

# CLACKAMAS COUNTY, OREGON COMPREHENSIVE PLAN

## Welcome to Clackamas County's web page for the **Clackamas County, Oregon Comprehensive Plan**

Every effort is made to keep this site accurate and up to date, however the current version on file at the offices of the Department of Transportation and Development is the final authority. For questions about interpretation of these regulations, please contact the Planning Division at (503) 353-4500.

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### RECENT CHANGES

Last Update 8/16/05

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Updated:

# CLACKAMAS COUNTY, OREGON COMPREHENSIVE PLAN UPDATE HISTORY

The "DATE POSTED" represents the date that revisions were posted to this web site. The actual date of adoption is noted in the Ordinance Number column.

<b>DATE POSTED</b>	<b>FILE NO.</b>	<b>ORDINANCE NUMBER</b>	<b>CHAPTER</b>
August 16, 2005	ZDO 203	2005-91 April 28, 2005	Chapter 5
April 13, 2004	ZDO 199	17-2003 March 17, 2004	Chapter 4
April 13, 2004	ZDO 198	16-2003 March 17, 2004	Chapter 5
October 2, 2003	ZDO 195	10-2003 June 26, 2003	Chapter 5
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April 22, 2003	ZDO 190	02-2003 January 30, 2003	Chapter 4
July 8, 2002	ZDO 187	2002-112 June 6, 2002	Chapter 4
May 21, 2002	ZDO 185	2002-54 March 14, 2002	Chapter 5
May 21, 2002	ZDO 183	2002-52 March 14, 2002	Chapter 4, 5, 7
January 18, 2002	ZDO 178	01-256 November 1, 2001	Chapter 5
August 15, 2001	ZDO 179	01-189 July 26, 2001	Chapter 4
June 19, 2001	ZDO 176	2001-107 May 24, 2001	Chapter 5



June 19, 2001	ZDO 175	2001-89 May 3,2001	Approving the reformatting and renumbering of the Comprehensive Plan to allow the printing of a new edition.
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# CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 1

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## INTRODUCTION

Nearly one third of a million people call the 1,893 square miles of Clackamas County home.

The County's settlement pattern has resulted in small communities, most of which are clustered in the northwest part of the County. Most of the housing is attractive and structurally sound. Business and industry have established the reputation of being good neighbors.

County residents value the clean water, the thriving fisheries of the rivers, the glistening year-round snow of Mt. Hood, and the verdant carpet of timber on mountain slopes. They also value the proximity of jobs, services, and the cultural advantages of Portland.

This combination of an unspoiled natural environment, rich in contrasting beauty, and the pleasant cultural environment of local communities and neighboring Portland, has inspired County residents to turn their attention to what the future may bring.

### WHY PLAN?

Planning is essentially an organized attempt at community foresight. It seeks to guide the future conservation and development of an area within a framework of goals and policies consistent with physical constraints, legal requirements and attitudes and resources of the community. The basic aim of the Comprehensive Plan is to organize and coordinate the complex interrelationships among people, land, resources, and facilities in such a way as to protect the future health, safety, quality of life and welfare of Clackamas County residents.

### GOALS

The overall goals of the Plan are:

- Balance public and private interests and adopt a coordinated set of goals and policies to guide future development in Clackamas County.
- Identify the most appropriate land uses for individual sites by evaluating site characteristics in light of market demand, human needs, technology, and state, regional, and County goals.
- Provide for growth in areas where public facilities can economically be provided to support growth.
- Create development opportunities most compatible with the fiscal and financial capacity of the County and its residents.

- Implement the policies of this Plan by adopting a zoning map and set of regulations, and by guiding public investments to support anticipated growth.
- Establish a system whereby individual interests may be compared to stated County policy, and provide a process for review and amendment of those policies as expressed in this Comprehensive Plan.

## **FOUNDATION IN THE PAST**

This Plan is the culmination of Clackamas County's comprehensive planning efforts. The first Plan was adopted in 1974, with major updates in 1980 and 1992. In addition, revisions to the plan text and maps have been made periodically in response to an opportunity, or a state, federal or regional requirement. All revisions to the plan have been developed through a process including public input in development of plan concepts, and public hearings on specific proposed plan language. Much of the Plan is carried over in each update.

Revisions to the Plan are necessary because:

1. The Plan calls for regular review and revision.
2. Statewide Planning Goals, adopted by the Land Conservation and Development Commission in 1974, require periodic review.
3. The County's population, housing, natural resources, employment and traffic have changed since the first Plan was adopted, and are expected to continue to change over time.
4. New state laws, Administrative Rules (OARs), and court decisions regularly occur that further specify the relationship between planning and zoning, or establish new requirements or opportunities.

This Plan considers, and includes as a part of this Plan, the Mt. Hood Community Plan adopted in 1982 by Order No. 76-1855 and all subsequent amendments to it. All parts of the Mt. Hood Plan are deemed consistent with this Plan. Procedures for amending the Mt. Hood Community Plan shall be governed by policies for amendments and procedures in Chapter 11 of this Plan.

## **HOPE FOR THE FUTURE**

While continuity is one strength of comprehensive planning, the ability to adapt policy to changing needs and conditions is another. This plan builds on earlier Comprehensive Plans. It addresses concerns about energy and housing, for instance, which our society ignored previously. It attempts to resolve administrative problems encountered during the first years the Plan was used. With each update, the Comprehensive Plan is supported by better information and a more effective citizen involvement process. Consequently, this Plan can better guide development to the year 2020 than its predecessor, and it contains policies for

future revision and amendment.

## **HOW TO USE THIS PLAN**

This Plan, together with its supporting documents and the Court Orders by which it is adopted, is an official policy statement of the County.

Goals and Policies in this Plan direct future decisions on land use actions, ordinance amendments, zone changes, capital expenditures, procedures, and programs.

Plan Maps, in conjunction with the goals and policies, direct development and identify areas subject to various policies.

Each chapter of the Plan consists of:

- Background
- Issues
- Summary of Findings and Conclusions
- Goals
- Policies

The facts on which the Plan is based are in the supporting documents listed at the end of the Plan and in the Court Orders by which the Plan is adopted.

The Land Use chapter defines land use categories, specifies the site conditions used to qualify land for each category of use, and explains allowed uses or uses which may be established under certain conditions. Other chapters contain policies that are less site specific. Cross-references are provided where pitfalls to using the Plan are anticipated. Chapter 10 of the plan includes specific community or design plans, where certain policies may apply that do not apply elsewhere under the plan.

Most development proposals need only comply with provisions of implementing measures such as the zoning and subdivision ordinances. Some may require a zone change. Changes of the zoning map may be approved to allow a use equal to, or of less intensity than, the Plan specifies.

If the Plan does not accommodate the requested zone change, the applicant may request a Plan amendment. In most cases, the easiest way to accomplish this is to seek reclassification on the land use map based on the criteria for designating the desired category and showing that the site in question meets those criteria (see Chapter 11 for amendment procedures).

If a more fundamental change is desired, such as a change in the County's goals or definitions,

the same procedure must be followed. However, changes must comply with state and regional goals and result in a Plan which is internally consistent.

## **IMPLEMENTATION COSTS**

Policies throughout this Plan, as well as in Chapter 11, direct how the Plan will be implemented. The costs involved and the limitations on County financial resources will require that priorities be set to insure that implementation of the Plan is financially responsible.

## **WHAT DOES THIS PLAN DO?**

### **Overall Perspective**

- Recognize urban-rural identities
- Resource preservation emphasis in farm, forest, and rural areas
- Manage growth in urban areas
- Diverse, interesting, and active urban community in the northwest corner of the County
- People activities focused at urban centers
- Landscapes, rivers and other natural attractions protected.

### **Prospects for the Urban Community**

- Energy savings in land use patterns, housing, and transportation
- Desirable and affordable housing
- Livable neighborhoods
- More jobs for present and future residents
- Protected open spaces, streams, and hillsides
- Cost efficiency in providing roads, sewers, and other public services
- Fairer system of distributing necessary costs.

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 2

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### CITIZEN INVOLVEMENT

Citizen involvement is essential in the governmental process to promote the general health and welfare of the total community. New approaches must be developed by local government to effectively involve citizens in the planning and decision-making process. Positive accomplishments can be achieved when citizens become involved in planning programs.

#### ISSUES

1. Public awareness and understanding of land use proposals
2. Communication between the County and community groups, special interests, and individuals
3. Public availability of land use information
4. Mechanisms for public participation
5. Methods for decision makers to respond to citizen concerns and comments
6. The role of various public groups in the planning process

#### SUMMARY OF FINDINGS AND CONCLUSIONS

1. ORS 215 and 197 require the County to provide opportunities for citizen participation and to establish a citizens committee to assist the County in implementing and evaluating its citizen involvement program.
2. Clackamas County has an officially adopted Citizen Involvement Program, and that program is evaluated annually by the Committee for Citizen Involvement.
3. Continued public awareness of and citizen participation in the ongoing planning process is essential to responsible decisions which recognize public concerns and priorities.

#### GOALS

- Promote public participation in formulation of the long-range goals, objectives, scope, and focus of the planning programs.
- Encourage broadly based public participation representing all concerned geographical areas and diverse interests.
- Provide an opportunity for every interested citizen to participate in the formative stages and throughout the planning process.
- Insure successful citizen participation through ongoing education in the planning process.
- Insure regular communication between citizens and County officials (governing body, Planning Commission, and Planning staff).

- Insure a continuing citizen participation effort in the planning process and periodic reevaluation.

## **POLICIES**

- 1.0 Require provisions for opportunities for citizen participation in preparing and revising local land use plans and ordinances. Insure opportunities for broad representations, not only of property owners and Countywide special interests, but also of those persons within the neighborhood or areas in question.
- 2.0 Maintain a Committee for Citizen Involvement with membership that includes representatives of Community Planning Organizations and a diversity of occupation, geographic representation, and gender.
- 3.0 Direct the Committee for Citizen Involvement to develop and implement an annual action plan for citizen involvement.
- 4.0 The County will forward to affected CPOs copies of notices it receives from Metropolitan Service District, Portland Metropolitan Area Local Government Boundary Commission, and other neighboring jurisdictions on opportunities for citizen participation regarding proposed Urban Growth Boundary Amendments and/or annexations and other land use matters.
- 5.0 Encourage community planning organizations throughout the County and promote recognized community organizations where none exist through direct mail and media information, sponsorship of organizational meetings, and other appropriate means.
- 6.0 Seek citizens' input not only through recognized community organizations, but also through service organizations, interest groups, granges, and other ways.
- 7.0 Recognize community organizations which meet the following requirements:
  - a. That one or more well-publicized general community meetings have been held for purposes of information, organization, adoption of bylaws, and election of officers.
  - b. That all community meetings shall be publicized in advance of the meeting date in accordance with existing state law, and participation shall be open to any property owner, resident, business owner, or representative of any nonprofit organization located within the community. Criteria regulating voting shall be included in the bylaws.
  - c. That the organization's structure is capable of providing necessary coordination and communication between its members and County departments, and elected and appointed officials.
  - d. That the boundaries of the community organization specifically define an area of mutual interests, appropriate geographic size and population for effective planning. These boundaries should take into account natural boundaries, commercial patterns, community organizations, and historic factors.

- e. That community organization bylaws, assuring satisfactory fulfillment of the above minimum requirements, be recognized by official Board of County Commissioners' action and placed on file with the County.

8.0 Insure continued support of a recognized community group as long as the group fulfills its responsibilities, maintains the above policies, holds at least two well-publicized meetings per year, and furnishes copies of minutes of meetings to the County, together with an up-to-date list of officers.

9.0 Require the following functions and responsibilities of community organizations:

- a. Community organizations shall be advisory to the Board of County Commissioners, Planning Commission, and Planning Division on matters affecting their neighborhoods.
- b. The organization may develop planning proposals with respect to land use, zoning, parks, water resources, open space and recreation, annexation, housing, community facilities, transportation and traffic, community services, and other factors affecting the livability of their neighborhoods.
- c. Community organizations should review and advise the County on changes in the land use plan and zoning ordinance and may submit zoning recommendations to the County. Such recommendations shall be actively considered.
- d. Community organizations should develop and submit annual requests for services supportive of their functions for County approval and inclusion during the regular budget process.
- e. Community organizations may request funding of neighborhood projects for possible inclusion in the County budget and capital improvement program.
- f. Community organizations should continue the planning process by reevaluating the goals, objectives, and recommendations contained in the Comprehensive Plan or a Community Plan.

10.0 Assist community organizations by:



- a. Insuring that the level of funding and human resources allocated to the citizen involvement program is sufficient to make citizen involvement an integral part of the planning process.
- b. Providing a staff liaison for citizen participation.
- c. Providing designated representatives of recognized community organizations with copying services, postage, supplies, voter and property owner mailing lists, staff assistance, etc., to aid in the planning process.
- d. Notifying community organizations of proposed land use actions and legislative changes as required by ordinances.

- 11.0 Promote informed public participation in decisions through sponsoring or conducting education programs and providing publications and printed materials.
- 12.0 Insure availability of planning documents and reports, as appropriate, through County offices and public libraries.
- 13.0 Insure that the County responds to citizen recommendations through appropriate mechanisms and procedures.
- 14.0 Continue to implement the County's adopted Citizen Involvement Program.

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 3

### NATURAL RESOURCES AND ENERGY

<u><a href="#">NATURAL RESOURCES AND ENERGY</a></u>
<u><a href="#">WATER RESOURCES</a></u>
<u><a href="#">AGRICULTURE</a></u>
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<u><a href="#">NOISE AND AIR QUALITY</a></u>

Citizen involvement is essential in the governmental process to promote the general health and welfare of the total community. New approaches must be developed by local government to effectively involve citizens in the planning and decision-making process. Positive accomplishments can be achieved.

The resources and natural systems of Clackamas County are the most enduring and tangible assets for its communities and their economies and environment.

River corridors, farm fields, marshes, scenic outlooks, wildflowers, spawning beds for salmon, deer and elk wintering areas, gravel quarries, magnificent stands of trees along Oatfield Ridge, or reservoirs of hot water beneath the slopes of Mt. Hood are all part of the wealth of Clackamas County's environment.

Natural resources and processes are interdependent, supplying benefits to the system of which they are a part. Plants are used by animals. Floodplains accommodate floods. Geologic processes produce areas of spectacular scenery. Skiers use the snow-covered slopes of Multnomah Mountain. Favorable soils and slopes result in savings for construction. Energy flows into the region from the sun, wind, and rain.

Clackamas County is an area of rapid growth, urbanization pressures, and diverse rural

activities. As man exerts a greater influence on the environment, planning for future use of Clackamas County's land, water, and energy resources becomes increasingly important. The concern becomes one of insuring long-range values and a high quality of life. This can be accomplished by insuring that our resources are wisely managed, that different uses of land do not conflict, that energy for productivity is available in the quantities needed, and that there is a sufficient amount of high-quality water for the needs of the population as well as natural systems.

## **ISSUES**

1. Use of rivers for recreation and public water supply
2. Effects of river corridor development
3. Competing land use demands in river corridors and impact of development on wetlands
4. Availability and quality of groundwater
5. Management of agricultural resources
6. Management of forest resources on small woodlot ownerships
7. Management of urban forests
8. Competition of recreational demands in forest areas
9. Management of mineral and aggregate supplies
10. Reuse of exhausted aggregate extraction sites
11. Management of fish and wildlife habitat
12. Compatibility of structures and land uses in critical habitat areas; animal damage in agricultural/forest areas
13. Protection of scenic and unique natural areas on public and private lands
14. Housing density in hazard areas (e.g., steep slopes, active landslides, and floodplains)
15. Government liability if known hazard areas are allowed to develop, and damage to life or property occurs
16. Energy efficiency and alternative local sources (e.g., solar, geothermal)
17. Need for educational programs on energy conservation (e.g., weatherization, recycling, and efficient land use patterning).

## **SUMMARY OF FINDINGS AND CONCLUSIONS**

1. On peak days and/or during summer months, sections of the Willamette River are overused in terms of recreational activities. The Clackamas and Sandy Rivers may be approaching recreational overuse in some sections. The Molalla has very low summer flows. Access points on the Tualatin River and lower Molalla River are few. The banks of the Tualatin are predominantly mud, relatively fragile, and cannot withstand much wave (wake) action. Regulatory programs include State Scenic Waterways on the Clackamas and Sandy Rivers, Federal Wild and Scenic Waterways Act, the Willamette River Greenway, state water quality standards, Water Resources Department policy and water rights, and Division of State Lands fill permits. Seven cities and the County share jurisdiction of the Willamette River.

2. All rivers either support or provide passage for anadromous fish, i.e. salmon and steelhead.
3. Existing land uses within each river corridor area are:

<b>Land Use as Percentage of Total</b>				
River	Residential	Commercial	Industrial	Ag/Forest/OS
Clackamas	6.5	0.1	3.2	90.2
Sandy	4.7	0.4	0.0	94.9
Molalla	2.0	0.0	1.0	97.0
Tualatin	13.9	0.2	0.0	85.9
Willamette	11.3	0.4	3.6	84.7

4. Quality of groundwater in Clackamas County is generally good, although some dissolved iron is found in well supplies. Groundwater monitoring activities show a gradual yearly decline in the water table; however, according to the Oregon Water Resources Department, there is no indication of a critical groundwater situation.
5. The County's agricultural production in 1987 had an estimated value of over \$150 million. This contributed a total of approximately \$500 million to the state's economy. The County's agricultural land base has decreased over 100,000 acres in the last 30 years. The potential for agricultural production is further reduced by rural parcelization patterns and inactive farm land owners.
6. Techniques for maintaining the County's agricultural base are (1) regulating land uses to insure that in prime agricultural lands, economic farm units are preserved; and (2) utilizing and expanding existing resources that provide tax relief, educational programs, technical assistance, cooperatives, etc., to encourage the economic viability of the County's farms.
7. Federal timber revenues to the County treasury averaged over \$9 million per year from 1984 to 1988. The forest industry is one of the largest industries in the state.
8. During the late 1980s (from 1984 to 1988) federal lands supplied 70 to 75 percent of Clackamas County's timber harvest volume, and the forest industry supplied about 15 to 20 percent. Small woodlot owners control approximately 20 percent of the Countywide commercial forest land, and supply 5 to 10 percent of the timber harvest.
9. There is no County policy for street trees or managing forest lands in the urban area.
10. The County could simplify management of its scattered forest holdings by exchanging them for forest lands in other parts of the County and using them for parks and/or open space. A County forest land inventory and management plan has been completed and is now being implemented.
11. Aggregate supplies are integral to general economic development in the County; however, supplies near the urban area are limited due to encroachment of urban land uses.

12. Fishing is a major recreational activity in the County, with many streams and rivers noted for their salmon and steelhead runs. Hunting is also a major activity, with deer, bear, elk, and other hunting having an important economic impact on Clackamas County.
13. Areas near rivers or streams are the most important wildlife habitat, harbor the greatest species diversity, and are critical to the survival of numerous species. Cool and well-oxygenated rivers sustain fish in the summer. Winter range is necessary to support big game during inclement months.
14. Scenic and natural areas are often quite fragile and easily obscured or degraded by inappropriate forms of development.
15. County population projections indicate an increase of 45 percent by the year 2010, substantially increasing development pressure and recreational use of the County's scenic and natural areas. The quality of these resources affects tourism, a major County industry.
16. Flooding and landslides are natural events posing hazards to existing structures and may be compounded by further development. There are approximately 330 acres of landslides and 935 acres of floodplain in northwest unincorporated urban Clackamas County.
17. Inappropriate hillside development can increase runoff, erosion, and public service costs. County road maintenance costs, for development on hillsides with greater than 15 percent slope, are about four times as great as maintenance costs for development on 0 percent to 8 percent slope.
18. Practically all energy is imported to the County. Although little can be done to affect price or supply, efficient use of energy can be accomplished once it enters the County, and auxiliary sources (e.g. solar, wind, geothermal, etc.) can be developed.
19. Nearly 40 percent of the County's energy consumption is wasted by inefficient insulation, improper ventilation, poorly designed appliances, etc. Energy loss due to inefficient land use patterns add to this total. Energy conservation strengthens the economy by preventing job loss during shortages, reducing demands on natural resources, and providing time to develop new or more efficient sources.
20. Solar and wind energy are both essentially unlimited in their supply and pose few environmental problems. If more actively promoted, they could become important auxiliary energy sources in Clackamas County. Solar energy can make an immediate contribution for heating and cooling individual buildings.
21. The Metropolitan Service District has established a solid waste transfer station and recycling center in Oregon City. It, and a similar station near Sandy, are collection points for solid waste before the nonrecycled material is trucked to the landfill.
22. Initial exploration near Mt. Hood indicates a potential for geothermal energy. Heat from the earth could be an important contributor to the total energy requirements of the Portland metropolitan area in the next 10 to 20 years.

## **WATER RESOURCES**

The value of Clackamas County's water resources is immeasurable. Rivers, lakes, farm ponds,

marshes, streams, and groundwater provide for domestic supply, recreation, wildlife habitat, drainage control, and many aesthetic benefits.

To protect our water resources, the following goals and policies address rivers and stream corridors in general, five individual river corridors, wetlands, and groundwater.

## **GOALS**

- Maintain an adequate amount of surface water and maintain and improve water quality to insure its continued use for domestic water supply, aquatic habitat, and recreation.
- Minimize erosion and hazards to life or private and public property.
- Maintain or improve the quality and quantity of groundwater.
- Maintain or improve the quality of rivers and streams.
- Protect and enhance wetlands as a valuable source of groundwater recharge, wildlife habitat, and stormwater drainage control.

## **POLICIES**

### **River and Stream Corridors**

- 1.0 Maintain rivers and streams in their natural state to the maximum practicable extent through sound water and land management practices. Consideration shall be given to natural, scenic, historic, economic, cultural, and recreational qualities of the rivers and adjacent lands.
- 2.0 Apply erosion and sediment reduction practices in all river basins to assist in maintaining water quality. Existing riparian vegetation along streams and river banks should be retained to provide fisheries and wildlife habitat, minimize erosion and scouring, retard water velocities, and suppress water temperatures.
- 3.0 Require preservation of a buffer or filter strip of natural vegetation along all river and stream banks as shown on the adopted Water Protection Rules Classification Maps (WPRC), the depth of which will be dependent on the proposed use or development, width of river or stream, steepness of terrain, type of soil, existing vegetation, and other contributing factors, but will not exceed 150 feet. River and stream corridor crossings shall be permitted provided they do not interfere with fish movement. Commercial forest activities and harvesting practices shall provide for vegetation buffers and the intended shading, soil stabilizing, and water filtering effects as required by the Oregon Forest Practices Act and administered by the State Department of Forestry. Tree cutting activities associated with river or stream enhancement projects approved by the Oregon Department of Fish and Wildlife are exempt from this policy.

- 4.0 Encourage establishment and maintenance of adequate minimum flow standards in all streams to insure a productive fish habitat and to protect aquatic life and scenic qualities. As new data become available, and the Department of Water Resources Commission establishes minimum stream flows, such information shall be incorporated into the County planning process.
- 5.0 Require to the most reasonable extent possible the use of nonstructural methods of bank stabilization in areas experiencing accelerated soil loss. Require that bank stabilization not degrade fish habitat and not accelerate erosion in other sections of the river or stream.
- 6.0 Allow diversion or impoundment of stream courses if fisheries, wildlife, water quality, and flow will not be adversely affected. If the action is taken for fish or wildlife habitat enhancement, the action shall be approved by the applicable federal, state or local agencies having jurisdiction.
  - 6.1 Require new dams or other impoundments, or major modifications to existing dams or impoundments, to demonstrate that anadromous and resident fish will not be adversely affected by the installation of such works. The methodology for such determination shall be developed by the County in conjunction with affected federal and state agencies, including, but not limited to, the U.S. Department of Fish and Wildlife, the Oregon Department of Environmental Quality and Environmental Quality Commission, and the Oregon Department of Fish and Wildlife.
  - 6.2 Require all new dam and impoundment projects to incorporate designs which assist to the maximum extent practicable the restoration, expansion and monitoring of anadromous fish populations, as determined by the County in the development of a methodology with the agencies listed in Policy 6.1, above.
- 7.0 Allow low head hydroelectric dam facilities that do not adversely impact fisheries and water quality.
  - 7.1 Require new dams or other impoundments, or major modifications to existing dams or other existing impoundments, to demonstrate pursuant to current accepted methodology that anadromous and resident fish will not be adversely impacted as determined by the Oregon Department of Fish and Wildlife.
  - 7.2 Require all new dam and impoundment construction incorporate designs which assist to the maximum extent practical restoration, expansion and monitoring of anadromous fish populations as determined by the Oregon Department of Fish and Wildlife and U.S. Fish and Wildlife Services.
- 8.0 Prohibit subsurface sewage disposal field construction within 100 feet of any watercourse. Lots or parcels legally created prior to May 1, 1973 may be approved when consistent with all the provisions of OAR 340, Division 71 as determined by the County Soils staff.

- 9.0 Decisions regarding developments in Principal River Conservation Areas or Stream Conservation Areas shall be consistent with the applicable Economic, Social, Environmental and Energy (ESEE) analyses for the watershed.
- 10.0 Establish water-based recreational areas for activities such as swimming, fishing, and canoeing that are free from conflicts with speed boating and water skiing.

## **Principal River Conservation Areas**

- 11.0 Designate Principal River Conservation Areas along the corridors of the Clackamas River, Sandy/Salmon Rivers, Molalla/Pudding Rivers, Tualatin River, Willamette River, Roaring River, and Zig Zag River as shown on Map III-2. The corridors include those rivers identified by the Omnibus Oregon Wild and Scenic Rivers Act (1988), and the State Scenic Rivers Program. The corridor width will be one-quarter mile from mean high water level on each side, except along the Willamette River, where the width is defined by the Willamette River Greenway boundaries, urban and rural.
  - 11.1 Coordinate with regional, state and federal regulatory agencies to provide a common management direction and permit review procedures for the designated river corridors. This includes reliance on the Oregon Forest Practices Act for contemplated forest management activities.
  - 11.2 Manage development in all Principal River Conservation Areas according to the following siting performance criteria:
    - a. Maintain vegetative fringe areas along the river free of structures, grading and tree cutting activities (see Policy 3.0). Diseased trees or those in danger of falling may be removed.
    - b. Minimize erosion and sedimentation through drainage control techniques, revegetation of cleared/disturbed areas, phasing of vegetation removal, closure of unused roads, and discouraging off-road vehicles.
    - c. Limit residential structure height to 35 feet and use a vegetative fringe to screen from the river primary and accessory structures.
    - d. Encourage subdued substructure color or tones to blend with surroundings and adjacent features.
    - e. Screen commercial/industrial structures (except water-dependent or water-related uses), parking and/or loading, and storage areas from view from the river, and orient signs away from the river.



- 11.3 Require a minimum setback of not less than 100 feet or more than 150 feet from mean high water level for all structures, except water-dependent uses. The actual setback shall be based on the site criteria stipulated in Policy 3.0. Residential lots of record and residential minor land partitions unable to meet this requirement shall be exempt from the minimum setback standard. However, all River Areas siting criteria and other provisions of this Plan shall be met. Requirements of the State Scenic Waterways Act and Willamette River Greenway must be met on the applicable reaches of the Clackamas, Sandy, and Willamette Rivers.
- 11.4 Encourage new public access points to minimize trespass and vandalism on private property.
- 11.5 Mining of aggregate within Principal River Conservation Areas shall only be allowed upon demonstration the site is significant, has been reviewed pursuant to the Goal 5 process and procedures, and when demonstrated such uses shall not adversely impact water quantity or quality. Under no circumstances shall mining or other development activities associated with the use occur within one hundred fifty (150) feet of the mean high water line of the river.
  - a. The Canby Sand and gravel site, identified in Board order 95-47, commenced the Goal 5 process in 1992 and has been designated as a significant Goal 5 aggregate site but has not completed the ESEE stage of the process. This site has been found to have significant aggregate and fish habitat. The County has delayed the decision to protect these Goal 5 resources until a concurrent examination of these resources is performed pursuant to the ESEE analysis in OAR 660, Division 16.

## **Stream Conservation Areas**

- 12.0 Designate stream conservation areas along the corridors of fish-bearing streams based on Water Protection Rule Classification (WPRC) Maps created through the cooperative efforts of the Oregon Department of Forestry (DOF) and Oregon Department of Fish and Wildlife (ODFW) pursuant to OAR 629-635-000. Establish and manage conservation corridors based upon the following performance criteria:
  - 12.1 Large stream conservation areas: A minimum one hundred (100) feet from the mean high water line shall be designated along all streams described as fish-bearing streams (Type F) with average annual flows of ten (10) cubic feet per second or greater as shown on WPRC maps.

- 12.2 Medium stream conservation areas: A minimum seventy (70) feet from the mean high water line shall be designated along all streams described as fish-bearing streams (Type F) with average annual flows greater than two (2) cubic feet per second and less than ten (10) cubic feet per second or greater as shown on WPRC maps.
- 12.3 Small stream conservation areas: A minimum fifty (50) feet from the mean high water line shall be designated along all streams described as fish-bearing streams (Type F) with average annual flows less than two (2) cubic feet per second as shown on WPRC maps.
- 12.4 Manage development and establish minimum setbacks from watercourses. Allow stream corridor crossings provided they do not interfere with fish movement.
- 12.5 Maintain vegetative fringe areas along fish bearing streams free of structures.
- 12.6 Establish residential lots of record exemption provisions to allow development on properties physically unable to satisfy the minimum setback requirements.
- 12.7 Manage stream conservation areas to maintain and enhance water flows from springs, seeps, side channels and other sources.

#### 13.0 Sandy/Zig Zag/Salmon Rivers Design Plan and Policies

- 13.1 Implement the design plan for the Sandy/Salmon Rivers according to Map III-1b, which illustrates uses. Management activities and land classifications shown on the map are consistent with land use policies and designations in the Land Use Chapter. Official maps showing precise boundaries and sites (scale 1"=2000') are on file at the Clackamas County Department of Transportation and Development.
- 13.2 Limit development and intense recreation activities on those sites designated Protection Resource Areas on the Design Plan Map. Islands shall not be developed.
- 13.3 Apply policies contained in the adopted Mt. Hood Community Plan to the Sandy/Salmon Rivers.
- 13.4 Prohibit water appropriations or other withdrawals from the Salmon River unless it is demonstrated through current accepted methodology that anadromous and resident fish habitat will not be adversely impacted as determined by the Oregon Department of Fish and Wildlife.

#### 14.0 Clackamas River Design Plan and Policies

- 14.1 Implement the design plan for the Clackamas River according to Map III-1a, which illustrates uses. Management activities and land classifications shown on the map are consistent with land use policies and designations in the Land Use Chapter. Official maps showing precise boundaries and sites (scale 1"=2000') are on file at the Clackamas County Department of Transportation and Development.

- 14.2 Cooperate with the Oregon Department of Transportation (ODOT) in development of a coordinated management scheme for the scenic waterway section.
- 14.3 Limit development and intense recreational activities on those sites/areas designated Protection Resource Area on the Design Plan Map. Islands shall not be developed.
- 14.4 Develop, with the Oregon State Parks and Recreation Department, a Clackamas River Scenic Waterway Recreation Guide for river users that shows landmarks, access/egress points, and scenic waterway rules.
- 14.5 Study, for potential inclusion in the State Scenic Waterway Program, a Clackamas River "Gorge" from Estacada to Faraday Dam.
- 14.6 Encourage the posting of hazardous water signs in reaches of the river where safety hazards exist.

#### 15.0 Molalla River Design Plan and Policies

- 15.1 Implement the design plan for the Molalla/Pudding Rivers according to Map III-1c, which illustrates uses. Management activities and land classifications shown on the map are consistent with land use policies and designations in the Land Use Chapter. Official maps showing precise boundaries and sites (scale 1"=2000') are on file in the Clackamas County Department of Transportation and Development.
- 15.2 Encourage new public access points to minimize traffic hazards, trespass, vandalism, and crop disturbance. Clackamas County shall evaluate public access sites shown by the Oregon Department of Fish and Wildlife as indicated in the Pudding River Basin Master Plan for Angler Access and Associated Recreational Uses, 1969.
- 15.3 Limit development and intense recreational activities on those sites designated Protection Resource Areas on the Design Plan Map.

#### 16.0 Tualatin River Design Plan and Policies

- 16.1 Implement the design plan for the Tualatin River according to Map III-1d, which illustrates uses. Management activities and land classifications shown on the map are consistent with land use policies and designations in the Land Use Chapter. Official maps showing boundaries and sites (scale 1"=2000') are on file at the Clackamas County Department of Transportation and Development.
- 16.2 Encourage new public access points to minimize trespass and vandalism on private property.
- 16.3 Identify public access points above River Mile 3.4 (Lake Oswego Diversion Dam) and discourage boating activities which create bank erosion due to wave action.
- 16.4 Cooperate with the State Water Resources Department and other appropriate agencies to implement the Willamette River Basin Plan.

## 17.0 Willamette River Design Plan and Policies

- 17.1 Implement the design plan for the Willamette River according to Map III-1e, which illustrates uses. Management activities and land classifications shown on the map are consistent with land use policies and designations in the Land Use Chapter. Official maps showing precise boundaries and sites (scale 1"=2000') are on file at the Clackamas County Department of Transportation and Development.
- 17.2 Support regulation of recreational activities in the rural portion of the Willamette Greenway to minimize conflicts between water-based recreational uses, manage the intensity of recreational uses, and buffer bankside uses from water-borne recreational activities including recreational noise levels. The County shall develop a joint land management program with the Oregon State Parks and Recreation Department for all County- and state-owned lands in the rural greenway.
- 17.3 Provide for recreational activities in the urban portion of the Willamette Greenway through a jointly developed management program with all incorporated cities. At a minimum, public safety, recreational use intensity, and recreational noise need to be addressed.
- 17.4 Exempt specified modifications of single family residences from the existing Greenway Conditional Use procedure. For all other uses, change of use, modifications, and intensifications, require Willamette River Greenway Conditional Use approval and compliance with provisions of the design plan and Policies 10.2 and 10.3 of this chapter.
- 17.5 Prohibit private noncommercial docks and moorages in limited-use rural portions of the Greenway to protect the natural river character.
- 17.6 Allow private noncommercial docks and moorages in urban and multiple-use rural portions of the Greenway through the Greenway Conditional Use provisions of the Zoning Ordinance which require an extraordinary exception in the rural portion.
- 17.7 Limit development and intense recreational activities on sites designated Protection Resource Areas on the Design Plan Map. Islands shall not be developed.
- 17.8 Encourage new public access points to minimize trespass and vandalism on private property. Emphasis shall be directed to the area from Gladstone to Milwaukie.

- 18.0 Cooperate with the State Water Resources Department and other appropriate agencies to implement the Willamette River Basin Plan.

**Map III-1a**(Online version not available)

**Map III-1b**(Online version not available)

**Map III-1c**(Online version not available)

**Map III-1d**(Online version not available)

**Map III-1e**(Online version not available)

## **Wetlands**

- 19.0 Prevent disturbance of natural wetlands (marshes, swamps, bogs) associated with river and stream corridors or otherwise identified as Open Space on the Urban Land Use Map. Adjacent development shall not substantially alter normal levels or rates of runoff into and from wetlands. Site analysis and review procedures specified in the Open Space and Floodplains section of the Land Use chapter shall apply. (See Wildlife Habitats and Distinctive Resource Areas of this chapter).
  - 19.1 Develop guidelines for compatible uses on wetlands and their peripheries, and for wetland restoration. Table III-1 shall be used as a guide. Wetland restoration decisions shall be made on a site-specific basis.
  - 19.2 The County recognizes the U.S. Department of the Interior, Fish and Wildlife Service National Wetlands Inventory as a resource document for wetland identification in the County exclusive of the Northeast Urban Area. For the Northeast Urban Area, refer to Section 17.4. Individual site development of inventoried lands will be reviewed for compliance with wetlands policies. (1-4-96)
  - 19.3 The County has insufficient information as to location, quality, and quantity of wetland resources outside of the Mt. Hood urban area and the Urban Growth Boundary to develop a management program at this time. If such information becomes available, the County shall evaluate wetland resources pursuant to Goal 5 and OAR Chapter 660, Division 16, prior to the next Periodic Review. In the interim, the County will review all conditional use, subdivision, and zone change applications and commercial and industrial development proposals to assure consistency with Section 1000 of the Zoning and Development Ordinance and goals and policies of Chapter 3 of the Plan.
  - 19.4 The following policies apply to the Northeast Urban Area (as shown on Map IV-6, the North Urban Area Land Use Plan map):

- a. The County recognizes the 1994 Clackamas County Wetland Inventory (CCWI) maps, approved by the Oregon Division of State Lands (DSL), as the Goal 5 inventory of wetland resources as required by OAR Chapter 660, Division 16, and adopts it by reference to the Comprehensive Plan. A background report documents the environmental, social, energy, and economic (ESEE) analysis and decision for significant wetland sites. (1-4-96)
- b. Wetlands found not to be significant are mapped on the CCWI maps for DSL notification purposes. The County found these sites to be of such low quality it recommends fully allowing conflicting uses. (1-4-96)
- c. Potential wetlands and any new sites discovered after completion of the inventory are considered "1B" sites (OAR 660-16-000(5b)). (1-4-96)
- d. Based on the ESEE analysis of the wetland and impact area (OAR 660-16-000(2)), conservation wetlands are protected by a buffer area as shown on the Conservation Wetland Zoning maps. (1-4-96)
- e. Compensatory mitigation sites created as a result of conflicting uses allowed on conservation wetlands shall have a 25-foot buffer of natural vegetation around the perimeter. Mitigation sites and the 25-foot buffer shall be planned and zoned conservation wetlands. These sites shall not interfere with future transportation and public facilities identified in the County's Comprehensive Plan and Capital Improvement Plan or with other local jurisdiction's master plans and associated capital improvement plans. When considering enhancement of conservation wetlands for compensatory mitigation, the Oregon Division of State Lands and, if required, the Corps of Engineers shall coordinate with the County to verify a site's potential for enhancement. (1-4-96)

## Groundwater

- 20.0 Cooperate with appropriate state and federal agencies to inventory and catalog groundwater resources and their uses to assess groundwater potentials and establish management criteria and priorities to protect and maintain this natural asset.
- 21.0 Investigate the feasibility of maintaining or subsidizing a groundwater testing service, available to the County's citizens (upon request for a nominal fee) to assist in assuring adequate well water quality.
- 22.0 Cooperate in the monitoring of groundwater levels and quality with the Oregon Water Resources Department.
- 23.0 Protect groundwater supplies in rural, agricultural, and forest areas through large lot zoning (see Land Use Chapter).



## Table III-1 Compatibility Criteria for Wildlife Sensitive Areas

### **AGRICULTURE**

Preliminary estimates of the County's farm income show that it added over five hundred million dollars to the State's economy in 1987. The County ranked second among Oregon counties for total farm income according to the Oregon State University Extension Service. Production of nursery stock, Christmas trees, poultry, and vegetables have increased in recent years, along with traditional County crops of berries, tree fruits, field crops, and livestock.

In addition to its economic importance, farm land is valuable open space and provides urban buffers, visual resources, and wildlife habitats.

For additional consideration of agricultural lands, see the Land Use Chapter.

### **GOALS**

- Preserve agricultural lands.
- Maintain the agricultural economic base in Clackamas County and the State of Oregon.
- Increase agricultural markets, income and employment by creating conditions that further the growth and expansion of agriculture and attract agriculturally related industries.
- Maintain and improve the quality of air, water, and land resources.
- Conserve scenic areas, open space and wildlife habitats.

### **POLICIES**

- 1.0 Recognize agricultural areas through appropriate zoning. All agricultural areas shall continue unencumbered by activities/land uses unrelated to agriculture in order to insure productive farm land. Specific policies relating to land use in agricultural areas are found in the Land Use Chapter of this Plan.
- 2.0 Investigate the feasibility of irrigation projects in cooperation with the Oregon State University Extension Service, Bureau of Reclamation, Soil Conservation Service, and other state and federal agencies.
- 3.0 Encourage cooperative agricultural projects in support of small agricultural businesses within the County, e.g., establishment of a receiving/shipping station for fresh produce and a farmers market for the direct exchange of local farm products between growers and the public to benefit the economic viability of agricultural businesses.

- 4.0 Encourage food processing industries and services that support agriculture to locate in the County.
- 5.0 Cooperate with the Oregon State University Extension Service to promote education and dissemination of information on agricultural crops, methods and technology, special tax assessment programs, new farming techniques, and commercial agriculture opportunities for new farmers.
- 6.0 Encourage the appropriate agencies to assess agriculture's labor force problems and development of a program to alleviate these problems (e.g., provision of second job opportunities in rural centers).

## **FORESTS**

The forest resources of Clackamas County, primarily Douglas Fir, Western Hemlock and other coniferous trees, have provided thousands of jobs for many decades both in Clackamas County and the surrounding region. Timber volume is temporarily declining in the County as the old growth stands are replaced by younger forests. Sound management practices and coordination are needed by all forest owners.

Increased demand for outdoor recreation from a growing County and regional population places renewed emphasis on the need for balanced use and management of forest resources.

For additional consideration of forest lands, see the Land Use Chapter.

### **GOALS**

- Conserve and protect forest lands.
- Provide continued employment in the forest products industry.
- Protect, maintain, and conserve open space, environmentally sensitive areas, wildlife habitat, scenic corridors, recreational uses, and urban buffers.
- Maintain and improve the quality of air, water and land resources.
- Create conditions that will maintain or further the growth of the wood products industry.
- Support principles and implementation of the Oregon Forest Practices Act.

### **POLICIES**

- 1.0 Protect from conflicting land uses productive forest lands and related forested areas which are environmentally sensitive or otherwise require protection (watersheds, areas subject to erosion, landslides, etc.) (see Land Use Chapter). Recognize forest producing areas through appropriate zoning.



- 1.1 Insure that forest productivity data, based on cubic foot site classes, is current and revised periodically to reflect changes in commercial forest resources.
- 2.0 Encourage forest related industries, specifically firms doing secondary wood processing or those which use wood products now underutilized or considered waste--hardwoods, slash materials, etc.
- 3.0 Continue to support and coordinate programs of the Oregon State University Extension Service and the State Forestry Department to promote more intensive management of small woodlot forest lands, including the education and dissemination of information on timber management methods, special tax assessment incentives, and programs to aid in the marketing of small timber sales.
  - 3.1 Encourage ready availability of regeneration stock, greater opportunity for equipment-sharing co-ops, and joint timber harvest programs to assist smaller woodlot and timber tract owners.
- 4.0 Encourage coordinated management of major forest lands by cooperation with the U. S. Forest Service, the Bureau of Land Management, the Oregon State Board of Forestry, and the private industry sector.
- 5.0 Cooperate and coordinate with appropriate state and federal agencies to insure forest management practices that recognize the multiple resource values of forest lands. Impacts on environmentally sensitive areas such as slide and erosion hazard areas, sensitive fish and wildlife habitat, scenic corridors, unique natural and/or cultural features, etc, shall be minimized.
  - 5.1 Encourage forest owners to restrict the use of off-road vehicles to specified areas where environmental damage and conflicts with other forest uses will be minimized.
  - 5.2 Encourage public agencies to acquire through purchase, exchange, or easement, scenic areas now in private ownership in order to insure their preservation.
  - 5.3 Encourage strengthening of the State Forest Practices Act to include special consideration of scenic values in methods of harvesting, in addition to prompt clean up and regeneration (ref. State Forest Practices Act, Section 629-24-541 (h), 1978) and ORS 527.710.
  - 5.4 Support visual management techniques on federal lands within the County, e. g., alternating smaller harvests along scenic corridors to reduce large-scale impacts. Develop incentives to increase the management of scenic/watershed resources on privately owned forest lands, e.g., tax incentives for modifying harvest techniques in designated scenic corridors.
- 6.0 Initiate a tree conservation and planting program for the northwest urban area to preserve urban forest areas and promote tree landscapes.

- 6.1 Initiate an inventory of the urban region to identify and map the location of existing forested areas, and, with the cooperation of community organizations and other interested groups, identify the location of tree specimens worthy of protection.
  - 6.2 Develop tree conservation standards in conjunction with design review, grading, and subdivision ordinances to minimize and regulate removal of trees and vegetation on undeveloped lands within the urban area.
  - 6.3 Develop an urban street tree planting and maintenance program that focuses on specified arterials (e.g., boulevards) and designated neighborhoods. This should be done in cooperation with businesses and community groups.
  - 6.4 Establish a special review process for commercial timber harvesting within the urban area. Following receipt of a notification to harvest and/or operate motorized equipment by the State Department of Forestry, the County Department of Transportation and Development shall meet with representatives from State Forestry and OSU Extension Service. Visual and neighborhood impacts, alternative harvest plans, and revegetation techniques shall be addressed, and a recommendation made by the governing body and State Department of Forestry within fifteen (15) days.
- 7.0 Adopt and implement an updated Forest Management Plan for County-owned forest land, emphasizing consolidation/exchange of scattered County holdings to facilitate more intensive programs for timber management, park development and acquisition, and protection of any recognized watershed, recreation, or scenic values.

## **MINERAL AND AGGREGATE RESOURCES**

Clackamas County is rich in mineral and aggregate resources, the conservation of which is an economic necessity to our society. Haul distances and development, however, have limited many options for use of these resources. To maintain the availability of these valuable resources, areas containing significant resources must be protected from the potential limitations on their use caused by encroachment of conflicting uses.

Mining and processing these resources generates noise, truck traffic, dust and other impacts that can be a problem where there are conflicting uses like nearby houses or a school. Conflicting uses can reduce the economic viability of the resource site. Regulating some conflicting uses is necessary to allow the use of significant mineral and aggregate resources to some desired extent. Development standards are required of mining and processing to reduce the adverse effects these activities may have on surrounding land uses. The county requires reclamation of the mined land for use consistent with the comprehensive plan.

## **GOALS**

Protect and ensure the appropriate use of mineral and aggregate resources while minimizing adverse effects of mining and processing on surrounding land uses.

## **POLICIES**

- 1.0 To identify and protect mineral and aggregate resources, the county will comply with Statewide Planning Goal 5 and administrative rules adopted by LCDC interpreting the Goal 5 planning process.
- 2.0 The county will maintain an inventory of mineral and aggregate resources. The inventory comprises three parts.
  - a. A list of sites the county has determined are not significant or not in its planning jurisdiction. These sites are "other sites."
  - b. A list of sites for which the county lacks specific information about the location, quality and quantity of the possible resource. These sites are "potential sites."
  - c. A list of sites the county has determined are significant Goal 5 resources. These sites are "significant sites".
- 3.0 Where the county has completed the Goal 5 planning process and developed a program for protection of a significant mineral or aggregate site, the county shall use a Mineral and Aggregate Overlay District. The county may use other tools to carry out its program to achieve the Goal. If any aspect of the overlay requires interpretation, the county shall rely on direction in the site-specific program in the comprehensive plan.
- 4.0 The county shall use the site plan review process for the Mineral and Aggregate Overlay District solely for determining whether an application to mine complies with the site-specific program developed through the county's Goal 5 analysis or complies with other standards of the Zoning and Development Ordinance.
- 5.0 Applicants may seek land use permits to mine mineral or aggregate sites not zoned with the Mineral and Aggregate Overlay District. Subject to applicable laws, on land zoned exclusive farm use, the county may only issue a permit if an aggregate site is on the county inventory of mineral and aggregate sites. The requirement that a site be on the comprehensive plan inventory shall not apply to sites zoned other than for exclusive farm use.
- 6.0 Before 2005, the county will review its list of potential sites to determine if information exists to judge the significance of these sites. If the county finds sites on the list of potential sites significant resources, it shall complete the Goal 5 planning process.
- 7.0 Before 1999, the county will complete its analysis for the Anderson Quarry site, the Canby Sandy and Gravel site, and the Oregon Asphalt Paving Company site. The county will follow administrative rules interpreting and implementing Statewide Planning Goal 5.

- 8.0 The county will coordinate its planning and permitting processes for mineral and aggregate resources with the Oregon Department of Geologic and Mineral Industries (DOGAMI) and Oregon Department of State Lands (DSL).
- a. To assist state agency permit decisions, the county will identify post-mining land uses as part of any program to protect a significant mineral or aggregate resource site.
  - b. The county recognizes the jurisdiction of DOGAMI for the purpose of mined land reclamation pursuant to ORS 517.750 to 517.900 and the rules adopted thereunder.
  - c. Unless specifically authorized by ORS 517.830(3), DOGAMI should delay its final decision on approval of a reclamation plan and issuance of an operating permit, as those terms are defined by statute and rule, until all issues concerning local land use are decided by the county.
  - d. No mining or processing activity, as defined by the Zoning and Development Ordinance, shall begin until the county has issued a final land use decision and the permittee provides copies of an approved reclamation plan and operating permit issued by DOGAMI or DSL.
- 9.0 The county shall resolve issues relating to mine truck use of public roads as directed in county transportation plans and policies. The county reserves the right to make agreements with aggregate operators about the use of county roads independent from its decisions in Goal 5 analysis.

**TABLE III-2**

**\*INVENTORY OF MINERAL AND AGGREGATE RESOURCE SITES**

**SIGNIFICANT SITES**

Anderson Quarry

Canby Sand & Gravel Site

Oregon Asphaltic Paving Company Site

River Island Sand & Gravel Site

Wilmes Sand & Gravel Site

Dhooghe Road Quarry Site

Estacada Rock Products Site

**POTENTIAL SITES**

17	65	Francis Welch Silica	Ellis Deposit	Port Blakely Tree Farm
21-22	87	Terrill Silica Deposit	Scotts Mills Locality	Hein-Morris Property
29	89	Petes Mtn.	Dibble Deposit	Halton Company Property

32	90	Kroaker Prospect	Johnson & Laird	Alford-Goheen Property
35	114-116	Bauxite Deposit	Molalla High Alumina Clay	Robert Poole Property
37	227	Clear Creek	Avison Lumber	Western Pacific Construction
43	229	North Fork Claims	Forman Property	Wilsonville Concrete
45	231	Perry Bond Ranch	Molalla Redi-Mix	Molalla River Group
61-63		Molalla Clay	Patton Stone Quarry	Ogle Mountain Mine

**OTHER SITES**

1-2	84	Crown Zellerbach	Florence Silvers	Meadowbrook
4-13	86	Cavenham Forest Ind	Barton Sand & Gravel	180 Pit
14-15	88	Jim Hartman	Columbia Continental	Marquam Limestone Quarry
26	92-100	Doug Sandy	Brightwood Quarry	Beaver Creek
30-31	102-113	Jim Elting	Norman Strabein	South Fork 9AC
33-34	117	Jack Parker	Oregon State Hwy Division 1	
38-42	119-161	Cassinelli	Quarry 3	
44	166-226	Clack Sand & Gravel	South Eagle Pit	
47	228	OR State Hwy Div 2	Arrah Wanna Co	
64	23	Quick Srvc Sand & Gravel	John Jorgeson	
66-82	232-460	George Herbst	Arthur Snyder	

\*Resource sites identified by number from the State of Oregon Department of Geology and Mineral Industries (DOGAMI) Special Paper 3 "Rock Material Resources of Clackamas, Columbia, Multnomah, and Washington Counties, Oregon;" by number or name from the DOGAMI "Mineral Information Layer For Oregon By County;" by name from Conditional Uses for Surface Mining; and by name from H.G. Schlicker & Associates, Inc. Report for the Anderson Quarry, Jerry Lewis & Associates Report for Canby Sand & Gravel Site and Oregon Asphaltic Paving Company Site, Cascade Earth Sciences, LTD. Report for River Island Sand & Gravel Site, Dhooghe Road Quarry Site and Estacada Rock Products Site, and Reports Boatwright Engineering, Inc., Northwest Testing Laboratories, Inc. and Carlson Testing, Inc. for Wilmes Sand & Gravel Site

**WILDLIFE HABITATS AND DISTINCTIVE RESOURCE AREAS**

Fish and wildlife species provide an essential "background" to our daily lives and must have the environments necessary to provide food, cover, and water in order to survive.

Clackamas County's well-known distinctive resources include mountains, rivers and lakes, forest lands, agricultural lands, unique natural vegetation, geological formations, and other natural features.

The popularity of such places as the Mt. Hood Highway Corridor, the Clackamas River Corridor, and the Willamette River is testimony to the quality of scenic resources available to the Portland metropolitan area and Clackamas County.

Visual corridors along scenic roadways, rivers, and major arterials, the prominent slopes in the urban areas, and other distinctive areas are landscapes highly sensitive to alteration and development.

## **GOALS**

- Maintain and improve fisheries and wildlife habitat to enhance opportunities for consumptive and nonconsumptive uses.
- Retain and enhance wetlands and riparian habitat to provide areas for fisheries and wildlife and to promote species diversity, bank stabilization, and stormwater runoff control.
- Protect the scenic landscapes and natural beauty of Clackamas County.
- Provide an urban environment where trees and landscape plantings abound and where significant features of the natural landscape are retained.
- Preserve and protect areas of unique and distinctive wildlife habitats, native vegetation, and geologic formations.

