropolitan area;
- An area of diverse residential neighborhoods, commercial districts, natural features, and public attractions and spaces that serve both the local community and the region.

Goals

To achieve this Vision, the Clackamas Regional Center Area Design Plan describes policies to guide decisions on land use, transportation, housing and urban design that:

- Allow and promote compact development as a means to encourage efficient use of land, promote non-auto trips, and protect air quality.
- Promote development patterns which use land efficiently and support transportation investments.
- Transition towards more intensive use of land through infill and redevelopment, and phased development of infrastructure and urban design improvements.
- Accommodate and encourage appropriate land uses in the Regional Center, along Corridors and in the Station Community.
- Balance growth with the preservation of existing neighborhoods and affordable housing.
- Create districts and neighborhoods.

- Provide a range of housing types and density.
- Provide for more efficient parking.
- Provide or enhance public amenities such as open space, neighborhood parks, and public gathering places.
- Preserve and enhance natural features.
- Increase community attractions.
- Provide attractive streetscapes.
- Create civic spaces.
- Create a safe and pleasant environment.
- Incorporate design standards and guidelines that promote urban character.
- Increase visual identity.
- Provide a transportation network that provides for all modes of transportation.
- Improve circulation and connections for all modes of transportation.
- Maintain excellent regional access.

CLACKAMAS REGIONAL CENTER AREA DESIGN PLAN POLICIES

The following policies shall be applied in the Clackamas Regional Center Design Plan Area.

LAND USE POLICIES

I. LAND USE POLICIES GENERALLY

~~Map X-CRC 2 illustrates the Land Use Plan designations for the Clackamas Regional Center Design Plan Area. The following uses are allowed within the Clackamas Regional Center Design Plan Area:~~

1.0 Mixed Use

Mixed uses shall be allowed in the Clackamas Regional Center Design Plan Area in areas designated Commercial, High Density Residential and Regional Center High Density Residential. A mix of uses will be required to be master planned in Planned Mixed Use designated areas. A mix of uses will be allowed in Station Community Mixed Use designated areas, subject to transit-oriented-development building orientation and design requirements.

2.0 Commercial

The following primarily retail commercial designations shall be provided in the Clackamas Regional Center Design Plan Area: Regional Center Commercial, Retail Commercial and Corridor Commercial.

The following primarily office commercial designations shall be provided in the Clackamas Regional Center Design Plan Area: Regional Center Office and Office Commercial.

Commercial areas within the Clackamas Regional Center Design Plan Area shall:

2.1 Allow a mix of land uses on the development site.

2.2 Create a district accessible by all modes of transportation.

- 2.3 Create walkable districts by providing improvements and urban design features that encourage and support pedestrian use.
- 2.4 Allow land uses that generate pedestrian activity and transit ridership.
- 2.5 Require public or private street layouts that allow for future development of sites with redevelopment potential.
- 2.6 Maintain and improve pedestrian connections between commercial uses, transit corridors, recreation areas, open space and adjacent residential areas.
- 2.7 Locate all buildings to maximize access by emergency vehicles.
- 2.8 Require Design Review for all development.

3.0 Multifamily Residential

The following primarily multifamily residential designations shall be provided in the Clackamas Regional Center Design Plan area: Regional Center High Density Residential, High Density Residential, Medium High Density Residential, and Medium Density Residential. Multifamily areas within the Clackamas Regional Center Design Plan Area shall:

- 3.1 Establish minimum densities to help meet local and regional housing needs.
- 3.2 Provide for multifamily residential uses within walking distance of public transportation, parks, schools, employment areas and local shopping areas.
- 3.3 Create walkable districts by providing improvements and urban design features that encourage and support pedestrian use.
- 3.4 Locate all buildings to maximize access by emergency vehicles.
- 3.5 Require design review for all development.

4.0 Public and Community Use, Open Space

Public and Community use designations including open space shall be provided in the Clackamas Regional Center Design Plan Area.

5.0 Low Density Residential

Low density residential designations shall be provided in the Clackamas Regional Center Design Plan area.

6.0 Industrial

The following industrial designations shall be provided in the Clackamas Regional Center Design Plan Area: General Industrial, Light Industrial, and Business Park.

II. **LAND USE POLICIES FOR THE CLACKAMAS REGIONAL CENTER DESIGN TYPE AREA**

1.0 Within the Regional Center boundary shown on Map X-CRC-1, areas shall be planned to:

- 1.1 Provide for high intensity development to accommodate projected regional increases in housing and employment, including mixed use development.
- 1.2 Provide for and capitalize on high quality transit service.
- 1.3 Allow for a mix of land uses to support public transportation and bicycle and pedestrian usage.
- 1.4 Provide for the open space and recreation needs of residents and employees of the area.
- 1.5 Support a multi-modal street network.

2.0 Planned Mixed Use

The Planned Mixed Use designation requires master planning and development on key opportunity sites in areas designated for mixed use on the Region 2040 Growth Concept map. Generally, because of size, location, good access, and proximity to supportive land uses and existing or planned transportation improvements, these sites can accommodate more growth than other areas and sites within the plan boundary.

- 2.1 Create an area with a mix of land uses, both within the site itself (mix of uses) and within buildings (mixed uses), which:
 - a. Provide for high employment and residential densities that support use of public transportation.

- b. Protect key natural features.
 - c. Provide for essential public facilities and services, including parks and public spaces.
 - d. Provide for structured parking.
 - e. Are accessible by all modes of transportation.
- 2.2 Establish through zoning required and allowed land uses, transportation improvements, and design standards that encourage and support pedestrian-oriented streets, buildings and public places. Apply specific requirements to specific Planned Mixed Use sites through zoning.
- 2.3 Apply the Planned Mixed Use designation within the Regional Center as shown on Map X-CRC-1.
- 2.4 Sites planned for Planned Mixed Use but zoned for other uses may be converted to Planned Mixed Use zoning when:
 - a. Adequate transit services are provided to the site; and,
 - b. Minimum site size requirements are satisfied.

3.0 Regional Center Office

- 3.1 Apply the Regional Center Office designation within the Regional Center boundary shown on Map X-CRC-1 to:
 - a. Areas with an historical commitment to office use.
 - b. Areas served by high capacity transit service.
 - c. Areas with high visibility from a freeway.
 - d. Areas generally within ½ mile of a freeway interchange.
- 3.2 Provide support services for office development.

- 3.3 Limit retail uses in order to maximize the land available for office uses and to provide for the highest employment density in the Regional Center.
- 3.4 Require a minimum density to help meet regional employment needs, support public transportation and use land more efficiently.
- 3.5 Create walkable districts within the regional center with improvements, urban design features, and urban design standards that encourage and support pedestrian use.
- 3.6 Require master plans of large sites to allow for future development of sites with redevelopment potential.

4.0 Regional Center High Density Residential

Within the adopted Regional Center boundary, designate areas suitable for the highest density multifamily uses as Regional Center High Density Residential.

- 4.1 Determine the density of development through zoning.
- 4.2 Provide for multifamily residential uses within walking distance of public transportation, parks, schools, employment areas and local shopping areas.
- 4.3 Allow for a mix of land uses provided the minimum residential density is achieved for the entire development site prior to or concurrent with establishment of other allowed uses.

5.0 Regional Center Commercial

Apply the Regional Center Commercial zone to areas with an historic commitment to commercial uses within the adopted Regional Center boundary as shown on Map X-CRC-1.

- 5.1 Provide areas for regional and local shopping.
- 5.2 Require a minimum floor area ratio to help meet regional employment needs, support public transportation and use land more efficiently.
- 5.3 Create walkable districts within the regional center with improvements, urban design features, and urban design standards that encourage and support pedestrian use.

6.0 Amendments to the Clackamas Regional Center Boundary

The Clackamas Regional Center boundary may be amended to include property within the Clackamas Regional Center when all of the following criteria are met:

- 6.1 The property is contiguous to the Clackamas Regional Center boundary.
- 6.2 The area is, or is planned to be, a focus of compact, high density development with a mix of uses.
- 6.3 The area has, or is planned to have, high quality transit service, and a multi-modal street network.
- 6.4 The area has, or is planned to have; a density of 60 persons per acre on lands developed or planned to be developed (not including open space, parks, plazas or natural areas).

III. LAND USE POLICIES FOR CORRIDOR DESIGN TYPE AREAS

1.0 Land uses in Corridors shall be planned to:

- 1.1 Provide for both employment and housing, including mixed use.
- 1.2 Emphasize providing for a high level of bus usage, with land uses and transportation facilities to support bus use.
- 1.3 Encourage and support pedestrian travel with supportive land uses, frequent street connections, and sidewalks and pedestrian-ways.
- 1.4 Provide for vehicular traffic and auto-oriented uses, while expanding the share of trips via transit and other modes.

2.0 Corridor Land Use Designations

A range of land use designations may be applied within a designated Corridor identified on Map X-CRC-1. Each corridor shall include within its area land use designations which provide primarily for employment and shopping, and land use designations that provide primarily for residences.

- 2.1 Commercial designations that may be applied include: Corridor Commercial, Retail Commercial, and Office Commercial. Any site designated for a commercial use shall be located adjacent to the corridor street.
- 2.2 Multifamily designations that may be applied include: High Density Residential and Medium High Density Residential. Multifamily designations should generally be located so as to form a buffer between commercial uses adjacent to the corridor street and low density residential areas located outside the corridor.
- 2.3 Industrial designations that may be applied in corridors include: Light Industrial and Business Park.
- 2.4 Existing single family neighborhoods and mobile home parks should be zoned to discourage redevelopment to other uses.

3.0 Corridor Commercial

- 3.1 The following areas may be designated Corridor Commercial when located within a transportation corridor as identified on Map X-CRC-1 and when all of the following criteria have been met:
 - a. The site has an historical commitment to commercial uses,
 - b. The designation will not cause a decrease in housing capacity in the county,
 - c. The designation will not cause a significant traffic increase on local streets serving residential areas,

- d. Adverse effects including but not limited to traffic and noise, will have a minimal effect on adjacent neighborhoods or can be minimized through on-site improvements, and
 - e. The designation will not substantially increase an existing commercial strip or create new strips.
- 3.2 Provide commercial areas located in transportation corridors to meet local and regional needs for a wide range of goods and services.
 - 3.3 Provide for the sale of large-scale items in areas with good transportation access and minimal conflict with other uses.
 - 3.4 Allow mixed uses in the same building(s) or in a separate building(s) in the development.
 - 3.5 Establish design and dimensional standards that encourage and support pedestrian use.

IV. LAND USE POLICIES FOR THE STATION COMMUNITY DESIGN TYPE AREA

- 1.0 The Regulating Plan Map, which will be incorporated in the Zoning and Development Ordinance, shall be the basis of the design and development standards for the Station Community and shall establish the requirements for street types, block pattern, existing and new streets, building frontage types, and landscaping types.
- 2.0 Within the Station Community boundary shown on Map X-CRC-1, future development and redevelopment shall conform to the Regulating Plan Map, and areas shall be planned to:
 - 2.1 Provide for development utilizing urban design elements that create and support a dynamic, safe and convenient public realm made up of inter-connected streets, parking areas, parks and plazas framed by buildings with facades and entrances facing the streets and meeting other requirements of transit oriented design.

- 2.2 Provide for a mix of retail, services, office and high intensity housing in buildings meeting the requirements of transit oriented design, located on a street network with excellent pedestrian connectivity and supportive of local services, bicycle and pedestrian usage, and high capacity transit ridership.
- 2.3 Support a multi-modal street network with shared, public on-street parking on all but the most heavily traveled streets, building facades and entrances oriented to the street, and parking located to the side and behind buildings.
- 2.4 Provide for the open space and recreation needs of residents and employees of the area.

3.0 Corridor Commercial

- 3.1 Apply the Corridor Commercial designation within the Station Community boundary shown on Map X-CRC-1 to:
 - a. Areas with an historical commitment to retail uses.
 - b. Areas with high visibility and access from a major arterial street.
 - c. Areas located within ½ mile of a high capacity transit station, and providing actual or potential pedestrian connections between high capacity and bus transit.
- 3.2 Create an area with a mix of land uses, both within the site itself (mix of uses) and within buildings (mixed uses), which:
 - a. Provide for high employment and residential densities that support use of public transportation.
 - b. Provide for essential public facilities and services, including shared public parking on public and private streets, accessible and attractive walkways between and through developments, and public spaces.
 - c. Are accessible by all modes of transportation.
 - d. Orient buildings and parking areas to support and encourage pedestrian trips and utilization of high capacity transit.

- 3.4 Establish through zoning required and allowed land uses, transportation improvements, and design standards that encourage and support pedestrian-oriented streets, buildings, and public places.
 - a. Require development and redevelopment to meet transit-oriented design requirements.
- 3.5 In designated sectors on the Regulating Plan Map, where substantial shopping center development exists, provide for a limited amount of redevelopment to occur without requiring full compliance with transit-oriented design and connectivity requirements.
 - a. Ensure that such redevelopment does not reduce multimodal connectivity or hinder future development of additional planned connections.

4.0 Station Community Mixed Use

- 4.1 Apply the Station Community Mixed Use designation within the Station Community boundary shown on Map X-CRC-1 to:
 - a. Areas with an historical commitment to residential, office and employment uses.
 - b. Areas in proximity to high capacity transit service.
 - c. Areas with access to major and minor arterial and collector streets.
- 4.2 Create an area with a mix of residential, office, service and service commercial uses within buildings and developments that meet transit oriented development standards, which:
 - a. Provide for high employment and residential densities that support use of public transportation.
 - b. Provide for essential public facilities and services, including shared public parking on public and private streets, accessible and attractive walkways between and through developments, and public spaces.
 - c. Orient buildings and parking areas to support and encourage pedestrian trips and utilization of high capacity transit.

4.3 Establish through zoning required and allowed land uses, transportation improvements, and design standards that encourage and support pedestrian-oriented streets, buildings, and public places.

a. Require development and redevelopment to meet transit-oriented design requirements.

5.0 Build public and private streets within the Station Community to the standards illustrated in the Street Type cross sections (Figures X-CRC-8 through X-CRC-11).

6.0 Study providing on-street parking on 82nd Avenue, if future conditions warrant it.

V. LAND USE POLICIES FOR OTHER AREAS WITHIN THE CLACKAMAS REGIONAL CENTER DESIGN PLAN AREA

1.0 A range of land use designations shall be provided in portions of the Clackamas Regional Center Design Plan Area located outside the Regional Center, Corridors, and Station Community.

1.1 Land use designations shall generally increase in level of intensity in areas close to the Regional Center and Corridors.

1.2 Land use designations shall maintain the character of existing neighborhoods by providing for uses and improvements that are consistent with the type and scale of existing development.

1.3 Employment uses shall be provided for in the Regional Center, Corridors, or Station Community, and/or in locations adjacent to streets that are at least minor arterials.

VI. LAND USE POLICIES: LAND USE DESIGNATIONS THAT MAY APPLY THROUGHOUT THE CLACKAMAS REGIONAL CENTER DESIGN PLAN AREA

1.0 High Density Residential

In the High Density Residential district, allow for a mix of land uses as a limited use.

2.0 Low Density Residential – 5,000 and 2,500 square foot lots

In the Low Density Residential district, include 5,000 square foot and 2,500 square foot lot size low density residential zones, subject to Policy 2.0 of the Land Use Chapter, Residential Section of the Comprehensive Plan.

3.0 Low Density Residential – Single Family Attached

- 3.1 In Low Density Residential areas, areas may be zoned for single family attached residences on lots that average 2,500 square feet when the area has access to a residential collector or higher functional class street.
- 3.2 The size of the site and adjoining properties zoned for 2,500 square foot lots should generally not exceed ten (10) acres. Sites greater than 10 acres must include a combination of attached and detached housing within the allowed Single Family Attached density.
- 3.3 Design dwellings to provide variation in architectural appearance.
- 3.4 Require Design Review for single family attached residences.

URBAN DESIGN, PUBLIC AMENITIES, AND OPEN SPACE POLICIES

Design and development standards and physical improvements tie together land use and transportation to create a more "livable" community. Urban Design elements have been identified that will improve access by all modes of transportation; provide public amenities such as parks and accessible trails for recreational use; create public gathering places, and protect key natural features such as stream corridors and forested hillsides.

VII. URBAN DESIGN ELEMENTS

- 1.0 Establish design and dimensional standards that provide pedestrian oriented streets, buildings and public spaces.
- 2.0 Provide for the most intense development around public transportation routes.
- 3.0 Provide multi-modal connections that link neighborhoods with commercial areas, schools, parks and greenways.
- 4.0 Increase the visual identity of the Regional Center Area through streetscape improvements including pedestrian zones, landscaped strips between streets and sidewalks, lighting, street trees, landscaped medians, and gateways.
- 5.0 Protect natural features by directing development away from these areas and using remaining land more efficiently.
- 6.0 Provide public or private street layouts that support future development and increase connectivity for all modes of transportation.
- | 7.0 The Urban Design Elements shown on Map X--CRC-3 shall be provided in the Clackamas Regional Center Design Plan Area as development occurs and public improvements are provided.
 - 7.1 All new development or major modifications to existing approved development shall provide the design elements on Map X-CRC-3.
 - 7.2 For phased development, urban design requirements will generally be roughly proportional to the amount of development occurring in a phase.
 - 7.3 Key urban design elements shown on Map X-CRC-3 are defined as follows:

- a. Boulevards: Streets characterized by landscaped medians and other pedestrian crossing improvements, a sidewalk separated from the street by planting strips and street trees, and bike lanes.
- b. Main Streets: Streets characterized by a pedestrian/furnishing zone that includes sidewalks, street trees, and space for street lights and other furnishings, on-street parking, more frequent pedestrian crossings, and buildings oriented to the street with storefronts close to the sidewalk.
- c. Special Street Standards: Streets that are characterized by a landscaped planting strip separating the sidewalk from the curb, pedestrian lighting, and pedestrian amenities.
- d. Street Connections: General locations for new or enhanced street connections to improve connectivity in the area have been identified on Map X-CRC-3. Street connections may be public or private streets and in some cases line up with important driveways to commercial areas.
- e. Local Street Grid: An interconnected public or private street system that provides multi-modal access to all activities and uses.
- f. Off-street Pedestrian Linkages: Street, bicycle and pedestrian paths, and greenway paths to link parks, civic spaces, retail centers, neighborhoods, and other points of interest.
- g. Multi-Use Paths: Off-street pedestrian and bicycle paths. These paths may be developed primarily as a transportation facility, as an amenity, or may serve multiple purposes.

- h. Parks and Open Space: The general locations of parks needed in the Clackamas Regional Center Design Plan area are shown on the Map X-CRC-3. Park locations are not site-specific.
- i. Greenway Trails: Off-street trails within designated greenways (e.g., Phillips Creek and Mt. Scott Creek) that provide opportunities for environmental restoration, recreation and education.
- j. Plazas: Public gathering places are typically one acre or less and may be publicly or privately owned. Plazas are intended as public gathering places and community focal points.
- k. Natural Features: Natural features to be protected include creeks, wetlands, steep slopes and wooded bluffs.
- l. Gateways: Key intersections to be reconstructed with special design and landscape treatments that are intended to provide a visual announcement that people are entering a special area.

8.0 Establish though zoning transit-oriented design standards to ensure that streets and buildings are supportive of pedestrian, bicycle, and transit trips.

VIII. STREETS AND GATEWAYS

1.0 Establish design and dimensional standards that provide pedestrian oriented streets and buildings.

2.0 Design and dimensional standards for streets and gateways are intended to:

- a. Improve pedestrian safety at crossings.
- b. Improve visual appeal of the streets.
- c. Improve the pedestrian environment along sidewalks.
- d. Provide on-street parking where appropriate to help provide a supply of public parking that supports reduced parking standards on private property, and separate pedestrians from auto traffic.

- e. Provide strong visual identity to distinguish the Regional Center from adjacent areas.
 - f. Create a local block pattern for new roads to improve circulation for motor vehicles and pedestrians by providing shorter and more direct connections between uses.
- 3.0 Boulevards, Main Streets, Gateways, and streets planned for Special Street Standards have been identified on Map X-CRC-3. Figures X-CRC-1 through X-CRC-11 illustrate the intended standards for improvement.
- 3.1 Exceptions to these standards may be allowed subject to topography, environmental constraints, available right of way, safety considerations, and as follows:
- a. General elements of a gateway intersection are illustrated in Figures X-CRC-1 and X-CRC-7. Establish specific requirements through design.
 - b. Elements of the Main Street cross section may be modified to accommodate Light Rail Transit alignment.
- 3.2 When developing Boulevard improvements, the County should develop and implement a strategy to minimize adverse impacts to adjacent businesses.
- 4.0 New public and private streets should be designed to accommodate future development.
- 5.0 Encourage retention and development of a local street network as shown on Map X-CRC-4, and as otherwise required in the Clackamas Regional Center Design Plan.
- 6.0 Require new streets to connect uses within a development and to adjacent property, when applicable.
- 7.0 Allow new buildings to be oriented to private streets when these streets include sidewalks or raised walking surfaces, curbs, pedestrian scale street lighting and street trees.

IX. PARKS, PLAZAS, CIVIC SPACES, OPEN SPACE, PATHS AND LINKAGES

1.0 Add parks and enhance open space to meet community needs in the general locations shown on Map X-CRC-3. Coordinate park and open space efforts with the North Clackamas Parks and Recreation District. Provide additional parks as follows:

- *Golf Course Area Park*
- *Windmill Area Park*
- *Northeast Area Park*
- *Fuller Area Park*
- *Springwater Area Park*
- *Overland Area Park*
- *Bell Area Park*
- *Causey Area Park*
- *Price-Fuller Area Park*

2.0 Provide plazas at the general locations shown on Map X-CRC-3, as well as at major transit stops and stations, in high intensity pedestrian areas, and near major employment facilities.

3.0 Provide off-street pedestrian linkages at key locations to connect residential areas, parks, and major employment areas and attractions.

4.0 Protect natural features such as wetlands, forested areas and riparian habitat.

5.0 Conduct a feasibility study of the need for a multipurpose community/cultural facility. The study should be coordinated with the County Tourism Development Council and area business groups.

X. PHILLIPS CREEK GREENWAY

1.0 Work with the North Clackamas Park District, public agencies, the private sector and the community to implement the Phillips Creek Greenway Framework Plan, adopted by reference.

XI. URBAN DESIGN STANDARDS

1.0 Urban design standards shall be implemented to meet the goals of the Clackamas Regional Center Design Plan through standards in the Zoning and Development Ordinance.

1.1 All new buildings in the Clackamas Regional Center shall be oriented to existing or new private or public streets.

1.2 Maximum front yard setbacks with pedestrian amenities are required in the Regional Center to further develop a high quality pedestrian environment.

- 1.3 Buildings on corner lots are encouraged to have entrances at the corner.
- 1.4 When feasible and practical, buildings shall be placed to allow future infill and intensification of the site.
- 1.5 Pedestrian amenities, as defined by the Zoning and Development Ordinance, may be used to satisfy specific percentages of landscape requirements.
- 1.6 Where appropriate, the County may allow developments to utilize regional storm water facilities and/or for multiple property owners to utilize joint facilities.
- 1.7 Drive-through facilities may be prohibited, limited or conditioned to support the goal of creating high quality pedestrian environments.
- 1.8 Architectural design shall support and promote urban character.

TRANSPORTATION POLICIES

XII. ROADS AND STREETS SYSTEM POLICIES

- 1.0 Construct all roadway improvements identified in Map X-CRC-4 to maintain regional accessibility to the Regional Center and provide a network for all transportation modes that interconnects neighborhoods and districts, the Station Community, commercial areas, community centers, parks, libraries, and employment places, other major activities, off-street pedestrian linkages, regional multi-use paths, and area Greenway trails.
- 2.0 Street Connectivity Policies
 - 2.1 Develop a block and grid street network that serves all transportation modes with short and direct public right-of-way routes.
 - 2.2 In all new developments adjacent to corridor arterial streets, require public or private street, or private driveway connections to provide traffic flow parallel to the arterial.
 - 2.3 On major arterial streets, encourage public or private street connections at intervals of no more than 660'. Encourage more frequent public or private connections on other streets, especially those in areas planned for mixed-use or dense development.
 - 2.4 To reduce the number of local trips using 82nd Avenue, require and develop local street and commercial driveway connections on the east side of 82nd Avenue from Causey Blvd. to Otty Road. These public or private connections shall be open to public access, and may be indirect if appropriate direct routes are not feasible. This policy applies to all land use, transportation and development permits.
- 3.0 Require public local streets, private streets, and driveway connections between developments to provide public access and circulation between land uses and reduce local trips on collectors and arterials. This policy applies to all land use, transportation and development permits.

- 4.0 In the Station Community, a network of public and private streets, including arterial, collector and local streets, will provide excellent connectivity and pedestrian access to support transit access and utilization. Generally blocks will be no more than 450 feet in length.
- 5.0 Congestion-Performance evaluation measures Standards for portions of streets 82nd Avenue, Sunnyside Road, and Johnson Creek Boulevard located within the Regional Center boundary or Fuller Road Station Community boundary (consistent with Metro Regional Transportation Plan standards for Centers, such as and Station Communities) shall be as follows:

Performance Evaluation Measures
Clackamas Regional Center or Fuller Station Community
Weekday Mid-day and PM Peak Periods

	<u>Maximum Volume to Capacity (V/C) Ratio</u> <u>by Weekday Peak Periods</u>		
	<u>Mid-day, One-</u> <u>Hour Peak</u>	<u>1st Hour, PM</u> <u>Peak Period</u>	<u>2nd Hour, PM</u> <u>Peak Period</u>
<u>All street segments and intersections</u>	<u>0.99</u>	<u>1.1</u>	<u>0.99</u>

CONGESTION PERFORMANCE STANDARDS (Level-of-SERVICE)

	Preferred Operating Standard	Acceptable Operating Standard	Exceeds Deficiency Threshold
Mid-Day one-hour	C or better	E	F or worse
Peak two-hour	E first hour E second hour	F first hour E second hour	F first hour F second hour

- 6.0 Congestion-Performance evaluation measures Standards for portions of streets 82nd Avenue, Sunnyside Road, and Johnson Creek Boulevard located within the Clackamas Regional Center Design Plan Area, and but outside the Regional Center boundary or and the Fuller Road Station Community boundary, shall be as follows:

Performance Evaluation Measures
Clackamas Regional Center Design Plan Area (outside the Center and
Station Community)
Weekday Mid-day and PM Peak Periods

	<u>Maximum Volume to Capacity (V/C) Ratio</u> <u>by Weekday Peak Periods</u>		
	<u>Mid-day, One-</u> <u>Hour Peak</u>	<u>1st Hour, PM</u> <u>Peak Period</u>	<u>2nd Hour, PM</u> <u>Peak Period</u>
<u>All street segments and intersections</u>	<u>0.90</u>	<u>0.99</u>	<u>0.99</u>

CONGESTION PERFORMANCE STANDARDS (Level of Service)

	Preferred Operating Standard	Acceptable Operating Standard	Exceeds Deficiency Threshold
Mid-Day one-hour	C or better	D	E or worse
Peak two-hour	E first hour D second hour	E first hour E second hour	F first hour E second hour

7.0 Monitor transportation conditions in the SE 82nd Avenue Corridor to determine if Comprehensive Plan strategies are contributing to the attainment of congestion-performance evaluation measures standards as identified in Policies 5.0 and 6.0 above.

8.0 Provide for roadway and infrastructure improvements sufficient to support minimum planned development intensity and density.

8.1 The Regional Center Plan includes transportation and infrastructure planning that identifies certain needed roadway and infrastructure improvements necessary to support future development in the Regional Center.

8.2 These improvements, in conjunction with frontage improvements normally and legally exacted concurrent with development, are sufficient to support the minimum planned development intensity and density within the Regional Center. Developers in the Regional Center are entitled to rely on the improvements that are listed as funded in the Five (5) Year Capital Improvement Plan, as if they are already in place when submitting a master plan at the minimum densities and for approval of each phase of a multi-phase development project.

8.3 Amendments to the Comprehensive Plan or Zoning and Development Ordinance or changes in the Comprehensive Plan Map or zoning designation for property within the Regional Center shall not be authorized unless it is demonstrated that the improvements described in Policies 8.1 and 8.2 will remain adequate to support planned development intensity and density for the Regional Center.

XIII. TRANSIT POLICIES

1.0 Coordinate with Tri-Met to implement Clackamas Regional Center Design Area transit service improvements planned in the Tri-Met Primary

Transit Network and Tri-Met Choices for Livability, and implement additional transit improvements identified on Map X-CRC-6.

- 2.0 Coordinate with Tri-Met, Metro, ODOT, and other agencies in funding and implementing the planned Clackamas Regional Center Design Plan Area transportation improvements identified on Map X-CRC-6.
- 3.0 ~~Coordinate with Tri-Met to implement Light Rail Transit (LRT) service to the Clackamas Regional Center area.~~
- 4.0 3.0 Coordinate with Tri-Met in evaluating a fareless square for the Clackamas Regional Center Design Plan Area.
- 5.0 4.0 Coordinate with a Transportation Management Association (TMA) to develop and operate a frequent, fareless or low fare Loop Shuttle Service. A conceptual alignment for the shuttle service is indicated on Map X-CRC-6; the actual alignment is to be determined by Tri-Met and the TMA.
- 6.0 5.0 Establish park and ride lots at the periphery of the Clackamas Regional Center. Future shuttle bus routes should include stops at potential park and ride sites and employer locations.
- 7.0 6.0 To improve transit speed and the capacity of 82nd Avenue, add bus queue by-pass lanes which allow busses to by-pass auto traffic at traffic signals.
- 8.0 7.0 Coordinate with Tri-Met to encourage and support development of structured park-and-ride lots at high capacity transit stations. When surface parking facilities are provided, encourage TriMet to re-use these sites for transit-oriented development.

XIV. PEDESTRIAN AND BIKEWAY NETWORK POLICIES

- 1.0 Construct all pedestrian and bikeway network improvements identified on Maps X-CRC-3, X-CRC-7, and X-CRC-7a, and in the Clackamas Regional Center Pedestrian/Bicycle Plan adopted by reference in Appendix A, in order to provide a network connecting Clackamas Regional Center Area Design Plan neighborhoods and districts with transit stops, commercial areas, community centers, parks, libraries, employment places, other major activities, off-street pedestrian linkages, regional multi-use paths, and area greenway trails. Other local pedestrian and bikeway network improvements may be identified and developed during land use review and as part of public improvements.

- 2.0 Collaborate with public agencies and private property owners, as appropriate, to implement the sign plan element of the Clackamas Regional Center Pedestrian/Bicycle Plan adopted by reference in Appendix A.
- 3.0 Consider the prioritized list of projects identified in the Clackamas Regional Center Pedestrian/Bicycle Plan adopted by reference in Appendix A, when allocating public funds for pedestrian and bicycle network improvements in the Clackamas Regional Center.
- 4.0 In the development review process, new residential and mixed use developments within the Station Community, Corridors, and Regional Center shall encourage pedestrian and bicycle travel by:
 - 4.1 Providing direct and convenient public right-of-way routes connecting residential uses with planned commercial uses, schools, parks, and other neighborhood facilities.

- 4.2 Providing bike and pedestrian connections on public easements or right-of-way when full street connections are not possible, with connection spacing no more than 330' except where topography, barriers such as freeways, railroads, or environmental constraints such as streams, rivers, slopes, or environmentally sensitive areas prevent street extension.
- 5.0 Sidewalks shall be constructed on all public and private streets in the Clackamas Regional Center Design Plan Area, subject to topography and environmental constraints.

XV. TRANSPORTATION DEMAND MANAGEMENT (TDM)

- 1.0 Work with Clackamas Regional Center Design Area employers and businesses to develop strategies that will reduce vehicle miles traveled to decrease congestion and improve air quality. Strategies to be considered include but are not limited to the following:
- 1.1 Employer strategies that increase vehicle occupancy, encourage work trips outside peak travel times, and promote telecommuting.
- 1.2 ~~Facilities~~ Facility improvements to encourage non-auto transportation modes, ~~which including:~~
- e building the area bike/pedestrian network;
 - implementing transit preference systems that give buses advantage over other vehicles;
 - providing transit and pedestrian amenities such as covered bus stops and lighting; and
 - providing on-site shower and dressing areas.
- 1.3 Identifying County resources and incentives needed to promote and develop TDM programs for 82nd Avenue employers, and monitor the performance of 82nd Avenue corridor TDM programs conducted by employers.
- 2.0 Develop a Transportation Management Association (TMA) with businesses within the Regional Center Design Plan Area and Tri-Met to manage TDM strategies and operate a Loop Shuttle Service.
- 3.0 Work with employers and businesses within the Regional Center Boundary and other targeted TDM areas to initiate a Transportation Management Association (TMA) to manage area TDM strategies and operate a Loop Shuttle Service.

XVI. ACCESS MANAGEMENT

- 1.0 Implement the following access management standards on 82nd Avenue within the Clackamas Regional Center Design Plan Area.
 - 1.1 Consolidate driveways/accesses to the targets shown on Map X-CRC-8.
 - 1.2 Reduce signal spacing requirements from 1,320' to 500', contingent on maintaining adequate signal progression.
 - 1.3 Coordinate with ODOT to reassess 82nd Avenue Access Management Standards if the balance of efficient traffic flow with local access needs change as adjacent land uses develop to the Corridor and Boulevard Designs.
- 2.0 Develop Clackamas Regional Center Design Area Access Management Standards for the other areas of the Clackamas Regional Center Design Plan Area that:
 - 2.1 Require driveway/access spacing to support the County functional classification of the road.
 - 2.2 Require new driveways/accesses to line up with driveways/accesses or public streets on the opposite side of the Corridor to promote safety and efficient access and egress.
 - 2.3 Encourage shared driveways/accesses with adjacent properties to meet minimum driveway access spacing standard that support the functional classification of the road.
 - 2.4 Encourage connecting driveways/accesses with adjacent properties.
 - 2.5 Require developments to provide rear access to public streets whenever feasible.
- 3.0 Other than the new public street access identified in Map X-CRC-8, do not allow additional access on Johnson Creek Boulevard between 82nd Avenue and I-205.

XVII. PARKING STANDARDS

- 1.0 Encourage more efficient land use, promote non-auto trips and improve air quality within the Clackamas Regional Center Design Plan Area by establishing, by zoning, minimum and maximum parking ratios.

- 2.0 Encourage parking on all local and collector street classifications to provide a buffer between pedestrians and vehicle traffic, and provide public shared parking.

HOUSING

XVIII. HOUSING POLICIES

In addition to the policies in Chapter 4, the following policies apply to the Clackamas Regional Center Design Plan Area:

- 1.0 Provide for a range and variety of housing types (size and density) and variety of ownership and rental opportunities, in a range of prices.
- 2.0 Encourage housing opportunities for employees in the Clackamas Regional Center Design Plan Area by investigating partnerships to develop housing for workers in the area.
- 3.0 Limit expansion of commercial zoning into residential neighborhoods along the 82nd Avenue corridor.
- 4.0 Preserve existing mobile home parks by requiring a relocation plan to be developed and implemented by the developer for residents of mobile home parks whenever the zone designation on a mobile home park is changed to a zone other than MR-1. The County must approve the relocation plan as part of the zone change application.
- 5.0 Replace housing capacity lost in the study area by future Comprehensive Plan or zone changes. Any application for a change in Comprehensive plan designation within the Clackamas Regional Center Design Plan Area will be accompanied by a demonstration of how an equal amount of housing capacity is replaced on another site, or constructed on the site as part of a mixed use development.
 - 5.1 The purpose of this policy is to maintain the potential for the amount of housing identified in the Clackamas Regional Center Area Plan.
 - 5.2 This policy would apply to plan or zone changes made subsequent to adoption of the Clackamas Regional Center Area Plan.
 - 5.3 This policy would apply to quasi-judicial changes from residential to a non-residential use.
 - 5.4 Replacement housing capacity could be located anywhere within unincorporated Clackamas County located within the Urban Growth Boundary.

- 5.5 Approval of a design review application and any other applicable land use permit for the required amount of replacement housing on a site in a commercial or office district, not including PMU sites, will meet the requirements of policy 5.0.
- 6.0 Form a County Housing Advisory Committee to counsel and advise the Board of County Commissioners on housing issues.
 - 6.1. Clackamas County shall review its policies and ordinances regarding affordable housing and develop an affordable housing strategy with a series of tools to provide for a mix of housing types and prices in the County.

MAPS & FIGURES

(Only maps are included in this package. Figures are not included because no change is proposed).

Clackamas Regional Center Area Design Plan

Map X-CRC-1	Regional Center, Corridors and Station Community
Map X-GRC-2	Land-Use Plan-Map
Map X-CRC-3	Urban Design Elements
Map X-CRC-4	Transportation Network (Public and Private)
Map X-CRC-5	Functional Classification
Map X-CRC-6	Transit Network
Map X-CRC-7	Pedestrian and Bicycle Circulation Network
Map X-CRC-7a	Walkway Network
Map X-CRC-8	82 nd Avenue Access Management Targets
Figure X-CRC-1	82 nd Avenue Regional Boulevard (Gateway Intersections)
Figure X-CRC-2	82 nd Avenue Regional Boulevard (Between Gateway Intersections)
Figure X-CRC-3	Sunnyside Road
Figure X-CRC-4	Harmony Road Regional Boulevard (Fuller Road to 82 nd Avenue)
Figure X-CRC-5	Monterey Avenue Main Street (I-205 to 82 nd Avenue with Causey Avenue Overpass)
Figure X-CRC-6	Causey Avenue Main Street (I-205 82 nd Avenue)
Figure X-CRC-7	Gateway Intersection (Boulevard & Main Street)
Figure X-CRC-8	Fuller Road Station Community, Street Type "B"
Figure X-CRC-9	Fuller Road Station Community, Street Type "C"
Figure X-CRC-10	Fuller Road Station Community, Street Type "D"
Figure X-CRC-11	Fuller Road Station Community, Type "E" Pedestrian/Bicycle Connection



Regional Center, Corridors, and Station Community

MAP X-CRC-1

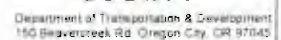
Last Amended February 11, 2013

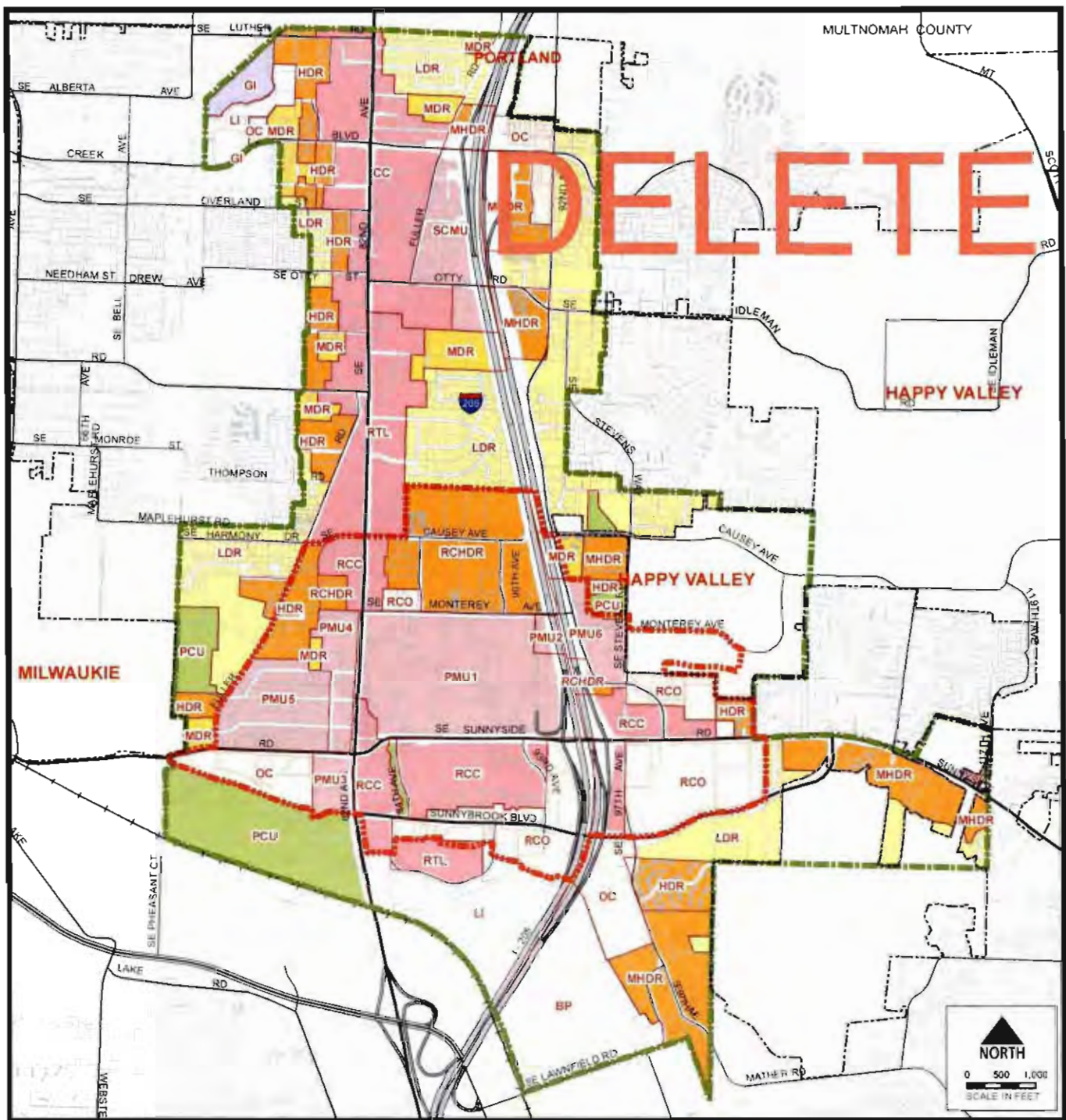
 Regional Center

Station Community

Corridor

Incorporated City





Clackamas Regional Center Area Design Plan

Land Use Plan

Clackamas County Comprehensive Plan

MAP X-CRC-2

Last Amended February 11, 2013

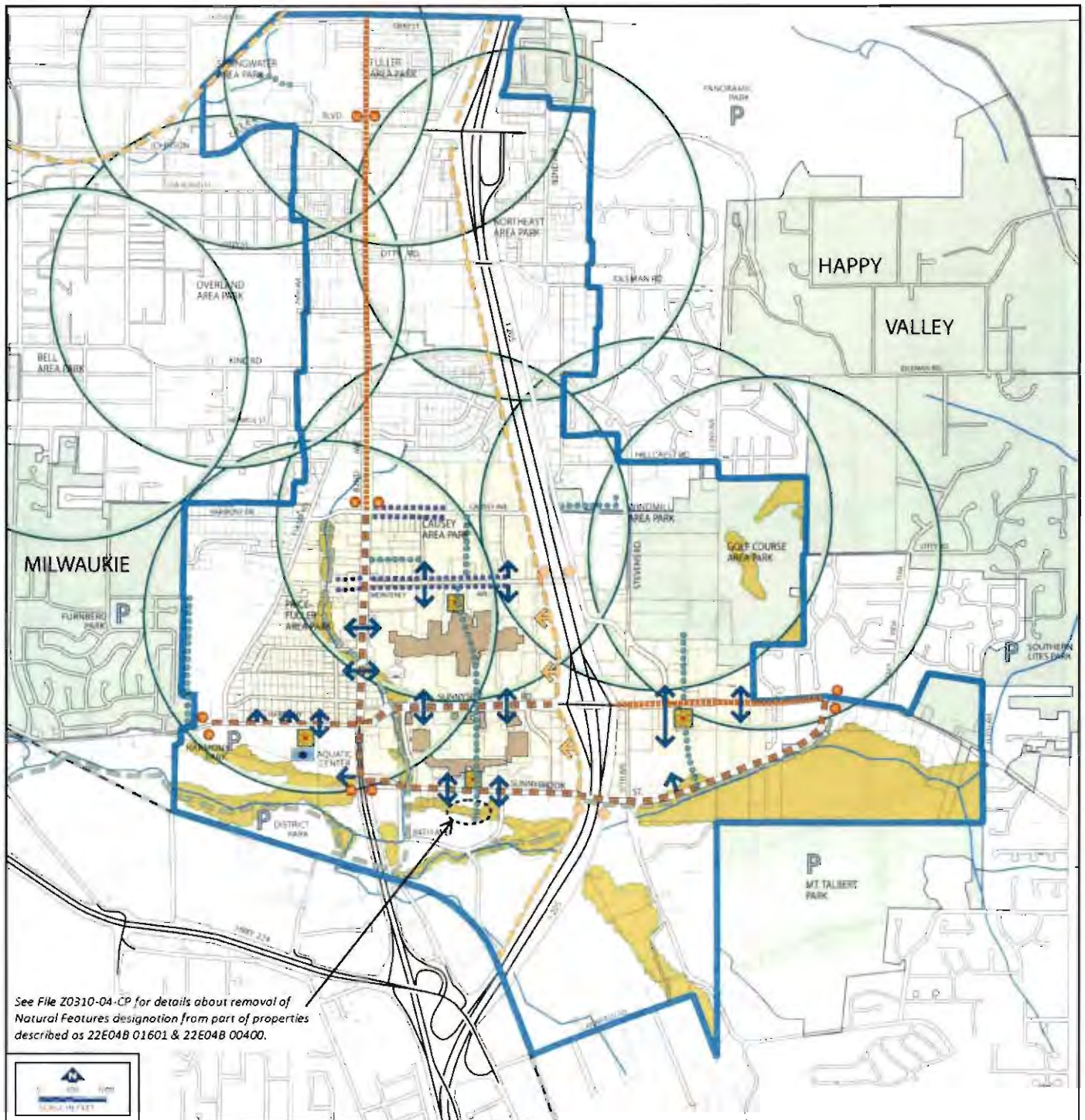
Low Density Residential (LDR)	Office Commercial (DC)
Medium Density Residential (MDR)	Regional Center Office (RCO)
High Density Residential (HDR)	Planned Mixed Use (PMU)
Medium High Density Residential (MHDR)	Station Community Mixed Use (SCMU)
Regional Center High Density Residential (RCHDR)	General Industrial (GI)
Corridor Commercial (CC)	Business Park (BP)
Retail Commercial (RTL)	Light Industrial (LI)
	Public & Community Use Open Space (PCU)