## **POLICIES**

- 1.0 Cooperate with wildlife management agencies to enhance fish and wildlife opportunities and populations. This includes cooperation with the Oregon Department of Fish and Wildlife in its habitat improvement practices and programs and Wild Fish Management Policy, and with the U.S. Fish and Wildlife Service to inventory and classify wetland environments.
- 2.0 Protect native plant species, wetlands, and streambank vegetation on County-managed public lands.
- 3.0 Manage roadside spraying programs to minimize adverse water quality, and fish and wildlife impacts.
- 4.0 Support preferential taxation methods to encourage retention of riparian habitat, brushy fencerows, and wetlands on private lands.

- 5.0 Minimize adverse wildlife impacts in sensitive habitat areas, including deer and elk winter range below 3,000 feet elevation, riparian areas, and wetlands.
- 6.0 Encourage closure of temporary roads outside the urban area that are no longer necessary for fire protection or logging activities to reduce wildlife harassment during the critical seasons of winter and spring. Countywide, all new roads crossing streams containing anadromous fish shall provide fish passage facilities acceptable to the Oregon Department of Fish and Wildlife.
- 7.0 Expand, in conjunction with the cities and the County's community planning organizations, the detailed inventory of unique natural and scenic areas, including a visual resource inventory and map showing areas of outstanding visual sensitivity as well as blighted areas.
- 8.0 Protect areas of high visual sensitivity and/or unique natural areas by requiring development review for any development which would substantially alter the existing landscape, as specified in the Land Use Chapter of the Plan. The purpose is to integrate development with natural features, minimizing any adverse impacts.
- 9.0 Improve scenic quality of areas impacted by urban blight, working toward the following objectives:
  - a. Regulation and/or removal of advertising billboards
  - b. Screening junkyards and other unsightly areas
  - c. Placing of utility lines underground
  - d. Requiring landscape buffers (berms, trees, etc.) between incompatible uses and in visually sensitive areas.
- 10.0 When natural resource activities (e.g., commercial timber harvesting) compete with retention of visual or unique/natural resources and values, the County shall coordinate with appropriate state and federal agencies to minimize significant adverse impacts. The County also will encourage the public acquisition of land through purchase or land exchange, or conservation easements in designated scenic corridors or vistas and unique/distinctive natural areas (see Map III-2).
- 11.0 Protect and conserve sensitive bird resources to avoid degradation of habitat by requiring development review for any development which could potentially result in adverse impacts to sensitive bird nesting and rearing areas. See maps III-3, Molalla State Park Great Blue Heron Rookery, and III-4, Stevens Great Blue Heron Rookery.
  - 11.1 Inventory and analyze, on a periodic basis, nesting and rearing areas of sensitive bird species pursuant to the Goal 5 and Oregon Administrative Review Rules 660, Division 16 provisions.
  - 11.2 Establish standards and procedures for evaluating development activities that affect sensitive bird habitat areas.

- 11.3 Cooperate and coordinate with wildlife management agencies to identify sensitive bird habitat areas and protect sensitive bird populations. This includes cooperation with the Oregon Department of Fish and Wildlife and the U.S. Department of Fish and Wildlife for inventorying habitat and reviewing development activities in habitat areas.

**Map III-2 Scenic and Distinctive Resource Areas (Online version not available)**



**[Map III-3 Molalla State Park Great Blue Heron Rookery](#)**



**[Map III-4 Stevens Great Blue Heron Rookery](#)**

## NATURAL HAZARDS

Policies for natural hazards protect County residents and prevent development in those areas with a potential for structural damage or destruction.

### GOALS

- Protect life, property, private and public investments from natural or man-induced geologic and/or hydrologic hazards.
- Incorporated hazardous areas within open space networks encouraging these areas to remain natural.

### POLICIES

- 1.0 Recognize floodplains as areas where high water presents hazards to life and property, and provide protection in flood hazard areas as stated in the Land Use Chapter.
- 2.0 Prevent development (structures, roads, cuts and fills) of landslide areas (active landslides, slumps and planar slides as defined and mapped by the Oregon Department of Geology and Mineral Industries, DOGAMI) to avoid substantial threats to life and property except as modified by 2.1. Vegetative cover shall be maintained for stability purposes and diversion of stormwater into these areas shall be prohibited.
  - 2.1 Allow mitigation of identified landslide hazards based on established and proven engineering techniques, and related directly to an approved specific plan that avoids adverse impacts (see Land Use Chapter). Developers should be made aware of liability in such cases for protection of private and public properties from damage of any kind.



- 3.0 Apply appropriate safeguards to development on organic/compressible soils, high shrink-swell soils and wet soils with high water table (as defined in DOGAMI Bulletin No. 99) to minimize threats to life, private and public structures/facilities.
- 4.0 Insure that data on the severity and area of natural hazards is current and revised periodically to reflect any additional information.
- 5.0 Continue cooperation with DOGAMI in the delineation of earth faults. As the information becomes available, policies governing the location of structures and land uses shall be adopted as a part of the Plan. The County Emergency Operations Plan should be reviewed and modified as necessary to prepare for volcanic eruptions, earthquakes, and other natural hazards.
- 6.0 Regulate the use of hillsides and steep slope hazard areas in order to direct urban area development toward more suitable lands. As slope and other adverse conditions increase, the need to regulate development also increased in order to reduce major sources of erosion and storm runoff, and public costs of maintaining development.
  - 6.1 Require soils and engineering geologic studies in developments proposed on slopes of 20 percent or greater. More detailed surface and subsurface investigations shall be warranted if indicated by engineering and geologic studies to sufficiently describe existing conditions (e.g., soils, vegetation, geologic formations, drainage patterns) and where stability may be lessened by proposed grading/filling or land clearing. DOGAMI Bulletin No. 99 provides general geologic data.
  - 6.2 Establish any additional standards or criteria including the density for development on hillside slope and hazard areas, as stated in the Land Use Chapter. Density Transfers shall be encouraged to take advantage of natural topographic features such as benches or terraces. Joint hillside development projects shall be encouraged.
  - 6.3 Establish a consistent, uniform method for calculating slope on a site specific basis in conjunction with zoning and subdivision ordinances.

## **ENERGY SOURCES AND CONSERVATION**

Virtually all energy used in Clackamas County is imported in one form or another from other counties, states, or in the case of petroleum and natural gas, foreign countries. There is very little the County can do to affect the supply or cost of imported energy; however, it is possible to develop supplemental energy sources, such as geothermal, solar and waste by products, and to use energy efficiently once it enters Clackamas County.

The importance of energy conservation cannot be overemphasized. Conscientious application of a broad energy conservation program to all sectors of the energy market -- homes, businesses, industry and transportation -- could significantly cut the historical energy growth rate and reduce long-term energy price increases. Programs such as home weatherization

produce immediate benefits due to reduced energy expenditures by the homeowner or renter, and the creation of new jobs.

## GOAL

Conserve energy and promote energy efficiency through source development, recycling, land use and circulation patterning, site planning, building design and public education.

## POLICIES

- 1.0 Cooperate with the state legislature and appropriate state and federal agencies (Public Utility Commission, Geology and Mineral Industries, Forest Service, etc.) in programs to encourage alternative energy source development. Such programs will focus on (a) geothermal resources in the Cascades; (b) single building solar and wind conversion technologies; and (c) energy recoverable from solid wastes.
  - 1.1 Support exploration, research and development of geothermal resources consistent with environmental protection policies of this Plan. The County also will cooperate in the development of any necessary transmission facilities designed to bring such energy to local industries and residences.
  - 1.2 Cooperate with the State Department of Energy to undertake and evaluate studies on the specific nature and potential of the County's wind and solar energy resources.
- 2.0 Initiate solid waste recycling programs to reduce dependence on nonrenewable resources.
  - 2.1 Work cooperatively with the Metropolitan Service District to develop a solid waste recycling program and refuse-derived fuel facility.
  - 2.2 Facilitate recycling of domestic, commercial and industrial waste materials through collection franchises and conveniently located collection depots.
- 3.0 Encourage energy-efficient land use and circulation patterns.
  - 3.1 Locate employment centers, shopping services, parks, recreational and cultural facilities, and medical/dental services near residential developments to minimize transportation, fully utilize urban services, and encourage neighborhood self-sufficiency.
  - 3.2 Provide for high density developments near transit and major employment/shopping centers.
  - 3.3 Develop an overall circulation system for the County which promotes transportation alternatives (transit, carpooling, bicycling, and foot travel) and improves traffic flow on major arterials (synchronized signals, vacating nonessential cross streets, access controls).

- 3.4 Design subdivisions, Planned Unit Developments, and multifamily, commercial and industrial developments to encourage the use of transit, bicycles, and pedestrian walkways (see Land Use and Transportation chapters).
- 3.5 Encourage bike lanes/sidewalks on collector streets. Bike/pedestrian paths should be developed through long blocks and between cul-de-sacs to improve neighborhood circulation.
- 4.0 Encourage energy efficiency through site planning of all residential subdivisions and multifamily, commercial, and industrial projects.
  - 4.1 Permit lot configurations within subdivisions and Planned Unit Developments to make maximum use of energy-saving features of the natural environment and minimize the effects of temperature extremes.
  - 4.2 Retain natural terrain features and vegetation where practical which create micro-climates conducive to energy conservation in subdivisions, Planned Unit Developments and multifamily, commercial, and industrial developments.
  - 4.3 Encourage planting of appropriate landscape materials to reduce solar impact in the summer, minimize winter heat loss and buffer against prevailing wind sources in Planned Unit Developments and multifamily, commercial and industrial developments.
  - 4.4 Orient structures to enhance potentials for both passive and active solar collection where practical.
  - 4.5 Allow low-density residential developments to include common-wall structures or attached dwellings.
  - 4.6 Allow flexibility in yard size, setbacks, and building height to permit efficient building orientation and shapes.
  - 4.7 Cluster structures to minimize road surfaces and utility networks and to provide the potential for common-wall construction or attached dwellings.
  - 4.8 Allow flexible road standards for more energy-efficient circulation within developments. Streets should be of such widths as to serve only necessary functions and minimize use of asphalt.
  - 4.9 Provide for adequate and convenient bicycle parking spaces in multifamily, commercial, and industrial developments.
  - 4.10 Revise parking standards to reflect the trend to smaller automobiles and use of transit. The integration and sharing of parking facilities within commercial/ industrial areas should be encouraged.
  - 4.11 Permit planting of street trees in new subdivisions and along designated arterials to minimize temperature extremes, favoring deciduous trees (sun in winter and shade in summer) over evergreens and ornamentals.
  - 4.12 Encourage large employment centers to provide priority parking spaces for carpools and vanpools, as well as incentives for increasing transit ridership.

- 4.13 Encourage eating facilities, day care facilities, and on-site recreational areas in large employment centers and large multifamily developments.
- 4.14 Provide incentives such as density bonuses for housing proposals demonstrating exceptional examples of energy-efficient site planning.
- 5.0 Encourage energy efficiency through building design and weatherization of existing structures.
  - 5.1 Encourage flexibility in building and zoning codes to permit energy-efficient building design, such as commonwall construction, solar collection and underground/earth-sheltered structures.
  - 5.2 Encourage architectural and design features which are conducive to energy efficiency and conservation, such as south facing windows, roof overhangs, awnings, double entry vestibules, storm windows, insulation, shutters, louvres, double glazed windows and draperies with thermal linings. Many of these same features also can be utilized in the weatherization of existing structures.
- 6.0 Cooperate with the cities, other agencies (e.g., educational) and energy purveyors (Portland General Electric, Northwest Natural Gas, etc.), in development of an education program to:
  - a. Publicize the importance of energy conservation and available weatherization programs.
  - b. Serve as a forum for addressing energy-related issues (e.g., recycling of domestic wastes, code weatherization of existing residences prior to sale, and need for a Countywide Energy Advisory Commission)
- 7.0 Continue implementation of the 1983 County Energy Management Plan for County activities and property, including assessment of vehicular policy and an energy audit of County buildings.

## **NOISE AND AIR QUALITY**

Noise and air quality affect our health, our economic interests, and our quality of life. High noise levels affect a person's mental and physical well being and ability to work. Poor air quality can be a health hazard, impair views of scenic vistas, and erode and degrade structures. Air quality management is a regional responsibility, while noise control is more local.

### **GOALS**

- Maintain an environment not disturbed by excessive levels of noise.
- Promote maintenance of an airshed in Clackamas County free from adverse effects on public health and welfare.

## **POLICIES**

### **Noise**

- 1.0 Cooperate with public agencies and the private sector to reduce noise, and continue to enforce the County noise ordinance.
- 2.0 Implement a procedure to minimize the impact of external noise on sensitive land uses.
  - 2.1 Require, through the review process, buffering of noise sensitive areas or uses where appropriate. For example, adjacent to arterials, expressways, freeways or heavily used rail lines, landscaped berms or other solid barriers may be required. Encourage setbacks and/or noise insulation in structures.
  - 2.2 Noise mitigation plans, subject to County approval, shall be required of significant new noise generating land uses adjacent to or impacting established noise sensitive properties.
  - 2.3 Construction or reconstruction of high volume arterials, expressways, or freeways in or near residential areas may require sound buffers as part of the road project.

### **Air Quality**

- 3.0 Cooperate with local, regional, state, and federal agencies and industry to maintain and/or improve local air quality.

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 4

### LAND USE (3/17/04)

<u>LAND USE</u>
<u>URBANIZATION</u>
<u>URBAN GROWTH CONCEPT</u>
<u>RESIDENTIAL</u>
<u>COMMERCIAL</u>
<u>INDUSTRIAL</u>
<u>OPEN SPACE AND FLOODPLAINS</u>
<u>RURAL COMMUNITIES</u>
<u>RURAL</u>
<u>AGRICULTURE</u>
<u>FOREST</u>

When the pioneers settled Clackamas County, the land resource appeared infinite. They cleared forest, carved towns from the wilderness, and used waterways as the arterials of commerce. Some lands were valued for certain uses. The alluvial valley of the Willamette River was among the first areas to be cleared for agriculture. The falls at Oregon City was one of the first industrial sites. From the earliest days, the value of strategic location for various uses of the land was recognized and exploited for man's benefit. The best sites were usually used first.

Now we realize that not only is land finite, but also that sites with desirable characteristics for certain types of development are scarce. A growing population is increasing demand for land of all types. It is increasingly important to evaluate characteristics of remaining sites to determine their optimum use.

The Oregon Legislature has provided for land use to be determined at the local level through a rational process of balancing state and local goals, human needs, and the site characteristics of land. Generally, the factors for designating land use categories in this plan include the following:

- Physical site conditions such as soils, slope, and drainage
- Present and projected needs of the people
- Character of existing development
- Financial impacts on the County and its residents
- Community livability
- Capacities of streets, sewers, water systems, and other facilities
- Estimated market demand
- Parcel sizes
- Availability of transit
- Proximity to jobs, shopping and cultural activities
- Providing an adequate balance between various uses

The above factors alone are insufficient for planning a community. A planning process reflecting community values is needed to weigh various factors. This systematic approach involves identifying issues, developing alternative ways of dealing with the issues and choosing the most desirable alternative.

## **ISSUES**

The major issues affecting future development in the County are:

1. Supply and location of land for urban uses
2. Density of residential uses
3. Intensity of commercial and industrial uses
4. Proximity of mutually supporting land uses
5. The cost impacts of various land uses
6. Compatibility or conflict between land uses
7. Competing demands for land having certain characteristics
8. Compatibility of city and County plans
9. Supply and location of land for rural uses
10. Preservation of land for agricultural and forestry uses
11. The character and appearance of neighborhoods
12. Compatibility of land use with supportive systems such as transportation and sewerage
13. Protection of natural features and waterways from the impact of development
14. Provision of open spaces within the urban environment.

## **LAND USE DEFINITIONS**

This Plan divides Clackamas County into six principal land use categories: Urban, Urban Reserve, Rural, Agriculture, Forest and Rural Communities.

### **Urban**

Urban areas include all land inside Urban Growth Boundaries. Urban areas are either developed or planned to be developed with adequate supportive public services provided by cities or by special districts. Urban areas have concentrations of people, jobs, housing and commercial activity.

**Urban Growth Boundaries.** Urban Growth Boundaries are designated on the Comprehensive Plan Maps. They separate Urban areas from Urban Reserves, Rural, Agricultural and Forest areas. An Urban Growth Boundary encompasses existing urban development and lands to accommodate urban growth forecasted for a 20-year horizon.

**Immediate Urban Areas.** Immediate Urban areas are lands that are within Urban Growth Boundaries and meet at least one of the following conditions:

1. Served by public services (including sewer, water, stormwater facilities, and transportation facilities);
2. Included within boundaries of cities or within special districts capable of providing public services and planned to be served in the near future; or
3. Substantially developed or surrounded by development at urban densities.

Immediate Urban areas are planned and zoned for urban uses.

**Future Urban Areas:** Future Urban areas are lands within Urban Growth Boundaries but outside Immediate Urban areas. Future Urban areas are planned to be provided with public services, but currently lack providers of those services. Future Urban areas are substantially underdeveloped and will be retained in their current use to ensure future availability for urban needs. Future Urban areas are planned for urban uses but zoned for large lot, limited development.

**Future Urban Study Areas:** Future Urban Study Areas are lands that have been brought into an urban growth boundary but for which urban Comprehensive Plan designations have not been applied. Planning will be conducted to determine urban Plan designations and apply Future Urban zoning.

## Urban Reserve

Urban Reserve areas lie outside an urban growth boundary and have been designated as highest priority for inclusion in an urban growth boundary when additional urban land is needed. Metro designates Urban Reserve areas in the Portland Metropolitan Area. The cities of Sandy, Molalla, Estacada and Canby, in coordination with Clackamas County, may designate and adopt other Urban Reserve areas.

## Rural



Rural lands are exception lands, as defined under OAR 660-004-0005(1), that are outside Urban Growth Boundaries and Rural Communities, and are suitable for sparse settlement such as small farms, woodlots or acreage homesites. They lack public services or have limited services, and are not suitable, necessary or intended for urban uses.

## **Agriculture**

Agricultural lands are those of predominantly Class I-IV soils as identified by the U.S. Natural Resources Conservation Service or as identified in more detailed data; and other lands which are suitable for farm use due to soil fertility, suitability for grazing, climatic conditions, existing or future potential for irrigation, land use patterns, accepted farming practices or are necessary to permit farming practices to be undertaken on adjacent or nearby lands.

## **Forest**

Forest lands are composed of existing or potential forest lands which are suitable for commercial forest uses or other forest lands needed for watershed protection, wildlife and fish habitat and recreation. Also included are lands where extreme conditions of climate, soil and topography require maintenance of vegetative cover.

## **Rural Communities**

Rural Communities, as defined in OAR 660 Division 22, are settlements that are located outside Urban Growth Boundaries which have concentrated residential development combined with limited commercial, industrial or public uses. Rural communities have limited public facilities and services.

## **LAND USE MAPS**

The following maps are adopted as part of the County Comprehensive Plan. Map IV-1 displays the unincorporated land within the Metro Urban Growth Boundary. Map IV-2 provides an index for the land use maps. Maps IV-3, IV-4, and IV-5 show areas where the County has adopted the plan designations by agreement with adjoining cities. As these cities adopt amendments to their maps, the County will consider adoption. County land use designations are shown on Map IV-6 and IV-7. Land Use maps adopted as part of a Community or Design Plan in Chapter 10 automatically update Maps IV-6 and IV-7.



[Map IV-1 Urban Land within the Metro UGB](#)



[Map IV-2 Land Use Plan Map Index](#)



[Map IV-3 Lake Oswego Land Use Plan Map](#)



[Map IV-4 West Linn Land Use Plan Map](#)



[Map IV-5 Oregon City Land Use Plan Map](#)

**Map IV-6** North Urban Area Land Use Plan Map (Online version not available)

**Map IV-7** Non-Urban Area Land Use Plan, and Mt. Hood Corridor Land Use Plan (Online version not available)

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## URBANIZATION

The goals and policies in the following section address the designation of lands for urban uses, conversion of lands from Urban Reserve to Future Urban plan designations, and County actions regarding Future Urban Study areas and Urban Reserve areas.

### GOALS

- Clearly distinguish Urban and Urban Reserve areas from non-urban areas.
- Encourage development in areas where adequate public services and facilities can be provided in an orderly and economic way.
- Insure an adequate supply of land to meet immediate and future urban needs.
- Provide for an orderly and efficient transition to urban land use.
- Distinguish lands immediately available for urban uses from Future Urban areas within Urban Growth Boundaries.

### POLICIES

- 1.0 Coordinate with Metro in designating urban areas within Metro's jurisdiction. Recognize the statutory role of Metro in maintenance of and amendments to the Portland Metropolitan Urban Growth Boundary.
- 2.0 Coordinate with affected cities in designating urban areas outside of Metro. The following areas may be designated as Urban:

- a. Land needed to accommodate 20 years of future urban population growth.
- b. Land needed for increased housing, employment opportunities and livability from both a regional and subregional view.
- c. Land to which public facilities and services can be provided in an orderly and economic way.
- d. Land which insures efficient utilization of land within existing urban areas.
- e. Land which is best suited for urban uses based on consideration of the environmental, energy, economic and social consequences.
- f. Agricultural land only after considering retention of agricultural land as defined, with Class I having the highest priority for retention and Class VI the lowest priority.
- g. Land needed after considering compatibility of proposed urban uses with nearby agriculture activities
- h. Land where the strategic location of employment and living opportunities can minimize commuting distance, traffic congestion, pollution and energy needs.

3.0 Land use planning for urban areas shall integrate all applicable policies found throughout the Plan including the following:

- a. Locate land uses of higher density or intensity to increase the effectiveness of transportation and other public facility investments.
- b. Encourage infilling of Immediate Urban Areas with a minimum of disruption of existing neighborhoods (see infill policies in the Housing Chapter).
- c. Enhance energy conservation and transportation system efficiency by locating opportunities for housing near work and shopping areas.
- d. Integrate developments combining retailing, office, and medium and high density housing at places with frequent transit service and pedestrian facilities.

4.0 Establish Urban Growth Management Areas and Urban Growth Management Agreements to clarify planning responsibilities between the County and cities for areas of mutual interest.

5.0 Establish agreements with cities and service districts to clarify service and infrastructure responsibilities for areas of mutual interest.

## **Immediate Urban Policies**

6.0 An area may be designated Immediate Urban consistent with the definition. The following policies apply to Immediate Urban areas:

- 6.1 Use the following guidelines when evaluating proposed changes in zoning designations that convert an area from Future Urban to Immediate Urban status:
  - a. Capital improvement programs, sewer and water master plans, and regional public facility plans shall be reviewed to ensure that orderly, economic provision of public facilities and services can be provided.
  - b. Sufficient vacant Immediate Urban land should be permitted to ensure choices in the market place.
- 6.2 Apply urban zoning districts that implement the Plan through a legislative or quasi-judicial zone change process consistent with applicable state, Metro and local requirements.
- 6.3 Control land uses in Immediate Urban areas through the Zoning and Development Ordinance.
- 6.4 Place conditions on development to ensure adequate services and facilities prior to or concurrent with development.

## **Future Urban Policies**

- 7.0 The following policies apply to Future Urban lands:
  - 7.1 Control premature development (before services are available) by: (4/30/03)
    - a. Applying a future urban zone with a 10 acre minimum lot size within the Portland Metropolitan UGB except those lands identified in Subsection 7.1.b. (4/30/03)
    - b. Applying a future urban zone with a 20 acre minimum lot size or greater for areas planned for employment, industrial and commercial uses within the Portland Metropolitan UGB. (4/30/03)
    - c. Applying within the urban growth boundaries of Canby, Estacada, Sandy or Molalla, a 5 acre lot size or larger in rural, agricultural or forest zones. (4/30/03)
  - 7.2 Prohibit subdivisions, as defined in the Zoning and Development Ordinance, until the land qualifies as Immediate Urban. (4/30/03)
  - 7.3 Review partition requests to ensure that the location of proposed easements and road dedications, structures, wells, and septic drainfields are consistent with the orderly future development of the property at urban densities.
  - 7.4 For land within the urban growth boundaries of Canby, Estacada, Sandy or Molalla, require annexation to a city as a requirement for conversion to Immediate Urban unless otherwise agreed to by the City and County.

## **Future Urban Study Area Policies**

8.0 The following policies apply to Future Urban Study Areas:

- 8.1 Conduct a planning process consistent with the policies of Chapter 11 of this Plan, that coordinates with affected service providers, agencies, and jurisdictions, and meets pertinent state, regional and local requirements.
- 8.2 In the Portland Metropolitan Urban Area, develop Comprehensive Plan designations that are consistent with Regional Urban Growth Goals and Objectives and the Regional Urban Growth Management Functional Plan, including Title 11, and the following. (6/6/02)

When areas are brought into the Urban Growth Boundary, the following actions shall be undertaken: (6/6/02)

- a. Control premature development (before services are available) within the Portland Metropolitan UGB by applying a minimum 20 acre lot size in the land use categories of Rural Communities, Rural Commercial, Rural Industrial and Rural. (4/30/03)
  - b. The County shall enter into discussion with nearby cities, agencies that provide public facilities and services, and area citizens, to determine how services and governance will be provided for the area. (6/6/02)
  - c. Agreements shall be developed with affected cities and service providers to cooperate in development of a Concept Plan for the area, and to consider the Concept Plan in development of future Plans. (6/6/02)
  - d. A Concept Plan shall be developed meeting state and regional requirements. Opportunity shall be provided to citizens and affected public agencies to participate in the development of the Concept Plan. In the Damascus area, the Damascus Concept Planning Study Report shall be used to provide background information and guidance for the Concept Planning process. (6/6/02)
  - e. A request shall be made to revise state and regional transportation plans to reflect the Concept Plan. (6/6/02)
  - f. Public facilities plans shall be developed or revised to accommodate the Concept Plan. (6/6/02)
  - g. The Comprehensive Plan, Comprehensive Plan Maps, Zoning and Development Ordinance and zoning maps shall be revised according to the Concept Plan. (6/6/02)
- 8.3 Develop and adopt urban comprehensive plan designations that meet applicable state planning requirements and balance County planning goals adopted in the Comprehensive Plan. This will convert Future Urban Study Areas to Future Urban or Immediate Urban areas.

- 8.4 During development of Comprehensive Plan provisions pursuant to Title 11 of the Urban Growth Management Functional Plan, consider the feasibility of providing and funding adequate infrastructure. (3/14/02)

## Urban Reserve Area Policies

- 9.0 The following policies apply to Urban Reserve areas:
- 9.1 Clackamas County shall recommend to Metro land in Clackamas County which should be designated Urban Reserve, when Urban Reserve amendments to the Region 2040 Urban Growth Management Functional Plan are considered by Metro. The cities of Sandy, Molalla, Estacada and Canby, in coordination with Clackamas County, may designate and adopt other urban reserve areas in a manner consistent with OAR 660-021-0000.
- 9.2 Clackamas County will consider the following characteristics of each area when recommending Urban Reserve areas to Metro: potential for providing jobs within near proximity to housing; the feasibility and cost effectiveness of extending urban infrastructure; the suitability of an area to accommodate urban level densities; and, the relationship and implications to existing areas designated urban.
- 9.3 When considering the designation of Urban Reserve areas near Sandy, Molalla, Estacada and Canby, the County, in cooperation with the City, shall make findings and conclusions based on the requirements of OAR 660-021-0030.
- 9.4 Urban Reserve areas designated by Metro will be depicted on Metro's Region 2040 Growth Concept map. Designated Urban Reserve areas near Sandy, Molalla, Estacada and Canby shall be defined within the Urban Growth Management agreements with each city. (6/6/02)
- 9.5 Lands within a designated Urban Reserve area shall continue to be planned and zoned for rural uses in a manner that ensures a range of opportunities for the orderly, economic and efficient provision of urban services when these lands are included in the Urban Growth Boundary. Planning and zoning shall be done in a manner consistent with OAR 660-021-0000 and the Metro Code, in areas where Metro has jurisdiction.

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## URBAN GROWTH CONCEPT

This section of the Land Use Chapter addresses the implementation of the Region 2040 Growth Concept as it applies to Clackamas County. It provides for design type areas that are consistent with the general locations shown on the Region 2040 Growth Concept Map.

Clackamas County, with approximately 67% of its population inside the Portland Metropolitan Urban Growth Boundary, is a partner in the region's efforts to efficiently utilize the land inside the boundary. This will minimize the need to expand the boundary and protect the land available for agricultural, forest and rural uses. The intent of the Urban Growth Concept is to focus increased development in appropriate locations, such as existing commercial centers and along transportation corridors with existing or planned high quality transit service. It also encourages increased employment densities in industrial and employment areas.

The provisions of the Urban Growth Concept apply in addition to other requirements identified in the Clackamas County Comprehensive Plan. The Urban Growth Concept is designed to provide guidance for Comprehensive Plan and Zoning Development Ordinance changes, as well as to identify specific development review requirements. All provisions except Green Corridors apply to lands inside the Portland Metropolitan Urban Growth Boundary. Green Corridors apply to rural, agricultural and forest areas. Future Urban Study Areas are areas in transition. When concept planning is completed for these areas, growth concept design types will be adopted as appropriate.

## DEFINITIONS:

**Growth Concept Design Types.** The locations of the following design types are identified on the Clackamas County Urban Growth Concept Map: (Map IV-8) or as described below:  
(4/30/03)



[Map IV-8 Urban Growth Concept Map](#)

**Regional Center:** An area that is the focus of compact development, redevelopment, high quality transit service and multi-modal street networks. The intent of the Regional Center is to provide an area for the most intense development and highest densities of employment and housing.

**Corridors:** Areas located along streets which have existing or planned high quality transit service and feature a high quality pedestrian environment, convenient access to transit and increased residential and employment densities. The intent of the Corridor designation is to encourage increased densities by facilitating zone and plan changes in specific locations. In addition, it provides guidance for development review to implement a high quality pedestrian environment.

The streets where the Corridor design type designation is applied are: McLoughlin Blvd. (from Milwaukie to Gladstone), 82nd Avenue (within the Clackamas Regional Center Design Plan Area), Johnson Creek Boulevard (within the Clackamas Regional Center Design Plan Area),

and Sunnyside Road (from 82nd Avenue to 139th Avenue).

**Employment areas:** Areas providing for various types of employment and some residential development with limited large-scale commercial uses. The intent is to define the appropriate locations for "big box retailers" to allow for more employment intensive uses.

**Industrial areas:** Areas set aside primarily for industrial activities with limited supporting uses. The intent is to prohibit "big box retailers" from these areas to allow for industrial uses.

**Neighborhoods:** Primarily residential areas that are accessible to jobs and neighborhood businesses. This broad category includes areas set aside for homes, parks and open space, schools, public services, and neighborhood business uses. The intent is to facilitate the Region 2040 "Inner Neighborhood" design type.

**Green Corridors.** Areas outside the Urban Growth Boundary adjacent to major transportation routes to neighboring cities where the rural character of the landscape and agricultural economy shall be maintained. The intent is to preserve the view sheds and maintain the rural character between urban areas along the major transportation routes.

**Future Urban Study Areas.** Areas brought within the Urban Growth Boundary for which the required planning has not yet been completed. The intent is to identify the areas where Title 11 of the Urban Growth Management Functional Plan and Metro code specify that concept planning and other requirements must be completed before other Urban Growth Concept design types and urban plan designations can be applied. Future Urban Study Areas include areas identified on Map IV-8 and areas brought into the Portland Metropolitan UGB after the adoption of Map IV-8. (4/30/03)

## GOALS

- Provide for a compact urban form, integrating the built environment, transportation network, and open space, that:
  - Minimizes the amount of Urban Growth Boundary expansion required to accommodate expected population and employment growth in the next 20 years.
  - Efficiently uses public services including transportation, transit, parks, schools, sewer and water.
  - Distinguishes areas for intensive development from areas appropriate for less intensive development.



- Preserves existing stable and distinct neighborhoods by focusing commercial and residential growth in mixed use centers and corridors.
- Develops mixed use centers and corridors at a pedestrian scale and with design features and public facilities that support pedestrian, bicycle and transit trips.
- Maintain the rural character of the landscape between the Urban Growth Boundary and neighboring cities.

## **POLICIES**

### **Regional Center**

- 1.0 The Regional Center design type designation is applied to the Clackamas Regional Center, as identified on Map IV-8. The goals and policies applicable to the Clackamas Regional Center are located in Chapter 10: Clackamas Regional Center Area Design Plan.

### **Corridors**

- 2.0 The "Corridor Design Type Area" designation is applied to sites adjoining the Corridor streets shown on Map IV-8. Corridor Design Type Areas may be either continuous or development nodes. The areas of application for Corridor Design Type Areas are specified in Chapter 10 for all of the Corridor Streets.

The Policies that apply to all the Corridor Design Type Areas include:

- 2.1 Provide for both employment and housing, including mixed use.
  - 2.2 Provide for a high level of bus usage, with land uses and transportation facilities to support bus use.
  - 2.3 Encourage and support pedestrian travel with supportive land uses, frequent street connections, and sidewalks and pedestrian-ways.
  - 2.4 Provide for vehicular traffic and auto-oriented uses, while expanding the share of trips via transit and other modes.
  - 2.5 Enhance connectivity between neighborhoods adjacent to the Corridor Design Type Area and the Corridor Street.
- 3.0 Specific policies for the SE 82nd Ave, SE Johnson Creek Boulevard and SE Sunnyside Road (from 82nd Ave to approximately SE 117th Ave.) corridors are located in Chapter 10: Clackamas Regional Center Design Plan.
- 4.0 Specific policies for the Sunnyside Road (from approximately SE 117th Ave to SE 139th Avenue) Corridor Design Type Area are located within Chapter 10: The Sunnyside Corridor Community Plan.

- 5.0 Specific policies for the McLoughlin Blvd. Corridor are located in Chapter 10: McLoughlin Corridor Design Plan.

## Employment Areas

- 6.0 The Employment Area Design Type designation is applied as shown on Map IV-8. Policies that apply to the Employment Design Type Areas include:
- 6.1 Employment Design Type Areas shall be developed to provide for a mix of employment and residential uses, including:
- a. Industry, office and service uses,
  - b. Residential development,
  - c. Low traffic generating, land consumptive commercial uses with low parking demand which have community or region-wide market,
  - d. Limited retail uses designed primarily to serve the needs of people working or living in the immediate Employment Design Type Area.
- 6.2 Retail facilities larger than 60,000 square feet of gross leasable area per building or business may be allowed on sites designated for General Commercial uses in or before 1996, or when allowed by zoning and:
- a. Transportation facilities adequate to serve the retail use, consistent with Metro's functional plan for transportation, will be in place at the time the retail use begins operation; and,
  - b. Transportation facilities adequate to meet the transportation need for other planned uses in the Employment Design Type Area are also provided.

## Industrial Areas

- 7.0 The Industrial Area Design Type designation is applied as shown on Map IV-8. Policies that apply to the Industrial Areas include:
- 7.1 Retail uses larger than 60,000 square feet of gross leasable area per building or business are prohibited.

## Neighborhoods

- 8.0 The Neighborhood Design Type designation is applied as shown on Map IV-8. Policies that apply to the Neighborhood Areas include:

- 8.1 Development of areas planned for residential, commercial and industrial uses within Neighborhood Design Type Areas shall be guided by the urban land use policies outlined in the Land Use Chapter in the Comprehensive Plan.
- 8.2 Areas designated as Low Density Residential shall achieve the densities as outlined in the Low Density Residential policy section.

## **Future Urban Study Areas**

- 9.0 The Future Urban Study Area Design Type designation is applied as shown on Map IV-8. The goals and policies applicable to Future Urban Study Areas are located in the Urbanization section of Chapter 4: Land Use.

## **Green Corridors**

- 10.0 The goals and policies for Green Corridors shall be defined through a separate study as outlined in the Intergovernmental Agreements on Green Corridor and Rural Reserve and Population Coordination, signed by Clackamas County, City of Sandy, City of Canby, ODOT and Metro.

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# **RESIDENTIAL**

This section of the Land Use Chapter addresses primarily the location and density of housing. The Housing Chapter establishes policies for other aspects of housing such as structure type, affordability and design.

Low Density Residential areas are those planned for an average up to six units per gross acre, exclusive of density bonuses and Conditional Uses, with a range of lot sizes from 2,500 square feet for townhouse units to 30,000 square feet for sites with environmental constraints.

Medium Density Residential areas are those planned for up to 12 units per gross acre (exclusive of density bonuses and Conditional Uses).

Medium High Density Residential areas are those planned for up to 18 units per gross acre (exclusive of density bonuses and Conditional Uses).

High Density Residential areas are those planned for up to 25 units per gross acre (exclusively of density bonuses and Conditional Uses).

Special High Density Residential areas are planned for high rise multifamily housing up to 60

units per gross acre.

## GOALS

- Protect the character of existing low density neighborhoods.
- Provide a variety of living environments.
- Provide for development within the carrying capacity of hillsides and environmentally sensitive areas.
- Provide opportunities for those who want alternatives to the single family house and yard.
- Provide for lower cost, energy efficient housing.
- Provide for efficient use of land and public facilities, including greater use of public transit.

## POLICIES

### Low Density Residential

- 1.0 The following areas may be designated Low Density Residential if any of the following criteria are met:
  - 1.1 Areas where a need for this type of housing exists.
  - 1.2 Areas which are currently developed at low density and where little need exists for redevelopment.
  - 1.3 Areas where transportation is limited to collectors and local streets.
  - 1.4 Areas where sensitivity to the natural environment or natural hazards indicate a reduced density.
- 2.0 Determine the density of development by zoning. Zoning of Immediate Urban Low Density Residential areas and conversion of Future Urban areas to Immediate Urban low density residential shall include zones of 2,500 through 30,000 square feet. The following factors guide the determination of the most appropriate zone:
  - 2.1 Physical site conditions such as soils, slope, drainage:

- a. Land with soils subject to slippage, compaction or high shrink-swell characteristics shall be zoned for larger lots.
- b. Land with slopes of:
  - 0 percent to 20 percent shall be considered for zones in the 2,500 to 8,500 square foot range.
  - 20 percent and over shall be considered for zones in the 10,000 to 30,000 square foot range.
- c. Land with hydrological conditions such as flooding, high water table or poor drainage shall be zoned for larger lots.

- 2.2 Capacity of facilities such as streets, sewers, water, and storm drainage systems.
- 2.3 Availability of transit: Land within walking distance (approximately one-quarter mile) of a transit stop should be zoned for smaller lots.
- 2.4 Proximity to jobs, shopping and cultural activities: Areas in proximity to trip generators shall be considered for smaller lots.
- 2.5 Location of 2,500 and 5,000 square foot lots: Location of 2,500 and 5,000 square foot lots may be allowed in Corridor design type areas and where permitted by Community and Design Plans located in Chapter 10.
- 2.6 Need for neighborhood preservation and variety: Areas which have historically developed on large lots where little vacant land exists should remain zoned consistent with the existing development pattern. Otherwise, unless physical or service problems indicate to the contrary, areas of vacant land shall be zoned for lots of 8,500 square feet or smaller.
- 2.7 Density average: To achieve an average of 7,500 square feet or less per lot in low density Future Urban areas when conversion to Immediate Urban low density residential occurs, the R-10 zone shall be limited to areas with 20 percent slope and greater. Flexible lot size land divisions and other buffering techniques shall be encouraged in those areas immediately adjacent to developed subdivisions with lots of 20,000 square feet or more to protect neighborhood character, while taking full advantage of allowed densities.

3.0 Through zoning, Neighborhood Commercial uses may be allowed in the Low Density residential plan designation areas according to the criteria in the Commercial Section of this Chapter.

4.0 Permit transfer of density within a development even if different zones or Plan designations are involved. Encourage the transfer of units from hazardous or environmentally sensitive areas to be transferred to areas which are less hazardous or less expensive to develop. Resulting density on the developed portion of a given site shall not exceed the density allowed in the next highest residential Plan category. Buffering from lower density adjacent uses shall be considered in the review process.

5.0 Establish special development criteria and density standards in the following areas (see Natural Resources and Energy Chapter, Natural Hazards Section Policy 6.0):

5.1 On slopes over 20 percent, the following development criteria shall be met:

- a. Avoid major hazard areas
- b. Maintain the stability of the slope
- c. Grade without large or successive pads or terraces and without creating road grades in excess of County standards
- d. Maintain vegetation and natural terrain features to sustain slope stability
- e. Ensure that existing natural rates of run-off and erosion are not exceeded
- f. Protect visually significant slopes, ravines, ridgelines, or rock outcroppings in their natural state

5.2 In flood hazard areas or wetlands, the following development criteria, as well as the specifications in the Natural Resources chapter, shall be met:

- a. Avoid major flood hazard areas
- b. Maintain water quality and the natural function of the area to reduce or absorb flood runoff and to stabilize water flow
- c. Protect wildlife habitats, significant vegetation and trees
- d. Protect any associated recreational values

5.3 Density standards in these areas shall be as follows:

- a. Land in the flood fringe and slopes over 20 percent shall be allowed to develop at no more than 50% of the density of the zone. If not developed, up to 100 percent of the density may be transferred to more suitable land within the site, depending upon its characteristics. Density should be reduced as slope increases above 20 percent, with development discouraged on slopes over 35 percent.
- b. Land in the floodway, and on landslides shall not be allowed to develop, except on a lot of record and only after having met the provisions stated in policies 5.1, 5.2, and other relevant Plan requirements. However, 100 percent of the units allowed in the zone may be transferred to more suitable land within the site.
- c. Wetlands outside the Northeast Urban area shall not be allowed to develop, except on a lot of record and only after having met the provisions stated in Policy 5.2 and other relevant Plan requirements (See Natural Resources and Energy chapter). However, up to 100 percent of the density may be transferred to more suitable land within the site. Decisions regarding development of wetlands in the Northeast Urban area have been made through the Goal 5 Planning process. Wetlands in the Northeast Urban area are subject to the policies in Section 17 of the Natural Resources and Energy chapter and the Clackamas County

## Zoning and Development Ordinance.

- 6.0 Insure adequate provisions for the schools, churches and recreation facilities which are an integral part of all residential neighborhoods. The siting of these facilities is subject to conditions insuring adequate design and safety particularly with regard to vehicular and pedestrian access.
- 7.0 Encourage retention of natural landscape features such as topographic variations, trees and water areas, and allow variation in housing type and design.
- 8.0 Require a site analysis for each development in areas designated as open space or where the County has identified the potential for significant impacts. This requirement may be waived in the event all development is transferred to more suitable land outside of areas designated as Open Space.
- 9.0 The County shall require dedication of designated open space areas where appropriate for purposes of developing the urban park or trails program.
- 10.0 Require roads in land divisions to be County roads and connected directly with an improved County road, state road or city street. Half streets and private roads may be allowed where appropriate.
- 11.0 Develop all land divisions in urban areas with public sewer, public water, drainage controls, pedestrian/bikeway facilities and underground utilities. Street lighting and street trees may be required. Implementing ordinances shall set standards in which street lighting and street trees will be encouraged or required.
- 12.0 Determine the net density in Planned Unit Developments recognizing that up to 15 percent of the gross area is for roadways.
- 13.0 Encourage subdivision design to eliminate direct vehicular access from individual lots onto major or minor arterials. Frontage roads should be used wherever possible.
- 14.0 Require stub streets in land divisions where necessary to provide access to adjacent property.
- 15.0 Develop residential land divisions as Planned Unit Developments whenever one or more of the following criteria apply:
  - a. Any part of the site is designated open space on North Urban Area Land Use Plan Map (Map IV-6)
  - b. More than 20 percent of the dwelling units are to be attached or condominiums
  - c. Sites are large enough to warrant on-site provision of substantial open and/or recreation space
  - d. A large area is specifically identified by the County as needing greater design flexibility, increased open space, or a wider variety of housing types

- 16.0 Require a minimum of twenty (20) percent of the total land area in all Planned Unit Developments to be devoted to open space, outdoor recreational areas, or school facilities as required by Public Services Policy 10.0 in the Public Facilities and Services chapter. Development for any other uses shall not be allowed. Parkland dedications may be part of the 20 percent open space requirement.
- 17.0 Require provisions for adequate maintenance prior to final plat approval to insure the designated park area will be a community asset.
- 18.0 Allow flexible lot sizes in land divisions provided that the average lot size is consistent with the base zone, as adjusted by density bonuses (see Density Bonus Section of Housing Chapter).
  - a. For detached single-family dwellings, the smallest lot size allowable shall be 80% of the lot size allowed by the base density.
  - b. For attached single family dwellings, the smallest lot size allowable shall be 2,000 square feet.
  - c. In Planned Unit Development land divisions, the individual lot size is unrestricted.
- 19.0 Allow one accessory dwelling unit per primary dwelling on a lot of record subject to design standards.
- 20.0 Establish a minimum density to help meet regional and local housing needs.

### **Medium Density Residential**

- 21.0 The following areas may be designated Medium Density Residential when at least the first two criteria are met:
  - a. Areas where a need for this type of housing exists.
  - b. Areas with access to a major or minor arterial or collector. Siting should not result in significant traffic increase on local streets serving low density residential areas.
  - c. Areas located near or adjacent to commercial areas, employment concentrations or transit stops.
  - d. Areas of deteriorating dwellings or structures in neighborhoods to stimulate private investment, infilling and redevelopment, as long as one or more of the preceding criteria apply.
- 22.0 Determine the density of development through zoning. Zoning of Immediate Urban Medium Density Residential areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County. The Planned Medium Density (PMD) zoning district shall be limited to areas currently zoned PMD.



- 23.0 Medium Density Residential zoning districts shall provide for reduced density on hazardous land or steep slopes as stipulated in Policy 5.3.
- 24.0 Through zoning, Neighborhood Commercial uses may be allowed in the Medium Density Residential Plan-designated areas according to the criteria in the Commercial Section of this chapter.
- 25.0 Encourage variations in density on different parts of a large site and promote a variety in housing type, ownership and design.
- 26.0 Require in all Medium Density Residential developments a minimum of 25 percent of the total gross areas to be landscaped, natural and/or recreational areas. This landscaping requirement may be reduced during the design review process when pedestrian amenities or amenities that provide opportunities for passive or active recreation within the development are substituted for gross land area.
  - 26.1 The County shall require dedication of designated open space areas where appropriate for purposes of developing the urban park or trails program.
- 27.0 Require all Medium Density Residential developments to be subject to design review.
- 28.0 When necessary, require improvements to existing streets and/or development of new streets to County standards prior to or concurrent with Medium Density Residential development.
- 29.0 Require pedestrian access to nearby schools, transit stations, commercial, recreational and employment areas to be convenient and improved to standards determined through design review.
- 30.0 Develop all Medium Density Residential areas with public sewer, public water, curbs, drainage controls, pedestrian/bikeway facilities, underground utilities and street lighting.
- 31.0 Existing mobile home parks which are designated Medium Density Residential shall not have the designation changed unless a plan for relocation of the existing tenants is submitted and approved. This plan shall demonstrate that existing tenants will be relocated prior to redevelopment of the property.
- 32.0 Establish a minimum density to help meet regional and local housing needs.

### **Medium High Density Residential**

- 33.0 The following areas may be designated Medium High Density Residential when the first two and at least one of the remaining criteria are met:

- a. Areas where a need for this type of housing exists.
- b. Areas with access to a street designated as a major or minor arterial or collector. Siting should not result in significant traffic increase on local streets serving low density residential areas.
- c. Areas adjacent to or within walking distance of a significant educational, cultural, recreational or open space facility or area.
- d. Areas located adjacent or in proximity to a designated commercial or industrial area on the Comprehensive Map.
- e. Areas within 800 feet of a transit line or transit station or within one-quarter mile of such transit facility if easily accessible due to pedestrian amenities such as sidewalks, pedestrian ways and streetlights.

- 34.0 Medium High Density Residential zoning districts shall provide for reduced density on hazardous land or steep slopes as stipulated in Policy 5.3.
- 35.0 Determine the density of development through zoning. Zoning of Immediate Urban Medium High Density Residential areas shall be consistent with this plan. Timing of zoning district application shall be in accord with the orderly development of the County.
- 36.0 Encourage variations in density on different parts of a large site and promote a variety in housing type, ownership and design.
- 37.0 Through zoning, Neighborhood Commercial uses may be allowed in the Medium High Density Residential Plan-designated areas according to the criteria in the Commercial section of this chapter.
- 38.0 Require in all Medium High Density Residential developments a minimum of 25 percent of the total gross area to be landscaped, natural and/or recreational areas.
- 38.1 The County shall require dedication of designated open space areas where appropriate for purposes of developing the urban park or trails program.
- 39.0 Require all Medium High Density Residential developments to be subject to the design review process.
- 40.0 When necessary, require improvements to existing streets and/or development of new streets to County standards prior to or concurrent with Medium High Density Residential development.
- 41.0 Require pedestrian access to nearby schools, transit stations, commercial, recreational and employment areas to be convenient and improved to standards determined through design review.
- 42.0 Develop all Medium High Density Residential areas with public sewer, public water, curbs, drainage controls, pedestrian/bikeway facilities, underground utilities, and street lighting.
- 43.0 Establish minimum densities to meet regional and local housing needs.

## High Density Residential

- 44.0 The following areas may be designated High Density Residential when at least the first three criteria are met:
- a. Areas located either adjacent to or within proximity to major shopping centers, employment concentrations and/or major transit centers.
  - b. Areas with access to a street designated as a major or minor arterial or collector. Siting should not result in significant traffic increase on local streets serving low density residential areas.
  - c. Areas free from known geologic hazards, flooding, or soils subject to slippage.
  - d. Areas adjacent to permanently protected open space or bodies of water as long as the above criteria apply.
- 45.0 High Density Residential zoning districts shall provide for reduced density on hazardous land or steep slopes as stipulated in policy 5.3.
- 46.0 Determine the density of development through zoning. Zoning of Immediate Urban High Density Residential areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County.
- 47.0 Encourage variations in density on different parts of a site and promote a variety of housing type, ownership and design.
- 48.0 Through zoning, Neighborhood Commercial uses may be allowed in the High Density Residential Plan-designated areas according to the criteria in the Commercial Section of this chapter.
- 49.0 Allow office, and service commercial uses oriented to on-site residents. Such uses, including food and beverage establishments and professional offices, should be integrated with the residential development.
- 50.0 Allow existing commercial uses to remain or improve in High Density Residential areas as long as such uses are integrated with surrounding development.
- 51.0 Require all High Density Residential developments to provide a minimum of 25 percent of the total gross area to be landscaped, natural and/or recreational areas. This landscaping requirement may be reduced during the design review process when pedestrian amenities or amenities that provide opportunities for passive or active recreation within the development are substituted for gross land area.
- 51.1 The County shall require dedication of designated open space areas where appropriate for purposes of developing the urban park or trails program.
- 52.0 Require all High Density Residential developments to be subject to the design review process.

- 53.0 When necessary, require improvements to existing streets and/or development of new streets to County standards prior to or concurrent with high density development.
- 54.0 Require pedestrian access to nearby schools, transit stations, commercial, recreational and employment areas to be convenient and improved to standards determined through design review.
- 55.0 Encourage understructure parking.
- 56.0 Develop all High Density Residential areas with public sewer, public water, curbs, drainage controls, pedestrian/bikeway facilities, underground utilities and street lighting.
- 57.0 Establish a minimum density to meet regional and local housing needs.

### **Special High Density Residential**

- 58.0 The following areas may be designated Special High Density Residential when all of the criteria are met:
  - a. Areas located either adjacent or close to employment concentrations in excess of 2,000 employees.
  - b. Areas within walking distance (approximately one-quarter mile) of a major transit station, and with good access to a major or minor arterial.
  - c. Areas where impact on adjacent neighborhoods will be minimal.
  - d. Areas free from known geologic hazards, flooding, or soils subject to slippage.
- 59.0 Determine the density of development through zoning. Zoning of Special High Density Residential areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County.
- 60.0 Encourage variations of density on different parts of a site through high rise construction.
- 61.0 Allow retail, office, and service uses if the minimum residential density is achieved. Mixed uses may either be in the same building as a primary use or in a separate building.
- 62.0 Allow existing commercial uses to remain or improve in Special High Density Residential areas as long as such uses are integrated with surrounding development.
- 63.0 Require all Special High Density Residential developments to provide a minimum of 40 percent of the total gross area to be landscaped, natural, and/or recreation areas. This landscaping requirement may be reduced during the design review process when pedestrian amenities or amenities that provide opportunities for active or passive recreation are substituted for gross land area.

- 63.1 The County shall require dedication of designated open space areas where appropriate for purposes of developing the urban park or trails program.
- 64.0 Require all Special High Density Residential developments to be subject to the design review process.
- 65.0 When necessary, require improvements to existing streets and/or development of new streets to County standards prior to or concurrent with Special High Density Residential development.
- 66.0 Require pedestrian access to nearby schools, transit stations, commercial, recreational and employment areas to be convenient and improved to standards determined through design review.
- 67.0 Understructure or underground parking may be required.
- 68.0 Develop all Special High Density Residential areas with public sewer, public water, curbs, drainage controls, pedestrian/bikeway facilities, underground utilities and street lighting.
- 69.0 Establish through zoning a minimum density to help meet regional and local housing needs.
- 

## **COMMERCIAL**

This section of the Land Use Chapter addresses the location of commercial land and the physical development of commercial districts. The Economics Chapter establishes policies for other aspects of commerce such as commercial growth, economic diversity, and employment.

Neighborhood Commercial uses include convenience retail and service establishments relying upon frequent purchases and having small trade areas. Neighborhood Commercial uses are compatible with residential areas and may be located in residential areas.

Community Commercial areas are designated for sale of a limited range of goods and services. Trade areas may encompass several neighborhoods. Uses are generally compatible with adjacent neighborhoods. Small scale professional offices may be included in this category.

General Commercial areas are designated for sale of a wide range of goods and services. Trade areas for establishments within this district may be extensive. This category includes uses which may be incompatible with residential areas. Professional offices and multifamily uses are allowed in this land use category.

Retail Commercial areas are also designated for sale of a wide range of goods and services. Trade areas for establishments within this district may be very extensive. This category

provides for intensive retail development, with limits on some land extensive uses, and also limits on outdoor storage. Professional offices and multifamily uses are allowed in this land use category.

Office Commercial areas are designated for professional office developments.

Office Apartment areas are designated as mixed use areas with an emphasis on office and apartment uses. Compatible land uses may be allowed on a limited basis. This category includes uses generally compatible with development within designated Corridors.

## **GOALS**

- Provide opportunities for a wide range of commercial activity ranging from convenience establishments close to neighborhoods to major regional shopping centers.
- Ensure that access, siting, and design of commercial developments are suitable for the type of commercial activity.
- Encourage attractive compact shopping areas offering a wide range of goods and services.
- Ensure that traffic attracted to commercial development will not adversely affect neighborhoods.
- Limit expansion of commercial strips and encourage better design of existing strips to make them more functional and attractive.
- Allow mixed use.

## **POLICIES**

### **Neighborhood Commercial**

- 1.0 The Neighborhood Commercial district may be applied to sites within residential areas which either have an historical commitment to neighborhood commercial uses, or satisfy all the following criteria:
  - 1.1 The conditional use criteria of the Zoning and Development Ordinance.
  - 1.2 The new site, or expanded site, is necessary to provide convenience commercial uses which are not currently available within the service area.  
"Service area", for purposes of this policy, shall be either:

- a. The readily accessible area within 2000 feet of the proposed site; or
- b. A defined area with a minimum of 500 existing or potential dwelling units which are closer to the proposed site, and have as good or better access to the proposed site, than to existing commercial sites considering distance and topographical barriers. Potential dwelling units shall be determined on the basis of existing zoning.

- 1.3 Each Neighborhood Commercial site should be a maximum of one acre in size. To allow clustering of convenience uses, additional area may be added up to a maximum total area of two acres.
- 1.4 Sites shall have direct access to a street of at least a collector classification and preferably an arterial.
- 1.5 Sites should not include more than one quadrant of an intersection. If more than one quadrant is approved, it shall be shown that undue traffic congestion will not result.
- 1.6 Sites shall be developed with uses allowed by the Neighborhood Commercial district within two years of the action of the County tentatively approving the zone change, unless a time extension is granted.
- 2.0 Determine permitted uses by zoning. Zoning of Neighborhood Commercial areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County.
- 3.0 Cluster buildings in Neighborhood Commercial areas to prevent strip development and require buildings to be compatible in design and scale with the surrounding neighborhood.
- 4.0 Require in all Neighborhood Commercial development and redevelopment a minimum of 15 percent of the total developed area to be in landscaping
- 5.0 Require all Neighborhood Commercial developments to be subject to the design review process.
- 6.0 Require that improvements to streets be made when necessary prior to or concurrent with Neighborhood Commercial development. Bicycle/pedestrian facilities shall be provided.

## **Community Commercial**

- 7.0 The following areas may be designated Community Commercial when the first or all of the other criteria are met:

- a. Areas having an historical commitment to commercial uses.
- b. Areas which are separated from similar commercial uses by a least one-half mile. Each Community Commercial area should not exceed 10 acres.
- c. Areas having direct access to a street of at least a minor arterial classification. Siting should not result in significant traffic increase on local streets serving residential areas.
- d. Areas which do not increase an existing commercial strip.

- 8.0 Determine permitted uses through zoning. Zoning of Community Commercial areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County.
- 9.0 Require in Community Commercial development and redevelopment a minimum of 15 percent of the total developed area to be in landscaping.
- 10.0 Require all developments to be subject to the design review process.
- 11.0 Require improvements to streets and/or transit access when necessary prior to or concurrent with development.
- 12.0 Require sidewalks and bicycle facilities.
- 13.0 Limit and define access to facilitate efficient and safe traffic movements. Joint access and provisions for vehicular and pedestrian movement between developments shall be required when necessary.
- 14.0 Require curbs, drainage controls, underground utilities and street lighting.

## **Office Commercial**

- 15.0 The following areas may be designated Office Commercial:
- a. Properties or areas currently developed with office commercial uses or committed to such uses, or which are adjacent to properties developed or committed to such uses, and are required in order to protect such uses from incompatible development. (2-3-88)
  - b. Properties offering high visibility from a major highway or arterial which will not draw traffic through single family neighborhoods. (2-3-88)
  - c. Properties or areas which provide a buffer between residential and commercial or industrial properties. (2-3-88)
- 16.0 Determine permitted uses through zoning. Zoning of Office Commercial areas shall be consistent with this plan and the stated purposes of the Office Commercial district. Timing of zoning district application shall be in accord with the orderly development of the County. (2-3-88)



- 17.0 Allow high density housing, and bed and breakfast establishments as a permitted use in office commercial areas. (2-3-88)
- 18.0 Require in Office Commercial development or redevelopment a minimum of twenty (20) percent of the total developed area to be in landscaping. (2-3-88)
- 19.0 Allow service commercial uses within office commercial with limits on the percent of floor area to be occupied. (11-5-98)
- 20.0 Allow institutional and cultural facilities as permitted uses in the office commercial zoning district, with limits on the size of assembly or convention facilities. Provide for larger facilities through conditional use procedures. (2-3-88)
- 21.0 Require development plan approval on sites prior to parcelization of existing ownerships in this district. (2-3-88)
- 22.0 Allow staff variances from dimensional standards up to twenty percent without public notice. (2-3-88)
- 23.0 Require all developments to be subject to the design review process. (2-3-88)
- 24.0 Require improvements to streets and/or pedestrian and transit access when necessary prior to or concurrent with development. (2-3-88)
- 25.0 Limit and define access to facilitate efficient and safe traffic movements. Joint access provisions for vehicular and pedestrian movement between developments shall be required when uses are complimentary or compatible. (2-3-88)
- 26.0 Discourage the use of large semi-trailer trucks while providing for local delivery-sized vehicles. (2-3-88)
- 27.0 Provide for high quality building and site design through the application of strict development standards. (2-3-88)
- 28.0 Protect and promote office commercial areas for developments which project a positive image. (2-3-88)
- 29.0 Require sidewalks, drainage controls, underground utilities and street lighting.

## **Office Apartment**

- 30.0 Areas may be designated Office Apartment when they meet 30.1 or 30.2 below:
  - 30.1 The area to be considered by the land use application is located in a Corridor Design Type Area as defined in the Growth Concepts section of the Land Use Chapter of the Comprehensive Plan
  - 30.2 The area to be considered by the land use application is located on a Corridor street and the majority of the area is within 150' of the Corridor street right-of-way, and meets the following criteria:

- a. Access to the site will meet transportation safety standards and not cause an unacceptable level of service on the Corridor street, and
- b. The site can be developed consistent with access management plans that have been prepared for the Corridor street (for example in Sunnyside Corridor Community Plan Map X-22) and consistent with access management requirements stated in the Clackamas County Comprehensive Plan Table V-5.

31.0 Determine permitted uses through zoning. Zoning of Office Apartment areas shall be consistent with this plan and the stated purposes of the Office Apartment district. Timing of zoning district application shall be in accordance with the orderly development of the County.

31.1 Allow multi-family or single family attached dwelling uses in mixed use buildings as part of developments that include office uses. (7/26/01)

31.2 Allow senior or congregate care facilities as limited uses in Office Apartment areas.

31.3 Allow compatible land uses as limited uses with limits on the amount of floor space used by the limited use.

32.0 For each Office Apartment site area, a master plan for the entire contiguous site area designated Office Apartment shall be submitted for approval with any land use application. The master plan shall include a plan for consolidation of vehicular accesses for the entire site area. Master plan approval for Office Apartment site areas shall be required prior to allowing development or land divisions in this district.

33.0 Development in Office Apartment areas shall be subject to Development Review, and shall comply with the following design requirements:

- a. Developments shall be designed at a pedestrian scale, with pedestrian amenities provided and pedestrian oriented design used to support non-auto trips to the facility.
- b. Developments shall be designed in a series of low-rise buildings.
- c. Buildings shall be oriented towards streets.
- d. Development shall be integrated with the neighborhood using secondary accesses or, at minimum, pedestrian-only access to adjacent residential areas.
- e. Strict development standards shall be applied to provide for high quality building and site design.
- f. Development or redevelopment of Office Apartment uses shall provide a minimum of twenty (20) percent of the total developed site area in landscaping.
- g. Sidewalks, drainage controls, underground utilities and street lighting shall be required.
- h. Improvements to streets and/or pedestrian and transit access shall be

required when necessary, prior to, or concurrent with development.

- i. Access shall be limited and defined to facilitate efficient and safe traffic movements. Joint access provisions for vehicular and pedestrian movement between developments shall be required when uses are complimentary or compatible.

## **General Commercial**

- 34.0 The following areas may be designated General Commercial when either the first or all of the other criteria are met:
- a. Areas having an historical commitment to commercial uses.
  - b. Areas necessary to serve the shopping needs of County residents.
  - c. Areas having access to a street of at least a major arterial classification or transit trunk route. Siting should not result in significant traffic increase on local streets serving residential areas.
  - d. Areas which do not increase an existing commercial strip or create new strips.
  - e. Areas where adverse effects, such as traffic and noise, will have a minimal effect on adjacent neighborhoods or can be minimized through on-site improvements.
  - f. Areas near employment centers.
- 35.0 Determine permitted uses through zoning. Zoning of General Commercial areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County.
- 36.0 Require in General Commercial development and redevelopment a minimum of 15 percent of the total developed area to be in landscaping.
- 37.0 Require all developments to be subject to the design review process.
- 38.0 Require improvements to streets and/or transit access when necessary prior to or concurrent with development.
- 39.0 Require sidewalks and bicycle facilities.
- 40.0 Limit and define access to facilitate efficient and safe traffic movements. Joint access and provisions for vehicular and pedestrian movement between developments shall be required when necessary.
- 41.0 Require curbs, drainage controls, underground utilities and street lighting.

## **Retail Commercial**

- 42.0 Provide for retail commercial areas incorporating high standards and an attractive image, to meet regional shopping needs for a wide range of goods and services accessible by transit and automobile in areas such as the Town Center.
- 43.0 Provide for development oriented toward mass transit and pedestrian amenities.
- 44.0 The following areas may be designated Retail Commercial when either the first or all of the other criteria are met:
  - a. Areas having an historical commitment to commercial uses.
  - b. Areas necessary to serve the shopping needs of County residents.
  - c. Areas having access to a street of at least a major arterial classification or transit trunk route. Siting should not result in significant traffic increase on local streets serving residential areas.
  - d. Areas which do not increase an existing commercial strip or create new strips.
  - e. Areas where adverse effects, such as traffic and noise, will have a minimal affect on adjacent neighborhoods or can be minimized through on-site improvements.
  - f. Areas near employment centers.
- 45.0 Determine permitted uses through zoning. Zoning of Retail Commercial areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County.
- 46.0 Require in Retail Commercial development and redevelopment a minimum of 15 percent of the total developed area to be in landscaping.
- 47.0 Require all developments to be subject to the design review process.
- 48.0 Require improvements to streets and/or transit access when necessary prior to or concurrent with development.
- 49.0 Require sidewalks and bicycle facilities.
- 50.0 Limit and define access to facilitate efficient and safe traffic movements. Joint access and provisions for vehicular and pedestrian movement between developments shall be required when necessary.
- 51.0 Require curbs, drainage controls, underground utilities and street lighting.
- 52.0 Allow Medium, Medium High or High Density housing within Retail Commercial areas.

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## **INDUSTRIAL**

This section of the Land Use Chapter addresses the location of industrial land and the physical development of industrial districts. Other aspects of industry such as industrial growth, diversity and employment are addressed in the Economics Chapter.

The Campus Industrial designation shall be limited to areas currently designated as Campus Industrial.

Business Park areas are designated to accommodate and encourage high technology and other clean, light industry, research facilities, and offices satisfying high aesthetic standards. These uses generate minimal large truck traffic and noise, and no outdoor storage. Design and development standards, including site planning, building type, truck and traffic circulation, and landscaping shall be satisfied to ensure compatibility with, and an attractive appearance from, adjacent land uses.

Light Industrial areas are designated for clean industries which are generally compatible with commercial activities. Light industry usually generates minimal truck traffic, noise, or pollution. Sites are often grouped into industrial parks with common circulation, open space, and design standards.

General Industrial areas are designated for manufacturing, assembling, fabrication and processing, bulk handling, storage, warehousing and trucking. Many general industrial uses are incompatible with residential and commercial uses.

## **GOALS**

- Provide attractive areas for mixed uses including clean, employment intensive industrial and office uses integrated with housing.
- Provide areas for general industry that meet the locational requirements of prospective industries and protect designated industrial areas from encroachment of incompatible uses.
- Protect Industrial areas from the transportation impacts of residential and commercial development.
- Protect areas adjacent to industrial areas from potential blighting effects of noise, dust, odor or high truck traffic volumes.
- Conserve the supply of industrial land.

## **POLICIES**

### **Campus Industrial**

- 1.0 The Campus Industrial designation shall be limited to areas currently designated Campus Industrial:

- 2.0 Determine permitted uses by zoning. Zoning of Campus Industrial areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County. The zone should allow light industrial uses which do not produce substantial noise, smoke, dust, noxious odors or truck traffic. Offices, high density residential uses, and commercial retail and service uses for employees and residents shall be allowed.
- 3.0 Require a unified site design for all properties within the Campus Industrial district. Clearly identify entrances and exits with the area and integrate internal circulation within the area.
- 4.0 Require in all Campus Industrial development a minimum of 25 percent of the total developed area to be landscaped and integrated with the open space system. Landscaping may be shared between developments within the Campus Industrial district.
- 5.0 Provide for pedestrian/bicycle circulation within the Campus Industrial area as well as access to transit corridors and, where applicable, to nearby medium or high density residential areas.
- 6.0 Require curbs, drainage controls, underground utilities and street lighting.
- 7.0 Require all Campus Industrial developments to be subject to the design review process.

## **Business Park**

- 8.0 Areas may be designated Business Park when all of the following criteria are met:
  - a. Areas with good access to an existing or planned four-lane major arterial, expressway, or better road.
  - b. Areas adjacent to a street of at least a collector status.
  - c. Areas with significant natural or man-made amenities, as long as other criteria apply.
- 9.0 The Business Park zoning district implements this designation.
- 10.0 Require that Business Park developments have a minimum of 25% of the developed site area landscaped. Landscaping, as well as other design features, shall be used to promote attractive views from public roads and adjacent properties.
- 11.0 Require all Business Park uses to be subject to performance and development standards intended to maintain high aesthetics in the area.
- 12.0 Require curbs, sidewalks, drainage controls, underground utilities and street lighting.

## **Light Industrial**

- 13.0 The following areas may be designated Light Industrial when either the first or all of the other criteria are met:
- a. Areas having an historical commitment to industrial uses.
  - b. Areas with excellent access to the regional transportation network.
  - c. Areas with access to a street of at least a minor arterial classification.
  - d. Areas with sites large enough for several industries to cooperatively design an industrial park.
- 14.0 Determine permitted uses through zoning. Zoning of Light Industrial areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County.
- 15.0 Discourage land uses other than industrial or industrially related uses.
- 16.0 Clearly identify entrances and exits to facilitate efficient traffic movement. The internal circulation system should have broad lanes and turnarounds large enough to accommodate truck traffic. Access streets should include curbs and gutters.
- 17.0 Require in all light industrial development and redevelopment a minimum of 20 percent of the total gross area to be in landscaping.
- 18.0 Require landscaping and limit outdoor storage and display to enhance the appearance on site and from off site.
- 19.0 Provide for pedestrian and bicycle access to adjacent transit corridors and, where applicable, to nearby residential areas. Require sidewalks when appropriate.
- 20.0 Require storm drainage control measures as an integral part of all industrial area development to compensate for large roofs and paved parking areas within industrial areas.
- 21.0 Require underground utilities and street lighting.
- 22.0 Require all Light Industrial developments to be subject to the design review process.
- 23.0 Encourage coordinated utility and traffic improvements in industrial land divisions.

## **General Industrial**

- 24.0 The following areas may be designated General Industrial when either the first or all of the following criteria are met:

- a. Areas having an historical commitment to industrial uses.
- b. Areas with availability of rail service, access to navigable water, known mineral deposits or freeway access.
- c. Areas where buffering land uses or physical features provide protection for lower intensity land uses, particularly Low Density Residential areas.
- d. Areas having access to a street of at least a major arterial classification. Sites within the broader district may be accessed by roads of a lower classification. Designation shall not result in significant traffic increase on streets of less than a collector status serving residential areas.
- e. Areas with sites large enough to accommodate expansion of individual establishments or serve several establishments within one district.

- 25.0 Determine permitted uses through zoning. Zoning of General Industrial areas shall be consistent with this Plan and the stated purpose of compatible zoning districts. Timing of zoning district application shall be in accord with the orderly development of the County.
- 26.0 Discourage land uses other than industrial or industrially related uses.
- 27.0 Clearly identify entrances and exits to facilitate efficient traffic movement. The internal circulation system should have broad lanes and turnarounds large enough to accommodate truck traffic. Access streets should include curbs and gutters.
- 28.0 Require in all General Industrial development and redevelopment a minimum of 15 percent of the total gross area for landscaping.
- 29.0 Provide for pedestrian and bicycle access to adjacent transit corridors and, where applicable, to nearby residential areas.
- 30.0 Require storm drainage control measures to be an integral part of the site design and improvements if site development includes large roof and paved parking areas.
- 31.0 Require sidewalks, when appropriate.
- 32.0 Require curbs, underground utilities and street lighting.
- 33.0 Require all General Industrial developments to be subject to the design review process.
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## OPEN SPACE AND FLOODPLAINS

The protection of open space resources is an important objective, but the designation of an area as Open Space does not mean development is prohibited. Development can occur within the framework of preservation of essential open space elements, and the functioning of natural systems. Open space preservation also need not mean public ownership or public access. Many alternatives and methods of open space protection are available. An open space network must be established through early acquisition, where appropriate, or the imposition of clear, consistent controls on land containing significant natural resources or hazards.



Open space often coincides with areas subject to natural hazards, including the undeveloped 100-year floodplain. Floodplains consist of areas which are periodically inundated from stream flows, causing damage to property and threatening the lives of residents. The 100-year floodplain has an average flood frequency of at least once every 100 years, or a one (1) percent probability of flooding in any particular year. A distinct set of policies has been formulated to deal with the special problems associated with flood hazard areas.

## GOALS

- Protect the significant natural features and systems of the County for the enjoyment of all residents and visitors.
- Protect a network of open space to balance development within the urban area and provide needed contrast in the urban landscape.
- Provide opportunities for needed recreation facilities.
- Protect the lives and property of County residents from natural hazards.

## POLICIES

### Open Space

- 1.0 Designate as Open Space areas of land or water substantially free of buildings or other significant structures which also are one of the following:
  - a. Natural resource areas with recognized unique or significant value, primarily those associated with stream/river corridors and hillsides.
  - b. Areas with some constraint or degree of hazard for development, such as landslides, steep slope, or flooding.
  - c. Existing parks and other committed open areas, such as golf courses, playgrounds, and cemeteries.
- 2.0 Establish three categories of Open Space within the northwest urban area: Resource Protection, Major Hazards, and Public and Community Use.
  - 2.1 The purpose of Resource Protection Open Space is to protect natural resources and the open character of designated areas while allowing development according to the Plan. Resource Protection Open Space is land in one the following categories:

- a. The flood fringe of 100-year floodplains
- b. Areas within 100 feet of mean low water on all major rivers and 50 feet of any other permanent stream
- c. Land within the Willamette River Greenway
- d. Wetland areas
- e. Distinctive urban forests
- f. Hillsides of more than 20 percent slope
- g. Areas of high visual sensitivity
- h. Other distinctive or unique natural areas (see Natural Resources Chapter)
- i. Undeveloped public land with potential for recreation.

2.2 The purpose of Major Hazards Open Space is to protect the public from natural hazards. Major Hazards Open Space is land in any of the following categories:

- a. The floodway of 100-year floodplains
- b. Areas of known landslide hazard
- c. Areas of severe erosion, unstable soil, or earth movement

2.3 The purpose of Public and Community Use Open Space is to preserve community open space and its associated benefits, such as recreation. Public and Community Use Open Space is land in any of the following categories:

- a. Parks and other recreation facilities
- b. Cemeteries
- c. Other publicly or commonly owned lands which function as open space

3.0 Require that all residential developments over one (1) acre size and having ten percent or more of designated Open Space, be Planned Unit Developments or flexible lot land divisions.

3.1 Protect open space features by clustering development away from the more sensitive areas within a site, assembling adjacent parcels into a larger development, transferring density within the development, and reviewing design, landscaping, color and materials for compatibility with the site and natural features

3.2 Development on land which includes wetlands shall be designed to (1) maintain water quality and the natural function of wetlands, (2) reduce and absorb flood runoff and stabilize water flow, and (2) protect wildlife habitats.

3.3 Apply to Major Hazard Open Space areas a Low Density Residential zone consistent with the area for the purpose of computing density transfer.

- 3.4 Wetlands outside the Northeast Urban area shall not be developed, except on a legal lot of record and where consistent with Policy 5.3c of the Land Use Chapter, Low Density Residential Section. However, up to 100 percent of the density may be transferred to another portion of the site which is not a wetland. Decisions regarding development of wetlands in the Northeast Urban area have been made through the Goal 5 Planning process. Wetlands in the Northeast Urban area are subject to the policies in Section 17 of the Natural Resources and Energy chapter and the Clackamas County Zoning and Development Ordinance.
- 4.0 Require that industrial and commercial development not disturb land designated as Open Space, unless unavoidable for the reasonable development of the site. Develop criteria for land coverage and development intensity to guide site planning and reduce impacts on open space features. Dedication of land for purposes of developing the urban parks and trail program shall be required as appropriate.
- 5.0 Prepare, in a timely manner, a site analysis for any development in the northwest urban area affecting land designated as Open Space. In addition, the County may prepare an analysis for development in an area of high visual sensitivity for any development having significant impact upon the County.
  - 5.1 The County's analysis will supplement the applicant's environmental assessment and include the following:
    - a. An evaluation of the proposed development's impact on the relevant natural systems or features of the open space network.
    - b. Identification of applicable provisions or criteria of this Plan.
    - c. Alternatives to the proposal which might better achieve the optimum siting or design layout and protect the site's open space values.
    - d. An evaluation of the potential for public acquisition or dedication as part of the urban park or trail system.
- 6.0 Prohibit development of areas designated Major Hazard Open Space except as provided in Policy 2.1 of the Natural Resources and Energy chapter, Natural Hazards Section, and Policy 5.3b of the Land Use chapter, Residential section.
- 7.0 Implement Public and Community Use Open Space through an Open Space zone. Public recreation or other compatible private or public uses and structures should be allowed, including golf pro shops, school play equipment, or park restrooms.
- 8.0 Permit public acquisition of land intended for Public and Community Use Open Space purposes in all land use categories and amend the Land Use Plan Map accordingly.
- 9.0 Use the best available data to make decisions on the extent to which a site may be developed in areas designated Open Space.

- 10.0 Conversion of land designated Public and Community Use open space may occur when an alternate use proposal is accompanied by suitable retention or replacement of open space, developed recreation or other suitable compensating actions.

## **Floodplains**

- 11.0 Designate as Floodplains the areas within 100-year floodplains. Refine Floodplain designations upon completion of detailed floodplain information including floodway and flood fringe.
- 12.0 Encourage floodplains to be retained as open space in order to protect their ability to convey and store water. The use of Floodplains shall conform to the requirements of the Floodplain Management Zoning District.
- 12.1 Restrict development and/or fill in the flood fringe to insure that danger to life and property will not result. The natural flow of water shall not be restricted, nor shall development which would significantly increase flood elevations be permitted.
- 12.2 Prohibit development and/or fill in the floodway due to risk to life and property, flow diversion and increased flood elevations. Possible exceptions to this policy are commercial or industrial activities of a water-dependent nature approved by the U.S. Army Corps of Engineers and/or Division of State Lands.
- 12.3 Allow riprap or other streambank protection measures only when they comply with river management policies in the Natural Resources and Energy chapter.
- 12.4 Prohibit storage of toxic or hazardous materials in the floodplain. Materials used for construction which may be inundated shall be of such strength and quality that they will not deteriorate, and shall be able to withstand water pressure or the high velocity of flowing water.
- 12.5 Require structures in the floodplain to be secured to prevent flotation. Septic tank lids shall be sealed to prevent loss of contents during flooding.
- 12.6 Require the lowest floor of buildings designed for human occupancy to be at least one foot above the 100-year flood elevation.

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## **RURAL COMMUNITIES**

Rural Communities are villages located outside Urban Growth Boundaries in which concentrated residential development is combined with limited commercial and industrial development and with limited public facilities and services.

## **GOALS**

- Provide for commercial and industrial development necessary to serve surrounding Agricultural, Forest and Rural areas.
- Provide residential areas supportive of the commercial and industrial uses.
- Recognize and protect communities and their historic character.
- Provide a balance of residential, commercial, and industrial uses conducive to a healthy economy for the community.
- Provide employment opportunities for residents of the Rural Community and surrounding areas.

## **COMMUNITY TYPES/DEFINITIONS**

### **Clackamas County defines rural communities by type as follows:**

- Rural Community (Redland, Beaver Creek, Colton, Boring, Wildwood/Timberline, Zigzag Village): an unincorporated community consisting primarily of residential uses but also including at least two other land uses that provide commercial, industrial, or public uses.
- Rural Service Center (Mulino, Rhododendron): unincorporated community consisting primarily of commercial and industrial uses providing goods and services to the surrounding rural area or persons traveling through.
- Resort Community (Wemme/Welches): community that was established primarily for and continues to be used primarily for recreation or resort purposes, and includes both residential and commercial uses as well as overnight lodging.
- Urban Unincorporated Community (Government Camp): unincorporated community that includes at least 150 permanent dwelling units, along with a mixture of other land uses including three or more public, commercial, or industrial land uses. This type of community includes areas served by community water and sewer.

## **POLICIES**

- 1.0 When the following criteria are met, areas may be designated Rural Communities:
- a. Land which has been acknowledged as a 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 rural communities;
  - b. Lands planned and zoned for farm or forest use provided such land:
    - is contiguous to Goal 3 or 4 exception lands included in the community boundary,
    - the land 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;

- only that portion of the lot or parcel that is occupied by the use(s) above may be included within the boundary; and
- the land remains planned and zoned for farm or forest use.

- 2.0 Rural Communities shall not be expanded into areas of natural hazards.
- 3.0 Management of land use patterns in Rural Communities shall be guided 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 the Planning Process chapter.
- 4.0 Development shall be contingent upon the ability to provide public service (e.g., school, water, fire, telephone).
- 5.0 Roads and streets shall be developed in a manner and to a level compatible with Rural 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 Industrial uses shall be limited to:
- Uses authorized under Goals 3 and 4;
  - Expansion of an existing use;
  - Small scale, low impact uses;
  - Uses that require proximity to a rural resource;
  - New uses that will not exceed the capacity of water and sewer service available to the site, or, if such services are not available to the site, the capacity of the site itself to provide water and absorb sewage;
  - New uses more intensive than listed above, provided an analysis set forth in the Comprehensive Plan demonstrates, and land use regulations ensure:
- 7.1 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,
- 7.2 That such uses would not rely upon a work force served by uses within urban growth boundaries, and
- 7.3 That the determinations 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.

8.0 Commercial uses shall be limited to:

- Uses authorized under Goals 3 and 4;
- Small scale, low impact uses;
- Uses intended to serve the community and surrounding rural area or the travel needs of people passing through the area.

9.0 Commercial and industrial uses should be encouraged to locate in Rural Communities to provide employment opportunities to residents of the communities and the surrounding area.

10.0 Commercial and industrial development shall be subject to design review.

11.0 Public facilities in Rural Communities should be expanded or developed only when consistent with maintaining the rural character of the center.

12.0 Increased water service to an area will 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.

14.0 The Rural (Agricultural) one-acre (RA-1) zoning district implements the goals and policies of this Plan for residential areas of Rural Communities; this zoning district and any other zoning district developed in the future which implements these goals and policies should be applied in Rural Communities.

15.0 Road standards in Rural Communities shall follow the Clackamas County residential road standards guide.

16.0 All roads within Rural Communities, which have a collector or higher classification, shall be provided with bikeways/pedestrian pathways.

## **Rural Commercial**

17.0 Nonurban commercial plan designations and zoning districts may be applied in nonurban areas to provide for commercial uses necessary for, and on a scale commensurate with, rural development including, but not limited to, small grocery stores, garages service stations and taverns.

18.0 The Rural Commercial (RC) Zoning District implements the Rural Commercial Plan designation. Areas may be designated Rural Commercial when either the first, or all of the other criteria are met:

- a. Areas having an historical commitment to commercial uses.
- b. Areas located within Rural Communities
- c. Sites shall have direct access to a street of at least a collector classification.

## **Rural Industrial**

- 19.0 Nonurban industrial plan designations and zoning districts may be applied in nonurban areas to provide for industries which are not labor-intensive and are consistent with rural character, rural development and rural facilities and services.
- 20.0 The Rural Industrial (RI) Zoning District implements the Rural Industrial Plan designation. Areas may be designated Rural Industrial when either the first, or all of the other criteria are met:
  - a. Areas having an historical commitment to industrial uses.
  - b. Areas located within Rural Communities
  - c. Sites having direct access to a street of at least an arterial classification.

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## **RURAL**

Rural lands are those which are outside the Urban Growth Boundaries and are suitable for sparse settlement, small farms or acreage homesite with no or hardly any public services and which are not suitable, necessary or intended for urban, agriculture or forest use.

### **GOALS**

- To provide a buffer between urban and agricultural or forest uses.
- To perpetuate the rural atmosphere while maintaining and improving the quality of air, water and land resources.
- To conserve open space and protect wildlife habitat.

### **POLICIES**

- 1.0 The following areas may be designated Rural:
  - a. Areas which are presently developed, built upon or otherwise committed to sparse settlement or small farms with no or hardly any public services available.



- 2.0 Designation of additional rural lands shall be based on findings which shall include, but not be limited to:
  - a. Reasons why additional Rural land is needed or should be provided.
  - b. An evaluation of alternative areas in the County which should be designated Rural; and a statement of why the chosen alternative is more suitable.
  - c. An evaluation of the long term environmental, economic, social and energy consequences to the locality, region or state by designating this area Rural.
  - d. Reasons why designating the area Rural will be compatible with other adjacent uses.
  - e. For lands outside urban growth boundaries, require exceptions to LCDC Goals 3 and 4 for any Plan amendment or zone change to uses other than agriculture or forestry.
- 3.0 Areas impacted by major transportation corridors, adjacent to areas designated Urban or Rural and for which public services are committed or planned shall be given priority in designating additional rural areas.
- 4.0 Residential lot sizes shall be based upon:
  - a. Parcelization
  - b. Level of existing development
  - c. Topography
  - d. Soil conditions
  - e. Compatibility with the types and levels of available public facilities
  - f. Proximity to existing Rural Communities or an incorporated city
  - g. Capacity and existing level of service of the road network
- 5.0 Existing large lots should be reduced to meet future rural housing needs prior to expanding the areas designated as Rural.
- 6.0 Areas with marginal or unsuitable soils for agricultural or forest use shall be given a higher priority for conversion to rural development than areas with more suitable soils.
- 7.0 Public facilities should be expanded or developed only when consistent with maintaining the rural character of the area.
- 8.0 Increased water service to an area will not be used in and of itself to justify reduced lot sizes.
- 9.0 The County shall encourage grouping of dwelling units with lot sizes less than the minimum allowed by the zoning district, when such cluster development is compatible with the policies in this Plan and the overall density of the zoning district.

- 10.0 Preexisting nonconforming structures and uses which are destroyed by fire, other casualty or natural disaster shall be allowed to reconstruct, as provided by the Zoning Ordinance.
- 11.0 The Rural (Agricultural) two-acre (RA-2), Rural Residential Farm/Forest five-acres (RRFF-5) and the Farm Forest ten-acres (FF-10) zoning districts maintain the character of Rural areas and implement the goals and policies of this Plan for residential uses in Rural areas; these zoning districts and any other zoning district developed in the future, which implements these goals and policies, should be applied in Rural areas. These zones shall be applied as follows:
- 11.1 A two-acre zone shall be applied when all the following criteria are met:
- a. Parcels are generally two acres or smaller.
  - b. The area is significantly affected by development.
  - c. There are no natural hazards and the topography and soil conditions are well suited for the location of homes.
  - d. A public or private community water system is available.
  - e. Areas are in proximity or adjacent to a Rural Center or incorporated city.
  - f. In areas adjacent to urban growth boundaries, 2 acre zoning shall be limited to those areas in which virtually all existing lots are already two acres or less.
- 11.2 A five-acre zone shall be applied when all the following criteria are met:
- a. Parcels are generally five acres.
  - b. The area is affected by development.
  - c. There are no serious natural hazards and the topography and soils are suitable for development.
  - d. Areas are easily accessible to a Rural Community or incorporated city.
- 11.3 A ten-acre zone shall be applied when one or more of the following criteria are met:
- a. Parcels are generally ten acres.
  - b. The area is developed with a mixture of uses not consistent with extensive commercial agriculture or forestry uses.
  - c. Access to a Rural Community or an incorporated city is generally poor.

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## **AGRICULTURE**

Agricultural lands are those of predominantly Class I-IV soils as identified by the U.S. Conservation Service or as identified in more detailed data; and other lands which are suitable

for farm use due to soil fertility, suitability for grazing, climatic conditions, existing or future potential for irrigation, land use patterns, accepted farming practices or are necessary to permit farming practices to be undertaken on adjacent or nearby lands.

## GOALS

- Preserve agricultural use of agricultural land.
- Protect agricultural land from conflicting uses, high taxation and the cost of public facilities unnecessary for agriculture.
- Maintain the agricultural economic base of Clackamas County and increase its share of the agricultural market.
- Increase agricultural income and employment by creating conditions which further the growth and expansion of agriculture and which attract agriculturally related industries.
- Maintain and improve the quality of air, water and land resources.
- Conserve scenic and open space.
- Protect wildlife habitats.

## POLICIES

- 1.0 The following areas shall be designated for Agriculture:
  - a. Areas with predominantly Class I-IV agricultural soil as defined by the U. S. Soil Conservation Service or identified as agricultural soil by more detailed data.
  - b. Areas generally in parcels of 20 acres or larger.
  - c. Areas primarily in agricultural use
  - d. Areas necessary to permit farming practices on adjacent lands or necessary to prevent conflicts with the continuation of agricultural uses.
  - e. Other areas in soil classes different from SCS I-IV, when the land is suitable for farm use as defined in ORS 215.203(2)(a), taking into consideration soil fertility; suitability for grazing; climatic conditions; existing and future availability of water for farm irrigation purposes; existing land use patterns; technological and energy inputs required; and accepted farm practices.
- 2.0 Agriculturally related industries shall be encouraged.
- 3.0 Land uses which conflict with agricultural uses shall not be allowed.
- 4.0 New sewer facilities shall not be allowed in Agricultural areas. (3/17/04)
- 5.0 Roads shall be developed in a manner and to a level compatible with maintaining Agricultural areas.

- 6.0 Education and dissemination of information on agricultural crops, methods and technology, special tax assessment programs and new land use techniques should be encouraged.
  - 7.0 Preexisting nonconforming structures and uses which are destroyed by fire, other casualty or natural disaster shall be allowed to reconstruct, as provided by the Zoning Ordinance.
  - 8.0 Exclusive Farm Use zones shall be used to implement agricultural policies.
  - 9.0 The Exclusive Farm Use (EFU) zoning district implements the goals and policies of this land use designation; this zoning district and any other Exclusive Farm Use zoning district developed in the future, which implements these goals and policies should be applied in Agricultural areas.
  - 10.0 Forest zoning districts which require a minimum lot size of 80 acres or larger may be applied in Agricultural areas provided the primary uses are forest and forest related and that permitted uses will not conflict with agricultural uses.
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## **FOREST**

Forest lands are composed of existing and potential commercial forest lands which are suitable for commercial forest uses and other forested lands needed for watershed protection, wildlife and fish habitat, and recreation. Also included are lands where extreme conditions of climate, soil and topography require maintenance of vegetative cover, and forested lands in urban and agricultural areas which provide urban buffers, wind breaks, wildlife habitat, scenic corridors and recreational use.

### **GOALS**

- To conserve forest lands.
- To protect the state's forest economy by making possible economically efficient forest practices that assure the continuous growing and harvesting of timber as the leading use on forest land.
- To conserve, protect and enhance watersheds, wildlife and fisheries resources, agriculture and recreational opportunities that are compatible with the primary intent of the zone.
- To minimize wildfire hazards and risks.
- To enhance and protect other environmentally sensitive areas.

### **POLICIES**

- 1.0 The following areas shall be designated Forest:

- a. Lands suitable for forest use;
- b. Lands predominantly capable of generating at least 85 cubic feet of timber per acre per year;
- c. Areas generally in forest uses;
- d. Areas which are environmentally sensitive or otherwise require protection (watersheds, areas subject to erosion, landslides, etc.) should be designated Forest;
- e. Forested areas which buffer more intense land uses from areas of less intense use may be designated Forest.

- 2.0 Forest related industries shall be encouraged.
- 3.0 Land uses which conflict with forest uses shall not be allowed.
- 4.0 Housing should be limited in forest areas because it is generally incompatible with forest uses due to fire danger and accepted forest practices such as herbicide spraying and slash burning.
- 5.0 Commercial and industrial development shall not be allowed in forest areas.
- 6.0 New sewer facilities shall not be allowed in forest areas. (3/17/04)
- 7.0 The County shall encourage use of a Homestead Provision which allows retention of a homesite with an existing dwelling and transfer the remaining property as long as the transfer is compatible with forest policies.
- 8.0 Preexisting nonconforming structures and uses which are destroyed by fire, or natural disasters shall be allowed to reconstruct, as provided by the Zoning and Development Ordinance.
- 9.0 Zoning districts consistent with state, regional, and County goals and USFS land allocation and management plans shall be applied to the Mt. Hood and Willamette National Forests.
- 10.0 This plan and implementing ordinance provisions shall not conflict with the Oregon Forest Practices Act.
- 11.0 The Timber (TBR) and Ag/Forest (AG/F) zoning districts implement the goals and policies of this land use designation. The TBR zone shall be applied to areas predominantly in forest use. The AG/F zone shall apply to areas having such a mixture of agricultural and forest use that neither the statewide forest goal, nor statewide agriculture goal apply alone.

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 5

### TRANSPORTATION (4/28/05)

<u>TRANSPORTATION</u>
<u>ROADWAYS</u>
<u>TRANSPORTATION DEMAND MANAGEMENT</u>
<u>PARKING</u>
<u>TRANSIT</u>
<u>PEDESTRIAN AND BICYCLE FACILITIES</u>
<u>FREIGHT, RAIL, AIR, PIPELINES AND WATER TRANSPORTATION</u>

Clackamas County's transportation system is an extensive network of public and private transportation facilities, including roads, railways, airports, waterways and trails. The system is intended to allow people to get where they need to go safely and efficiently, whether they travel by foot or by automobile, bus, train, airplane or bicycle. The system also is intended to provide for the efficient movement of goods, whether by truck, barge, train or pipeline. It is expected to serve a multitude of public needs without sacrificing air and water quality or creating noise pollution.

In recent years, rapid population growth and, ironically, the strong economy, have challenged the ability of the transportation system to balance those goals. Funding levels for roads, the backbone of the transportation system, have not kept pace with the proliferation of motor vehicles, housing and businesses, which increase the demand for road miles. The backlog of needed road maintenance and construction projects has grown larger.

At the same time, factors including the jobs/housing imbalance in the tri-county region have encouraged single occupant vehicle commuting. Given these conditions, relieving traffic congestion and protecting the environment will require strategic low-cost fixes.

This Plan focuses primarily on the County's responsibilities, 1,435 miles of road and 165 bridges. The cities and the State also own and maintain roads and bridges within Clackamas County. All land-based modes of travel, except rail and pipeline, must share the public rights-of-way. This includes autos, trucks, buses, bicycles, and pedestrians. Safety considerations apply to travelers by all modes, and public rights-of-way must be improved and maintained to make

travel safe for all. Clackamas County is also challenged by the responsibility to maintain and develop a safe and functional road network in rural areas and the need to expand a formerly rural road network to a full service urban transportation system in urban areas.

Many agencies and public and private providers as well as developers are involved in building and maintaining the County's transportation system. Metro, the region's governing body, coordinates transportation financing for many projects, sets priorities for expenditures, and sets standards for the operation and design of regional elements of the transportation system. The County coordinates with its 16 cities, transit providers and the State of Oregon. One product of that coordination is the County's Capital Improvement Plan (20-year) and a detailed 5-year program for improvement of County-owned roads and bridges.

## **ISSUES**

- Providing transportation infrastructure to support changing land uses, and population and employment growth, while being sensitive to neighborhood needs and concerns.
- Balancing the need for maintenance and management of existing facilities with the need for building new facilities to accommodate increased trip demand.
- Monitoring the effects of transportation on employment and economic activity, especially the relationship of transportation to economic development and the ways transportation can be used as a tool to stimulate economic development.
- Improving roads to perform all the necessary functions.
- Balancing the need for mobility (through movement of traffic) with the need for access to property.
- Taking environmental needs and concerns into account.
- Balancing regional transportation needs with the need for local circulation and access.
- Providing mobility for those who choose not to drive, or who cannot drive.
- Sharing public and private costs for transportation facilities and services.
- Developing facilities for alternative modes of travel, and improving safety for travelers by all modes.
- Conserving energy.

## **SUMMARY OF FINDINGS AND CONCLUSIONS**

1. An increasing population, a growing labor force, a strong economy and our own travel habits have increased the demand for transportation facilities, while costs for these facilities continue to rise.
2. Greater reliance on transit, bicycles, foot traffic, carpools, and other transportation modes will be necessary, along with decreased average trip length, in order to decrease energy consumption and road congestion. Use of alternative modes will decrease the need for costly road construction projects and improve air quality, neighborhood livability, and access to goods, services, and employment.

3. An improved relationship between land uses and transportation is necessary to decrease reliance on automobiles. 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.
4. Improved east/west transportation connections are needed in the urban part of the County.
5. Money for transportation projects is limited, therefore the County must make the best possible use of existing funds and existing rights-of-way in order to efficiently provide transportation to the greatest number of people.
6. 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. Federal law requires the region to implement measures that will allow the region to maintain federal air quality standards. Federal law prohibits significant degrading of air quality in the Mt. Hood Wilderness area.
7. Transportation related noise is a significant problem, especially in residential areas adjacent to major roads.
8. Elderly, disabled and low-income residents -- a significant proportion of the County's population -- require better access to public transit and/or special transportation services.
9. The County's Capital Improvement Plan (CIP) contains the list of needed capital improvement projects that should be completed within 20 years in order to accommodate projected population and employment growth.
10. The County considered Metro's Roadway Design types and will apply them where appropriate.
11. Rural roads should be safer and improved to standard.
12. In 1999, 60% of Clackamas County residents commuted to work outside the County. The relative shortage of jobs within the County contributes to the County's transportation problems.

## **GENERAL TRANSPORTATION GOALS**

- Create a safe, efficient and effective transportation system -- with multiple modes -- that balances the needs of the economy, protection of the environment, conservation of natural resources, and protection of neighborhoods.
- Work in partnership with neighboring and affected agencies in transportation planning to ensure effective and efficient results.
- Prepare a financial plan to fund the projects included in the Capital Improvement Plan (CIP).
- Use all financial means possible and take the lead in developing new funding sources to construct needed projects.
- Work to maximize dollar return from state, regional and federal sources for County transportation projects.
- Schedule transportation system improvements to coincide with the needs of new



development.

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## ROADWAYS

The County's roadway system, not including State highways and city streets, is an asset that, if built today (1999), would cost in excess of \$1 billion. This investment, mostly an endowment from previous generations, permits the movement of goods and people across the landscape, using the mode of our choice. Roadways provide access to virtually all property. They support old communities and serve new development. They connect rural communities and urban neighborhoods. Roadways give structure to our urban form, define our commuting patterns and influence our perceptions of what is far away or close at hand.

### GOALS

- Create and maintain a safe, continuous County-wide road system, that accommodates movement by all travel modes.
- Meet the future transportation demands of the County.
- Complement the transportation networks of cities, other counties and the State.

### POLICIES

#### Efficiency and Finance

- 1.0 Consider strategies for using the existing road system and its capacity most efficiently before building new roads or adding new capacity to existing roads. Transportation System Management techniques are a set of strategies that shall be used to make roadways operate more efficiently.

Transportation System Management (TSM) strategies include;

- Access Management
- Alternative/Modified Standards (Performance and/or Design Standards)
- Intelligent Transportation System (ITS) applications
- Operational Improvements
- Parking Standards.

- 2.0 Emphasize maintenance of existing roadways, with improvements where appropriate, to improve traffic flow and safety at a reasonable cost.

- 3.0 Determine roadway maintenance needs and priorities and develop an effective and efficient roadway maintenance program.
- 4.0 Preserve as much as possible the efficient function of the regional roadway system in development of any new roads.
- 5.0 Investigate and cooperate with other jurisdictions in establishing a transportation financing plan.
- 6.0 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, local and regional jurisdictions in their roadway planning efforts.

### **Needed Roadway Improvements**

- 7.0 Fund and build the roadway improvement projects needed to accommodate and appropriately manage future traffic demands for the next 20 years. The list of these projects follows as Table V-1. Maps illustrating their locations are included as Maps V-1a and V-1b.
  - 7.1 Designate the Sunrise Corridor along a new alignment of Highway 212 in rural Clackamas County as a future, planned highway corridor.
  - 7.2 Pursuant to OAR 660, Division 12 that requires an exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities and Services) and Goal 14 (Urbanization) for constructing new arterial roads on EFU lands, an exception has been taken to allow for the Arndt Road improvement listed as project numbers 265 and 266 on Table V-1. For findings of fact and statement of reasons, see File ZDO 194. (April 17, 2003)
  - 7.3 Pursuant to OAR 660, Division 12 that requires an exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities and Services) and Goal 14 (Urbanization) for constructing new arterial roads on EFU lands, an exception has been taken to allow for the Arndt Road improvement listed as project numbers 266 and 267 on Table V-1. For findings of fact and statement of reasons, see File ZDO 195. (June 26, 2003)
- 8.0 Maintain a current and complete 5-year Capital Improvement Program. It shall contain needed future transportation projects in priority order, with estimated costs and assigned responsibility for funding. It should be updated and adopted periodically by the Board of County Commissioners.

### **Table V-1 Clackamas County 20 Year Capital Improvement Needs**



[Map V-1a Transportation System Plan 20 Year Projects, Urban](#)



[Map V-1b Transportation System Plan 20 Year Projects, Rural](#)

## Functional Classifications and Roadway Standards

9.0 Designate and develop roadways according to the functional classifications and guidelines listed in Tables V-2 and V-3 while allowing flexibility to accommodate characteristics of terrain, scenic qualities, and existing development.

[TABLE V-2](#) Roadway Classifications And Guidelines AND

[TABLE V-3](#) Roadway Classifications And Guidelines (Continued)

- 10.0 Designate freeways, arterials, collectors and connectors as shown on Maps V-2a and V-2b. Roadways that do not presently exist but are shown on these maps are shown in approximate locations.
- 11.0 Limit zone change approvals to those that will not require a roadway as planned in the Capital Improvement Plan to be redesigned or increased to a higher functional classification in order to maintain the minimum acceptable performance evaluation Level-of-Service standard. State transportation facilities shall be evaluated according to the Oregon Highway Plan. (3/14/02)
- 12.0 The County shall consider the Regional Street Design Type Guidelines, as shown on Table V-4, when designing new county roads or redesigning existing county roads prior to construction or reconstruction. Map V-3 shows which roads are designated by each Design Type.



[MAP V-2a Functional Classification \(Urban Area\)](#)



[MAP V-2b Functional Classification \(Rural Area\)](#)

[TABLE V-4](#) Regional Street Design Types



[MAP V-3 Regional Street Design Types](#)

13.0 Design arterials and collectors to allow safe and convenient passage of buses in urban areas and, where necessary, rural areas.

## Access Standards

- 14.0 Plan and control access onto roads within the County, as shown on Table V-5, for urban areas and according to the American Association of State Highway and Transportation Officials (AASHTO) guidelines for rural areas, for both new and existing uses, and coordinate with the Oregon Department of Transportation for access control on state highways. Access standards need to be applied in a flexible manner that maintains reasonable access to property when access cannot be denied.

### **TABLE V-5** Clackamas Co. Access Requirements By Functional Classification, Urban Areas Only

## Improvements to Serve Development

- 15.0 Require right-of-way dedication, on-site improvements to the applicable roadway standard as shown on Tables V-2 and V-3, and off-site improvements for new developments and land divisions necessary to handle expected traffic loads and travel by alternative modes.
- 16.0 Require development to be served by adequate roadway facilities. (3/14/02)
- 17.0 Require implementation of a local street network for undeveloped sites illustrated on Map V-4. Existing streets shall be extended to provide a direct, connected street system.
- 18.0 Developers of new developments and land divisions that will require construction of new streets shall provide the County with a conceptual street plan map and street cross sections responding to the other requirements of this section, and full street connections at intervals of no more than 530 feet. Exceptions may be made when a full street connection is prevented by barriers such as topography, railroads, freeways, pre-existing development or environmental constraints such as streams and wetlands.
- 19.0 Before an exception is granted to the above requirement, it shall be determined if, at a minimum, an accessway for pedestrians, bicyclists or emergency vehicles may be constructed at intervals of 330 feet. Those accessways shall be constructed unless prevented by barriers or environmental constraints.



### [MAP V-4 Undeveloped Sites Larger than 5 Acres](#)

- 20.0 Assess anticipated off-site traffic impacts caused by new developments and land divisions. The developer or subdivider may be required to participate financially or otherwise in the provision of off-site improvements, dedications or other requirements. (3/14/02)
- 21.0 Where appropriate, develop and implement neighborhood traffic circulation plans intended to improve circulation while minimizing neighborhood disruption and environmental problems.
- 22.0 Encourage a relationship between land use and roadways which decreases average trip length.
- 23.0 Discourage through trips on local, connector and collector roadways.
- 24.0 Develop neighborhood traffic calming policies that will enable the County to address inappropriate travel patterns and speeds.
- 25.0 Allow flexible roadway criteria and standards for local streets that are less than 200 feet in length, are expected to carry very low traffic volumes, and are not capable of being extended.
- 26.0 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 streets and are not maintained by the County, and don't necessarily provide connectivity.

## **Operating Standards**

- 27.0 Evaluate capacity needs for regional roadways within Metro's boundaries using the Regional Motor Vehicle Performance Measures. The use of these measures is limited to network analysis, and priorities for funding through Metro; they are not for designing individual road improvements.
- 28.0 All arterials and collectors not in Regional Centers shall be evaluated for performance to Level-of-Service "D" as the acceptable operating standard, except as established below. All capital construction shall be designed to achieve Level-of-Service "D" or better. (4/28/05)
  - a. Review of high-employment developments shall use a performance evaluation operating standard of Level-of-Service "E". (4/28/05)
  - b. Review of developments proposed on property with a Comprehensive Plan designation of Campus Industrial, Business Park, Light Industrial, General Industrial or Rural Industrial shall use a performance evaluation operating standard of Level-of-Service "E", except within the Clackamas Industrial Area, where no performance evaluation operating standard shall apply. (4/28/05)

- 29.0 Limit zone change approvals to those that will not reduce the Level of Service of a roadway as planned in the Capital Improvement Plan below the minimum acceptable performance evaluation Level-of-Service standard. State facilities shall be evaluated according to the Oregon Highway Plan. (3/14/02)

## **Building Roads**

- 30.0 County road capital improvement projects outside UGBs may be designed and constructed to improve safety and bring the roads up to County standards. When projects are located within current rights-of-way, no conflicts with Goals 3 or 4 are anticipated. If the design of a project requires expansion of right-of-way into lands planned for Forest or Agricultural use, a goal exception may be necessary.
- 31.0 Road projects located outside UGBs shall be planned to support the existing development pattern and through traffic needs, and are not planned to support or promote urbanization. Such projects will comply with Goal 11 (Transportation) to provide a safe and efficient transportation system meeting the needs of the rural area.
- 32.0 Streets and roads are an allowed use in all zoning districts. All state and County policies relating to roads shall be considered when widening or constructing new roads.
- 33.0 Consider all types of interchange designs when developing a freeway interchange project to maximize traffic flow, safety and efficiency.
- 34.0 Consider all transportation modes when building new roads or widening existing roads to maximize efficiency and safety for all users of the road.