- Clackamas Regional Center Area
- Regional Center
- Incorporated City



Department of Transportation & Development
150 Broadway Rd. Oregon City, OR 97136

Ordinance ZDO-246, Exhibit A



Clackamas Regional Center Area Design Plan
Urban Design Elements

Clackamas County Comprehensive Plan

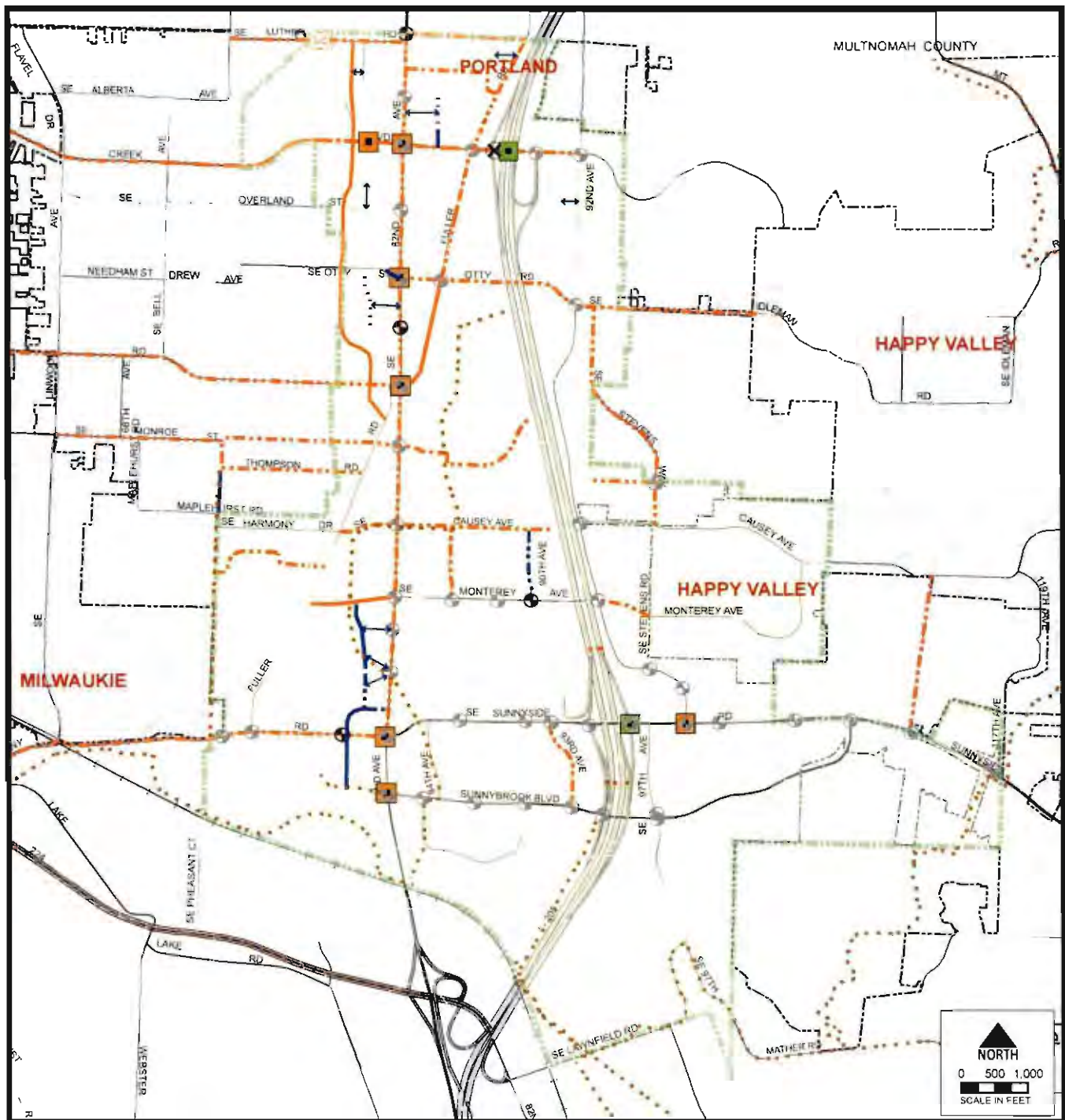
Map X-CRC-3

Last Amended February 11, 2013

- CLACKAMAS REGIONAL CENTER AREA
- - - - - MAIN STREET
- - - - - BOULEVARD
- SPECIAL STREET STANDARD
- ↔ STREET CONNECTION

- - - - - LOCAL STREET GRID
- - - - - OFF-STREET PEDESTRIAN LINKAGE
- - - - - MULTI-USE PATH
- POTENTIAL COMMUNITY CENTER
- GENERAL LOCATION OF NEEDED PARKS

- P PARK - OPEN SPACE
- - - - - GREENWAY TRAIL
- PLAZA
- NATURAL FEATURES
- PRIMARY GATEWAY
- FREEWAY GATEWAY



Clackamas Regional Center Area Design Plan

Transportation Network (Public and Private)

Clackamas County Comprehensive Plan

MAP X-CRC-4

Last Amended: March 1, 2014

Projects on 20-Year CIP*

- New Road (Public)
- - - Road Improvement
- - - Multi-use Path
- Bridge Replacement
- Intersection Improvement
- ODOT Interchange Improvement

Other Projects in CRC Plan

- New Road (Public)
- - - Road Improvement
- - - New Local Road (Public or Private)
- ↔ New Local Road location to be determined (Public or Private)

Signalized Intersections

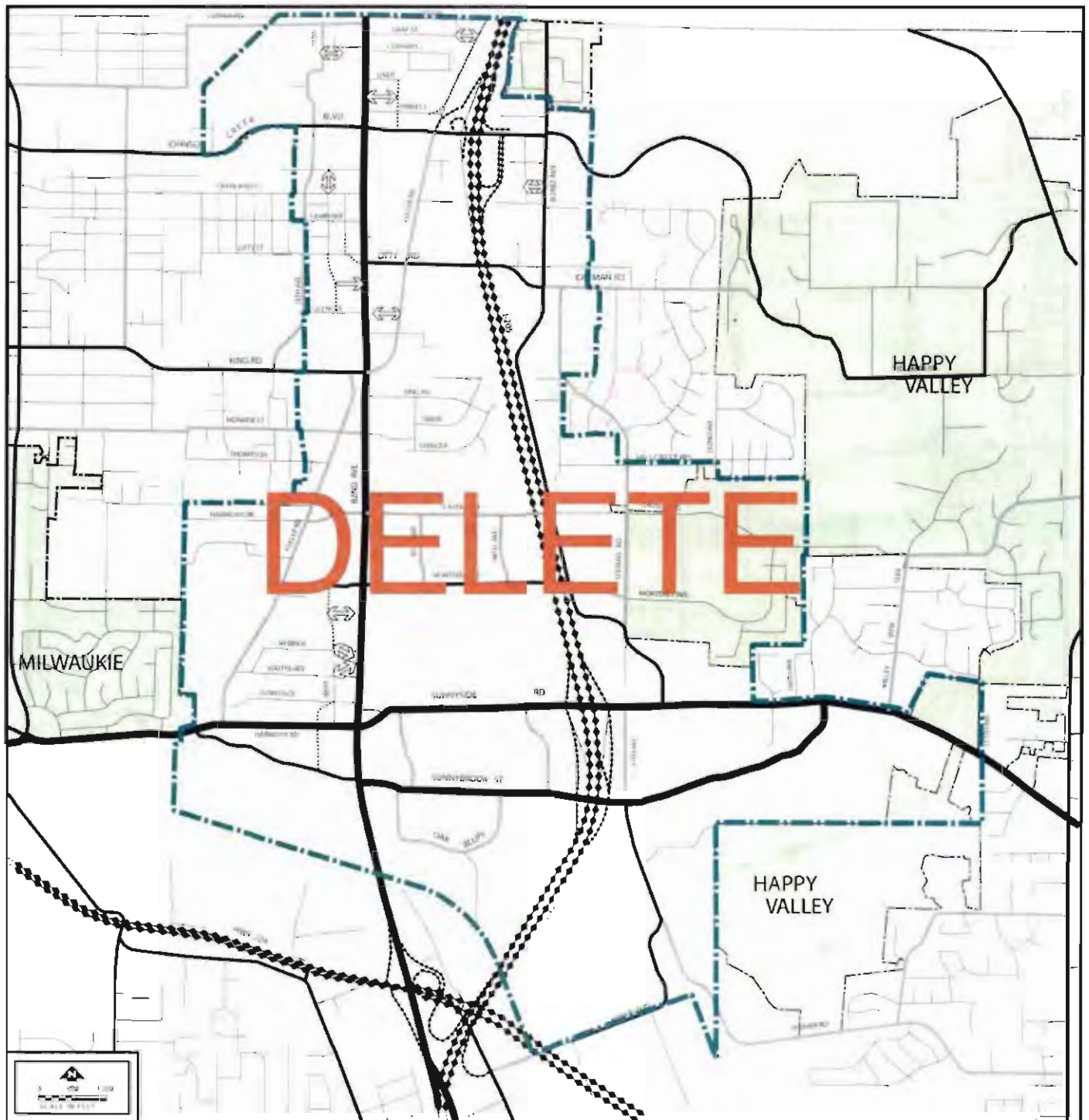
- Existing
- ⊙ Planned
- ⊗ To be Removed

- Clackamas Regional Center Area Design Plan
- Incorporated City



Ordinance ZDO-246, Exhibit A

*See Map 5-11a and Tables 5-3a to 5-3d (Chapter 5) for project descriptions



Clackamas Regional Center Area Design Plan
Functional Classification

Clackamas County Comprehensive Plan

Map X-CRC-5

Last Amended February 11, 2013



CLACKAMAS
 REGIONAL
 CENTER AREA



FREEWAY



FREEWAY RAMP



MAJOR ARTERIAL



MINOR ARTERIAL



COLLECTOR



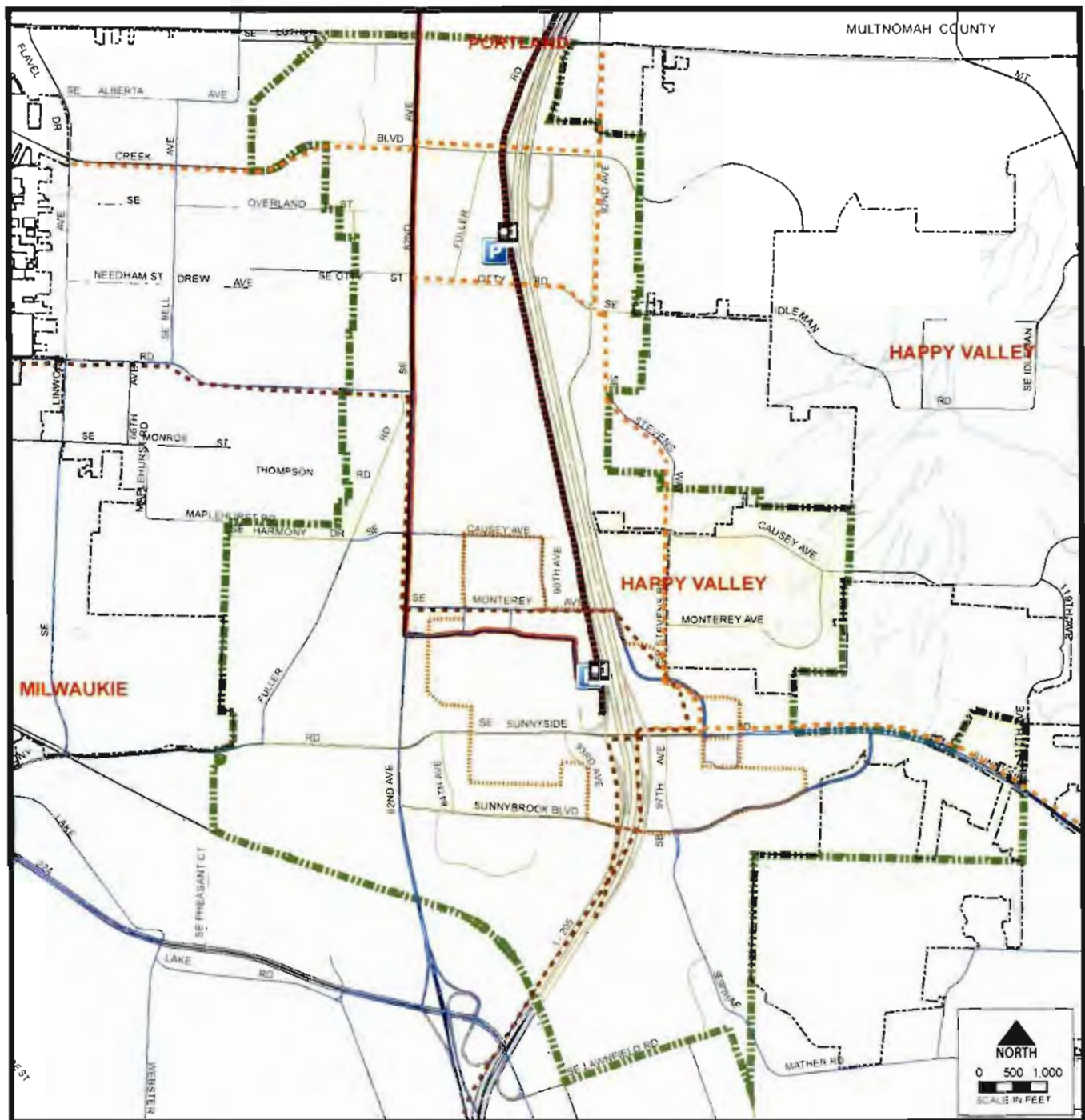
LOCAL STREET

LOCATION TO BE DETERMINED
 (PUBLIC OR PRIVATE)



LOCAL STREET

(PUBLIC OR PRIVATE)



Clackamas Regional Center Area Design Plan

Transit Network

Clackamas County Comprehensive Plan

MAP X-CRC-6

Last Amended: March 1, 2014

Existing Transit Network

- Frequent Bus Service (20 min or less)
- Standard Bus Service
- Light Rail Line
- P Light Rail Stop
- P Park & Ride

Planned Transit Network

- - - Planned Frequent Bus Routes
- - - Other Planned Transit Routes in CRC Plan
- - - Conceptual Loop Shuttle

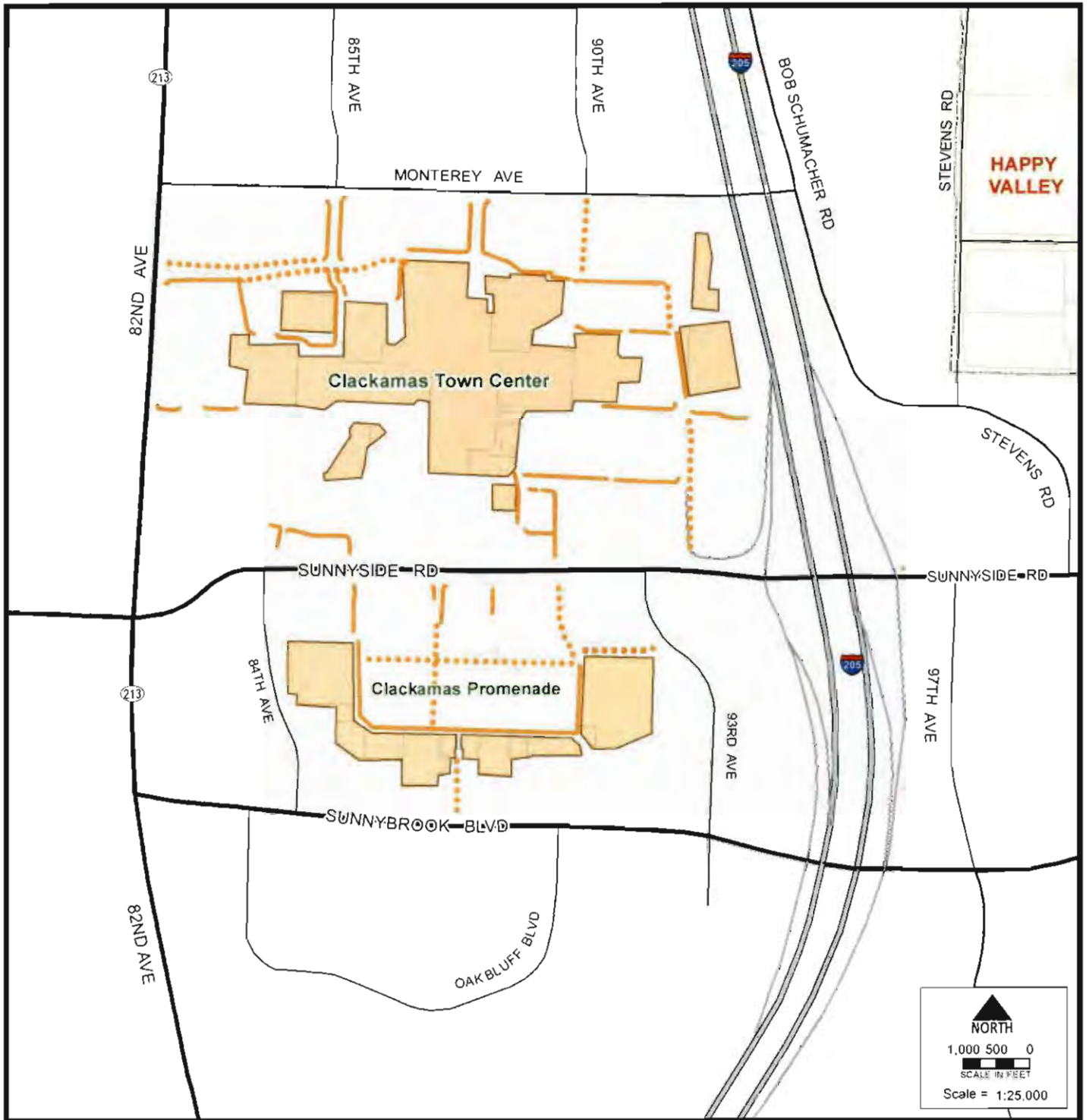


Clackamas Regional Center



Department of Transportation & Development
150 Beavercreek Rd. Oregon City, OR 97045

Ordinance ZDO-246, Exhibit A



Clackamas Regional Center Area Design Plan

WALKWAY NETWORK

Clackamas County Comprehensive Plan

MAP X-CRC-7a

Adopted 10/15/2012

-  Existing Walkways
-  Planned Walkways



SUNNYSIDE CORRIDOR COMMUNITY PLAN

The Sunnyside Corridor Community Plan Area is one of the most rapidly urbanizing areas of Clackamas County. Most of the development has occurred in the last 20 years, and there is capacity for additional growth. The Sunnyside Village area has developed rapidly since adoption of the Sunnyside Village Plan in 1993, and has provided many lessons about integrating land use and transportation, mixing uses, and accommodating higher density housing types. New planning rules affect the ways the remaining areas must be planned. These include:

- The Region 2040 Urban Growth Management Functional Plan. Sunnyside Road was identified by regional planning efforts as appropriate for designation as a Corridor design type. Corridors are planned to be areas featuring a high quality pedestrian environment, convenient access to transit, and higher employment concentrations and housing densities than surrounding areas. In order to support high quality transit service, they are planned to be developed at densities that are somewhat higher than today (2000). Typical new development would include rowhouses, and one- to three-story office, apartment and retail buildings.
- The National Marine Fisheries Service has listed several runs of Chinook Salmon and Steelhead in the Clackamas River as "threatened" under the Endangered Species Act. The Region 2040 Urban Growth Management Functional Plan, and the county water quality plans are responding to the listings. The listings may require additional protection of riparian corridors and area streams.

In addition, the recently completed Environmental Assessment for widening Sunnyside Road identifies opportunities and limits for the types of development that are feasible and prudent in the area. The Sunnyside Corridor Community Plan is designed to support the transportation improvements planned for Sunnyside Road by limiting land uses and thus traffic generation on Sunnyside Road, limiting accesses on Sunnyside Road, and increasing the connectivity within the neighborhood so that local trips won't have to use Sunnyside Road.

The Sunnyside Corridor Community Plan is designed to promote an urban form that will support alternative modes of transportation, such as walking, bicycling, and transit. Permitted land uses, the transportation network, and development standards are all designed to support alternative modes as well as auto use, and create a development pattern conducive to face-to-face community interaction. Designations for employment and higher density housing are located to support adopted public policy for the development of the regional transportation system.

The Sunnyside Corridor Community Plan is designed to focus the most intense development in two "development nodes" centered on SE 122nd Avenue and Sunnyside Road and on SE 132nd Avenue and Sunnyside Road. SE 122nd Avenue and SE 132nd Avenue must be improved to support the levels of traffic projected. There are three schools in the vicinity of SE 132nd Avenue and it is heavily used by school children. A street design to promote safety, convenience, and comfort is of utmost importance.

The overall Clackamas County Comprehensive Plan applies to the Sunnyside Corridor Community Plan Area. This section of the Comprehensive Plan describes the goals and policies that are specific to the Sunnyside Corridor Community Plan Area. This section takes precedence where conflicts exist between it and the remainder of the Comprehensive Plan.

The Sunnyside Corridor Community Plan applies to the area shown on Map X-SC-1, from SE 117th Avenue to the western boundaries of the Sunnyside Village. The primary focus of the Plan is the area immediately adjacent to Sunnyside Road and other areas with vacant and redevelopable land, especially the future urban areas east of SE 132nd Avenue.

GOALS

- Ensure the efficient use of land and urban services.
- Provide a mix of housing types, densities and price ranges to accommodate the diverse housing needs of the projected population.
- Encourage jobs and services along the Sunnyside Corridor to be concentrated at major intersections.
- Provide a transportation network that emphasizes an interconnection of streets, alleys and pedestrian ways that encourage transit, bicycle and pedestrian trips and provide opportunities for neighborhood circulation that avoids having to use Sunnyside Road.
- Reduce access points along Sunnyside Road.
- Facilitate development of sub-regional storm drainage detention and sediment control facilities that enhance water quality in area streams and provide adequate storm water detention.
- Provide adequate infrastructure.
- Provide for joint-use public facilities to reduce the land area committed to public uses.
- Protect the character of existing neighborhoods.

POLICIES

I. LAND USE

- 1.0 Map X-SC-2 illustrates the Land Use Plan designations for the Sunnyside Corridor Community Plan Area. The following uses may be allowed: Low Density Residential, Medium High Density Residential, Office Apartment, Community Commercial, and Public and Community Use. Policies directing the application of these plan designations are located in Chapter 4 of this Plan. In addition, policies establishing special standards for these plan designations when applied in the Sunnyside Corridor Community Plan Area are set out in policies 2.0 to 5.0 below.
- 2.0 The Growth Concept Design Type Corridor, as defined in Chapter 4, shall be applied along Sunnyside Road from approximately SE 117th Avenue to SE 138th Avenue. The Corridor Design Type location shall be defined within the Sunnyside Corridor Community Plan as development nodes, which are delineated on Map X-SC-1.

- 2.2 The development nodes will contain concentrations of higher intensity development, separated by Office Apartment or Low Density Residential uses.
- 2.3 Corridor Policies 2.1 - 2.5 stated in Chapter 4: Urban Growth Concept shall be applicable to the development nodes.
- 2.4 The development nodes will include a complementary mix of land uses. The following uses are expected to be found in the Corridor design type area: retail, services, offices, schools, religious facilities, community facilities, and multifamily residential. The following Plan designations may be located within the development nodes: Community Commercial, Office Apartment, Medium High Density Residential and Low Density Residential.
- 2.5 The Corridor design type development nodes shall not be expanded to include additional land area.

Residential

- 3.0 Residential designations shall be allowed in the Sunnyside Corridor Community Plan Area to provide for a variety of housing choices that are compatible with the character of the area, support current and projected demographics and ensure a range of densities to promote an efficient use of the land and urban services.
- 3.1 Urban Low Density Residential (LDR) designations shall be applied in many locations in the Sunnyside Corridor Community Plan Area, including locations on Sunnyside Road between development nodes. R-7 zoning shall be applied to areas designated Urban Low Density Residential that are located east of SE 132nd Avenue, south of SE Sunnyside Road and west of the Sunnyside Village.

Office Apartment

- 4.0 The Office Apartment designation shall be applied in the Sunnyside Corridor Community Plan Area to provide for employment and limited housing uses. Office Apartment designations shall be applied as depicted on Map X-SC-2 and may be applied in other locations when the Office Apartment Area of Application criteria are met.

Commercial

- 5.0 Within the Sunnyside Corridor Community Plan Area, the Community Commercial plan designation shall be allowed only on the south side of SE Sunnyside Road within the development node at the intersection of SE 122nd Avenue. This designation is provided to meet the retail needs of the Sunnyside Corridor Community Plan Area.

II. STREETS, ALLEYS AND PEDESTRIAN CONNECTIONS

- 1.0 Integrate land use with the transportation network in the Sunnyside Corridor Community Plan.
- 2.0 All new developments shall provide streets, vehicular connections and pedestrian connections as shown on the Maps X-SC-3 and Map 5-4aXSC-4.
- 2.1 New streets and connections identified on Map X-SC-3 as "location determined" may be modified only when it can be shown that the depicted street or connection is impractical to develop due to wetlands, topographic conditions, resource protection, or pre-existing lotting patterns.
- 2.2 The precise location for new streets and connections depicted as "location flexible" will be determined during the development review process.
- 3.0 In addition to the vehicular and pedestrian connections required on Map X-SC-3, safe and convenient pedestrian connections shall be used to enhance access between residential and commercial developments, public facilities, activity centers, and streets when public streets are not feasible.
- 3.1 A system of pedestrian connections shall be provided from subdivisions and multifamily developments to the following commercial or public facilities: existing or planned transit facility, school, park, outdoor activity area, plaza, day care center, children's play area, library, church, or similar facility; and.
- 3.2 Pedestrian access shall be provided from a dead-end street, cul-de-sac, or mid-block where the block is longer than 330 feet; and
- 3.3 Commercial developments shall be integrated with the neighborhood. If direct pedestrian access is not provided between commercial developments and adjacent residential areas via public streets and sidewalks, additional pedestrian and bicycle access

shall be provided.

- 4.0 Southeast 132nd Avenue south of Sunnyside Road shall be constructed to the street standards as depicted in Figure X-SC-1.
 - 4.1 No new residential driveway accesses shall be allowed on SE 132nd Avenue south of Sunnyside Road.
 - 4.2 The fronts or sides of primary dwelling units shall be oriented to SE 132nd Avenue. Back yards shall not line SE 132nd Avenue.
 - 4.3 Facades facing SE 132nd Avenue shall not consist of a blank wall.
- 5.0 New local streets and new connector streets shall comply with the following design standards:
 - 5.1 Orient local streets whenever practical so that at least 50% of the lots front north or south to take advantage of solar access.
 - 5.2 Provide on-street parking, planting strips between sidewalk and street, sidewalks on both sides of the street, street trees, and short pedestrian crossing distances at intersections. Figure X-SC-2 illustrates a typical street cross section.
- | 6.0 Street trees listed as prohibited in Section ~~1600~~1007 of the Zoning and Development Ordinance shall not be approved as street trees in the Sunnyside Corridor Community Plan Area.
- 7.0 Provide vehicular and/or pedestrian connections between residential developments, public facilities, neighborhood services, and the collector and arterial street system.
- 8.0 Alleys shall be allowed in all residential districts. All alleys shall be private streets and shall be constructed as depicted in Figure X-SC-3.
- 9.0 Access controls on Sunnyside Road shall be consistent with the preliminary design for Sunnyside Road as shown in the Sunnyside Road Environmental Assessment or more detailed design and engineering work undertaken for Sunnyside Road. In addition, the following shall be applied:
 - 9.1 Consolidate driveways to the targets shown on Map X-SC-5, Access Management Targets for Sunnyside Road.
 - 9.2 Whenever possible, driveway accesses shall be consolidated as development and re-development occurs. Temporary accesses

may be allowed when Office Apartment sites develop incrementally, but only if a master plan has been approved demonstrating how and when further driveway consolidation shall occur.

- 9.3 To maintain the flow of traffic on Sunnyside Road, driveways may be restricted to right-in, right-out only.
- 9.4 Office Apartment and Commercial developments shall minimize vehicular access to Sunnyside Road, with primary access provided on side streets whenever possible.

III. NATURAL RESOURCE PROTECTION

- 1.0 Restrict development of natural resource areas, including: Slopes greater than 20%, confirmed landslide hazard areas, flood hazard areas, stream buffers, wetlands and significant natural areas.
- 2.0 Except in stream corridor and wetland buffers, residential development may be allowed within restricted areas when it is consistent with the Policies in the Natural Hazards section of Chapter 3, and the Open Space and Floodplains section of Chapter 4 of the Comprehensive Plan.
- 3.0 Allow the transfer of residential development density from restricted areas to other areas on the site, subject to the following standards:
 - 3.1 Resulting density on the developed portion of a Low-Density Residential site shall not exceed 15 dwelling units per acre.
 - 3.2 If the density on the developed portion of the site exceeds the next highest residential Plan category, buffering from adjacent low-density residential uses shall be considered in the development review process.

IV. PARKS, OPEN SPACE AND RECREATION TRAILS

- 1.0 Provide parks that are equitably distributed and accessible from throughout the Sunnyside Corridor Community Plan Area.
- 2.0 Facilitate park and recreation and storm water detention and treatment providers to cooperate in the development of facilities that meet the needs of both agencies.
- 3.0 At the time of site development, trails shown on Map X-SC-6 shall be constructed to standards established by the North Clackamas Parks and Recreation District.

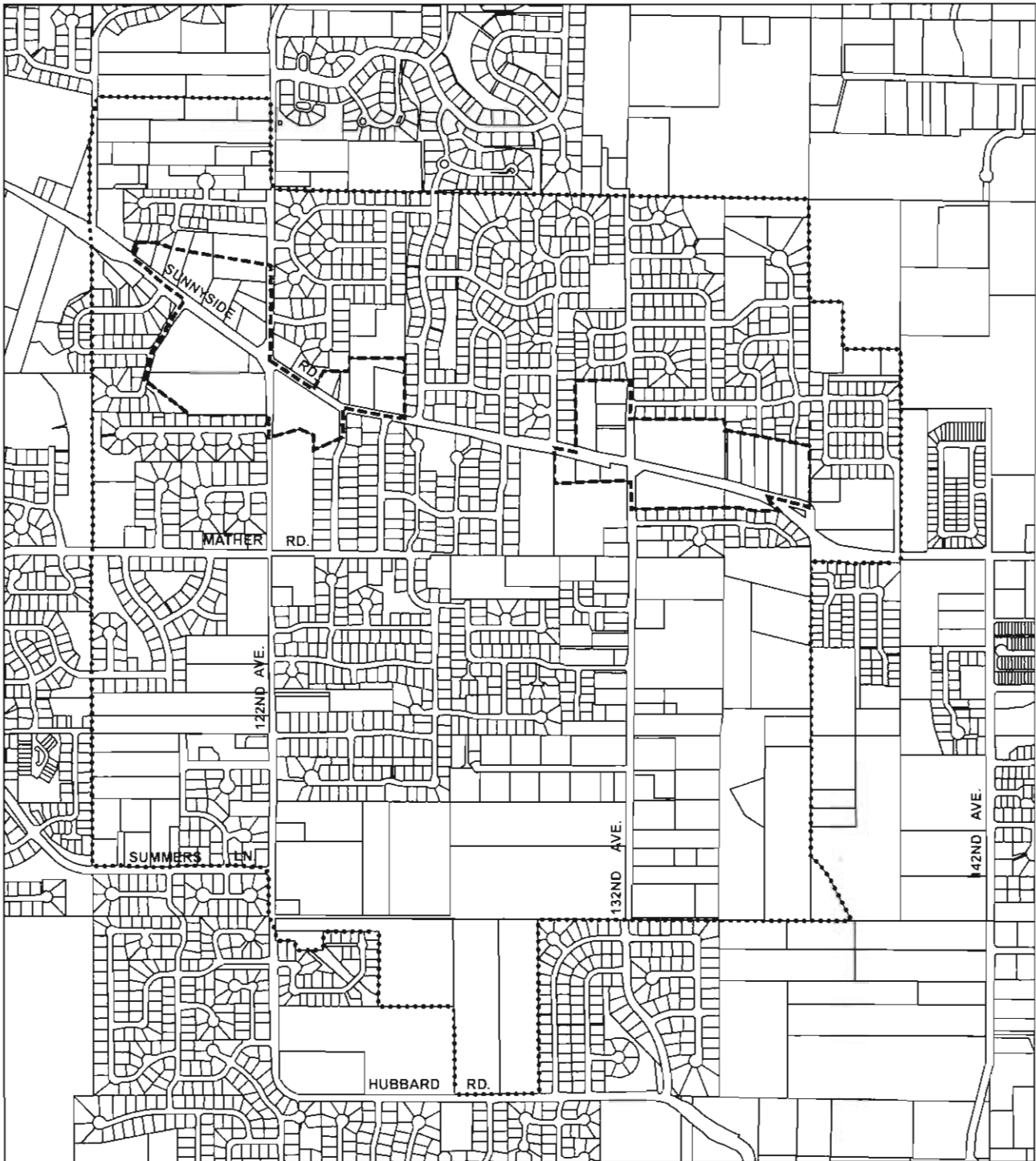
- 4.0 Map X-SC-6 depicts the general location of a trail that will connect to an adjacent trail in the Sunnyside Village. The final location of this trail will be determined as development occurs.
- 5.0 All designated trails identified on Map X-SC-6 shall be either dedicated to, or granted as an easement to, the North Clackamas Parks District, which will be responsible for their maintenance.

MAPS & FIGURES

(Only maps are included in this package. Figures are not included because no change is proposed).

Sunnyside Corridor Community Plan

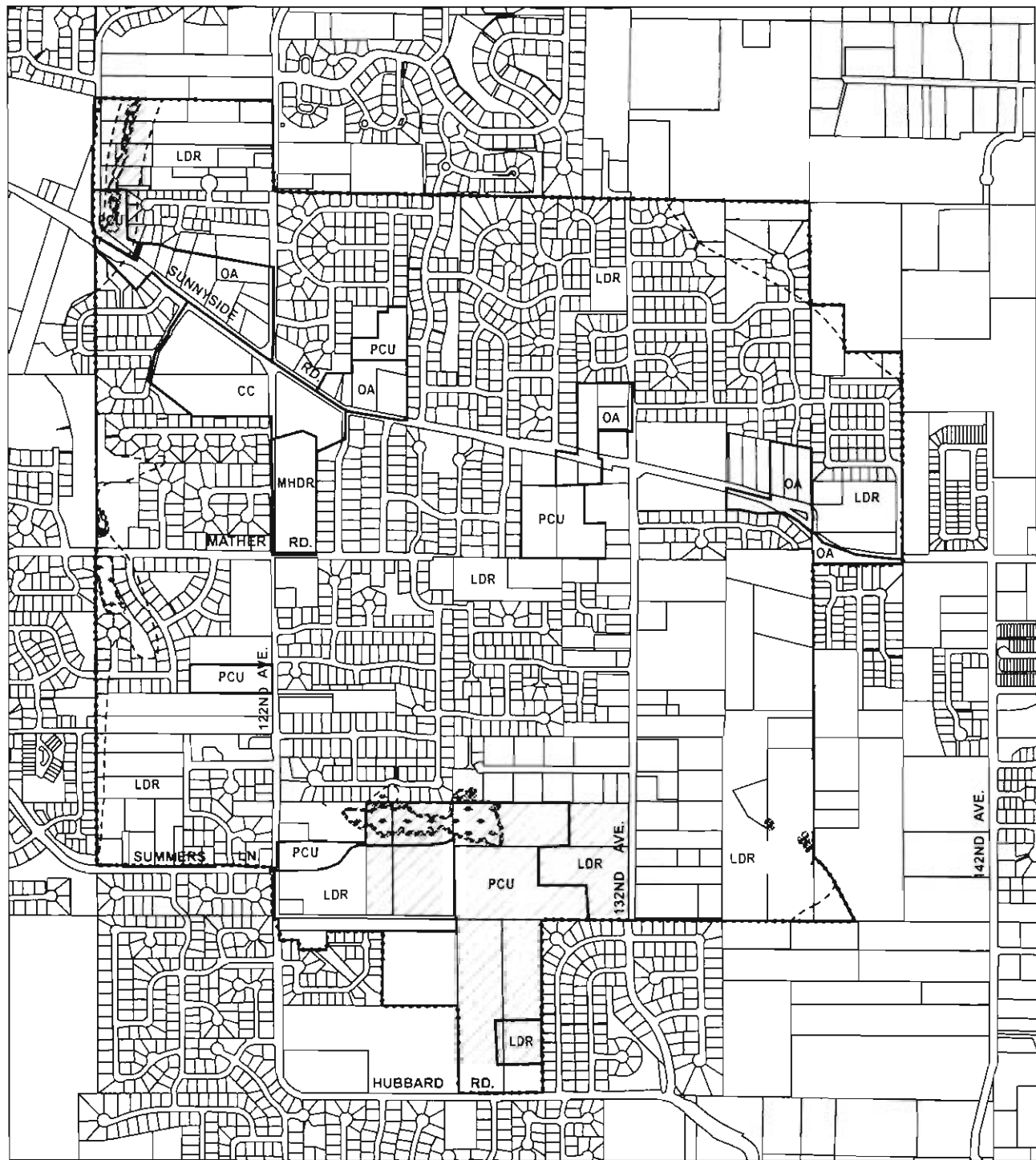
Map X-SC-1	Community Plan Area & Corridor Design Type Location
Map X-SC-2	Land Use Plan Map
Map X-SC-3	New Streets
Map X-SC-4	Functional Classification
Map X-SC-5	Sunnyside Road Access Management Targets
Map X-SC-6	Trails
Figure X-SC-1	132 nd Avenue South of Sunnyside Road
Figure X-SC-2	New Local Streets
Figure X-SC-3	Alley Cross Section



Sunnyside Corridor Community Plan
Community Plan Area and Corridor Design Type Location