## **Scenic Roads**

- 35.0 Implement a County Scenic Road System.
- 35.1 The Scenic Road designation is intended to protect recreation values, scenic features, and an open, uncluttered character along the roadway. Developments adjacent to scenic roads shall be designed with sensitivity to natural conditions. The following policies are intended to accomplish these ends:

- a. Scenic roads shall have strict access control on new developments.
- b. Scenic roads should have shoulders wide enough for pedestrians or bicycles.
- c. Turnouts should 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 should be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer zone.
- f. Parking areas adjacent to scenic roads should be separated from the right-of-way by a landscaped buffer.
- g. Frontage roads, if any, adjacent to scenic roads should be separated by a vegetative buffer.
- h. Encourage underground placement of utilities.

35.2 The following shall be designated scenic roads: (See Map V-5).

- I-205 west of the Willamette River
- Stafford Road from Lake Oswego to Mountain Road
- Mountain Road, Canby Ferry, Locust, 37th, and Holly Street
- Schaeffer Road
- Pete's Mountain Road from Schaeffer Road to Tualatin River
- Oregon City Bypass-Newell Creek Canyon segment
- Highway 99E from Oregon City to New Era Road
- Canby-Marquam Highway from Canby to Highway 211
- Highway 211 from Canby-Marquam Highway to Estacada
- Highway 224 from Carver to Barton and from Estacada south
- Redland Road
- Clackamas River Drive
- Fischers Mill Road
- Springwater Road from Clackamas River Drive to Hayden Road
- Hayden Road
- Highway 26 east of Sandy
- Highway 35
- Old Highway 35/FS 386
- Timberline Road and West Leg Road
- Marmot/Barlow Trail Road
- Lolo Pass Road
- Salmon River Road
- Still Creek Road
- Wilsonville Road

- 35.3 Designate that portion of the Mt. Hood Loop in Clackamas County (Dodge Park Road, Lusted Road, Ten Eyck Road, US 26, and OR 35) as an official Oregon Scenic Byway.



[MAP V-5 Scenic Roads](#)

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## TRANSPORTATION DEMAND MANAGEMENT

Strategies to achieve efficiency in the transportation system by reducing demand are collectively known as Transportation Demand Management (TDM) techniques. TDM measures can be effective tools in reducing Vehicle Miles Traveled (VMT). Implementation of TDM measures will help meet the County's Transportation Planning Rule requirement for reduction in VMT per capita over the next 20 years. In the long run these strategies can help keep costs down for new transportation facilities and improve air quality.

### GOALS

- Reduce single occupant vehicle trips on the roadway network during peak travel demand periods.
- Reduce Vehicle Miles Traveled per Capita by 10% by year 2020 (using year 2000 as a base year).
- Work with businesses in Clackamas County to support their efforts in reducing single occupant vehicle commuting, which in turn will reduce Vehicle Miles Traveled per Capita.

### POLICIES

- 1.0 Work with Metro and the state to explore Congestion Pricing (Value Pricing) on appropriate transportation facilities to encourage reductions in VMT.
- 2.0 Encourage employers in Clackamas County to implement a range of TDM policies to help their employees reduce VMT. Examples are, subsidized bus passes, company owned vanpools, preferred parking for carpools and vanpools, bicycle racks, and flexible work schedules.
- 3.0 Coordinate with DEQ and Tri-Met to implement TDM programs and the Employer Commute Options (ECO) rule.
- 4.0 Provide adequate bicycle and pedestrian facilities to employment areas of Clackamas County to encourage use of alternative modes for the commute to work.



- 5.0 Work with Clackamas County employers located in concentrated employment areas to develop Transportation Management Associations (TMAs) to coordinate and support private sector TDM efforts.
- 6.0 Establish the following Year 2040 Non Single Occupancy Vehicle (SOV) modal split targets for Regional 2040 Design Types:

<b>2040 Design Type</b>	<b>Non-SOV Modal Target</b>
Regional Centers	45%
Town Centers	45%
Main Streets	45%
Station Communities	45%
Corridors	45%
Industrial Areas	40%
Intermodal Facilities	40%
Employment Areas	40%
Inner Neighborhoods	40%
Outer Neighborhoods	40%

## **PARKING**

The setting of parking standards is a Transportation System Management (TSM) technique that is consistent with the Region 2040 Growth Concept, meets the objectives of the Transportation Planning Rule (TPR), and complies with DEQ's Air Quality Maintenance Plan.

### **GOAL**

- Insure that parking is provided in a manner convenient to users of all transportation modes.

### **POLICIES**

- 1.0 Set minimum and maximum limits on allowed off-street parking relative to building size, location and use, and adjacent land uses.

- 2.0 Encourage off-street parking in commercial, industrial, and high density residential areas to be at the sides or rear of buildings where practical, with buildings oriented to the street in a manner that is convenient to pedestrians and aesthetically pleasing to passers-by, but does not interfere with sight distance on the roadway, or preclude road widening.
  - 3.0 Existing curbside parking along arterials and collectors may be removed to allow the striping of bike lanes, construction of travel or turning lane improvements or for increasing sight distance.
  - 4.0 Allow developments along transit routes to decrease their parking area requirements if they provide pedestrian and transit amenities.
  - 5.0 Allow commercial and industrial developments to decrease their parking area requirements if they provide and maintain ridesharing programs.
  - 6.0 Allow shared parking where feasible, such as within mixed use development and where adjacent land uses are compatible. Such sharing of parking can be used to help satisfy compliance with parking standards.
  - 7.0 Increase on-street parking in residential areas by minimizing the width of driveway curb cuts.
  - 8.0 On-street parking may be prohibited in front of schools as needed to assure student safety and school security, and shall be reviewed on a school by school basis.
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## **TRANSIT**

Transit service is essential for the mobility of many County residents, and provides an attractive option for others who prefer to use it. Tri Met, transit districts in Wilsonville, Molalla and Sandy, and each of the school districts operate buses on County roads, State highways, and city streets within the County. While the County provides no transit service directly, it has some influence over the type of service provided and the way new developments interface with transit and provide amenities for transit riders.

### **GOALS**

- Develop an integrated transit system that complements and supports the road, pedestrian, and bicycle system and encourages the use of alternative transportation modes within, to, and from the County's urban areas.
- Encourage transit ridership through development of a transit system that is fast and comfortable at low cost.
- Encourage land use patterns, development designs and street and pedestrian/bikeway improvements that support transit.
- Provide transit for people who cannot use or do not have adequate private transportation. Provide transit that is accessible to people with disabilities.

- Develop a transit system that supports residential, commercial and industrial development to help reduce new investment in roadway capacity.
- Develop a transit system that meets the County's local needs.
- Develop a system of light rail transit (LRT) routes to serve selected corridors in the north urban area of the County.

## **POLICIES**

- 1.0 Work with transit agencies to identify existing transit deficiencies in the County, needed improvements, and park and ride lots to increase the accessibility of transit services.
- 2.0 Major developments or road construction projects along transit routes shall be required to include provisions for transit shelters, pedestrian access to transit and/or bus turnouts where appropriate.
- 3.0 Coordinate with transit providers to achieve the goal of transit service within 1/4 mile of most residences and businesses within the Portland Metropolitan UGB. More frequent service should be provided within Regional Centers and Corridors.
- 4.0 Emphasize corridor or roadway improvements to increase transit speed, convenience and comfort.
- 5.0 Coordinate and cooperate with Tri-Met and other transit agencies to provide transportation to the elderly and people with disabilities.
- 6.0 Promote park and ride lots, bus shelters and pedestrian/bikeway connections to transit.
- 7.0 Emphasize transit improvements that best meet the needs of the County, including more east-west connections and service between the County's industrial and commercial areas and medium to high density neighborhood areas.
- 8.0 Protect neighborhoods, recreation areas and pedestrian/bikeways from transportation related environmental degradation.
- 9.0 Require pedestrian and transit-supportive features and amenities and direct access to transit through the Development Review Process. Such 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. Parking should be at the rear or sides of buildings. Buildings measuring more than 100 feet along the side facing the major pedestrian/transit access should have more than one pedestrian entrance.
- 10.0 Coordinate with Tri-Met on all new residential, commercial or industrial developments to ensure appropriate integration of transit into the developments.
- 11.0 Bus routes will be improved and coordinated with financing and implementation of necessary roadway improvements and in cooperation with transit service providers.
- 12.0 Encourage Tri-Met to restructure transit service to efficiently serve local as well as regional needs.

- 13.0 Work with federal, state, and regional agencies to implement high capacity transit in the downtown Portland to Milwaukie (McLoughlin) Corridor, and the Highway 224 Corridor to Clackamas Town Center.
- 14.0 Provide high capacity transit to the Oregon City and Tualatin areas, and in the I-205 corridor including the Gateway Transit Center. The purpose is to relieve traffic congestion, provide for transportation alternatives to the automobile, and to promote the economy of the Oregon City and Tualatin areas and the I-205 Corridor.

### **Standards and Criteria for Major Transit Streets and Major Transit Stops**

- 15.0 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 Map V-6, as well as any other street that receives 20 minute or better service at the PM traffic peak.
- 16.0 Major Transit Stops shall be any transit stop along a Major Transit Street where that stop is within 250 feet of the centerline of an intersection with a public or private street. Orientation of buildings to transit at Major Transit Stops shall be accomplished by siting new commercial buildings 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 property lines.
- 17.0 Pedestrian access should be provided connecting 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.



[MAP V-6 Urban Area Transit Routes and Designated Transit Centers](#)



[MAP V-6b Rural Area Transit Routes and Designated Transit Centers](#)

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## **PEDESTRIAN AND BICYCLE FACILITIES**

The county completed its transportation systems planning for pedestrian and bicycle modes in 1995, to implement the state's Transportation Planning Rule (TPR). The TPR is grounded by the principles that: (3/17/04)

- 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. (3/17/04)
5. "Well-planned", properly designed facilities will encourage people to make trips by non-motorized modes. (3/17/04)
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. (3/17/04)

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 as supporting documents. Both master plans were prepared under the guidance of the Clackamas County Pedestrian and Bikeway Advisory Committee, which was guided by the following vision: (3/17/04)

## **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.

## **POLICIES**

The first five policies below speak to how the envisioned system should be designed. The results of the system design work based on those policies are shown on the Planned Bikeway Network Map V-7a, Planned Bikeway Network Map V-7b, and Essential Pedestrian Network Map V-8. Those pedestrian and bicycle facilities shall be constructed in the course of development, as well as added to existing communities as the Capital Improvement Program allows. Responsibility for construction falls on both the private and public sectors. These facilities shall be constructed to specified standards. Ongoing, unfinished, and project-level planning for pedestrian and bicycle facilities will continue. It will be coordinated with other jurisdictions and integrated with other transportation modes. (3/17/04)

- 1.0 Provide networked systems of walkways and bikeways connecting neighborhoods, transit stops, commercial areas, community centers, schools, parks, libraries, employment places, other major destinations, regional bikeways and walkways, and other transportation modes.
- 2.0 Identify walkway and bikeway improvements necessary to ensure direct and continuous networks of walkways and bikeways on the county road system. (3/17/04)
- 3.0 Support acquisition and development of multi-use paths on abandoned public and private rights-of-way.

- 4.0 Encourage bicycle and pedestrian access across rivers and other natural barriers.
- 5.0 Promote grid-street development patterns to provide direct routes from neighborhoods to destinations frequented by pedestrians and bicyclists.
- 6.0 Construct all walkways, bikeways, and trails as designated on maps V-7a, V-7b, and V-8. (3/17/04)
- 7.0 Construct all walkways designated in this Plan and any other walkways proposed, according to the current county design standards, the American Association of State Highway and Transportation Officials (AASHTO) standards, and the Americans with Disabilities Act (ADA) standards. (3/17/04)
- 8.0 Construct all bikeways designated in this Plan and any other bikeways proposed, according to the current standards in the Oregon Bicycle and Pedestrian Plan and the American Association of State Highway and Transportation Officials (AASHTO) standards. (3/17/04)
- 9.0 The implementation of bikeways and sidewalks shall be considered in all new collector or arterial construction or reconstruction, even if not designated on Maps V-7a, V-7b, and V-8. (3/17/04)
- 10.0 Require that new development include construction of pedestrian and bikeway connections within the development and between adjacent developments for the purpose of increasing non-motorized mobility. (3/17/04)
- 11.0 Coordinate with pedestrian, bicycle, and trail master plans of the Oregon Department of Transportation, the United States Forest Service, Metro, parks districts, and city parks departments to achieve a safe and convenient off-road trail system connecting to the on-road pedway and bikeway network. (3/17/04)
- 12.0 Coordinate the implementation of pedways and bikeways with neighboring jurisdictions and jurisdictions within the county. (3/17/04)
- 13.0 Support the continuation of the "Bikes on Transit" program on all public transit routes.
- 14.0 Require new development to provide bicycle parking, and initiate a program for adding bicycle parking in areas frequented by bicyclists.
- 15.0 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. (3/17/04)
- 16.0 Support continuation of current (or equivalent) federal, state, and local funding mechanisms to construct county pedestrian and bicycle facilities. (3/17/04)
- 17.0 Develop dedicated funding sources to implement the Clackamas County Pedestrian and Bicycle Master Plans. (3/17/04)
- 18.0 Develop routine maintenance standards and practices for pedestrian facilities and on-road and off-road bikeways, including traffic control devices. (3/17/04)
- 19.0 Inform the public of their responsibilities for sidewalk and bikeway maintenance. (3/17/04)

- 20.0 Ensure an opportunity for representative citizen involvement in the county pedestrian and bicycle planning process by sponsoring the Clackamas County Pedestrian and Bikeway Advisory Committee as a forum for public input. (3/17/04)
- 21.0 Encourage the provision of street lighting for the purpose of increasing the visibility and personal security of pedestrians and bicyclists. (3/17/04)
- 22.0 Monitor and update the Clackamas County Pedestrian and Bicycle Master Plans through data collection, evaluation, and review activities necessary to maintain and expand the programs established in these plans. (3/17/04)
- 23.0 Construct separate multi-use paths in rural areas according to American Association of State Highway and Transportation Officials (AASHTO) standards where travel lanes or wide paved shoulders along roadways may be unacceptable to pedestrians or bicyclists. (3/17/04)
- 24.0 In Rural Communities construct walkways adjacent to or within areas of development, such as schools, businesses, or employment centers near or along highways. (3/17/04)



[MAP V-7a Planned Bikeway Network, Urban](#)



[MAP V-7b Planned Bikeway Network, Rural](#)



[MAP V-8 Essential Pedestrian Network](#)



[MAP V-9 North Clackamas Parks District Neighborhood Trails](#)

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## **FREIGHT, RAIL, AIR, PIPELINES AND WATER TRANSPORTATION**

These modes are acknowledged as making significant contributions to the movement of people and goods that improve our quality of life. Clackamas County has a strong job base in the sectors of transportation and wholesale trade. It is important to maintain the advantages of location and transportation infrastructure that ensure leadership in these sectors.

If the County's role in freight movement is to expand within the region and nation, intermodal facilities will require expansion. National and international markets will become increasingly prominent, but the decision to keep business in the County competitive will require local support.

## GOALS

- Provide efficient, cost-effective and safe movement of freight in and through the County.
- Maintain and enhance the County's competitive advantage in freight distribution through the efficient use of a flexible, continuous, multi-modal transportation network that offers competitive choices for freight movement.
- Protect and enhance public and private investments in the freight network.
- Encourage better service and inter-modal connections for passenger rail and air travel.
- Continue to use and diversify the rail system in Clackamas County through development of supportive land use, coordination between rail and other transportation modes, and encouragement of passenger rail service.
- Protect residents from safety hazards and environmental degradation caused by rail.
- Locate new airports so as to maximize safety, minimize environmental degradation, and integrate airport location with other transportation networks.
- Minimize conflicts between airports and other uses.
- Encourage freight shipment on the Willamette River while minimizing environmental degradation.

## POLICIES

### Freight Trucking

- 1.0 Maintain a truck circulation plan, as shown on Map V-10, for movements of freight on arterial roads where minimum impact will occur to neighborhoods, and industrial areas will have the service they need.



[MAP V-10 Urban Area Freight Routes](#)

### Rail

- 2.0 Reduce the number of at-grade crossings from those that currently exist.
- 3.0 On new or reconstructed arterials or urban collectors, prohibit at-grade crossings of heavy rail lines without traffic restrictive safety devices unless train traffic is very low.
- 4.0 Encourage use of the rail system for freight and passenger high speed rail service. Encourage additional stations for heavy rail service.



- 5.0 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.

## Airports

- 6.0 Work with the Port of Portland to make the Port's facilities for passenger and freight service more accessible to County residents.
- 7.0 Work with the Port of Portland in the development of the Mulino Airport.
- 8.0 Coordinate with Marion County to implement regulations on development near the Aurora Airport.
- 9.0 Apply the following criteria when reviewing applications for new airports or expansions of existing ones.
- 9.1 Locate new public use airports within one mile of an arterial roadway. (11/01/01)
  - 9.2 Locate new public use airports at least one mile away from urban residential areas. (11/01/01)
  - 9.3 Prevent air pollution and noise generated by airports from exceeding standards of appropriate regulatory agencies.
  - 9.4 Cooperate with regulatory agencies to minimize conflicts between airports and other uses.
  - 9.5 Develop appropriate height and clear zone standards for airport facilities.
  - 9.6 Encourage establishment of heliports in industrial areas in conjunction with state and federal standards for heliport design and location.
  - 9.7 New airports, airport expansions, or expansions of airport boundaries, except those limited to use by ultralights and helicopters, shall have a runway at least 1800 feet long and control at least enough property at the end of each runway through ownership, avigation easement, or long term lease to protect their approach surfaces until they are 50 feet above the terrain. The runway shall be located so as to achieve at least a 20 foot clearance of the approach surface over a county, city or public road. (11/01/01)
- 10.0 The County will adopt ordinance provisions to implement regulations consistent with applicable statutes and administrative rules. (11/01/01)
- 11.0 Recognize airports in Clackamas County, classified as shown on Map V-11.



[MAP V-11 Airports](#)

## Pipelines

- 12.0 Work with pipeline companies to provide safe, quiet, efficient transport of bulk commodities.

## **Water Transportation**

- 13.0 Maintain land transportation access to docks, boat ramps and shippers using waterways for transportation.
- 14.0 Support efforts to minimize negative impacts on water quality caused by river transportation.

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 6

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### HOUSING

Meeting the future housing needs and desires of residents will require a variety of housing types and densities. For example, the desire for home ownership can be partially met with mobile homes and condominiums in large or small complexes or owner-occupied duplexes. A range of housing prices can be encouraged by providing a greater variety of lot sizes for single family housing. More apartments and other alternative housing forms are needed to house the young, the elderly, and lower income households which are priced out of the single family housing market, or households which may prefer other than single family homes.

### ISSUES

The planning process has identified a number of issues. These issues address affordable housing, housing choice and variety, citizen preference, density, neighborhood livability, and compatibility with mass transit. Some of these issues follow:

1. Affordable housing for all the County's households
2. Housing for low and moderate income households, the elderly, and mentally or physically handicapped residents
3. A variety of housing types for all income levels, including single family houses, apartments, duplexes, condominiums, and mobile homes
4. The number and densities of single family and multifamily units, duplexes and mobile homes
5. Locations of multifamily housing in relation to services, employment, transportation and open space
6. Locations of individual mobile homes, mobile home parks and mobile home subdivisions
7. Owner-occupied and renter-occupied housing

### SUMMARY OF FINDINGS AND CONCLUSIONS

1. Clackamas County is projected to gain as many as 112,500 people between 1987 and 2010.
2. Projected population growth is expected to be slower than the County experienced in the 1970s, faster than the 1980s. From 1970 to 1978 the average annual growth rate was 3.8% per year, and from 1980 to '87 it was .76%. The forecast for planning purposes is 1.6% per year from 1987 to 2010.
3. The Northwest urban area has the potential of being the most energy efficient and cost effective location for growth in the County.
4. Since 1980, 30% of the new units built in the entire County have been multifamily units,

including duplexes. In the northwest urban areas, 41% of new units have been multifamily.

5. It is forecast that 26% of the new units built in the next 20 years in the entire county, and 32% of the new units built in the northwest urban area, will be multifamily.
6. Lack of affordable housing continues to be a problem, especially severe for households headed by the young, elderly, single parents, or handicapped individuals.
7. Clackamas County has a shortage of special living environments for the developmentally disabled and chronically mentally ill, a particularly pressing need as the de-institutionalization movement continues to accelerate and homes must be found in communities for previously institutionalized residents. (Note: The County social services agency does not identify a particular shortage of special housing for their elderly clients at this time (1990).
8. There are few condominiums in unincorporated areas.

## GOAL

- Provide opportunities for a variety of housing choices, including low and moderate income housing, to meet the needs, desires, and financial capabilities of all Clackamas County residents to the year 2010.

## POLICIES

### Housing Choice

- 1.0 Encourage development which will provide a range of choices in housing type, densities and price and rent ranges throughout the urban areas of the County.
  - 1.1 Provide for mobile home park development.
  - 1.2 Encourage new condominiums of all types, densities and price ranges but discourage conversion of existing rental units.
  - 1.3 Encourage an adequate number and variety of rental units including those that allow children.
  - 1.4 Develop detailed community plans when appropriate to ensure that both housing choice and neighborhood quality and livability goals are obtained.
  - 1.5 Encourage a diversity of housing types and densities in Planned Unit Developments.
  - 1.6 Encourage a wide range of housing alternatives for the elderly or handicapped.

### Affordable Housing

- 2.0 Encourage development of affordable housing (including public subsidized housing) to produce a range of housing prices and rent ranges commensurate with the range of the County's household incomes.
  - 2.1 Encourage low and moderate income housing with good access to employment opportunities.
  - 2.2 Encourage diversified affordable housing opportunities for the elderly or handicapped.
  - 2.3 Support the regional Housing Opportunity Plan (HOP), the County's Community Development Block Grant program, and the County's Public Housing Program as a means to provide more low and moderate income housing.
  - 2.4 Pursue subsidies to provide affordable housing for low and moderate income households including the elderly and the handicapped.
  - 2.5 Encourage more affordable housing by:
    - a. Providing for higher density single family development by including more 7,000 and 8,500 square foot lots;
    - b. Providing for increased capacity for multifamily development at four density levels: Medium, Medium High, High, and Special High;
    - c. Allowing alternative road and improvement standards where appropriate (see roadway policies in Transportation Chapter);
    - d. Allowing reduced utility and roadway costs through flexible lotting patterns in subdivisions and Planned Unit Developments;
    - e. Allowing density transfers from hard-to-develop sites in planned developments;
    - f. Providing an expedient, efficient design review, building permit, zoning and subdivision process;
    - g. Encouraging growth in areas where public services can be economically provided;
    - h. Encouraging common wall construction;
    - i. Encouraging more condominiums and mobile homes;
    - j. Emphasizing planned developments resulting in less expensive lots;
    - k. Continuing to allow single family units to be built on lots of record down to 3,000 square feet; and
    - l. Continuing to allow prefabricated housing that meets the Uniform Building Code on individual lots within the Urban Growth Boundary.
  - 2.6 Give priority for relocation into public housing to low income residents displaced by development of property to commercial, industrial or multifamily use.
  - 2.7 Encourage continuation of existing mobile home parks.

- 2.8 Give every new subdivision of twenty lots or more a density bonus of one lot for every lot reserved for assisted housing to provide an adequate amount of dispersion of assisted housing (see Policy 8.0).

## **Neighborhood Quality**

- 3.0 Provide for a variety of housing opportunities that are complimentary or compatible with existing neighborhoods.
  - 3.1 Encourage the maintenance or upgrading of existing neighborhoods.
  - 3.2 Protect the quality, life-style and values of existing neighborhoods.
  - 3.3 Discourage the demolition of housing which can be economically renovated in residential areas.

## **Urban Infill Policy**

- 4.0 Make use of existing urban service capacities without damaging the character of existing low-density neighborhoods. This policy will be achieved by the following:
  - 4.1 Providing higher density residential Plan designations.
  - 4.2 Locating higher density Plan designations at locations that have minimum impact on existing low-density neighborhoods.
  - 4.3 Encouraging development within Immediate Urban Areas where services are available (see Immediate Urban policies in Land Use Chapter).
  - 4.4 Allowing greater flexibility for duplexes and triplexes (see Policy 6.0).
  - 4.5 Establishing a transportation policy that encourages investments to improve the existing system prior to making investments in new roads (see Roadway Policies in Transportation Chapter).
  - 4.6 Protecting existing neighborhoods by designating compatible land uses in existing low-density neighborhoods (see Low Density Residential policies in Land Use Chapter).
  - 4.7 Allowing residences on lots without required road frontage through variance procedure on a case-by-case basis. Shared access shall be encouraged when developing flag lots.
  - 4.8 Facilitating development on hillsides within the limits of public safety and land suitability. (see Natural Resources and Energy chapter, Natural Hazards section; and Land Use chapter, Low Density Residential and Open Space sections.)
  - 4.9 Allowing density transfers from hazard areas to more suitable sites.

- 4.10 Allowing the use of half-street or private common access drives where appropriate but not exceeding access to more than seven lots.
- 4.11 Allowing waivers of residential setback requirements pursuant to adopted criteria.
- 4.12 Allowing waivers of sidewalk and curb requirements along existing road frontage where not in conflict with Policies 3.0 and 4.0 of the Transportation Chapter, Pedestrian and Bikeways Section.
- 4.13 Protecting the privacy of existing residences by buffer requirements where appropriate.

## **Multifamily Residential**

- 5.0 Encourage multifamily residential development consistent with the needs and desire of County residents. (Multifamily residential refers to all development in Medium, Medium High, High, and Special High Density residential land use designations.)
  - 5.1 Require design review approval for all multiple-family development.
  - 5.2 Design review will address the following:
    - a. Energy efficiency and conservation
    - b. Access to transit
    - c. Crime prevention including natural surveillance of public areas by residents
    - d. Open space including recreation areas and children's play areas
    - e. Privacy considerations, including private entries, patios, and fencing
    - f. Noise abatement
    - g. Shared parking to reduce paved areas
    - h. Accessibility of parking to units
    - i. Pedestrian/bicycle facilities on and off site
    - j. Minimization of impervious ground cover
    - k. Retention of natural areas and features such as major trees
    - l. Landscaping
    - m. Screened parking areas
  - 5.3 Allow density bonuses for provision of units for low income residents either through a government subsidized program or the private sector, and for parks dedication.

## **Common Wall Units**

- 6.0 Encourage "common wall" units. (Common wall refers to all attached units allowed in Low Density residential land use designations.)

- 6.1 Allow as an outright permitted use in all new subdivisions except PUDs up to 20 percent of the units to be common wall construction.
- 6.2 Allow as an outright permitted use, all units to be common wall units in Planned Unit Developments (PUDs).
- 6.3 Allow as a conditional use a duplex or triplex on individual lots with a lot area per unit equal to approximately two-thirds the average lot area of the base zone.
- 6.4 Allow as a conditional use the conversion of existing single family units to duplexes. The lot area per unit must be approximately two-thirds the average lot area of the base zone.

**Mobile Homes**

- 7.0 Support the provision of needed mobile home sites throughout the County.
  - 7.1 Allow mobile home subdivisions of three acres or more in all single family zones subject to standards including skirting of units, minimum unit size, pitched roofs and visual buffering of the subdivision.
  - 7.2 Allow outright new mobile home parks in Medium Density districts, but not in designated commercial, industrial, or higher density multifamily areas.
  - 7.3 Allow mobile homes outright on individual properties consistent with the requirements of rural and natural resources Plan designations in all areas outside Urban Growth Boundaries.
  - 7.4 Allow mobile homes and manufactured housing within Urban Growth Boundaries on individual lots subject to size, construction and design standards. (6-2-94)
  - 7.5 All existing mobile home parks shall not redevelop unless a plan for relocation of the existing tenants is submitted and approved prior to redevelopment.

**Density Bonuses**

- 8.0 Allow density bonuses in Low, Medium, Medium High, and High density Plan designations where special performance criteria have been met.

<b>DENSITY BONUS CHART</b>			
	<b>LOW DENSITY</b>	<b>MEDIUM &amp; MED HIGH DENSITY</b>	<b>HIGH DENSITY</b>
<b>Bonus Category</b>	<b>% increase</b>	<b>% increase</b>	<b>% increase</b>



<p>1. Low-Cost Housing: Living units qualifying and approved for housing for low-income families or for the elderly under a federal, state or local program will be provided in the development.</p>	Up to 5% (1 unit per assisted housing unit)	Up to 8% (1 unit per assisted housing unit)	Up to 8% (1 unit per assisted housing unit)
<p>2. Park Dedication: Improved site area is dedicated and accepted by the County or other public agency.</p>	10%	10%	10%
<p><b>MAXIMUM TOTAL % BONUS INCREASE</b></p>	15%	18%	18%

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 7

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### PUBLIC FACILITIES AND SERVICES (3/14/02)

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<u><a href="#">PUBLIC FACILITIES AND SERVICES</a></u>
<u><a href="#">PUBLIC FACILITIES</a></u>
<u><a href="#">PUBLIC SERVICES</a></u>

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The provision of public facilities and services is a key ingredient in the development of Clackamas County and the implementation of this Plan. All development requires a certain level of public facilities and services. The objective of this Plan element is to provide the level of public facilities and services to support the land use designations in this Plan, and to provide those facilities and services at the proper time to serve development in the most cost effective way.

This chapter addresses, in part, the requirements of the Land Conservation and Development Commission's (LCDC's) Goal 11, also known as Oregon Administrative Rule 660, Division 11. It requires planning for sanitary sewage treatment, water, storm drainage and transportation. Adequate levels of those public facilities and services must be available before urban levels of development can be built in a manner consistent with the land use designations in this Plan. (Transportation facilities and services are addressed in Chapter 5 of this Comprehensive Plan). Further detail, particularly with regard to necessary facility improvements and their costs, can be found in the County's Public Facilities Plan.

Failure to plan for public facilities properly could result in unnecessary financial costs, if the services are provided in excess of needed levels. Unnecessary environmental degradation and ultimately more financial cost could result if services are not properly designed to accommodate the anticipated level of development.

The public facilities and services policies of this Plan provide a logical framework for the timely, orderly and efficient arrangement of facilities and services required to meet the population and economic needs of this County. The following policies will be used to guide and coordinate the provision of future facilities and services with development activities in Clackamas County. Other policies that may pertain to public facilities and services are included in the Natural Resources, Transportation, and Land Use Chapters of this Plan.

#### ISSUES

Several critical issues stand out among the others when planning for the provision of new public facilities and services. These issues are:

1. The type of services provided,
2. The appropriate level of each service,
3. The arrangement or pattern of services,
4. The timing of the necessary services,
5. Who should provide the services,
6. Who should benefit from and pay for the necessary services,
7. The differential cost of providing services in different geographic areas.

## **SUMMARY OF FINDINGS AND CONCLUSIONS**

### **Sanitary Sewage Treatment**

1. Twenty different management agencies either collect, treat, plan or regulate existing sewerage facilities serving the urban portions of Clackamas County.
2. The County's approved Sewerage Facilities Master Plan is the guiding planning document for the development and operation of wastewater facilities in Clackamas County.
3. Improving sewerage facilities is highly capital intensive. Current rates and charges, including either user rates or system development charges, will likely need to be increased over the next twenty-year period to fund major capital improvement programs.
4. All future sanitary facilities must comply with federal, state and regional water quality goals and regulations.
5. Provision of sanitary facilities must be coordinated with other essential facilities and services.

### **Water**

6. At present, a sufficient supply and source of drinking water exists to serve the projected urban population needs of Clackamas County.
7. The County Health Department has identified 232 public water districts serving four or more households.
8. The primary sources of water are Bull Run, Clackamas River, Molalla River and groundwater. Wilsonville has recently decided to use the Willamette River as a municipal water source.
9. Although the Clackamas River is an excellent source of water, there is a potential problem of "over-allocating" individual water rights relative to the available water supply.
10. Many purveyors will need to expand their in-system storage capacity to meet 20-year demands. This storage is needed to meet short-term emergency fire demands in excess of transmission facility capacity and peak demand.

11. Many of the smaller private purveyors have inadequate treatment systems and little storage capacity to meet 20-year demands.
12. Information concerning groundwater is incomplete. At present data are incomplete on quantities of groundwater withdrawn by private users. (See Natural Resources and Energy chapter, Groundwater Section.)
13. The Regional Water Providers Consortium provides a forum for water purveyors serving the urban areas of the County to discuss regional water issues, including revision of service areas. Final decisions regarding actual services will continue to be made by local service providers.

## **Storm Drainage**

14. Storm drainage basin planning is substantially complete for the urban areas of Clackamas County using a 20-year planning period, and that planning is in process for Urban Reserves.
15. The County currently lacks a comprehensive stormwater system and lacks mechanisms for upgrading inadequate sections for the urban areas. The service providers are working on planning and building regional facilities for water quality and quantity.
16. The County has stormwater improvement requirements that include on-site detention and provide options for regional detention and the service providers are working on water quality requirements.
17. The Endangered Species Act and the listing of Steelhead and Salmon as threatened species are critical considerations in the formulation of surface water management policy.
18. Implementation of any storm drainage program requires a major financial investment. Federal and state revenue sources are insufficient to support major storm drainage improvements. Local methods of finance will be more heavily relied upon to develop storm drainage improvements.

## **Solid Waste**

19. Disposal of solid waste materials is a regional problem necessitating a regional solution. Metro is the regional planning authority charged with the responsibility of overall planning, siting and management of solid waste disposal in the metropolitan area. Metro is also responsible for state-mandated recycling and recovery in the tri-county region.
20. Metro has made arrangements with a private firm to construct a new landfill in Arlington, Oregon to accept the region's solid wastes.
21. Solid Waste facilities in Clackamas County are the Metro South Transfer Station, Sandy Transfer Station and Mt. Hood Refuse Center, and the Canby Transfer and Recycling Station. The only mixed waste processing center in Clackamas County is KB Recycling, although other centers in adjacent Counties serve Clackamas County as well. Several yard debris processors and composting facilities are located in Clackamas County.

## **Fire and Emergency Medical**

22. The level of fire safety in any community depends upon several factors, including: water supply and pressure, fire station staffing, condition of transportation routes, travel times, distance between vegetation and buildings, fire agency capabilities, and housing densities.
23. Nine fire districts provide fire and emergency medical services to the unincorporated portions of Clackamas County.
24. An intergovernmental agreement between the fire agencies and the County establishes one Fire Code for all agencies (implemented by the Building Department and at Development Review).
25. Each fire agency's response standard and its capabilities are established by its governing body and vary based on community taxpayer support.
26. Automatic and mutual assistance agreements exist countywide that address routine to catastrophic incident response, and are updated on a regular basis, or as needed under the auspices of the Clackamas Fire Defense Board.

## **Law Enforcement**

27. Police services are provided by nine agencies in Clackamas County. Clackamas County's Sheriff's Department serves by far the largest geographic area including contractual patrol services to Happy Valley, Johnson City, Rivergrove, Wilsonville and Estacada.
28. The Sheriff's Department operates and maintains the only County jail facility, which is located on the Red Soils complex in Oregon City.
29. The County operates and maintains a radio system and dispatch facilities that provide communication services for the fire, emergency medical system, and law enforcement providers in the County. The cities of Lake Oswego and Gladstone maintain separate dispatch facilities for fire, emergency medical system, and police services. The City of Milwaukie provides its own police dispatch center.
30. There is an "Enhanced" 9-1-1 telephone system that serves all of Clackamas County.

## **Schools**

31. Ten separate school districts operate 105 public primary and secondary schools in Clackamas County.
32. Coordination between the County Planning Division and school district administrations can be improved, particularly in reviewing new subdivisions and reviewing the location of additional school facilities. Due to state land use law, schools cannot be compensated for the impact of development, nor can the County limit development based on inadequate school capacity.

## County Government

33. During the past decade, Clackamas County has experienced significant population growth, resulting in expanded levels of governmental services. As a consequence, the County has leased space in a number of locations. A Master Facility and Space Consolidation Plan should be implemented by the County.
  34. Clackamas County, in its role of coordinator for public facilities as required by the Land Conservation and Development Commission's (LCDC's) Goal 11, has adopted a Public Facilities Plan for the North Clackamas Urban Area. It describes facilities for sanitary sewage treatment, storm drainage, public water, and transportation. It describes the existing facilities, future needs for 5-year and 20-year periods, the cost of meeting those needs, and the sources of funding expected to pay for the expansions.
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## PUBLIC FACILITIES

### GOALS

- Maintain and improve the quality of Clackamas County's streams, lakes, waterways and groundwater.
- Provide for the location and development of sanitary sewage treatment, collection and reuse facilities to support existing and future land use development in all urban areas of the County.
- Provide for the location and development of drinking water facilities to support existing and future land development.
- Protect the quantity and quality of drinking water supplies.
- Coordinate the location and size of drinking water facilities with appropriate water purveyors.
- Minimize stormwater runoff, water pollution, siltation, soil erosion and flooding.
- Improve fish habitat and support recovery of aquatic species.
- Require adequate storm drainage, public sanitary sewer and public water service concurrent with development in areas that require these services. (3/14/02)
- Provide a systematic control for the collection, transport, storage, separation, processing, recycling, resource recovery and disposal of solid waste.
- Minimize the impact on air, land and water quality and neighborhoods when siting sanitary landfills.

### POLICIES

Clackamas County adopts as supporting documents to this Plan the public facilities plans titled, "Transportation Element", "Sanitary Sewerage Services", "Water Systems", and "Storm

Drainage Element", including the public facility project titles contained therein. The public facility projects' locations or service areas are shown on maps contained within the above reports. Additional supporting documents are the master plans for Cow and Sieben Creeks, Kellogg/Mt. Scott Creek, and Rock and Richardson Creeks.

## Sanitary Sewage Treatment

- 1.0 Recognize County responsibility for operating, planning and regulating wastewater systems as designated in the approved Sewerage Facilities Master Plan.
- 2.0 Recognize that Clackamas County Service District No. 1, Tri-City Service District, Oak Lodge Sanitary District, the Unified Sewerage Agency and the City of Portland have responsibility for operating, planning, and regulating wastewater systems as designated in the approved Sewerage Facilities Master Plan.
- 3.0 Require all agencies that provide sewer treatment and collection services in Clackamas County to be consistent with a DEQ approved Sewerage Facilities Master Plan.
- 4.0 Ensure that sewerage facilities in Clackamas County are developed and maintained by the appropriate sanitary district, county service district or city.
- 5.0 Require, if necessary, provision of sanitary sewers prior to development in areas identified as "health hazards" by the State of Oregon.
- 6.0 Require sanitary sewerage service agencies to coordinate extension of sanitary services with other key facilities, i.e., water, transportation, and storm drainage systems, which are necessary to serve additional lands.
- 7.0 Require the timely and orderly provision of sanitary sewers in all Immediate Urban areas except those identified as Floodplain and other hazard areas.
- 8.0 Prohibit new on-site sewage disposal systems within Urban Growth Boundaries except for:
  - a. A lot of record outside of a sewerage service district, legally recorded prior to January 31, 1980, or
  - b. Parcels of ten acres or larger in Future Urban areas inside the Metro Urban Growth Boundary (UGB), or
  - c. Outside the Metro UGB on lots that conform to the minimum lot size of the zone, or
  - d. Parcels inside a sewerage service district having unique topographic or other natural features that make sewer extension impractical as determined on a case by case basis by the sewer service provider.
- 9.0 Allow sewerage systems in "Rural" designated areas only to alleviate a public health hazard or water pollution problem that has been identified by the State of Oregon or Clackamas County.

- 10.0 Allow sewerage systems in the Wildwood/Timberline Rim, Zigzag Village, Rhododendron, Wemme/Welches, Government Camp and Boring Rural Communities, provided such systems are not allowed to expand outside the boundaries of these communities.
- 11.0 Allow DEQ approved sewage disposal systems in "Agricultural" and "Forest" designated areas if:
  - a. Necessary to alleviate a public health hazard or water pollution problem that has been identified by the State of Oregon.
  - b. Necessary for parks or recreation lands when consistent with the protection of forests and agriculture, or for housing necessary for the conduct of forest or agriculture related activities.
- 12.0 12.0 Coordinate the review of development applications with the appropriate sanitary sewer service provider to ensure that approval is not granted in the absence of adequate sanitary sewer facilities or a mechanism to provide them concurrently with development. (3/14/02)

## **Water**

- 13.0 Develop a Countywide program for domestic water source development.
- 14.0 Require all public water purveyors to design the extension of water facilities at levels consistent with the land use element of the Comprehensive Plan. Capacity suitable for fire protection needs to be included.
- 15.0 Require water purveyors in urban areas to coordinate the extension of water services with other key facilities, i.e., transportation, sanitary sewers, and storm drainage facilities, necessary to serve additional lands.
- 16.0 Encourage development in urban areas where adequate urban water facilities already exist.
- 17.0 Require water service purveyors to provide water services for non-urban areas at levels appropriate for non-urban use.
- 18.0 Coordinate the review of development applications with the appropriate water service provider to ensure that approval is not granted in the absence of adequate water facilities or a mechanism to provide them concurrently with development. (3/14/02)

## **Storm Drainage**

- 19.0 Require all new developments to meet the development standards of the appropriate service provider.



- 10.0 Require submission of storm drainage, water quality and erosion control plans prior to approval of all new development, and implementation of such plans.
- 21.0 Require that urban stormwater runoff be minimized by nonstructural controls, where feasible, to maintain the quality and quantity of runoff in natural drainage ways. These areas may be calculated as part of the required open space.
- 22.0 Require runoff from impervious surfaces to be collected and treated, as required by the appropriate service provider, prior to discharge to a natural drainage way capable of accepting the discharge.
- 23.0 Require control measures to minimize erosion and sedimentation during construction. The method of retention and control shall be approved by the appropriate service provider.
- 24.0 Stabilize drainage ways as necessary below drainage and culvert discharge points for a distance sufficient to minimize erosion created by the discharge.
- 25.0 Determine the responsibility for installation of storm drainage systems prior to final approval of all new developments.
- 26.0 Coordinate the review of development applications with the appropriate storm drainage service provider to ensure that approval is not granted in the absence of adequate storm drainage facilities or a mechanism to provide them concurrently with development. (3/14/02)

## **Solid Waste**

- 27.0 Coordinate with Metro in the proper siting and operation of solid waste facilities in Clackamas County.
- 28.0 Require future sanitary landfill sites to meet appropriate State and regional siting criteria and regulations.
- 29.0 Ensure that the operation of solid waste facilities and services is consistent with County Solid Waste and Waste Management Ordinances.
- 30.0 The guiding policy for waste management in the County should be based on the following priorities:
  - a. Reduce the amount of solid waste generated.
  - b. Reuse material for the purpose for which it was originally intended.
  - c. Recycle material that cannot be reused.
  - d. Compost material that cannot be reused or recycled.
  - e. Recover energy from solid waste that cannot be reused, recycled, or composted so long as the energy recovery facility preserves the quality of air, water, and land resources.
  - f. Dispose of, by landfilling, any solid waste that cannot be reused, recycled, composted or from which energy cannot be recovered.

## Street Lighting

- 31.0 Encourage provision of street lighting for all new and existing developments inside the Urban Growth Boundary.
  - 32.0 Outside Urban Growth Boundaries, discourage installation of street lighting except in Rural Communities and in subdivisions with lots of one (1) acre or less. This policy is not intended to prevent installation of individual lights necessary for security or public safety.
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## PUBLIC SERVICES

### GOALS

- Support a sufficient level of fire safety and prevention in all areas of the County in order to minimize the risk of fire damage to the life and property of all residents.
- Develop and maintain County law enforcement and correction services to provide safety to all County residents.
- Coordinate proposed land use actions and Plan amendments with school districts.
- Coordinate the location and size of future school sites with appropriate school districts.
- Support school facilities as focal points of community activity subject to available funding and interest.
- Locate County governmental facilities to maximize service to all County residents in the most cost efficient manner.

### POLICIES

#### Fire

- 1.0 Facilitate coordination between fire districts and developers prior to approval of future development to insure appropriate levels of fire safety.
- 2.0 Encourage all public water purveyors to maintain a sufficient amount of water storage and pressure within the system to maintain minimum fire flow.
- 3.0 Coordinate with fire and water districts in locating fire hydrants in new development.

#### Law Enforcement

- 4.0 Encourage provision of the appropriate level of Sheriff services in urban and rural areas.
- 5.0 Review proposals for additional law enforcement and correction facilities to assure that such proposals are consistent with the Comprehensive Plan and policies.

## **Education**

- 6.0 Encourage maximum use of school facilities.
- 7.0 Support proposals that recommend using school facilities or portions of school facilities for senior citizen, day-care, or preschool age children activities.
- 8.0 Encourage development of portions of school property or adjacent property as neighborhood park and recreation facilities in park deficient areas.
- 9.0 Require notification to school districts of all subdivision applications.
- 10.0 Encourage the location of schools in the urban areas within a safe walking distance for students.
- 11.0 Encourage barrier free elementary school service areas, i.e., minimize service areas bisected by major arterials, highways, railroads, waterways, commercial or industrial areas.
- 12.0 Encourage junior and senior high schools to be centrally located on, or near, an arterial within its service area.

## **County Government**

- 13.0 Promote consolidation of County services and facilities whenever possible.
- 14.0 Work toward developing a major centralized facility for County Government.
- 15.0 Encourage the location of Human Resource services in locations convenient to the citizens of the County.

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 8

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### ECONOMICS

If any community is to thrive and prosper, jobs must be available to provide income for its residents. The type, quality, wage rates, and variety of jobs available in the community determine to a large extent the life-style and well-being of the residents.

The economy of Clackamas County is not separable from that of surrounding urban areas, nor is it uniform throughout. The northwest urban portion of the County clearly is part of the highly diversified urban economy of the Portland metropolitan area, with similar industries, and many retail and service business to serve the large urban population. The rural parts of the County and the cities lying outside the northwest urban area have traditionally been timber or agriculture based economies; however, residents are increasingly commuting to jobs in the Portland urban area.

### ISSUES

1. Providing jobs for existing and expected population
2. Job locations, numbers and types
3. Balancing community livability and environmental quality with economic development
4. Protecting existing firms
5. Industrial and commercial growth
6. Types and locations of commercial and industrial development
7. Quality of industrial and commercial areas
8. Relationship of industrial land uses and environmentally sensitive areas
9. Relationships of commercial/industrial sites to housing and transportation
10. Future of natural resource based industries
11. Relationship of increased employment and accelerated immigration
12. Home occupations
13. Adapting to the information/global/service economy.

### SUMMARY OF FINDINGS AND CONCLUSIONS

1. The County contained approximately 86,500 nonagricultural jobs in 1987. An increase of up to 48,100 new jobs is expected by the year 2010.
2. Clackamas County's economy was traditionally dominated by natural resource-oriented industry, but has become increasingly diversified, especially in the urban area.
3. Half of County residents commute out of the County to work.
4. Timber-related employment declined substantially in the 1980s, and is expected to remain relatively low because of increasing productivity and the limited timber supply.

5. Decline in natural resource-related employment could be offset somewhat by improved management in some classes of timber lands, fully processing timber materials now considered waste, and increased secondary processing of wood products. Improved food processing facilities and other support services for agriculture might increase agricultural and related employment.
6. Most of the County's industrial areas are along the Milwaukie Expressway, Highway 212 east of I-205, and in Wilsonville. These areas have good rail and freeway access, public services and some large parcels. These areas are filling up rapidly, with few large or easy to develop parcels remaining.
7. Improved access to the Clackamas industrial area is needed if development potential is to be realized. Implementation of the Clackamas Industrial Area Urban Renewal Plan projects will substantially improve transportation and other public facility needs in the area.
8. Much of the vacant industrial land in the Milwaukie Expressway-Clackamas industrial area is in small parcels. Conversion of Camp Withycombe in the Clackamas area from a National Guard Camp to industrial use offers the best opportunity to obtain needed acreage of prime industrial land in a large parcel.
9. Most of the County's commercial land is in centers focused on I-205 or I-5 interchanges, in "strips" along McLoughlin Boulevard, 82nd Avenue, and other major arterials, or in the downtowns of cities. Downtowns of cities in the northwest urban area tend to be small, providing a limited range of goods and services.
10. Clackamas Town Center, a regional shopping center, has had a major impact on the commercial areas of the northwest urban portion of the County.
11. Most industrial and commercial areas of the County are primarily accessed by private automobile.
12. Nationwide, small firms provide a significant amount of new employment opportunities. New technology development also frequently occurs in small, new firms.
13. Clackamas County has taken a very active role in attracting economic development during the 1980s, including working with a very active Economic Development Commission and its subcommittees, developing one of the first strategic Economic Development Plans in the state, developing two Urban Renewal Plans for prime industrial and commercial development areas, working with Task Forces to develop special area plans, working on the Governor's Regional Strategy Program as well as with several other state programs for Economic Development, and actively marketing the County and its cities.

## **GOAL**

- Establish a broad-based, stable and growing economy to provide employment opportunities to meet the needs of the County's residents.

## **POLICIES**

## Existing Industry and Business

- 1.0 Encourage retention and expansion of existing industry and business.
  - 1.1 Protect established industrial and commercial areas from encroachment by incompatible land uses.
  - 1.2 Encourage maintenance of sufficient vacant lands to provide room for the future expansion or relocation of the County's industry and business.
  - 1.3 Facilitate the efficient operation of existing firms in the urban area by giving high priority to equality in public services including law enforcement, water service and fire protection, storm drainage, sewer, transit, pedestrian and bike access, road maintenance, and traffic access and circulation.
  - 1.4 Develop and implement strategies to revitalize and/or maintain established commercial areas considering such things as parking needs, pedestrian/auto conflicts, traffic circulation, historic character, compatibility of activities, potential for new development, compatibility of new development, transit service, pedestrian and bike access, and merchant participation.
  - 1.5 Encourage natural resource-oriented industries by:
    - a. Encouraging timberland owners to use sound timber management practices and promote a sustained harvest.
    - b. Identifying and recruiting firms doing secondary wood processing using wood products now underutilized or considered waste, i.e., hardwoods, slash materials, etc.
    - c. Encouraging food processing industries and other support services for agriculture in the rural areas.
  - 1.6 Consider impacts on established commercial areas prior to approving Plan changes for major new commercial areas. High priority should be given to retaining the viability of affected downtowns.

## New Industry and Business

- 2.0 Encourage new industrial and commercial development which is consistent with environmental quality and community livability, and the needs of County residents.
  - 2.1 Provide sufficient industrial land of four general types:

- a. General industrial designations for intensive industrial uses, with sites for a broad range of industry and warehousing.
- b. Light Industrial designations for a narrower range of industry and warehousing while allowing office uses outright, and providing stronger noise and aesthetic controls within the development.
- c. Campus Industrial designations to provide for a mix of clean, light manufacturing, offices, and high density residential uses in campus-style complexes, where design shall be compatible with adjacent areas. New developments shall be consistent with a design plan to assure an integrated development of the area. (See Land Use Chapter, Campus Industrial policies.)
- d. Business Park designations to provide for offices and light industrial uses which project a high image.

2.2 Provide sufficient commercial land of four different types (see Land Use Chapter, Commercial development policies):

- a. General Commercial for a broad mix of commercial uses including outdoor storage and display.
- b. Retail Commercial for a range of uses including retail, office, services, and multifamily which project a high-quality image.
- c. Office Commercial designations to provide for a mix of offices, clean, light manufacturing, and high density residential uses in campus-style complexes, which have less impact on surrounding properties, and project a positive image.
- d. Community Commercial for local shopping and services, including large grocery stores and other frequently patronized community services.

2.3 Allow in residential designations Neighborhood Commercial uses, through zoning, which provide goods or services to the surrounding neighborhood, and which do not attract traffic from other areas. Criteria for sites are listed in the Land Use Chapter, Residential policies.

2.4 Give high priority to provision of sewer, water and road services to growing industrial areas.

2.5 Encourage the location of business and industry in areas that minimize the journey to work and/or facilitate mass transit usage for the journey to work.

2.6 Encourage Tri-Met to provide better transit service. Specifically, improve service to commercial centers, small city downtowns, and the Clackamas industrial area.

2.7 Provide for a broad range of types and sizes of industrial and commercial development to provide a broad cross section of employment opportunities for residents.