CLACKAMAS COUNTY
 COMPREHENSIVE PLAN
MAP X-SC-1

-  SUNNYSIDE CORRIDOR COMMUNITY PLAN AREA
-  CORRIDOR DESIGN TYPE AREAS
-  SUNNYSIDE VILLAGE

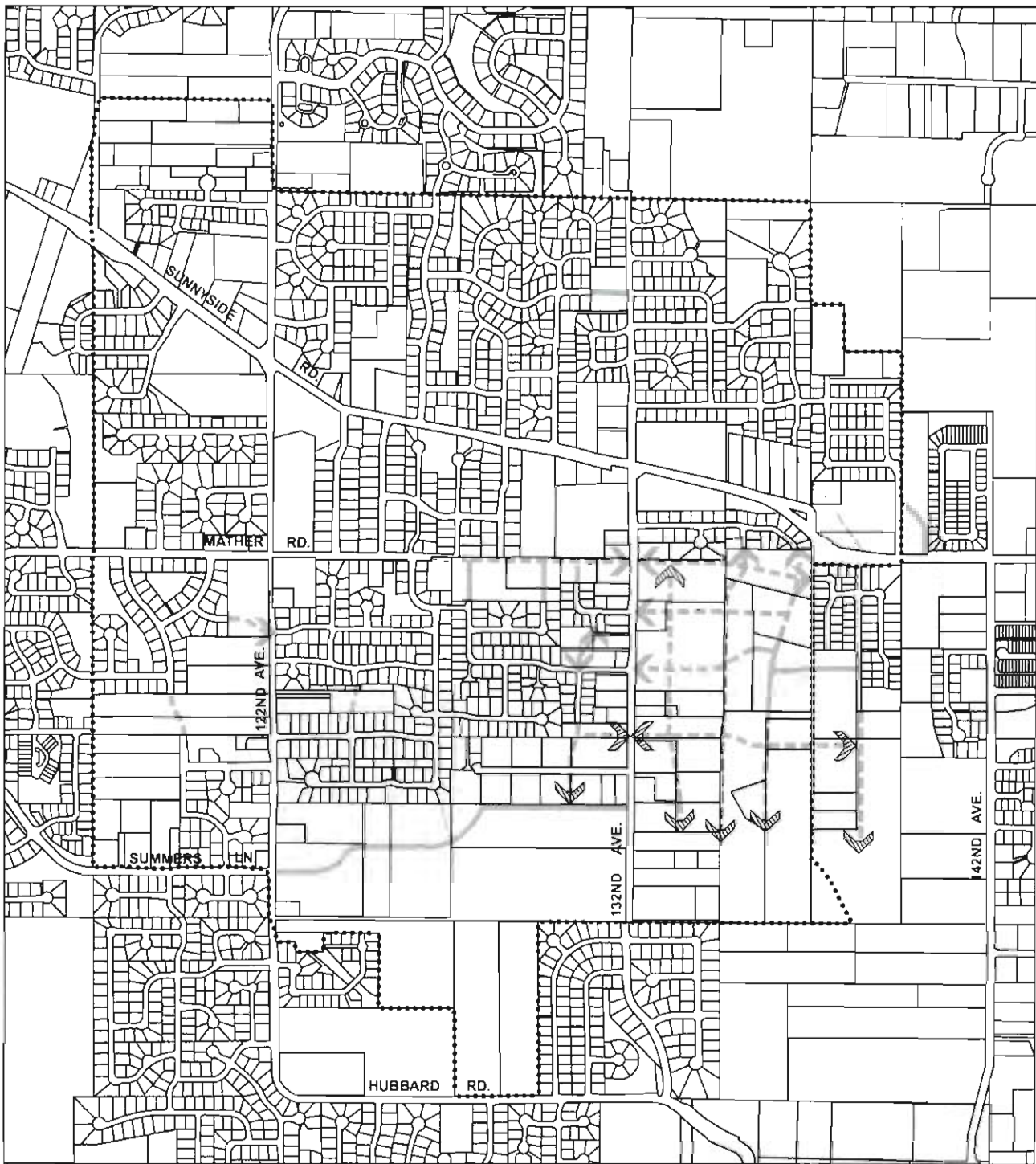


Sunnyside Corridor Community Plan Land Use Plan Map

CLACKAMAS COUNTY
COMPREHENSIVE PLAN
MAP X-SC-2

CC	COMMUNITY COMMERCIAL		RESOURCE PROTECTION
OA	OFFICE APARTMENT		GOAL 5 WETLAND
LDR	LOW DENSITY RESIDENTIAL		WETLAND BUFFER
MHDR	MEDIUM HIGH DENSITY RESIDENTIAL		
PCU	PUBLIC AND COMMUNITY USE		

Ordinance ZDO-246, Exhibit A



Sunnyside Corridor Community Plan New Streets

CLACKAMAS COUNTY
COMPREHENSIVE PLAN
MAP X-SC-3

 COMMUNITY
PLAN AREA

 NEW STREET, LOCATION DETERMINED
 NEW STREET, LOCATION FLEXIBLE
 NEW PEDESTRIAN CONNECTION,
LOCATION FLEXIBLE

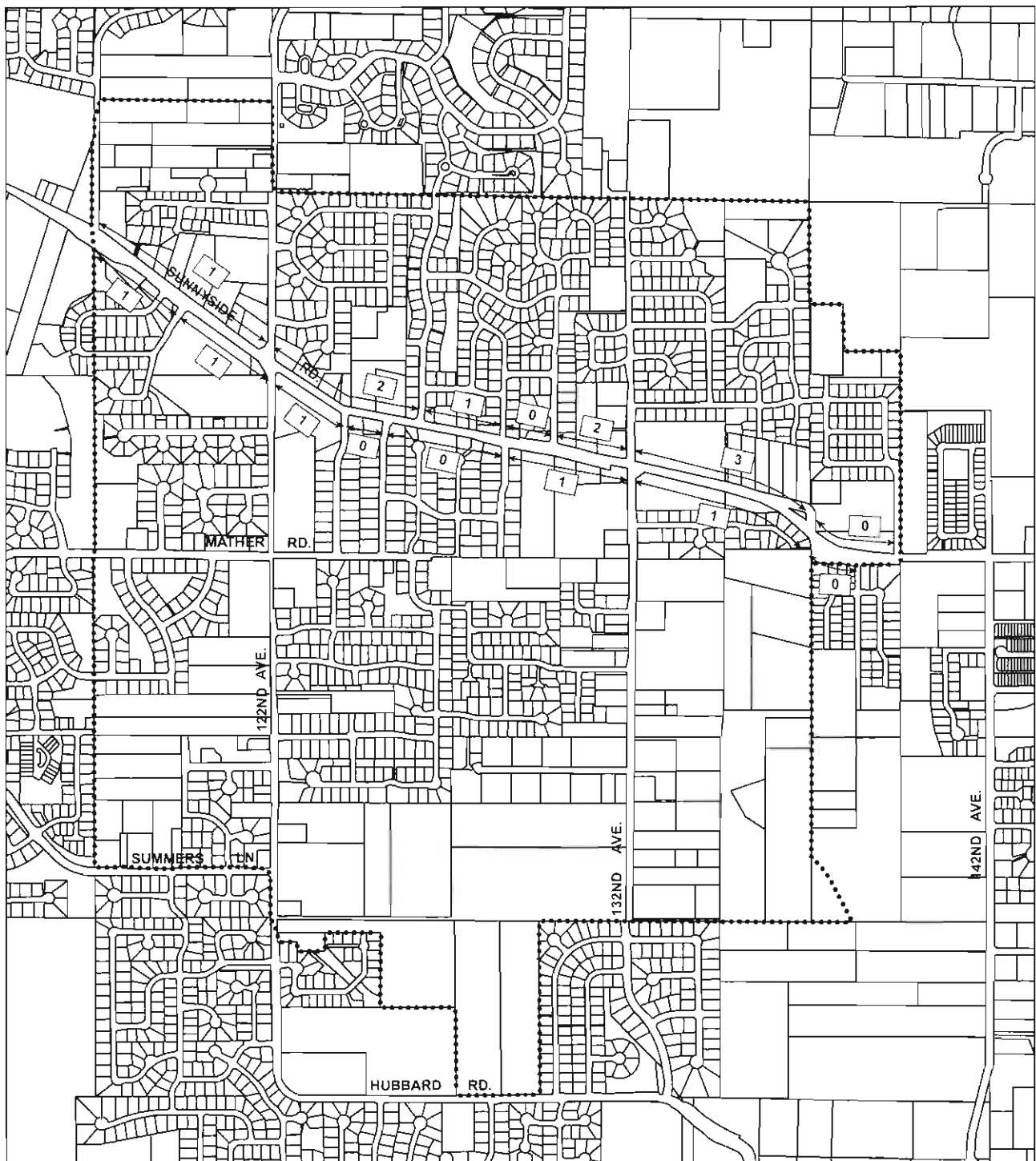
 NEW CONNECTION,
LOCATION DETERMINED
 NEW CONNECTION,
LOCATION FLEXIBLE



Sunnyside Corridor Community Plan **Functional Classification**

CLACKAMAS COUNTY
 COMPREHENSIVE PLAN
MAP X-SC-4

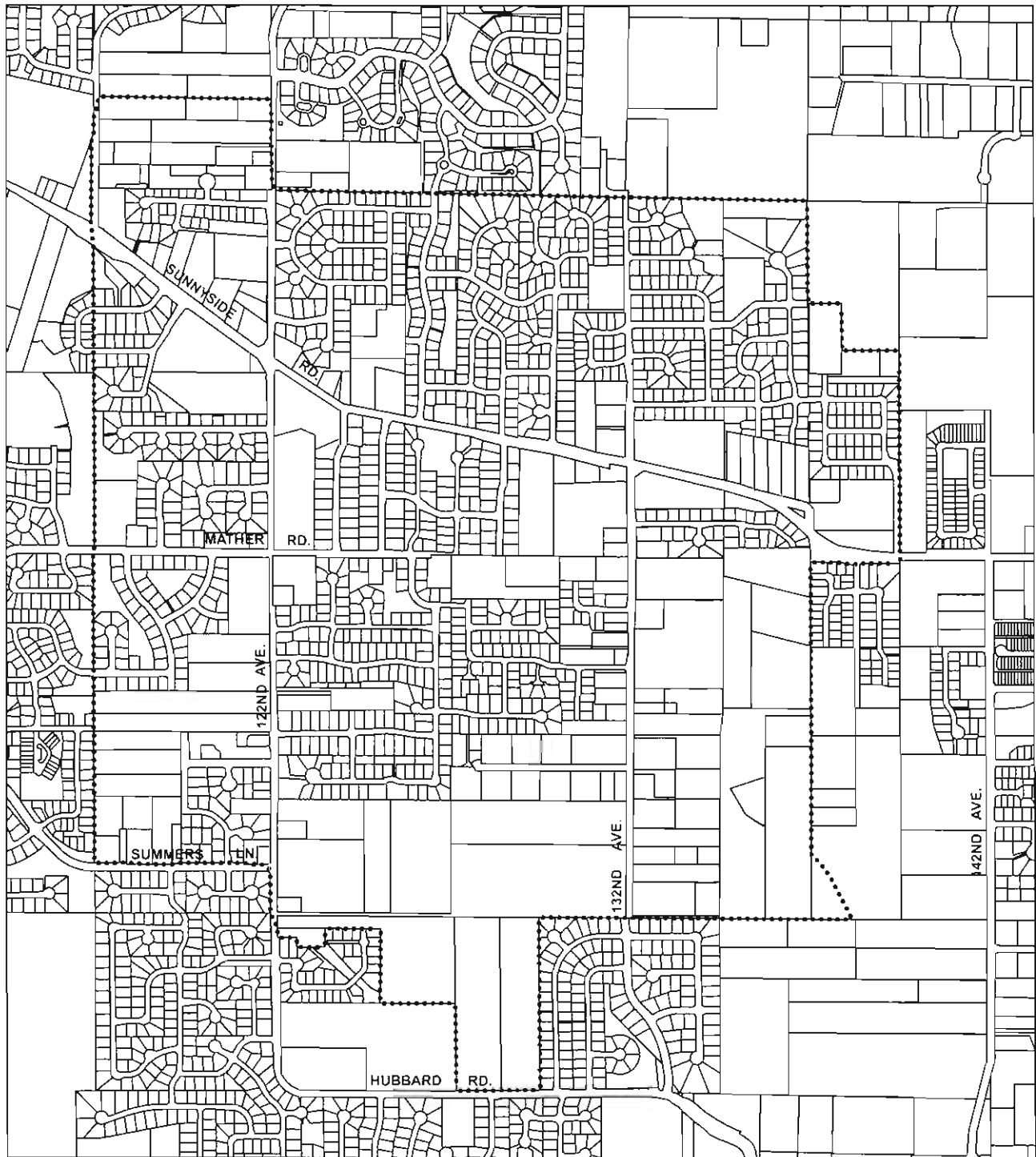




Sunnyside Corridor Community Plan **Sunnyside Road Access Management Targets**

CLACKAMAS COUNTY
 COMPREHENSIVE PLAN
MAP X-SC-5

-  COMMUNITY PLAN AREA
-  NUMBER OF DRIVEWAYS TARGETED IN THIS SEGMENT



Sunnyside Corridor Community Plan Trails

CLACKAMAS COUNTY
COMPREHENSIVE PLAN
MAP X-SC-6



COMMUNITY PLAN AREA

TRAIL

McLOUGHLIN CORRIDOR DESIGN PLAN

The Portland metropolitan area has changed significantly in the past 20 years, and will likely experience more changes in the future. McLoughlin Boulevard, and the business and residential areas that surround it, have also changed – reflecting population and traffic changes, shifts in retail market and development types, and infill and maturation of the nearby residential neighborhoods.

A number of issues affect the future of the McLoughlin Corridor, which provided the impetus for a special study of the area in 1998-99, including:

- McLoughlin has been identified as a "Regional Street" in the Region 2040 Urban Growth Management Functional Plan, and is expected to continue to support high levels of through and local vehicular traffic.
- The area along McLoughlin is designated a "Corridor" in the Region 2040 Urban Growth Management Functional Plan. A corridor is intended to feature a high quality pedestrian environment and convenient access to transit, while continuing to meet the needs of the automobile. Corridor areas are expected to transition to higher residential and employment densities through infill and redevelopment.
- The Oregon Highway Plan designates McLoughlin as a District Highway. As a District Highway, McLoughlin provides a link between urbanized areas and also serves local access and traffic. The management objective is to provide for safe and efficient, low to moderate speed traffic flow and for pedestrian and bicycle movements.
- McLoughlin has been designated for frequent bus service.
- The Oregon Department of Transportation (ODOT) needs to evolve policies and standards for state highways in urban areas such as the McLoughlin Corridor.

Clackamas County worked with state and local agencies, a Citizen's Workgroup, and the general public through a series of open houses, to develop a plan in response to these issues.

The focus of the McLoughlin Corridor Study became the design of the street itself. McLoughlin Boulevard was the first four-lane highway constructed in the State. It was constructed in the 1930s, and improved incrementally since then. It generally has 120 feet of right-of-way, with an improved width of 80-90 feet. Several of the State and County policies that describe how a District Highway or Major Arterial is to be designed and constructed remain to be implemented.

The McLoughlin Corridor Design Plan is not intended to repeat policies that cover issues already addressed by other State and County plans, such as the need for continuous sidewalks, bike lanes, street lighting, and transit improvements. The Design Plan also does not attempt to modify existing state or county policies for access control. This plan focuses on designing aspects of the street for greater safety, aesthetics and utility, especially including a landscaping strip between the curb and sidewalk. Both safety and appearance will be improved by consistent design, including continuous bikelanes, landscaped strips, sidewalks, street lights, transit amenities, fewer driveways, and no on-street parking. The Design Plan includes typical cross sections, with strategies to apply them in the context of design work leading up to a reconstruction of McLoughlin and in the context of development review.

Land Uses in the McLoughlin Corridor were reviewed. A market analysis addressed the market for a range of land uses, and the types of employment and housing densities that are suitable for the corridor. It was determined that the employment and housing uses and densities appropriate to a corridor are already feasible under the existing plan designations provided for in the Comprehensive Plan.

Land uses would be better served in terms of access and circulation if there were better connectivity between parking lots, and between parking lots and streets to the side or rear of the development. The image of McLoughlin would be improved if the existing sign ordinance were better enforced. An improved appearance may lead to more investment, more patronage of businesses, and more job creation.

The overall Clackamas County Comprehensive Plan is applicable to the McLoughlin Corridor area. This chapter of the Comprehensive Plan describes the goals and policies that are specific to the McLoughlin Corridor. This chapter takes precedence where conflicts exist between it and the remainder of the Comprehensive Plan.

GOALS

- Design and improve McLoughlin to serve the needs of travelers by all modes of transportation along and across the roadway.
- Design McLoughlin to serve a balance between regional through traffic and local access for business and residents.
- Design McLoughlin to serve regional and local traffic, including public transportation, bicycle and pedestrian travel.
- Enhance safety for all travel modes and improve the aesthetic appeal of McLoughlin.

- Create a high quality pedestrian environment, convenient access to transit, and mix of land uses that implement the “Corridor” design type.
- Enhance pedestrian safety, especially pedestrian crossings near schools.

POLICIES

Land Use

- 1.0 The Growth Concept design type “Corridor”, as defined in Chapter 4 and displayed on Map X-MC-1, shall be applied along McLoughlin Boulevard.
- 2.0 The Corridor design type is applied to properties within the McLoughlin Corridor Study area that have the following Comprehensive Plan designations: GC-General Commercial, SHD-Special High Density, HDR-High Density Residential, MHDR-Medium High Density Residential, and MDR-Medium Density Residential and are no more than 650 feet from the McLoughlin Boulevard Right-of-Way.
- 3.0 Corridor Policies 2.1-2.5 stated in Chapter 4: Urban Growth Concept shall be applicable within the Corridor design type area.
- 4.0 Office and commercial developments shall integrate with adjacent neighborhoods by providing, at minimum, excellent pedestrian access.
- 5.0 A range of land use designations may be applied within the designated Corridor design type area. Land use designations that provide primarily for employment and shopping, and land use designations that provide primarily for multi-family residences shall be considered. Land Use Designations applicable in the Corridor design type area are:
 - 5.1 Commercial and Office designations that may be applied include: General Commercial, Retail Commercial, Office Commercial and Office Apartment. Any site designated for a commercial use shall be located adjacent to McLoughlin.
 - 5.2 Multifamily designations that may be applied include: Special High Density, High Density, Medium High Density and Medium Density Residential. Multifamily designations should generally be located so as to form a buffer between commercial uses adjacent to McLoughlin and low density residential areas.

- 5.3 When applying for a Comprehensive Plan map amendment to a multi-family designation in the McLoughlin Corridor, the applicant's property shall have access to a street designated as a major or minor arterial, collector, connector or local. Siting should not result in significant traffic increase on local streets serving low density residential areas.

Transportation

- 6.0 Encourage circulation to occur between businesses by requiring that adjacent parking lots be connected to each other or to a street at the side or rear of the development.
- 7.0 Develop a program for enforcement of the County's sign ordinance on McLoughlin Boulevard. Potential strategies include: providing additional funding and establishing priority with the County's Code Enforcement Section; and setting up a "Corridor Committee" of property owners and business owners who would work toward compliance by setting a good example, discussion, persuasion, and soliciting compliance in a friendly way.
- 8.0 ODOT's access standards are applicable to McLoughlin Boulevard as are their roadway standards between the curbs.
- 9.0 Apply the typical cross sections as shown on Figures X-MC-1-a and -1b. Map X-MC-2 shows where the various cross sections generally apply. These cross sections for the area of the roadway adjacent to a development (generally sidewalks and landscaping strips) shall be required during development review.
- 9.1 The standard arterial segment cross section is preferred at locations between intersections. In areas where the topography adjacent to the outside of the sidewalk slopes so that a retaining wall higher than 3 feet would be required, the landscaped buffer may be reduced in width. The topographically constrained cross section on Figure X-MC-1-a, portrays the maximum reduction in the improved width (landscaped buffer reduced to zero, but no reduction is allowed in sidewalk width). Reduction in the width of the landscaped buffer shall be the minimum necessary, considering a retaining wall 3 feet high.

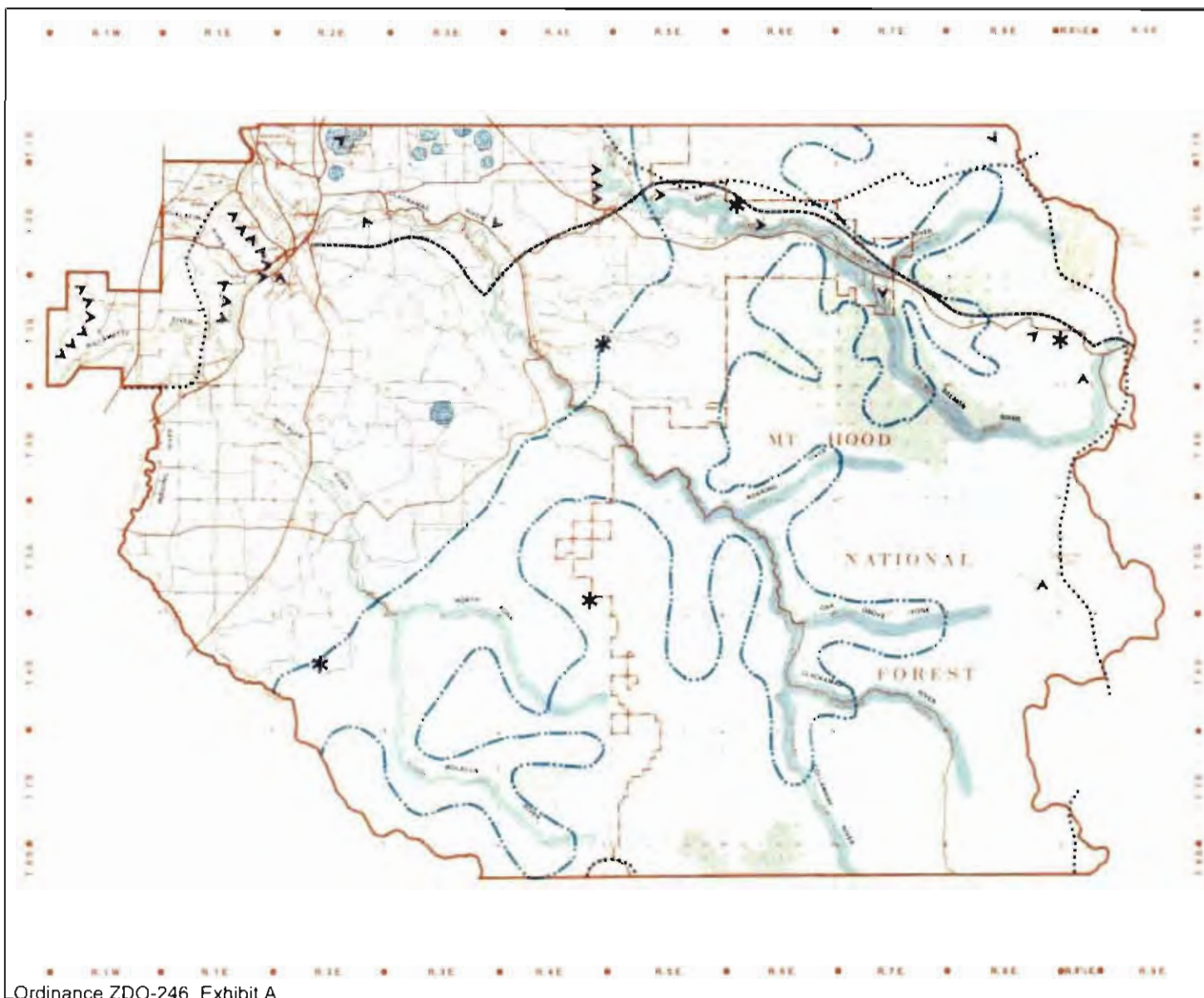
- | 10.0 The typical cross sections as shown on Figure X-MC-1-a and -1b, and indexed on Map X-MC-2 shall be used as guidelines for specific designs for reconstruction of McLoughlin Boulevard. More specific design work produced in preparation of a reconstruction of McLoughlin may replace the typical cross sections in regard to requirements for development and redevelopment. Design work for road reconstruction should start with the Final Report of the McLoughlin Corridor Land Use and Transportation Study as a guide.
- 11.0 Transit improvements in the McLoughlin Corridor should include a transit shuttle through the McLoughlin Corridor area.

MAPS & FIGURES

(Map are not included because no change is proposed).

McLoughlin Corridor Design Plan

Map X-MC-1	Design Plan Area
Map X-MC-2	Location of Street Improvements
Figure X-MC-1	Street Cross Sections
Figure X-MC-2	Street Cross Sections



SCENIC & DISTINCTIVE RESOURCE AREAS

- Principal River Corridors
- Wilderness Areas
- Buttes
- Unique / Natural Features *
- Viewpoints
- Upper & Lower Limits of Winter Range (Deer, Elk - 3000' Elevation)
- Barlow Road Historic Corridor (Oregon National Historic Trail)
- Recreation Trails, Existing / Proposed

Scenic Roads - See Map V-3 5-1

* Source: Nature Conservancy

Ordinance ZDO-246**Zoning and Development Ordinance Amendments**

Text to be added is underlined. Text to be deleted is ~~struck through~~.

202 DEFINITIONS

ACCESSORY BUILDING OR USE: A subordinate building or use, the function of which is clearly incidental to that of the main building or use on the same lot.

ACCESSWAY: A public right-of-way, a portion of which is hard surfaced, for use by pedestrians and bicyclists providing a direct route where public roads require significant out of direction travel.

ACCESS DRIVE: A private way, with a travel surface generally no more than 12 feet in width, created by deed or easement to provide vehicular ingress to, or egress from not more than two lots or parcels.

ACTIVE RECREATIONAL AREA: An area such as a park, sports field, or golf course, where turf provides a playing surface that is dedicated to active play.

ADJOINING: Contiguous or abutting exclusive of street width. It shall include the terms adjacent, abutting or contiguous.

ADULT BUSINESS: A range of commercial activities characterized by live, closed circuit, or reproduced material which has an emphasis on nudity and/or specified sexual activity. Such businesses generally limit their patrons to persons at least 18 years of age. Adult businesses include the following types of establishments: adult bookstores, adult theaters, adult arcades, adult cabarets, and adult paraphernalia shops, as defined below, and other establishments which feature any combination of activity or merchandise described below which collectively account for 25 percent, or more, of the establishment's activity or merchandise. These definitions shall not be construed to allow uses or activities which are unlawful under State criminal laws.

"Adult bookstore" is an establishment having as 25 percent or more of its merchandise for sale, rent, or viewing on the premises, such items as books, magazines, other publications, films, video tapes or video discs which are distinguished by their emphasis on specified sexual activities, as defined in this ordinance.

"Adult theater" is an establishment used for more than 25 percent of showtime for presenting material (either live, closed circuit, or prerecorded) for observation by patrons therein which has as a dominant theme an emphasis on nudity and/or specified sexual activities, as defined in this ordinance.

"Adult arcade" is an establishment offering viewing booths or rooms for one or

more persons in which 25 percent, or more, of the material presented (either live, closed circuit, or reproduced) is characterized by an emphasis on nudity and/or specified sexual activities, as defined in this ordinance.

"Adult cabaret" is an establishment having as its primary attraction live exhibitions (either for direct viewing, closed circuit viewing, or viewing through a transparent partition) for patrons, either individually, or in groups, where the exhibition material presented is characterized by an emphasis on nudity and/or specified sexual activities, as defined in this ordinance.

"Adult paraphernalia shop" is an establishment having as 25 percent or more of its merchandise objects which stimulate human genitalia and/or objects designed to be used to substitute for or be used with human genitalia while engaged in specified sexual activities, as defined in this ordinance.

AIRPORT, PERSONAL-USE: An airstrip restricted, except for aircraft emergencies, to use by the owner and, on an infrequent and occasional basis, by his invited guests, and to commercial activities in connection with agricultural operations only.

AIRPORT, PRIVATE USE: An airport restricted, except for aircraft emergencies, to use by the owner and his invited guests. The determination as to whether an airport is private or public-use is made by the Oregon Department of Aviation.

AIRPORT, PUBLIC-USE: An airport that is open to use by the flying public, with or without a request to use the airport.

ALLEY: ~~A travel way that is used Any public space or thoroughfare less than 16 feet but not less than 10 feet in width which has been dedicated or deeded to the public~~ primarily for vehicular service access to the back or side of properties otherwise abutting on a street.

ALTERATION, CULTURAL RESOURCE: Any exterior change or modification, through public or private action, of any cultural resource or of any property located within an historic district including, but not limited to, exterior changes to or modification of structure, architectural details or visual characteristics such as paint color and surface texture, grading, surface paving, new structures, cutting or removal of trees and other natural features, disturbance of archaeological sites or areas, and the placement or removal of any exterior objects such as signs, plaques, light fixtures, street furniture, walls, fences, steps, plantings and landscape accessories affecting the exterior visual qualities of the property.

ANTIQUES: Goods that, by virtue of their age or unusual quality, are generally considered to be of historical and/or artistic interest, ordinarily such items are in good state of preservation or are restorable to their original conditions.

ARCHITECTURAL FEATURES: Features include, but are not limited to cornices, canopies, sunshades, gutters, chimneys, fireplaces, flues and eaves. Architectural

features shall not include any portion of a structure built for the support, occupancy, shelter or enclosure of persons or property of any kind.

ARCHITECTURAL FEATURES, CULTURAL RESOURCE: The architectural elements embodying style, design, general arrangement and components of all of the outer surfaces of an improvement, including, but not limited to, the kind, color, texture of the building materials and type and style of all windows, doors, lights, signs and other fixtures appurtenant to such improvements.

AUTOMATIC IRRIGATION CONTROLLER: An automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.

BABYSITTER: A person who goes into the home of a child to give care during the temporary absence of the parent or legal guardian or custodian.

BASEMENT: A portion of a building which has less than one-half of its height measured from finished floor to finished ceiling above the average elevation of the adjoining ground, but not an "underground structure" as defined in this ordinance.

BEACON: Any light with one or more beams directed into the atmosphere or directed at one or more points not on the same site as the light source; also, any light with one or more beams that rotate or move.

BED AND BREAKFAST ESTABLISHMENT: A use carried on in a structure designed for a single-family dwelling, except as provided under Section 832, which provides rooms for rent on a daily basis to the public and which includes a breakfast meal as part of the cost of the room. Bed and breakfast establishments do not include other similar uses, such as motels, health or limited care facilities, boarding houses, group quarters, hostels, or rescue missions. All bed and breakfast establishments require tourist facility licensing by the appropriate agency. Bed and breakfast residences and inns, as defined below, must also satisfy the State Health Division requirements. Three levels of bed and breakfast establishments are as follows:

"Bed and Breakfast Homestay" provides overnight accommodations plus breakfast in an owner-occupied dwelling that provides one or two guest rooms for occasional bed and breakfast guests, not exceeding five guests at one time. Primary use of the dwelling remains as a dwelling, not as a lodging establishment. All reservations are made in advance. Income derived from bed and breakfast activity does not generally represent a primary source of income. Bed and breakfast homestays are major home occupations, subject to Section 822.

"Bed and Breakfast Residence" provides overnight accommodations plus breakfast and occasional family-style meals for guests, in an operator- or owner-occupied dwelling that provides up to five rooms on an occasional or regular basis. Income derived from the bed and breakfast activity may represent a

primary source of income. Bed and breakfast residences are subject to Section 832, and all requirements of the underlying district.

"Bed and Breakfast Inn" provides accommodations plus breakfast on a daily or weekly basis in an operator- or owner-occupied dwelling that is primarily used for this purpose. This use is operated as a commercial enterprise, encourages direct bookings from the public, and is intended to provide a major source of income to the proprietors. This level includes inns that operate restaurants offering meals to the general public as well as to overnight guests. Bed and breakfast inns are subject to Section 832 and all requirements of the underlying district.

BICYCLE RACK: An apparatus designed to support the central frame of a bicycle and allow locking of both wheels, without the removal of wheels.

BIKEWAY: A paved facility provided for use by cyclists. There are five types of bikeways.

Shared Roadway: A type of bikeway where motorists and cyclists occupy the same roadway area. Shared roadways are allowed on neighborhood streets and on rural roads and highways.

Shoulder Bikeway: A bikeway which accommodates cyclists on paved roadway shoulder.

Bike Lane: A section of roadway designated for exclusive bicycle use, at the same grade as the adjacent roadway.

Bike Path: A bike lane constructed entirely separate from the roadway.

Cycle Track: An exclusive "grade-separated" bike facility elevated above the street level using a low-profile curb and a distinctive pavement material.

BLANKETING: The visual blocking of one sign by another as seen by a motorist traveling a street or highway.

BLOCK: A parcel of land bounded by streets, railroad rights-of-way, waterways, parks, unsubdivided acreage, or a combination thereof.

BUILDING: Any structure used or intended for supporting or sheltering any use or occupancy.

BUILDING ENVELOPE: The three dimensional space which is to be occupied by a building.

BUILDING LINE: A straight line that is parallel and adjacent to the front side of the main building and parallel to the front lot line.

BUILDING OR STRUCTURE HEIGHT: The term "height of building" shall be

calculated by the methods identified in the State of Oregon Structural Specialty Code or the State of Oregon One and the Two Family Dwelling Specialty Code, as applicable.

BULK PLANT: Hazardous substances at the bulk plant level are manufactured, collected, repackaged, stored, or distributed, but are generally not used on the site. The primary emphasis of uses at the bulk plant level is on hazardous substances. Materials are stored in large permanent tanks. Bulk plant quantities are larger than amounts transported in or out in any single shipment. Processors of hazardous substances will generally be at this level. Uses which produce hazardous substances as a by-product or accessory to another product are not in this category.

CARE: The provision of room and board and other services as needed to assist in activities of daily living, such as assistance with bathing, grooming, eating, medication management, money management or recreation.

COGENERATION FACILITY: A facility that produces, through the sequential use of energy, electric energy and useful thermal energy including but not limited to heat or steam, used for industrial, commercial, heating, or cooling purposes; and is more than 50 percent owned by a person who is not an electric utility, an electric holding company, an affiliated interest, or any combination thereof.

COMMERCIAL USE: The use of land and/or structures for the conduct of retail, service, office, artisan, restaurant, lodging, daycare, entertainment, private recreational, professional, and similar uses.

COMMON OWNERSHIP: Land commonly owned to include open space lands dedicated in planned unit developments and lands dedicated for open space which are owned by homeowners associations.

COMPOSTING: The managed process of controlled biological decomposition of green feedstocks. It does not include composting for the purposes of soil remediation.

COMPOSTING FACILITY: A site or facility, excluding home composting areas as described in Section 202 and agricultural composting conducted as a farm use, which utilizes green feedstocks to produce a useful product through a managed process of controlled biological decomposition. Composting may include amendments beneficial to the composting process. Vermiculture and vermicomposting are considered composting facilities. Composting facilities or sites may include sales of the finished product, as well as accessory products limited to topsoil, barkdust and aggregate commonly used in landscaping to wholesale and retail customers. The area utilized for the sale of said accessory products shall not exceed 10% of the area used for composting, or two (2) acres, whichever is less subject to the provisions of Subsection 834.03 and 834.04.

CONGREGATE HOUSING FACILITY: A building that contains more than one dwelling unit and provides common facilities and services for residents who require

or desire a more supportive living environment than typically afforded to residents in multifamily, three-family, two-family, or single-family dwellings. Regular on-premise supervision by a registered physician, registered nurse, or other health care provider may be included.

CULTURAL RESOURCE: Improvements, buildings, structures, signs, features, sites, places, areas or other objects of scientific, aesthetic, educational, cultural, architectural, or historical significance to the citizens of the county.

CULTURAL RESOURCE INVENTORY: The official list of designated cultural features, sites, districts subject to the provisions of Section 707, Cultural Resources.

CULTURAL RESOURCES OBJECT: A material thing of functional, aesthetic, cultural, symbolic or scientific value, usually by design or nature movable.

DAYCARE FACILITY: A facility that provides regular daycare services to children under 13 years of age, including a day nursery, nursery school group, or similar unit operating under any name. A daycare facility shall not include services provided by a physician or nurse, or facilities operated primarily for education or supervised training or instruction, or daycare provided by a "babysitter" or "family daycare provider".

DEDICATION: The designation of land by its owner for any general or public use.

DESIGNATED SITE (historic site, cultural resource site, landmark site): A parcel or part thereof on which a cultural resource is situated, and any abutting parcel or part thereof constituting part of the premises on which the cultural resource is situated, and which has been designated pursuant to this Ordinance.

DESIGNATED STRUCTURE (landmark, cultural resource, historic structure): Any improvement that has special historical, cultural, aesthetic or architectural character, interest or value as part of the development, heritage or history of the county, the State of Oregon, or the nation and that has been designated pursuant to this ordinance.

DIRECT ROUTE: The shortest reasonable route between two points. A route is considered direct if it does not involve significant out of direction travel that could be avoided. Out of direction travel is significant if it is more than 50 percent longer than the straight line between two points.

DISTINCTIVE URBAN FOREST: Forested or woodland areas which are visually prominent or contain unique or rare tree and plant communities. These areas are usually found in association with other open space resources within the urban area.

DRIP IRRIGATION: Any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour.

DRIP LINE: The outermost edge of a tree's canopy; when delineating the drip line on the ground, it will appear as an irregularly shaped circle defining the canopy's

perimeter.

DROUGHT-TOLERANT PLANTS: Plants that will survive in the typical or somewhat less than typical amount of rainfall in the Willamette Valley, and therefore require very little or no supplemental water once established.

DWELLING: A building, or portion thereof, which contains one or more dwelling units. A dwelling may be a residential trailer or a manufactured dwelling but not a recreational vehicle.

DWELLING, ATTACHED SINGLE-FAMILY: A building, or portion thereof, that contains only one dwelling unit; shares at least one wall, or portion thereof, with another attached single-family dwelling; and is located on a separate lot of record from any other dwelling, except where otherwise permitted for an accessory dwelling unit. A manufactured dwelling or residential trailer is not an attached single-family dwelling.

DWELLING, DETACHED SINGLE-FAMILY: A building, or portion thereof, that contains only one dwelling unit and is detached from any other dwelling, except where otherwise permitted for an accessory dwelling unit. A manufactured dwelling or residential trailer is not a detached single-family dwelling.

DWELLING, MULTIFAMILY: A building, or portion thereof, that contains four or more dwelling units.

DWELLING, THREE-FAMILY: A building, or portion thereof, that contains three dwelling units.

DWELLING, TWO-FAMILY: A building, or portion thereof, that contains two dwelling units, both of which are located on the same lot of record. If one of the two dwelling units is an accessory dwelling unit, the building, or portion thereof, is not a two-family dwelling.

DWELLING UNIT: A building, or portion thereof, with one or more rooms designed for residential occupancy by one family.

DWELLING UNIT, ACCESSORY: A dwelling unit located on the same lot of record as a primary dwelling. The primary dwelling may be an attached or detached single-family dwelling, as specified in the underlying zoning district provisions.

EASEMENT: A right of usage of real property granted by an owner to the public or to specific persons, firms, and corporations.

EDIBLE GARDEN: A garden that contains plants that produce food for human consumption.

ELECTRIC VEHICLE CHARGING STATION: A location where a vehicle can plug into an electrical source to re-charge its batteries.

FAMILY: Any individual or group of persons, regardless of relationship but not exceeding 15 persons, living together as a single housekeeping unit within a dwelling unit.

FAMILY DAYCARE PROVIDER: A daycare provider who regularly provides daycare to 16 or fewer children, or as amended by ORS 657A.440, including the children of the provider, regardless of full-time or part-time status, in the provider's home in the family living quarters. Provision of daycare to more than 16 children, including the children of the provider, regardless of full-time or part-time status, in the provider's home in the family living quarters shall constitute the operation of a "daycare facility" and shall be subject to the requirements of this Ordinance for daycare facilities.

FARMERS' MARKET: An organized seasonal outdoor market dedicated to the direct sales by growers of agricultural goods, including plants, produce, meats, and other animal products (e.g. eggs, cheese, honey).

FLAG: Any fabric, banner, or bunting containing distinctive colors, patterns, or symbols.

FLAG LOT: A lot or parcel which has access to a road, street or easement, by means of a narrow strip of lot or easement.

FLOOR AREA: The area included within the surrounding exterior walls of a building or portion thereof, exclusive of porches and exterior stairs, multiplied by the number of stories or portion thereof. The floor area of a building, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above. Floor area shall not include portions of buildings used for parking of vehicles, except the square footage of commercial uses in parking structures can be counted as part of the total floor area.

FLOOR AREA RATIO (FAR): A measurement of density expressed as the ratio of square footage of building floor area to the square footage of the net site area. The greater the ratio, the greater the density. For example, a building occupying one-fourth of the net site area has a FAR of .25: 1, or .25; adding a second floor to the same building increases the FAR to .50:1, or .5.

FRATERNITY OR SORORITY HOUSE: A building occupied by and maintained exclusively for students affiliated with a school or college.

GRADE: The line of the street or ground surface deviation from the horizontal.

GREEN FEEDSTOCKS: Are defined as including yard debris, non-treated wood waste, vegetative food waste, produce waste, vegetative restaurant waste, vegetative food processor by-products, crop waste and livestock manure. For the purpose of these provisions, "non-treated wood waste" excludes wood waste treated with paint, varnish or other chemicals or preservatives.

GREEN ROOF: A vegetated roof designed to treat storm runoff.

GUEST HOUSE/STUDIO: A guest house or studio is a separate accessory structure, or portion thereof, which is built to residential (R-3 occupancy) building code requirements and which is used by members of the family residing in the primary dwelling or their nonpaying guests or employees on the premises. A "guest-house" or "studio" shall be a temporary living area, and shall not be used for boarders or lodgers.

HARDSCAPES: In the practice of landscaping, refers to the inanimate, manmade, non-planted, outdoor areas where the soil is no longer exposed and that are surfaced with pervious or non-pervious durable materials such as masonry, wood, stone, paving, tile, or similar material to create patios, walkways, water fountains, benches, gazebos, etc.

HAZARDOUS SUBSTANCE, MATERIAL OR WASTE: Any hazardous substance, material or waste listed in the following federal regulations:

- A. Superfund Amendments and Reauthorization Act (SARA) of 1986, Section 302 Extremely Hazardous Substances List (40 C.F.R 355, App. A and B);
- B. Comprehensive Environmental Response Compensation & Liability Act Superfund (CERCLA) of 1980, Hazardous Substances List (40 C.F.R 302, Table 302.4);
- C. SARA of 1986, Section 313, Toxic Chemicals List (40 C.F.R Section 372.65);
- D. Resource Conservation and Recovery Act (RCRA) of 1976 and 1984 Amendments, Hazardous Wastes List (P & U Categories) (40 C.F.R Section 261.33(e) and (f)); and
- E. DOT Hazardous Materials Table (49 C.F.R Part 172.101).

HISTORIC AREA: Any area containing improvements which have a special character, historical interest or aesthetic value or which represent one or more architectural periods or styles typical of the history of the County and which improvements constitute a distinct section of the County that has been designated a cultural resource district pursuant to this ordinance.

HOME COMPOSTING: A composting area operated and controlled by the owner or person in control of a single family dwelling unit and used to dispose of vegetative waste, garden wastes, weeds, lawn cuttings, leaves and prunings generated from that property.

HOME OCCUPATION: An occupation or business activity which results in a product or service; is conducted, in whole or in part, in a dwelling and/or an accessory building normally associated with primary uses allowed in the underlying zoning district; is conducted by at least one family member occupying the dwelling;

and is clearly subordinate to the residential use of the subject property. Home occupations do not include garage sales, yard sales, holiday bazaars, or home parties which are held for the purpose of the sale or distribution of goods or services unless such sales and/or parties are held more than six times in a calendar year or operate in excess of 24 total days in a calendar year.

HOMEOWNERS ASSOCIATION: The grouping or uniting of persons residing within a defined area, such as a subdivision, into an incorporated entity for the prosecution of a common enterprise.

HOSPITAL, ANIMAL: A building or premises for the medical or surgical treatment of domestic animals or pets, including dog, cat, and veterinary hospitals.

HOTEL: A building which is designed or used to offer short-term lodging for compensation, with or without meals, for six or more people. A facility that is operated for the purpose of providing care beyond that of room and board is not a "hotel".

HOUSEKEEPING UNIT: A living arrangement within a dwelling unit in which a common kitchen facility, laundry facility, living and dining rooms, and other general living areas of the dwelling unit, and the duties, rights, and obligations associated with the performance of domestic tasks and management of household affairs, are shared by the residents by virtue of legal relationship or mutual agreement.

HYDROELECTRIC FACILITY: Any facility relating to the production of electricity by waterpower, including, but not limited to the power generating plant, associated dams, diversions, penstocks, navigation locks, fish ladders, fish screens, reservoirs and detention areas, recreation facilities, interconnecting transmission lines, substations, access roads, offices or commercial and industrial structures proposed to be built in connection with the energy facility; and activities involved in their construction and operation.

IMPROVEMENT: Any building structure, parking facility, fence, gate, wall, work of art or other object constituting a physical betterment of real property, or any part of such betterment.

INDIRECT ILLUMINATION: A nonelectric sign illuminated by an indirect or separate light source.

INDUSTRIAL USE: The use of land and/or structures for the manufacturing or processing of primary, secondary, or recycled materials into a product; warehousing and associated trucking operations; wholesale trade; and related development.

INSTITUTIONAL USE: The use of land and/or structures for activities such as daycare and pre-school facilities, public and private schools, colleges, universities, art, music, trade and other educational and training facilities, convalescent care facilities, nursing homes, hospitals, places of worship, fraternal lodges, municipal and civic buildings, transit centers and park-and-ride facilities, parks, swimming pools

and other recreational facilities open to the public or a membership group, senior and community centers, libraries, museums, cemeteries and mausoleums, utility facilities, and similar public and private uses.

INVASIVE NON-NATIVE OR NOXIOUS VEGETATION: Plant species that are listed in the Oregon Department of Agriculture's Noxious Weed Policy and Classification System.

KENNEL: Any lot or premises on which four or more dogs, more than six months of age or with permanent canine teeth, are kept for purposes other than a veterinary clinic.

KIOSK: A small structure used as a newsstand, information booth, refreshment stand, bandstand, or display of goods, etc.

LANDSCAPING: Areas of land planted with groundcover, grasses, shrubs, annuals, perennials, or trees.

LIMITED USE: A use allowed in a district on a limited basis and subject to conditions specified therein which are generally more restrictive than the conditions placed on primary or accessory uses within the same district.

LIVESTOCK: One or more domesticated animals raised in an agricultural setting to produce commodities such as food, fiber, and labor. The term "livestock" includes miniature livestock, poultry, and farmed fish.

LOT: A unit of land created by a subdivision of land. For the purposes of this Ordinance, lot includes parcel and lot of record unless otherwise specified in the context of the specific provisions.

LOT AREA: The total horizontal area within the lot lines of a lot.

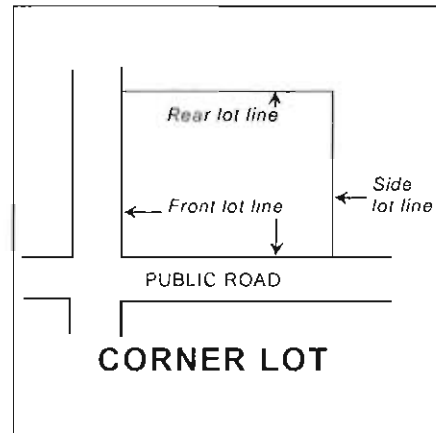
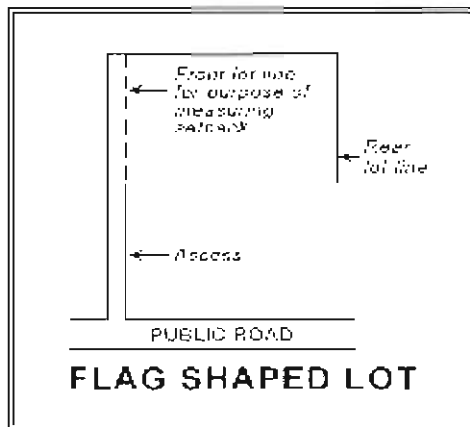
LOT, CORNER: A lot with street frontage on two streets intersecting at a corner of the lot. A lot within the radius curve of a single street is not a corner lot. A lot with access limited to, and frontage on, a state, County, public or private road and also with frontage on an intersecting private road or access drive is not a corner lot for the purpose of determining setbacks provided that the lot does not take access onto the latter abutting private road or access drive. In such a case, the frontage on the latter private road or access drive shall be treated as a side lot line.

LOT COVERAGE: The area of a lot covered by a building or buildings expressed as a percentage of the total lot area.

LOT DEPTH: The "lot depth" is the mean horizontal distance between the front line and the rear lot line of a lot.

LOT, DOUBLE FRONTAGE: A lot with street frontage along two opposite boundaries. See also "LOT, REVERSE FRONTAGE" AND "LOT, THROUGH".

LOT LINE, FRONT: Any boundary line separating the lot from a County, public, state or private road, or access drive. Except as otherwise provided in Subsection 903.07 of this Ordinance, the front lot line of a flag lot, for the purpose of determining setbacks, shall be within the boundaries of the lot by a distance equal to the width of the narrow strip or easement providing access to the lot. The front lot line shall be parallel to the lot line extending from the road to the lot line opposite and most distant from the road. (See following illustration for flag shaped lot).



LOT LINE, REAR: Any boundary line opposite and most distant from the front lot line, and not intersecting a front lot line. In the case of a corner lot, the rear lot line shall be any one of the boundary lines opposite the front lot lines. Any other opposite boundary line shall be a side lot line (see illustration above for corner lot). In the case of a triangular-shaped lot, there shall be no rear lot line for setback purposes.

LOT LINE, SIDE: Any boundary line not a front or rear lot line.

LOT OF RECORD: A lot, parcel, other unit of land, or combination thereof, that conformed to all zoning and Subdivision Ordinance requirements and applicable Comprehensive Plan provisions, in effect on the date when a recorded separate deed or contract creating the lot, parcel or unit of land was signed by the parties to the deed or contract; except:

- A. Contiguous lots under the same ownership when initially zoned shall be combined when any of these lots, parcels or units of land did not satisfy the lot size requirements of the initial zoning district, excluding lots in a recorded plat.
- B. A unit of land created solely to establish a separate tax account, or for mortgage purposes, that does not conform to all zoning and Subdivision Ordinance requirements and applicable Comprehensive Plan provisions, in effect on the date when a recorded separate deed, tax account or contract creating it was signed by the parties to the deed or contract, unless it is sold under the foreclosure provisions of Chapter 88 of the Oregon Revised Statutes.

LOT, REVERSE FRONTAGE: A double-frontage lot for which the boundary along one of the streets is established as the rear lot line. The rear lot line of the lot shall be that boundary abutting a primary arterial, railroad right-of-way or other feature which shall preclude access. See also "LOT, DOUBLE FRONTAGE" AND "LOT, REVERSE FRONTAGE".

LOT, THROUGH: Lots, other than corner lots, that abut on two or more streets. See also "LOT, DOUBLE FRONTAGE" AND "LOT, REVERSE FRONTAGE".

LOT WIDTH: The "lot width" is the mean horizontal distance between the side lot lines of a lot measured within the lot boundaries.

LOT, ZONING: A "zoning lot or lots" is a single tract of land located within a single block, which (at the time of filing for a building permit) is designated by its owner or developer as a tract to be used, developed, or built upon as a unit under single ownership or control. Therefore, a "zoning lot or lots" may or may not coincide with a lot of record.

LOW VOLUME IRRIGATION: The application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

MAJOR TRANSIT STOP: A transit center, major bus stop, or light rail stop, as identified on Comprehensive Plan Map 5-8a, *Transit, Urban*.

MAJOR TRANSIT STREET: A street with a Frequent Service Bus Line, as identified on Comprehensive Plan Map 5-8a, *Transit, Urban*; existing or planned High Capacity Transit, as identified on Comprehensive Plan Map 5-8c, *High Capacity Transit (HCT) System Plan*; or both. Major transit streets, for the purpose of setting standards for orientation of development to transit, shall be those streets planned for High Capacity Transit and Primary Bus as shown on Comprehensive Plan Map V-6, and any other street that receives 20 minute or better service at the PM Peak traffic peak.

MANUFACTURED DWELLING: A mobile home or manufactured home, but not a residential trailer or recreational vehicle.

MANUFACTURED HOME: A structure constructed on or after June 15, 1976, for a movement on the public highways that has sleeping, cooking and plumbing facilities, that is designed, intended to be and/or being used for human occupancy by a family for residential purposes, and constructed in accordance with Federal manufactured housing construction and safety standards and regulations in effect at the time of construction.

MANUFACTURED HOME PARK: Any place where four or more manufactured homes are located within 500 feet of one another on a lot, tract or parcel of land under the same ownership, the primary purpose of which is to rent, lease or barter the use of

such facilities. A manufactured home park does not include a lot or lots located within a subdivision.

MASTER PLAN: A sketch or other presentation showing the ultimate development layout of a parcel of property that is to be developed in successive stages or subdivisions. The plan need not be completely engineered but shall be of sufficient detail to illustrate the property's inherent features and probable development pattern.

MILL SITE, ABANDONED OR DIMINISHED: A mill, plant, or other facility engaged in the processing or manufacturing of wood products, including sawmills and facilities for the production of plywood, veneer, hardboard, panel products, pulp, and paper, that is located outside of urban growth boundaries; was closed after January 1, 1980, or has been operating at less than 25 percent of capacity since January 1, 2003; and contains or contained permanent buildings used in the production or manufacturing of wood products.

MIXED USE: A mix of uses located within a single building, such as retail on the first floor and residential or office uses on the upper floors.

MOBILE HOME: A structure constructed between January 1, 1962 and June 15, 1976, for movement on the public highways that has sleeping, cooking and plumbing facilities, that is designed, intended to be and/or being used for human occupancy by a family for residential purposes and met the construction requirements of Oregon mobile home law in effect at the time of construction.

MOBILE VENDING UNIT: A vehicle that is used in selling and dispensing goods or services to the customer. As used in this definition, a vehicle is motorized or non-motorized transportation equipment containing an axle and intended for use on public roads, including, but not limited to, a car, van, pickup, motorcycle, recreational vehicle, bus, truck, detached trailer, or a truck tractor with no more than one trailer.

MOTEL: A building or series of buildings in which lodging only is offered for compensation and which may have more than five sleeping rooms or units for this purpose and which is distinguished from a hotel primarily by reason of providing direct independent access to and adjoining parking for each rental unit designed primarily for automobile tourists and transient persons. The term includes auto courts, tourist courts, tourist homes, and motor lodges.

MULTI-USE DEVELOPMENT: A Multi-Use Development is a development which includes a number of distinct categories of uses, one or more of which is not allowed as a primary or accessory use in the underlying zoning district. Multi-Use Developments are allowed as conditional uses subject to the procedures and standards set forth in Section 1016 of this Ordinance.

NATIVE PLANTS: Any indigenous or resident species currently or historically found in the Willamette Valley.

NATURAL AREA: An area of land or water that has substantially retained its

character and functions as an important habitat for plant and animal life.

NONCONFORMING DEVELOPMENT: An element of development, such as landscaping, parking, height, signage, or setbacks that was created in conformance with development regulations which, due to a change in the zone or zoning regulations, is no longer in conformance with the current applicable regulations.

NONCONFORMING USE: A use of any building, structure or land allowed by right when established or that obtained a required land use approval when established but, due to a change in the zone or zoning regulations, is now prohibited in the zone.

NUDITY OR NUDE: Being devoid of a covering for the male or female genitalia consisting of an opaque material which does not simulate the organ covered and, in the case of a female, exposing to view one or both breasts without a covering over the nipple that is at least three inches in diameter and does not simulate the organ covered.

NURSERY: The propagation of trees, shrubs, vines or flowering plants for transplanting, sale, or for grafting or budding; planting of seeds or cuttings; grafting and budding one variety on another; spraying and dusting of plants to control insects and diseases, and buying and selling the above plant stock at wholesale or retail. Help and seasonal labor may be employed. The term "nursery" contemplates the sale of a product of such nursery. The conduct of a nursery business presumes parking places for customers, the keeping of sales records, and quarters for these functions. However, the use does not include the business of reselling goods purchased off the premises, except plant stock, or the establishment of a roadside stand.

NURSING HOME: A nursing, convalescent, or rest home facility licensed by the State under ORS chapters 441 and 442, or an assisting living facility licensed under ORS 443, which provides, for a period exceeding 24 hours, the continuous services of licensed nursing personnel to care for chronically ill or infirm patients, exclusive of those patients related to the owner or facility administrator by blood or marriage. Such nursing, convalescent, or rest home must provide nursing services to those patients who, in the judgment of a physician, registered nurse, or facility administrator, require remedial, restorative, supportive, or preventive nursing measures.

OPEN SPACE: Land within a development which has been dedicated in common to the ownership within the development or to the public specifically for the purpose of providing places for recreational uses or for scenic purposes. Open space shall be used as such in perpetuity.

OVERBURDEN: Earth that lies above a natural deposit of a mineral.

OVERHEAD SPRINKLER IRRIGATION SYSTEMS: Systems that deliver water for irrigation from spray heads, rotors or other above-ground emitters that send water through the air.

OWNER: Person or persons holding fee title to a parcel, lot or tract of land, except in those instances when the land is being sold on contract, the contract purchaser shall be deemed the owner.

PARCEL: A unit of land created by a partition of land. For the purposes of this Ordinance, parcel includes lot and lot of record unless otherwise specified in the context of the specific provisions.

PARKING STRUCTURE: A structure having at least two levels which is designed and used for parking vehicles, or a structure having one level of covered parking area under an open space or recreational use. A one level surface parking area, garage or carport shall not be considered a "parking structure" for purposes of this Ordinance.

PARTITION: To divide an area or tract of land into two or three parcels within a calendar year when such area or tract of land exists as a unit or contiguous units of land under single ownership at the beginning of such year. "Partition" does not include divisions of land resulting from lien foreclosures, divisions of land resulting from foreclosure of recorded contracts for the sale of real property and divisions of land resulting from the creation of cemetery lots; and "partition" does not include any adjustment of a lot line by the relocation of a common boundary where an additional parcel is not created and where the existing parcel reduced in size by the adjustment is not reduced below the minimum lot size established by an applicable zoning ordinance. "Partition" does not include the sale of a lot in a recorded subdivision, even though the lot may have been acquired prior to the sale with other contiguous lots or property by a single owner.

PEDESTRIAN AMENITIES: Outdoor improvements directly visible and accessible to pedestrians that promote and facilitate pedestrian use, including plazas, pocket parks, courtyards, awnings or other weather protection, kiosks or gazebos, water features, drinking fountains, sculpture, outside seating areas, landscape planters, trellises, and street furniture.

PEDESTRIAN PATHWAY: A hard-surfaced or permeable hard-surfaced pedestrian facility adjacent to a public roadway where there is no curb, but is protected from vehicular traffic or set back behind a planting strip.

PEDESTRIAN-SCALE LIGHTING: Street lights designed to illuminate sidewalks to provide security for nighttime use by pedestrians. Pedestrian scale lighting includes ornamental lighting with a 14- to 25-foot mounting height and which meets the Illumination Society guidelines for Commercial Collector roadways.

PENNANT: Any lightweight plastic, fabric, or other material, whether or not containing a message of any kind, suspended, usually in series, from a rope, wire, or string, and designed to move in the wind.

PERVIOUS: Any surface or material that allows the passage of water through the material and into the underlying soil.

PLANNING DIRECTOR: The administrative official of Clackamas County, or authorized staff member, designated to administer the responsibilities of the Planning Division.

PLAT, FINAL: A final map and other writing containing all the descriptions, locations, specifications, dedications, provisions, and information concerning a partition or subdivision.

PLAT, PRELIMINARY: A clearly legible and approximate drawing of the proposed layout of streets, blocks, lots and other elements of a subdivision or partition which shall help furnish a basis for the approval or disapproval of the general layout of a partition or subdivision. For the purposes of this Ordinance, "preliminary plat" shall be synonymous with "tentative plan" as used in Oregon Revised Statutes Chapter 92.

POROUS PAVEMENT: Surface to walk, drive or park on that may reduce stormwater runoff by allowing water to soak into the ground. Examples are permeable pavers, pervious concrete, porous asphalt, and gravel.

PREMISES: A lot, building, or portion of a lot or building, occupied by a use with its appurtenances.

PRESERVATION, CULTURAL RESOURCES: The identification, study, protection, restoration, rehabilitation or enhancement of cultural resources.

PRIMARY BUILDING WALL: Exterior building wall which contains a public entrance to the occupant's premises and faces either a street or a parking area.

PRODUCE STAND: A table, bench (or similar), cart, or structure, any of which may be covered, that is located or erected for the purpose of direct sales by growers of agricultural goods, including vegetables, fruits, flowers, bulbs, herbs, plants, honey, and similar products as determined by the Planning Director, but not including processed foods such as jams or jellies, that are produced on the same site at which the produce stand is located.

PROFESSIONAL SERVICES: Activities such as those offered by a physician, surgeon, dentist, lawyer, architect, engineer, accountant, artist, teacher, real estate agent, and insurance agent.

PUBLIC OWNERSHIP: Land owned by federal, state, regional, or local government, or governmental agency.

PUBLIC UTILITY: A utility regulated by the Public Utility Commission under ORS 757 or any other utility that provides electrical energy directly to consumers within the State of Oregon, including, but not limited to, municipalities, cooperatives and people's utility districts.

PUBLIC WATER SYSTEM: A system for the provision to the public of piped water for human consumption, if such system has more than three service connections and

is a facility licensed by the State of Oregon Health Division.

RAINWATER COLLECTION SYSTEM: A system of pipes, container (rain barrel, rainwater tank, pond, or rainwater reservoir), valves and associated apparatus for collecting and storing harvested rainwater runoff, typically from rooftops via rain gutters, but also from ground catchment systems.

RECREATIONAL VEHICLE: A vehicle licensed by the Oregon State Department of Motor Vehicles, with or without motive power, which is designed, intended to be and/or used for temporary human occupancy for recreation, seasonal or emergency purposes, and has a gross floor area not exceeding 400 square feet in the set-up mode. These shall include but are not limited to park trailers, travel trailers, pickup campers, motor homes, fifth wheel trailers, camping and tent trailers.

RECYCLABLE DROP-OFF SITE: A convenient location not within a public right-of-way where mobile depots or drop boxes may be sited as a recyclable material collection point for nearby residents prior to delivery to a broker or user of such materials.

RECYCLE/RECYCLING: A process by which solid waste materials are transformed into new products in such a manner that the original products may lose their identity. It shall also include the collection, transportation, or storage of products by other than the original user or consumer, giving rise to the product's being in the stream of commerce for collection, disposal, recycling, reuse, resource recovery, or utilization.

RECYCLING CENTER: A facility that primarily purchases for recycling or reuse principal recyclable materials which have been source-separated by type, such as vegetative yard debris, paper, glass, and metal, by the person who last used the unseparated solid wastes, but not a salvage or junk yard. Principal recyclable materials are those items defined as such by the Oregon Department of Environmental Quality.

RELATIVE: A parent, child, brother, sister, grandparent or grandchild of a person or person's spouse.

RESERVE STRIP: A strip of land, usually one foot in width, across the end of a street or alley which shall be under the ownership of the County to insure street extensions where needed.

RESIDENTIAL HOME: A dwelling operated as a single housekeeping unit for the purpose of providing food, shelter, personal services, care, and when appropriate, a planned treatment or training program of counseling, therapy, or other rehabilitative social service, for persons of similar or compatible conditions or circumstances.

RESIDENTIAL TRAILER: A structure constructed prior to January 1, 1962, for movement on the public highways that has sleeping, cooking and plumbing facilities, that is designed, intended to be and/or being used for human occupancy by a family for residential purposes and that was constructed in accordance with Federal

Manufactured housing construction and safety standards and regulations in effect at the time of construction and is greater than 400 square feet and less than 700 square feet.

RESOURCE RECOVERY FACILITY: Any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse, but not a salvage or junk yard.

RIGHT-OF-WAY: A passageway conveyed for a specific purpose.

ROAD: A public or private way created to provide ingress to, or egress from, one or more lots, parcels, areas or tracts of land, or that provides for travel between places by vehicles. A private way created exclusively to provide ingress and egress to land in conjunction with a forest, farm or mining use is not a "road:". The terms "street", "access drive" and "highway" for the purposes of this Ordinance shall be synonymous with the term "road".

ROAD, COUNTY: A public way under County jurisdiction which has been accepted into the County road maintenance system by order of the Board of County Commissioners.

ROAD, PRIVATE: A private way created by deed or easement to provide vehicular ingress to, or egress from, three or more lots or parcels.

ROAD, PUBLIC: A public way dedicated or deeded for public use but not accepted into the County road maintenance system, intended primarily for vehicular circulation and access to abutting properties.

ROADWAY: That portion of a road or alley that has been improved for vehicular and pedestrian traffic.

SALVAGE: Separating, collecting or retrieving reusable solid waste for resale.

SALVAGE, JUNK YARD: A location on which solid wastes are separated, collected, and/or stored pending resale.

SCHOOL, COMMERCIAL: A building where instruction is given to pupils in arts, crafts, or trades, and operated as a commercial enterprise as distinguished from schools endowed and/or supported by taxation.

SCHOOL, PRIVATE: Includes private kindergartens, nurseries, play schools, and church-related schools.

SCREENING: Sight-obscuring fence, or sight-obscuring planting.

SERVICE STATION: A commercial establishment with sales and services limited to the sale of motor fuels and supplying goods and service generally required in the operation and maintenance of automotive vehicles and fulfilling a motorist's needs.

These may include sale of petroleum products; sale and servicing of tires, batteries, automotive accessories and replacement items; washing and lubricating services; the performance of minor automotive maintenance and repair, and the supplying of other incidental customer services and products. Major automotive repairs, painting and fender work are excluded. An electric vehicle charging station is not a service station.

SHARED PARKING: Parking spaces used jointly by two or more uses within the same development, or separate adjacent developments, which either have peak hours of operation that do not overlap, or typically provide services to many of the same patrons (i.e. restaurant in an office complex or hotel providing lodging for convention participants within the same development), provided satisfactory legal evidence is presented in the form of deeds, leases, or contracts securing full access to such parking spaces for all parties jointly using them.

SIDEWALK: A concrete pedestrian facility adjacent to a curb along a public road or setback from the curb behind a planting strip.

SIGHT-OBSCURING FENCE: Any fence or wall which conceals or makes indistinct any object viewed through such fence or wall.

SIGHT-OBSCURING PLANTING: A dense perennial evergreen planting with sufficient foliage to obscure vision and which will reach a height of at least six feet within 30 months after planting.

SIGN: A presentation or representation, other than a house number, by words, letters, figures, designs, pictures or colors displayed out of doors in view of the general public so as to give notice relative to a person, a business, an article of merchandise, a service, an assemblage, a solicitation, or a request for aid or other type of identification. This definition specifically includes billboards, ground signs, freestanding signs, wall signs, roof signs, logo signs, and signs on the following: marquees, awnings, canopies, street clocks and furniture and includes the surface upon which the presentation or representation is displayed.

SIGN, ANIMATED: Any sign that uses movement or change of lighting to depict action or create a special effect or scene.

SIGN AREA, OR SURFACE AREA: The area, on the largest single face of a sign, within a perimeter which forms the outside shape of a sign. If the sign consists of more than one module, the total area of all modules will constitute the sign area. The area of a sign having no such perimeter or boarder shall be computed by enclosing the entire copy area within the outline of either a parallelogram, triangle, circle or any other easily recognized geometric shape and then computing the area. Where a sign is of a three-dimensional, round or irregular shape, the largest cross section shall be used in flat projection for the purpose of computing sign area.

SIGN, BUILDING: Any sign attached to any part of a building, as contrasted to a freestanding sign.

SIGN, CHANGEABLE COPY: A sign or portion thereof with characters, letters, or illustrations that can be changed or rearranged without altering the face or the surface of the sign. A sign on which the message changes more than eight times per day shall be considered an animated sign and not a changeable copy sign for purposes of this ordinance.

SIGN, COMMERCIAL: Any sign associated with a commercial activity.

SIGN, DIRECTORY: An onsite sign that identifies and directs traffic to a number of tenants, uses, or buildings within a development.

SIGN, ELECTRONIC MESSAGE CENTER: A sign, display or device, or portion thereof, whose message may be changed by electronic process or remote control, and includes electronic time and temperature displays and the device known in the advertising industry as a commercial electronic variable message sign.

SIGN, FREESTANDING: A sign not attached to a building.

SIGN, INCIDENTAL: A sign, generally informational, that has a purpose secondary to the use of the site on which it is located, such as "no parking," "entrance," "loading only," "telephone," and other similar directives.

SIGN, INTEGRAL ROOF: Any sign erected or constructed as an integral or essentially integral part of a normal roof structure of any design, such that no part of the sign extends vertically above the highest portion of the roof and such that no part of the sign is separated from the rest of the roof by a space of more than six inches.

SIGN, LOGO: A sign consisting of a trademark or symbol.

SIGN, MESSAGE: Anything displayed on an electronic message center sign, including copy and graphics.

SIGN, MONUMENT: A sign which extends from the ground or which has a support which places the bottom thereof less than two feet from the ground.

SIGN, OFF-PREMISES: A sign which advertises goods, products or services which are not sold, manufactured, or distributed on or from the premises or facilities on which the sign is located.

SIGN, POLE: A sign erected and maintained on a freestanding frame, mast or pole and not attached to any building but does not include ground-mounted signs.

SIGN, PORTABLE: Any sign not permanently attached to the ground or other permanent structure, and/or designed to be transported, including, but not limited to, signs designed to be transported by means of wheels; signs converted to A- or T-frames; menu and sandwich board signs; balloons used as signs; umbrellas used for advertising; and signs attached to or painted on vehicles parked and visible from the public right-of-way, unless said vehicle is used as other than a sign in the normal day-

to-day operations of the business for transportation of goods and/or personnel.

SIGN, PROJECTING: Any sign affixed to a building or wall in such a manner that its leading edge extends more than six inches beyond the surface of such building or wall.

SIGN, PUBLIC SERVICE INFORMATION: Any sign, or message on an electronic message center sign, which provides the time, date, temperature, weather, or information concerning civic, charitable or other noncommercial activities.

SIGN, RESIDENTIAL: Any sign associated with a dwelling.

SIGN, ROOF: Any sign erected and constructed wholly on and on top of the roof of a building, supported by the roof structure.

SIGN, SEGMENTED MESSAGE: Any message or distinct subunit of a message presented by means of at least one display change on an electronic message center sign.

SIGN, TEMPORARY: Any sign that is normally considered to be of temporary duration and is not permanently mounted. Examples include, but are not limited to: commercial signs for limited term events, election signs, real estate signs, etc.

SIGN, TRAVELING MESSAGE: A message which appears to move across an electronic message center sign.

SIGN, WALL: Any sign parallel to, and attached within six inches of a wall, painted on the wall surface, or erected and confined within the limits of an outside wall of any building or structure, which is supported by such wall or building, and which displays only one sign surface.

SIGN, WINDOW: Any sign, pictures, symbol, or combination thereof, that is placed inside a window or upon the window panes or glass and is visible from the exterior of the window.

SIGNIFICANT NATURAL AREAS: Natural areas as defined in "Oregon National Areas - Clackamas County Data Summary" published by The Nature Conservancy. This list of natural areas may be amended by the County as additional areas are identified.

SMALL POWER PRODUCTION FACILITY: A facility that produces energy primarily by use of biomass, waste, solar energy, wind power, water power, geothermal energy, or any combination thereof; is more than 50 percent owned by a person who is not an electric utility, an electric utility holding company, an affiliated interest, or any combination thereof; and has a power production capacity that, together with any other small power production facility located at the same site and owned by the same person, is not greater than 80 megawatts.

SOIL MOISTURE SENSING DEVICE OR SOIL MOISTURE SENSOR: A device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

SOLAR ENERGY SYSTEM: Any solar collector, or other solar energy device, the primary purpose of which is to provide for the collection, storage, and distribution of solar energy for space heating or cooling, water heating, or electricity. The power generating capacity of a “solar energy system” is limited to power consumed by the development to which the system is accessory, or—if the system feeds power into the grid of a public utility company—to an amount equivalent to no more than the annual usage of the development to which the system is accessory.

SOLID WASTE: Solid waste shall include all putrescible and non-putrescible waste, including, but not limited to: garbage; compost; organic waste; yard debris; brush and branches; land clearing debris; sewer sludge; residential, commercial and industrial building demolition or construction waste; discarded residential, commercial and industrial appliances, equipment and furniture; discarded, inoperable or abandoned vehicles or vehicle parts and vehicle tires; special vehicles and equipment that are immobile and/or inoperable; manufactured dwellings or residential trailers which are dilapidated, partially dismantled or fire damaged; manure; feces; vegetable or animal solid and semi-solid waste and dead animals; and infectious waste. Waste shall mean useless, unwanted or discarded materials. The fact that materials which would otherwise come within the definition of Solid Waste may, from time to time, have value and thus be utilized shall not remove them from the definition. The terms “solid waste” or “waste” do not include:

- A. Environmentally hazardous wastes as defined in ORS 466.055;
- B. Materials used for fertilizer or for other productive purposes on land in agricultural operations in the growing and harvesting of crops or the raising of fowl or animals. This exception does not apply to the keeping of animals on land which has been zoned for residential non-agricultural purposes;
- C. Septic tank and cesspool pumping or chemical toilet waste;
- D. For purposes of Article V of this Ordinance, reusable beverage containers as defined in ORS 459A;
- E. Source separated, principal recyclable materials as defined in ORS 459A and the Rules promulgated thereunder and under this Ordinance, which have been purchased or exchanged for fair market value, unless said principal recyclable materials create a public nuisance pursuant to Article II of this Ordinance;
- F. Applications of industrial sludges or industrial waste by-products authorized through a **Land Use Compatibility Statement of Management Plan** approval and that have been applied to agricultural lands according to accepted agronomic practices or accepted method approved by the Land Use

Compatibility Statement or Management Plan, but not to exceed 100 dry tons per acre annually;

- G. Stabilized municipal sewage sludge applied for accepted beneficial uses on land in agricultural, non-agricultural, or silvicultural operations;
- H. Sludge derived products applied for beneficial uses on land in landscaping projects.

SPECIFIED SEXUAL ACTIVITIES: Real or simulated acts of human sexual intercourse, human/animal sexual intercourse, masturbation, sadomasochism abuse (as defined on ORS 167.060), sodomy, or the exhibition of human sexual organs in a stimulated state, or the characterization thereof in printed form. This definition shall not be construed to allow uses or activities which are unlawful under State criminal laws.

STABLE, BOARDING OR RIDING: Premises that are used by the public for the training, riding, boarding, public exhibition or display of livestock for commercial or noncommercial purposes. An agricultural building, as defined in Chapter 4 of the Uniform Building Code, or premises used for the boarding, training or riding of three or less livestock other than those of the operator of the premises shall not be a "stable" for the purposes of this Ordinance.

STORY: A portion of a building included between a floor and the ceiling next above it, exclusive of a basement.

STREAM: A body of perennial running water, together with the channel occupied by such running water.

STREAM CORRIDOR AREA: An area including the streambed and a required strip or buffer of land on each side of the streambed necessary to maintain streamside amenities and existing water quality. The width of the stream corridor area varies with the site conditions and shall be determined by on-the-ground investigation, as provided under Subsection 1002.05(B). The intent of the stream corridor area shall be to preserve natural environmental qualities and the function of land to purify water before it reaches the stream but not to prohibit timber management activities pursuant to the State Forest Practices Act.

STREET FRONTAGE: The entire linear distance of a lot abutting a street. Toe strips or flair strips shall not be used to satisfy the minimum street frontage requirements of the Ordinance.

STREET: See "ROAD".

STREET FURNITURE: Any structural element other than residential, industrial or commercial buildings, streets, sidewalks and curbs shall be considered street furniture including, but not limited to, benches, bus shelters, newsstands, bulletin boards, kiosks, drinking fountains, bicycle stalls, etc.

STRUCTURE: Anything constructed or erected, which requires location on the ground or attached to something having a location on the ground.

SUBDIVIDE: To divide an area or tract of land into four or more lots within a calendar year when such area or tract exists as a unit or contiguous units, under a single ownership at the beginning of such year, whether or not that area or tract of land is divided by a water course or a road right-of-way.

SUBDIVISION: A division of property creating four or more lots in the same calendar year.

SURFACE MINING: Includes the mining of minerals by removing overburden and extracting a natural mineral deposit thereby exposed, or simply such extraction. Surface mining includes open-pit mining, auger mining, production of surface mining waste, prospecting and exploring that extracts minerals or affects land, processing to include rock crushing and batch plant operations, and excavation of adjacent offsite borrow pits other than those excavated for building access roads.

SURFACE MINING, MINERALS: Includes soil, clay, stone, sand, gravel, and any other inorganic solid excavated from a natural deposit in the earth for commercial, industrial, or construction use.

SURFACE MINING, NONAGGREGATE MINERALS: Coal and metal-bearing ores, including but not limited to ores that contain nickel, cobalt, lead, zinc, gold, molybdenum, uranium, silver, aluminum, chrome, copper or mercury.

SURFACE MINING, OPERATOR: A legal entity engaged in surface mining or in an activity at a surface mining site preliminary to surface mining.

SURFACE MINING, RECLAMATION: Procedures designed to minimize the disturbance from surface mining and to provide for the rehabilitation of surface resources through the use of plant cover, soil stabilization, and other procedures to protect the surface and subsurface water resources, and other measures appropriate to the subsequent beneficial use of mined lands.

SUSTAINABILITY: Using, developing, and protecting resources in a manner that enables people to meet their current needs and also provides that future generations can meet their own needs. Sustainability requires simultaneously meeting environmental, economic, and community needs.

TRACT: One or more contiguous lots or parcels under the same ownership.

TRAIL: A hard- or soft-surfaced facility for pedestrians, bicyclists, or equestrians that is separate from vehicular traffic. Trails often go through natural areas and are designed to have a minimal impact on the natural environment.

TRANSFER STATION: A fixed or mobile facility used as part of a solid waste collection and disposal system or resource recovery system, between a collection

route and a processing facility or a disposal site, including but not limited to drop boxes made available for general public use. This definition does not include solid waste collection vehicles.

TRANSIT STOP: Any posted bus or light rail stop.

TURF LAWN: A ground-cover surface made up of thick, closely mowed, cultivated grass.

UNDERGROUND STRUCTURE: A structure in which more than 50 percent of the cubic footage of the enclosed, covered space is (1) constructed below the highest elevation of the ground adjoining the structure site prior to excavation; and (2) covered over by ground materials, such as soil, sod, sand or exterior paving, which are continuous on at least one side of the structure with contiguous surface ground materials. Conventional roofing materials may be used to cover any portion of the structure which extends above ground elevation. For an underground structure to be a "dwelling unit" access must be provided to outdoor space at floor level (within two feet of elevation) equal to at least 20 percent of the square footage of the enclosed, covered area of the structure.

Underground structures must meet all appropriate Uniform Building Code regulations and the requirements of the subject zoning district, except as provided in Section 904 of this Ordinance.

UNINCORPORATED COMMUNITY: A settlement that conforms to the definition set forth in Chapter 660, Division 22 of the Oregon Administrative Rules. The County's unincorporated communities are identified in Chapter 4 of the Comprehensive Plan and shown on Map IV-7 of the Comprehensive Plan.

USE: The purpose for which land or a building is arranged, designed or intended, or for which either land or a building is or may be occupied.

UTILITY CARRIER CABINETS: A small enclosure used to house utility equipment intended for offsite service, such as electrical transformer boxes, telephone cable boxes, cable TV boxes, fire alarm boxes, police call boxes, traffic signal control boxes, and other similar apparatus.

VEHICLE COMMERCIAL: A commercially licensed and operated vehicle exceeding the capacity of one ton.

VISUALLY SENSITIVE AREAS: Prominent natural landscape features such as hillsides, forests, and waterways; historic district; visual corridors along major highways and rivers. Natural landscapes that occur within the urban area and along traffic corridors are of higher visual significance.

WALKWAY: A hard-surfaced facility for pedestrians, within a development or between developments, distinct from surfaces used by motor vehicles. A walkway is distinguished from a sidewalk by its location on private property.

WASTE-RELATED USES: Waste-related uses are characterized by uses that receive solid or liquid wastes from others for disposal on the site for transfer to another location, uses which collect sanitary wastes, or uses that manufacture or produce goods or energy from the composting of organic material. Waste-related uses also includes uses which receive hazardous wastes from others and which are subject to the regulations of OAR 340.100-110, Hazardous Waste Management.

WETLANDS: Areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

YARD: The open space, on a lot, between a structure or structures and any lot line. The minimum horizontal distance between any point on a lot line and the nearest part of any structure or building is the yard depth.

YARD, FRONT: Any yard abutting a state highway, County road, public road, private road, or access drive, except as modified by Subsections 903.01 and 903.07 of this Ordinance.

YARD, REAR: Any yard abutting a rear lot line.

YARD, SIDE: Any yard abutting a side lot line.

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-231, 1/31/12; Amended by Ord. ZDO-232, 3/12/12; Amended by Ord. ZDO-234, 6/7/12; Amended by Ord. ZDO-243, 9/9/13]

306 MOUNTAIN RECREATIONAL RESORT DISTRICT (MRR)

306.01 PURPOSE

Section 306 is adopted to implement the policies of the Comprehensive Plan for Mountain Recreation areas.

[Amended by Ord. ZDO-224, 5/31/11]

306.02 AREA OF APPLICATION

Property may be zoned Mountain Recreational Resort if:

- A. The site has a Comprehensive Plan designation of Mountain Recreation; and
- B. The criteria in Section 1202 are satisfied.

[Amended by Ord. ZDO-224, 5/31/11]

306.03 PRIMARY USES

The following are primary uses in the Mountain Recreational Resort District:

- A. Multifamily dwellings;
- B. Three-family dwellings;
- C. Two-family dwellings;
- D. One detached single-family dwelling, residential home, or manufactured home. A manufactured home is subject to Section 824;
- E. Congregate housing facilities;
- F. Condominiums, subject to Section 803;
- G. Nursing homes, subject to Section 810;
- H. Bus shelters, subject to Section 823;
- I. Utility carrier cabinets, subject to Section 830;
- J. Bed and breakfast residences and inns, subject to Section 832;
- K. Wireless telecommunication facilities listed in Subsections 835.04(B) and (C), subject to Section 835;
- L. Lodging, boarding, and rooming houses for any number of guests;

- M. Public parks, playgrounds, recreational and community buildings and grounds, community gardens, public golf courses, tennis courts, and similar recreational uses, all of a noncommercial nature, provided that any principal building or swimming pool shall be located a minimum of 30 feet from any other lot in a residential district;
- N. Park-and-ride facilities; and
- O. Hotels, motels, and associated convention facilities, except that a new hotel or motel in Rhododendron shall be limited to a maximum of 35 units.

[Amended by Ord. ZDO-224, 5/31/11]

306.04 ACCESSORY USES

The following are accessory uses in the Mountain Recreational Resort District:

- A. Uses and structures customarily accessory and incidental to a primary use;
- B. Indoor and outdoor recreational facilities, such as swimming pools, saunas, game and craft rooms, exercise rooms, community meeting rooms, lounges, playgrounds, tennis and other courts, bike and walking trails, and pedestrian plazas and courts;
- C. Offices, buildings, and facilities required for the operation, administration, and maintenance of any planned recreational resort development;
- D. Parking structures;
- E. Repair and maintenance services;
- F. The temporary storage within an enclosed structure of source-separated recyclable/reusable materials generated and/or used on-site prior to on-site reuse or removal by the generator or licensed or franchised collector to a user or broker;
- G. Self-service laundry facilities;
- H. Solar energy systems;
- I. Rainwater collection systems;
- J. Electric vehicle charging stations;
- K. Produce stands, subject to Section 815;
- L. Livestock, subject to Section 821;
- M. Home occupations, subject to Section 822;

- N. Temporary buildings for uses incidental to construction work. Such buildings shall be removed upon completion or abandonment of the construction work;
- O. Family daycare providers; and
- P. Signs, subject to Subsection 306.10(E).

[Amended by Ord. ZDO-224, 5/31/11]

306.05 LIMITED USES

- A. Uses incidental to a primary use, including level three and four mobile vending units, subject to Section 837; eating and drinking establishments; sports equipment rental, sale, service, or repair; specialty shops; arts and crafts galleries; personal service establishments; campgrounds; and similar recreational operations are permitted provided:
 - 1. Limited uses are provided for as an integral part of the general plan of the development;
 - 2. Limited uses will not by reason of their location, construction, manner or timing of operations, signs, lighting, parking arrangements, or other characteristics have adverse effects on residential uses within or adjoining the zoning district or create traffic congestion or hazards to vehicular or pedestrian traffic; and
 - 3. Any application for a limited use is approved in conjunction with or after building permits for the primary use.

[Amended by Ord. ZDO-231, 1/31/12]

306.06 USES SUBJECT TO REVIEW BY THE PLANNING DIRECTOR

The Planning Director may approve the following use in the Mountain Recreational Resort District, pursuant to Subsection 1305.02:

- A. Wireless telecommunication facilities listed in Subsections 835.05(A)(2) and (3), subject to Section 835.

[Amended by Ord. ZDO-224, 5/31/11]

306.07 CONDITIONAL USES

- A. The Hearings Officer may approve the following conditional uses in the Mountain Recreational Resort District, pursuant to Section 1300. Approval shall not be granted unless the proposal complies with Section 1203 and any applicable provisions of Section 800.
 - 1. Churches, subject to Section 804;

2. Schools. subject to Section 805;
3. Daycare facilities. subject to Section 807;
4. Service and recreational uses. subject to Section 813, except that associated shops, garages, and general administrative offices may be included with public or private utility services. water storage facilities, and sanitary sewerage treatment systems;
5. Quarry activities or uses: rock, gravel, sand, soil, aggregates, and similar extractive activities and uses, but none within any stream corridor area or within 100 feet of the average annual high water mark of any stream, river, or other body of water, whichever is greater, subject to Section 818;
6. Sanitary landfills, debris fills, and solid waste transfer or processing stations. subject to Section 819;
7. Manufactured dwelling parks. subject to Section 825;
8. Public or private energy source development. Hydroelectric facilities shall be subject to Section 829;
9. Wireless telecommunication facilities listed in Subsection 835.06(A), subject to Section 835;
10. Personal use airports and helistops;
11. Recreational uses, including, but not limited to, ski areas and associated uses;
12. Multi-use developments. subject to Section 1016; and
13. The hosting of weddings, family reunions, class reunions, company picnics, and similar events.

[Amended by Ord. ZDO-224, 5/31/11]

306.08 PROHIBITED AND PREEXISTING USES

A. Prohibited Uses: The following uses shall be prohibited:

1. Uses of structures and land not specifically permitted;
2. The use of a residential trailer or mobile home as a dwelling, except within a lawfully established preexisting manufactured dwelling park or as authorized under Section 1204.

B. Preexisting Uses:

1. The minimum lot size for a new lot created for a preexisting dwelling shall be calculated pursuant to Subsection 306.09(B).
2. A lot created for a preexisting dwelling shall not be included in the gross site area used to determine the maximum density for the remaining lot.

306.09 DIMENSIONAL STANDARDS

A. Purpose: The dimensional standards are intended to:

1. Provide for the protection of the natural environment and the surrounding areas from potentially adverse influences;
2. Provide for and protect the unique character, livability, and scenic quality of the Mount Hood community;
3. Provide for fire safety and protection of all structures;
4. Protect the privacy and livability of on- and offsite dwellings and yard areas;
5. Provide for adequate light and air circulation between structures;
6. Provide for adequate snow slide area between structures above the 3,500-foot elevation;
7. Ensure consistency in the scale of structures, both vertically and horizontally; and
8. Provide for adequate open space within a development.