- 2.8 Encourage the retention of vacant industrial and commercial lands in large parcels until committed for development, at which time overall development plans should be prepared for the site.
- 2.9 Support the conversion and development of Camp Withycombe as it is designated in the Comprehensive Plan.
- 2.10 Allow business park uses in general commercial areas, subject to conditional standards, addressing:
  - a. Existing buildings
  - b. Compatibility with surrounding commercial areas
  - c. Minimum external storage, smoke or noise
  - d. Continuity of pedestrian flow within and between surrounding uses
- 2.11 Facilitate home occupations within the constraints of neighborhood quality, subject to standards, including:
  - a. Visual compatibility with neighborhood and appropriate buffering
  - b. No unsightly or distracting storage, smoke, dust, noise, etc.
  - c. No excessive increase in traffic, especially truck traffic
  - d. No excessive parking of vehicles on the property
- 2.12 Require design review approval for all industrial and commercial development, addressing:
  - a. Compatibility with surrounding areas, including buffering, scale and materials of buildings, and scale and type of plants
  - b. Visual impact of landscaping and lot coverage
  - c. Energy efficiency in site planning and building design
  - d. Storm drainage retention and control
  - e. Access including internal truck and auto circulation in commercial developments
  - f. Outdoor storage and location of parking and loading
  - g. Identification and directional signing
  - h. Noise abatement
  - i. Pedestrian, bike and carpool facilities
  - j. Support of transit usage
  - k. Site security
- 2.13 Gradually modify strip commercial areas into more functional and attractive development with consolidated access to the street where possible. Exempt clearly highway-oriented uses (such as gasoline stations).



- 2.14 Encourage design and circulation plans to be prepared for major industrial and commercial areas in the County, primarily aimed at providing a cohesive, integrated overall development pattern.

## **Coordination**

- 3.0 Develop a working partnership with the cities, private sector and various agencies and organizations to meet the economic needs of Clackamas County.
  - 3.1 Encourage the County Economic Development Commission (EDC) to take a leading role in directing and coordinating economic development activities in the County.
  - 3.2 Cooperate with the Metropolitan Service District, Portland Development Commission, Port of Portland and Oregon Economic Development Division in economic development planning and implementation efforts.
  - 3.3 Cooperate with the private sector to achieve economic development in the County.
  - 3.4 Coordinate with local jurisdictions to obtain compatible policies, ordinances and land-use designations for economic development.

## **Target Industries**

- 4.0 Encourage the development of the following target industries in Clackamas County planning areas:
  - a. Metals and Machinery Manufacturing
  - b. Instruments and Electrical Equipment Manufacturing
  - c. Wholesale Trade, Distribution Centers, Warehousing
  - d. Business Centers
  - e. Destination Retail
  - f. Class "A" Offices
  - g. Destination Restaurants
  - h. Hotels/Motels/Conference Facilities
  - i. Tourism/Destination Attractions and accommodations
  - j. Agriculture/Horticulture and Specialty Crops

**CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 9****OPEN SPACE, PARKS, AND HISTORIC SITES**

[OPEN SPACE, PARKS, AND HISTORIC SITES](#)

[OPEN SPACE](#)

[PARKS AND RECREATION](#)

[HISTORIC LANDMARKS, DISTRICTS, AND TRANSPORTATION CORRIDORS](#)

The conservation of land, water, and historic resources, and the related provision of recreation opportunities, is one of the most important factors in maintaining the quality of life which has made Clackamas County an attractive place to live. Recently, however, the urban area in particular has experienced a sharp jump in population, with substantial changes in the physical environment. Population growth is inevitable, at least for the foreseeable future, but the degradation of our communities is not.

Numerous natural, historic and recreation resources will continue to be available for everyone's enjoyment if the commitment is made to preserve them. The streams and river corridors, the steep wooded hillsides, marshes and wetlands, the rich farmlands, and the vast, magnificent mountains form a natural network of significant benefit. A distinctive building or section of the Barlow Trail provide us with an historical context which can be an important part of our identity. They give us a feeling of continuity, a connection with the past and with the future. Recreation resources are also important but, unlike the others, these need to be built up, changed, and improved as the demands of the people who use them change. This must be done within the limits of the natural resource systems. For instance, the natural characteristics of a stream must not be sacrificed to satisfy the demands of the people who use it for recreation. Rather, more recreation opportunities must be developed elsewhere to satisfy the demand.

This example illustrates the need for a resource conservation and recreation development strategy for Clackamas County. In the past there was ample open space and a wide selection of recreation activities available to virtually everyone. With little urban development pressure, there was little need to preserve either natural or man-made resources. Now the pressures on these resources are increasing, and will continue to mount in the future. Population density and recreation needs are rising, once cherished local open spaces are disappearing, and more people are demanding more places for a variety of recreation activities. It is increasingly clear that our options and opportunities, especially within the urban area, are becoming fewer every day. The County must take the lead to preserve the resources and develop facilities which will

assure that a high quality of life is available to all County residents.

## ISSUES

1. The effective protection of an adequate amount of open space, especially within the urban area
2. The provision of adequate local recreation land, facilities and programs to meet the needs of residents and visitors
3. The type of financial strategy needed to acquire, develop, and maintain recreation facilities
4. The preservation of historically or culturally significant sites and structures

## SUMMARY OF FINDINGS AND CONCLUSIONS

1. Although approximately one-third of the urban area is open land at the present time, only about 5 percent is effectively preserved, and most of the balance could disappear over the next 20 years.
2. Many of the areas which are a natural part of the open space network also are areas subject to natural hazards (over 11 percent of the land in the urban area), are valuable as natural resource areas, and provide natural buffers between urban communities. The two primary components of the network are stream and river corridors and forested hillsides.
3. An effective land use regulation process will have to be established over the area designated as open space. Without this process, no effective preservation is possible in areas which are not acquired.
4. The north urban area of the County (Census Tracts 208 through 226) is significantly deficient in public park land--approximately 2.8 acres per 1,000 population as compared to the standard of 10 acres per 1,000 population. Well over half of the total park acreage is undeveloped.
5. The most deficient categories are neighborhood and community parks, particularly east of the Willamette River where there are fewer than two park acres per 1,000 population. The unincorporated part of this area is especially deficient. The north urban area also has less than average play field acreage at some schools. Serious deficiencies exist in other recreation facilities as well, especially public swimming pools and beaches, tennis and multipurpose courts, ball fields, and various types of trail systems.
6. As the urbanizing area is filled in, the need for parks and other recreation facilities will intensify since the informal play areas and open spaces will no longer be there. There is a need to develop local facilities and site them for access by foot and transit. However the amount of vacant land suitable for park development in the east urban area is very limited. It is imperative that suitable acreage be acquired quickly in this area before it has been irreversibly committed to development.
7. In order to meet minimum standards for the expected north urban area population in the year 2010, the amount of park acreage will have to be increased by almost 1,200 acres

in the next 20 years. Local governments are responsible for the provision of most urban area recreation facilities and cannot necessarily expect assistance from the state or federal governments in meeting urban area park needs.

8. Consideration must be given to various methods of financing the provision of adequate park and recreation facilities and programs in the urban area. A park and recreation district would probably be the best solution. It could either cover the entire urban area, or just the unincorporated area and any interested cities. Local improvement districts (LIDs) are another method. A system development charge or real estate transfer tax also should be considered to provide new facilities for the developing areas. A capital improvements program (CIP) should be instituted to make better use of all available funds.
  9. Many historic sites and structures in Clackamas County are in disrepair and may be expensive to restore and maintain. While many can be adapted to contemporary use, care must be taken not to harm the features which made the structure or site significant.
  10. Many historical features in the County are located in areas where land is quite valuable and subject to redevelopment pressure. They are often overwhelmed by surrounding developments or destroyed because their value is not recognized.
  11. Archaeological sites are often difficult to locate due to the lack of a written historical record. This frequently means that they have been unknowingly destroyed. These sites, even when known, cannot be specifically identified in the inventory because of their sensitivity to exploration.
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## **OPEN SPACE**

The preservation of open space is a necessity if the quality of life, particularly in the northwest urban area, is to be maintained and enhanced. The following goals and policies supplement those found in the Land Use Chapter.

### **GOALS**

- Protect the open space resources of Clackamas County.
- Improve the environmental quality of the northwest urban area.

### **POLICIES**

- 1.0 Initiate an environmental management program to ensure the retention and enhancement of environmental quality and open space values, particularly in the urban area.

- 1.1 The program will resolve conflicts between a proposed land use activity (e.g., housing, timber harvesting) and the open space, scenic, historic, and natural resources of the County. The social, economic, environmental, and energy consequences of the proposed action will be identified. Changes may then be required in the proposal in order to minimize any adverse impact upon these resources. Policies from other sections of this chapter may be relevant.
  - 1.2 Detail the nature and character of visually sensitive areas (see Natural Resources and Energy Chapter). This information will be used in the site analysis outlined in policy 5.0 of the Open Space section of the Land Use Chapter.
  - 1.3 Provide site management assistance for lands which are maintained as open space, including utilization of the County's professional expertise to advise property owners on methods of land management.
  - 1.4 Initiate an urban tree conservation and planting program in cooperation with business and community groups. This program should include street tree plantings, with an emphasis on major arterials, and regulation of the removal of trees and other significant vegetation which may have value as a feature of the urban area open space (see Forestry section of Natural Resources and Energy Chapter).
- 2.0 Use the Open Space Network Map, which has identified desirable open space within the urban area, natural areas identified through the Metropolitan Greenspaces Master Plan and natural areas within Metro's Urban Reserve Area, as the guide for public acquisition of open space (willing seller, willing buyer basis only) and open space dedication during the development process (see map IX-1).
- 2.1 Refine the open space network to more specifically focus on local neighborhood and community needs. This refinement should consider the relationship between lot and ownership patterns and the natural systems and features of the open space network. The map should also indicate suitable areas for clustering development, and appropriate combinations of adjoining properties which would achieve the best balance of urban development and open space within each community.
  - 2.2 Major adjustments to this map shall be incorporated onto the Land Use Map as they occur, in accordance with the amendment process outlined in the Planning Process Chapter. Minor adjustments will be considered compatible with the existing map.
  - 2.3 Open Space Management zoning may be applied to natural areas identified through the Metropolitan Greenspaces Master Plan and natural areas within Metro's Urban Reserve Area, when under public or common ownership.

- 3.0 Protect open space resources outside the urban area through the policies of the Land Use and the Natural Resources and Energy chapters of the Plan, specifically the policies for agriculture, forestry, water resources, wildlife habitats, and distinctive resource areas.
- 4.0 Use all available methods of acquiring or protecting open space for the enjoyment of all County residents including the following.
  - 4.1 Finance the purchase of open space land either in combination with an urban area parks and recreation district acquisition program (see Parks and Recreation Policy 7.0) or through a special funding measure based on all taxable property in the urban area. Full-fee acquisitions, development-rights purchase and scenic easements, among other methods, may be used to implement this program. The County will maximize the use of local money through the aggressive pursuit of federal and state funds.
  - 4.2 Set standards for accepting land dedications as part of subdivision or PUD approval. If the site contains land designated as Open Space, that land should have the highest priority for open space dedication.
  - 4.3 Publish and distribute information indicating desirable areas for land donations, what procedure to follow, and how the donor will benefit.
  - 4.4 Support the state's existing property tax reduction program for all property in designated Open Space areas as long as they are maintained as open space.
- 5.0 Establish responsibility through an existing or new commission to advise the County on the preservation of open space, natural, scenic, historic and cultural resources, and the provision of adequate recreation sites. The existing Parks Advisory Board could be expanded to assume this role; however, given the extent of responsibility, formation of a new commission may be necessary.
- 6.0 Cooperate with ODOT in addressing specific location and completion of the Goal 5 process for the Sandy River and Indian Ridge trails after general trail alignment is determined by ODOT.

**Map IX-1** Open Space Network and Recreation Needs (Online version not available)

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## **PARKS AND RECREATION**

Clackamas County, like all rapidly urbanizing areas, needs to set aside land and develop facilities for the recreation and enjoyment of its residents and visitors. Various types of parks, urban recreation trails, and a number of outdoor and indoor recreational facilities will be needed over the next 20 years. Recognizing the limitations of existing facilities, priorities and standards have been set for the acquisition and development of land for recreation purposes,

with a strong emphasis on the urban area.

The initial step is a commitment to provide an adequate park and recreation system to meet the needs of the people. This commitment must be met, however, within an overall strategy that considers the other legitimate needs of County residents. Different types of budgetary and funding mechanisms will need to be used and many segments of the community involved, including all governmental jurisdictions and the private sector.

## GOALS

- Provide land, facilities and programs which meet the recreation needs of County residents and visitors.
- Establish an equitable means of financing parks and recreation facilities and programs.

## POLICIES

1.0 Establish the following park classifications and standards to guide the provision of parks and other recreation facilities throughout the County.

Policies 1.1 through 1.3 are detailed in [TABLE IX-1](#).

1.4 The County will seek to establish a park and recreation system which maximizes access for walkers, hikers, bicyclists and transit riders.

1.5 The County will seek to provide improved access and conveniences for disabled people in its park and recreation facilities.

2.0 Acquire and develop park sites in the urban area in order to bring that part of the County up to adopted standards. Due to the significant lack of parks and open space, the north urban area should be given special emphasis, particularly the Oak Lodge and Overland/Kendall neighborhoods.

2.1 The following park land will be acquired by the County or other appropriate agency as soon as possible (see map IX-2 for subarea boundaries):

Subarea A not in County parks planning area

Subarea B neighborhood parks: 150 acres

community parks: 150 acres

metropolitan parks: 250 acres

Subarea C neighborhood parks: 40 acres

community parks: 20 acres

metropolitan parks: 80 acres

Subarea D not in County parks planning area

Following is the projected total parks acreage needed over the next 20 years:

Subarea A not in County parks planning area

Subarea B neighborhood parks: 225 acres  
community parks: 225 acres  
metropolitan parks: 450 acres

Subarea C neighborhood parks: 75 acres  
community parks: 75 acres  
metropolitan parks: 150 acres

Subarea D not in County parks planning area

(The above acreage requirements are based on the standards outlined in Policies 1.1 - 1.3, Metro 1987 population figures, and 2010 population forecasts.)

## **Map IX-2 Urban Park and Recreation Sub-Areas (Online version not available)**

2.2 Parks and other recreation sites will be developed with facilities to meet the short-term recreation needs of residents (see the Parks, Open Space, Historic Sites Background Report for information on determining recreation needs). The following is a partial list of desirable facilities for Subareas B and C:

- 5-6 swimming pools
- 3,000 feet of swimming beach
- 300-400 miles of pedestrian ways (including sidewalks)
- 100-150 miles of bike trails
- 30 ball fields
- 35 tennis courts
- 2 community centers

Many other facilities will also be needed to meet the expected demand over the next 20 years.

- 3.0 Provision of recreation in rural areas must be closely coordinated with other local, state and federal agencies (e.g., school districts, Willamette Greenway Program).
- 4.0 Consider the need to protect environmentally sensitive areas from overuse as well as satisfy the needs of County residents and visitors in developing area park and recreation facilities.
- 5.0 Pursue the following priorities for recreation land acquisition and development, subject to review and update at regular intervals. As a general strategy, acquisition will have priority over development, due to the rate of urban development on good park sites.



## 5.1 Acquisition Priorities

Priority 1: Land suitable for neighborhood or community park development in subarea B, recognizing the significant lack of both existing park facilities and available land. Action should be taken immediately to acquire as many suitable parcels as possible in the unincorporated urban area to assure an adequate amount of park land for the future.

Priority 2: Neighborhood and community parks in subarea C. Parks should be acquired prior to or as residential areas are developed. Action should be taken immediately due to the rapid pace of development currently taking place in this area. Acquire community park sites within the open space network.

Priority 3: A metropolitan park site for the eastern part of the urban area. This site should be centrally located and easily accessible to both Subareas B and C. Because of the requirements for this type of park, Mt. Talbert should be considered as a potential site.

## 5.2 Development Needs

1. An urban trail system for both walking and bicycling, especially in conjunction with the development of neighborhood and community parks. Use should be made of open space linkages along creek and river banks, ridgelines, and existing rights-of-way. Open space dedication at the time of development will be used as a means of completing this trail system (see map IX-1).
2. Swimming pools in community and metropolitan parks. A diversity of pool types is preferred, ranging from small, outdoor pools to a large, indoor, Olympic-sized pool.
3. Neighborhood parks, which would include children's play equipment, picnic facilities, and informal open space. These parks should be strategically located so that no resident would travel more than one mile to reach the facilities.
4. Ball fields as part of neighborhood and community parks, with sufficient area for several different simultaneous activities.
5. Multipurpose courts in neighborhood and community parks.
6. Natural areas as part of all three major urban area park types.

- 5.3 Use the preceding list of needs as a general guide for acquiring and developing recreation areas in the County. The list should be updated at least once every two years. Any funds available for general park and recreation development should be used in these priority areas. Donations of land outside the urban area should be accepted by the County. Purchase of additional land in the rural portions of the County may be considered if the land is a significant natural area that is being seriously threatened.
- 5.4 Establish a park and recreation site selection process, with location as the primary determining factor. All future acquisition and development programs should also take into account: (a) areas of substantial need; (b) how well a site meets the relative recreation needs of the service area; (c) the suitability of environmental conditions; (d) fiscal feasibility; (e) threat of loss of valuable resource; and (f) opportunity for cooperative projects.
- 5.5 Use the following criteria when considering the timing of site acquisition: (a) unusually favorable acquisition opportunities; (b) the likelihood that the site will be lost to development; (c) the appreciation rate of property in the area; and (d) the existence of advantageous opportunities to cooperate with other public agencies or private organizations.
- 6.0 Require all new urban residential developments to contribute to the provision of park facilities in their communities proportionate to the need generated by the development and based on the park standards established in Policy 1.0.
  - 6.1 Develop specifications for park and open space dedications and fees in coordination with urban area and/or local park acquisition programs. Options for the developer may be:
    - a. Dedicate land for a new park on site which meets established standards and is approved by the County;
    - b. Provide fees-in-lieu of park land or contribute to a systems development fund or other appropriate fund (see Process Chapter, Policy 10.0) in proportion to the standard; or
    - c. Some combination of the above.
  - 6.2 Provide for a density bonus to be available for land developed with recreation facilities dedicated to public use. The bonus will be used to encourage the provision of public recreation facilities in conjunction with large development projects (see Density Bonus Section of the Housing Chapter).
- 7.0 Establish an urban area service district, or initiate the formation of a parks and recreation district to provide a full range of recreation facilities and programs to urban residents.
  - 7.1 Provide for the district to assume ownership, planning, administration, acquisition, development and maintenance of all parks in the urban part of the County.

- 7.2 Provide for the district to initiate a recreation program, coordinate the use of publicly operated recreation facilities, and provide access to recreation services for all County residents, focusing on the special needs of urban area residents. The recreation program will attempt to meet the recreation needs of all age groups and serve as many different interest groups as possible. Potential programs include: soccer, softball, baseball, and basketball leagues; gymnastics, martial arts, volleyball, and exercise classes; arts and crafts classes; swimming lessons; free play time in a gymnasium for children and adults; and other activities. User or participant fees will be kept as low as possible, while an attempt will be made to recoup many of the costs involved in each program.
- 7.3 Allow the district to take over ownership and maintenance of all dedicated open space upon approval of the organization (e.g., homeowners association) or agency which holds the title.
- 8.0 Use all available and responsible means to reduce the cost of acquisition, development, operation and maintenance of parks and recreation facilities, while working toward the provision of facilities and programs specified in Policies 1.0 and 6.0.
  - 8.1 Develop a capital improvements program for parks and recreation facilities to make efficient use of all funding sources and to plan for needed facilities and their maintenance.
  - 8.2 Seek to place idle park or open space lands into revenue producing interim uses compatible with their ultimate use and with environmentally sound land management practices (e.g., agriculture, selective timber harvest, community gardens).
  - 8.3 Prepare park development plans which easily adapt to changing conditions and the changing needs of County residents. Plans will phase development, where appropriate, in order to assess whether full development is warranted. Consideration will be given to materials and technologies that reduce development and long-term maintenance costs while maintaining environmental compatibility.
  - 8.4 Encourage the private sector to help meet the recreation needs of County residents and visitors. The recreation program should use private facilities on a program-by-program basis when public facilities are not available. Where appropriate, nonprofit organizations will be encouraged to operate special purpose parks and facilities (e.g., nature exhibits, historic sites).
  - 8.5 Support legislation to enable local governments to use up to 25 percent of their federal park and recreation grants for normal park operation and maintenance, rather than just for acquisition and development.
- 9.0 Coordinate County activities with other agencies and organizations to provide park and recreation facilities.
  - 9.1 Coordinate the development of facilities and programs with the cities and school districts when mutual concerns exist.

- 9.2 Explore joint development projects in order to provide facilities needed by residents of both incorporated and unincorporated areas.
  - 9.3 Avoid duplication of facilities through coordination with state and federal agencies and the private sector.
  - 10.0 Ensure opportunities for citizen participation in park and recreation decisions as provided in the Citizen Involvement Chapter and Policy 5.0 of the Open Space Section of this chapter.
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## **HISTORIC LANDMARKS, DISTRICTS, AND TRANSPORTATION CORRIDORS**

Clackamas County has a rich and unique heritage from its founding through its development over time. Historic sites, objects, structures, and transportation corridors still remain which represent prehistory, the era of the Territorial Government, western migration along the Oregon Trail, the existence of the first and longest running electric street car line in the nation, the influence of the railroad on development and our heritage as an agricultural and lumber based economy. We are the stewards of these historic resources and charged through state law to protect and preserve them.

Cultural, economic, and social benefits can come from preservation of the County's historic resources. There is cultural value in establishing firm, visible links with the past. Economic benefits include enhanced property values, savings in structure replacement costs, tourism, and, in commercial areas, strengthened retail sales. Social and community benefits appear in the renewal of older neighborhoods and the increased pride fostered in the residents.

To effectively preserve historical resources, an evaluation must determine which structures and sites are worthy of preservation. A method of regulating the use or demolition of historic resources would then be necessary to protect them. It is essential that the County make a firm commitment to protect its historic resources.

Individual descriptions and maps of Clackamas County Historic Landmarks which are located within the urban area of the County can be found in the Clackamas County Historic Landmarks book, adopted by Clackamas County.

A detailed mapping project of the Barlow Road, the westernmost segment of the Oregon Trail, was undertaken in 1988. This document, entitled Maps of the Barlow Road, Mt. Hood to Oregon City, Clackamas County, prepared by the Planning and Economic Development Division, exhibits maps of the historic road corridor as well as associated historic sites. It also includes recommendations for a more detailed survey to assist in the preservation and management of this historic resource.

## GOAL

- Preserve the historical, archaeological, and cultural resources of the County.

## POLICIES

- 1.0 Conduct a comprehensive inventory in the County of historic areas, sites, structures, and objects. Inventory the location, quantity and quality of these resources using state and federal criteria.
- 2.0 The County adopts the Barlow Road Historic Corridor as defined by the Barlow Road Survey Project and the Barlow Road Background Report and Management Plan as a Clackamas County Historic Corridor. All provisions of the Historic Landmarks, Historic Districts and Historic Corridors Ordinance shall apply to the designated sites and historic corridor of the Barlow Road. (5-13-87; 3-24-94)
- 3.0 Develop criteria to further evaluate the significance of these historic resources using state and federal criteria as models.
- 4.0 Zone properties Historic Landmark (HL), Historic Districts (HD), or Historic Corridor (HC) which are determined significant by the evaluation criteria.
- 5.0 Identify conflicts by analyzing the economic, social, environmental, and energy consequences of land use actions with regard to significant historic resources.
- 6.0 Develop policies and programs to protect historic resources and minimize the conflicts.
- 7.0 Pursue private and public sources of funding for use by property owners in the renovation and maintenance of historic properties.
- 8.0 Pursue options and incentives to allow productive, reasonable use, and adaptive reuse of historic properties.
- 9.0 Appoint an Historic Review Board whose role is to protect and preserve Historic Landmarks, Districts, and Corridors and who individually have demonstrated interest and expertise in the field of Historic Preservation. This Board shall be empowered to:
  - 9.1 Recommend zoning of Historic Landmarks, Historic Districts, and Historic Corridors. (5-13-87)
  - 9.2 Review alterations, new construction land divisions, and proposed demolition on all Landmark, District, and Corridor properties. (5-13-87)
  - 9.3 Provide technical assistance and conduct workshops to provide an educational forum for historic preservation to broaden community awareness and public participation. (5-13-87)
  - 9.4 Coordinate local preservation programs, including signing, plaques or other monumentation, driving and walking tour brochures, and other informational pieces. (5-13-87)

**9.5 Make recommendations for designation of sites on the National Register of Historic Places. (5-13-87)**

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 10

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### MOUNT HOOD COMMUNITY PLAN

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<a href="#">LAND USE</a>
<a href="#">VILLAGES</a>
<a href="#">RESIDENTIAL</a>
<a href="#">COMMERCIAL</a>
<a href="#">OPEN SPACE</a>
<a href="#">PUBLIC FACILITIES</a>
<a href="#">TRANSPORTATION</a>
<a href="#">PLANNING PROCESS</a>

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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 are in addition to, or different from, the County Comprehensive Plan in four subject areas: Land Use, Public Facilities, Transportation, and Planning Process.

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### 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.

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## 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. (3-11-93)

### 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**

- 3.1 Provide for a development character of medium intensity (See development level chart, page 3).
- 3.2 Orient new development away from Highway 26, which is designated a scenic highway.



- 3.3 Encourage development of recreational-resort facilities to provide accommodations for the users of the area's recreational amenities.
  - 3.4 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	
	Wemme/Welches	Rhododendron
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.
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## **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.

**MAP X-MH-1** Resource Protection Open Space (Online version not available)

**MAP X-MH-2** Resource Protection Open Space, Wemme-Welches (Online version not available)

**MAP X-MH-3** Resource Protection Open Space, Wildwood-Timberline (Online version not available)



[\*\*MAP X-MH-4\*\* Government Camp Village Plan, Land Use Plan and Boundary](#)



[\*\*MAP X-MH-5\*\* Government Camp Village Plan, Resource Protection and Open Space](#)



[\*\*MAP X-MH-6\*\* Government Camp Village Plan, Recreation Trails and Facilities](#)

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## **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 Clackamas County shall acknowledge periodic updates of the sanitary sewer, water and transportation elements of the Government Camp Facilities Plan.
  - 8.0 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 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 Multopor/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.

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 Multorpor 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.

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 10

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### KRUSE WAY DESIGN PLAN

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<u>LAND USE</u>
<u>TRANSPORTATION</u>
<u>TRANSPORTATION MANAGEMENT</u>
<u>PUBLIC FACILITIES</u>
<u>FINANCIAL ALTERNATIVES</u>

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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.

**Map X-KW-14** Kruse Way Design Plan Area (Online version not available)

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## 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

- 1.0 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.
  - 3.0 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".

#### **Map X-KW-2** Kruse Way-Recommended Approach Lanes (Online version not available)

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 Carman 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 Carman Drive

Carman 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 Carman 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 (eastbound 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.

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## **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 Buttke 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".

## Map X-KW-3 Kruse Way-Future Transit Service (Online version not available)

### **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.

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### **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.

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### **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 & COST SCHEDULE

	Immediate or w/ Development	When Needed	Estimated 1989 Cost
Carman Dr. left turn lanes at Kruse Way & Meadows	■		\$140,000
Bangy Rd. left turn lane at Meadows	■		40,000
Bangy Rd. double left turn lane at Kruse Way & added N.B. lane	■		140,000
Signalize Bangy Rd. & Meadows	■		80,000
Signalize Carman Dr. & Meadows	■	■	80,000
Carman Dr. and Bonita Rd.		■	110,000
Pedestrian Overpasses			----



## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 10

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# SUNNYSIDE VILLAGE PLAN

## INTRODUCTION

The Sunnyside Road area of Clackamas County east of I-205 to 152nd 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 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 in 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 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 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., 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 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 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, or 152nd 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 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 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. (11/06/97)
- 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. (11/06/97)

## **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 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 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 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 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 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.



[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 and Sizes\*\*](#)



[\*\*FIGURE X-SV-1 Sunnyside Village Plan Street Cross Section: Connector Street with Planting Strips and Bike lanes\*\*](#)



[\*\*FIGURE X-SV-2 Sunnyside Village Plan Street Cross Section: Connector Street with Planting Strips\*\*](#)



[\*\*FIGURE X-SV-3 Sunnyside Village Plan Typical Connector Street Plan\*\*](#)



[\*\*FIGURE X-SV-4 Sunnyside Village Plan Choker and Curb Extension Design: Connector Street\*\*](#)



[\*\*FIGURE X-SV-5 Sunnyside Village Plan Street Cross Section: Local Street with Planting Strips\*\*](#)



[\*\*FIGURE X-SV-6 Sunnyside Village Plan Street Cross Section: Alleys\*\*](#)



[\*\*FIGURE X-SV-7 Sunnyside Village Plan Intersections: Minimum Curb Radius at Intersections\*\*](#)



[\*\*FIGURE X-SV-8 Sunnyside Village Plan Traffic Circle\*\*](#)



[\*\*FIGURE X-SV-9 Sunnyside Village Plan Plan Alternative Horizontal Curve for Local Streets\*\*](#)

## **CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 10**

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# **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 X-CR-1 North Bank of the Clackamas River: Greenway](#)

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 10

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# CLACKAMAS REGIONAL CENTER AREA DESIGN PLAN

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<a href="#"><u>INTRODUCTION</u></a>
<a href="#"><u>REGION 2040 GROWTH CONCEPT PLAN DESIGN TYPES</u></a>
<a href="#"><u>CLACKAMAS REGIONAL CENTER AREA DESIGN PLAN POLICIES</u></a>
<a href="#"><u>URBAN DESIGN, PUBLIC AMENITIES, AND OPEN SPACE POLICIES</u></a>
<a href="#"><u>TRANSPORTATION POLICIES</u></a>
<a href="#"><u>HOUSING</u></a>

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## 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-2.

## **REGION 2040 GROWTH CONCEPT PLAN DESIGN TYPES**

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

### **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.

### **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 and along Corridors.
- 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.

### **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:

## 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.

## 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, Corridor Commercial, and Low Traffic Impact 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 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 allows for 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. 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 1/2 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 as shown on Map X-CRC-2 may be designated in corridors as 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, Low Traffic Impact 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 criterion 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 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 and Corridors.
  - 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 or Corridors, and/or in locations adjacent to streets that are at least minor arterials.

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

- 1.0 **Low Traffic Impact Commercial**
  - 1.1 Areas may be designated Low Traffic Impact Commercial when both of the following criteria are met:
    - a. The area is located on at least a minor arterial street, and
    - b. The area has excellent visibility where uses with low peak hour traffic generation are necessary to help reduce the traffic impacts on inadequate intersections.
  - 1.2 Allow uses with low peak hour traffic generation as specified in the Institute of Traffic Engineers Trip Generation Manual or other professionally recognized resources.
  - 1.3 Maintain and improve automobile and pedestrian connections between commercial uses, transit corridors, recreation areas, open space and adjacent residential areas.
  - 1.4 Require street layouts that provide for future development of the site or adjacent property.
  - 1.5 Areas designated Low Traffic Impact Commercial may be considered for other zones when sufficient capacity is added to the street system to accommodate higher peak volume traffic loads.
  - 1.6 Require design review for all development.

**2.0 High Density Residential**

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

**3.0 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.

**4.0 Low Density Residential - Single Family Attached.**

4.1 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.

4.2 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.

4.3 Design dwellings to provide variation in architectural appearance.

4.4 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.

### **VI. 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 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.

## VII. 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-7 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.

## **VIII. 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.

## **IX. 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.

## **X. 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**

### **XI. ROADS AND STREETS SYSTEM**

- 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, 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 Congestion Performance Standards for portions of 82nd Avenue and Sunnyside Road located within the Regional Center boundary shall be as follows:

<b>CONGESTION PERFORMANCE STANDARDS (Level of Service)</b>			
	<b>Preferred Operating Standard</b>	<b>Acceptable Operating Standard</b>	<b>Exceeds Deficiency Threshold</b>
<b>Mid-Day one-hour</b>	C or better	E	F or worse
<b>Peak two-hour</b>	E first hour E second hour	F first hour E second hour	F first hour F second hour

5.0 Congestion Performance Standards for portions of 82nd Avenue, Sunnyside Road and Johnson Creek Boulevard located within the Clackamas Regional Center Design Plan Area and outside the Regional Center boundary shall be as follows:

<b>CONGESTION PERFORMANCE STANDARDS (Level of Service)</b>			
	<b>Preferred Operating Standard</b>	<b>Acceptable Operating Standard</b>	<b>Exceeds Deficiency Threshold</b>
<b>Mid-Day one-hour</b>	C or better	D	E or worse
<b>Peak two-hour</b>	E first hour D second hour	E first hour E second hour	F first hour E second hour

6.0 Monitor transportation conditions in the SE 82nd Avenue Corridor to determine if Comprehensive Plan strategies are contributing to the attainment of congestion performance standards as identified in Policy 4.0 and 5.0 above.

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

7.1 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.

- 7.2 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.
- 7.3 Amendments to the Comprehensive Plan or Zoning Ordinance or changes in the Comprehensive Plan Map or zoning designation for the property within the Regional Center shall not be authorized unless it is demonstrated that the improvements described in Policy 7.1 and 7.2 will remain adequate to support planned development intensity and density for the Regional Center.

## **XII. TRANSIT**

- 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 Coordinate with Tri-Met in evaluating a fareless square for the Clackamas Regional Center Design Plan Area.
- 5.0 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 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 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.

## **XIII. PEDESTRIAN AND BIKEWAY NETWORK POLICIES**

- 1.0 Construct all walkway and bikeway improvements identified in Maps X-CRC-3 and X-CRC-7 to provide a network connecting Clackamas Regional Center Design Plan area neighborhoods and districts with transit stops, commercial areas, community centers, parks, libraries, and employment places, other major activities, off-street pedestrian linkages, regional multi-use paths, and area greenway trails. Other local sidewalks, walkways and bikeways may be identified and developed during land use review and as part of public improvements.
- 2.0 In the development review process, new residential and mixed use developments within the Corridor and Regional Center shall encourage pedestrian and bicycle travel by:
  - 2.1 Providing direct and convenient public right-of-way routes connecting residential uses with planned commercial uses, schools, parks, and other neighborhood facilities.
  - 2.2 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.
- 3.0 Sidewalks shall be constructed on all public and private streets in the Clackamas Regional Center Design Plan Area, subject to topography and environmental constraints.

#### **XIV. 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 Improvements to encourage non-auto transportation modes which include building the area bike/pedestrian network, transit preference systems that give buses advantage over other vehicles, transit and pedestrian amenities such as covered bus stops and lighting, on-site shower and dressing areas.
  - 1.3 Identify 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.

## **XV. 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 Ave. 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.

## **XVI. 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**

## **XVII. HOUSING POLICIES**

In addition to the policies in Chapter 4 of the Comprehensive Plan, 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.



[\*\*MAP X-CRC-1\*\* Clackamas Regional Center Area Design Plan, Regional Center and Corridors](#)



[\*\*MAP X-CRC-2\*\* Clackamas Regional Center Area Design Plan, Comprehensive Plan Designations](#)



[\*\*MAP X-CRC-3\*\* Clackamas Regional Center Area Design Plan, Urban Design Elements](#)



[\*\*MAP X-CRC-4\*\* Clackamas Regional Center Area Design Plan, Transportation Network \(Public and Private\)](#)



[\*\*MAP X-CRC-5\*\* Clackamas Regional Center Area Design Plan, Functional Classification](#)



[\*\*MAP X-CRC-6\*\* Clackamas Regional Center Area Design Plan, Transit Network](#)



[\*\*MAP X-CRC-7\*\* Clackamas Regional Center Area Design Plan, Bikeway and Path Network](#)



[\*\*MAP X-CRC-8\*\* Clackamas Regional Center Area Design Plan, 82nd Avenue Access Management Targets](#)



[\*\*FIGURE X-CRC-1\*\* Clackamas Regional Center Area Design Plan 82nd Avenue Regional Boulevard \(Gateway Intersections\)](#)



[\*\*FIGURE X-CRC-2\*\* Clackamas Regional Center Area Design Plan 82nd Avenue Regional Boulevard \(Between Gateway Intersections\)](#)



[\*\*FIGURE X-CRC-3\*\* Clackamas Regional Center Area Design Plan Sunnyside Road](#)



[\*\*FIGURE X-CRC-4\*\* Clackamas Regional Center Area Design Plan Harmony Road Regional Boulevard \(Fuller Road to 82nd Avenue\)](#)



[\*\*FIGURE X-CRC-5\*\* Clackamas Regional Center Area Design Plan Monterey Avenue Main Street \(I-205 to 82nd Avenue with Causey Avenue Overpass\)](#)



[\*\*FIGURE X-CRC-6\*\* Clackamas Regional Center Area Design Plan Causey Avenue Main Street \(I-205 82nd Avenue\)](#)



**[FIGURE X-CRC-7 Clackamas Regional Center Area Design Plan Gateway Intersection \(Boulevard and Main Street\)](#)**

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 10

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### 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.
  - 2.1 The development nodes will contain concentrations of higher intensity development, separated by Office Apartment or Low Density Residential uses.
  - 2.2 Corridor Policies 2.1 - 2.5 stated in Chapter 4: Urban Growth Concept shall be applicable to the development nodes.
  - 2.3 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.
  - 2.4 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 XSC-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 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.
- 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.
- 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 A conceptual alignment for Summers Lane between SE 132nd Avenue and 142nd Avenue has been approved as illustrated on Map X-SC-3. Since the time this conceptual alignment was determined, problems with it have been identified. The alignment will be re-evaluated, which will involve re-opening the public process. The determination of the final alignment will also involve determination of a funding strategy and mechanism.
- 5.0 Southeast 132nd Avenue south of Sunnyside Road shall be constructed to the street standards as depicted in Figure X-SC-1.
  - 5.1 No new residential driveway accesses shall be allowed on SE 132nd Avenue south of Sunnyside Road.
  - 5.2 The fronts or sides of primary dwelling units shall be oriented to SE 132nd Avenue. Back yards shall not line SE 132nd Avenue.
  - 5.3 Facades facing SE 132nd Avenue shall not consist of a blank wall.
- 6.0 New local streets and new connector streets shall comply with the following design standards:
  - 6.1 Orient local streets whenever practical so that at least 50% of the lots front north or south to take advantage of solar access.
  - 6.2 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.
- 7.0 Street trees listed as prohibited in Section 1600 of the Zoning and Development Ordinance shall not be approved as street trees in the Sunnyside Corridor Community Plan Area.
- 8.0 Provide vehicular and/or pedestrian connections between residential developments, public facilities, neighborhood services, and the collector and arterial street system.
- 9.0 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.
- 10.0 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:
  - 10.1 Consolidate driveways to the targets shown on Map X-SC-5, Access Management Targets for Sunnyside Road.
  - 10.2 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.

- 10.3 To maintain the flow of traffic on Sunnyside Road, driveways may be restricted to right-in, right-out only.
- 10.4 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 At the time of re-evaluation of the conceptual alignment for Summers Lane between SE 132nd Avenue and 142nd Avenue, as per Policy 4.0 under Streets and Alleys above, the determination shall be made of the final alignment and design standards of the trail.
- 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.



[\*\*MAP X-SC-1\*\* Sunnyside Corridor Community Plan, Community Plan Area and Corridor Design Type Location](#)



[\*\*MAP X-SC-2\*\* Sunnyside Corridor Community Plan, Land Use Plan Map](#)



[\*\*MAP X-SC-3\*\* Sunnyside Corridor Community Plan, New Streets](#)



[\*\*MAP X-SC-4\*\* Sunnyside Corridor Community Plan, Functional Classification](#)



[\*\*MAP X-SC-5\*\* Sunnyside Corridor Community Plan, Sunnyside Road Access Management Targets](#)



[\*\*MAP X-SC-6\*\* Sunnyside Corridor Community Plan, Trails](#)



[\*\*FIGURE X-SC-1\*\* Sunnyside Corridor Community Plan, 132nd Avenue South of Sunnyside Road \(Gateway Intersections\)](#)



[\*\*FIGURE X-SC-2\*\* Sunnyside Corridor Community Plan, New Local Streets](#)



[\*\*FIGURE X-SC-3\*\* Sunnyside Corridor Community Plan, Alley Cross Section](#)

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 10

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### 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 Figure X-MC-1 and Figure X-MC-2. 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, 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 and Figure X-MC-2, 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.



[MAP X-MC-1 McLoughlin Corridor Design Plan, Design Plan Area](#)



[MAP X-MC-2 McLoughlin Corridor Design Plan, Location of Street Improvements](#)



[FIGURE X-MC-1 McLoughlin Corridor Design Plan, Street Cross Sections](#)



[FIGURE X-MC-2 McLoughlin Corridor Design Plan, Street Cross Sections](#)

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 11

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### THE PLANNING PROCESS

<a href="#">CITY, SPECIAL DISTRICT AND AGENCY COORDINATION</a>
<a href="#">AMENDMENTS AND IMPLEMENTATION</a>

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The purpose of Clackamas County's comprehensive planning process is to establish a framework for land use decisions that will meet the needs of Clackamas County residents, recognize the County's interrelationships with its cities, surrounding counties, the region, and the state, and insure that changing priorities and circumstances can be met. Coordination with other governmental agencies and refinement of this Plan and County ordinances is essential to achieve this end.

#### ISSUES

1. Coordination with cities, special districts and federal, state and regional agencies
2. Compatibility of County planning programs with those of other jurisdictions and agencies
3. Relationship of changing circumstances to County plans and ordinances
4. Implementation of County goals and policies
5. Public and private costs
6. Administration of ordinances and programs

#### SUMMARY OF FINDINGS AND CONCLUSIONS

1. Comprehensive planning in Oregon is mandated by the State. The 1973 Legislature adopted Senate Bill 100 (ORA Chapter 197) which established the Land Conservation and Development Commission (LCDC) and directed the commission to adopt Statewide Planning Goals and Guidelines. LCDC Goals and Guidelines were adopted in December 1974, and became effective January 1, 1975.

The Statewide Planning Goals require Clackamas County to:

- a. Provide opportunity for citizen involvement
- b. Establish a land use planning process and policy framework
- c. Preserve and maintain agricultural lands
- d. Conserve forest lands for forest uses
- e. Conserve open space and protect natural and scenic resources
- f. Maintain and improve the quality of our air, water and land resources
- g. Protect life and property from natural disasters and hazards
- h. Satisfy the recreation needs of the citizens of the state and visitors
- i. Diversify and improve the economy of the state
- j. Provide for the housing needs of the citizens
- k. Plan and develop a timely, orderly, and efficient arrangement of public facilities and services
- l. Provide and encourage a safe, convenient, and economic transportation system
- m. Conserve energy
- n. Provide an orderly and efficient transition from rural to urban land use
- o. Protect, conserve, enhance and maintain the natural scenic, historical, agricultural, economic and recreational qualities of the Willamette Greenway

2. LCDC adopted 19 statewide goals, of which the 15 listed above apply to Clackamas County. The remaining goals (16-19) apply only to Oregon's coastal areas.
3. This Plan satisfies requirements and goals of the Land Conservation and Development Commission. The 15 goals that apply to Clackamas County are addressed within various chapters of the Plan, some as individual topic areas, and others covered in more than one chapter.
4. Metro is responsible for coordinating land use planning activities of the jurisdictions within its district, including:
  - a. Coordinating local plan review for consistency with statewide goals and guidelines within the Metro jurisdiction. Plans of jurisdictions outside the district are reviewed by the County.
  - b. Requiring, local plans be consistent with the Metro Land Use Framework Element, the Region 2040 Urban Growth Management Functional Plan and Statewide Planning Goals.
  - c. Requiring amendments to the Plan in a timely manner consistent with regional goals and objectives and/or functional elements (see Amendments, policy 3.1).

5. More than 150 different federal and state agencies, local governments, and special purpose districts provide services and are involved in planning or engage in activities which directly affect the scope and direction of the County's Plan. Agency boundaries seldom coincide.
6. Interagency coordination is necessary to assure that the activities of the agencies reinforce each other and the County's Comprehensive Plan.
7. Area-wide management of problems is needed for transportation, air and water quality, housing and solid waste.
8. The County contains 15 cities, all of which have adopted or intend to adopt, comprehensive plans, which may include land outside their boundaries.
9. The County contains over 100 special districts, which provide services to unincorporated areas.

## **CITY, SPECIAL DISTRICT AND AGENCY COORDINATION**

Clackamas County recognizes that many activities and problems spill across political boundaries, making coordination with special districts, cities, and state and federal agencies essential.

### **GOALS**

- Provide a coordinated approach to problems which transcend local government and special purpose district boundaries or responsibilities.
- Coordinate various agency capital improvement programs with the County's Comprehensive Plan.
- Direct the activities of the various agencies toward implementation of the County's Comprehensive Plan.
- Establish specific areas adjacent to incorporated city boundaries within which the County will coordinate land use actions with the individual city, and within which formal plan agreement will be sought.

### **POLICIES**

- 1.0 Participate in interagency coordination efforts with federal, state, Metro, special purpose districts and cities. The County will maintain an updated list of federal, state and regional agencies, cities and special districts and will invite their participation in plan revisions, ordinance adoptions, and land use actions which affect their jurisdiction or policies.
- 2.0 Request state and regional governments, cities and special districts to inform the County of needs which should be addressed in the County's plan-ning program.

- 3.0 Encourage and assist Metro in developing and updating its regional database.
- 4.0 Actively participate with Metro in identifying regional needs and priorities and implementing functional plans.
- 5.0 Continue to assist its citizens in contacting and communicating with other governmental agencies.
- 6.0 Adopt Urban Growth Management Agreements with each city and offer to sign such agreements with all special districts.
- 7.0 Apply the County's Comprehensive Plan to unincorporated dual interest areas, except those areas where the County has adopted city plan designations in accordance with an urban growth management agreement. Such agreements may provide that the County will not plan or zone dual interest areas at urban densities prior to their annexation by a city. After annexation to a city, the County Plan will continue to apply, in accordance with the provisions of ORS 215.130, until the city applies its own land use plan and/or zoning designation. The County will revise Urban Growth Management Agreements to insure that all agreements include provisions consistent with ORS 215.130.
- 8.0 Notify the parties to Urban Growth Management Agreements of proposed land use actions and Plan amendments and encourage participation in formulating and evaluating the proposals. Request necessary technical assistance in assessing impacts on the area and enter all formal comments into the public record.
- 9.0 Insure consistency between city and County plans. Any conflicts shall be stated in an Urban Growth Management Agreement, and resolution of these conflicts will occur through the Plan amendment process.
- 10.0 Engage the public in development of intergovernmental agreements.

## **AMENDMENTS AND IMPLEMENTATION**

Clackamas County citizens need a Comprehensive Plan which will meet and guide changing needs and circumstances for the physical and economic growth within the County. The adoption of the Comprehensive Plan is not an end in itself. The Plan must be implemented by governmental or citizen action. It must be kept current through periodic review and appropriate revision.

### **GOALS**

- Assure that policies in this Plan are implemented.
- Establish Plan review and revision procedures which include provisions for participation by citizens and affected governmental units.
- Assure an adequate factual base for decisions and actions.

## POLICIES

- 1.0 Assure that the Comprehensive Plan and County ordinances meet the goals of LCDC, the Region 2040 Urban Growth Management Functional Plan and the Metro Framework Plan.
- 2.0 Assure that the Comprehensive Plan is regularly reviewed, revised and amended.
  - 2.1 Establish administrative and organizational procedures to insure adequate monitoring of population, vacant lands, transportation systems, public facility capacities, environmental and economic changes, including a computerized data retrieval system.
  - 2.2 Maintain the adopted citizen involvement program to provide a means for the public to express their views on County or community needs, changes and improvements.
  - 2.3 Periodically reassess goals, general policies and implementation as well as the database and alternatives on which this Plan is based.
  - 2.4 Formally review the Comprehensive Plan at periodic intervals.
- 3.0 Amend the Comprehensive Plan pursuant to the following procedures and guidelines.
  - 3.1 A map amendment may be initiated only by the Board of County Commissioners, the Planning Commission, the Planning Director, or the owner of the property for which a change is requested.
  - 3.2 A text amendment may be initiated only by the Planning Director, Planning Commission or Board of County Commissioners.
  - 3.3 All proposed Comprehensive Plan amendments are to be considered at advertised public hearings before the Planning Commission, in accordance with state law and County requirements.
  - 3.4 If the proposed amendment is quasi-judicial, property owners will be notified as required. The Community Planning Organization in the affected area shall be notified at least 35 days prior to the first hearing.
  - 3.5 If the proposed amendment is legislative, notice of public hearing, together with a copy of the proposal, will be mailed to all recognized Community Planning Organizations at least 35 days prior to the scheduled public hearing.
  - 3.6 Provide the opportunity for the DLCD and Metro to review and comment on proposed legislative amendments pursuant to the applicable provisions of Metro's Code and state laws.
- 4.0 Coordinate the Plan with regional policies by allowing the acknowledged County Plan to be "opened" periodically for amendments that specifically consider compliance with regional goals and objectives and functional elements.

- 4.1 "Open" the Plan, each of its elements, and the implementing ordinances for amendments that consider compliance with the goals and objectives and functional plans of Metro on a periodic basis.
- 4.2 Recognize that this provision is not to be construed as waiving any legal rights which the County may have to challenge the legality of a regional goal, objective or plan revision.
- 5.0 Direct the Planning Director to make the initial decision on any questions of interpretation or applicability of the Comprehensive Plan. This decision may be appealed to the Planning Commission. The interpretation made by the Planning Commission may be appealed to the governing body of the County pursuant to the appeals or review procedure of the Clackamas County Zoning and Development Ordinance.
- 6.0 Implement this Plan through appropriate ordinances and action.
  - 6.1 Amend existing ordinances and adopt new ordinances to carry out the policies of this Plan.
  - 6.2 Apply zoning in a timely manner which is consistent with this Plan.
  - 6.3 Require all zoning and subdivision ordinances to be consistent with the intent of, and based on, this Comprehensive Plan.
  - 6.4 Require all actions of the County on conditional uses, variances, zone changes, design review and all other planning actions to be consistent with the intent of this Plan.
- 7.0 Consider the development and adoption of Comprehensive Plan amendments to meet special needs within specific neighborhoods or communities.
  - 7.1 Develop when necessary detailed plans for areas of significant new development or redevelopment, Rural Communities, additional rural areas or areas of transition from rural to urban areas.
  - 7.2 Develop appropriate community plans to implement housing, transportation and park policies where necessary at the community level.
- 8.0 Provide public facilities and services appropriate for urban and nonurban designations through participation with regional agencies, cities and special districts in studies to determine needs, service areas and jurisdictional responsibility.
  - 8.1 Include opportunities for appropriate citizen participation in all facilities and service plans and implementation decisions.
- 9.0 Pursue, as deemed appropriate, enactment or amendment of state statutes and regulations to facilitate opportunities for achieving the goals of this Plan.
- 10.0 Develop public financing systems that are more capable of providing the revenues needed to finance the public improvements needed to implement this Plan.



- 10.1 Actively pursue funding possibilities including public/private partnerships, federal or state grants, real estate transfer tax, and tax increment financing to realize practical application and benefit of this Plan's policies.
  - 10.2 Pursue annual development of a Capital Improvement Program (CIP) for the coming fiscal year, the next five years, and the long-term outlook.
  - 10.3 Coordinate with federal, state and regional governments to maximize their contributions to County projects.
  - 10.4 Evaluate the use of a systems development charge based on the development's impact to help alleviate its impact on transportation facilities, open space and other publicly financed facilities.
- 11.0 Insure maximum public benefit from the policy directions in this Plan and the provisions in implementing ordinances by continuing to promote public information/education on land use opportunities and constraints.
- 12.0 Continue to administer state agency regulations at the local level in those cases where doing so will improve service to the people of the County. State programs which currently lend themselves to County administration include soil tests for septic tank suitability, and surface mining requirements.
- 13.0 For lands outside urban growth boundaries, require exceptions to LCDC Goals 3 and 4 for any Plan amendment or zone change to uses other than agriculture or forestry.

## **CLACKAMAS COUNTY COMPREHENSIVE PLAN: APPENDIX**

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### **Appendix A**

#### **MAPS AND DOCUMENTS ADOPTED BY REFERENCE**

The following maps and documents have been adopted by reference to the Comprehensive Plan. These documents are available for review at the Clackamas County Planning office.

##### **Chapter 3 NATURAL RESOURCES AND ENERGY**

1994 Clackamas County Wetland Inventory, Comprehensive Plan Map Map A: Northeast Urban Area, West of I-205

1994 Clackamas County Wetland Inventory, Comprehensive Plan Map Map B: Northeast Urban Area, East of I-205

##### **Chapter 5 TRANSPORTATION**

Clackamas County Pedestrian Master Plan

Clackamas County Bicycle Master Plan

Clackamas County Airport Plan (11/1/01)

##### **Chapter 10 COMMUNITY AND DESIGN PLANS, Clackamas Regional Center Area Plan**

Phillips Creek Greenway Framework Plan

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: APPENDIX

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### 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

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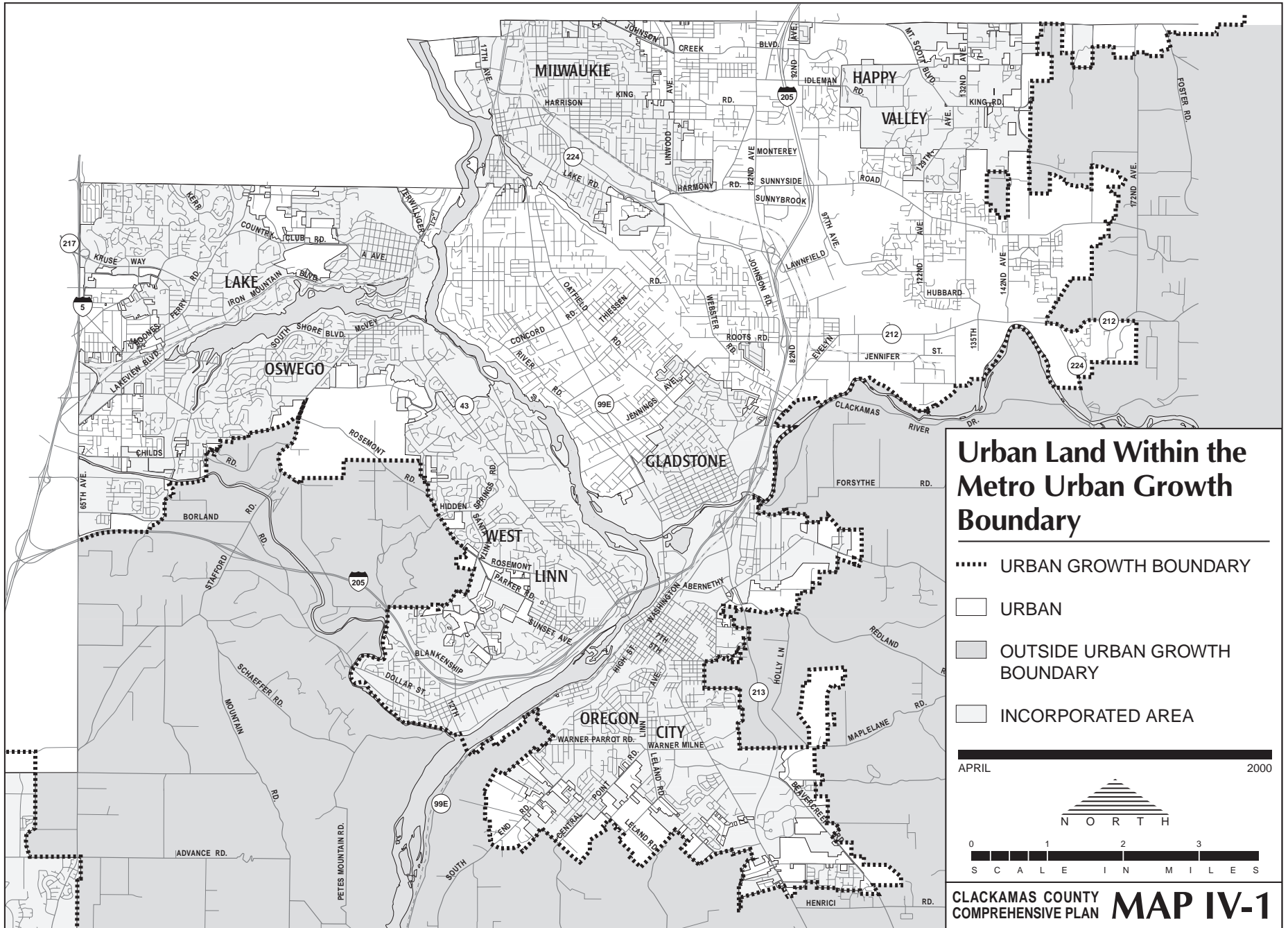
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SEE LAKE OSWEGO  
LAND USE  
PLAN MAP IV-3

SEE NORTH URBAN AREA LAND USE PLAN MAP IV-6

SEE WEST LINN  
LAND USE  
PLAN MAP IV-4

SEE OREGON CITY  
LAND USE  
PLAN MAP IV-5

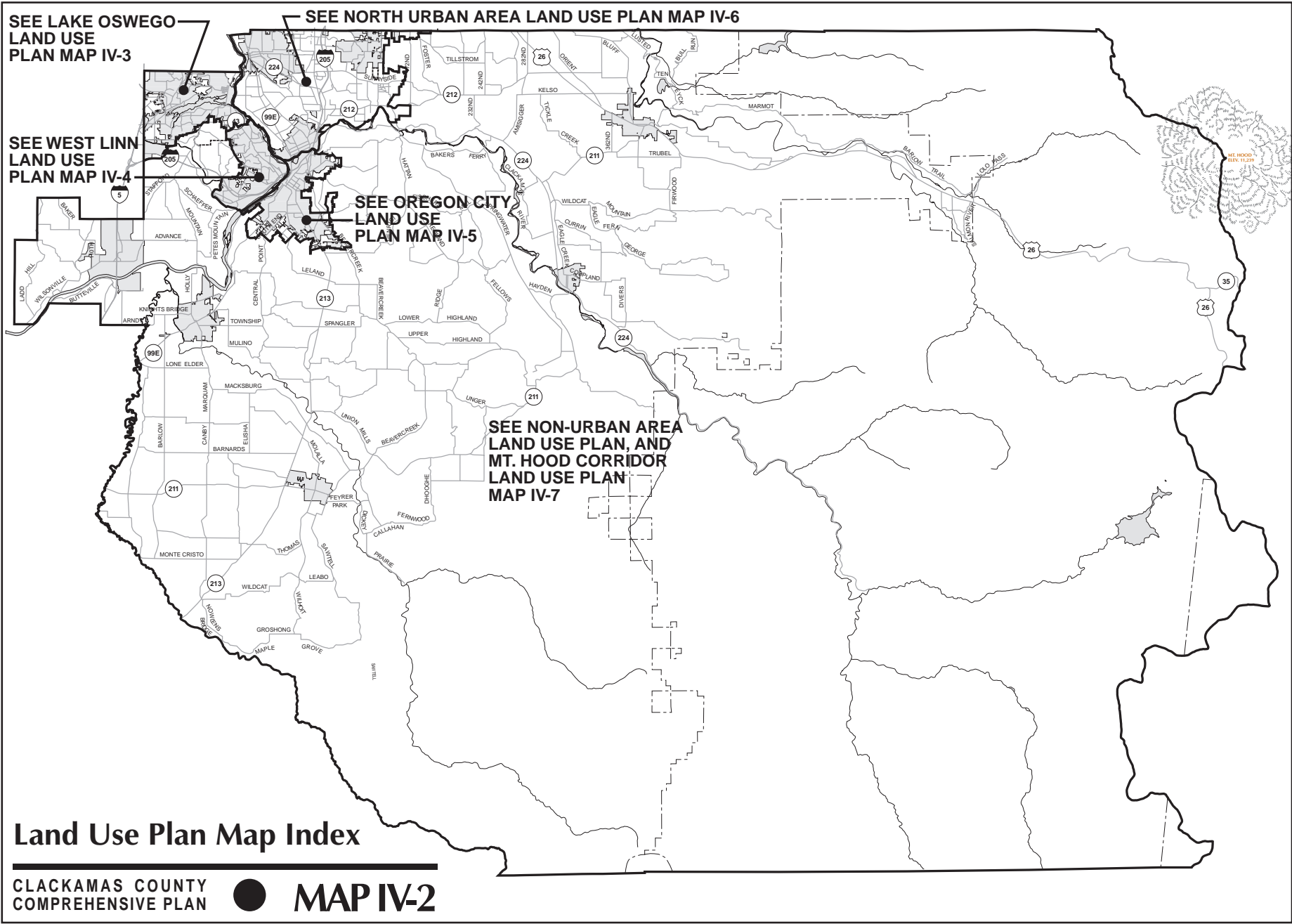
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LAND USE PLAN  
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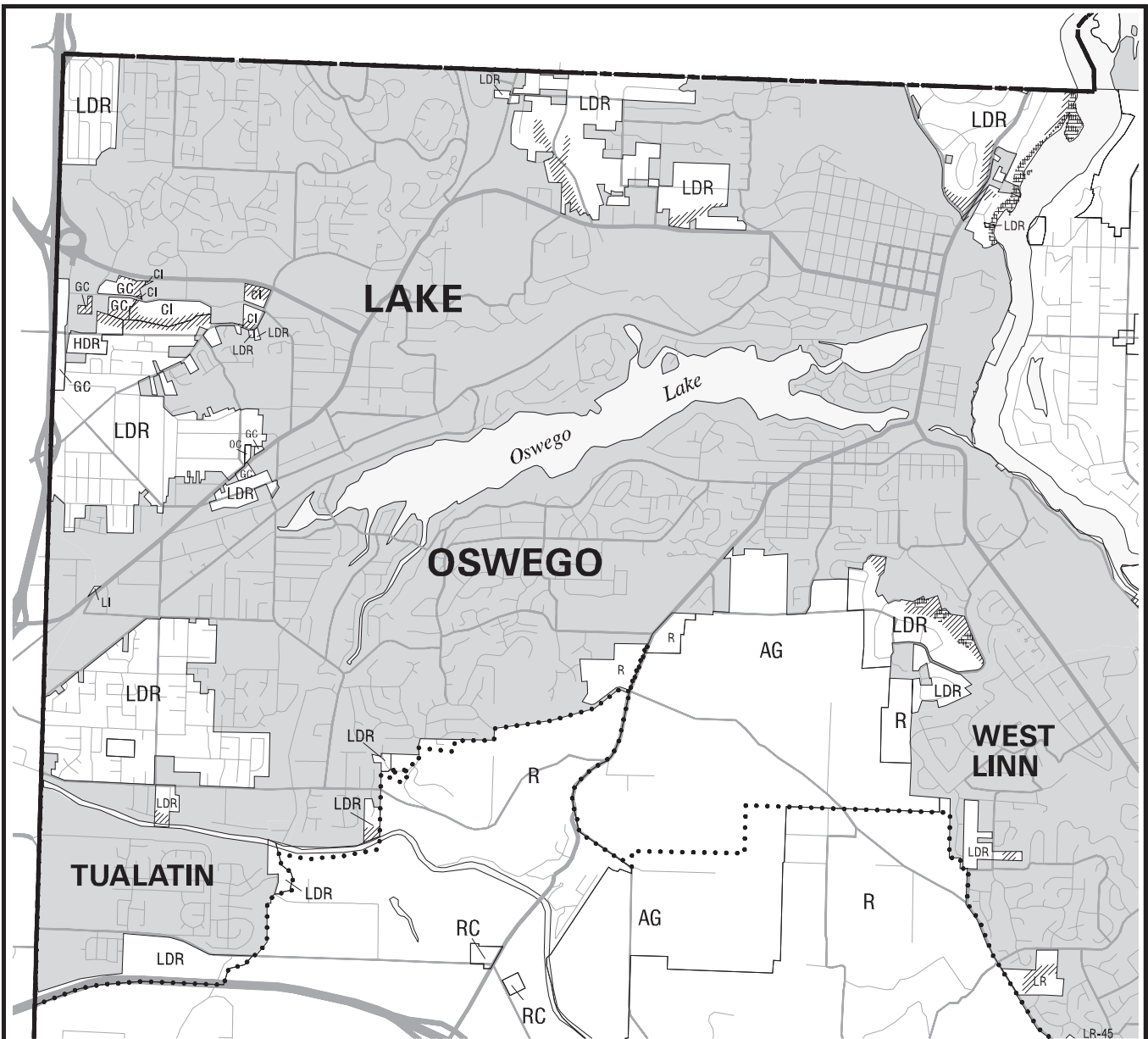
# Land Use Plan Map Index

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN



## MAP IV-2





**MAP IV-3 • LAKE OSWEGO LAND USE PLAN MAP • CLACKAMAS COUNTY COMPREHENSIVE PLAN**

- Agriculture (AG)
- Forest (F)
- Rural (R)
- Low Density Residential (LDR, LR, LR\_MH/P)
- Medium Density Residential (MDR)
- High Density Residential (HDR)
- Commercial (GC, CC, C, RC)
- Industrial (I, LI)
- Public & Community Use (PCU, P-SCH, QP)

..... Urban Growth Boundary

 Resource Protection

 Major Hazard

 Incorporated City

Scale = 1:41395



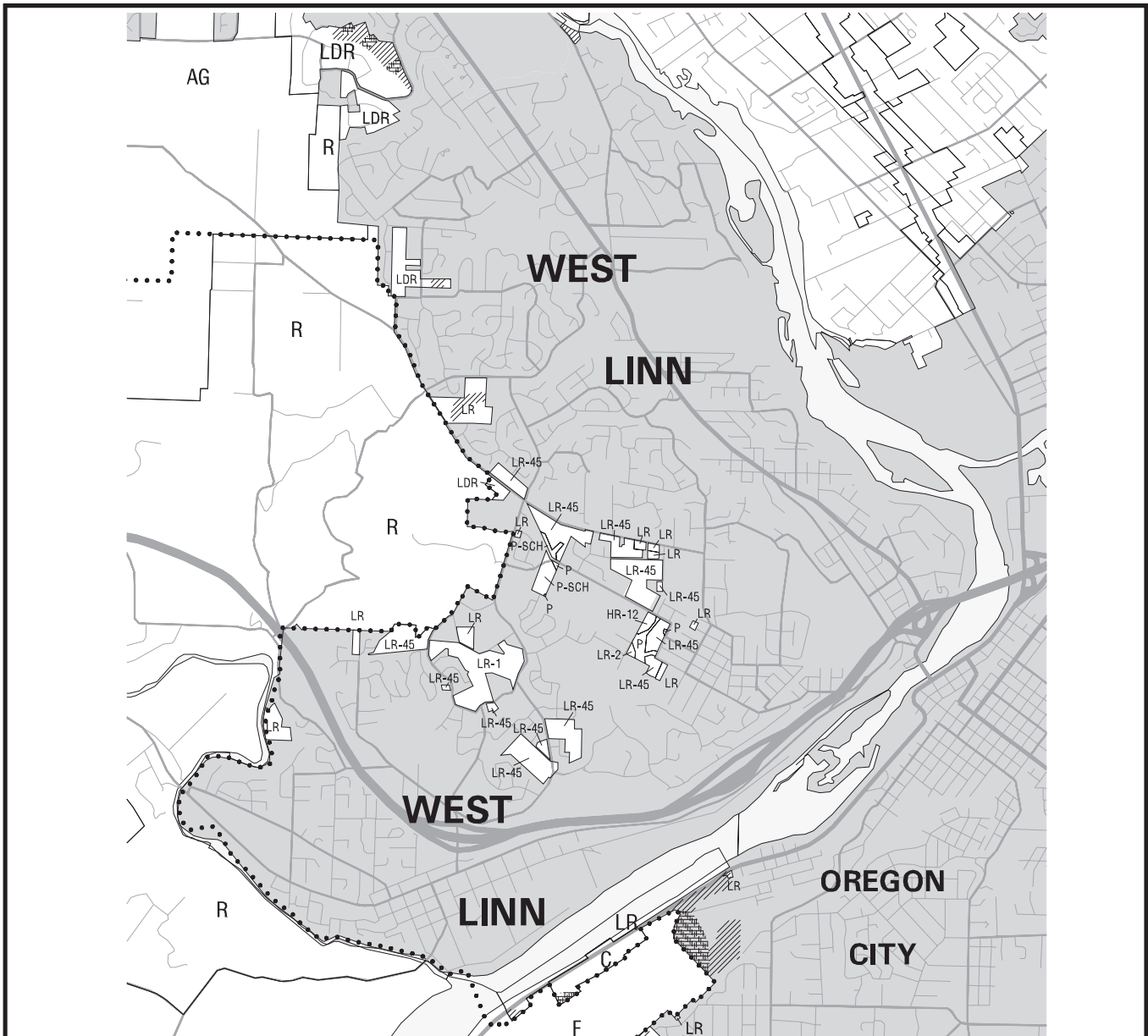
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City boundaries & land use plan data as of August 2000




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**MAP IV-4 • WEST LINN LAND USE PLAN MAP • CLACKAMAS COUNTY COMPREHENSIVE PLAN**

- Agriculture (AG)
- Forest (F)
- Rural (R)
- Low Density Residential (LDR, LR, LR\_MH/P)
- Medium Density Residential (MDR)
- High Density Residential (HDR)
- Commercial (GC, CC, C, RC)
- Industrial (I, LI)
- Public & Community Use (PCU, P-SCH, QP)

..... Urban Growth Boundary

-  Resource Protection
-  Major Hazard
-  Incorporated City

Scale = 1:41143



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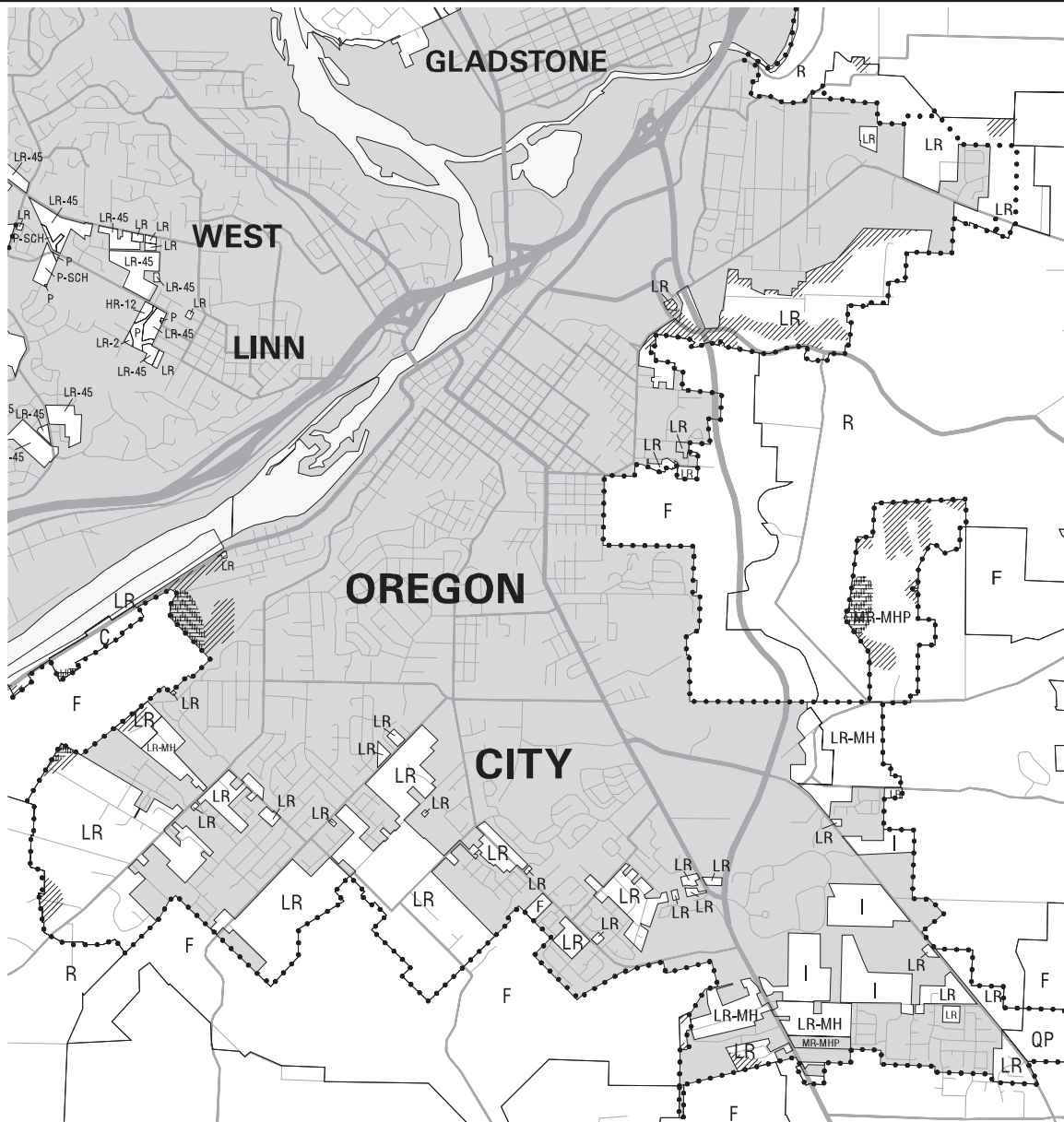
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City boundaries & land use plan data as of August 2000

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**MAP IV-5 • OREGON CITY LAND USE PLAN MAP • CLACKAMAS COUNTY COMPREHENSIVE PLAN**

- Agriculture (AG)
- Forest (F)
- Rural (R)
- Low Density Residential (LR, LR-MH, LR-MHP)
- Medium Density Residential (MR, MR-MHP)
- Commercial (C)
- Industrial (I)
- Quasi Public (QP)

Scale = 1:46474



..... Urban Growth Boundary

-  Resource Protection
-  Major Hazard
-  Incorporated City



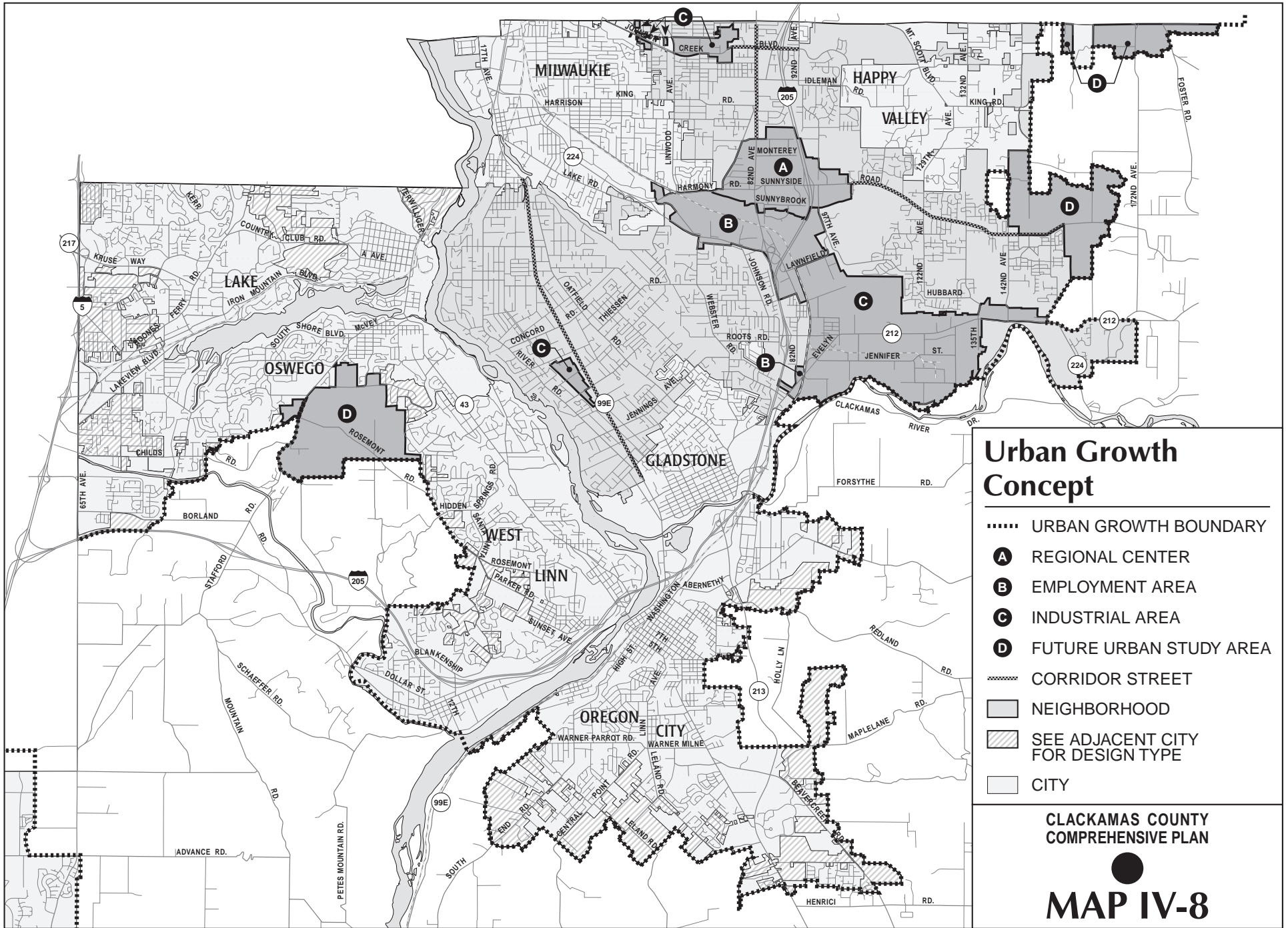
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City boundaries & land use plan data as of August 2000

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## Urban Growth Concept

- URBAN GROWTH BOUNDARY
- A** REGIONAL CENTER
- B** EMPLOYMENT AREA
- C** INDUSTRIAL AREA
- D** FUTURE URBAN STUDY AREA
- CORRIDOR STREET
- NEIGHBORHOOD
- SEE ADJACENT CITY FOR DESIGN TYPE
- CITY

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

**MAP IV-8**

## CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 5

### TRANSPORTATION

MAP	PROJECT	SECTION	DESCRIPTION
<b>URBAN AREA PROJECTS</b>			
1	Johnson Creek Blvd.	36th to 45th	Widen to minor arterial standards
2	Johnson Creek Blvd.	55th Avenue to Bell Avenue	Widen to (3) lanes
3	Johnson Creek Bridge (6135)	Bridge	Reconstruct and widen bridge to (5) lanes (74 ft)
4	Johnson Creek Blvd.	Bell Avenue to 82nd Avenue	Widen to (5) lanes plus bike lanes and sidewalks
5	Clatsop Street/Luther Road	"Luther - 72nd Ave. to 82nd: Clatsop, 82nd Ave. east to Fuller"	Upgrade to collector standard and signalize 82nd Avenue intersection
6	West Collector	Luther Street to Johnson Creek Blvd.	Construct new collector
7	SE 82nd Avenue	Clatsop Street to Johnson Creek Blvd.	Widen to (5) lanes with bike lanes and sidewalks
8	SE 82nd Avenue	82nd Avenue/Johnson Creek Blvd. intersection	Add second southbound left-turn lane
9	Fuller Road extension	Johnson Creek Blvd. to Hinkley Street	Extend street
10	King Road	Harrison/King/42nd intersection	"Realign intersection, traffic signal"
11	King Road	King/Stanley intersection	Add turn lanes to Stanley
12	Linwood Avenue	Linwood/Monroe intersection	"Add curbs/sidewalks, improve horizontal alignments"
13	Stanley Road (6455)	Bridge	Reconstruct and widen to 32 feet
14	Wichita Road	Bridge	Reconstruct and widen to 32 feet

15	West Collector (79th)	Johnson Creek Blvd. to King Road	Construct new collector
16	SE 82nd Avenue	Johnson Creek Blvd. to Causey Avenue	Widen to (5) lanes + bike lanes
17	Johnson Creek Blvd.	1-205 - Johnson Creek interchange	"Connect southbound off-ramp with Fuller, remove signal, upgrade with new ramps"
18	Fuller Road	Otty Street to Johnson Creek Blvd.	Widen to (3) lanes
19	Otty Street Realignment	Otty Street/82nd Avenue/Otty Road	Realign Otty Street with Otty Road at 82nd Avenue
20	Otty Road	82nd Avenue to 92nd Avenue	"Improve to minor arterial standard, add bike lanes and sidewalks"
21	Fuller Road	Otty to King/82nd Avenue	(2) lane extension
22	Fuller Road disconnect	Fuller Road/King Road intersection	Disconnect Fuller auto access to King Road
23	Monroe Street	72nd Avenue to Fuller Road	Improve to collector standard
24	Boyer Drive	82nd Avenue to Fuller Road	New (2) lane extension
25	Fuller Road	King Road to Harmony Road	Reconstruct and widen road to collector standards
26	Fuller Road	King Road to Harmony Road	Add bike lanes and sidewalks
27	Causey Avenue	Fuller Road to I-205	Widen and add bike lanes
28	Causey Avenue	Extend Causey over I-205 to Frontage Road	Construct (3) lane overpass to Frontage Road
29	SE 85th Avenue	Causey Avenue to Monterey Avenue	Improve to collector standard with bike lanes and sidewalks
30	Monterey Avenue	82nd Avenue to Fuller Road	New (2) lane extension
31	Monterey Avenue	82nd Avenue to 92nd Avenue	Widen to (3) lanes with parking to main street standards



32	Monterey Overpass	Extend Monterey over I-205	Construct overpass to Frontage Road
33	Lake Road	Highway 224 west to Milwaukie city limits	"Reconstruct, widen, turn lanes"
34	Harmony Road	Lake Rd/Linwood Ave/Harmony Rd intersection	To be determined after additional planning work
35	Harmony Road	82nd Avenue - Highway 224	Widen to (5) lanes
36	Sunnybrook Rd extension (W)	82nd Avenue to Harmony Road	Extend as a minor arterial
37	SE 82nd Avenue	Causey Avenue to Sunnyside Road	Boulevard treatment
38	Phillips Creek multi-use path	Causey Avenue to North Clackamas Trail	Construct multi-use path
39	North Clackamas Trail	84th Avenue to Park Complex	Construct trail
40	SE 82nd Avenue	Sunnyside Road to Sunnybrook Road	Widen to (7) lanes with boulevard
41	Sunnyside Road	82nd Avenue to 97th Avenue	Restripe to add bike lanes
42	I-205 multi-use path	Clatsop Street to Mt. Scott Creek	Multiple local connections to path
43	I-205 Frontage Road	Sunnyside Road to 92nd Avenue	New Frontage Road east of I-205
44	Stevens Road redesignation	Frontage Road to Idleman Road	"Downgrade to collector + optional traffic calming, sidewalks"
45	Hillcrest Street	92nd Avenue to Stevens Road	Add sidewalks
46	Idleman Road redesignation	92nd Avenue to Johnson Creek Blvd. extension	Downgrade to collector + provide bike lanes and sidewalks
47	Johnson Creek extension	Altamont to Idleman Road	New (2) lane extension
48	Idleman Road	Johnson Creek extension to Mt. Scott Blvd.	"Reconstruct and widen to urban minor arterial standards, smooth curves"

49	Mt. Scott Blvd.	Idleman/Mt. Scott intersection	Realign and add left-turn lanes
50	Mt. Scott Blvd./King Road	Idleman Road to 132nd Avenue	Reconstruct and widen (urban). Improve grade.
51	King Road	King Road/129th intersection	"Add turn lanes, realign"
52	SE 132nd Avenue	King Road to Clatsop Street	Widen to (3) lanes
53	King Road	132nd Avenue to 147th Avenue	"Reconstruct, widen, turn lanes"
54	SE 122nd/129th Avenue	Sunnyside to King Road	Widen to (3) lanes
55	Causey extension	I-205 Frontage Road to W. Otty Road	Collector with bike lanes and sidewalks
56	William Otty Road extension	Stevens Road to Valley View Terrace	New (2) lane collector
57	Valley View Terrace	Sunnyside Road to William Otty Road	Upgrade to collector with bike lanes and sidewalks
58	Sunnybrook extension east	97th Avenue to Sunnyside at 108th Avenue	New (5) lane arterial
59	Sunnyside Road Phase 1	Stevens to 122nd Avenue	"Widen to (5) lanes, with bridge"
60	Sunnyside Road Phase 2	122nd Avenue to 132nd Avenue	Widen to (5) lanes
61	Sunnyside Road Phase 3	132nd Avenue to 152nd Avenue	Widen to (5) lanes
62	Sunnyside Road Phase 4	152nd Avenue to 172nd Avenue	"Widen to (5) lanes, with bridge"
63	Sunnyside Road	Sunnyside Road/SE 172nd Avenue intersection	Install traffic signal and left-turn lanes
64	SE 147th Avenue	Sunnyside Road to Monner Road	Realign road to improve grade
65	SE 172nd Avenue	Highway 212 to Multnomah County Line	"Four lane widening with left-turn lanes, ext. of 172nd Ave to Hwy 212"
66	Foster Road	Tillstrom Road to Multnomah County Line	Four lane widening with left-turn lanes

67	Foster Road	Foster Road/Tillstrom Road intersection	"Install traffic signal, install southbound left-turn lane"
68	Mather Road	97th Avenue to 122nd Avenue	Reconstruct and widen (urban)
69	Mather Road	Mather Road/122nd Avenue intersection	Install traffic signal
70	Mather Road	122nd Avenue to 132nd Avenue	New (2) lane extension
71	SE 122nd Avenue	Sunnyside Road to Hubbard Road	"Reconstruct and widen, add turn lanes"
72	SE 132nd Avenue	Sunnyside Road to Hubbard Road	"Upgrade to standards, add sidewalks"
73	Summers Lane Ext. Phase 2	122nd Avenue to 132nd Avenue	New (2) lane extension
74	Summers Lane Ext. Phase 3	132nd Avenue to 142nd Avenue	New (2) lane extension
75	SE 142nd Avenue	Sunnyside Road to Highway 212	Widen to (3) lanes
76	SE 152nd Avenue Phase 1	Right angle curves	Realign curves to collector standards
77	SE 152nd Avenue Phase 2	Sunnyside Road to Highway 212	Reconstruct and widen (urban)
78	River Road	Milwaukie to Gladstone	Reconstruct and widen (urban)
79	River Road	River Road/Courtney Road intersection	Improve sight distance
80	River Road	River Road/Concord Road intersection	Install traffic signal and left-turn lanes
81	Concord Road	River Road to Oatfield Road	Reconstruct and widen (urban)
82	Oatfield Road	Oatfield Road/Park Road intersection	Install traffic signal and left-turn lanes
83	Oatfield Road	Oatfield Road/Courtney Road intersection	Install traffic signal
84	Oatfield Road	Oatfield Road/Hill Road intersection	"Install left-turn lanes, install signal if warranted"

85	Oatfield Road	Oatfield Road/Concord Road intersection	"Widen, add turn lanes"
86	Oatfield Road	Oatfield Road/Roethe Road intersection	"Install signal and left-turn lanes, improve approach grade on Roethe Road"
87	Oatfield Road	Oatfield Road/McNary Road intersection	Add turn lanes
88	Aldercrest Drive	Thiessen Road to Oatfield Road	Reconstruct and widen (urban)
89	Kuehn Road (6262)	Bridge	Reconstruct and widen to 32 feet
90	Thiessen Road	Thiessen Road/Hill Road intersection	"Widen, add left-turn lane on Thiessen Road"
91	Jennings Road	Oatfield Road to Webster Road	Reconstruct and widen
92	Webster Road	Highway 224 to Gladstone City limits	Widen to (3) lanes and conduct Highway 224 corridor study
93	Webster Road	Webster Road/Lake Road intersection	Add left-turn lanes
94	Webster Road	Webster/Jennings and Roots intersection	"Construct traffic signals, turn lanes"
95	Webster Road	Webster/Strawberry Lane intersection	"Install traffic signal, left-turn lanes"
96	Roots Road/McKinley Road	I-205 to Webster Road	Reconstruct and widen
97	Johnson Road/McKinley Road	Lake Road to I-205	Reconstruct and widen (urban)
98	Strawberry Lane	Strawberry Lane/82nd Drive intersection	Install traffic signal
99	SE 82nd Drive	Highway 212 to Gladstone Phase 2	Widen to (5) lanes
100	SE 82nd Drive	Highway 212 to Lawnfield Road	Widen to (5) lanes
101	Industrial Way	Lawnfield Road to Mather Road	New (3) lane collector
102	SE 98th Avenue	Lawnfield Road to Mather Road	Widen to (3) lanes

103	Mather Road	SE 82nd Drive to Industrial Way	Extend Mather Road across railroad to SE 82nd Drive
104	Mather Road	Industrial Way to 98th	Widen to (3) lanes
105	102nd industrial access improv.	102nd to Mather Road	Upgrade to collector standards
106	Jennifer/135th	130th-135th and Jennifer-Highway 212	Two lane extension and reconstruction of 135th
107	Bangy Road	Bany/Meadows intersection	"Install traffic signal, turn lanes"
108	Bangy Road	Bangy/Bonita intersection	"Install traffic signal, turn lanes"
109	Carman Drive	I-5 to Quarry Road	"Reconstruct and widen, add turn lanes"
110	Carman Drive	Carman/Meadows Road intersection	"Install traffic signal, turn lanes"
111	Carman Drive	Carman Drive/Parkview/Fosberg Rd. intersection	"Install traffic signal, channelization"
112	Childs Road	Stafford Road to 65th Avenue	Reconstruct and widen - 2/3 lanes
113	Borland Road	65th Avenue to Stafford Road	Four lane widening with left-turn lanes
114	Stafford Road	Stafford/Rosemont Road intersection	"Install traffic signal, southbound turn lane and northbound turn lane"
115	Stafford Road	Childs Road to Rosemont	Four lane widening with left-turn lanes
116	Stafford Road	Stafford/Childs Road intersection	"Install traffic signal, southbound turn lane and northbound turn lane"
117	Stafford Road	Johnson Road to Childs Road	Four lane widening with left-turn lanes
118	Stafford Road	Borland Road to Johnson Road	Four lane widening with left-turn lanes
119	Stafford Road (2567)	Bridge	Reconstruct and widen to 50 feet
120	Stafford Road	Stafford/Borland intersection	Install traffic signal and left-turn lanes on all approaches

121	Stafford Road	I-205 to Borland Road	Four lane widening with left-turn lanes
122	Rosemont Road	Stafford Road to Parker Road	Reconstruct and widen
123	Rosemont Road	Rosemont/Parker/Day intersection	"Realign intersection, add turn lanes"
124	Parker Road	Rosemont Road to Sunset Road	Reconstruct and widen (urban)
125	Willamette Falls Drive	Highway 43 to 10th Avenue	Reconstruct and widen (urban)
126	Stafford Road	Mountain Road to I-205	Four lane widening with left-turn lanes
127	Stafford Road	Stafford/Mountain intersection	Install traffic signal and southbound left-turn lane
128	Stafford Road	Newland Road to Mountain Road	Four lane widening with left-turn lanes
129	Stafford Road	Boeckman Road (Advance Rd) to Newland Road	Reconstruct and widen (rural)
130	65th Ave/Elligsen/Stafford Rd.	Elligsen Road to Stafford Road	"Realign Elligsen Road to south, install north bound right-turn and southbound left-turn lane at new Stafford Road/Elligsen Road intersection"
131	Petes Mountain Road	Willamette Falls Road to Hoffman Road	Reconstruct and widen (rural)
132	Forsythe Road	Railroad crossing between Clackamas and Boardwalk	Add/upgrade railroad crossing
133	Clackamas River Drive	Highway 213 to Springwater Road	Reconstruct and widen (rural)
134	Springwater Road	Highway 224 to Hattan Road	"Four lane widening with left-turn lanes, widen bridge over Clack. River"
135	Springwater Road (1446)	Bridge	Reconstruct and widen bridge to (5) lanes (74 feet)

136	Springwater Road (6512)	Bridge	Reconstruct and widen to 36 feet
137	Forsythe Road	Clackamas River Drive to Bradley Road	Reconstruct and widen (rural)
138	Forsythe Road	Forsythe Road/Victory Road intersection	"Realignment, widening of Victory Road and removal or decrease of curves along Forsythe Road, relocation of intersection"
139	Gronlund Road/Hattan Road	Bradley to Springwater	Reconstruct and widen (rural)
140	Hattan Road	Hattan Road/Gronlund Road intersection	Install southbound right-turn lane
141	Hattan Road	Fischers Mill Road to Gronlund Road	Reconstruct and widen (rural)
142	Abernethy Road	Redland Road to Main Street	"Realign 17th Street intersection, widen to (5) lanes"
143	Holcomb Blvd.	Abernethy Road to Bradley Road	Reconstruct and widen
144	Holcomb Blvd.	Holcomb Blvd./Bradley Road intersection	Realignment of Holcomb Road to form one intersection at Bradley Road
145	Bradley Road	Redland Road to Holcomb Blvd.	Widen lanes and shoulders to County standards
146	Redland Road (1214)	Bridge	Reconstruct and widen to 36 feet
147	Redland Road (1215)	Bridge	Reconstruct and widen to 36 feet
148	Redland Road	Redland Road/Holly Road intersection	Install traffic signal
149	Redland Road	Henrici Road to Abernethy Road	Reconstruct and widen
150	Redland Road	Redland/Ferguson Road intersection	Install eastbound right-turn lanes and westbound left-turn lanes



151	Ferguson Road	Redland Road to Maplelane Road	"Remove or decrease horizontal curve along Redland Road, relocate intersection, install eastbound right-turn lanes and westbound left-turn lanes"
152	Redland Road	Redland/Bradley Road intersection	Install eastbound left turn and westbound right-turn lanes
153	Redland Road	Redland/Grassle Road intersection	"Remove bank and remove or decrease horizontal curve, relocate intersection"
154	Fischers Mill Road	Fischers Mill/Hattan Road intersection	Install eastbound left-turn lane
155	Redland Road	Redland/Fischers Mill/Henrici Road intersection	Install eastbound left-turn lane and east and westbound right-turn lane at Henrici Road
156	Henrici Road	Beavercreek Road to Redland Road	"Widen lanes and shoulder to County standards, remove or decrease horizontal and vertical curves, investigate 40 mph speed zone extension to east of Ferguson Road"
157	Henrici Road (6228)	Bridge	Reconstruct and widen to 36 feet
158	Beavercreek Road	Highway 213 to Molalla Avenue	Widen to (5) lanes
159	Highway 213	Beavercreek/Highway 213 intersection	Add dual left-turn lanes and ramps
160	Beavercreek Road	Highway 213 to Henrici Road	Widen to (5) lanes
161	Henrici Road	Highway 213 to Beavercreek Road	Widen lanes and shoulders to County standards
162	Beavercreek Road - goes into rural area	Leland Road to Henrici Road	Three lane widening



163	Maple Lane (6218)	Bridge	Reconstruct and widen to 32 feet
164	Leland Road (6091)	Bridge	Reconstruct and widen to 36 feet
165	Sound End Road	Warner Parrott Road to 99E	Widen (2) lanes and smooth curves
166	Eckert Lane	Extend Eckert Lane to Andregg Parkway	New two lane collector
<b>RURAL AREA PROJECT</b>			
200	Sunnyside Road	172nd Avenue and Highway 212	"Realign curves, widen to add shoulders, install traffic signal at Highway 212"
201	Foster Road	Highway 212 to Troge Road	Four lane widening with left-turn lanes
202	Tillstrom Road	SE 190th Drive to Foster Road	"Remove or decrease horizontal curve along Foster Road, relocate intersection, install southbound left-turn lane"
203	Tillstrom Road	SE 222nd Drive to Borges Road	"Remove or decrease vertical curve along 222nd Drive, relocate intersection"
204	SE 242nd Avenue	Highway 212 to Multnomah County Line	"Reconstruct and widen (rural), add turn lanes"
205	SE 242nd Avenue	242nd/Sunshine Valley Road intersection	Install northbound right-turn lane
206	SE 242nd Avenue	242nd/Tillstrom Road intersection	Install northbound left-turn lane and southbound right-turn lane
207	Hoffmeister Rd/SE 257th Ave	Highway 212 to 242nd Avenue	"Remove or decrease vertical curve along 242nd Ave., relocate intersection"
208	SE 282nd Avenue	Highway 212 to Multnomah County Line	Widen shoulders to County standard
209	SE 282nd Avenue	282nd/Stone intersection	Add turn lanes

210	Compton Road	US 26 to 352nd Avenue	"Remove or decrease vertical curve along Orient Drive, relocate intersection, widen to standards"
211	SE 232nd Avenue	Highway 212 to Highway 224	Reconstruct and widen (rural)
212	Richey Road	Kelso Road to Highway 212	"Reconstruct and widen (rural), add turn lanes"
213	Richey Road	Kelso/Richey Road intersection	Perform special study
214	Amisigger Road	Highway 224 to Kelso/Richey Road	"Reconstruct and widen (rural), smooth curves"
215	Kelso Road	Richey Road to Orient Drive	Reconstruct and widen (rural)
216	Kelso Road	Orient Drive to Sandy UGB	"Remove or decrease vertical curve along Orient Drive, relocate intersection, widen shoulders to County standard, investigate speed zone"
217	SE 362nd Drive	Colorado Road to Dubarko Road	Remove or decrease horizontal and vertical curves
218	SE 362nd Drive	362nd/Deming Road intersection	"Remove or decrease vertical curve along SE 362nd Drive, relocate intersection"
219	Bull Run Road	Ten Eyck Road to Multnomah County Line	Reconstruct and widen (rural)
220	Ten Eyck Road	Lusted Road to US 26	Reconstruct and widen (rural)
221	Ten Eyck Bridge (6570)	Bridge	Reconstruct and widen to 32 feet
222	Firwood Road	Firwood/Trubel Road intersection	Realign Trubel Road to remove or decrease downgrade
223	Firwood Road	Wildcat Mountain Drive to US 26	Reconstruct and widen (rural)
224	Welches Road	Highway 26 to Salmon River Road	Reconstruct and widen

225	Arrah Wanna (6572)	Bridge	Reconstruct and widen to 32 feet
226	Elk Park Road (6574)	Bridge	Reconstruct and widen to 32 feet
227	East Bridge South (6605)	Bridge	Reconstruct and widen to 32 feet
228	Lolo Pass Road	Highway 26 to Barlow Trail Road	"Perform addtl. safety analysis, widening of shoulders to County standards"
229	Highway 26	Highway 26/Multopor Drive intersection	Add eastbound right-turn lane
230	Bakers Ferry Road	Springwater Road to Highway 224	Reconstruct and widen (rural)
231	Bakers Ferry Road	Eaden Road to Highway 224	"Remove or decrease horizontal curve along Bakers Ferry Road, relocate intersection"
232	Springwater Road	Hattan Road to Hayden Road	Reconstruct and widen (rural)
233	Springwater Road	Springwater/Bakers Ferry Road intersection	Install southbound left-turn lane
234	Springwater Road	Springwater/Fischers Mill Road intersection	"Perform special study, install southbound right-turn lane"
235	Springwater Road	Springwater/Redland Road intersection	Install northbound left-turn lane
236	Springwater Road	Springwater/Hayden Road intersection	Install southbound left-turn lane
237	Hayden Road	Springwater Road to Highway 211	"Reconstruct and widen (rural), intersection improvements"
238	Springwater Road	Hayden Road to Highway 211	Widen shoulders to County standard

239	Eagle Creek Road	Keegan Road to Currin Road	"Perform additional safety analysis at Wildcat Mountain Drive, widen lanes and shoulders to County standards"
240	Eagle Creek Road	Currin Road to Duus Road	"Remove or decrease horizontal curve along Eagle Creek Road, relocate intersection, widen lanes and shoulders to County standards, investigate speed zone south of Currin Road"
241	Coupland Road	Eagle Creek Road to Divers Road	Reconstruct and widen (rural)
242	Mattoon Road	Fischers Mill Road to Redland Road	"Widen lanes and shoulders to County standards, remove or decrease vertical curves, remove or decrease horizontal curves north of Redland Road"
243	Fellows Road	Redland Road to Lower Highland Road	Reconstruct and widen (rural)
244	Ridge Road	Lower Highland Road to Redland Road	Reconstruct and widen (rural)
245	Redland Road	Henrici Road to Springwater Road	Reconstruct and widen (rural)
246	Lower Highland Road	Beavercreek Road to Fellows Road	Reconstruct and widen (rural)
247	Unger Road	Beavercreek Road to Highway 211	Reconstruct and widen (rural)
248	Highway 213	Highway 213 to Leland Intersection	Install traffic signal
249	Beavercreek Road	Beavercreek/Leland Road intersection	Add turn lanes
250	Beavercreek Road	Beavercreek/Williams Road intersection	"Remove or decrease vertical curve along Beavercreek Road, relocate intersection"

251	Central Point Road	Partlow Road to Mulino Road	"Widen 2/3 lanes, smooth curves"
252	New Era Road	Central Point Road to Penman Road	Perform additional safety analysis
253	Casto Road	Spangler Road to Central Point Road	Reconstruct and widen (rural)
254	Spangler Road	Casto Road to Beaver Creek Road	Reconstruct and widen (rural)
255	Kamrath Road	Carus Road to Spangler Road	"Perform additional safety analysis at Carus Road, widen lanes and shoulders to County standards, remove or decrease horizontal curves north of Spangler Road"
256	Ladd Hill Road	Wilsonville Road to Washington County Line	Reconstruct and widen (rural)
257	Wilsonville Road	Wilsonville/Ladd Hill Road intersection	Construct new railroad crossing
258	Wilsonville Road	Wilsonville/Edminston Road intersection	"Remove bank, remove or decrease horizontal curve along Wilsonville Road, relocate intersection"
259	Denbrook Road	Railroad crossing west of Boones Ferry Road	Add/upgrade railroad crossing
260	Boones Ferry Road	Boones Ferry/Butteville Road intersection	"Remove bank, remove/decrease horizontal curve"
261	Airport Road	Airport/Miley Road intersection	"Realign, add turn lanes, install traffic signal"
262	Airport Road	Arndt Road to Miley Road	Reconstruct and widen (rural)
263	Arndt Road	Arndt/Airport Road intersection	Install traffic signal
264	Arndt Road	Canby-Hubbard Highway to Knights Bridge Road	"Four lane widening with median, left-turn lanes"
265	Arndt Road	Barlow Road to Knights Bridge Road	"Remove or decrease horizontal curves, widen lanes and shoulders to County standards"

266	Barlow Road	Arndt/Barlow Road intersection	Widen intersection
267	Arndt Road	Knights Bridge to 99E	New (5) lane road
268	Knights Bridge Road	Arndt Road to Barlow Road	Remove or decrease horizontal curves at Arndt Road and 0.47 miles west of Barlow Road
269	Knights Bridge Road	Knights Bridge/Barlow Road intersection	Install traffic signal and westbound left-turn lane
270	Holly/Territorial Road	Logging Road to Canby Ferry	Bike lanes
271	Territorial Road	99E to Holly Road	Reconstruct and widen (rural)
272	Territorial Road	Territorial Road/ Highway 99E intersection	"Install traffic signal, realign grade"
273	Township Road	Township/Ivy Road intersection	Install traffic signal
274	Township Road	Railroad crossing between Redwood and Walnut	Construct new railroad crossing
275	Township Road	Central Point Road to Canby City limit	Reconstruct and widen (rural)
276	Berg Parkway	Highway 99E to Ivy Street	New two lane extension
277	Mulino Road	"Mulino Road to 13th Avenue, intersection 23"	"Relocate intersection to south away from railroad trestle, change of stop control to 13th Avenue"
278	Mulino Road (13th St segment)	Ivy Street to Highway 213	Widen to (3) lanes
279	Lone Elder Road	Lone Elder/Barlow intersection	Add left-turn lanes
280	Canby-Marquam Highway	Canby-Marquam Hwy/ Lone Elder Rd intersection	Install northbound left-turn lane and southbound right-turn lane
281	Graves Road (6562)	Bridge	Reconstruct and widen to 32 feet
282	Gard Road (6322)	Bridge	Reconstruct and widen to 32 feet

283	Canby-Marquam Highway	Canby-Marquam Hwy/ Macksburg Rd intersection	Install southbound left-turn lane and northbound right-turn lane
284	Dryland Road	Macksburg Road (S) to Macksburg Road (N)	Realignment of Macksburg Road to form one intersection at Dryland Road
285	Macksburg Road	Canby Marquam Hwy to Highway 213	Reconstruct and widen (rural)
286	Oak Grove Road	Railroad crossing southwest of Macksburg Road	Construct new railroad crossing
287	Union Mills Road	Highway 213 to Highway 211	Reconstruct and widen (rural)
288	Meridian Road	Elliott Prairie Road to Barlow Road	"Widen shoulders to County standard, remove or decrease horizontal and vertical curves, investigate speed zone"
289	Meridian Road	Meridian/Whiskey Hill Road intersection	Limitation of access/egress points to and from school on NE corner of intersection
290	Whiskey Hill Road (1559)	Bridge	Reconstruct and widen to 32 feet
291	Barnards Road (6191)	Bridge	Reconstruct and widen to 36 feet
292	Sconce Road (6115)	Bridge	Reconstruct and widen to 32 feet
293	Barlow Road	Bridge	Reconstruct and widen to 36 feet
294	Canby Marquam (6027)	Bridge	Reconstruct and widen to 36 feet
295	Molalla Avenue/Vaughan (City of Molalla)	Highway 213 to Highway 211	Reconstruct and widen (rural)
296	Vick Road	Between Molalla Avenue and Highway 213	Widen and bring to County standards
297	Vick Road	Railroad crossing between Molalla Avenue and Appaloosa	Construct new railroad crossing



298	Toliver Road	Between Highway 213 and Molalla Avenue	"Install traffic signal, curb and sidewalk, widen and pave"
299	Wright Road	Feyrer Park Road to Callahan Road	Widen lane and shoulder widths to County standards
300	Callahan Road (S) (Beginning on Ramsby Road)	Dickie Prairie Road to Fernwood Road	Reconstruct and widen (rural)
301	Fernwood Road	Dhooghe Road to Callahan Road	Reconstruct and widen (rural)
302	Dhooghe Road	Highway 211 to Fernwood Road	Reconstruct and widen (rural)
303	Klang's Mill Bridge	Bridge	Reconstruct and widen to 32 feet
304	Dhooghe Road (6541)	Bridge	Reconstruct and widen to 32 feet
305	Sawtell Road	Maple Grove Road to Wilhoit Road	Reconstruct and widen (rural)
306	Wildcat Road	Wilhoit Road to Highway 213	Reconstruct and widen (rural)
307	Nowlens Bridge Road	Highway 213 to Maple Grove Road	Reconstruct and widen (rural)
308	Blair Road	Groshong Road to Maple Grove Road	Reconstruct and widen (rural)
309	Groshong Road	Blair Road to Bird Road	Reconstruct and widen (rural)
310	Bird Road	Groshong Road to Wilhoit Road	Reconstruct and widen (rural)
311	Maple Grove Road	Nowlens Bridge Road to Sawtell Road	Reconstruct and widen (rural)