B. Density: The district land area for purposes of calculating density pursuant to Section 1012 is 1,980 square feet per dwelling unit in Government Camp. In Wemme/Welches and Rhododendron, the district land area is based on dwelling unit size as follows:

Dwelling Unit Size (in square feet)	District Land Area in Wemme/Welches	District Land Area in Rhododendron
1200+	7,260	10,890
1000-1199	6,223	8,712
800-999	5,445	7,260
600-799	4,356	5,445
Less than 600	3,111	3,630

- C. Scenic Roads: Structures built on lots adjacent to roads designated as scenic roads on Comprehensive Plan Map 5-1V-5, Scenic Roads, should be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer area.
- D. Minimum Perimeter Yard Setbacks: 10 feet to 30 feet depending on the following criteria:
 - 1. Yard setback requirements in the abutting zoning district; and
 - 2. Adjacent land use.
- E. Setback Exception: No perimeter yard setback is required from property lines that abut a national forest.
- F. Minimum Structure Separation: A minimum of 10 feet shall be required between all buildings, on- or off-site. Above 3,500 feet in elevation, the separation distance between buildings with contiguous snowslide areas shall be a minimum of 20 feet. "Snowslide area" means the area around a structure that may be subject to snow buildup as a result of snow sliding from the sloped roof of the structure.
- G. Maximum Building Height: 40 feet. This provision may be modified to allow a maximum height of 50 feet when necessary to accommodate understructure parking.
- H. Building Height Exception: The maximum building height for hotel developments in Government Camp shall be 70 feet. This provision shall be modified to allow a maximum height of 87.5 feet when necessary to accommodate understructure parking or where a higher structure will preserve significant natural features or views.
- I. Minimum Landscaping Area: 25 percent of the lot.
- J. Exceptions: Dimensional standards are subject to modification pursuant to Section 900.
- K. Variances: Dimensional standards may be modified pursuant to Section 1205.

[Amended by Ord. ZDO-224, 5/31/11]

306.10 DEVELOPMENT STANDARDS

- A. General: Development shall be subject to the applicable provisions of Sections 1000 and 1100. In addition, except as otherwise indicated below, the standards applicable to the Medium Density Residential District shall apply.

- B. Community and Design Plans: Development within a Community or Design Plan area identified in Chapter 10 of the Comprehensive Plan shall comply with the specific policies and standards for the adopted Community or Design Plan.
- C. Restricted Areas: Generally residential development is prohibited in the Floodplain Management District regulated by Section 703, river and stream corridors, wetlands, mass movement hazard areas regulated by Section 1003, and slopes greater than 25 percent. However, a single-family dwelling may be developed in a restricted area on a lot of record created prior to the adoption of this standard, subject to compliance with the applicable criteria in this Ordinance for such development. In the case of a land division, density accruing to restricted areas may be eligible for transfer to unrestricted areas as provided in Section 1012.
- D. Building Design: The following standards shall apply to commercial developments in Government Camp. These are recommended for all other developments.
 - 1. Exterior Building Materials: Primary and accessory structures shall use wood, stone, stone veneer, or stucco for exterior construction. Stucco and textured concrete may be used as secondary materials. Stucco must be acrylic-based and combined with heavy timber, wood, or stone cladding. A rock, rock veneer, or textured concrete base shall be provided around building exteriors visible from roadways. No exposed plywood, particle board, plain concrete, cinder block, or grooved T1-11 is permitted.
 - 2. Roofing Materials: No composition shingles or galvanized or corrugated metal roofs are allowed.
 - 3. Design: Building design shall meet the design intent of mountain architecture as described in the Government Camp Design Guidelines Handbook. Examples of mountain architecture include "Cascadian", "Oregon Rustic", and the "National Park Style".
- E. Signs: Permanent identification signs shall be subject to Subsections 1010.09(A)(1) through (5). Signs may be indirectly illuminated and shall be complementary to the unique character of the Mount Hood Community in the use of graphics, symbols, and natural materials. On-site directional signing shall be sensitive to the needs of tourists. Government Camp signs shall comply with Section 1010.
- F. Manufactured Dwelling Parks: Redevelopment of a manufactured dwelling park with a different use shall require compliance with Subsection 825.03.

[Amended by Ord. ZDO-224, 5/31/11]

309 RURAL RESIDENTIAL FARM FOREST 5-ACRE DISTRICT (RRFF-5)

309.01 PURPOSE

Section 309 is adopted to implement the policies of the Comprehensive Plan for Rural areas.

309.02 AREA OF APPLICATION

Property may be zoned Rural Residential Farm Forest 5-Acre District when the site has a Comprehensive Plan designation of Rural; the criteria in Policy 11.2 of the Rural section of Chapter 4 of the Comprehensive Plan are satisfied; and the criteria in Section 1202 are satisfied.

309.03 PRIMARY USES

The following are primary uses in the Rural Residential Farm Forest 5-Acre District:

- A. One detached single-family dwelling, residential home, or manufactured dwelling. A manufactured dwelling shall be subject to Section 824;
- B. Current employment of land for general farm uses, including:
 - 1. Raising, harvesting, and selling of crops;
 - 2. Feeding, breeding, selling, and management of livestock, poultry, fur-bearing animals, or honeybees;
 - 3. Selling of products of livestock, poultry, fur-bearing animals, or honeybees;
 - 4. Dairying and the selling of dairy products;
 - 5. Preparation and storage of the products raised on such lands for man's use and animal use;
 - 6. Distribution by marketing or otherwise of products raised on such lands; and
 - 7. Any other agricultural use, horticultural use, animal husbandry, or any combination thereof;
- C. The propagation or harvesting of a forest product. Inside the Portland Metropolitan Urban Growth Boundary, refer to Subsection 1002.03 regarding a development restriction that may apply if excessive tree removal occurs;
- D. Public and private conservation areas and structures for the conservation of water, soil, forest, or wildlife habitat resources;

- E. Fish and wildlife management programs:
- F. Public and private parks, community gardens, campgrounds, playgrounds, recreational grounds, hiking and horse trails, pack stations, corrals, stables, and similar casual uses provided that such uses are not intended for the purpose of obtaining a commercial profit:
- G. Bus shelters under the ownership and/or control of a city, county, state, or municipal corporation, subject to Section 823;
- H. Utility carrier cabinets, subject to Section 830; and
- I. Wireless telecommunication facilities listed in Subsection 835.04, subject to Section 835.

309.04 ACCESSORY USES

The following are accessory uses in the Rural Residential Farm Forest 5-Acre District:

- A. Uses and structures customarily accessory and incidental to a primary use;
- B. Home occupations, including bed and breakfast homestays, subject to Section 822;
- C. Produce stands, subject to the parking requirements of Section 1015;
- D. Signs, subject to Section 1010;
- E. Guest houses, subject to Section 833;
- F. Solar energy systems;
- G. Rainwater collection systems;
- H. Electric vehicle charging stations for residents and their nonpaying guests; and
- I. Family daycare providers.

309.05 USES SUBJECT TO REVIEW BY THE PLANNING DIRECTOR

The Planning Director may approve the following use in the Rural Residential Farm Forest 5-Acre District, pursuant to Subsection 1305.02:

- A. Wireless telecommunication facilities listed in Subsections 835.05(A)(2) and (3), subject to Section 835.

309.06 CONDITIONAL USES

- A. The Hearings Officer may approve the following conditional uses in the Rural Residential Farm Forest 5-Acre District, pursuant to Section 1300. Approval shall not be granted unless the proposal complies with Section 1203 and any applicable provisions of Section 800.
1. Churches, subject to Section 804;
 2. Schools, subject to Section 805, except as restricted by Subsection 309.07(E);
 3. Daycare facilities, subject to Section 807;
 4. Cemeteries, subject to Section 808;
 5. Service and recreational uses that exceed the limits of Subsection 309.03(F), subject to Section 813;
 6. Operations conducted for the exploration, mining, and processing of geothermal resources, aggregate and other mineral resources, or other subsurface resources, subject to Section 818;
 7. Sanitary landfills and debris fills, subject to Section 819;
 8. Hydroelectric facilities, subject to Section 829;
 9. Bed and breakfast residences and inns, subject to Section 832;
 10. Composting facilities, subject to Section 834;
 11. Wireless telecommunication facilities listed in Subsection 835.06(A), subject to Section 835;
 12. Kennels, provided that the portion of the premises used is located a minimum of 200 feet from all property lines;
 13. Aircraft land uses;
 14. Commercial recreational uses that exceed the limits of Subsection 309.03(F);
 15. Commercial or processing activities that are in conjunction with timber and farm uses; and
 16. Home occupations to host events, subject to Section 806.

309.07 PROHIBITED USES

The following are prohibited uses in the Rural Residential Farm Forest 5-Acre District:

- A. Uses of structures and land not specifically permitted;
- B. Except as approved pursuant to Subsection 902.01(B)(4), a subdivision or partition within the urban growth boundaries of Sandy, Molalla, Estacada, and Canby resulting in the creation of one or more lots or parcels of less than five acres in size;
- C. A subdivision or partition within the Portland Metropolitan Urban Growth Boundary resulting in the creation of one or more lots or parcels of less than 20 acres in size;
- D. Subdivisions in areas defined as Future Urban in Chapter 4 of the Comprehensive Plan; and
- E. Schools within the areas identified as Employment, Industrial, and Regionally Significant Industrial on the Metro Region 2040 Growth Concept Map.

309.08 DIMENSIONAL STANDARDS

- A. Purpose: The dimensional standards are intended to:
 - 1. Provide for and protect the unique character, livability, and scenic quality of rural areas of the County;
 - 2. Provide for fire safety and protection of all structures;
 - 3. Protect the privacy and livability of dwellings and yard areas; and
 - 4. Preserve, within urban growth boundaries, large parcels of land for future development at urban densities.
- B. Minimum Lot Size: New lots of record shall be a minimum of five acres in size, except as restricted by Subsections 309.07(B) through (D) or as modified by Section 902, 1013, or 1014. For the purpose of complying with the minimum lot size standard, lots that front on existing county or public roads may include the land area between the front property line and the middle of the road right-of-way.
- C. Minimum Front Yard Setback: 30 feet; however, there shall be no minimum front yard setback for bus shelters and roadside stands of no more than 400 square feet in area and no more than 16 feet in height.
- D. Minimum Side Yard Setback: 10 feet.

- E. Minimum Rear Yard Setback: 30 feet; however, accessory structures shall have a minimum rear yard setback of 10 feet.
- F. Scenic Roads: Structures built on lots adjacent to roads designated as scenic on Comprehensive Plan Map 5-1V-5, *Scenic Roads*, should be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer area.
- G. Exceptions: Dimensional standards are subject to modification pursuant to Section 900.
- H. Variances: The requirements of Subsections 309.08(B) through (E) may be modified pursuant to Section 1205.

309.09 DEVELOPMENT STANDARDS

- A. General: Development shall be subject to the applicable provisions of Sections 1000 and 1100.
- B. Future Urban Areas: A partition in an area defined as Future Urban by Chapter 4 of the Comprehensive Plan shall be approved only if the proposed locations of improvements, including easements, dedications, structures, wells, and on-site sewage disposal systems are consistent with the orderly future development of the property at appropriate urban densities on the basis of the criteria in Subsection 301.02.
- C. Manufactured Dwelling Parks: Redevelopment of a manufactured dwelling park with a different use shall require compliance with Subsection 825.03.

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-245, 7/1/13]

310 FARM FOREST 10-ACRE DISTRICT (FF-10)

310.01 PURPOSE

Section 310 is adopted to implement the policies of the Comprehensive Plan for Rural areas.

310.02 AREA OF APPLICATION

Property may be zoned Farm Forest 10-Acre District when the site has been designated as Rural by the Comprehensive Plan; the criteria in Policy 11.3 of the Rural section of Chapter 4 of the Comprehensive Plan are satisfied; and the criteria in Section 1202 are satisfied.

310.03 PRIMARY USES

The following are primary uses in the Farm Forest 10-Acre District:

- A. One detached single-family dwelling, residential home, or manufactured dwelling. A manufactured dwelling shall be subject to Section 824.
- B. Current employment of land for general farm uses, including:
 - 1. Raising, harvesting, and selling of crops;
 - 2. Feeding, breeding, selling, and management of livestock, poultry, fur-bearing animals, or honeybees;
 - 3. Selling of products of livestock, poultry, fur-bearing animals, or honeybees;
 - 4. Dairying and the selling of dairy products;
 - 5. Preparation and storage of the products raised on such lands for man's use and animal use;
 - 6. Distribution by marketing or otherwise of products raised on such lands; and
 - 7. Any other agricultural use, horticultural use, animal husbandry, or any combination thereof;
- C. Propagation or harvesting of a forest product. Inside the Portland Metropolitan Urban Growth Boundary, refer to Subsection 1002.03 regarding a development restriction that may apply if excessive tree removal occurs;
- D. Public and private conservation areas and structures for the conservation of water, soil, forest, or wildlife habitat resources;

- E. Fish and wildlife management programs;
- F. Public and private parks, community gardens, campgrounds, playgrounds, recreational grounds, hiking and horse trails, pack stations, corrals, stables, and similar casual uses provided that such uses are not intended for the purpose of obtaining a commercial profit;
- G. Bus shelters under the ownership and/or control of a city, county, state, or municipal corporation, subject to Section 823;
- H. Utility carrier cabinets, subject to Section 830; and
- I. Wireless telecommunication facilities listed in Subsection 835.04, subject to Section 835.

310.04 ACCESSORY USES

The following are accessory uses in the Farm Forest 10-Acre District:

- A. Uses and structures customarily accessory and incidental to a primary use;
- B. Home occupations, including bed and breakfast homestays, subject to Section 822;
- C. Produce stands, subject to the parking requirements of Section 1015;
- D. Signs, subject to Section 1010;
- E. Guest houses, subject to Section 833;
- F. Solar energy systems;
- G. Rainwater collection systems;
- H. Electric vehicle charging stations for residents and their nonpaying guests; and
- I. Family daycare providers.

310.05 USES SUBJECT TO REVIEW BY THE PLANNING DIRECTOR

The Planning Director may approve the following use in the Farm Forest 10-Acre District, pursuant to Subsection 1305.02:

- A. Wireless telecommunication facilities listed in Subsections 835.05(A)(2) and (3), subject to Section 835.

310.06 CONDITIONAL USES

- A. The Hearings Officer may approve the following conditional uses in the Farm Forest 10-Acre District, pursuant to Section 1300. Approval shall not be granted unless the proposal complies with Section 1203 and any applicable provisions of Section 800.
1. Churches, subject to Section 804;
 2. Schools, subject to Section 805, except as restricted by Subsection 310.07(C);
 3. Daycare facilities, subject to Section 807;
 4. Cemeteries, subject to Section 808;
 5. Service and recreational uses that exceed the limits of Subsection 310.03(F), subject to Section 813;
 6. Operations conducted for the exploration, mining, and processing of geothermal resources, aggregate and other mineral resources, or other subsurface resources, subject to Section 818;
 7. Sanitary landfills and debris fills, subject to Section 819;
 8. Hydroelectric facilities, subject to Section 829;
 9. Bed and breakfast residences and inns, subject to Section 832;
 10. Composting facilities, subject to Section 834;
 11. Wireless telecommunication facilities listed in Subsection 835.06(A), subject to Section 835;
 12. Kennels, provided that the portion of the premises used is located a minimum of 200 feet from all property lines;
 13. Aircraft land uses;
 14. Public and private parks, campgrounds, recreational grounds, hiking and horse trails, pack stations, corrals, boarding or riding stables, and other similar uses intended for the purpose of obtaining a commercial profit;
 15. Commercial or processing activities that are in conjunction with timber and farm uses; and
 16. Home occupations to host events, subject to Section 806.

310.07 PROHIBITED USES

The following are prohibited uses in the Farm Forest 10-Acre District:

- A. Uses of structures and land not specifically permitted;
- B. A subdivision or partition within the Portland Metropolitan Urban Growth Boundary resulting in the creation of one or more lots or parcels of less than 20 acres in size; and
- C. Schools within the areas identified as Employment, Industrial, and Regionally Significant Industrial on the Metro Region 2040 Growth Concept Map.

310.08 DIMENSIONAL STANDARDS

- A. Purpose: The dimensional standards are intended to:
 - 1. Provide for and protect the unique character, livability, and scenic quality of rural areas of the County;
 - 2. Provide for fire safety and protection of all structures;
 - 3. Protect the privacy and livability of dwellings and yard areas; and
 - 4. Preserve, within urban growth boundaries, large parcels of land for future development at urban densities.
- B. Minimum Lot Size: New lots of record shall be a minimum of 10 acres in size, except as restricted by Subsection 310.07(C) or as modified by Section 902 or 1013. For the purpose of complying with the minimum lot size standard, lots that front on existing county or public roads may include the land area between the front property line and the middle of the road right-of-way.
- C. Minimum Front Yard Setback: 30 feet; however, there shall be no minimum front yard setback for bus shelters and roadside stands of no more than 400 square feet in area and no more than 16 feet in height.
- D. Minimum Side Yard Setback: 10 feet.
- E. Minimum Rear Yard Setback: 30 feet; however, accessory structures shall have a minimum rear yard setback of 10 feet.
- F. Scenic Roads: Structures built on lots adjacent to roads designated as scenic on Comprehensive Plan Map ~~5-1V-5~~ *Scenic Roads*, should be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer area.

- G. Exceptions: Dimensional standards are subject to modification pursuant to Section 900.
- H. Variances: The requirements of Subsections 310.08(B) through (E) may be modified pursuant to Section 1205.

310.09 DEVELOPMENT STANDARDS

- A. General: Development shall be subject to the applicable provisions of Sections 1000 and 1100.
- B. Manufactured Dwelling Parks: Redevelopment of a manufactured dwelling park with a different use shall require compliance with Subsection 825.03.

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-245, 7/1/13]

312 HOODLAND RESIDENTIAL DISTRICT (HR)

312.01 PURPOSE

Section 312 is adopted to:

- A. Implement the policies of the Comprehensive Plan for Low Density Residential areas regulated by the Mount Hood Community Plan; and
- B. Maintain and enhance the natural environmental and living qualities of those areas within the Mt. Hood Community which are recreational residential in character through conservation of natural resources and carefully controlled development.

[Amended by Ord. ZDO-224. 5/31/11]

312.02 AREA OF APPLICATION

Property may be zoned Hoodland Residential District if:

- A. The site has a Comprehensive Plan designation of Low Density Residential;
- B. The site is regulated by the Mount Hood Community Plan; and
- C. The criteria in Section 1202 are satisfied.

[Amended by Ord. ZDO-224. 5/31/11]

312.03 PRIMARY USES

The following are primary uses in the Hoodland Residential District:

- A. One detached single-family dwelling, residential home, or manufactured home. A manufactured home shall be subject to Section 824;
- B. One attached single-family dwelling per lot on up to 20 percent of the total number of lots in a subdivision or up to 100 percent of the lots in a planned unit development. If three or more dwelling units are attached to one another, design review shall be required pursuant to Section 1102.
- C. Bus shelters, subject to Section 823;
- D. Utility carrier cabinets, subject to Section 830;
- E. Wireless telecommunication facilities listed in Subsections 835.04(B) and (C), subject to Section 835;
- F. Public parks, playgrounds, recreational and community buildings and grounds, community gardens, public golf courses, tennis courts, and similar

recreational uses, all of a noncommercial nature, provided that any principal building, swimming pool, or use shall be located a minimum of 45 feet from any other lot in a residential district; and

- G. Park-and-ride facilities.

[Amended by Ord. ZDO-224, 5/31/11]

312.04 ACCESSORY USES

The following are accessory uses in the Hoodland Residential District:

- A. Uses and structures customarily accessory and incidental to a primary use;
- B. One accessory dwelling unit;
- C. Produce stands, subject to Section 815;
- D. Livestock, subject to Section 821;
- E. Home occupations, including bed and breakfast homestays, subject to Section 822;
- F. Guest houses, subject to Section 833;
- G. Signs, subject to Section 1010;
- H. Solar energy systems;
- I. Rainwater collection systems;
- J. Electric vehicle charging stations for residents and their nonpaying guests;
- K. Temporary buildings for uses incidental to construction work. Such buildings shall be removed upon completion or abandonment of the construction work; and
- L. Family daycare providers.

[Amended by Ord. ZDO-224, 5/31/11]

312.05 USES SUBJECT TO REVIEW BY THE PLANNING DIRECTOR

The Planning Director may approve the following use in the Hoodland Residential District, pursuant to Subsection 1305.02:

- A. Wireless telecommunication facilities listed in Subsections 835.05(A)(2) and (3), subject to Section 835.

[Amended by Ord. ZDO-224, 5/31/11]

312.06 CONDITIONAL USES

- A. The Hearings Officer may approve the following conditional uses in the Hoodland Residential District, pursuant to Section 1300. Approval shall not be granted unless the proposal complies with Section 1203 and any applicable provisions of Section 800.
1. Condominium conversions, subject to Section 803;
 2. Churches, subject to Section 804;
 3. Schools, subject to Section 805;
 4. Daycare facilities, subject to Section 807;
 5. Nursing homes, subject to Section 810;
 6. Service and recreational uses, subject to Section 813;
 7. Quarry activities or uses: rock, gravel, sand, soil, aggregates, and similar extractive activities and uses, but none within any stream corridor area or within 100 feet of the average annual high water mark of any stream, river, or other body of water, whichever is greater, subject to Section 818;
 8. Sanitary landfills, debris fills and solid waste transfer stations, with a minimum site area of 3 acres, subject to Section 819;
 9. Public or private energy source development. Hydroelectric facilities shall be subject to Section 829;
 10. Bed and breakfast residences and inns, subject to Section 832;
 11. Wireless telecommunication facilities listed in Subsection 835.06(A), subject to Section 835;
 12. Personal use airports and helistops;
 13. Guest ranches, lodges, campgrounds, and similar recreation operations, with a minimum site area of one acre;
 14. Multi-use developments, subject to Section 1016; and

15. The hosting of weddings, family reunions, class reunions, company picnics, and similar events.

[Amended by Ord. ZDO-224, 5/31/11]

312.07 PROHIBITED USES

The following are prohibited use in the Hoodland Residential District:

- A. Uses of structures and land not specifically permitted; and
- B. The use of a residential trailer or mobile home as a dwelling, except within a lawfully established preexisting manufactured dwelling park or as authorized under Section 1204.

[Amended by Ord. ZDO-224, 5/31/11]

312.08 DIMENSIONAL STANDARDS

- A. Purpose: The dimensional standards are intended to:
 1. Provide for the protection of the natural environment and the surrounding areas from potentially adverse influences;
 2. Provide for and protect the unique character, livability, and scenic quality of the Mount Hood community;
 3. Provide for fire safety and protection of all structures;
 4. Protect the privacy and livability of on- and offsite dwellings and yard areas;
 5. Provide for adequate light and air circulation between structures;
 6. Provide for adequate snow slide area between structures above the 3,500-foot elevation;
 7. Ensure consistency in the scale of structures, both vertically and horizontally; and
 8. Provide for adequate open space within a development.
- B. Density: The district land area for purposes of calculating density pursuant to Section 1012 is 10,890 square feet per primary dwelling unit.
- C. Setback Exception: Notwithstanding Subsections 312.08(D), (E) and (G), no setback is required from property lines that abut a national forest.

- D. Minimum Front Yard Setback: 20 feet from the front property line or 40 feet from the centerline of the fronting road, whichever is greater, except as provided below:
1. Scenic Roads: Structures built on lots adjacent to roads designated as scenic roads on Comprehensive Plan Map ~~5-1V-5~~, *Scenic Roads*, should be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer area.
 2. Corner or Through Lots: Structures on corner or through lots shall observe the minimum front yard setback on one road and shall have the option of maintaining a 15-foot setback or 35 feet from the centerline of the fronting road, whichever is greater, on the other road. Structures located above 3,500 feet in elevation shall have the option of maintaining a 10-foot setback, or 30 feet from the centerline of the fronting road, whichever is greater, on the other road.
- E. Minimum Side Yard Setback: 10 percent of the lot width calculated at the building line. However, regardless of lot width, a side yard setback shall not be less than five feet, and a side yard setback of more than 10 feet shall not be required.
- F. Minimum Structure Separation: Above 3,500 feet in elevation, the separation distance between buildings with contiguous snow slide areas shall be a minimum of 20 feet. "Snow slide area" means the area around the structure that may be subject to snow buildup as a result of snow sliding from the sloped roof of the structure.
- G. Minimum Rear Yard Setback: 10 percent of the average lot depth. However, regardless of lot depth, a rear yard setback shall not be less than 10 feet, and a rear yard setback of more than 20 feet shall not be required. Attached single-family dwellings shall have a minimum rear yard setback of 20 feet.
- H. Maximum Lot Coverage:
1. Maximum lot coverage for lots developed with attached single-family dwellings shall be 50 percent.
 2. A 20-percent lot coverage limitation shall apply to lots contained in any subdivision recorded prior to September 16, 1974. In a planned unit development, the lot coverage limitation shall be calculated as a percentage of the average lot size. In calculating the average, common areas shall be included in the total area but the result shall be divided only by the number of building lots.
- I. Maximum Building Height: 40 feet. This provision may be modified to allow a maximum height of 50 feet when necessary to accommodate understructure parking. Attached single-family dwellings shall have a maximum building height of 35 feet.

J. Exceptions: Dimensional standards are subject to modification pursuant to Section 900.

K. Variances: Dimensional standards may be modified pursuant to Section 1205.

[Amended by Ord. ZDO-224, 5/31/11]

312.09 DEVELOPMENT STANDARDS

A. General: Development shall be subject to the applicable provisions of Sections 1000 and 1100.

B. Community and Design Plans: Development within a Community or Design Plan area identified in Chapter 10 of the Comprehensive Plan shall comply with the specific policies and standards for the adopted Community or Design Plan.

C. Restricted Areas: Generally residential development is prohibited in the Floodplain Management District regulated by Section 703, river and stream corridors, wetlands, mass movement hazard areas regulated by Section 1003, and slopes greater than 25 percent. However, a single-family dwelling may be developed in a restricted area on a lot of record created prior to the adoption of this standard, subject to compliance with the applicable criteria in this Ordinance for such development. In the case of a land division, density accruing to restricted areas may be eligible for transfer to unrestricted areas as provided in Section 1012.

D. Manufactured Dwelling Parks: Redevelopment of a manufactured dwelling park with a different use shall require compliance with Subsection 825.03.

E. Design Features: All dwellings, except temporary dwellings approved pursuant to Section 1204, shall include at least three of the following features visible to the road. If a dwelling is located on a corner lot, the features shall be visible to the road from which the dwelling takes access.

1. A covered porch at least two feet deep;
2. An entry area recessed at least two feet from the exterior wall to the door;
3. A bay or bow window (not flush with the siding);
4. An offset on the building face of at least 16 inches from one exterior wall surface to the other;
5. A dormer;
6. A gable;

7. Roof eaves with a minimum projection of 12 inches from the intersection of the roof and the exterior walls;
8. Roofline offsets of at least 16 inches from the top surface of one roof to the top surface of the other;
9. An attached garage;
10. Orientation of the long axis and front door to the road;
11. A cupola;
12. A tile or shake roof;
13. Horizontal lap siding.

[Amended by Ord. ZDO-224, 5/31/11]

314 FUTURE URBAN 10-ACRE DISTRICT (FU-10)

314.01 PURPOSE

Section 314 is adopted to implement the goals and policies of the Comprehensive Plan for Future Urban areas.

314.02 AREA OF APPLICATION

The Future Urban 10-Acre District is applied to those areas designated as Future Urban by Chapter 4 of the Comprehensive Plan.

314.03 PRIMARY USES

The following are primary uses in the Future Urban 10-Acre District:

- A. One detached single-family dwelling, residential home, or manufactured dwelling. A manufactured dwelling shall be subject to Section 824;
- B. Current employment of land for general farm uses including:
 - 1. Raising, harvesting, and selling of crops;
 - 2. Feeding, breeding, selling, and management of livestock, poultry, furbearing animals, or honeybees;
 - 3. Selling of products of livestock, poultry, furbearing animals, or honeybees;
 - 4. Dairying and selling of dairy products;
 - 5. Preparation and storage of the products raised on such lands for man's use and animal use;
 - 6. Distribution by marketing or otherwise of products raised on such lands; and
 - 7. Any other agricultural use, horticultural use, animal husbandry, or any combination thereof;
- C. Propagation or harvesting of a forest product. Inside the Portland Metropolitan Urban Growth Boundary, refer to Subsection 1002.03 regarding a development restriction that may apply if excessive tree removal occurs;
- D. Public and private conservation areas and structures for the conservation of water, soil, forest, or wildlife habitat resources;
- E. Fish and wildlife management programs;

- F. Bus shelters under the ownership and/or control of a city, county, state, or municipal corporation, subject to the provisions of Section 823;
- G. Utility carrier cabinets, subject to Section 830; and
- H. Wireless telecommunication facilities listed in Subsections 835.04(B) and (C), subject to Section 835.

314.04 ACCESSORY USES

- A. The following are accessory uses in the Future Urban 10-Acre District:
- B. Uses and structures customarily accessory and incidental to a primary use;
- C. Produce stands, which in addition to selling produce grown on site, may sell agricultural products that are produced in the surrounding community in which the stand is located;
- D. Signs, subject to Section 1010;
- E. Guest houses, subject to Section 833;
- F. Home occupations, including bed and breakfast homestays, subject to Section 822;
- G. Solar energy systems;
- H. Rainwater collection systems; and
- I. Electric vehicle charging stations for residents and their nonpaying guests.

314.05 USES SUBJECT TO REVIEW BY THE PLANNING DIRECTOR

The Planning Director may approve the following use in the Future Urban 10-Acre District, pursuant to Subsection 1305.02:

- A. Wireless telecommunication facilities listed in Subsections 835.05(A)(2) and (3), subject to Section 835.

314.06 CONDITIONAL USES

- A. The Hearings Officer may approve the following conditional uses in the Future Urban 10-Acre District, pursuant to Section 1300. Approval shall not be granted unless the proposal complies with Section 1203 and any applicable provisions of Section 800.

- 1. Expansion of existing churches, subject to Section 804;
- 2. Expansion of existing schools, subject to Section 805;

3. Expansion of existing daycare facilities, subject to Section 807;
4. Cemeteries, subject to Section 808;
5. Service and recreational uses, excluding recreational vehicle camping facilities, subject to Section 813;
6. Sanitary landfills, debris fills, and transfer stations, subject to Section 819;
7. Hydroelectric facilities, subject to Section 829;
8. Bed and breakfast residences, subject to Section 832;
9. Wireless telecommunication facilities listed in Subsection 835.06(A), subject to Section 835;
10. Aircraft land uses;
11. Public and private parks, campgrounds, playgrounds, recreational grounds, hiking and horse trails, pack stations, corrals, boarding or riding stables, and other similar uses; and
12. Home occupations to host events, subject to Section 806.

314.07 PROHIBITED USES

The following are prohibited uses in the Future Urban 10-Acre District:

- A. Uses of structures and land not specifically permitted;
- B. Any division of land resulting in the creation of one or more parcels of less than 10 acres in size, except as modified by Subsection 902.01(B)(4);
- C. Residential subdivisions;
- D. The use of a residential trailer as a dwelling, except within a lawfully established pre-existing manufactured dwelling park or as authorized under Section 1204; and
- E. Kennels.

314.08 DIMENSIONAL STANDARDS

- A. Purpose: The dimensional standards are intended to:
 1. Provide for fire safety and protection of all structures;
 2. Protect the privacy and livability of dwellings and yard areas; and

3. Preserve, within urban growth boundaries, large parcels of land for future development at urban densities.

- B. Minimum Lot Size: New lots of record shall be a minimum of 10 acres in size, except as modified by Subsection 902.01(B)(4). For the purpose of complying with the minimum lot size standard, lots that front on existing county or public roads may include the land area between the front property line and the middle of the road right-of-way.
- C. Minimum Front Yard Setback: 30 feet; however, there shall be no minimum front yard setback for bus shelters and produce stands of no more than 100 square feet in area and no more than 16 feet in height.
- D. Minimum Rear Yard Setback: 30 feet; however, accessory structures shall have a minimum rear yard setback of 10 feet.
- E. Minimum Side Yard Setback: 10 feet.
- F. Scenic Roads: Structures built on lots adjacent to roads designated as scenic on Comprehensive Plan Map ~~5-1V-5~~, *Scenic Roads*, should be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer area.
- G. Exceptions: Dimensional standards are subject to modification pursuant to Section 900.
- H. Variances: The requirements of Subsections 314.08(C) through (E) may be modified pursuant to Section 1205.

314.09 DEVELOPMENT STANDARDS

- A. General: Development is subject to the applicable provisions of Sections 1000 and 1100.
- B. Partitions: A partition shall be approved only if the proposed locations of improvements, including easements, dedications, structures, wells, and on-site sewage disposal systems are consistent with the orderly future development of the property at appropriate urban densities on the basis of the criteria in Subsection 301.02.
- C. Manufactured Dwelling Parks: Redevelopment of a manufactured dwelling park with a different use shall require compliance with Subsection 825.03.

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-245, 7/1/13]

809 HOSPITALS

809.01 CONDITIONAL STANDARDS

- A. Minimum Lot Size: 10 acres.
- B. Access: Primary access to the site shall be from a road with a functional classification of major arterial as identified on Comprehensive Plan Map ~~5-4aV-2a~~, Road Functional Classification, (Urban-Area), or ~~5-4bV-2b~~, Road Functional Classification, (Rural-Area).
- C. Minimum Front, Rear, and Side Yard Setbacks: 50 feet.
- D. Maximum Building Height: ~~Two and one-half~~ 2½ stories or 35 feet. The maximum building height may be exceeded provided that the height of the building is not greater than the setback distance from the higher portion of the building to any Urban Low Density Residential District.

[Amended by Ord. ZDO-224, 5/31/11]

810 NURSING HOMES

810.01 CONDITIONAL STANDARDS

The following conditional standards shall apply:

A. Minimum Lot Size:

One to five beds: 10,000 square feet

Six to 10 beds: 15,000 square feet

11 to 15 beds: 20,000 square feet

Plus 800 square feet for each bed over 15 beds

B. Design Review: An application for a nursing home shall be subject to design review pursuant to Section 1102.

C. Minimum Setbacks: Minimum front, rear, and side yard setbacks shall be the same as the underlying zoning district unless the Hearings Officer finds that a greater setback is indicated by uses and structures on surrounding properties or unique circumstances of the site.

D. Fence: A fence of at least five feet in height shall be provided between property used for a nursing home and any contiguous residential property.

E. Public Facilities: A nursing home shall be served by public sewer and water.

F. Access: A nursing home shall be located within one-quarter mile of a road with a functional classification of collector or higher as identified on Comprehensive Plan Map 5-4a, Road Functional Classification, Urban, V-2a or 5-4b, Road Functional Classification, Rural, V-2b.

G. Signs: Signs shall be subject to Section 1010.

822 HOME OCCUPATIONS

822.01 PURPOSE

Section 822 is adopted to:

- A. Encourage economic development in the County by promoting home occupations;
- B. Reduce vehicle miles traveled by providing opportunities for people to work from their homes;
- C. Recognize the differences between residential communities, and provide standards for home occupations consistent with these differences;
- D. Ensure the compatibility of home occupations with other uses permitted in the underlying zoning district;
- E. Maintain and preserve the character of the community and residential neighborhoods; and
- F. Mitigate noise, traffic, and other possible negative effects of home occupations.

822.02 DEFINITIONS

Unless specifically defined in Subsection 822.02, words or phrases used in Section 822 shall be interpreted to give them the same meaning as they have in common usage and to give Section 822 its most reasonable application.

- A. Abutting Properties: Properties that are contiguous to the property on which the home occupation is proposed, as well as properties directly across any access drive, or private, public, or county road, provided the functional classification of the road is below that of a collector.
- B. Accessory Space: Any building space, other than the dwelling unit, that is used for the home occupation, including, but not limited to, an attached garage, detached garage, or pole building. Accessory space does not include manufactured dwellings, residential trailers, or recreational vehicles.
- C. Employee: Any on-site person, whether they work full-time or part-time in the home occupation, including, but not limited to, the operator, partners, assistants, and any other persons participating in the operation of the home occupation.
- D. Home Occupation: An occupation or business activity which results in a product or service; is conducted, in whole or in part, in a dwelling unit and/or

an accessory building normally associated with primary uses allowed in the underlying zoning district; is conducted by at least one resident of the dwelling unit; and is clearly subordinate to the residential use of the subject property. Home occupations do not include garage sales, yard sales, holiday bazaars, or home parties which are held for the purpose of the sale or distribution of goods or services unless such sales and/or parties are held more than six times in a calendar year or operate in excess of 24 total days in a calendar year.

- E. Incidental Use: The use of no more than 25 percent of the floor area of a structure or 500 square feet, whichever is less.
- F. Operator: The person who conducts the home occupation, has majority ownership interest in the home occupation, lives full-time in a dwelling unit on the subject property, and is responsible for strategic decisions and day-to-day operations of the home occupation.
- G. Property: A lot of record.
- H. Vehicle: Any motorized or non-motorized transportation equipment intended for use on public roads and associated with the home occupation, including, but not limited to, a car, van, pickup, motorcycle, truck, detached trailer, or a truck tractor with no more than one trailer. An exception may be made for a detached trailer or trailers, which may be categorized as equipment if stored within an enclosed building approved for this use through a home occupation permit. Accessory space utilized for storage of a trailer shall be included in the calculation of total accessory space approved for the home occupation.
- I. Vehicle Trip: A vehicular movement either to or from the subject property by any vehicle used in the home occupation, any delivery vehicle associated with the home occupation, or any customer or client vehicle.

822.03 LEVEL ONE MINOR HOME OCCUPATION

No land use permit is required for a Level 1 Minor Home Occupation, which shall comply with the following standards:

- A. Employees: No persons other than residents of the dwelling unit in which the home occupation is located shall be employees of the home occupation.
- B. Building Space: The home occupation shall be conducted in a dwelling unit, but is limited to incidental use thereof. In addition, incidental use of accessory space is allowed for storage purposes only.
- C. Noise, Vibration, Glare, Fumes, and Odors: The home occupation shall not create noise, vibration, glare, fumes, or odors detectable to normal sensory

perception off the subject property. Vehicles entering or exiting the subject property shall be exempt from this standard, but idling vehicles shall not.

- D. Electrical Interference: The home occupation shall not create visual or audible electrical interference in any radio, television, or other electronic device off the subject property, or cause fluctuations in line voltage off the subject property.
- E. Storage and Display: No outside storage, display of goods or merchandise visible from outside an enclosed building space, or other external evidence of the home occupation shall occur, except as specifically allowed by Subsection 822.03. Notwithstanding this provision, business logos flush-mounted on vehicles used in the daily operations of the home occupation are allowed.
- F. Signs: Signs shall be permitted pursuant to Section 1010.
- G. Traffic: The home occupation shall not generate more than 10 vehicle trips per day.
- H. Parking: Parking associated with the home occupation shall be regulated as follows:
 1. Vehicles associated with the home occupation shall not be stored, parked, or repaired on public rights-of-way.
 2. The maximum number of customer or client vehicles that are associated with the home occupation and located on the subject property shall not exceed two at any time.
 3. The home occupation shall not involve the use, parking, storage, or repair of any vehicle exceeding a gross vehicle weight of 11,000 pounds, except deliveries by parcel post, United Parcel Service, or similar in-town delivery service trucks. Parcel post, United Parcel Service, or similar in-town delivery services shall be limited to no more than one delivery per day.
 4. Two parking spaces for customers/clients shall be provided in defined areas of the subject property. Such areas shall be accessible, usable, designed, and surfaced for parking. The minimum parking space requirement for the home occupation shall be in addition to the parking required for other permitted uses on the subject property.

822.04 LEVEL TWO MAJOR HOME OCCUPATION

The Planning Director may approve a Level Two Major Home Occupation, pursuant to Subsection 1305.02, if the applicant provides evidence substantiating compliance with the following standards:

- A. Location: The home occupation shall be located on a property where the majority of abutting properties are equal to or less than two acres. A renewal application shall be evaluated on the basis of the parcel size analysis first applied to the home occupation.
- B. Operator: The operator of the home occupation shall reside in a dwelling unit on the subject property.
- C. Employees: The home occupation shall have no more than five employees.
- D. Building Space: The home occupation may be conducted in a dwelling unit, but—except in the case of a bed and breakfast homestay—is limited to incidental use thereof. A maximum of 500 square feet of accessory space may be used for the home occupation. If only a portion of an accessory building is authorized for use in the home occupation, a partition wall at least seven feet in height, or a height as required by the County Building Codes Division, whichever is greater, shall separate the home occupation space from the remainder of the building. A partition wall may include a door, capable of being closed, for ingress and egress between the home occupation space and the remainder of the building.
- E. Noise: Noise shall be regulated as follows:
 - 1. From 8:00 a.m. until 6:00 p.m., the average peak sound pressure level, when measured off the subject property, of noise created by the home occupation shall not exceed the greater of 60 dB(A) or the ambient noise level. During all other hours, the home occupation shall not create noise detectable to normal sensory perception off the subject property.
 - a. Noise generated by vehicles entering or exiting the subject property, but not by idling vehicles, shall be exempt from Subsection 822.04(E)(1).
 - b. Subsection 822.04(E)(1) shall not apply to noise detectable on public rights-of-way and railroad rights-of-way.
 - 2. A noise study may be required to demonstrate compliance with Subsection 822.04(E)(1). If a noise study is required, measurements shall be made with a sound level meter. The sound level meter shall be an instrument in good operating condition, meeting the requirements of a Type I or Type II meter, as specified in ANSI Standard 1.4-1971. The sound level meter shall contain at least an A-weighted scale, and both fast and slow meter response capability. Personnel making measurements shall have completed training in the use of the sound level meter, and measurement procedures consistent with that training shall be followed.
- F. Vibration, Glare, Fumes, and Odors: The home occupation shall not create vibration, glare, fumes, or odors detectable to normal sensory perception off

the subject property. Vehicles entering or exiting the subject property shall be exempt from this standard, but idling vehicles shall not.

- G. Electrical Interference: The home occupation shall not create visual or audible electrical interference in any radio, television, or other electronic device off the subject property, or cause fluctuations in line voltage off the subject property.
- H. Storage and Display: No outside storage, display of goods or merchandise visible from outside an enclosed building space, or external evidence of the home occupation shall occur, except as specifically allowed by Subsection 822.04. Notwithstanding this provision, business logos flush-mounted on vehicles used in the daily operations of the home occupation are allowed.
- I. Signs: Signs shall be permitted pursuant to Section 1010.
- J. Traffic: The home occupation shall not generate more than 20 vehicle trips per day.
- K. Parking: Parking associated with the home occupation shall be regulated as follows:
 - 1. Vehicles associated with the home occupation shall not be stored, parked, or repaired on public rights-of-way.
 - 2. The maximum number of vehicles that are associated with the home occupation and located on the subject property shall not exceed four at any time, including, but not limited to, employee vehicles and customer/client vehicles.
 - 3. The home occupation shall not involve the use, parking, storage, or repair of any vehicle exceeding a gross vehicle weight of 11,000 pounds, except deliveries by parcel post, United Parcel Service, or similar in-town delivery service trucks.
 - 4. Parking spaces needed for employees or customers/clients of the home occupation shall be provided in defined areas of the subject property. Such areas shall be accessible, usable, designed, and surfaced for parking. Parking for the home occupation may be required to comply with Americans with Disabilities Act requirements, as determined by the County Building Codes Division.
- L. Change of Occupancy Classification: If the home occupation will alter the occupancy classification of an existing structure as determined by the County Building Codes Division, then the structure shall be made to conform with the current edition of the Oregon Structural Specialty Code or the Oregon Residential Specialty Code and the requirements of the State Fire Marshal or the local fire district.