### REGIONAL AND STATE PROJECTS

	Sunrise Corridor Phase 2	Rock Creek Junction to US-26	New (4) lane facility with interchange(s)
	Sunrise Corridor Phase 1	I-205 to Rock Creek Junction	New (4) lane facility with interchanges
	Sunnybrook Split Diamond	I-205 at Sunnyside and Sunnybrook	New overcrossing at Sunnybrook with collector/distributor roads



South/North High Capacity Transit	Clackamas Town Center to Rose Quarter	High capacity transit improvements
McLoughlin Blvd.	Milwaukie County Line to Gladstone County Line	Multi-modal corridor enhancements
Highway 99E/Highway 224	Ross Island Bridge to I-205	"Access management, reversible lanes and (6) lanes, Harold to I-205"
US-26	Kelso Road to Highway 26 intersection	"Require two-movement crossing on Kelso Road with vehicles crossing one direction of Highway 26 first into the middle of the intersection, followed by crossing of second direction"
US-26	Orient Drive to Highway 26 intersection	Install westbound right-turn lane
US-26	Firwood Road/Highway 26 intersection	Install eastbound right-turn lane
US-26	East Fernwood Circle/Hwy-26 intersection	Install westbound left-turn lane
US-26	Brightwood Loop (W.)/ Hwy-26 intersection	Install westbound right-turn lane
US-26	Brightwood Loop (E.)/Hwy-26 intersection	Install westbound right-turn lane
US-26	East Wildwood Avenue/ Highway-26 intersection	Install continuous two-way center turn lane from m.p. 38.75 to 40.01
US-26	Salmon River Road/Hwy-26 intersection	Install eastbound right-turn lane
US-26	Lolo Pass Road to Govt. Camp Loop Rd. (W.)	"Four lane widening with left-turn lanes, add passing/ climbing lanes and westbound right-turn lane at Lolo Pass"
US-26	0.74 miles east of Camp Creek Road	Perform additional safety analysis
US-26	0.27 west of four lane section	Realign to remove/decrease horizontal curves

US-26	Govt. Camp Loop (W.) to Warm Springs Highway	"Four lane widening with median, add left-turn lanes"
US-26	Govt. Camp Loop (W.)/ Hwy-26 intersection	"Improve safety, operation and access of Government Camp Loop Road with Highway 26"
US-26	Multorpor Road Overpass	"Phase 2 - Widen overpass to accommodate all travel modes, investigate feasibility of Highway 26 ramp connections to provide direct access"
US-26	Govt. Camp Loop (E.)/ Hwy-26 intersection	"Improve safety, operation and access of Government Camp Loop Road with Highway 26, reduce traffic impacts of existing rest area at this location"
US-26	Hwy-35 Junction to Wasco County Line	Add passing/climbing lanes (short term project)
US-26	Hwy-35 Junction to Wasco County Line	Four lane widening with median
I-205	I-205 at Sunnybrook	"Complete interchange, add southbound auxiliary lanes on I-205"
I-205	I-205 bridge in Oregon City	To be determined - I-205 South Corridor Study
I-205	Willamette River to West Linn	New southbound truck climbing lane
I-205	Hwy-213 to I-84	To be determined - I-205 South Corridor Study
I-205	West Linn to I-5	To be determined - I-205 South Corridor Study
Highway 99E	South End Road/99E intersection	"Realignment of South End Road approach, install southbound left-turn lane"
Highway 99E	New Era Road/99E intersection	Install northbound right-turn lane

Highway 99E	Territorial Road/99E intersection	Install traffic signal
Highway 99E	Barlow Road to Marion County Line	"Four lane widening with median, left-turn lanes from m.p. 24.05"
Highway 99E	Barlow Road/99E intersection	Add turn lanes at Barlow Road
Highway 99E	Lone Elder Road/99E intersection	Install north bound right-turn lane
Highway 224	Metro UGB to Springwater Road	Four lane widening with left-turn lanes
Highway 224	Springwater Road to 232nd Drive	"Shoulder widening, horizontal realignment to ODOT standards"
Highway 224	Springwater Road/Hwy-224 intersection	Install traffic signal and turn lanes
Highway 224	SE 232nd Drive to Bakers Ferry Road (short term)	"Add passing lanes, realign of curves"
Highway 224	SE 232nd Drive to Bakers Ferry Road (long term)	"Four lane widening with median, add left turn lanes"
Highway 224	se 232nd Drive/Hwy-224 intersection	Install eastbound left-turn lane and westbound right-turn lane
Highway 224	Bakers Ferry Road to Estacada N. UGB	Add passing lanes
Highway 224	Bakers Ferry Road/Hwy-224 intersection	Install eastbound right-turn lane
Highway 224	Amisigger Road/Hwy-224 intersection	"Install traffic signal, southbound and eastbound left turn lane and west bound right-turn lane"
Highway 224	Eaglecreek-Sandy Hwy/Hwy-224 intersection	Install roundabout
Highway 224	Heiple Road/Hwy-224 intersection	Install southbound right-turn lane
Highway 224	Fall Creek Road to Ripple Creek Road	Add passing/climbing lanes from m.p. 29.03

Highway 213	I-205 to Redland Road	Add southbound lanes
Highway 213	Washington Street at Hwy-213	Grade separate intersection
Highway 213	Molalla Ave/Clack. Comm. College to Leland Rd.	"Access management, widen to (4) lanes with left turn lanes"
Highway 213	Abernethy/Hwy-213 intersection	Intersection improvements
Highway 213	I-205/Highway Interchange	Reconstruct I-205 ramps
Highway 213	Beavercreek/Hwy-213 intersection	Phase 2 - Construct urban interchange
Highway 213	Leland/Union Road intersection	Add passing lanes
Highway 213	Carus Road/Hwy-213 intersection	Install southbound left-turn and right-turn lanes
Highway 213	Spangler Road/Hwy-213 intersection	Installation of southbound right-turn lane
Highway 213	Mulino Road/Hwy-213 intersection	Install northbound left-turn lane and southbound right-turn lane
Highway 213	Union Mills Road/Hwy-213 intersection	Install northbound right-turn lane
Highway 213	Macksburg Road to Liberal Way	Widen shoulders to ODOT standards
Highway 213	Liberal Way to Molalla Avenue	"Install two-way center turn lane between Liberal Way and Molalla Avenue, widen turn radius on northwest corner of Hwy-213/Liberal Way"
Highway 213	Molalla Avenue to Toliver Road	Add passing lanes to mile post 15.34
Highway 213	Barnards Road/Hwy-213 intersection	Install southbound right-turn lane
Highway 213	Wright Creek	Replace bridge structure
Highway 213	Butte Creek	Construct scour protection

Highway 212	Armstrong Circle (E&W) to 172nd Avenue	"Extension of 172nd Avenue to Hwy-212 with installation of signal, turn lanes at new Hwy-212/172nd Avenue intersection"
Highway 212	Foster Road to Rust Way	Extension of continuous two-way center turn lane between Foster Road and SE 222nd Avenue with installation of signal at Royer Road
Highway 212	Foster Road/Hwy-212 intersection	Add southbound left lane on Foster Road approach
Highway 212	SE 282nd Avenue/Hwy-212 intersection	Install traffic signal
Highway 212	Rock Creek Junction to Damascus	Construct climbing lane
Highway 211	Marion County Line to Canby-Marquam Highway	Add passing lanes at several locations
Highway 211	Meridian Road/Hwy-211 intersection	Construct eastbound and westbound right-turn lanes and eastbound left-turn lane
Highway 211	South Needy Road to .6 miles west	"Remove or decrease vertical curve to allow passing zone, add passing lane in one or both directions, possible relocation of intersection"
Highway 212	Hwy-211/Leroy Street intersection	"Widen, add curb and sidewalk"
Highway 211	So. Canby-Marquam Hwy/Hwy-211 intersection	"Install eastbound and westbound left-turn lanes, eastbound right-turn lane, remove or decrease horizontal curve"
Highway 211	Mathias Road to Wright Road	Add passing lanes
Highway 211	Wright Road/Hwy-211 intersection	Install eastbound right-turn lane

Highway 211	"Beavercreek Rd, Union Hall Rd to Dhooghe Rd"	Add passing lanes from mile post 17.77
Highway 211	Dhooghe Road/Hwy-211 intersection	"Remove or decrease horizontal curve along Hwy-211, relocate intersection"
Highway 211	Schieffer Road/Hwy-211 intersection	Install eastbound right-turn lane
Highway 211	Hayden Road to Hwy-224	Four lane widening with left-turn lanes
Highway 211	Hayden Road/Hwy-211 intersection	Install westbound right-turn lane
Highway 211	Eagle Creek Road to Tickle Creek Road	Add passing/climbing lanes
Highway 211	Eagle Creek Road/Hwy-211 intersection	Install eastbound right-turn lane
Highway 211	0.14 miles east of Coop Road to Jackknife Road	"Realignment to remove or decrease horizontal and vertical curves, widen shoulders to ODOT standards"
Highway 211	Tickle Creek Road to 362nd Drive	Add passing/climbing lanes to mile post 2.78
Highway 211	Tickle Creek Road/Hwy-211 intersection	"Remove or decrease horizontal curve along Hwy-211, relocate intersection"
Highway 211	SE 362nd Drive/Hwy-211 intersection	Remove or decrease vertical curve along Hwy-211 and remove vegetation
Highway 211	SE 367th Avenue/Hwy-211 intersection	Install eastbound right-turn lane
Highway 173	Timberline Lodge to Hwy-26	"Provision of pull-offs, perform additional safety analysis to identify other improvements"
Highway 173	Hwy-26/Hwy-173 intersection	Remove or decrease horizontal and vertical curves along Hwy-26

	Highway 51	I-5 to Marion County Line	"Add passing lanes from mile post 0.,41 to 1.47"
	Highway 35	Warm Springs Hwy to Hood River County Line	Add passing/climbing lanes from mile post 57.59 to 58.26

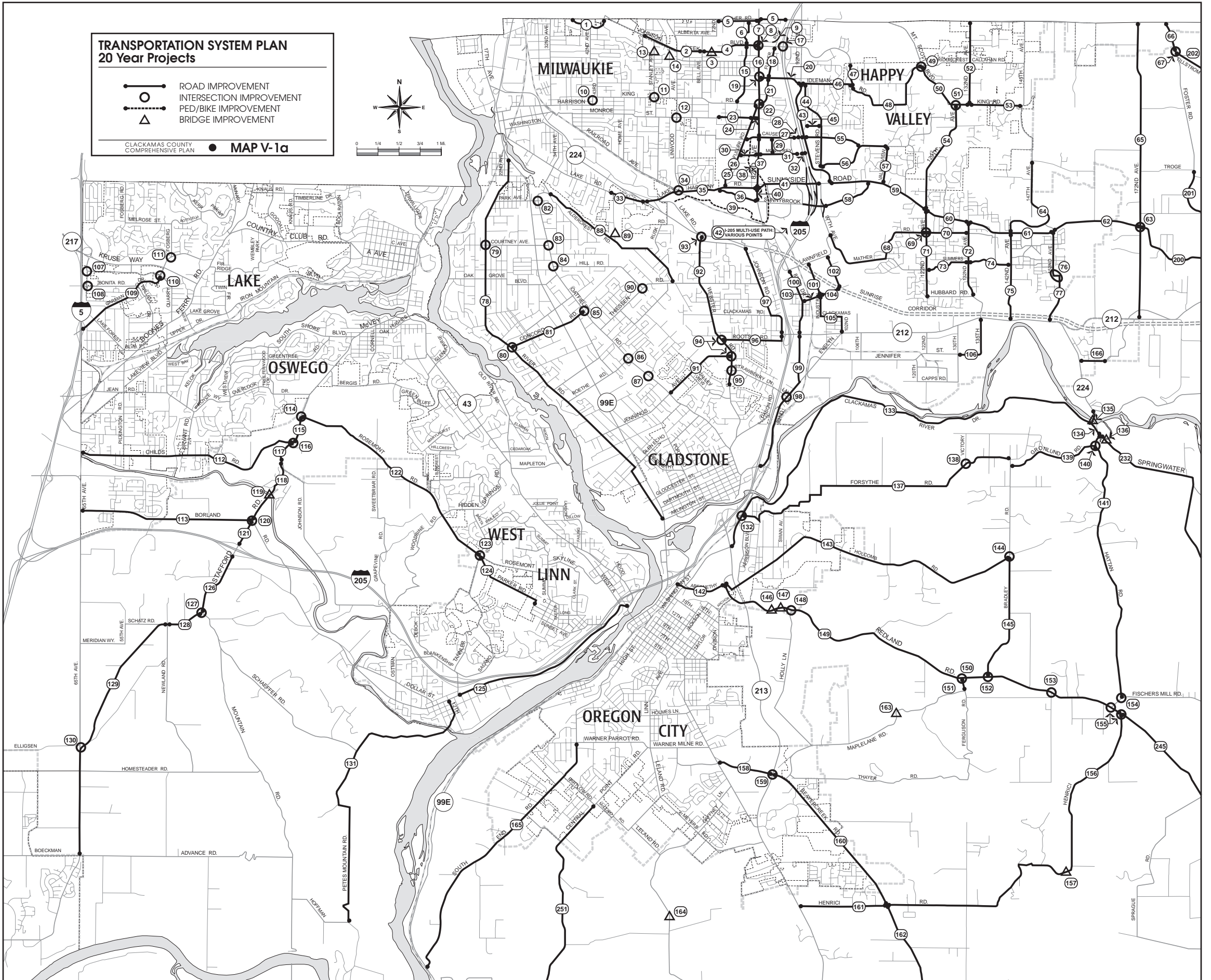
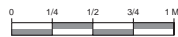


**TRANSPORTATION SYSTEM PLAN  
20 Year Projects**

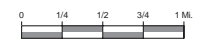
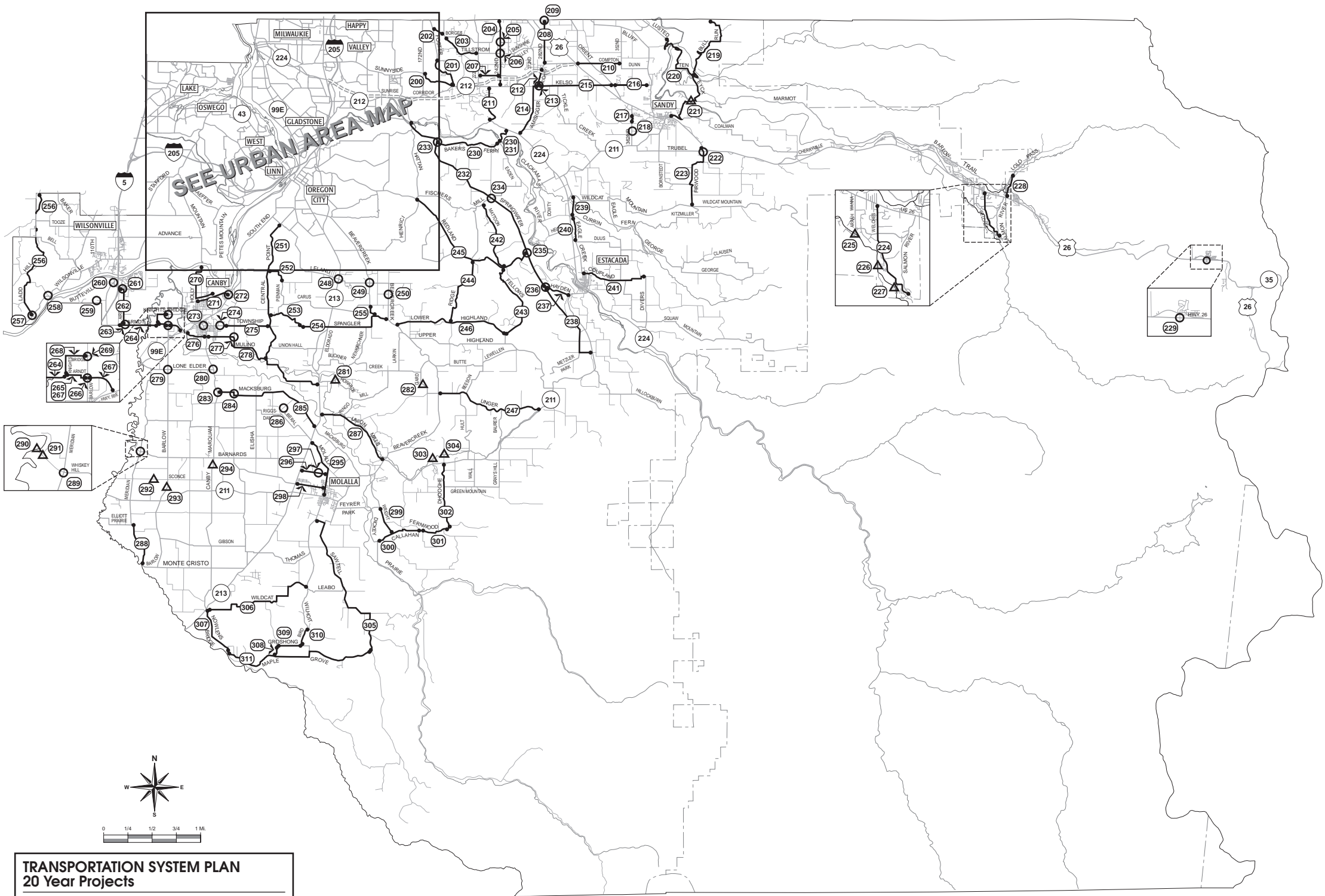
-  ROAD IMPROVEMENT
-  INTERSECTION IMPROVEMENT
-  PED/BIKE IMPROVEMENT
-  BRIDGE IMPROVEMENT

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

● MAP V-1a










**TRANSPORTATION SYSTEM PLAN  
20 Year Projects**

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-  ROAD IMPROVEMENT
-  INTERSECTION IMPROVEMENT
-  BRIDGE IMPROVEMENT

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CLACKAMAS COUNTY COMPREHENSIVE PLAN ● **MAP V-1b**

# CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 5

## TRANSPORTATION

**Table V-2**

**ROADWAY CLASSIFICATIONS AND GUIDELINES**

<b>FUNCTIONAL CLASSIFICATION</b>	<b>PURPOSE</b>	<b>LAND ACCESS</b>	<b>ROADSIDE PARKING</b>
Freeway/ Expressway	Serves interregional and intraregional trips. Carries heavy volume at high speed.	Extremely limited **	Emergency Only
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.	Restricted **	Restricted
Minor Arterial	Connects collectors to higher order roadways. Carries moderate volume at moderate speed.	Restricted if an alternative is available	Generally restricted
Collector	Principle 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. New collectors should intersect minor arterials rather than major arterials.	Generally allowed * Residential driveways are limited.	Generally allowed *

Connector	<p>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. Traffic calming measures may be appropriate. A connector should connect to a collector or minor arterial.</p>	Allowed	Allowed if width is sufficient
Local	<p>Provides access to abutting property and connects to higher order roads. New local roads should intersect collectors, connectors, or, if necessary, minor arterials. Traffic calming measures may be appropriate. Not for through traffic.</p>	Allowed	Allowed if width is sufficient
Alley	<p>May be public or private, to provide access to the rear of property. Alleys should intersect local roads or connectors. Not for through traffic.</p>	Allowed	Generally not allowed

\* May be restricted on collectors with high volume, high access, impaired visibility, or other significant problems.

\*\* The County accepts the State's access control standards for State facilities.

**Table V-3**

**ROADWAY CLASSIFICATIONS AND GUIDELINES (CONTINUED)**

<b>FUNCTIONAL CLASSIFICATION</b>	<b>NUMBER OF TRAFFIC LANES</b>	<b>MINIMUM RIGHT-OF-WAY WIDTH *</b>	<b>PAVED WIDTH</b>	<b>SIDEWALK</b>	<b>BIKEWAYS</b>	<b>LANDSCAPE STRIP **</b>
Freeway/ Expressway	4 to 8	Defer to Federal and State Standards	Defer to Federal and State	No	No	Defer to Federal and State
Major Arterial	3 to 7 Urban 2 to 4 Rural	60' -125' More if needed for terrain, turn lanes or heavy volume	36' - 98'	Yes, in urban areas only	Yes	Yes, in urban areas
Minor Arterial	2 to 5	60' -115'	36' - 90'	Yes, in urban areas only	Yes	Yes, in urban areas
Collector	2 to 3	60' -85' Less if volume and land use density are low and terrain allows	32' - 61'	Yes, in urban areas only	Yes	Yes, in urban areas
Connector	2	55'	28' - 34' Residential 28' - 40' Industrial	Yes, in urban areas only	If ROW allows	Yes, in urban areas
Local	2	40' - 50'	28'	Yes ***	No	Yes, in urban areas
Alley	2	16'	16'	No	No	No

\* Preferred dimensions are not adjusted for adjacent land uses; additional right-of-way may be required for slope, sign, sidewalk and utility easements.

\*\* Required unless acquiring right-of-way is impractical due to wetlands, topographic conditions, resource protection, or preexisting development patterns.

**\*\*\*Sidewalks are required on all new local streets within the Urban Growth Boundary and when development or redevelopment occurs on existing streets located on the Essential Pedestrian Network.**

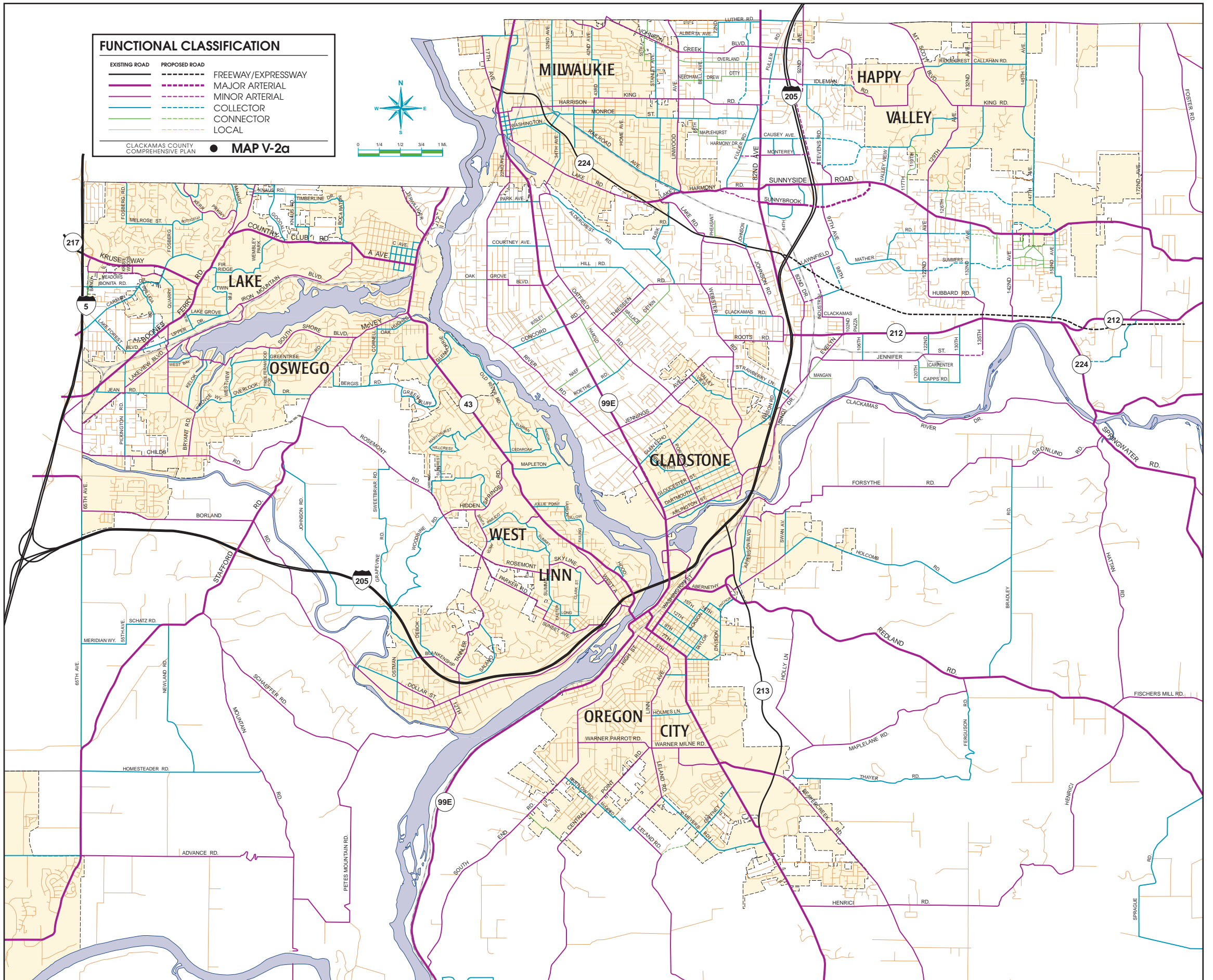
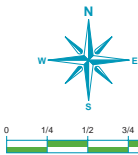


**FUNCTIONAL CLASSIFICATION**

EXISTING ROAD	PROPOSED ROAD	
		FREEWAY/EXPRESSWAY
		MAJOR ARTERIAL
		MINOR ARTERIAL
		COLLECTOR
		CONNECTOR
		LOCAL

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

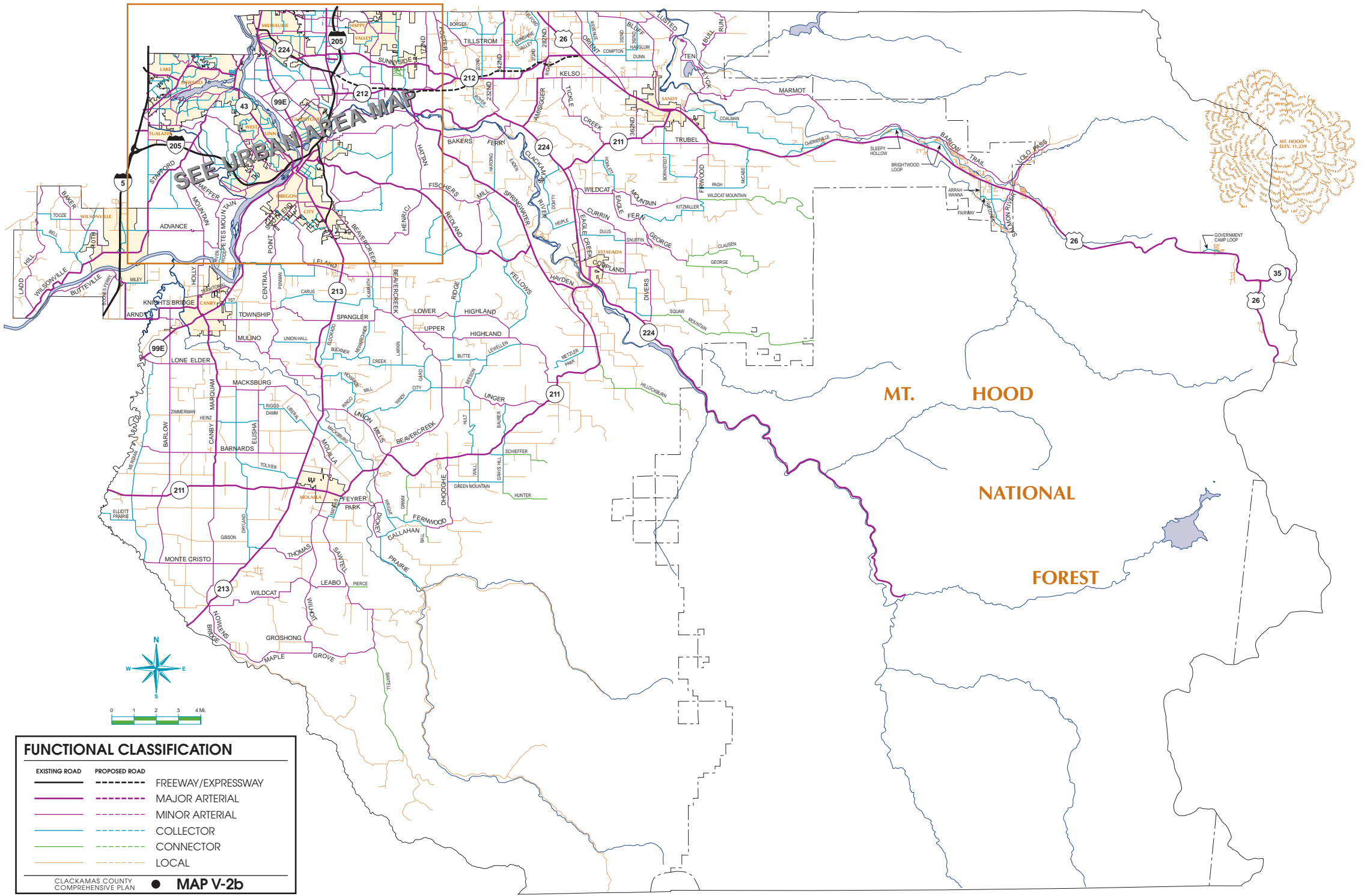
● **MAP V-2a**



## FUNCTIONAL CLASSIFICATION GUIDELINES

Classification	Number of Traffic Lanes	Purpose	Access Impacts	Examples
Freeway Expressway	4-8	Serves interregional and intraregional trips. Carries heavy volume at high speed.	Freeways and expressways are intended to move traffic and not provide direct access to land use activities. Access to these facilities will be from other arterials.	I-205 Milwaukie Expressway
Major Arterial	3-7 Urban 2-4 Rural	Carries local and through traffic to and from destinations outside local community, connects cities and rural centers. Moderate to heavy volume; moderate to high speed.	Direct Access to major arterials will be limited. Access should be restricted to major generators.	Sunnyside Road Boones Ferry Road Highway 26
Minor Arterial	2-5	Connects collectors to higher order roadways. Carries moderate volume at moderate speed.	Direct access will be limited, however to a lesser degree than major arterials. The number and location of driveways should be controlled.	Oatfield Road Beavercreek Road Borland Road

Classification	Number of Traffic Lanes	Purpose	Access Impacts	Examples
Collector	2	Principle carrier within neighborhoods or single land use areas. Links neighborhoods with major activity centers and arterials. Generally not for through traffic. Low to moderate volume; low to moderate speed. New collectors should intersect minor arterials rather than major arterials.	Collectors provide access to abutting land and to the arterial system. Access to individual parcels is usually allowed.	Roethe Road Welches Road Pikington Road
Connector	2	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.	Connectors provide direct access to abutting properties.	Risley Ave Harold Ave Pleasant Ct
Local	2	Provides access to abutting property and connects to higher order roads. New local roads should intersect collectors or, if necessary, minor arterials.	Local streets provide direct access to abutting properties. Adjacent land is normally residential.	Blanton Street Windy City Road La Bonita Way



**FUNCTIONAL CLASSIFICATION**

EXISTING ROAD	PROPOSED ROAD	
		FREEWAY/EXPRESSWAY
		MAJOR ARTERIAL
		MINOR ARTERIAL
		COLLECTOR
		CONNECTOR
		LOCAL

CLACKAMAS COUNTY COMPREHENSIVE PLAN ● MAP V-2b

# CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 5

## TRANSPORTATION

**TABLE V-4**

**REGIONAL STREET DESIGN TYPES**

<b>Design Type</b>	<b>Design Guidelines</b>
Freeway	Design is determined by State and Federal Guidelines
Highway	Usually 4-6 travel lanes. Generally should be divided with an impassable median, left-turn refuges may be provided at signalized intersections. Bikelanes should be provided, sidewalks should be provided within the urban area.
Regional Street	Usually 4 travel lanes. Two-way center turn lane, 14-15 feet wide, could be replaced with a raised median 4-16 feet wide. Planting strip is a high priority between curb and sidewalk. No on-street parking is allowed.
Regional Boulevard	Usually 4 travel lanes. Two-way center turn lane, 12-14 feet wide, could be replaced with a raised median, 4-16 feet wide. Planting strip is a high priority and may be indented for on-street parking, which may be allowed.
Community Street	Usually 2 travel lanes. Two-way center turn lane, 12-14 feet wide, could be replaced by a raised median, 4-14 feet wide. Planting strip may be indented for on-street parking, which may be allowed.
Community Boulevard	Usually 2 travel lanes. There is no two-way center turn lane. Raised median is required, 4-16 feet wide. Planting strip may be indented for on-street parking, which may be allowed.
Road (Urban and Rural)	Usually 2-4 travel lanes. May have an impassable median. Left turn refuges may be provided at intersections. In urban area bikelanes and sidewalks should be provided, in rural area 6-8 foot shoulder should be provided. Planting strip between curb and sidewalk is optional. On-street parking is usually not recommended. In rural areas, passing lanes or climbing lanes may be provided, where appropriate.
For All	The number and widths of lanes, bikelanes, access and signalization are determined by functional class. Width of sidewalks is determined by functional class and adjacent land use.



# CLACKAMAS COUNTY COMPREHENSIVE PLAN: CHAPTER 5

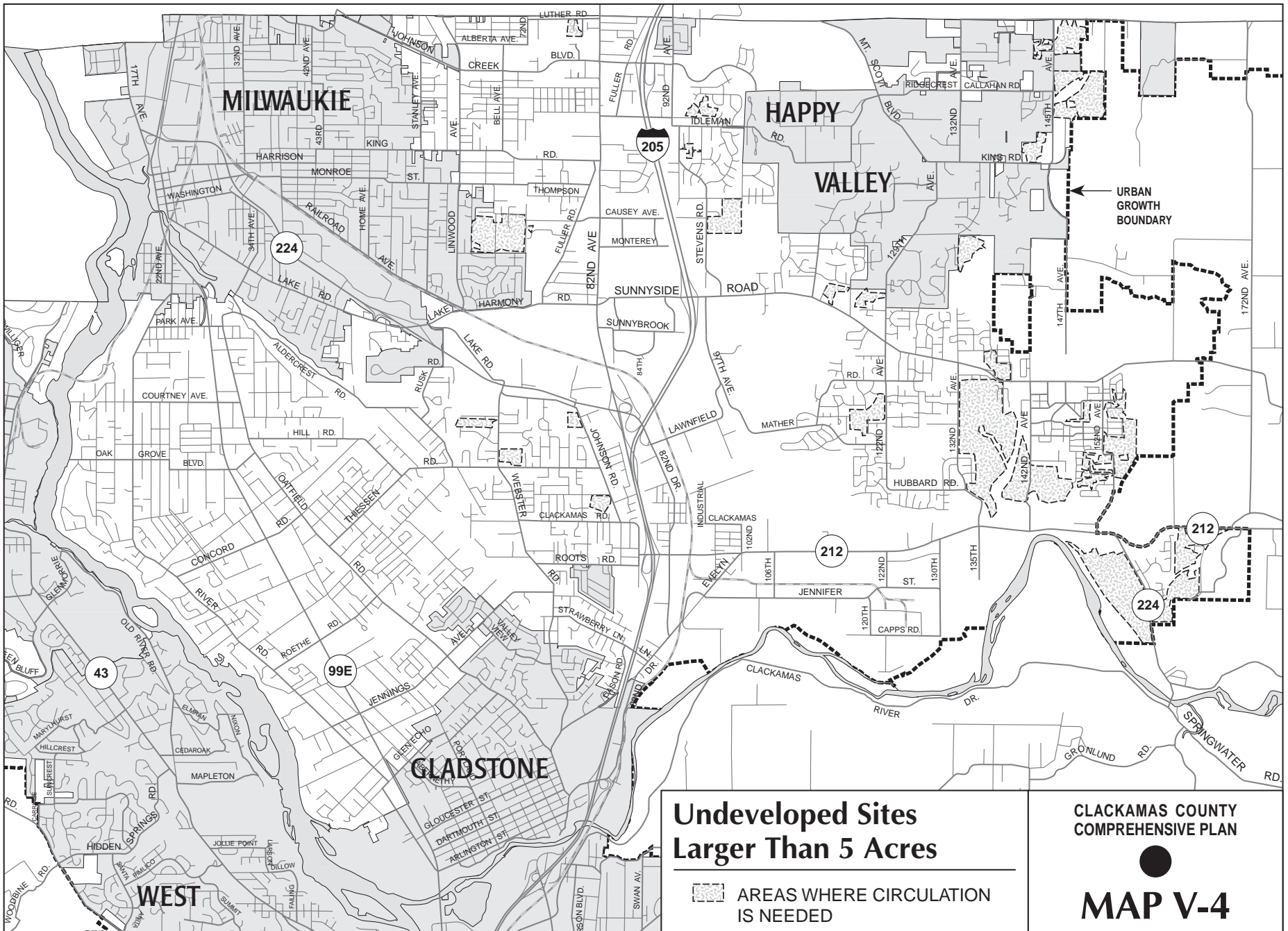
## TRANSPORTATION

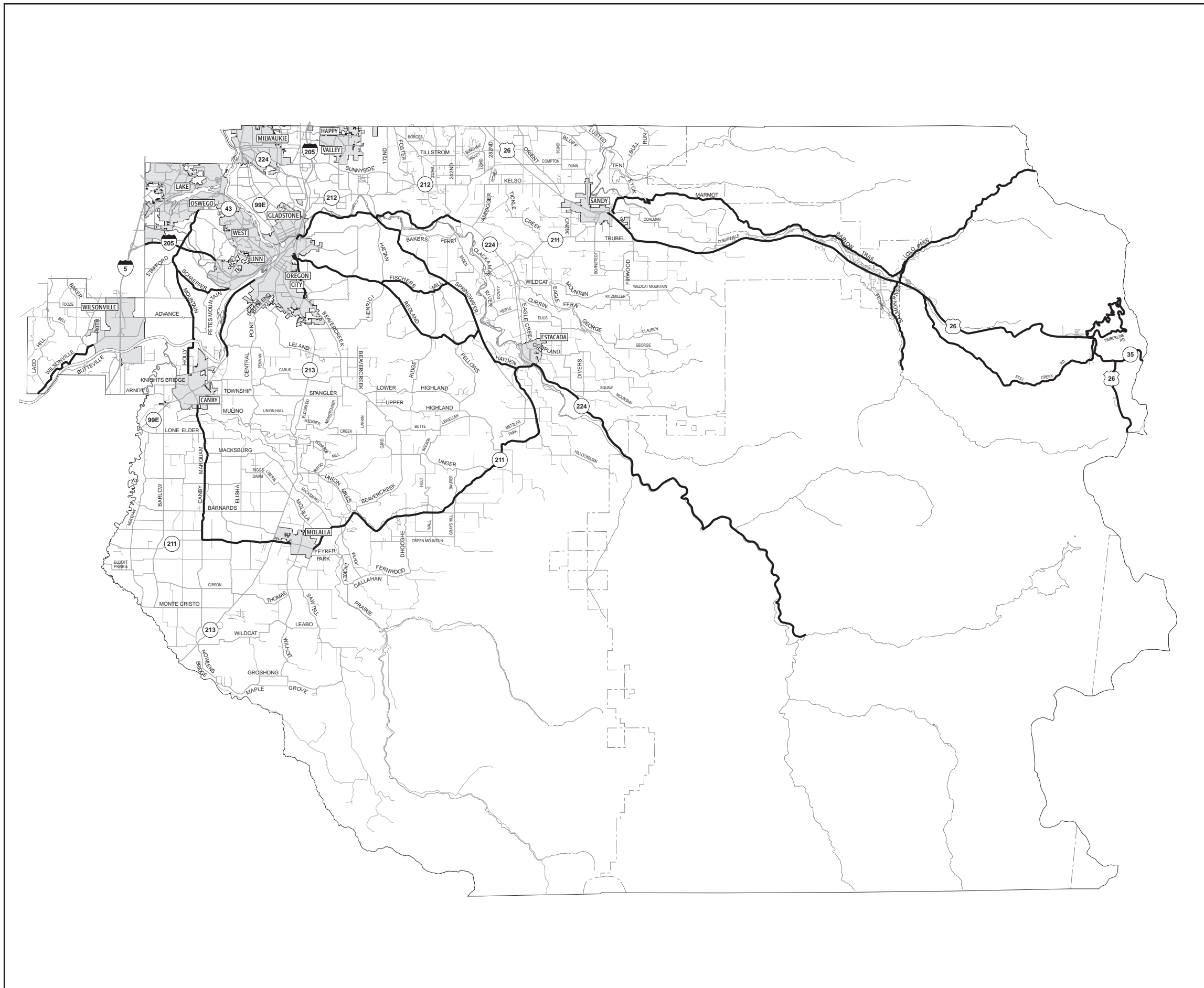
### TABLE V-5

#### CLACKAMAS CO. ACCESS REQUIREMENTS BY FUNCTIONAL CLASSIFICATION, URBAN AREAS ONLY

Functional Classification	Access Requirements
Major and Minor Arterials	<p><b>Signal spacing guidelines:</b> The preferred spacing of signalized intersections is as follows: Along major arterials; signals should be at least 1,000 feet apart, along minor arterials; at least 600 feet apart.</p> <p><b>Street access guidelines:</b> If feasible, only collectors, connectors or other arterials should intersect arterials.</p> <p>Non-signalized intersections may be constructed along major arterials if they are located at least 400 feet from the nearest signal (300 feet from the nearest signal along minor arterials). Such intersections may be required to offer circulation from neighborhoods but there should be no expectation of future signalization.</p> <p>Street networks for Community or Design Plan areas shall be implemented as shown in Chapter 10.</p> <p>Alternative spacing and access types may be used if an access management plan ensures that the arterial will operate within the acceptable standard.</p> <p><b>Driveway access guidelines:</b> If feasible, access for developments located on arterial streets shall be located on streets with a lower functional classification. Joint accesses between developments shall be encouraged. Driveway accesses shall not be located within 400 feet of an intersection along major arterials or 300 feet of an intersection along minor arterials except when it is demonstrated that no other alternative is feasible.</p> <p>Single family residential driveways should not access a major or minor arterial.</p>

	<p>Access management targets shall be implemented when appropriate as shown in Chapter 10.</p>
<p>Collector</p>	<p><b>Driveway access guidelines:</b> If feasible, single family driveways should not access a collector street. When single family residential driveways are allowed, driveway spacing should be at least 100 feet, with shared access used to increase distance between driveways.</p> <p>Commercial, industrial, multi-family, and institutional uses may have exclusive driveway access to a collector, with a minimum driveway spacing of 150 feet when feasible.</p>
<p>Connector</p>	<p><b>Driveway access guidelines:</b> Access for new single-family development is allowed. When feasible, developments should be designed to place driveway accesses on local streets rather than connector streets.</p> <p>No driveway shall be allowed within 25 feet of the right-of-way lines at an intersection.</p>
<p>Local</p>	<p><b>Driveway access guidelines:</b> Access for new single-family development is allowed.</p> <p>No driveway shall be allowed within 25 feet of the right-of-way lines at an intersection.</p>





## Scenic Roads

— SCENIC ROAD

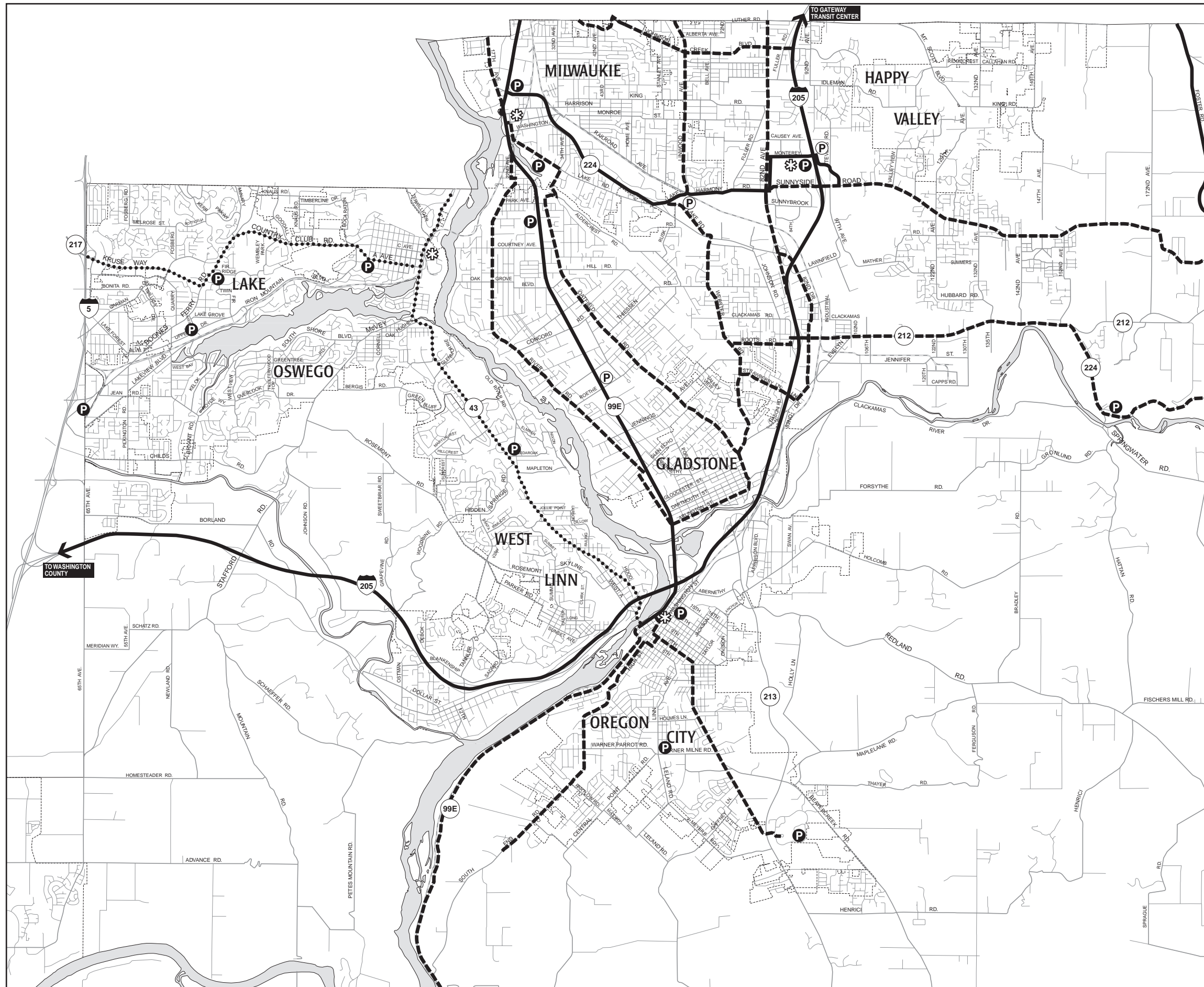
APRIL 2000



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## Urban Area Transit Routes & Designated Transit Centers

### PLANNED

-  HIGH CAPACITY TRANSIT  
Examples: Bus Rapid Transit, Light Rail
-  FREQUENT BUS
-  PRIMARY BUS
-  TRANSIT CENTER
-  EXISTING PARK & RIDE SITE
-  POTENTIAL PARK & RIDE SITE

APRIL

2000

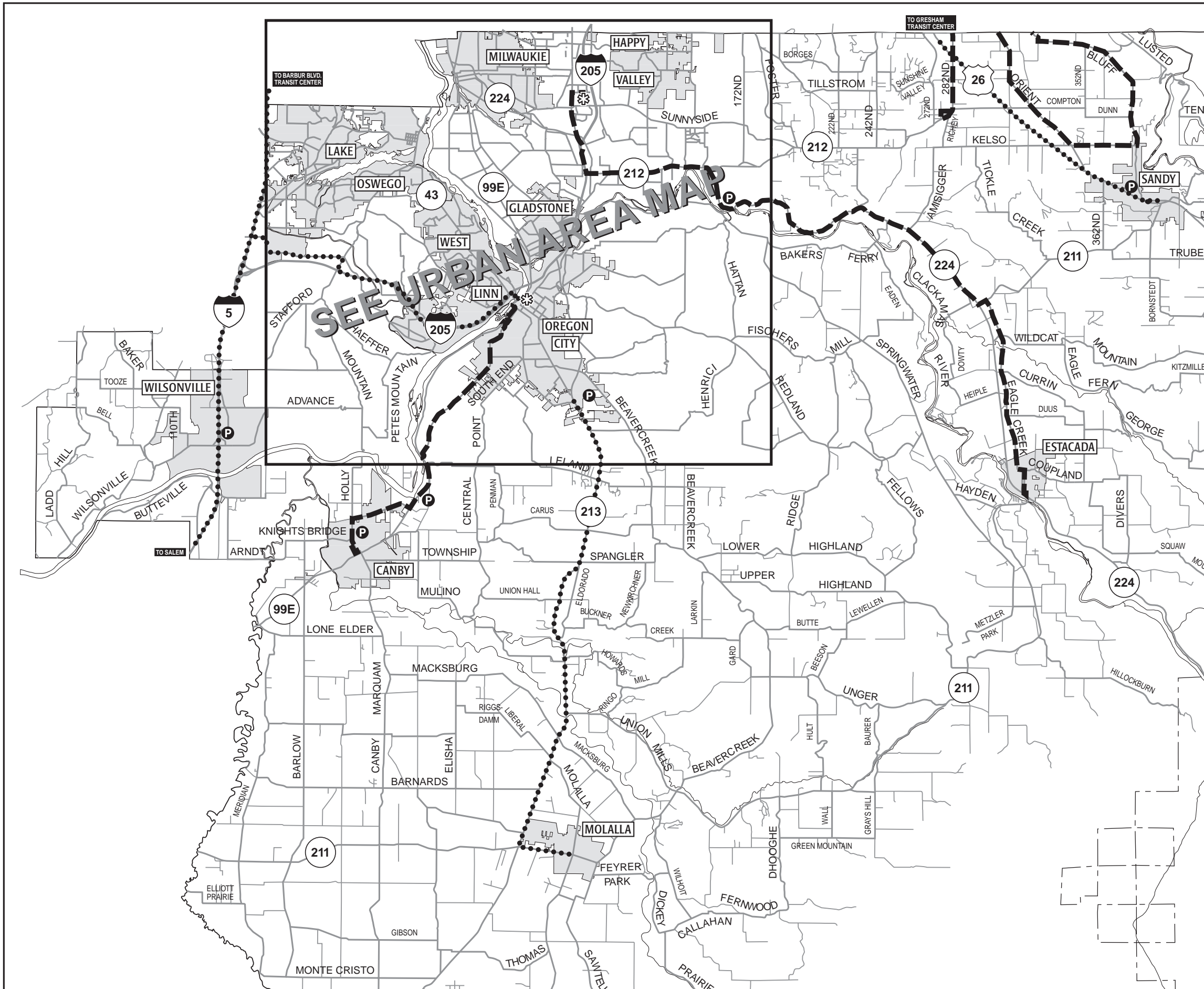


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CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

● MAP V-6



## Rural Area Transit Routes & Designated Transit Centers

-  SECONDARY BUS
-  LOCAL TRANSIT DISTRICT ROUTE
-  TRANSIT CENTER
-  EXISTING PARK & RIDE SITE

SEPTEMBER 2000



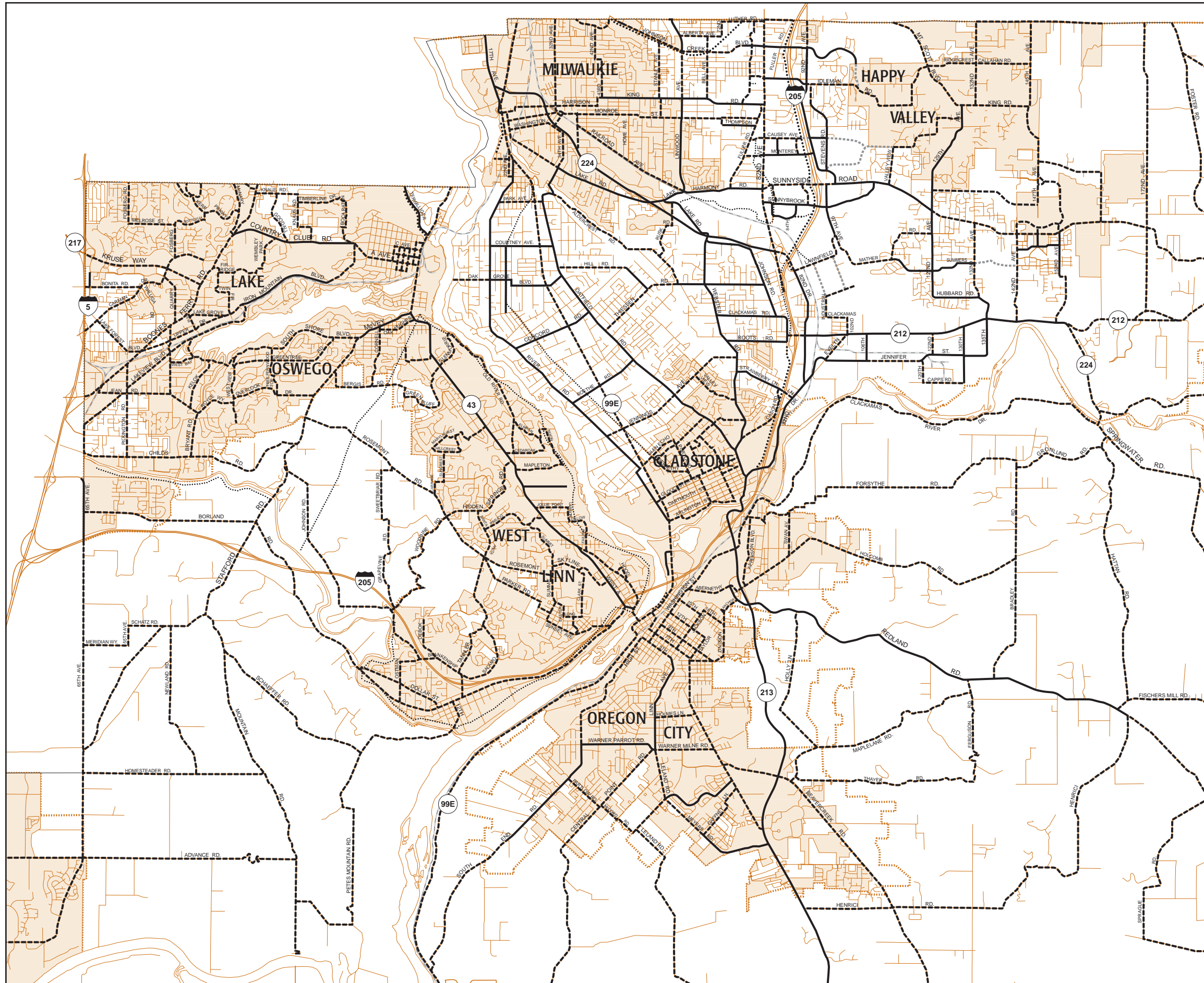
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SCALE IN MILES