- M. Prohibited Uses: The following uses shall be prohibited as a home occupation:
1. Repair of motorized vehicles and equipment, including the painting or repair of automobiles, trucks, trailers, or boats;
 2. Towing and vehicle storage business;
 3. Any other use that requires a structure to be upgraded to a more restrictive use, under the current edition of the Oregon Structural Specialty Code, than an automobile repair shop with open flame; and
 4. Hazardous materials on the subject property in quantities greater than those normally associated with the primary uses allowed in the underlying zoning district, or in quantities greater than those exempt amounts allowed by the current edition of the Oregon Structural Specialty Code, whichever is less.
- N. Access: The subject property shall have frontage on, and direct access from, a constructed public, county, or state road, or take access on an exclusive road or easement serving only the subject property. If property takes access via a private road or easement which also serves other properties, evidence must be provided by the applicant, in the form of a petition, that all other property owners who have access rights to the private road or easement agree to allow the specific home occupation described in the application. Such evidence shall include any conditions stipulated in the agreement. A new petition shall not be required for a renewal application.
- O. If the subject property is located in an EFU, TBR, or AG/F zoning district, only structures otherwise allowed in the zoning district shall be used in the operation of the home occupation.

822.05 LEVEL THREE MAJOR HOME OCCUPATION

The Planning Director may approve a Level Three Major Home Occupation, pursuant to Subsection 1305.02, if the applicant provides evidence substantiating compliance with the following standards:

- A. Location: The home occupation shall be located on a property where a minimum of 50 percent of abutting properties are greater than two acres. A renewal application shall be evaluated on the basis of the parcel size analysis first applied to the home occupation.
- B. Operator: The operator of the home occupation shall reside in a dwelling unit on the subject property.

- C. Employees: The home occupation shall have no more than five employees.
- D. Building Space: The home occupation may be conducted in a dwelling unit, but—except in the case of a bed and breakfast homestay—is limited to incidental use thereof. A maximum of 1,500 square feet of accessory space may be used for the home occupation. If only a portion of an accessory building is authorized for use in the home occupation, a partition wall at least seven feet in height, or a height as required by the County Building Codes Division, whichever is greater, shall separate the home occupation space from the remainder of the building. A partition wall may include a door, capable of being closed, for ingress and egress between the home occupation space and the remainder of the building.
- E. Noise: Noise shall be regulated as follows:
1. From 8:00 a.m. until 6:00 p.m., the average peak sound pressure level, when measured off the subject property, of noise created by the home occupation shall not exceed the greater of 60 dB(A) or the ambient noise level. During all other hours, the home occupation shall not create noise that is detectable to normal sensory perception off the subject property.
 - a. Noise generated by vehicles entering or exiting the subject property, but not by idling vehicles, shall be exempt from Subsection 822.05(E)(1).
 - b. Subsection 822.05(E)(1) shall not apply to noise detectable on public rights-of-way and railroad rights-of-way.
 2. A noise study may be required to demonstrate compliance with the noise standards. If a noise study is required, measurements shall be made with a sound level meter. The sound level meter shall be an instrument in good operating condition, meeting the requirements of a Type I or Type II meter, as specified in ANSI Standard 1.4-1971. The sound level meter shall contain at least an A-weighted scale, and both fast and slow meter response capability. Personnel making measurements shall have completed training in the use of the sound level meter, and measurement procedures consistent with that training shall be followed.
- F. Vibration, Glare, Fumes, and Odors: The home occupation shall not create vibration, glare, fumes, or odors detectable to normal sensory perception off the subject property. Vehicles entering or exiting the subject property shall be exempt from this standard, but idling vehicles shall not.
- G. Electrical Interference: The home occupation shall not create visual or audible electrical interference in any radio, television, or other electronic device off the subject property, or cause fluctuations in line voltage off the subject property.

- H. Storage and Display: No outside storage, display of goods or merchandise visible from outside an enclosed building space, or external evidence of the home occupation shall occur, except as specifically allowed by Subsection 822.05. Notwithstanding this provision, business logos flush-mounted on vehicles used in the daily operations of the home occupation are allowed.
- I. Signs: Signs shall be permitted pursuant to Section 1010.
- J. Traffic: The home occupation shall not generate more than 30 vehicle trips per day.
- K. Parking: Parking associated with the home occupation shall be regulated as follows:
1. Vehicles associated with the home occupation shall not be stored, parked, or repaired on public rights-of-way.
 2. The maximum number of vehicles that are associated with the home occupation and located on the subject property shall not exceed five at any time, including, but not limited to, employee vehicles, customer/client vehicles, and vehicles to be repaired. Vehicles to be repaired shall be located within an enclosed building or in an area not visible from off the subject property.
 3. No more than one of the five vehicles permitted to be located on the subject property at one time shall exceed a gross vehicle weight of 11,000 pounds.
 4. Parking spaces needed for employees or customers/clients of the home occupation shall be provided in defined areas of the subject property. Such areas shall be accessible, usable, designed, and surfaced for parking. Parking for the home occupation may be required to comply with Americans with Disabilities Act requirements, as determined by the County Building Codes Division.
- L. Change of Occupancy Classification: If the home occupation will alter the occupancy classification of an existing structure as determined by the County Building Codes Division, then the structure shall be made to conform with the current edition of the Oregon Structural Specialty Code or the Oregon Residential Specialty Code and the requirements of the State Fire Marshal or the local fire district.
- M. Prohibited Uses: The following uses shall be prohibited as a home occupation:
1. Any use that requires a structure to be upgraded to a more restrictive use, under the current edition of the Oregon Structural Specialty Code, than aircraft engine repair; and

2. Hazardous materials on the subject property in quantities greater than those normally associated with the primary uses allowed in the underlying zoning district, or in quantities greater than those exempt amounts allowed by the current edition of the Oregon Structural Specialty Code, whichever is less.

- N. Access: The subject property shall have frontage on, and direct access from, a constructed public, county, or state road, or take access on an exclusive road or easement serving only the subject property. If property takes access via a private road or easement which also serves other properties, evidence must be provided by the applicant, in the form of a petition, that all other property owners who have access rights to the private road or easement agree to allow the specific home occupation described in the application. Such evidence shall include any conditions stipulated in the agreement. A new petition shall not be required for a renewal application.
- O. If the subject property is located in an EFU, TBR, or AG/F zoning district, only structures otherwise allowed in the zoning district shall be used in the operation of the home occupation.

822.06 EXCEPTIONS

- A. The Hearings Officer may approve a Level Two or Level Three Major Home Occupation that includes an exception to any of the standards identified in Subsections 822.04(C) through (M) or 822.05(C) through (M), pursuant to Section 1300, if the applicant provides evidence substantiating the following:
1. The subject property takes direct vehicular access to a road with a functional classification of collector, minor or major arterial, or freeway/expressway as identified on Comprehensive Plan Map 5-4a, Road Functional Classification, Urban, ~~V-2a~~ or 5-4b, Road Functional Classification, Rural ~~V-2b~~.
 2. The use remains compatible with the area. The following factors shall be considered when determining if a use is compatible with the area:
 - a. The number of standards identified in Subsections 822.04(C) through (M) or 822.05(C) through (M) that will be exceeded; it is presumed that the more standards exceeded, the more difficult it will be to demonstrate compatibility;
 - b. The character of the neighborhood, including such factors as the presence of other similar uses, proximity of other dwellings, the level of surrounding traffic, the size of accessory buildings, background noise levels, and other outside storage uses;
 - c. The ability to mitigate impacts by screening, landscaping, building location, building design, and other property improvements (for example, driveway or road improvements);

- d. Potential environmental impacts, including effects on air and water quality; and
 - e. Provision of adequate and safe access to public, County, or state roads.
- 3. Services adequate to serve the proposed use are available, including transportation, public facilities, and other services existing or planned for the area affected by the use. At a minimum, compliance with Subsections 1006.02(F), 1006.06(B), and 1006.08(C) (except as set forth in Subsection 1006.09), and 1007.09 is required.
- B. Notwithstanding Subsection 822.06(A):
 - 1. Maximum accessory space for the home occupation shall not exceed 3,000 square feet; and
 - 2. If the subject property is in an EFU, TBR, or AG/F zoning district, the number of employees shall not exceed five.
- C. A preapplication conference is required, pursuant to Subsection 1301.04, prior to the filing of an application for a home occupation under Subsection 822.06.

822.07 PREEXISTING HOME OCCUPATIONS

Home occupations legally established prior to April 22, 2010, which complied with all provisions of this Ordinance then in effect, including appropriate permits if required, are exempt from the requirements of Section 822. Those preexisting home occupations that were subject to annual permit review shall be reviewed for compliance with the standards in effect at the time of their establishment, on the same schedule as home occupations established under the current provisions of Section 822. Home occupations established prior to the requirement for permit application and review are not subject to automatic review, but must continue to comply with the standards in effect at the time of their establishment. Preexisting home occupations may not be transferred to another operator or be enlarged without satisfying all the requirements of Section 822.

822.08 APPROVAL PERIOD AND RENEWALS

- A. A major home occupation permit is valid for three years from the date of the final written decision. If the County's final written decision is appealed, the approval period shall commence on the date of the final appellate decision.
- B. A major home occupation permit may be renewed an unlimited number of times. Renewals also shall be valid for three years from the date of the final written decision. If the County's final written decision is appealed, the approval period shall commence on the date of the final appellate decision.

- C. Renewals of a major home occupation permit, including one for a home occupation with previously approved exceptions under Subsection 822.06, shall be reviewed by the Planning Director pursuant to Subsection 1305.02. However, if the renewal application includes a request for an exception not approved under the prior home occupation permit, the renewal shall be reviewed by the Hearings Officer pursuant to Section 1300.

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-230, 9/26/11]

1005 SUSTAINABLE SITE AND BUILDING DESIGN

1005.01 PURPOSE

Section 1005 is adopted to ensure sites are developed and buildings designed to:

- A. Efficiently utilize the land used in development, particularly urban land in centers, corridors, station communities and employment areas;
- B. Create lively, safe, attractive and walkable centers, corridors, station communities, employment areas and neighborhoods;
- C. Support the use of non-auto modes of transportation, especially pedestrian trips to and between developments;
- D. Support community interaction by creating lively, safe and attractive public use spaces within developments and on the street;
- E. Reduce impacts of development on natural features and vegetation;
- F. Utilize opportunities arising from a site's configuration or natural features;
- G. Encourage use of green building technologies and green site development practices, energy conservation and use of renewable energy resources;
- H. Design illumination so that dark skies are maintained to the extent possible, balanced with the lighting needs of safe and functional developments; and
- I. Accommodate the needs of the users to be located in developments.

1005.02 APPLICABILITY

Section 1005 shall apply to institutional, commercial and industrial development; multifamily dwellings; and developments of more than one two- or three-family dwellings. Subsection 1005.04 (F) shall also apply to attached single-family dwellings.

1005.03 GENERAL SITE DESIGN STANDARDS

Development shall be subject to the following standards:

- A. Where feasible, cluster buildings within single and adjacent developments for efficient sharing of walkways, on-site vehicular circulation, connections to adjoining sites, parking, loading, transit-related facilities, plazas, recreation areas, and similar amenities.
- B. Cluster and modulate building masses to minimize disturbance of existing significant landforms and vegetation. Through the design review process, minimum front yard setbacks may be reduced or waived to minimize disturbance of natural landforms or vegetation. If a setback reduction is granted, a program for protection of those landforms and vegetation during construction, and for long-term maintenance, shall be provided.
- C. Incorporate existing significant plants, terrain or other natural features into the landscape design and development.
- D. Where feasible, design the site so that so that the longest building elevations can be oriented within 20 degrees of true south in order to maximize the south-facing dimensions.
- E. Minimum setbacks may be reduced by up to 50 percent as needed to allow improved solar access—as demonstrated by technical standards set forth in Section 1018 or by other credible evidence---when solar panels or other active or passive solar use is incorporated into the building plan.
- F. A continuous, interconnected on-site walkway system meeting the following standards shall be provided.
 1. Walkways shall directly connect each building public entrance accessible to the public to the nearest sidewalk or pedestrian pathway, and to all adjacent streets, including streets that dead-end at the development or to which the development is not oriented.
 2. Walkways shall connect each building to outdoor activity areas including parking lots, transit stops, children's play areas and plazas.
 3. Walkways shall be illuminated. Separate lighting shall not be required if existing lighting adequately illuminates the walkway.

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4. Walkways shall be constructed with a well drained, hard-surfaced material or porous pavement and shall be at least five feet in unobstructed width.
5. Standards for walkways through vehicular areas:
 - a. Walkways crossing driveways, parking areas and loading areas shall be constructed to be clearly identifiable to motorists through the use of different paving material, raised elevation, warning signs or other similar methods.
 - b. Where walkways are adjacent to driveways, they shall be separated by a raised curb, bollards, landscaping or other physical barrier.
 - c. Inside the Portland Metropolitan Urban Growth Boundary (UGB), if the distance between the building public entrance and street is 75 feet or greater and located adjacent to a driveway or in a parking lot, the walkway shall be raised, with curbs, a minimum four-foot-wide landscape strip and shade trees planted a maximum of 30 feet on center.
 - d. The exclusive use of a painted crossing zone to make walkways identifiable to motorists may be used only for portions of walkways which are shorter than 30 feet and located across driveways, parking lots, or loading areas.
 - e. Walkways bordering parking spaces shall be at least seven feet wide or a minimum of five feet wide when concrete bumpers, bollards, curbing, landscaping, or other similar improvements are provided which prevent parked vehicles or opening doors from obstructing the walkway.
 - f. The interconnected onsite walkway system shall connect to walkways in adjacent developments, or stub to the adjacent property line if the adjacent land is vacant or is developed without walkways.
 - g. Walkway stubs shall be located in consideration of topography and eventual redevelopment of the adjacent property.
 - h. Notwithstanding the remainder of Subsections 1005.03(F)(65)(f) and (g), walkway linkages to adjacent development shall not be required within industrial developments, to industrial developments, or to vacant industrially zoned land.
6. Inside the UGB, except for industrial developments, a minimum of 50 percent of the street frontage of the development site shall have buildings located at the minimum front yard setback line.
 1. If the minimum front yard setback is less than 20 feet, the setback may be increased to 20 feet provided pedestrian amenities are developed within the setback.

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2. Primary building entrances for buildings used to comply with Subsection 1005.03(G), shall:
 - a. Face the street;
 - b. Be located at an angle facing both the street and a parking lot; or
 - c. Be located to the side of the building, provided that the walkway connecting to the street is a minimum of eight feet wide and is developed with landscaping and pedestrian amenities.
3. If a development has frontage on more than one street, Subsection 1005.03(G) must be met on only one frontage, as follows:
 - a. If one of the streets is a major transit street, the standard shall be met on that street.
 - b. If neither or both are a major transit street, then the standard shall be met on the street with the higher functional classification.
 - c. If neither 1005.03(G)(3)(a) or (b) applies, then the standard shall be met on the longest frontage.
11. Inside the UGB, parking lots larger than three acres in size shall be built with major on-site vehicular circulation ways that include raised walkways with curbs, a minimum four-foot-wide landscape strip and shade trees planted a maximum of 30 feet on center.
- I. Onsite vehicular circulation aisles for multifamily, mixed use, commercial, institutional and industrial developments shall be a maximum of 24 feet in width, unless additional width is required by the County Roadway Standards or in areas designed for truck circulation.
- J. Inside the UGB:
 1. The development shall have no more than the minimum number of driveways allowed by the Department of Transportation and Development on all arterial and collector streets.
 2. For properties having more than one street frontage, driveways shall be located on the street with the lowest functional classification, if feasible.
 3. Driveways shall be no wider than the minimum width allowed by the County Roadway Standards.
 4. Driveways shall be located so as to maximize the number of allowed on-street parking spaces, the number of street trees and optimum street tree spacing.

K. New retail, office, mixed use, and institutional buildings located on major transit streets shall have at least one public entrance facing a major transit street, or street intersecting a major transit street.

1. A private street used to meet the standards in Subsection 1005.03(K) must have raised walking surfaces on both sides, street trees, curbs, and pedestrian-scale street lighting, and must connect at both ends to an existing or proposed street.
2. If a development has frontage on more than one major transit street, this orientation requirement needs to be met on only one side.
3. The public entrance orientation requirement does not apply to warehouses or industrial buildings with less than 5,000 square feet of attached offices.

L. New retail, office, mixed use, multifamily, and institutional buildings located at a major transit stop shall be set back a maximum of 20 feet from at least one of the following: the major transit stop, the major transit street or an intersecting street, or a pedestrian plaza at the major transit stop or a street intersection. Buildings located at or near a transit stop along a major transit street in the Community Commercial, General Commercial, Office Commercial, Retail Commercial (RTE), Business Park, or Corridor Commercial (CC) Districts shall have a maximum front yard setback of 20 feet from a state, County, public, or private road.

1. For the purpose of Subsection 1005.03(L), a building is located at a major transit stop, if: "At or near" means within 250 feet of an intersection along a major transit street where a transit stop is within 250 feet of the intersection, as illustrated in Figure 1005-1:

- a. The building is located on a lot that has frontage on the major transit street or an intersecting street; and
- b. Any portion of the building is within a 200-foot radius of the major transit stop.

2. The 20-foot maximum setback shall apply in both directions along the major transit street and along the intersection street to the depth of the designation of any zone identified in Subsection 1005.03(L). This setback applies to the side of the major transit street having the transit stop, and applies whether the intersection street is a public street or signalized private road.

3. Except in the CC District, along a signalized private road, the maximum setback shall apply only along the first 250 feet from the major transit street.

4. 2. Lawfully established buildings that do not comply with the maximum nonconforming front yard setbacks standard may have additional

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height added as an expansion without being brought into conformance with the standard this maximum-setback.

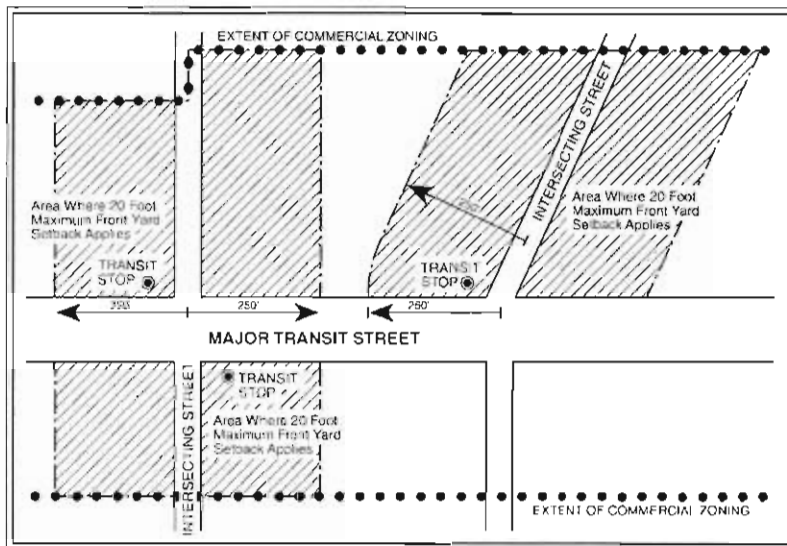
5.3. The maximum setback standard requirement does not apply to warehouses or industrial buildings with less than 5,000 square feet of attached offices.

6. Except in the CC District, this maximum setback from major transit streets and, except in the RTL District, intersecting streets shall contain no on-site parking; however, vehicle circulation lanes are permitted if crossing walkways are designed to ensure safety for pedestrians.

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Figure 4005-4

Comment [DH1]: Figure 4005-1 is deleted.



M. Development in Centers, Station Communities or along Corridor Streets as identified on Comprehensive Plan Map IV-8. *Urban Growth Concept: X-CRC-1, Clackamas Regional Center Area Design Plan, Regional Center, Corridors and Station Community; X-SC-1, Sunnyside Corridor Community Plan, Community Plan Area and Corridor Design Type Location; or X-MC-1, McLoughlin Corridor Design Plan, Design Plan Area* is subject to the following standards:

1. Site plans shall illustrate potential future development on the site, including: additional buildings, expansions of proposed buildings, locations of understructure or structured parking, and circulation and connections to adjacent uses. For Corridor Streets, this shall apply to the depth of the multifamily, mixed use, commercial or industrial zoning.

2. The site shall be developed to accommodate the potential future development illustrated.

1005.04 BUILDING DESIGN

- A. The following standards apply to building facades visible from a public or private street or accessway and to all building façades where the primary entrance is located.

1. Building facades shall be developed with architectural relief, variety and visual interest and shall avoid the effect of a single, long or massive wall with no relation to human size. Examples of elements that subdivide the wall: change in plane, texture, masonry pattern or color, or windows.
2. Building facades shall have particular architectural emphasis at entrances and along sidewalks and walkways.
3. Provide visual interest through use of articulation, placement and design of windows and entrances, building trim, detailing, ornamentation, planters or modulating building masses.
4. Utilize human scale, and proportion and rhythm in the design and placement of architectural features.
5. Use architectural features which are consistent with the proposed use of the building, level and exposure to public view, exposure to natural elements, and ease of maintenance.
6. When uses between ground-level spaces and upper stories differ, provide differentiation through use of bays or balconies for upper stories, and awnings, canopies, trim and other similar treatments for lower levels.

B. Requirements for building entries:

1. Public entries shall be clearly defined, highly visible and sheltered with an overhang or other architectural feature, with a depth of at least four feet.
2. Commercial, mixed-use and institutional buildings sited to comply with 1005.03(G) shall have public entries that face streets and are open to the public during all business hours.

- C. The street-facing façade of commercial, mixed-use and institutional buildings sited to comply with 1005.03(G) shall meet the following requirements:

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1. Facades of buildings shall have transparent windows, display windows, entry areas, or arcades occupying a minimum of 60 percent of the first floor linear frontage.
 2. Transparent windows shall occupy a minimum of 40 percent of the first floor linear frontage. Such windows shall be designed and placed for viewing access by pedestrians.
 3. For large-format retail buildings greater than 50,000 square feet, features to enhance the pedestrian environment, other than transparent window, may be approved through design review. Such items may include, but are not limited to display cases, art, architectural features, wall articulation, landscaping, or seating, provided they are attractive to pedestrians, are built to human scale, and provide safety through informal surveillance.
- D. Requirements for roof design:
1. For buildings with pitched roofs:
 - a. Eaves shall overhang at least 24 inches.
 - b. Roof vents shall be placed on the roof plane opposite the primary street.
 2. For buildings, other than industrial buildings, with flat roofs or without visible roof surfaces, a cornice or other architectural treatment shall be used to provide visual interest at the top of the building.
- E. Requirements for exterior building materials:
1. Use architectural style, concepts, colors, materials and other features that are compatible with the neighborhood's intended visual identity.
 2. Building materials shall be durable and consistent with the proposed use of the building, level and exposure to public view, exposure to natural elements, and ease of maintenance.
 3. Walls shall be surfaced with brick, tile, masonry, stucco, stone or synthetic equivalent, pre-cast masonry, gypsum reinforced fiber concrete, wood lap siding, architecturally treated concrete, glass, wood, or a combination of these or other high-image materials.
 4. Notwithstanding Subsection 1005.04(E)(3) metal may be approved as an exterior building material through design review pursuant to Section 1102 for specific high-image surfaces, canopies, awnings, doors, screening of roof-mounted fixtures, or other architectural features.
- F. Additional building design requirements for multifamily dwellings, two- and three-family dwellings, and attached single-family dwellings:

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1. Façades of buildings that are two or more stories in height shall have a minimum of one balcony or bay per four dwelling units.
2. Windows shall be frequent and coordinate with bays and balconies.
3. Where feasible, place the buildings to minimize the potential of windows facing directly toward primary living areas of other dwelling units.
4. For buildings that are one or two stories in height, roofs shall be hipped, gambrel or gabled to provide visual interest. Flat roofs shall be allowed in areas of these buildings where mechanical equipment is mounted or where they are used for roof gardens or other outdoor activities.
5. For multifamily developments, convenient areas shall be provided for storage of articles such as bicycles, barbecues, and outdoor furniture. These areas shall be completely enclosed and easily accessible to respective dwelling units.

G. Requirements to increase safety and surveillance:

1. Locate buildings and windows to maximize potential for surveillance of entryways, walkways, parking, recreation and laundry areas.
2. Provide adequate lighting for entryways, walkways, parking, recreation and laundry areas.
3. Locate parking and automobile circulation areas to permit easy police patrol.
4. Design landscaping to allow for surveillance opportunities.
5. Addresses shall be clearly marked. Addresses for complexes shall be visible from the street, and addresses of individual businesses and dwelling units shall be clearly marked at a pedestrian scale within the development.
6. Locate mail boxes where they are easily visible and accessible.
7. Limit fences, walls and, except for trees, landscaping between a parking lot and a street to a maximum of three feet in height.
8. Locate play areas for clear parental monitoring.

II. Solar access requirements:

1. Except for uses with greater cooling needs than heating needs, such as many retail uses, concentrate window areas on the south side of buildings (within 20 degrees of due south) where there is good southern exposure.
2. Provide overhangs, balconies, or other shading devices to prevent excessive summer heat gains.

3. Use architectural features, shape of buildings, fences, natural landforms, berms, and vegetation to catch and direct summer breezes for natural cooling, and minimize effects of winter winds.
- I. Requirements for compatibility with the intent of the design type or with the surrounding area. For purposes of Subsection 1005.04(1), design types are Centers, Station Communities or Corridor Streets as identified on Comprehensive Plan Map IV-8, *Urban Growth Concept*; X-CRC-1, *Clackamas Regional Center Area Design Plan, Regional Center, Corridors and Station Community*; X-SC-1, *Sunnyside Corridor Community Plan, Community Plan Area and Corridor Design Type Location*; or X-MC-1, *McLoughlin Corridor Design Plan, Design Plan Area*. The intent of these design types is stated in Chapter 4 or 10 of the Comprehensive Plan.
 1. Use shapes, colors, materials, textures, lines, and other architectural design features that enhance the design type area and complement the surrounding area and development.
 2. Use colors, materials and scale, as appropriate, to visually connect building exteriors to adjoining civic/public spaces such as gateways, parks, plazas and transit stations.
 3. Use building orientation and physical design, including setbacks and modulations, to ensure a development is compatible with other activities onsite, nearby properties, intended uses and the intent of the design type.
 4. Orient loading and delivery areas and other major service activity areas of the proposed project away from existing dwellings.
 5. In industrial zoning districts, site areas used for vehicular operations, outdoor storage, and outdoor processing to minimize the impacts on adjacent dissimilar uses.
 6. Inside the Portland Metropolitan Urban Growth Boundary, use colors, materials and architectural designs to visually reduce the impact of large buildings.
 7. In unincorporated communities, design structures to reflect and enhance the local character and to be in scale with surrounding development.
 8. In rural and natural resource areas, use materials, colors and shapes that imitate or complement those in the surrounding areas, such as those used in typical farm structures.
 9. In open space or scenic areas, use natural color tones, lines and materials which blend with the natural features of the site or site background.

J. Requirements for screening mechanical equipment:

1. Rooftop mechanical equipment, except for solar energy systems, shall be screened from view by the use of parapet walls or a sight-obscuring enclosure around the equipment. The screen shall be constructed of one of the primary materials used on the primary facades, and shall be an integral part of the building's architectural design.
2. Ground mounted mechanical equipment shall be located away from the intersection of two public streets, to the extent practicable, and shall be screened by ornamental fences, screening enclosures, or landscaping that blocks at least 80% of the view.
3. Wall mounted mechanical equipment shall not be placed on the front of a building or on a façade that faces a street. Wall mounted mechanical equipment that extends six inches or more from the outer building wall shall be screened from view from the streets; from residential, public, and institutional properties; and from public areas of the site or adjacent sites through one of the screening techniques used in 1005.04(J)(1) or (2).

K. Requirements for specialized structures in industrial zoning districts:

1. In the GI District, silos, towers, and other specialized storage or processing structures, including metal-sided structures, are permitted as part of a primary use only if such structures are enclosed in a building that complies with the other applicable standards of Subsection 1005.04, or if such structures have the following characteristics:
 - a. Provide windows and canopies, awnings, wood or masonry siding, or other exterior treatment to highlight accessory office areas within the same building, when applicable;
 - b. Use exterior colors which blend with the landscape, such as brown, green, tan, or, in the case of tall structures, such as silos or towers, use light colors that blend with the sky; and
 - c. Do not use bright colors, white, or multiple colors, except as specifically approved pursuant to Section 1102 for trim, accents, or to provide visual interest to equipment or structures that are unique to the particular use.
2. In the BP and LI Districts, silos, towers, and other specialized storage or processing structures are prohibited unless they are enclosed in a building that complies with the other applicable standards of Subsection 1005.04, or unless they are approved as part of a conditional use.

1005.05 OUTDOOR LIGHTING

A. Outdoor lighting devices:

1. Shall be architecturally integrated with the character of the associated structures, site design and landscape.
2. Shall not direct light skyward.
3. Shall direct downward and shield light; or direct light specifically toward walls, landscape elements or other similar features, so that light is directed within the boundaries of the subject property;
4. Shall be suitable for the use they serve, e.g. bollard lights along walkways, pole mounted lights for parking lots;
5. Shall be compatible with the scale and intensity of uses they are serving. Height of pole mounted fixtures shall not exceed 25 feet or the height of the tallest structure onsite, whichever is less; and
6. At entrances, shall be glare-free. Entrance lighting may not exceed a height of 12 feet and must be directed downward.

B. The following are exempt from Subsection 1005.05(A):

1. Temporary lights used for holiday decorations;
2. Street lights regulated in Section 1006; and
3. Lighting associated with outdoor recreation uses such as ball fields or tennis courts.

1005.06 ADDITIONAL REQUIREMENTS

In addition to the requirements listed in Subsections 1005.03 through 1005.05, development shall comply with a minimum of one of the following techniques per 20,000 square feet of site area. Regardless of site size, a minimum of one and a maximum of five techniques are required. Partial site area numbers shall be rounded.

- A. Install a solar energy system in the development.
- B. Use passive solar heating or cooling techniques to reduce energy consumption. Examples of techniques:
1. Modulate building masses to maximize solar access.

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2. For developments with more than one structure, locate taller structures to minimize negative impacts on solar access for the development site and adjacent sites, as demonstrated by technical standards set forth in Section 1018 or by other credible evidence.
 3. Locate buildings to maximize windbreaks.
 4. Locate structures and landscaping to avoid winter shading on the south side and optimize summer shading on the west and southwest sides of buildings.
 5. Utilize deciduous trees to provide summer shade and allow winter sun.
 6. Utilize deciduous vines on fences, trellises, and arbors to provide summer shade.
 7. Locate and form berms to protect buildings and exterior use spaces against winter winds or utilize dense evergreens or conifers to screen winter wind and protect against hostile winter elements.
 8. Provide skylights or clerestory windows to provide natural lighting, and/or solar heating of interior spaces.
- C. Use highly reflective (high albedo) materials on roof surfaces.
- D. Place major outdoor use areas such as plazas, playgrounds, gardens, etc. on the south side of buildings.
- E. Construct a minimum of 75 percent of walkway area of porous pavement.
- F. Construct a minimum of 75 percent of all parking spaces with porous pavement.
- G. Provide additional landscaping area at least 10 percent above the requirements for the site pursuant to Table 1009-1. For example, if the minimum area requirement is 20 percent, then 22 percent shall be provided. Credit shall be given for green roofs or other areas of vegetation that exceed the minimum area requirements.
- H. Include additional swales in development landscaping, pursuant to Section 1009. Credit shall be given for additional swale(s) that exceed the requirements of Subsection 1009.04(A)(2) by at least 10 percent of area. For example, if 1009.04(A)(2) requires 200 square feet of swale area, then an additional 20 square feet of swale area would be required.
- I. Collect rainwater from roofs and/or other impervious surfaces and use it for irrigation.
- J. Apply other techniques for onsite storm water treatment identified by the surface water management regulatory authority.

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- K. Lay out sites and locate buildings and on-site vehicular circulation to create functional open areas such as plazas, courtyards, outdoor recreation areas, mini-parks, and accessways that are open to the general public.
- L. Enhance sidewalks and/or walkways by providing additional width, using higher quality materials; shielding from vehicular traffic with enhanced planting strips, street trees and on-street parking, and/or providing pedestrian amenities that are compatible with the design of the development as well as the neighborhood as a whole.
- M. Coordinate development between adjacent uses to provide for a more attractive and lively streetscape, enhance connections, minimize conflicts and provide common-use areas.
- N. Enhance the pedestrian connection between the development and neighborhood shopping areas, nearby transit, trails, bikeways or parks. Examples include additional width or pedestrian amenities.
- O. Provide functional and accessible rooftop gardens.
- P. For multifamily dwelling units that face the street, raise first floor units a minimum of two feet above street level.
- Q. Provide structured or under-structure parking to meet all or part of the parking need.
- R. Provide no more than the minimum number of surface parking spaces set out in Table 1015-2, all of which shall be no greater than the minimum dimensions allowed in Subsection 1015.04(B)(2).
- S. Lay out sites or orient structures, to maximize significant vistas.
- T. Locate and design structures to protect scenic views or vistas from adjacent properties and public thoroughfares. Setbacks, building height, and bulk should be considered.
- U. Utilize rail service opportunities abutting the site.
- V. Inside the UGB, a minimum of 75 percent of the street frontage of each lot shall have buildings located at the minimum front setback line. If the minimum front setback is zero, up to 20 feet of additional setback may be provided where plazas, outdoor seating, or other pedestrian amenities are located.
- W. Outside the UGB, or for industrial developments, a minimum of 25 percent of the street frontage of each lot shall have buildings located at the minimum front setback line. Up to 20 feet of additional setback may be provided where plazas, outdoor seating, or other pedestrian amenities are located.

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- X. Locate buildings at the minimum side yard setback or within 10 feet of the side setback line, whichever is greater.
- Y. For developments not in Centers, Station Communities or along Corridor Streets site plans shall illustrate potential future buildings and potential future expansions of proposed buildings, locations of understructure or structured parking, and circulation and connections to adjacent uses. Lay out and develop the site to accommodate future additional buildings, circulation and structured parking.

1005.07 MODIFICATIONS

Modification of any standard identified in Subsections 1005.03 and 1005.04 may be approved as part of design review if the proposed modification will result in a development that achieves the purposes stated in Subsection 1005.01 as well or better than the requirement listed.

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-243, 9/9/13]

1007 **ROADS AND CONNECTIVITY**

1007.01 PURPOSE

Section 1007 is adopted to:

- A. Provide for safe, efficient, convenient, and economical movement of vehicles, freight, transit, bicycles, and pedestrians on a balanced and sustainable transportation system network;
- B. Implement the provisions of Chapters 5 and 10 of the Comprehensive Plan pertaining to the design and construction of necessary transportation system improvements required in conjunction with new development;
- C. Protect public safety through functional, efficiently designed improvements addressing the impact of new development upon the roadway system;
- D. Support sustainable development by efficient utilization of land and resources;
- E. Facilitate and encourage the use of non-auto modes of transportation, such as transit, walking, and bicycling;
- F. Provide a highly interconnected transportation system with suitable access and route choices for pedestrians, bicyclists, and drivers;
- G. Support improved public health by providing safe and attractive pedestrian and bicycle facilities;
- H. Reduce vehicle miles traveled;
- I. Create walkable centers, corridors, and neighborhoods with pedestrian, bicycle, and vehicular connections within and between destinations;
- J. Reduce impacts from the transportation system on vegetation, natural features, neighborhoods, and public facilities; and
- K. Recognize and support the importance of streets and streetscapes as an ubiquitous aspect of the public realm in our landscape, and build streets that support and enhance community interaction.

1007.02 APPLICABILITY

Section 1007 applies to the design of new and reconstructed transportation improvements in public rights-of-way, private roads, and accessways required through development permit approvals that are subject to Section 1007.

1007.03 GENERAL PROVISIONS

- A. The location, alignment, design, grade, width, and capacity of all roads shall be planned, coordinated, and controlled by the Department of Transportation and Development and shall conform to Section 1007, Chapters 5 and 10 of the Comprehensive Plan, and the Clackamas County Roadway Standards. Where conflicts occur between Section 1007, the Comprehensive Plan, and the Clackamas County Roadway Standards, the Comprehensive Plan shall control.
- B. Right-of-way dedications and improvements shall be required of all new developments, including partitions, subdivisions, multifamily dwellings, two- and three-family dwellings, condominiums, single-family dwellings, and commercial, industrial, and institutional uses, as deemed necessary by the Department of Transportation and Development and consistent with Section 1007, Chapters 5 and 10 of the Comprehensive Plan, and the Clackamas County Roadway Standards.
- C. New developments shall have access points connecting with existing private, public, county, or state roads.
 - 1. Intersection spacing and access control shall be based on ~~Comprehensive Plan Table V-5, Access Requirements by Functional Classification, Urban Areas Only; Comprehensive Plan Map V-4, Undeveloped Sites Larger Than 5 Acres; Subsection 3.08.110(E) of the Metro Code (Regional Transportation Functional Plan); Chapters 5 and 10 of the Comprehensive Plan; and the Clackamas County Roadway Standards.~~
 - 2. For development on any portion of a contiguous site identified on Comprehensive Plan Map 5-6, Potentially Buildable Residential Sites > 5 Acres in UGB, the applicant shall provide a conceptual map of new streets for the entire site. The map shall identify street connections to adjacent areas to promote a logical, direct, and connected system of streets; demonstrate opportunities to extend and connect new streets to existing streets, and provide direct public right-of-way routes. Closed-end street designs shall be limited to circumstances in which barriers prevent full street extensions. Closed-end streets shall not exceed 200 feet in length and shall serve no more than 25 dwelling units. Subsequent development

on the site shall conform to the conceptual street map, unless a new map is approved pursuant to Subsection 1007.03(C)(2).

2.3. Access control shall be implemented pursuant to Chapter 5 of the Comprehensive Plan and the Clackamas County Roadway Standards considering best spacing for pedestrian access, traffic safety, and similar factors as deemed appropriate by the Department of Transportation and Development.

3.4. Approaches to public and county roads shall be designed to accommodate safe and efficient flow of traffic and turn control where necessary to minimize hazards for other vehicles, pedestrians, and bicyclists.

4.5. Joint access and circulation drives utilizing reciprocal easements shall be utilized as deemed necessary by the Department of Transportation and Development.

5.6. Access to state highways shall require a road approach permit issued by the Oregon Department of Transportation pursuant to Oregon Revised Statutes Chapter 374.

- D. Street alignments, intersections, and centerline deflection angles shall be designed according to the standards set forth in Chapters 5 and 10 of the Comprehensive Plan and the Clackamas County Roadway Standards.
- E. All roads shall be designed and constructed to adequately and safely accommodate vehicles, pedestrians, and bicycles according to Chapters 5 and 10 of the Comprehensive Plan and the Clackamas County Roadway Standards. Development-related roadway adequacy and safety impacts to roadways shall be evaluated pursuant to the Clackamas County Roadway Standards and also to Oregon Department of Transportation standards for state highways.
- F. Roadways shall be designed to accommodate transit services where transit service is existing or planned and to provide for the separation of motor vehicles, bicycle, and pedestrian traffic, and other modes as appropriate.
- G. The needs of all modes of transportation shall be balanced to provide for safe and efficient flow of traffic. Where practical, pedestrian crossing lengths shall be minimized and the road system shall be designed to provide frequent pedestrian connections.

1007.04 PUBLIC AND PRIVATE ROADWAYS

- A. All roadways shall be developed according to the classifications, guidelines, tables, figures, and maps in Chapters 5 and 10 of the Comprehensive Plan and the provisions of the Clackamas County Roadway Standards.
1. Development along streets with specific design standards specified in Chapter 10 of the Comprehensive Plan shall improve those streets as shown in Chapter 10.
 2. Development along streets identified as Regional or Community Boulevards on Comprehensive Plan Map ~~5-5V-3~~, *Metro Regional Street Design Classifications Types*, shall:
 - a. ~~Comply with the design guidelines in Comprehensive Plan Table V-4, *Regional Street Design Types*, or demonstrate why compliance is not feasible;~~
 - b. Provide pedestrian, bicycle, transit, and visual amenities in the public right-of-way. Such amenities may include, but are not limited to, the following: street trees, landscaping, kiosks, outdoor lighting, outdoor seating, bike racks, bus shelters, other transit amenities, pedestrian spaces and access to the boulevard, landscaped medians, noise and pollution control measures, other environmentally sensitive uses, aesthetically designed lights, bridges, signs, and turn bays as appropriate rather than continuous turn lanes.; and
 - c. ~~Strictly control vehicle access and sight distance requirements.~~
 3. Development adjacent to scenic roads identified on Comprehensive Plan Map 5-1V-5, *Scenic Roads*, shall conform to the following design standards, as deemed appropriate by the Department of Transportation and Development:
 - a. Road shoulders shall be improved to accommodate pedestrian and bicycle traffic; and
 - b. Turnouts shall be provided at viewpoints or for recreational needs.
 4. In centers, corridors, and station communities, as identified on Comprehensive Plan Map IV-8, *Urban Growth Concept*, roads shall be designed to minimize the length of street crossings and to maximize connectivity for pedestrians as deemed appropriate by the Department of Transportation and Development. Other streetscape design elements in these areas include:

- a. On-street parking;
 - b. Street trees;
 - c. Street lighting;
 - d. Pedestrian amenities; and
 - e. Truck routes shall be specified for deliveries to local businesses.
5. In centers, corridors, and station communities, as identified on Comprehensive Plan Map IV-8, *Urban Growth Concept*, on local streets within the Portland Metropolitan Urban Growth Boundary (UGB), and in unincorporated communities, when conflicts exist between the dimensional requirements for vehicles and those for pedestrians, pedestrians shall be afforded additional consideration in order to increase safety and walkability. In industrial and rural areas, the needs of vehicles shall take precedence.
- B. The layout of new public and county roads shall provide for the continuation of roads within and between the development and adjoining developments when deemed necessary and feasible by the Department of Transportation and Development.
1. When public access to adjoining property is required, this access shall be improved and dedicated to the County.
 2. Street stubs shall be provided to allow for future access to adjacent undeveloped property as deemed necessary by the Department of Transportation and Development.
 3. These standards may be deviated from when the County finds that safe and efficient alternate designs would better accommodate:
 - a. Sustainable development features such as “Green Streets” as described in Metro’s *Green Streets: Innovative Solutions for Stormwater and Street Crossings* (2002), which shall be allowed within the UGB and in unincorporated communities defined in the Clackamas County Roadway Standards;
 - b. Sustainable surface water management solutions such as low infiltration planters and basins, swales, ponds, rain gardens, trees, porous pavement, and minimal disruption to natural drainage systems;

- c. Preservation of existing significant trees and native vegetation;
 - d. Preservation of natural terrain and other natural landscape features;
 - e. Achievement of maximum solar benefit for new development through orientation and block sizing;
 - f. Existing forest or agricultural uses;
 - g. Existing development;
 - h. Scenic qualities;
 - i. Planned unit developments;
 - j. Local access streets less than 200 feet in length which are not extendible; and
 - k. Interior vehicular circulation for multifamily, commercial, institutional, and industrial developments.
- C. New county and public roads terminating in cul-de-sacs or other dead-end turnarounds are prohibited except where natural features (such as topography, streams, or wetlands), parks, dedicated open space, or existing development preclude road connections to adjacent properties, existing street stubs, or existing roads.
- D. Developments shall comply with the intersection sight distance and roadside clear zone standards of the Clackamas County Roadway Standards. In addition:
- 1. No planting, signing, or fencing shall be permitted which restricts motorists' vision; and
 - 2. Curbside parking may be restricted along streets with visibility problems for motorists, pedestrians, and/or bicyclists as deemed appropriate by the Department of Transportation and Development.
- E. New developments, subdivisions, and partitions may be required to dedicate land for right-of-way purposes and/or make road frontage improvements to existing rights-of-way as deemed necessary by the Department of Transportation and Development and consistent with Section 1007, Chapters 5 and 10 of the Comprehensive Plan, and the Clackamas County Roadway Standards.

- F. Road frontage improvements within the UGB and in Mt. Hood urban villages shall include:
 - 1. Surfacing, curbing, or concrete gutters as specified in Section 1007, Chapters 5 and 10 of the Comprehensive Plan, and the Clackamas County Roadway Standards;
 - 2. Pedestrian, bikeway, accessway, and trail facilities as specified in Subsection 1007.06;
 - 3. Transit amenities as specified in Subsection 1007.07; and
 - 4. Street trees as specified in Subsection 1007.08.
- G. Within public and county rights-of-way, the following uses may be permitted, subject to compliance with the Clackamas County Roadway Standards:
 - 1. Solar energy systems owned and operated by a public entity or utility;
 - 2. Electric vehicle charging stations owned and operated by a public entity or utility; and
 - 3. On-street parking within the UGB.

1007.05 PRIVATE ROADS AND ACCESS DRIVES

- A. Private roads and access drives shall be developed according to classifications and guidelines listed in Section 1007, Comprehensive Plan Figures ~~Tables 5-1 through 5-3, *Typical Roadway Cross Sections*~~ ~~V-2, *Roadway Classifications and Guidelines*~~, and ~~V-3, *Roadway Classification and Guidelines (Continued)*~~, Chapters 5 and 10 of the Comprehensive Plan, and the Clackamas County Roadway Standards, except:
 - 1. When easements or “flag-pole” strips are used to provide vehicular access to lots or parcels, the minimum width shall be 20 feet, unless a narrower width is approved by the Department of Transportation and Development and the applicable fire district’s Fire Marshal;
 - 2. Where the number of lots served exceeds three, a wider width may be required as deemed appropriate or necessary by the Department of Transportation and Development consistent with other provisions of Section 1007, the Comprehensive Plan, and/or the Clackamas County Roadway Standards;

3. Access easements or “flag-pole” strips may be used for utility purposes in addition to vehicular access;
4. The standards listed above may be deviated from when deemed appropriate by the Department of Transportation and Development to accommodate one-half streets or private common access drives and roads within developed urban areas providing access to not more than seven lots; and
5. The intersection of private roads or access drives with a public or county road and intersections of two private roads or access drives shall comply with the sight distance and clear zone standards pursuant to Subsection 1007.04(D).

1007.06 PEDESTRIAN AND BICYCLE FACILITIES

- A. General Standards: Pedestrian and bicycle facilities shall be developed according to the classifications and guidelines listed in Section 1007, Comprehensive Plan Figures 5-1 through 5-3, Typical Roadway Cross Sections Tables V-2, Roadway Classifications and Guidelines, and V-3, Roadway Classification and Guidelines (Continued), Chapters 5 and 10 of the Comprehensive Plan, and the Clackamas County Roadway Standards.
- B. Pedestrian and Bicycle Facility Design: Pedestrian and bicycle facilities shall be designed to:
 1. Minimize conflicts among automobiles, trucks, pedestrians, and bicyclists;
 2. Provide safe, convenient, and an appropriate level of access to various parts of the development and to locations such as schools, employment centers, shopping areas, adjacent developments, recreation areas and open space, and transit corridors;
 3. Allow for unobstructed movements and access for transportation of disadvantaged persons; and
 4. Be consistent with Chapters 5 and 10 of the Comprehensive Plan; and Comprehensive Plan Maps 5-2aV-7a, Planned Bikeway Network, Urban, 5-2bV-7b, Planned Bikeway Network, Rural, and 5-3V-8, Essential Pedestrian Network; North Clackamas Parks and Recreation District’s Park and Recreation Master Plan; and Metro’s Regional Trails and Greenways Map.

- C. Requirements for Pedestrian and Bicycle Facility Construction: Within the Portland Metropolitan Urban Growth Boundary (UGB), sidewalks, pedestrian pathways, and accessways shall be constructed as required in Subsection 1007.06 for subdivisions, partitions, multifamily dwellings, three-family dwellings, attached single-family dwellings where three or more dwelling units are attached to one another, and commercial, industrial, or institutional developments, except that for structural additions to existing commercial, industrial, or institutional buildings, development of such facilities shall be required only if the addition exceeds 10 percent of the assessed value of the existing structure, or 999 square feet.
- D. Requirement for Sidewalk Construction: Within the UGB, sidewalks shall be constructed, as required in Subsection 1007.06(F), for two-family dwellings, detached single-family dwellings, attached single-family dwellings where two dwelling units are attached to one another, and manufactured dwellings outside a manufactured dwelling park.
- E. Sidewalks or Pedestrian Pathways in Unincorporated Communities: In an unincorporated community, either a sidewalk or a pedestrian pathway shall be constructed on arterial or collector street frontage(s) of a lot upon which a subdivision, partition, multifamily dwelling, three-family dwelling, attached single-family dwelling where three or more dwelling units are attached to one another, or a commercial, industrial, or institutional development is proposed.
- F. Sidewalk Location: Sidewalks required by Subsection 1007.06(C) or (D) shall be constructed on:
1. Both sides of a new or reconstructed road, except that sidewalks may be constructed on only one side of the road if:
 - a. The road is not a through road;
 - b. The road is 350 feet or less in length and cannot be extended; or
 - c. In consideration of the factors listed in Subsection 1007.04(B)(3).
 2. The street frontage(s) of a lot upon which a subdivision, partition, multifamily dwelling, three-family dwelling, attached single-family dwelling where three or more dwelling units are attached to one another, or a commercial, industrial, or institutional development is proposed; and
 3. Local or collector road street frontage(s) of a lot upon which a two-family dwelling, a detached single-family dwelling, an attached single-family

dwelling where two dwelling units are attached to one another, or a manufactured dwelling is proposed. This requirement shall be imposed as a condition on the issuance of a conditional use permit, building permit, or manufactured dwelling placement permit, but

- a. The requirement shall be waived if the dwelling is a replacement for one destroyed by an unplanned fire or natural disaster; and
- b. The sidewalk requirement shall apply to no more than two street frontages for a single lot.

G. Pedestrian Pathways: ~~Within~~Inside the UGB, a pedestrian pathway may be constructed as an alternative to a sidewalk on a local or collector road when it is recommended by the Department of Transportation and Development; the surface water management regulatory authority approves the design; and at least one of the following criteria is met:

1. The site has topographic or natural feature constraints that make standard sidewalk construction unusually problematic;
2. No sidewalk exists adjacent to the site;
3. Redevelopment potential along the road is limited; or
4. The road is identified for a pedestrian pathway by the River Forest Neighborhood Plan adopted by the City of Lake Oswego.

H. Sidewalk and Pedestrian Pathway Width: Sidewalks and pedestrian pathways shall be constructed to the minimum widths shown in Table 1007-1, and be consistent with applicable requirements of Chapters 5 and 10 of the Comprehensive Plan.

Table 1007-1: Minimum Sidewalk and Pedestrian Pathway Width

Street Type	Residential Sidewalk	Commercial or Institutional Sidewalk	Industrial Sidewalk
Local	5 feet	7 feet	5 feet
Connector	5 feet	7 feet	5 feet
Collector	5 feet	8 feet	5 feet
Arterial	6 feet	8 feet	6 feet

1. The entire required width of sidewalks and pedestrian pathways shall be unobstructed.
2. Sidewalks and pedestrian pathways at transit stops shall be a minimum of eight feet wide for a distance of 20 feet centered on the transit shelter or transit stop sign.
3. A sidewalk set back from the curb by at least five feet may be one foot narrower (but not less than five feet) than the standard listed above. This five-foot separation strip shall be landscaped and shall be maintained by the adjacent property owner. The landscaped separation strip may contain fixed objects provided that sight distance and roadside clear zone standards are satisfied pursuant to the Clackamas County Roadway Standards.
4. Uses located in the Campus Industrial, Light Industrial, General Industrial, or Business Park District and containing over 5,000 square feet of office space shall comply with the requirements for Commercial and Institutional uses.

I. Accessways: Accessways shall comply with the following standards:

1. Accessways shall be required where necessary to provide direct routes to destinations not otherwise provided by the road system and where topography permits. Developments shall not be required to provide right-of-way for accessways off-site to meet this requirement. If right-of-way is available off-site, the developer may be required to improve an accessway off-site up to 150 feet in length.

2. Accessways shall provide safe, convenient access to facilities generating substantial pedestrian or bicycle trips, such as an existing or planned transit stop, school, park, church, daycare center, library, commercial area, or community center. Facilities such as these shall be accessible from dead-end streets, loops, or mid-block locations. Where required, accessways shall be constructed at intervals of no more than 330 feet, unless they are prevented by barriers such as topography, railroads, freeways, pre-existing development, or environmental constraints such as streams and wetlands.
3. An accessway shall include at least a 15-foot-wide right-of-way and an eight-foot-wide hard surface. For safety, accessways should be as straight as practicable and visible from an adjacent use if practicable. Removable bollards or other large objects may be used to bar motor vehicular access.
4. So that they may be safely used at night, accessways shall be illuminated by street lights or luminaires on shorter poles. Separate lighting shall not be required if existing lighting adequately illuminates the accessway.
5. Fences are not required, but the height of a fence along an accessway shall not exceed six feet.
6. Ownership and maintenance responsibility for accessways shall be resolved during the development review and approval process.

J. Bikeways: Bikeways shall be required as follows:

1. Shoulder bikeways, bike lanes, bike paths, or cycle tracks shall be included in the reconstruction or new construction of any street if a bikeway is indicated in Chapters 5 and 10 of the Comprehensive Plan and on Comprehensive Plan Maps 5-2aV-7a, *Planned Bikeway Network, Urban*, or 5-2bV-7b, *Planned Bikeway Network, Rural*; North Clackamas Parks and Recreation District's Park and Recreation Master Plan; or Metro's Regional Trails and Greenways Map.
2. Shoulder bikeways, bike lanes, bike paths, or cycle tracks shall be considered in the reconstruction or new construction of any other arterial or collector.
3. Within urban growth boundaries, shoulder bikeways, bike lanes, bike paths, or cycle tracks shall be constructed from new public or private elementary, middle school, and high school facilities to off-site bikeways

to provide continuous bicycle route connections within and between surrounding developments, unless precluded by existing development.

K. Trails:

1. Trail dedications or easements shall be provided and developed as shown on Comprehensive Plan Map IX-1, *Open Space Network & Recreation Needs*; the Facilities Plan (Figure 4.3) in North Clackamas Parks and Recreation District's Park and Recreation Master Plan; and Metro's Regional Trails and Greenways Map.
2. Off-road sections of trails shall have a minimum 30-foot right-of-way or easement width.

1007.07 TRANSIT AMENITIES

All residential, commercial, institutional, and industrial developments on existing and planned transit routes shall be reviewed by Tri-Met or other appropriate transit provider to ensure appropriate design and integration of transit amenities into the development. The design shall not be limited to streets, but shall ensure that pedestrian/bikeway facilities and other transit-supportive features such as shelters, bus pull-outs, park-and-ride spaces, and signing will be provided. The designs shall comply with Tri-Met standards and specifications.

1007.08 STREET TREES

- A. Within the Portland Metropolitan Urban Growth Boundary, sStreet trees are required on all road frontage—except frontage on private roads or access drives—for subdivisions, partitions, multifamily dwellings, three-family dwellings, attached single-family dwellings where three or more dwelling units are attached to one another, and commercial, industrial, or institutional developments, except that for structural additions to existing commercial, industrial, or institutional buildings, street trees are required only if the addition exceeds 10 percent of the assessed value of the existing structure, or 999 square feet, fronting on designated boulevards in the Comprehensive Plan and Street trees shall comply with the following standards:
1. Partial or complete exemptions from the requirement to plant street trees may be granted on a case-by-case ~~basishases~~. Exemptions may be granted, for example, if the exemption is necessary to save existing significant trees which can be used as a substitute for street trees, ~~or where trees approved under Subsection 1007.08(A)(2) are to be planted on the property adjoining the street right-of-way.~~

2. Street trees to be planted shall be chosen from a County-approved list of street trees (if adopted), unless approval for planting of another species is given by the Department of Transportation and Development. Trees listed in Table 1007-2, *Prohibited Street Trees*, shall not be planted as street trees.
3. Location and planting of street trees may be influenced by such conditions as topography, steep terrain, soil conditions, existing trees and vegetation, preservation of desirable views, and solar access.
4. Planting of street trees shall be coordinated with other uses which may occur within the street right-of-way, such as bikeways, pedestrian paths, storm drains, utilities, street lights, shelters, and bus stops.
5. Street trees at maturity shall be of appropriate size and scale to complement the width of the street or median area.

Table 1007-2: Prohibited Street Trees

<u>Scientific Name</u>	<u>Common Name</u>	<u>Reason for Prohibition</u>
<u>Acer macrophyllum</u>	<u>Big-leaf Maple</u>	<u>Leaves block drainage;</u> <u>Roots buckle sidewalks</u>
<u>Acer negundo</u>	<u>Box Elder</u>	<u>Insect prone; Weak wood</u>
<u>Acer saccharinum</u>	<u>Silver Maple</u>	<u>Shallow roots; Weak wood</u>
<u>Aesculus hippocastanum</u>	<u>Common Horsechestnut</u>	<u>Messy fruits</u>
<u>Betulus species</u>	<u>Birches</u>	<u>Insect prone; Weak wood</u>
<u>Carya species</u>	<u>Hickories</u>	<u>Fruits cause litter and</u> <u>safety problems</u>
<u>Catalpa species</u>	<u>Catalpas</u>	<u>Seed pods cause litter</u>

		<u>problem</u>
<u>Corylus species</u>	<u>Filberts</u>	<u>Fruits cause litter and safety problems</u>
<u>Crataegus species</u>	<u>Hawthorns</u>	<u>Thorns; Fruits cause litter and safety problems</u>
<u>Fraxinus species</u>	<u>Ashes</u>	<u>Seed pods cause litter problem</u>
<u>Gleditsia triacanthos</u>	<u>Honey Locust (species, does not include horticultural variants)</u>	<u>Seed pods cause litter problem</u>
<u>Juglans species</u>	<u>Walnuts</u>	<u>Fruits cause litter problem</u>
<u>Morus species</u>	<u>Mulberries</u>	<u>Fruits cause litter and safety problems</u>
<u>Populus species</u>	<u>Poplars</u>	<u>Shallow roots; Weak wood</u>
<u>Robinia species</u>	<u>Locusts</u>	<u>Weak wood; Suckers</u>
<u>Salix Species</u>	<u>Willows</u>	<u>Shallow roots; Weak wood</u>
<u>Ulmus fulva</u>	<u>Slippery Elm</u>	<u>Insect prone; Shallow roots; Weak wood</u>
<u>Ulmus pumila</u>	<u>Siberian Elm</u>	<u>Shallow roots; Weak wood</u>

B. Street trees are required for developments in the Clackamas Regional Center Area, as ~~identified~~ shown on Comprehensive Plan Map X-CRC-1, *Regional Center, Corridors, and Station Community*, and shall comply with the following standards:

1. Street trees are required along all streets, except for drive aisles in parking lots.
2. When determining the location of street trees, consideration should be given to accommodating normal retail practices in front of buildings such as signage, outdoor display, loading areas, and pullout lanes.

3. Street trees are required along private access streets under the following conditions:
 - a. On both sides when the access point is a signalized intersection;
 - b. On both sides when the street section has four or more lanes at the access point;
 - c. On both sides when the private street is developed to comply with building orientation standards;
 - d. On a minimum of one side when the street section has one or two lanes, and the street is not at a signalized intersection or is not used to meet the structure orientation standards of Subsections 1700.03(C) and 1700.04(B); and
 - e. On a minimum of one side of the street when access is shared with adjacent property. Adjoining property shall be required to install trees on its side of the access street when the property is developed.
4. In the Fuller Road Station Community, as identified on Comprehensive Plan Map X-CRC-1, *Regional Center, Corridors, and Station Community*, street trees are required along both sides of all street types, and as shown in Comprehensive Plan Figure X-CRC-11 for Type E pedestrian/bicycle connections. Street trees shall be spaced from 25 to 40 feet on center, based on the selected tree species and any site constraints. Street trees shall otherwise comply with the other provisions of Subsections 1007.08(A) and (B).

C. In the Business Park District, street trees are required at 30- to 40-foot intervals along periphery and internal circulation roads, except where significant trees already exist.

~~D. In the Campus Industrial District, street trees are required.~~

E.D. Street trees are required for developments in the Sunnyside Village Community Plan area, ~~as identified shown~~ on Comprehensive Plan Map X-SV-1, *Sunnyside Village Plan Land Use Plan Map*, along both sides of all connector and local streets, ~~and as set forth in Section 1600~~. In addition:

1. One to two street trees are required per interior lot, and two to four for corner lots depending on the canopy of the tree species proposed. If a small canopy (less than or equal to 25 feet in diameter at maturity) is

proposed, then two per interior lot and four per corner lot are required. If a larger canopy (greater than 25 feet in diameter at maturity) is proposed, then one per interior lot and two per corner lot are required.

2. As each portion of a project is developed, a specific species of street tree will be chosen for each street. The developer may choose the species of street tree to be planted so long as the species is not known to cause sidewalks to buckle, does not have messy fruits or pods, is not prone to insects or having weak wood, and is not on the list of prohibited trees. The County will have final approval regarding the type of street tree to be planted.
3. Along connector streets or streets with a higher classification, metal grating, non-mortared brick, grasscrete, or similar material shall be installed at grade over the planting area around street trees, or raised planters shall be constructed to prevent soil compaction and damage to the trunk. LandscapePlanting strips or tree wells are required along streets with a classification below connector status.

4. The trees listed in Table 1007-2 are prohibited as street trees:

~~Table 1007-2: Prohibited Street Trees in the Sunnyside Village Community Plan Area~~

~~Scientific Name~~	~~Common Name~~	~~Reason for Prohibition~~
~~Acer macrophyllum~~	~~Big-leaf Maple~~	~~Leaves block drainage; Roots buckle sidewalks~~
~~Acer negundo~~	~~Box Elder~~	~~Insect-prone; Weak wood~~
~~Acer saccharinum~~	~~Silver Maple~~	~~Shallow roots; Weak wood~~
~~Aesculus hippocastanum~~	~~Common Horsechestnut~~	~~Messy fruits~~
~~Betulus species~~	~~Birches~~	~~Insect-prone; Weak wood~~
~~Carya species~~	~~Hickories~~	~~Fruits cause litter and safety problems~~

Catalpa-species	Catalpas	Seed-pods-cause-litter problem
Corylus-species	Filberts	Fruits-cause-litter-and safety-problems
Crataegus-species	Hawthorns	Thorns; Fruits-cause-litter and safety-problems
Fraxinus-species	Ashes	Seed-pods-cause litter problem
Gleditsia-triacanthos	Honey Locust (species; does-not-include horticultural-variants)	Seed-pods-cause-litter problem
Juglans-species	Walnuts	Fruits-cause-litter-problem
Morus-species	Mulberries	Fruits-cause-litter-and safety-problems
Populus-species	Poplars	Shallow-roots; Weak-wood
Robinia-species	Locusts	Weak-wood; Suckers
Salix-Species	Willows	Shallow-roots; Weak-wood
Ulmus-fulva	Slippery Elm	Insect-prone; Shallow roots; Weak-wood
Ulmus-pumila	Siberian Elm	Shallow-roots; Weak-wood

F. — For additional street tree requirements in the Sunnyside Village Community Plan area shown on Comprehensive Plan Map X-SV-1, *Sunnyside Village Plan, Land Use Plan Map*, see Subsection 1600.03.

1007.09 TRANSPORTATION FACILITIES CONCURRENCY

A. The purpose of Subsection 1007.09 is to ensure that transportation infrastructure is provided concurrently with the new development it is required to serve or, within a reasonable period of time following the approval of new development.

- B. Subsection 1007.09 shall apply to the following development applications: design review, subdivisions, partitions, and conditional uses.
- C. Approval of a development shall be granted only if the capacity of transportation facilities is adequate or will be made adequate in a timely manner. The following shall be exempt from this requirement:
 - 1. Development that is located:
 - a. In the Light Industrial, General Industrial, or Business Park District; and
 - b. North of the Clackamas River; and
 - c. West of Highway 224 (south of Highway 212) or 152nd Drive (north of Highway 212); and
 - d. South of Sunnyside Road (east of 82nd Avenue) or Harmony Road (west of 82nd Avenue) or Railroad Avenue (west of Harmony Road); and
 - e. East of Interstate 205 (south of Milwaukie Expressway) or the city limits of Milwaukie (north of the Milwaukie Expressway).
 - 2. Modification or replacement of an existing development (or a development that has a current land use approval even if such development has not yet been constructed) on the same property, provided that an increase in motor vehicle traffic does not result;
 - 3. Unmanned utility facilities, such as wireless telecommunication facilities, where no employees are present except to perform periodic servicing and maintenance;
 - 4. Mass transit facilities, such as light rail transit stations and park-and-ride lots;
 - 5. Home occupations to host events, which are approved pursuant to Section 806; and
 - 6. Development in the Government Camp Village, as shown on Comprehensive Plan Map X-MH-4, *Government Camp Village Plan Land Use Plan & Boundary*, that is otherwise consistent with the Comprehensive Plan and zoning designations for the Village.

D. As used in Subsection 1007.09(C), “adequate” means a maximum volume-to-capacity ratio (v/c), or a minimum level of service of Level-of-Service (LOS) D, as established by Comprehensive Plan Tables 5-2a, *Performance Evaluation Measures for the Urban Area*, and 5-2b, *Performance Evaluation Measures for the Rural Area* except:

1. Portions of 82nd Avenue, Sunnyside Road, and Johnson Creek Boulevard located in the Clackamas Regional Center or the Fuller Road Station Community, as identified on Comprehensive Plan Map X-CRC-1, *Regional Center, Corridors, and Station Community*, shall be subject to the following minimums:
 - a. LOS E during the weekday midday peak one-hour period; and
 - b. LOS F during the first hour and LOS E during the second hour of the weekday PM peak two-hour period.
2. Portions of 82nd Avenue, Sunnyside Road, and Johnson Creek Boulevard located in the Clackamas Regional Center Area but outside the Clackamas Regional Center and the Fuller Road Station Community, as identified on Comprehensive Plan Map X-CRC-1, *Regional Center, Corridors, and Station Community*, shall be subject to the following minimums:
 - a. LOS D during the weekday midday peak one-hour period; and
 - b. LOS E during the first hour and LOS E during the second hour of the weekday PM peak two-hour period.
3. Roadways other than 82nd Avenue and Sunnyside Road in the Clackamas Regional Center, as identified on Comprehensive Plan Map X-CRC-1, *Regional Center, Corridors, and Station Community*, shall be subject to the following minimums:
 - a. LOS E during the weekday midday peak one-hour period; and
 - b. LOS E during the first hour and LOS E during the second hour of the weekday PM peak two-hour period.
4. Except as established by Subsections 1007.09(D)(1) through (3), LOS E shall apply to developments proposed on property in a Campus Industrial, Light Industrial, General Industrial, Rural Industrial, or Business Park zoning district.

- ~~5. Except as established by Subsections 1007.09(D)(1) through (3), LOS-E shall apply to high-employment developments. A high-employment development is one that provides a minimum of 50 FTE per acre. Only jobs where the employee reports to work at the subject property shall be included in this calculation.~~
- ~~6. The performance standards identified in the latest edition of the Oregon Highway Plan shall apply to facilities under the jurisdiction of the State of Oregon, with the exception of those facilities identified in Subsections 1007.09(D)(1) and (2).~~

E. For the purpose of calculating capacity as required by Subsections 1007.09(C) and (D), the following standards shall apply:

- ~~1. Both the methods of calculating v/c and LOS and the definitions given to the LOS letter designations are established by the Clackamas County Roadway Standards, except that: The method of calculating capacity on state facilities is established by the Oregon Highway Plan.~~
2. The minimum capacity standards shall apply to all roadways and intersections within the impact area of the proposed development. The impact area shall be established by the Clackamas County Roadway Standards.
3. Capacity shall be evaluated for motor vehicle traffic only.
- ~~4. Except as established by Subsections 1007.09(D)(1) through (3), capacity shall be evaluated for the peak 15-minute period of both the AM-weekday and PM-weekday peak hours of the transportation system within the impact area. The requirement to evaluate either the AM or the PM peak hour, or both, may be waived if the proposed use will not generate motor vehicle trips during the period(s).~~

F. As used in Subsection 1007.09(C), "timely" means:

1. For facilities under the jurisdiction of the County, necessary improvements are included in the Five-Year Capital Improvement Program, fully funded, and scheduled to be under construction within three years of the date land use approval is issued;
2. For facilities under the jurisdiction of the State of Oregon, necessary improvements are included in the Statewide Transportation Improvement

Plan and scheduled to be under construction within four years of the date land use approval is issued;

3. For facilities under the jurisdiction of a city or another county, necessary improvements are included in that jurisdiction's capital improvement plan, fully funded, and scheduled to be under construction within three years of the date land use approval is issued.
4. Alternatively, "timely" means that necessary improvements will be constructed by the applicant or through another mechanism, such as a local improvement district. Under this alternative:
 - a. Prior to issuance of a certificate of occupancy for a conditional use or a development subject to design review and prior to recording of the final plat for a subdivision or partition, the applicant shall do one of the following:
 - i. Complete the necessary improvements; or
 - ii. For transportation facilities under the jurisdiction of the County, the applicant shall provide the county with a deposit, letter of credit, performance bond, or other surety satisfactory to county staff pursuant to Section 1104. For transportation facilities under the jurisdiction of the state, a city, or another county, the applicant shall comply with the respective jurisdiction's requirements for guaranteeing completion of necessary improvements. This option is only available if the jurisdiction has a mechanism in place for providing such a guarantee.
5. For a phased development, the first phase shall satisfy Subsections 1007.09(F)(1) through (4) at the time of land use approval. Subsequent phases shall be subject to the following:
 - a. At the time of land use approval, necessary improvements shall be identified and the phase for which they are necessary shall be specified.
 - b. Necessary improvements for a particular phase shall either:
 - i. Comply with Subsections 1007.09(F)(1) through (3) at the time of building permit approval, except that the improvements shall be scheduled to be under construction within three years of building

permit approval rather than within three years of land use approval;
or

- ii. Comply with Subsection 1007.09(F)(4), in which case the improvements shall be completed or guaranteed prior to issuance of a certificate of occupancy or recording of the final plat for the applicable phase.

G. As used in Subsection 1007.09(F), “necessary improvements” are:

1. Improvements identified in a transportation impact study as being required in order to comply with the adequacy standard identified in Subsection 1007.09(D).
 - a. A determination regarding whether submittal of a transportation impact study is required shall be made based on the Clackamas County Roadway Standards, which also establish the minimum standards to which a transportation impact study shall adhere.
 - b. If a transportation impact study is not required, County traffic engineering or transportation planning staff shall identify necessary improvements or the applicant may opt to provide a transportation impact study.

H. As an alternative to compliance with Subsection 1007.09(C), the applicant may make a voluntary substantial contribution to the transportation system.

1. As used in this subsection, “substantial contribution” means construction of a roadway or intersection improvement that is all of the following:

- a. A complete project or a segment of a roadway identified in Comprehensive Plan Table 5-3a, 20-Year Capital Projects, 5-3b, Preferred Capital Projects, or 5-3c, Long-Term Capital Projects the Clackamas County 20-Year Capital Improvement Plan (CIP); the Statewide Transportation Improvement Plan (STIP); or the capital improvement plan (CIP) of a city or another county.
- i. For a segment of a roadway to qualify as a substantial contribution, the roadway shall be on or abutting the subject property; no less than the entire segment that is on or abutting the subject property shall be completed; and there shall be a reasonable expectation that the entire project—as identified in Comprehensive Plan Table 5-3a, 5-3b, or 5-3c the Clackamas County 20-Year CIP; the STIP; or

the CIP of a city or another county—will be completed within five years;

- b. Located within the impact area of the proposed development. The impact area shall be established by the Clackamas County Roadway Standards;
 - c. Estimated to have a minimum construction cost of \$527,000 in year 2004 dollars. The minimum construction cost shall on January 1st of each year following 2004 be adjusted to account for changes in the costs of acquiring and constructing transportation facilities. The adjustment factor shall be based on the change in average market value of undeveloped land, except resource properties, in the County according to the records of the County Tax Assessor, and the change in construction costs according to the Engineering News Record (ENR) Northwest (Seattle, Washington) Construction Cost Index; and shall be determined as follows:
 - i. $\text{Change in Average Market Value} \times 0.50 + \text{Change in Construction Cost Index} \times 0.50 = \text{Minimum Construction Cost Adjustment Factor}$
 - ii. After the adjustment factor is applied to the previous year's minimum construction cost, the result shall be rounded to the nearest thousand.
2. Prior to issuance of a certificate of occupancy for a conditional use or a development subject to design review and prior to recording of the final plat for a subdivision or partition, the applicant shall do one of the following:
- a. Complete the substantial contribution; or
 - b. For transportation facilities under the jurisdiction of the County, the applicant shall provide the county with a deposit, letter of credit, performance bond, or other surety satisfactory to county staff pursuant to Section 1104. For transportation facilities under the jurisdiction of the state, a city, or another county, the applicant shall comply with the respective jurisdiction's requirements for guaranteeing completion of necessary improvements. This option is only available if the jurisdiction has a mechanism in place for providing such a guarantee.

1007.10 FEE IN LIEU OF CONSTRUCTION

For all or part of the road frontage improvements required by Section 1007; located within the Portland Metropolitan Urban Growth Boundary (UGB) and required for a partition, a two- or three-family dwelling (where no more than one such dwelling is proposed), an attached or detached single-family dwelling, or a manufactured dwelling; the developer may elect to pay a fee in lieu of construction as follows.

- A. The fee in lieu of construction may be paid if the road frontage improvements are located on a local or collector road that is not identified on Comprehensive Plan Map 5-3V-8, *Essential Pedestrian Network*, and payment of the fee is deemed by the Department of Transportation and Development to be an acceptable alternative to construction of the required improvements; or
- B. The fee in lieu of construction may be paid if the road frontage improvements are located on a road that is identified on Comprehensive Plan Map 5-3V-8, *Essential Pedestrian Network*; payment of the fee is deemed by the Department of Transportation and Development to be an acceptable alternative to construction of the required improvements; and at least one of the following criteria is met:
 - 1. The improvements are included in the Five-Year Capital Improvement Program;
 - 2. The improvements are located on a road where significant topographical or natural feature constraints exist; or
 - 3. The improvements are located on a local or collector road where a sidewalk or pathway does not exist within 200 feet of the required improvements.
- C. For a two-family dwelling, a detached single-family dwelling, an attached single-family dwelling where two dwelling units are attached to one another, or a manufactured dwelling, the fee in lieu of construction shall be \$25.00 per lineal foot of frontage. The fee shall be adjusted annually to account for the change in construction costs according to the Engineering News Record (ENR) Northwest (Seattle, Washington) Construction Cost Index. The annual adjustment shall be made in January on the date that the ENR publishes its first index of the year.
- D. For a partition, a three-family dwelling, or an attached single-family dwelling where three or more dwelling units are attached to one another, the fee in lieu of construction shall be equal to the estimated cost of constructing the required frontage improvements and shall be calculated as follows.

1. A frontage improvement cost construction estimate acceptable to the Department of Transportation and Development shall be completed by an engineer who is registered by the State of Oregon.
 2. The elements to be considered when calculating the fee shall include, but shall not necessarily be limited to, mobilization/start-up, grading, rock, drainage, asphalt, curb, sidewalk, and retaining wall.
- E. All fees in lieu of improvements collected, and interest thereon, shall be placed in a "Sidewalk Improvement Fund." Fees shall be spent on sidewalk or pedestrian pathway construction on local or collector roads within the UGB.

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-230, 9/26/11; Amended by Ord. ZDO-232, 3/12/12]

1009 LANDSCAPING

1009.01 PURPOSE

Section 1009 is adopted to:

- A. Promote sustainable development practices, including energy efficiency, water conservation, reduced use of pesticides and synthetic fertilizers, and onsite storm water containment;
- B. Support clean air and water, wildlife habitat, greenhouse gas reduction, and the retention of existing natural features;
- C. Create compatibility between adjacent land uses, with particular emphasis on mitigating off-site impacts to residential areas;
- D. Provide outdoor recreational space in residential developments;
- E. Encourage the planting of edible gardens;
- F. Create an attractive, safe, and functional pedestrian environment;
- G. Facilitate the safe and efficient movement of traffic through parking lots; and
- H. Enhance the appearance of development.

1009.02 GENERAL PROVISIONS

- A. Landscaping materials shall be selected and sited to produce a hardy and low-maintenance landscaped area with an emphasis on fast-growing plants. Selection shall include consideration of soil type and depth, spacing, exposure to sun and wind, slope and contours of the subject property, building walls and overhangs, and compatibility with existing vegetation to be preserved. Notwithstanding the requirement for hardiness, annuals are permitted as provided in Subsection 1009.02(B).
- B. A variety of plants, intermixed throughout landscaped areas, shall be provided, as follows:
 - 1. Evergreen and deciduous;
 - 2. Trees, shrubs, and groundcover;
 - 3. Plants of varying textures;
 - 4. Plants of varying widths and heights at maturity; and
 - 5. Plants with seasonal color interest (e.g., foliage, flowering perennials, annuals).

- C. The planting of invasive non-native or noxious vegetation shall be prohibited, and existing invasive non-native or noxious vegetation shall be removed.
- D. Landscaped areas shall not be used for other purposes, such as storage or display of automobiles, equipment, merchandise, or materials.
- E. Landscaping of the unimproved area between a property line and the improved portion of an adjacent road right-of-way shall be required when there are no immediate plans to develop or otherwise disturb the unimproved area, and one or more of the following apply:
 - 1. The subject property is located inside the Portland Metropolitan Urban Growth Boundary;
 - 2. Landscaping is necessary to present an appearance consistent with the proposed development as viewed from the road;
 - 3. Landscaping is necessary to reduce dust, noise, erosion, or fire hazard; or
 - 4. The road is designated as a scenic road on Comprehensive Plan Map 5-1V-5, *Scenic Roads*.
- F. Landscaping shall be used to highlight public entrances to buildings, except that this requirement will be waived where buildings are not set back from the front property line.
- G. Where feasible, landscaping shall be required adjacent to walkways and other areas intended for pedestrian use.

1009.03 MINIMUM AREA STANDARDS

- A. Table 1009-1 establishes the minimum percentage of the area of the subject property that shall be landscaped.

1. The minimum landscaping percentage shall be calculated after subtracting any public dedications from the area of the subject property.
2. Landscaping in adjacent rights-of-way shall not count toward compliance with the minimum landscaping percentage.
3. Requirements for surface parking and loading area landscaping, screening and buffering, landscaping strips, and outdoor recreational areas set forth in Section 1009 apply regardless of whether compliance with those requirements results in landscaping a greater percentage of the site than is required by Table 1009-1.
4. Notwithstanding Subsection 1009.03(A), additions to a commercial, industrial, or institutional development which does not currently comply with the minimum landscaping percentage standard, shall require additional landscaping area, as follows:
 - a. Structural additions of 1,000 to 1,999 square feet: An additional five percent of the subject property, but no more than the percentage required by Table 1009-1;
 - b. Structural additions of 2,000 to 4,999 square feet: An additional 10 percent of the subject property, but no more than the percentage required by Table 1009-1;
 - c. Structural additions of 5,000 square feet or more: The percentage required by Table 1009-1; and
 - d. Where successive structural additions occur at different times, the required landscaping percentage shall increase until total conformance is reached.

Table 1009-1: Minimum Landscaped Area

Zoning District	Minimum Landscaped Area
RTL, RCO, RCC, PMU, CC, SCMU ¹	10 percent
NC, C-2, C-3, RTC ² , RC, BP, LI, GI, RI, VCS, VO, VC	15 percent
OC, OA, RCHDR ³	20 percent
MR-1, HDR, PMD, MRR, MR-2, CI, VTH, VA	25 percent, except 20 percent for developments of attached single-family dwellings in the MR-1 and MR-2 zoning districts
HR	25 percent for the development of conditional uses; 20 percent for the development of attached single-family dwellings, if three or more dwelling units are attached to one another
R-2.5 through R-30, RR, RA-1, RA-2, RRFF-5, FF-10, HR, FU-10, VR-4/5, and VR-5/7	25 percent for the development of conditional uses
SHD	40 percent ⁴

¹ In the SCMU District, the minimum shall be 15 percent for developments of three-family or multifamily dwellings, including mixed-use developments that include these uses.

² In the unincorporated community of Government Camp, as shown on Comprehensive Plan Map X-MH-4, *Government Camp Village Plan, Land Use Plan & Boundary*, the minimum shall be 10 percent, except that there shall be no minimum for properties with frontage on the Old Mt. Hood Loop Road from E. Wy'east Trail to E. Olive Street and on E. Little Trail from E. Olive Street to E. Church Street, where public plazas are provided in compliance with Subsection 504.09(E).

³ In the RCHDR District, this is the minimum percentage for landscaping, outdoor surface areas, and certain recreational facilities, as regulated by Subsections 1706.10(D) and (E).

⁴ This is the minimum percentage for certain indoor recreational facilities, as set forth in Subsection 304.10(C), and outdoor surface areas, including the following: landscaping; courtyards; pedestrian plazas; areas dedicated for parks; onsite walkways and bikeways; recreational areas and facilities; and shared yards, decks, terraces, patios, and roof gardens.

- B. A minimum of 75 percent of the minimum landscaped area required by Table 1009-1—excluding any area occupied by pedestrian amenities, active recreational areas, or edible gardens—shall be landscaped with native or drought-tolerant plants.
- C. Outdoor recreational areas required by Subsection 1009.08, as well as outdoor recreational areas in the Mountain Recreational Resort District, shall count toward the minimum landscaped area required by Table 1009-1, except that impervious surface area exceeding 25 percent of the outdoor recreational area shall be excluded.
- D. Edible gardens may comprise a maximum of 10 percent of the minimum landscaped area required by Table 1009-1.
- E. Green roofs may comprise a maximum of 25 percent of the minimum landscaped area required by Table 1009-1.
- F. Turf lawn may comprise a maximum of 10 percent of the minimum landscaped area required by Table 1009-1. However, this limitation shall not apply to active recreational areas, provided that no other areas of the subject property are planted in turf lawn, and it shall not apply to cemeteries.
- G. Pedestrian amenities may comprise a maximum of one-third of the minimum landscaped area required by Table 1009-1. However, no more than 15 percent of the minimum landscaped area required by Table 1009-1 and developed with pedestrian amenities shall have an impervious surface.
- H. Area occupied by walls, fences, or trellises constructed to comply with Subsections 1009.04 and 1009.05 shall count toward the minimum landscaped area required by Table 1009-1.
- I. In Medium, Medium High, and High Density Residential Districts, the following may comprise a maximum of 20 percent of the minimum landscaped area required by Table 1009-1: interior courtyards, atriums, solar greenhouses, solariums, roof gardens, indoor recreational areas, and other comparable amenities.

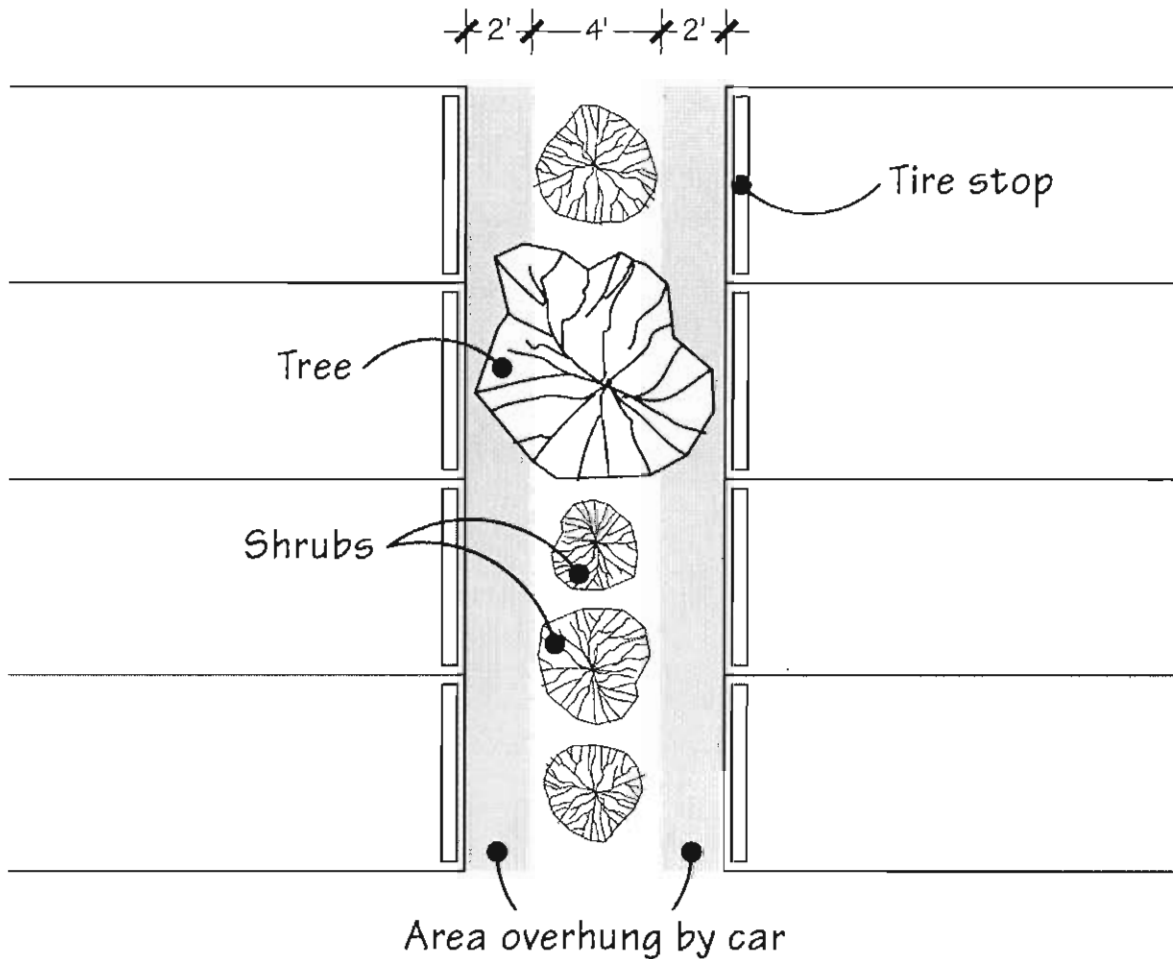
1009.04 SURFACE PARKING AND LOADING AREA LANDSCAPING

Surface parking and loading areas shall be landscaped as follows:

- A. Surface parking areas that include more than 15 parking spaces shall comply with the following landscaping requirements:
 - 1. Twenty-five square feet of landscaping per parking space, excluding perimeter parking spaces, shall be provided, except that the standard shall be reduced to 20 square feet for each parking space developed entirely with porous pavement.

2. One landscape swale located between two rows of parking spaces, as shown in Figure 1009-1, is required for every six rows of parking spaces, unless all parking spaces are developed entirely with porous pavement. Additional swales beyond the minimum requirement are allowed.
 - a. For the purpose of Subsection 1009.04(A)(2), a “row” of parking spaces is one space deep, meaning that where two spaces abut at their ends, it is considered two “rows”.
 - b. Parking spaces separated by pedestrian or vehicle crossings perpendicular to the row of parking spaces are considered to be part of a single row.
 - c. The first required swale shall be developed for the entire length of the longest row of parking spaces.
 - d. Gaps in a required swale are permitted only to provide for pedestrian and vehicle crossings.
 - e. The parking lot shall be graded to allow surface water to flow into a swale. Curbs shall not separate parking spaces from the swale, and gaps between parking space tire stops are required to allow surface water to flow into a swale.
 - f. Swales shall be a minimum of four feet wide.
 - g. If the front portions of parking spaces are landscaped as allowed by Subsection 1015.04(B)(11), the landscaped portion of the parking space shall be adjacent and in addition to the swale, as shown in Figure 1009-1.
 - h. Turf lawn is prohibited in swales.

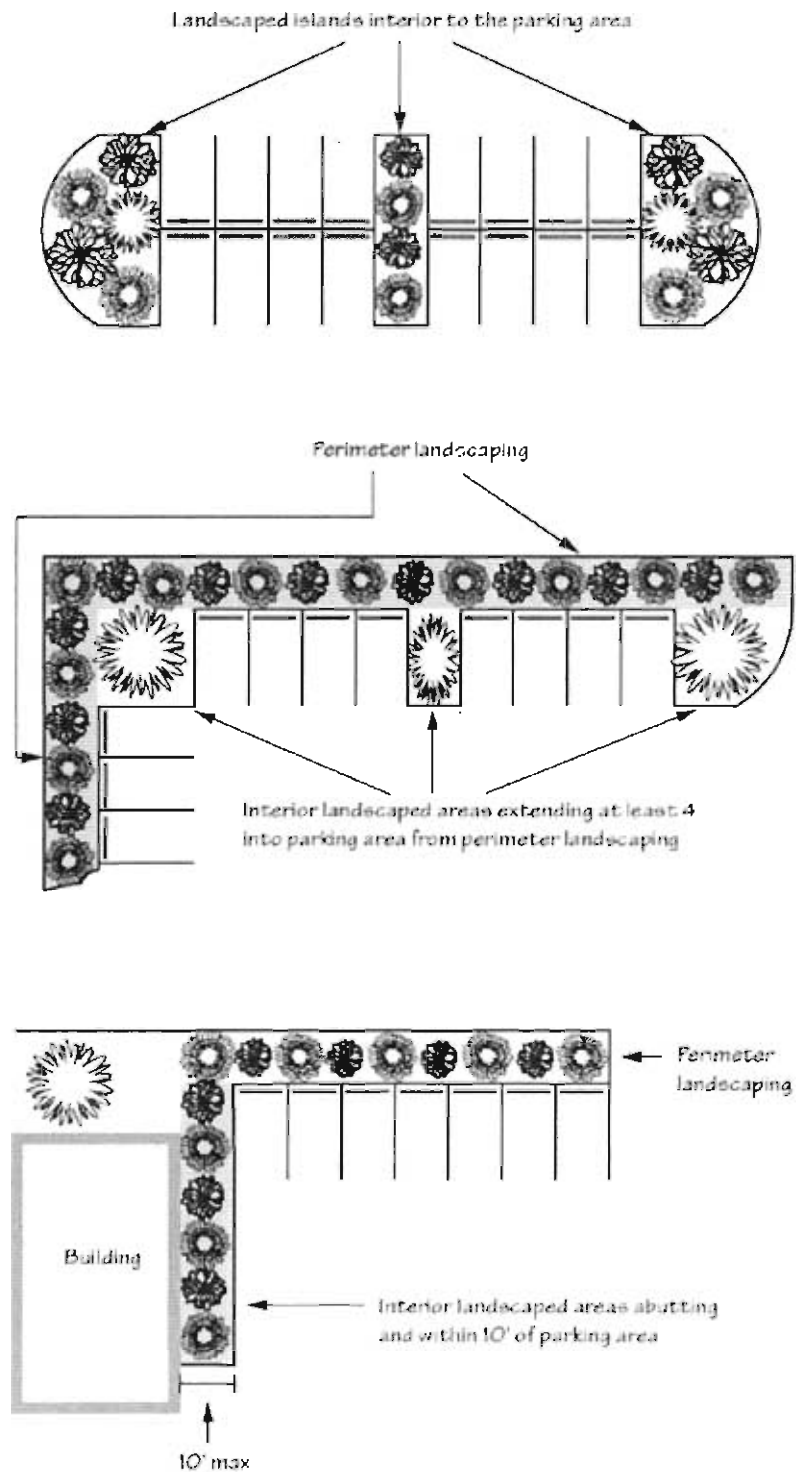
Figure 1009-1: Parking Lot Swale



3. Interior landscaping not developed as swales pursuant to Subsection 1009.04(A)(2) shall comply with the following standards:
 - a. It shall be arranged in areas at the ends of rows of parking or between parking spaces within rows of parking. See Figure 1009-2.
 - b. It may join perimeter landscaping as long as the interior landscape area extends at least four feet into the parking area from the perimeter landscape line. See Figure 1009-2.
 - c. Landscaping that abuts, but does not extend into, the parking area may be included as interior landscaping if all of the following are met:
 - i. The abutting landscaped area must be in addition to required perimeter landscaping;

- ii. Only the first 10 feet of the abutting landscaped area, measured from the edge of the parking area, may be included as interior landscaping; and
 - iii. The landscaped area is not abutting and parallel to required perimeter landscaping. See Figure 1009-2.
- d. The interior length and width of landscaped areas shall be a minimum of four feet.

Figure 1009-2: Interior Landscaping



4. Interior landscaped areas, including swales, shall include a minimum of one tree located every eight interior parking spaces, or fraction thereof, except in the Office Apartment (OA), Village Apartment (VA), Village Community Service (VCS), Village Office (VO), and Village Commercial (VC) Districts, where a minimum of one tree shall be located every six interior parking spaces.
 - a. Where necessary to accommodate other design considerations, variable spacing of the trees required by Subsection 1009.04(A)(4) is allowed, but in no case shall there be less than one tree planted in every 12 parking spaces.
 - b. The species of trees required shall be determined on the basis of the growth habit and the need to provide maximum shading of surface parking areas.
- B. Perimeter landscaping requirements for surface parking and loading areas adjacent to abutting properties or rights-of-way are as follows:
1. A landscaping strip with a minimum width of five feet shall be provided adjacent to the perimeter of the surface parking or loading area, except:
 - a. In the OA, VA, VCS, VO, and VC Districts, the minimum width shall be 10 feet;
 - b. In the BP and LI Districts, the minimum width shall be 15 feet abutting a front lot line; and
 - c. In the GI District, the minimum width shall be 10 feet abutting a front lot line.
 2. The required landscaping strips shall comply with the following standards:
 - a. Sufficient low shrubs shall be planted to form a continuous screen three feet high and 95 percent opaque, year-round; or a three-foot-high masonry wall or a berm may be substituted for the shrubs. When applied along front lot lines, the screen or wall is to be placed along the interior side of the landscaping strip.
 - b. In addition, one tree is required for every 30 linear feet of landscaping strip, or as otherwise required to provide a tree canopy over the landscaping strip.
 - c. Ground cover plants must fully cover the remainder of the landscaped area.

3. A perimeter landscape strip is not required for a surface parking or loading area adjacent to an abutting property if one or more interior driveways connect the two properties and if the abutting property also is developed with a surface parking or loading area adjacent to the shared property line.
4. Required walkways may cross perimeter landscaping strips.

1009.05 SCREENING AND BUFFERING

- A. Screening shall be used to eliminate or reduce the visual impacts of the following:
 1. Service areas and facilities, such as loading areas and receptacles for solid waste or recyclable materials;
 2. Storage areas;
 3. Ground-mounted rainwater collection facilities with a storage capacity of more than 100 gallons;
 4. Parking lots within or adjacent to an Urban Low Density Residential, Recreational Residential, Rural Area Residential 1-Acre, Rural Area Residential 2-Acre, Rural Residential Farm Forest 5-Acre, Farm Forest 10-Acre, Hoodland Residential, Future Urban 10-Acre, Village Small Lot Residential, or Village Standard Lot Residential zoning districts; and
 5. Any other area or use, as required by this Ordinance.
- B. Screening shall be accomplished by the use of sight-obscuring plant materials (generally evergreens), vegetated earth berms, walls, fences, trellises, proper siting of disruptive elements, building placement, or other design techniques.
- C. Screening shall be required to substantially block any view of material or equipment from any point located on a street or accessway adjacent to the subject property. Screening from walkways is required only for receptacles for solid waste or recyclable materials. A sight-obscuring fence at least six feet in height and up to a maximum of 10 feet shall be required around the material or equipment.
- D. Buffering shall be used to mitigate adverse visual impacts, dust, noise, or pollution, and to provide for compatibility between dissimilar adjoining uses. Special consideration shall be given to the buffering between residential uses and commercial or industrial uses, and in visually sensitive areas.
- E. Buffering shall be accomplished by one of the following:
 1. A landscaping strip with a minimum width of 15 feet and planted with:

- a. At least one row of deciduous and evergreen trees staggered and spaced not more than 30 feet apart;
 - b. At least one row of evergreen shrubs, spaced not more than five feet apart, which will grow to form a continuous hedge at least five feet in height within one year of planting; and
 - c. Low-growing evergreen shrubs and evergreen ground cover covering the balance of the area;
2. A berm with a minimum width of ten feet, a maximum slope of 40 percent on the side away from the area screened from view, and planted with a dense evergreen hedge;
 3. A strip with a minimum width of five feet, and including:
 - a. A masonry wall or sight-obscuring fence not less than five feet in height;
 - b. An evergreen hedge, vines, trees, or shrubs; and
 - c. Low-growing evergreen shrubs and evergreen ground cover covering the balance of the area; or
 4. Another method that provides an adequate buffer considering the nature of the impacts to be mitigated.
- F. Required walkways shall be accommodated, even if such accommodation necessitates a gap in required screening or buffering.

1009.06 LANDSCAPING STRIPS IN INDUSTRIAL ZONING DISTRICTS

- A. In the BP and LI Districts, a landscaping strip a minimum of 15 feet wide shall be provided along front lot lines.
- B. In the GI District, a landscaping strip a minimum of 10 feet wide shall be provided along front lot lines.

1009.07 FENCES

- A. In the CI District, periphery fences shall not be allowed. Decorative fences or walls may be used to screen service and loading areas, private patios or courts. Fences may be used to enclose playgrounds, tennis courts, or to secure sensitive areas or uses, such as vehicle storage areas or drainage detention facilities. Fences shall not be located where they impede pedestrian or bicycle circulation through or between site areas.

- B. In the BP District, street perimeter fences or walls and guard posts shall meet a minimum setback of 15 feet and shall be of a material, color, and design complementary to the development and to adjoining properties and public access roads.
- C. In the LI District, street perimeter fences or walls shall meet a minimum setback of 15 feet from the front lot line.
- D. In the GI District, street perimeter fences or walls shall meet a minimum setback of 10 feet from the front lot line.

1009.08 OUTDOOR RECREATIONAL AREAS

An outdoor recreational area shall be provided in developments of two-family, three-family, or multifamily dwellings in the Medium Density Residential, Medium High Density Residential, and High Density Residential zoning districts, and in developments of three-family or multifamily dwellings, including mixed-use developments that include these uses, in the Station Community Mixed Use (SCMU) zoning district, as follows:

- A. A minimum of 200 square feet of usable outdoor recreational space per dwelling unit shall be provided for studio, one- bedroom, and two-bedroom units. The minimum shall be increased to 300 square feet per dwelling unit for units with three or more bedrooms. Notwithstanding these requirements, see Subsections 1707.08(D)(1) and (2) for limitations that apply in the SCMU zoning district.
- B. Outdoor recreational areas may be designed for passive or active recreation, including edible gardening.
- C. Outdoor recreational areas shall be designed for adequate surveillance opportunities.
- D. Outdoor recreational areas shall be conveniently located and accessible to all dwelling units.

1009.09 EROSION CONTROL

- A. Graded areas shall be re-vegetated with suitable plants to ensure erosion control.
- B. Netting shall be provided, where necessary, on sloped areas while ground cover is being established.

1009.10 PLANTING AND MAINTENANCE

- A. Impervious weed barriers (e.g. plastic sheeting) are prohibited.

- B. Plants shall not cause a hazard. Plants over walkways, sidewalks, pedestrian pathways, and seating areas shall be pruned to maintain a minimum of eight feet below the lowest hanging branches. Plants over streets and other vehicular use areas shall be pruned to maintain a minimum of 15 feet below the lowest hanging branches.
- C. Plants shall be of a type that, at maturity, typically does not interfere with above- or below-ground utilities.
- D. Plants shall be installed to current nursery industry standards.
- E. Plants shall be properly guyed and staked to current nursery industry standards as necessary. Stakes and guy wires shall not interfere with vehicular or pedestrian traffic.
- F. Landscaping materials shall be guaranteed in writing by the developer for a period of one year from the date of installation. A copy of the guarantee shall be furnished to the County by the developer. The developer also shall submit a signed maintenance contract, or provide a financial guarantee pursuant to Section 1104, covering the landscape maintenance costs during the guarantee period.
- G. Plants shall be suited to the conditions under which they will be growing. As an example, plants to be grown in exposed, windy areas that will not be irrigated shall be sufficiently hardy to thrive under these conditions. Plants shall have vigorous root systems, and be sound, healthy, and free from defects and diseases.
- H. When planted, deciduous trees shall be fully branched, have a minimum caliper of two inches, and have a minimum height of eight feet.
- I. When planted, evergreen trees shall be fully branched and have a minimum height of eight feet.
- J. Shrubs shall be supplied in minimum one-gallon containers or eight-inch burlap balls with a minimum spread of 12 inches.
- K. Ground cover shall be planted a maximum of 30 inches on center with a maximum of 30 inches between rows. Rows of plants shall be staggered. Ground cover shall be supplied in minimum four-inch containers, except that the minimum shall be reduced to two and one-quarter inches or equivalent if the ground cover is planted a minimum of 18 inches on center.
- L. Plants shall be spaced so that ground coverage three years after planting is expected to be 90 percent, except where pedestrian amenities, rainwater collection systems, or outdoor recreational areas count as landscaping pursuant to Subsection 1009.03. Areas under the drip line of trees count as ground coverage.

- M. Irrigation of plants shall be required, except in wooded areas, wetlands, and in river and stream buffers. The irrigation system shall be automatic, except that hose bibs and manually operated methods of irrigation may be permitted in small landscaped areas close to buildings. Automatic irrigation systems are subject to the following standards:
1. The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.
 2. In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.
 3. Narrow or irregularly shaped areas, including turf lawn, less than eight feet in width in any direction shall be irrigated with subsurface or low volume irrigation.
 4. Overhead sprinkler irrigation shall not be permitted within two feet of any non-permeable surface. Allowable irrigation within the two-foot setback from non-permeable surfaces may include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:
 - a. The landscaped area is adjacent to permeable surfacing and no runoff occurs; or
 - b. The adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or
 - c. The irrigation designer specifies an alternative design or technology, and clearly demonstrates strict adherence to Subsection 1009.10(M)(1).
 - d. Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data shall be required for irrigation scheduling.
- N. Appropriate methods of plant care and landscaping maintenance shall be provided by the property owner.
- O. Plants shall be protected from damage due to heavy foot traffic or vehicular traffic by protective tree grates, pavers, or other suitable methods.

[Amended by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-243, 9/9/13]

1015 PARKING AND LOADING

1015.01 PURPOSE

Section 1015 is adopted to:

- A. Provide safe, efficient, and functional parking areas for automobiles and bicycles, and adequate loading areas for service vehicles;
- B. Provide parking and loading areas that complement the design of the development, the street, and the community, and support planned urban form in urban areas;
- C. Minimize disturbance of soils, impervious surfaces, and other negative environmental impacts of parking and loading areas; and
- D. Implement Title 4 of the Regional Transportation Functional Plan.

1015.02 APPLICABILITY

If there is a conflict between Section 1015 and the Clackamas County Roadway Standards, Section 1015 shall govern.

1015.03 GENERAL PROVISIONS

- A. The provision and maintenance of off-street parking and loading facilities ~~are~~is a continuing obligations of the property owner. When any parking area for the parking of three or more cars is to be established, the standards set forth herein shall apply.
- B. Inside the Portland Metropolitan Urban Growth Boundary (UGB), parking, loading, and maneuvering areas shall be hard-surfaced, unless a permeable surface is required to reduce surface runoff, as determined by the Department of Transportation and Development.
- C. Outside the UGB, all areas used for parking, loading, and maneuvering of vehicles shall be surfaced with screened gravel or better, and shall provide for suitable drainage.
- D. Parking and loading requirements for types of uses and structures not specifically listed in Tables 1015-2, 1015-3, and 1015-4, or specified in other Sections of this Ordinance, shall be subject to the requirements for the most similar use, as determined by the Planning Director.

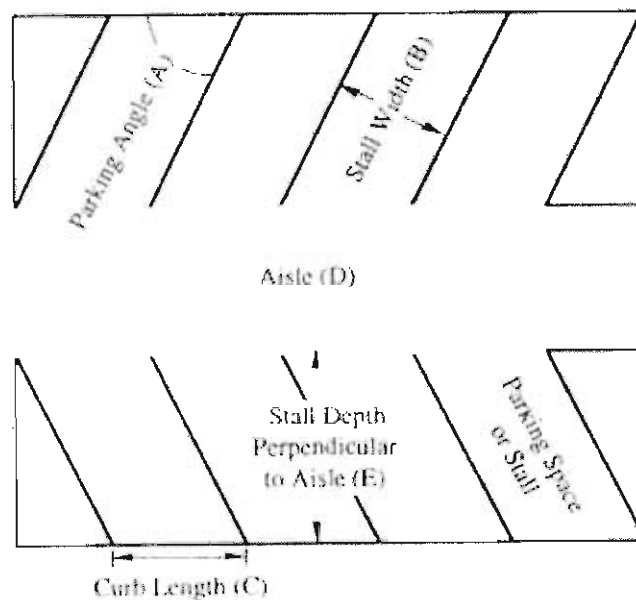
1015.04 AUTOMOBILE PARKING AREA STANDARDS

- A. Off-street parking areas shall be provided in defined areas of the subject property and shall meet the following requirements for location of the parking area on the site:
 - 1. No area shall be considered a parking space unless it can be shown that the area is accessible and usable for that purpose and has required maneuvering area for the vehicles.
 - 2. Automobile parking areas shall be separated from bicycle parking areas and from loading areas to the extent possible.
 - 3. Commercial or recreational vehicle storage areas shall be located in areas that are farther from building entrances than parking spaces for customers and employees.
- B. Off-street parking areas shall be designed to meet the following requirements:
 - 1. Parking areas must meet the requirements of the Americans with Disabilities Act.
 - 2. Except for parallel parking spaces, the minimum size for all standard parking spaces shall be 8.5 feet wide and 16 feet long.
 - 3. Minimum dimensions of curb length, stall depth, and parking lot aisles are based on the parking space orientation as follows:

Table 1015-1: Minimum Parking Space and Aisle Dimensions

Parking Space Orientation (A)	Curb Length (C)	Stall Depth (E)	One-Way Aisle (D)	Two-Way Aisle (D)
Parallel	22 feet	8 feet	12 feet	20 feet
30 degree angle	17 feet	15 feet	12 feet	20 feet
45 degree angle	12 feet	17 feet	12 feet	20 feet
60 degree angle	9.75 feet	17.5 feet	16 feet	20 feet
90 degree angle	8.5 feet	16 feet	24 feet	24 feet

Figure 1015-1 Parking Dimension Factors



4. Double-loaded, ninety-degree angle parking bays shall be utilized where possible.
5. A maximum of 50 percent of the parking spaces may be larger than 8.5 feet wide and 16 feet long, but not larger than 9 feet wide and 18 feet long, with the following exceptions:

- a. Outside the Portland Metropolitan Urban Growth Boundary (UGB), more than 50 percent of parking spaces may be larger than 8.5 feet wide and 16 feet long, but not larger than 9 feet wide and 18 feet long.
 - b. For retail uses such as building supply stores, furniture stores, and other stores selling bulky items, more than 50 percent of parking spaces may be larger than 8.5 feet wide and 16 feet long, but not larger than 9 feet wide and 18 feet long.
 - c. More than 50 percent of parking spaces may be larger than 8.5 feet wide and 16 feet long, but not larger than 9 feet wide and 18 feet long, when the applicant demonstrates that a higher ratio of over-sized vehicles are found in parking areas of similar developments and uses.
 - d. More than 50 percent of parking spaces may be larger than 8.5 feet wide and 16 feet long, but not larger than 9 feet wide and 18 feet long, when porous pavement is used for all parking spaces.
6. A minimum of five percent, but at least one space, of the required parking spaces shall be marked and signed for use as carpool/vanpool spaces. These spaces shall be the closest employee automobile parking spaces to the building entrances normally used by employees, but shall not take priority over any spaces required for individuals with disabilities.
 7. Required backing and maneuvering areas for on-site automobile parking spaces shall be located entirely onsite.
 8. In parking lots greater than one acre, major onsite circulation drive aisles and lanes crossing to adjacent developments shall not have parking spaces accessing directly onto them.
 9. Where feasible, shared driveway entrances, shared parking and maneuvering areas, and interior driveways between adjacent parking lots shall be required.
 10. Except for parallel spaces, parking spaces heading into landscaped areas or along the perimeter of a parking lot shall be provided with a sturdy tire stop at least four inches high and located two feet within the space to prevent any portion of a car within the lot from extending over the property line.
 11. For parking spaces heading into a landscaped area, the area in front of the tire stop that is included in the parking space dimension may be

landscaped instead of paved or graveled according to the following standards:

- a. Landscaping shall be ground cover plants only;
 - b. The area in front of the tire stop that is included in the parking space dimension shall be in addition to the required minimum dimension for a landscape planter; and
 - c. The landscaped area in front of the tire stop may count toward overall site landscaping requirements established in Table 1009-1. However, it may not count toward perimeter landscaping requirements established in Section 1009.04(B)(1).
12. Required parking spaces shall not be used for storing or accumulating goods or storing a commercial or recreational vehicle, camper, or boat, rendering it useless for parking.
- C. Uses located on transit service lines and that have days and hours of operation not in conflict with weekday use (e.g. churches, fraternal organizations, or nighttime amusements) may be required under Subsection 1007.07, to allow a portion of their parking area to be used for a park-and-ride lot.
- D. Parking Minimums: The minimum number of parking spaces listed in Table 1015-2 ~~applies~~apply unless modified in Subsection 1015.04(F).
1. In case of expansion of a building or use that, prior to the expansion, does not meet the minimum parking space requirements in Table 1015-2, the following provisions shall apply:
 - a. The minimum number of additional parking spaces required shall be based only on the floor area or capacity added and not the area or capacity existing prior to the expansion.
 - b. If the enlargement covers any of the pre-expansion parking spaces, lost parking spaces shall be replaced, in addition to any required additional spaces.
 - c. The maximum number of parking spaces allowed for the entire development after the expansion shall be based on Table 1015-2.
 2. In the event more than one use occupies a single structure or parcel, the total minimum requirement for parking shall be the sum of the minimum requirements of the several uses computed separately.
 3. Parking spaces fulfilling the minimum requirement for a specified use

shall not be rented, leased, or assigned to any other person or organization, except as provided for under Subsection 1015.03(F)(2)(a) for shared parking.

4. The conducting of any business activity, except for temporary uses (e.g., Farmers' Markets), shall not be permitted to occupy any of the required parking spaces.

E. Parking Maximums:

1. Within the UGB, the parking maximums listed in Table 1015-2, Urban Zone A, apply when an area has 20-minute peak hour transit service within one-quarter mile walking distance for bus transit or one-half mile walking distance for light rail transit;
2. Within the UGB, areas not meeting the requirements of Subsection 1015.04(E)(1), are subject to the parking maximums listed in Table 1015-2, Urban Zone B.
3. In case of expansion of a building or use with more parking spaces than the maximum allowed by Table 1015-2:
 - a. Existing parking spaces may be retained, replaced, or eliminated, provided that after the expansion, the total number of remaining spaces complies with the minimum parking space requirement of Table 1015-2 for the entire development; and
 - b. Additional parking spaces are allowed only if required to comply with the minimum parking space requirement of Table 1015-2 for the entire development after the expansion.

Table 1015-2: Automobile Parking Space Requirements*

* Parking ratios are based on spaces per 1,000 square feet of gross leasable area, unless otherwise stated.

Land Use Category	Minimum Parking Spaces	Maximum Parking Spaces (Urban Zone A)	Maximum Parking Spaces (Urban Zone B)
Amusement Parks, Riding Academies, and Camps (per 1000 square feet of serving area)	0.8	None	None
Bank with Drive-in	4.3	5.4	6.5
Bowling Alleys (per alley)	3	None	None
Daycare Facilities	0.5 In addition, a passenger- loading area shall be provided on the site.	None	None
Hospitals	0.5	None	None
Hotels and Motels (per unit)	1	None	None
Industrial, Manufacturing, and Processing Facilities			
Zero to 24,999 square feet	1.5	None	None
25,000 to 49,999 square feet	1.42	None	None
50,000 to 79,999 square feet	1.25	None	None
80,000 square feet and greater	1	None	None
Medical and Dental Clinics	3.5	4.9	5.9
Movie Theaters (per seat)	0.3	0.4	0.5

CLACKAMAS COUNTY ZONING AND DEVELOPMENT ORDINANCE

Land Use Category	Minimum Parking Spaces	Maximum Parking Spaces (Urban Zone A)	Maximum Parking Spaces (Urban Zone B)
Nursing Homes, Welfare or Correctional Institutions, and Institutions for Children (per bed)	0.2	None	None
Office Uses (includes Office Park, "Flex-Space", Government Office and Miscellaneous Services)	2.7	3.4	4.1
Places of Worship (per seat located in main assembly room), unless a school, daycare, or similar facility is proposed in conjunction with primary use, in which case it shall have separate parking requirement	0.5, or 1 per 5.3 feet of bench length in main assembly room	0.6	0.8
Produce Stands (per stand)	4	None	None
Dwellings, including			
Single-Family Dwelling or Manufactured Dwelling in Urban Low Density, Village Small Lot, or Village Standard Lot Residential District, except in a Planned Unit Development (per dwelling unit)	1, located behind the front yard setback line	None	None
Planned Unit Development (per single-family dwelling unit)	2	None	None
Hoodland Residential District (per dwelling unit 800 square feet or less) ¹	1	None	None
Hoodland Residential District (per dwelling unit greater than 800 square feet) ¹	2	None	None
Mountain Recreational Resort District, except congregate housing facilities (per 600 square feet of residential building area)	1	None	None

CLACKAMAS COUNTY ZONING AND DEVELOPMENT ORDINANCE

Land Use Category	Minimum Parking Spaces	Maximum Parking Spaces (Urban Zone A)	Maximum Parking Spaces (Urban Zone B)
Attached Single-Family Dwelling in Medium or Medium High Density Residential District (per dwelling unit)	2	None	None
Attached Single-Family Dwelling in Station Community Mixed Use District (SCMU) District (per dwelling unit)	1 onsite	2 onsite	NA
Attached Single-Family Dwelling in Village Townhouse District (per dwelling unit)	1, located in a garage	None	None
Two- and Three-Family Dwellings (per dwelling unit)	1.5	None	None
Manufactured Dwelling Park (per dwelling unit)	2	None	None
Multifamily Dwelling (per one-bedroom dwelling unit)	1.25	None	None
Multifamily Dwelling (per two-bedroom dwelling unit)	1.5	None	None
Multifamily Dwelling (per three-bedroom dwelling unit)	1.75	None	None
Congregate Housing Facilities (per resident)	0.25	None	None
Accessory Dwelling Units (per dwelling unit)	1, located behind the front yard setback line	None	None
Restaurants: Fast Food with drive-thru window service	9.0	12.4	14.9
Restaurants: With no drive-thru window service, Taverns	15.0	19.1	23

CLACKAMAS COUNTY ZONING AND DEVELOPMENT ORDINANCE

Land Use Category	Minimum Parking Spaces	Maximum Parking Spaces (Urban Zone A)	Maximum Parking Spaces (Urban Zone B)
Retail/Commercial, including shopping centers	4.1, except in the Clackamas Regional Center Area. 3.0	5.1	6.2
Retail stores with bulky merchandise, such as furniture, appliances, automobiles, service/repair shops	2	5.1	6.2
Schools: Colleges, Universities, and High Schools (per student or staff member)	0.2	0.3	0.3
Schools: Elementary and Junior High Schools (per school)	15, or 2 per classroom, whichever is less	None	None
Service Stations (per employee at peak employment period)	1	None	None
Sports Clubs/Recreation Facilities	4.3	5.4	6.5
Surface Mining	On-site vehicular parking for employees, customers and visitors, determined through Conditional Use process.	None	None
Tennis and Racquetball Courts	1	1.3	1.5
Theaters, Dance Halls, Community Clubs, Skating Rinks, Public Meeting Places (per seat, or 1 per 100 sq. ft. exclusive of stage)	0.25	None	None

Land Use Category	Minimum Parking Spaces	Maximum Parking Spaces (Urban Zone A)	Maximum Parking Spaces (Urban Zone B)
Warehouse and Storage Distribution, and Terminals (air, rail, truck, water, etc.) **Maximum parking requirements apply only to warehouses 150,000 gross square feet or greater.			
Zero to 49,999 square feet	0.3	None	None
50,000 square feet and over	0.2	0.4**	0.5**

On land above 3,500-foot elevation, covered parking shall be provided for structures containing three or more dwelling units.

F. Exceptions to Parking Requirements:

1. Parking maximums in Table 1015-2 may be increased for the following:
 - a. Parking spaces in parking structures;
 - b. Fleet parking;
 - c. Designated employee carpool spaces;
 - d. User paid spaces;
 - e. Parking for vehicles for sale, lease, or rent; and
 - f. Structured parking.
2. Parking minimums in Table 1015-2 may be reduced for the following:
 - a. The total minimum requirement for parking spaces may be reduced up to 20 percent per use when shared parking is utilized.
 - b. Available permitted on-street parking spaces on a development's street frontage may be counted toward required parking as follows:
 - i. All on-street parking spaces may count towards required parking in the following zoning districts: Neighborhood Commercial, Community Commercial, General Commercial, Office Commercial, Retail Commercial, Campus Industrial, Light Industrial, General Industrial, Business Park, Village Office, Village Commercial, Regional Center Office, Regional Center

Commercial, Corridor Commercial, and Station Community Mixed Use District.

- ii. In Office Apartment and Planned Mixed Use zoning districts, each on-street parking space may count towards one-half a required parking space.
 - iii. All on-street parking spaces may count towards required parking in Government Camp Village, as identified on Comprehensive Plan Map X-MH-4, *Government Camp Village Plan, Land Use Plan & Boundary*, on Government Camp Loop between Wy'East Trail and Church Street and on Little Trail between Olive Street and Church Street. Corner lots with such street frontage also may count parking spaces on the intersecting street.
- c. Motorcycle parking may substitute for vehicle parking spaces as follows:
- i. Up to five spaces or five percent of required automobile parking, whichever is less, may be utilized.
 - ii. For every four motorcycle parking spaces provided, the automobile parking requirement is reduced by one space.
 - iii. Existing parking may be converted to take advantage of this provision.
 - iv. Each motorcycle space must be at least four feet wide and eight feet deep.
- d. Electric vehicle charging stations may be installed according to the following standards:
- i. Two spaces or five percent of the minimum required parking spaces, whichever is greater, may be utilized for electric vehicle charging stations and identified exclusively for such use.
 - ii. Additional parking spaces of the minimum required parking may be utilized for electric vehicle charging stations, provided they are not identified exclusively for such use.
 - iii. Any portion of parking spaces provided that are beyond the required minimum number of parking spaces may be utilized for electric vehicle charging stations, regardless of whether they are identified exclusively for such use.

1015.05 BICYCLE PARKING STANDARDS

- A. Bicycle parking areas shall meet the following on-site locational requirements:
 1. Bicycle parking racks shall be located in ~~close~~ proximity to an entrance but shall not conflict with pedestrian needs.
 2. At least 75 percent of the bicycle parking spaces shall be located within 50 feet of a public entrance to the building.
 3. Bicycle parking areas shall be separated from automobile parking.
 4. Bicycle parking may be provided within a building, if the location is easily accessible for bicycles.
 5. Bicycle parking for multiple uses, or a facility with multiple structures, may be clustered in one or several locations within 50 feet of each building's entrance.
 6. If the bicycle parking is not easily visible from the street or main building entrance, then a sign must be posted near the building entrance indicating the location of the parking facilities.
- B. Bicycle parking shall be designed to meet the following requirements:
 1. When more than seven bicycle parking spaces are required, a minimum of 50 percent of the spaces shall be covered. All (100 percent) of the required bicycle spaces for schools, park-and-ride lots, congregate housing facilities, and multifamily dwellings shall be covered.
 2. Cover for bicycle parking may be provided by building or roof overhangs, awnings, bicycle lockers, bicycle storage within buildings, or freestanding shelters.
 3. When more than 15 covered bicycle parking spaces are required, 50 percent of the required covered spaces shall be enclosed and offer a high level of security, e.g. bicycle lockers or a locked cage or room with locking facilities inside, to provide safe long-term parking.
 4. Required bicycle parking spaces shall be illuminated.
 5. Required bicycle parking areas shall be clearly marked and reserved for bicycle parking only.
 6. Bicycle parking space dimensions and standards:

- a. Bicycle parking spaces must be at least six feet long and two feet wide, and in covered situations the overhead clearance must be at least seven feet.
 - b. An aisle five feet wide for bicycle maneuvering must be provided.
 - c. Bicycle racks must hold bicycles securely by the frame and be securely anchored.
 - d. Hanging bicycle racks and/or enclosed, stackable bike lockers may be substituted for surface racks if, through design review pursuant to Section 1102, it is determined that comparable dimensions, maneuvering, and clearance are provided to the user.
 - e. Bicycle racks must accommodate both:
 - i. Locking the frame and one wheel to the rack with a high-security U-shaped shackle lock; and
 - ii. Locking the frame and both wheels without removal of wheels to the rack with a chain or cable not longer than six feet.
7. The minimum bicycle parking spaces listed in Table 1015-3 are required.
 8. Notwithstanding Table 1015-3, all listed uses located within the Portland Metropolitan Urban Growth Boundary (UGB) shall have a minimum of two bicycle parking spaces.
 9. New multifamily residential, commercial, and institutional developments within the UGB shall designate short-term bicycle parking (less than four hours) and long-term bicycle parking (four or more hours) spaces as needed for the development.

Table 1015-3: Minimum Required Bicycle Parking Spaces

Land Use Category	Minimum Bicycle Parking Spaces*
Elementary Schools, Junior High Schools, Middle Schools, Senior High Schools, and Colleges (per classroom)	2 (maximum required spaces – 100)
Multifamily Dwellings (per dwelling unit)	0.5
Park-and-Ride Lots, Transit Centers, and Community Parks (per acre)	5

Land Use Category	Minimum Bicycle Parking Spaces*
Preschools	4
Residential Care Facilities, Nursing Homes, and Hospitals (per 8 beds)	1
Retail and Commercial including offices and clinics	
Per 2,500 square feet, up to 50,000 square feet	1
Per each additional 5,000 square feet	1
Theaters, Places of Worship, Auditoriums, Dance Halls and other Public Assembly Places (per 40 seats or per 40 persons of design capacity, whichever is greater)	1
Warehouses and industrial buildings without attached offices, automotive service uses such as service stations and tire stores, and businesses selling large items such as major appliances, furniture, cars, or boats (per 10,000 square feet of building area)	1

* Minimums outside the UGB are 20 percent of the requirement listed in Table 1015-3.

1015.06 OFF-STREET LOADING STANDARDS

- A. Loading areas shall meet the following ~~off-street~~^{onsite} locational requirements:
 1. No area shall be considered a loading berth unless it can be shown that the area is accessible and usable for that purpose, and has maneuvering area for vehicles.
 2. Loading areas shall be separated from vehicle and bicycle parking areas.
 3. In the BP District, loading areas shall be located to the side or rear of buildings unless topography, natural features, rail service, or other requirements of this Ordinance dictate front-yard loading bays.
- B. Loading berths fulfilling the minimum requirement for a specified use shall not be rented, leased, or assigned to any other person or organization, except as provided for under shared loading berths in Subsection 1015.06(F).
- C. The conducting of any business activity, except for permitted temporary uses (e.g., Farmers' Markets), shall not occupy any of the minimum required loading berths.

- D. No required loading berth shall be used for storing or accumulating goods or a commercial or recreational vehicle, camper, or boat, rendering it useless for loading operations.

- E. In cases of expansion of a building or use, that prior to the expansion, does not meet the minimum loading berth requirements in Table 1015-4, the following provisions shall apply:
1. The minimum number of additional loading berths required shall be based only on the floor area or capacity added and not on the area or capacity existing prior to the expansion.
 2. If the expansion covers any pre-expansion loading berths, lost loading berths shall be replaced, in addition to any required additional berths.
- F. In the event several uses occupy a single structure or parcel of land and share the same loading berths, the total requirement for off-street loading shall be reduced by up to 25 percent of the sum of the requirements of the several uses computed separately.
- G. The minimum off-street loading berths listed in Table 1015-3 are required.

Table 1015-4: Minimum Required Off-Street Loading Berths

Land Use Category	Unit of Measurement	Number of Loading Berths	Minimum Required Dimension
Multifamily Dwellings	Number of Dwelling Units		25 feet x 12 feet x 14 feet high
	Below 50	None	
	50 to 100	1	
	101 to 200	2	
	201 or more	3	
Hotels and Motels	Square feet of floor area		35 feet x 12 feet x 14 feet high
	Under 5,000	None	
	5,000 to 50,000	1	

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	50,001 to 150,000	2	
	150,001 to 300,000	3	
	300,001 to 500,000	4	
	For each additional 200,000	1 additional berth	
Institutional Uses			
Nursing Homes, Welfare or Correctional Institutions, and Institutions for Children	Number of beds		35 feet x 12 feet x 14 feet high
	Less than 25	0	
	More than 25	1	
Assisted Living Facilities			
	Square feet of floor area		
	Below 10,000	None	
	10,000 to 60,000	1	
	60,001 to 160,000	2	
	160,001 to 264,000	3	
	388,001 to 520,000	5	
	520,001 to 652,000	6	
	652,001 to 784,000	7	
	784,001 to 920,000	8	
	For each additional 140,000	1 additional berth	

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Schools	Per each school bus	0.5	
Hospitals	Square feet of floor area		35 feet x 12 feet x 14 feet high
	Under 5,000	None	
	5,000 to 16,000	1	
	16,001 to 40,000	2	
	40,001 to 64,000	3	
	64,001 to 96,000	4	
	96,001 to 128,000	5	
	128,001 to 160,000	6	
	160,001 to 196,000	7	
	For each additional 36,000	1 additional berth	
Commercial Uses	Square feet of floor area		35 feet x 12 feet x 14 feet high
	Under 5,000	None	
	5,000 to 24,999	1	
	25,000 to 49,999	2	
	50,000 to 100,000	3	
	Each additional 50,000	1	
Industrial, Manufacturing, Warehousing, Storage, Processing, and Terminals	Square feet of floor area		60 feet x 12 feet x 14 feet high

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	Under 5,000	None	
	5,000 to 16,000	1	
	16,001 to 40,000	2	
	40,001 to 64,000	3	
	64,001 to 96,000	4	
	96,001 to 128,000	5	
	128,001 to 160,000	6	
	160,001 to 196,000	7	
	For each additional 36,000	1 additional berth	

[Added by Ord. ZDO-224, 5/31/11; Amended by Ord. ZDO-231, 1/31/12; Amended by Ord. ZDO-243, 9/9/13]

1202 ZONE CHANGE

1202.01 APPROVAL CRITERIA

The Hearings Officer may approve a zone change, pursuant to Section 1300, if the applicant provides evidence substantiating the following:

- A. Approval of the zone change is consistent with the Comprehensive Plan;
- B. If development under the new zoning district designation has a need for public sanitary sewer, surface water management, and/or water service, it can be accommodated with the implementation of service providers' existing capital improvement plans. The cumulative impact of the proposed zone change and development of other properties under existing zoning designations shall be considered.
- C. The transportation system is adequate, as defined in Subsection 1007.09(D), and will remain adequate with approval of the zone change. Transportation facilities that are under the jurisdiction of the State of Oregon are exempt from Subsection 1202.01(C). For the purpose of this criterion:
 - 1. The evaluation of transportation system adequacy shall include both the impact of the proposed zone change and growth in background traffic for a 20-year period beginning with the year that a complete land use application is submitted.
 - 2. It shall be assumed that all improvements identified in Comprehensive Plan Table 5-3a, 20-Year Capital Projects~~the Clackamas County 20-Year Capital Improvement Plan~~; the Statewide Transportation Improvement Plan; and the capital improvement plans of other local jurisdictions are constructed.
 - 3. It shall be assumed that the subject property is developed with the primary use, allowed in the proposed zoning district, with the highest motor vehicle trip generation rate.
 - 4. Transportation facility capacity shall be calculated pursuant to Subsection 1007.09(E).
 - 5. A determination regarding whether submittal of a transportation impact study is required shall be made based on the Clackamas County Roadway Standards, which also establish the minimum standards to which a transportation impact study shall adhere.
- D. The proposal, as it relates to transportation facilities under the jurisdiction of the State of Oregon, complies with the Oregon Highway Plan.

- E. Safety of the transportation system is adequate to serve the level of development anticipated by the zone change.

1202.02 ALTERNATE ZONING DISTRICT DESIGNATION

An applicant may request that the Hearings Officer approve an alternate zoning district designation if the Hearings Officer finds that the applicant's preferred designation does not comply with the approval criteria but the alternate designation does. An alternate designation may be substituted only if the public notice required pursuant to Section 1302 includes all requested designations in its description of the applicant's proposal.

1202.03 PREAPPLICATION CONFERENCE

A preapplication conference is required, pursuant to Subsection 1301.04, prior to the filing of an application for a zone change.

1202.04 FINAL APPROVAL

Except as provided under Section 501, approval of a zone change is final on the date of the County's final written decision. If the County's final written decision is appealed, approval of a zone change is final on the date of the final appellate decision.

[Amended by Ord. ZDO-224, 5/31/11; Adopted by Ord. ZDO-230, 9/26/11]

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