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COMPREHENSIVE PLAN  MAP V-6b





## Planned Bikeway Network

-  EXISTING BIKEWAY
-  PROPOSED BIKEWAY
-  EXISTING MULTI-USE TRAIL
-  PROPOSED MULTI-USE TRAIL
-  PLANNED NEW ROADS (WILL INCLUDE BIKEWAY)
-  URBAN GROWTH BOUNDARY

MAY

2003







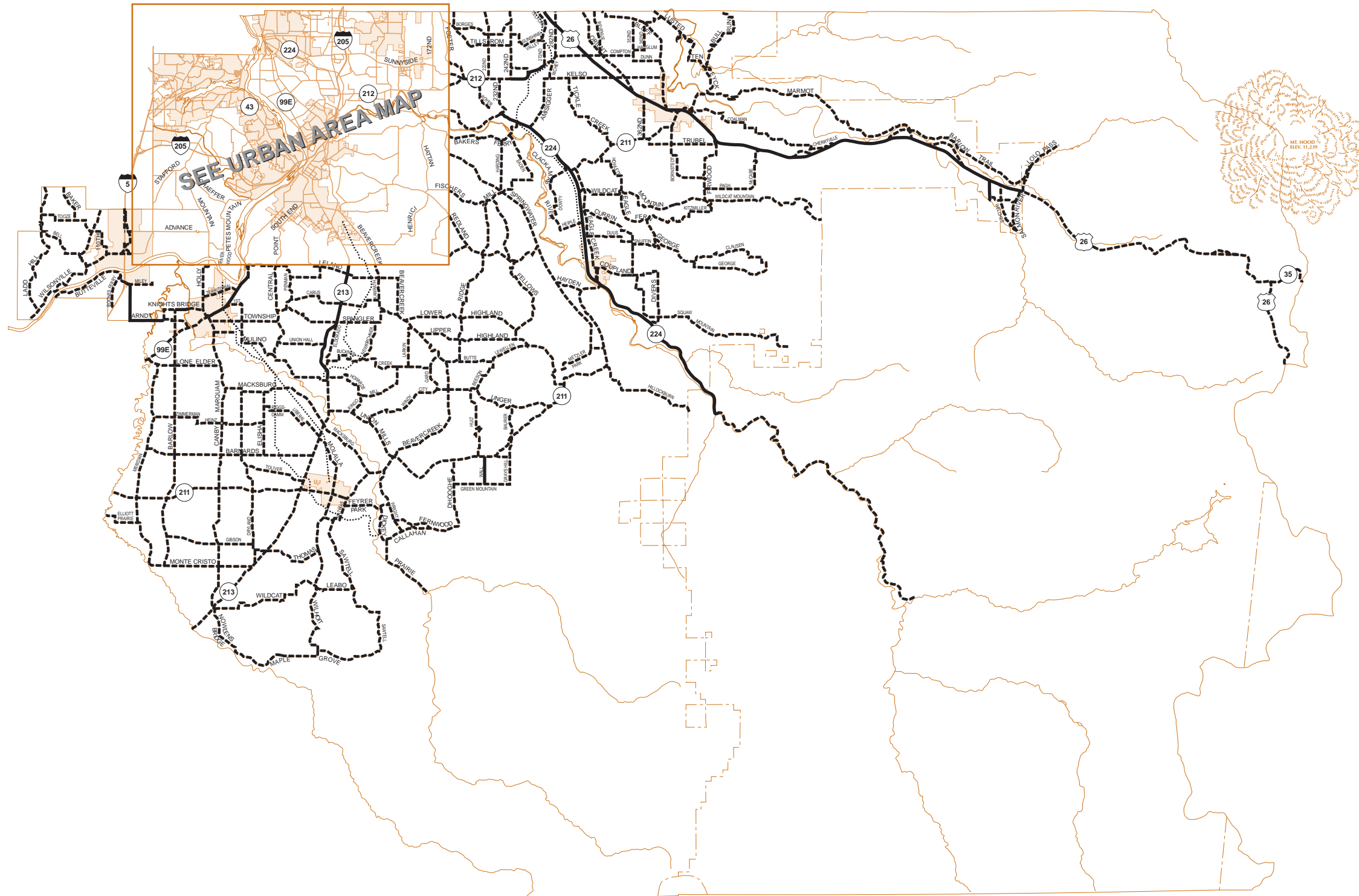
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CLACKAMAS COUNTY COMPREHENSIVE PLAN ● MAP V-7a

# Planned Bikeway Network

-  EXISTING BIKEWAY
-  PROPOSED BIKEWAY
-  EXISTING MULTI-USE TRAIL
-  PROPOSED MULTI-USE TRAIL



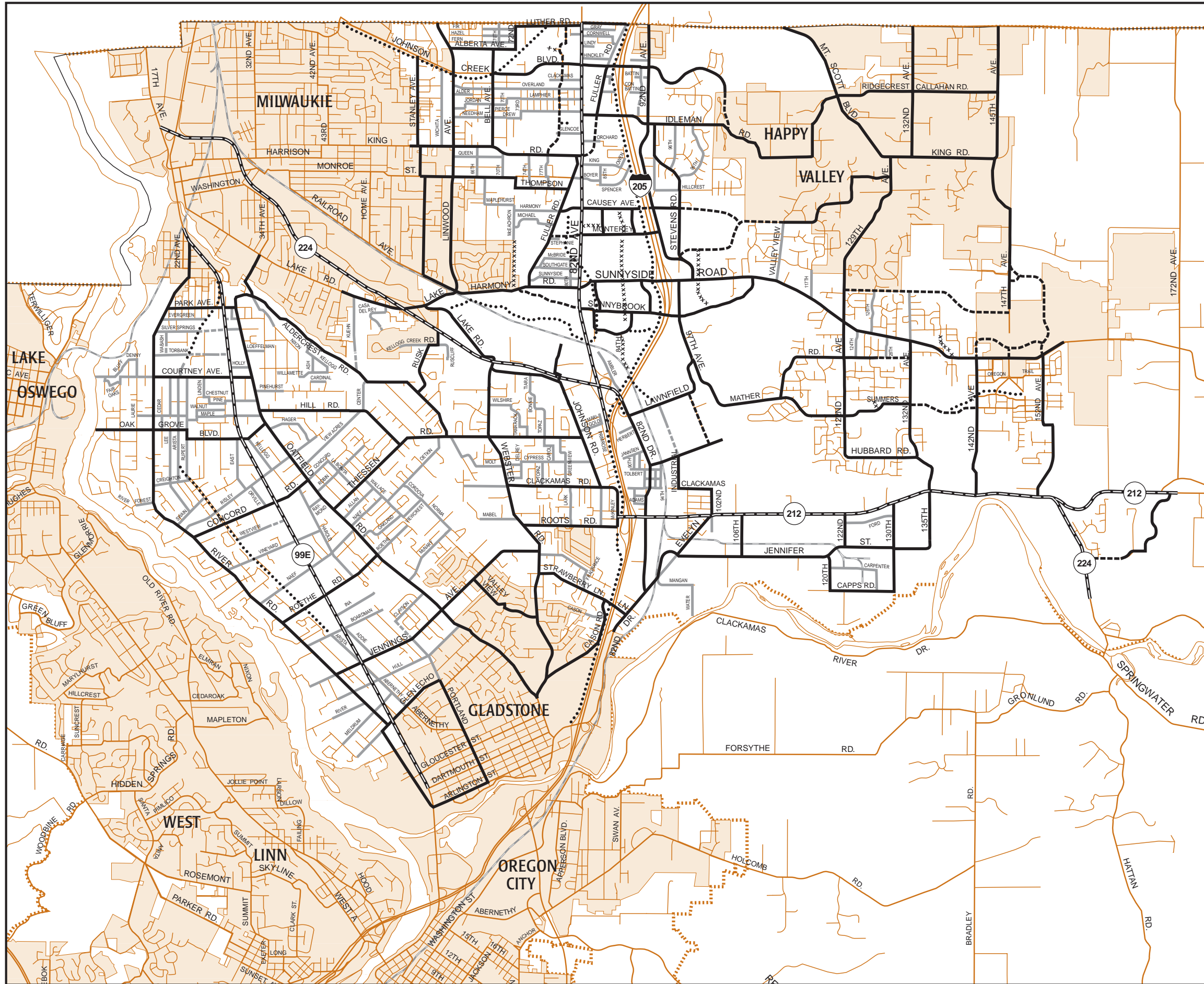
MAY 2003









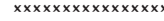
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CLACKAMAS COUNTY COMPREHENSIVE PLAN ● MAP V-7b





# Essential Pedestrian Network

-  STATE HIGHWAY
-  ARTERIALS/COLLECTORS
-  PROPOSED ARTERIALS/COLLECTORS
-  LOCALS
-  PROPOSED LOCALS
-  MULTI-USE TRAILS
-  PEDESTRIAN CONNECTION

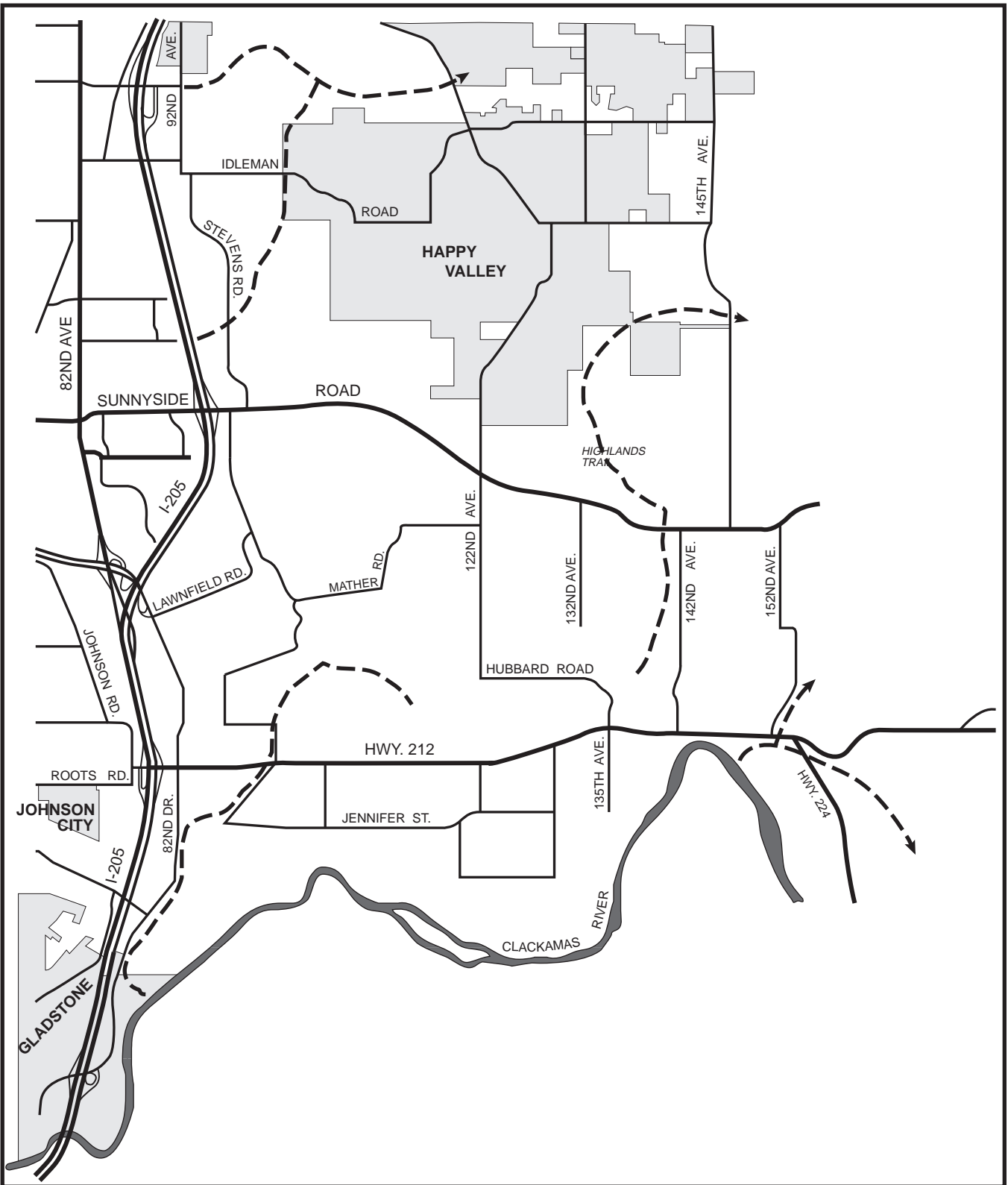
MAY 2003



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CLACKAMAS COUNTY COMPREHENSIVE PLAN ● MAP V-8



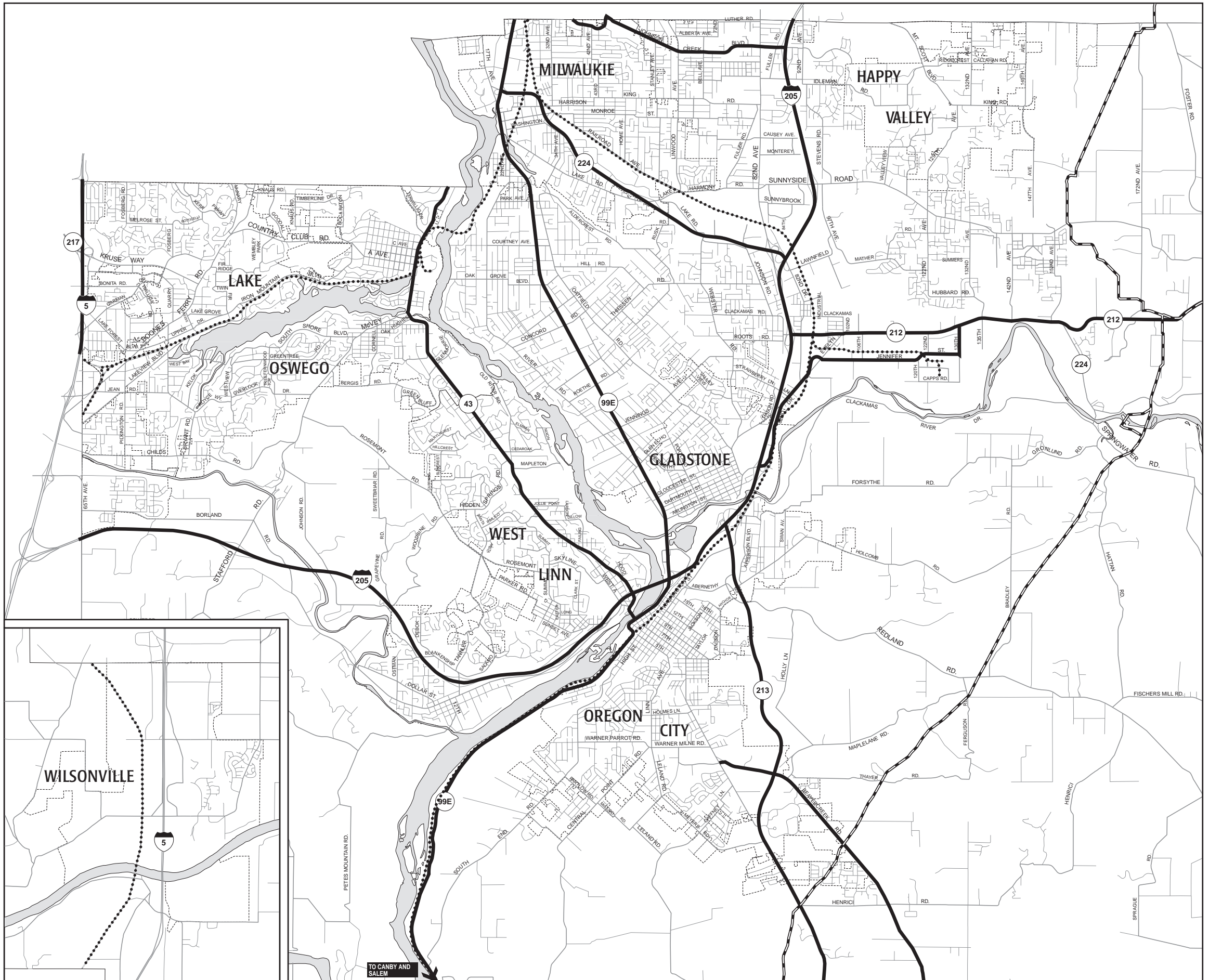
**North Clackamas Park District  
Neighborhood Trails**

--- TRAILS




CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

●  
**MAP V-9**





# Urban Area Freight Routes

-  FREIGHT ROUTES
-  RAIL LINES
-  MAJOR NATURAL GAS PIPELINE

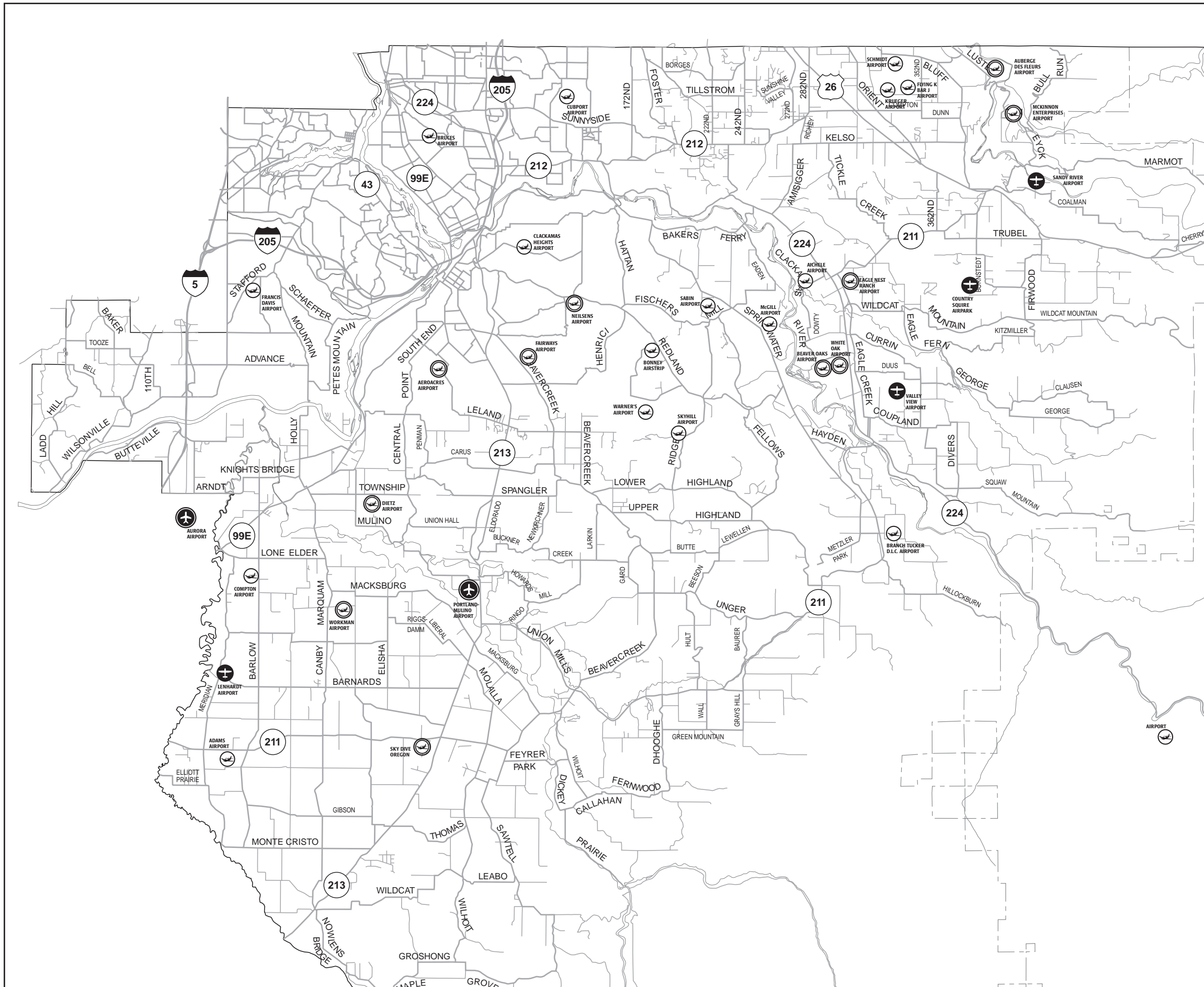
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CLACKAMAS COUNTY COMPREHENSIVE PLAN ● MAP V-10



## Airports

-  PUBLICLY OWNED/PUBLIC USE
-  PRIVATELY OWNED/PUBLIC USE
-  PRIVATELY OWNED/PRIVATE USE  
3 OR MORE BASED AIRCRAFT
-  2 OR FEWER BASED AIRCRAFT

SEPTEMBER

2001



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CLACKAMAS COUNTY COMPREHENSIVE PLAN ● MAP V-11



## CLACKAMAS COUNTY COMPREHENSIVE PLAN: TABLE IX-1

### TABLE IX-1

#### 1.1 URBAN AREA CLASSIFICATIONS AND STANDARDS:

TYPE OF PARK	APROX SIZE IN ACRES	ACRES PER 1,000 POP	SERVICE AREA	LOCATION	POPULATION SERVED	TYPICAL FACILITIES	ACCESS
Mini-Park	Up to 2		Up to 1/4 mile	Within neighborhoods	Up to 2,500	Benches, landscaping, children's play area	Walking, Bicycle
Neighborhood Park	2 to 20	2.5	1/4 to 1/2 mile	Adjacent to elementary schools when feasible	Up to 5,000	Benches, play apparatus area, picnic area, landscaping, play fields, paved courts, free play area, limited parking	Walking, Bicycle, Automobile
Community Park	15 to 100	2.5	1/2 to 3 miles	Designed to serve a group of neighborhoods. Should be along bike routes; where possible, adjacent to Jr. or Sr. High School	Up to 25,000	Benches, picnic area, play apparatus area, picnic shelter, athletic fields, tennis courts, swimming pool, paved courts, landscaping, substantial paved parking, lighted	Bicycle, Automobile, Transit

Metropolitan Park	50 +	5.0	Within 1/4 hr. driving time	Most desirable within large urban area but may be located on periphery	Up to 50,000	Benches, landscaping, nature & hiking trails, play apparatus area, amphitheater, boating or swimming areas, picnic grounds, camping, open field play areas, riding trails, paved parking	Bicycle, Automobile, Transit
-------------------	------	-----	-----------------------------	--	--------------	--	------------------------------

### 1.2 NONURBAN AREA CLASSIFICATIONS AND STANDARDS:

TYPE OF PARK	APROX SIZE IN ACRES	ACRES PER 1,000 POP	SERVICE AREA	LOCATION	POPULATION SERVED	TYPICAL FACILITIES	ACCESS
Rural District	5 to 100	2.5	Within 1/2 hr. driving time	In association with a natural feature or scenic area	Up to 25,000	Picnic area, open field areas, hiking and riding trails, play apparatus, beach, boat ramp, parking	Automobile, Walking
Regional Park	250 +	10.0	Within 1 hr. driving time	Where possible, areas associated with significant natural features such as a river	More than 100,000	Beaches, water resources, natural areas, camping, picnic grounds, boat ramps, nature and hiking trails, riding trails, open field play areas, parking	Automobile, Walking

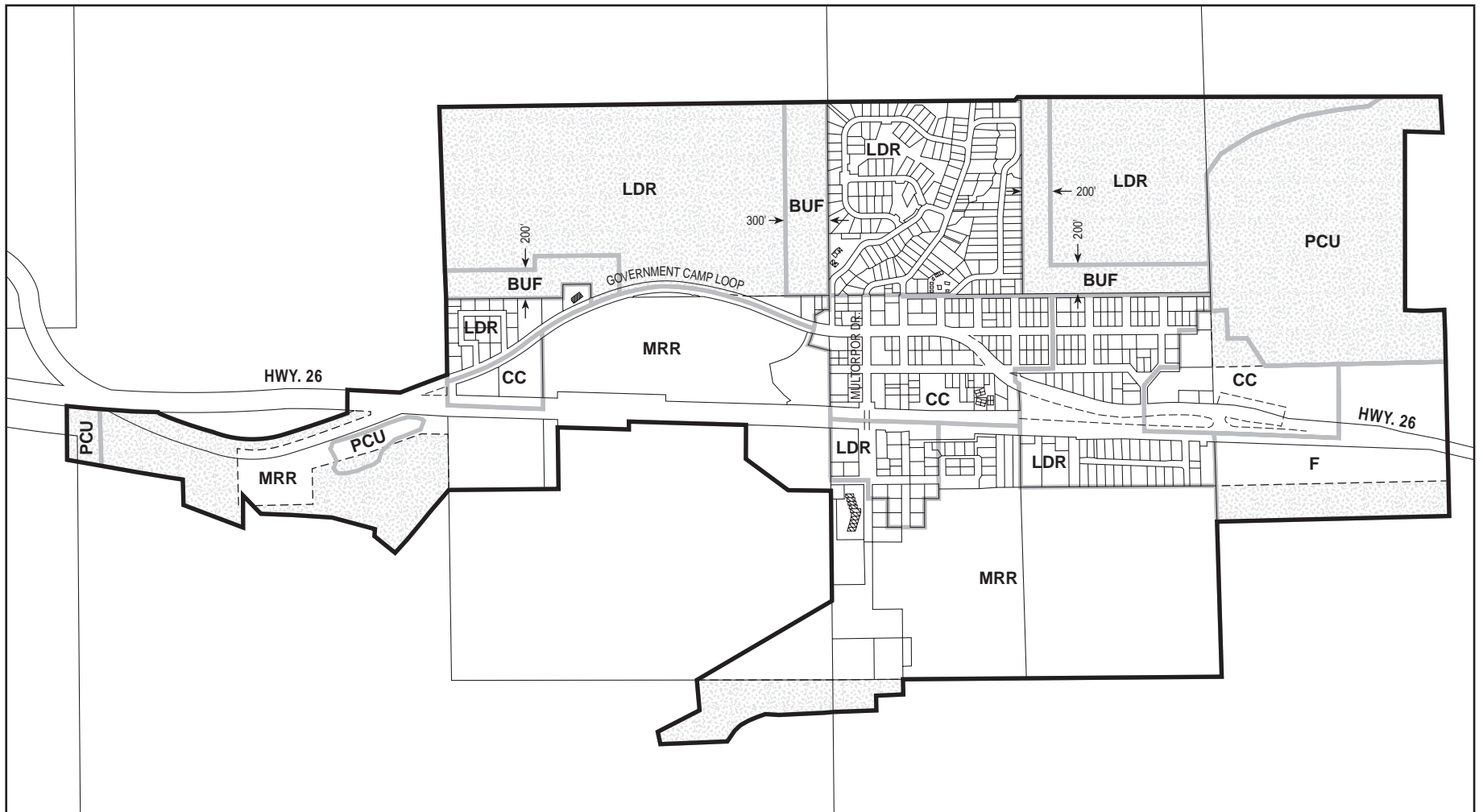
Wilderness Area	N/A	N/A	N/A	Large and remote enough to provide isolation from man made development. Natural qualities and forces are dominant.	N/A	No facilities except possibly natural trails. Undisturbed, roadless natural state	Walking Only
-----------------	-----	-----	-----	--	-----	---	--------------

**1.3 THE FOLLOWING CLASSIFICATIONS AND STANDARDS WILL BE USED THROUGHOUT THE COUNTY:**

<b>TYPE OF PARK</b>	<b>APROX SIZE IN ACRES</b>	<b>ACRES PER 1,000 POP</b>	<b>SERVICE AREA</b>	<b>LOCATION</b>	<b>POPULATION SERVED</b>	<b>TYPICAL FACILITIES</b>	<b>ACCESS</b>
Natural or Historical Preserve	N/A	N/A	N/A	An area of outstanding scenic and/or natural character, or historic value. Preservation and enhancement of the resource is the primary objective. Buffered from adjacent environments (particularly urban)	N/A	Limited to those needed for safety, health and education (e. g. trails, protective barriers, sanitary facilities, interpretive center, parking)	Automobile, Walking
Linear Park and Trail	N/A	N/A	N/A	Linear strip of land comprising natural or man-made resources such as a stream, river, ridgeline, service road, utility or transit right-of-way. Connects parks and	N/A	Walking, hiking, bicycling, and horseback riding trails (consolidated where possible), boating, trailhead facilities (sanitary and rest facilities,	Walking, Bicycle, Horse, Transit, Automobile

				<p>other points of interest. Sufficient width to protect from adjacent infringements and maintain environmental integrity of the corridor</p>		<p>limited parking)</p>	
<p>Special Purpose Facilities</p>	<p>This category includes facilities such as boat ramps, marinas, ski areas, golf courses, swimming pools, recreational vehicle trails, etc. No site or facility standards are applicable (see parks, Open Space, Historic Sites Background Report - Table 9 for approximate user standards)</p>						





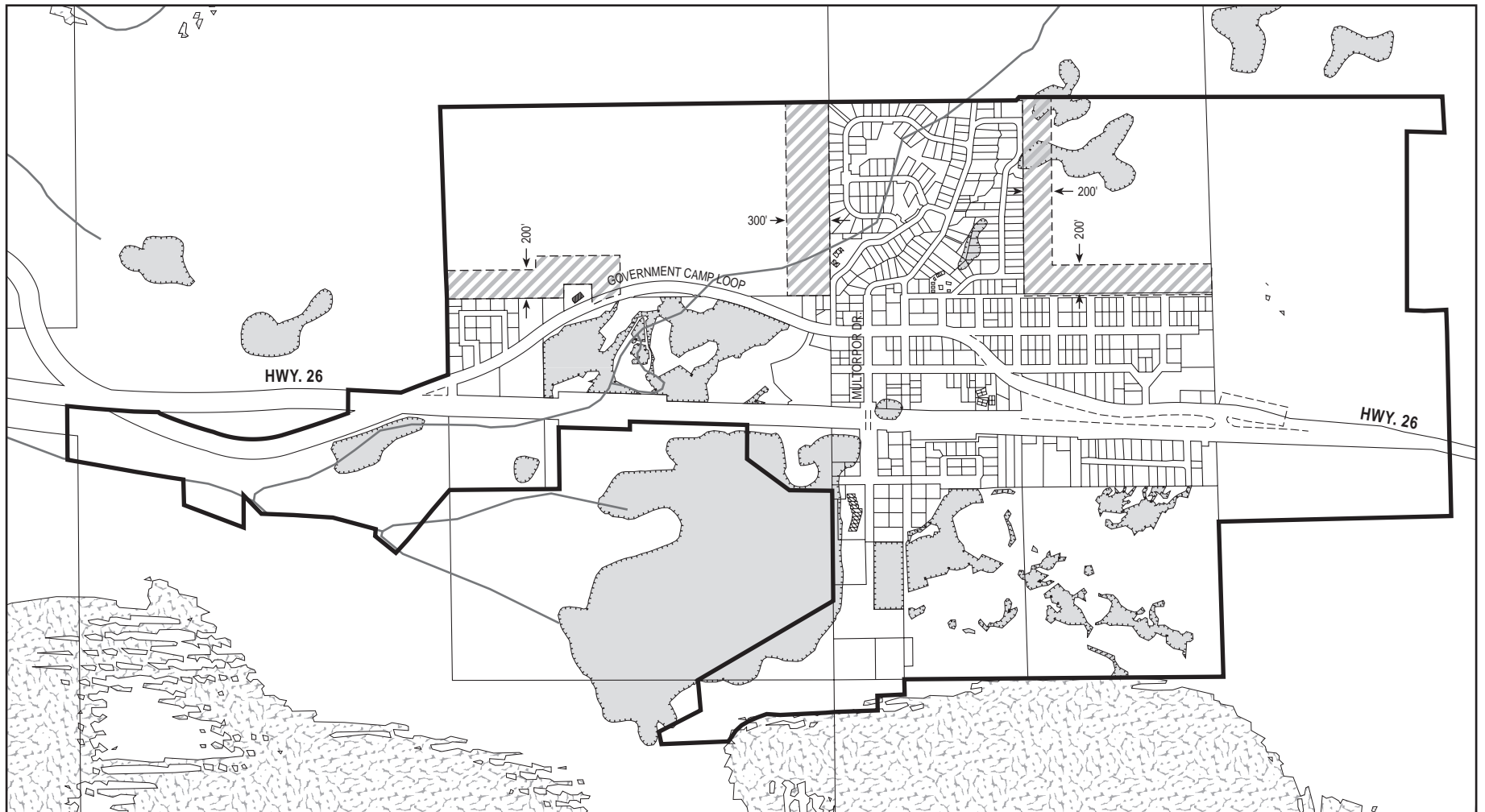
## Government Camp Village Plan Land Use Plan & Boundary

<b>LDR</b> LOW DENSITY RESIDENTIAL	<b>F</b> FOREST	FOREST SERVICE JURISDICTION
<b>MRR</b> MOUNTAIN RECREATION RESORT	<b>PCU</b> PUBLIC & COMMUNITY USE	URBAN UNINCORPORATED COMMUNITY BOUNDARY
<b>CC</b> COMMUNITY COMMERCIAL	<b>BUF</b> BUFFER	

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

**MAP X-MH-4**

OCTOBER 18, 2000



## Government Camp Village Plan

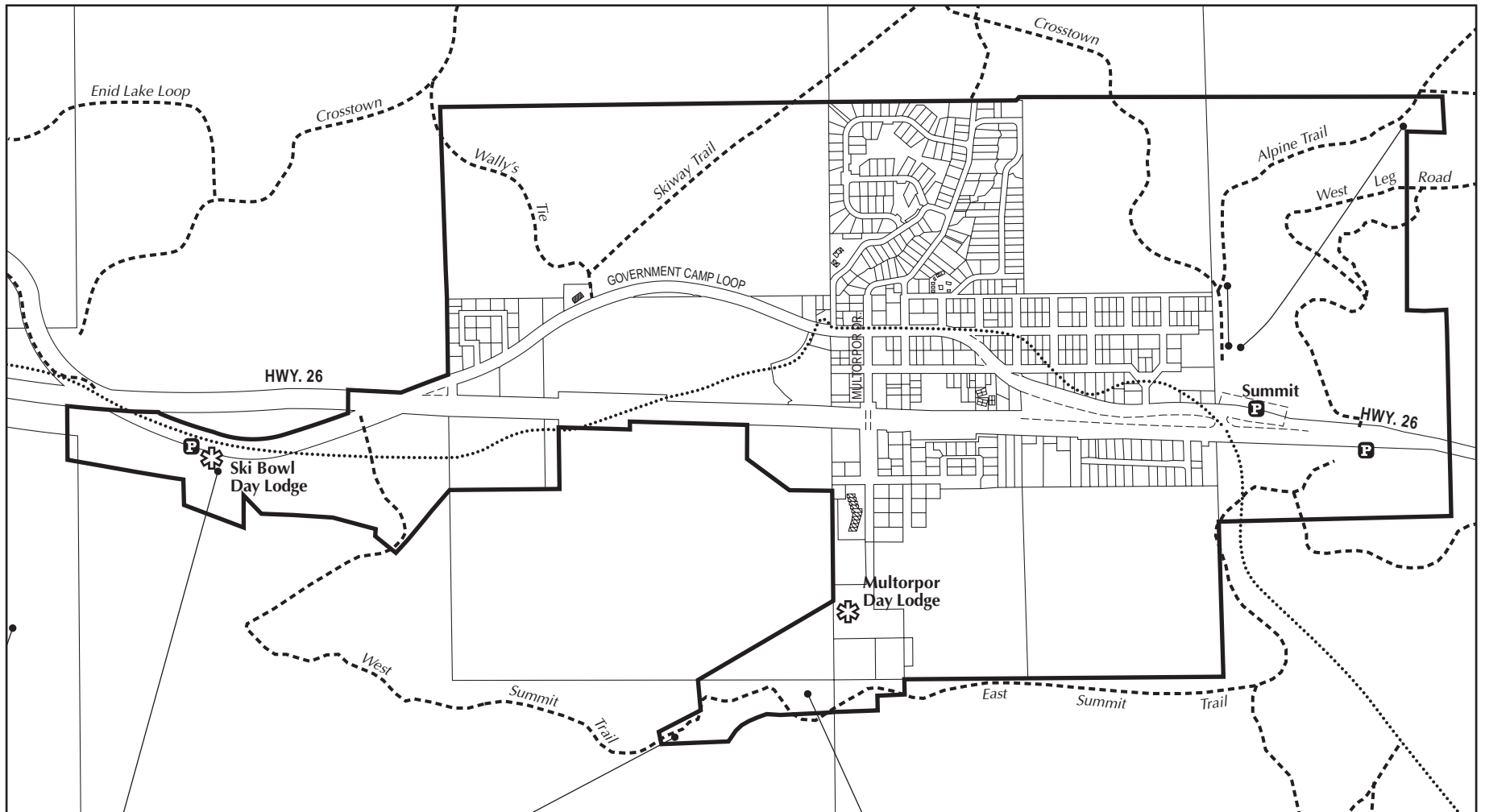
### Resource Protection Open Space

-  WETLANDS
-  SLOPE ≥25%
-  BUFFER AREA

 URBAN UNINCORPORATED  
COMMUNITY BOUNDARY

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

  
**MAP X-MH-5**



## Government Camp Village Plan Recreation Trails and Facilities

- |                        |                  |   |
|------------------------|------------------|---|
| ----- TRAILS           | ❄ SKI LODGE      | ———— URBAN UNINCORPORATED<br>COMMUNITY BOUNDARY |
| ..... THE BARLOW ROAD* | Ⓟ SNOW PARK AREA |   |
| —●— SKI LIFTS          |                  |   |

\* Barlow Road Alignment is Approximated from *National Forest Service Barlow Road Historic District Maps* and *Clackamas County Barlow Road Historic Corridor Background Report & Management Plan*.

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN



**MAP X-MH-6**

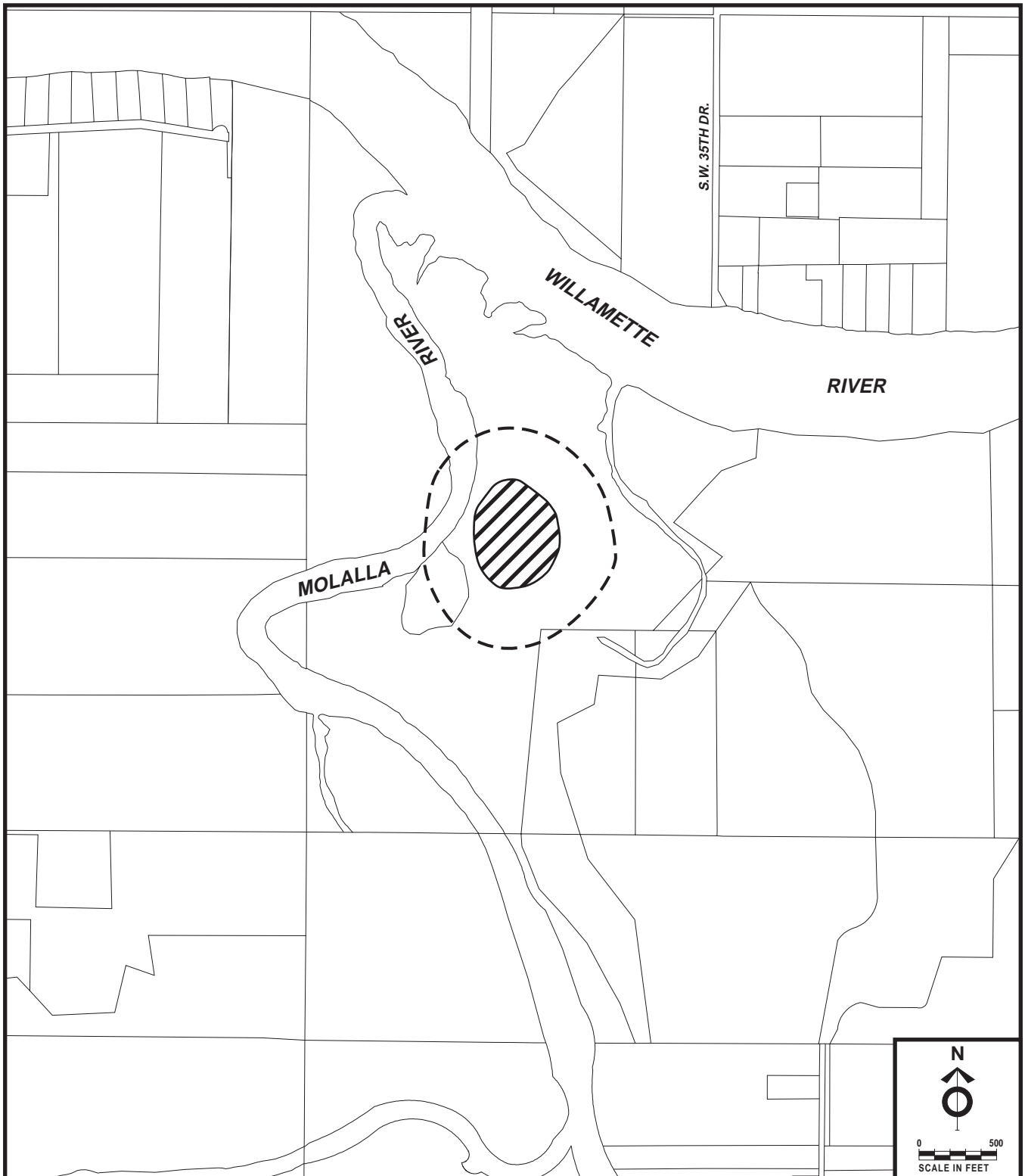
OCTOBER 18, 2000

COMPATIBILITY CRITERIA FOR WILDLIFE SENSITIVE AREAS



TABLE III-1

Sensitive Habitat Areas	Compatible Land Uses & Activities	Unacceptable Uses								Special Siting Considerations												Potential for Damage by Wildlife															
										Fences			Vegetation Clearing						Roads							Special Restrict.											
		Rock Pit	Feed Lot	Parks	Land Fills	Water Hole	Fire Pump Hole	Open Concrete Canal	Major Highways	Airports	Grazing	No Fence	Livestock Control	No Woven Wire	10% Max.	20% Max.	30% Max.	50% Max.	Not Within 50 Yards	Not Within 100 Yards	No Cut Nest Tree	Access Only	No Roads In Or Next To	Dec.-Apr. / Closure	None	No Water Fords	No Dev. 1/4 Mile	No Dev. In Meadow	No Dev. Below High Water	High	Medium	Low	None				
DEER WINTER RANGE Western	Grazing Timber		●		●			●	●	●		●					●					●	●									●					
ELK WINTER RANGE Cascade Forest	Timber Grazing		●		●			●	●	●		●			●							●	●										●				
NATURAL AREA*	Open Space	●	●		●			●	●	●		●				●					●			●		●									●		
PIGEON SPRING	Grazing Forest		●		●										●				●				●												●		
HERON NEST	Forest Grazing	●			●													●				●				●									●		
RAPTOR NEST	Grazing Forest/Agr.	●		●											●				●			●				●									●		
STREAMSIDE VEGETATION	Forest Grazing/Agr.	●			●			●							●							●						●								●	
MEADOWS	Grazing	●	●		●			●	●	●		●	●												●			●								●	
BOGS & SWAMPS	None	●	●	●	●	●	●	●	●	●		●												●		●										●	
DRAINAGE WAY	Grazing/Agr.														●							●														●	

\*As Identified by the Nature Conservancy



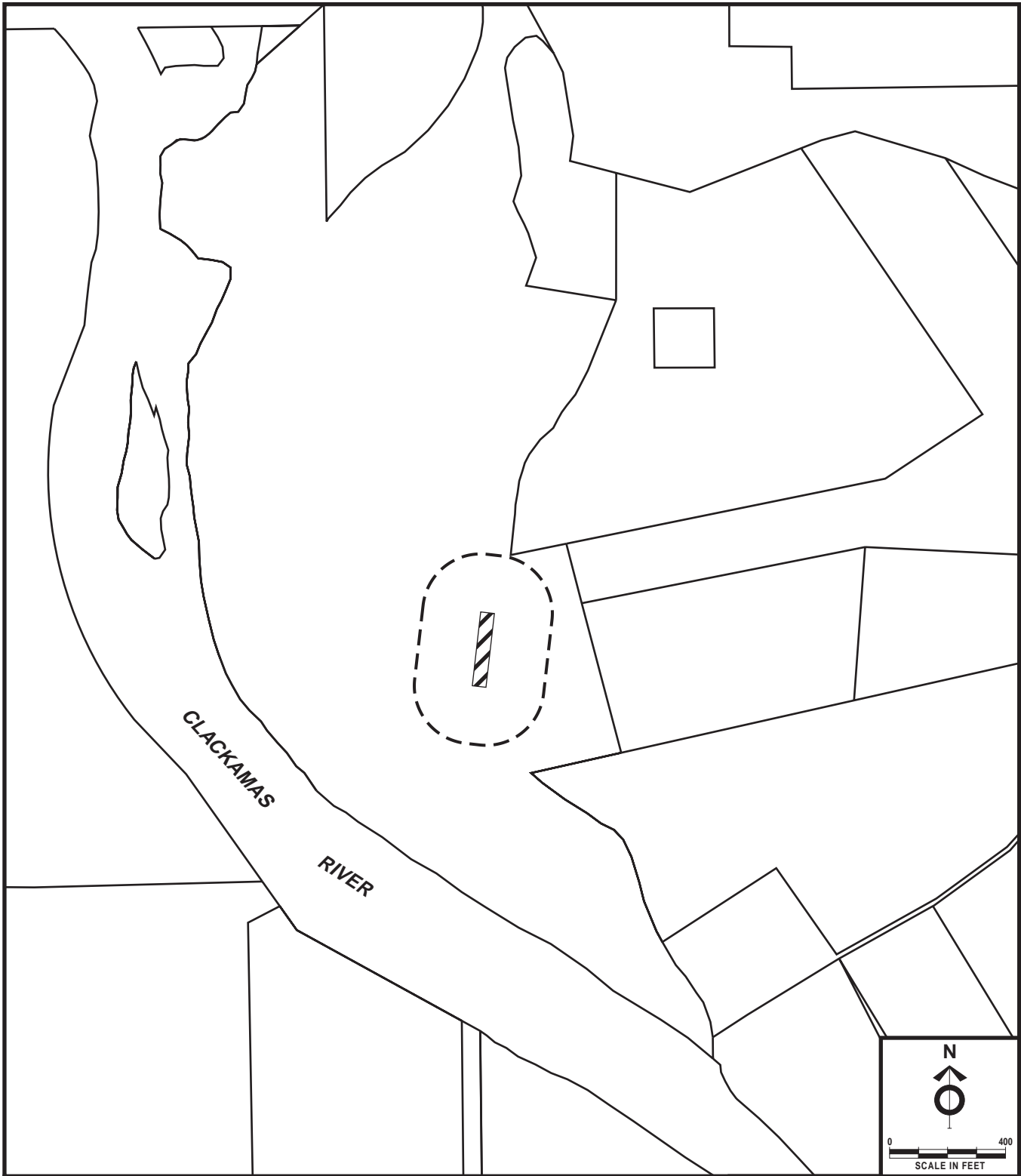
**Molalla State Park  
Great Blue Heron Rookery**

-  ROOKERY AREA
-  BUFFER



CLACKAMAS COUNTY  
COMPREHENSIVE PLAN



**MAP III-3**

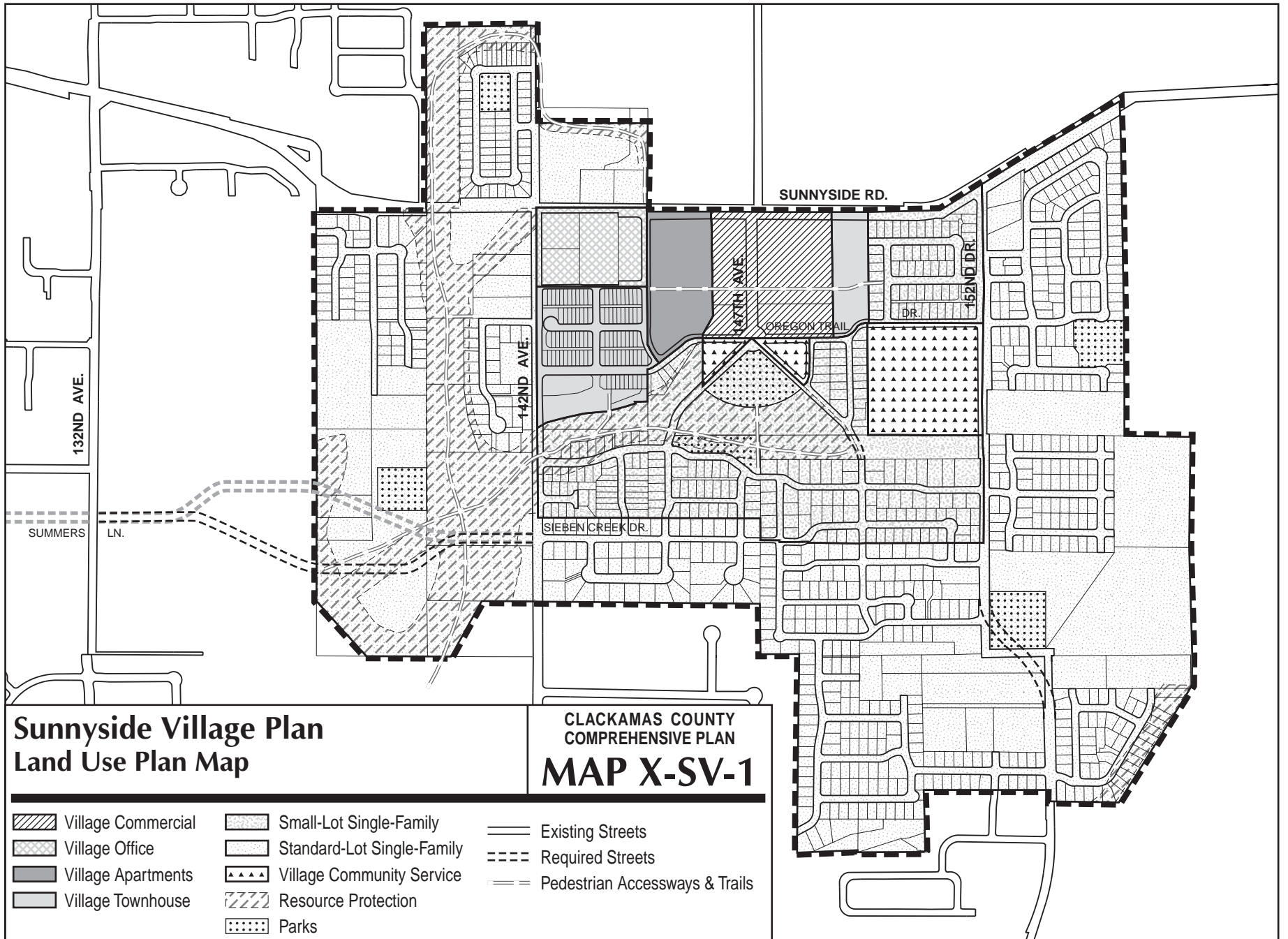


**Stevens  
Great Blue Heron Rookery**

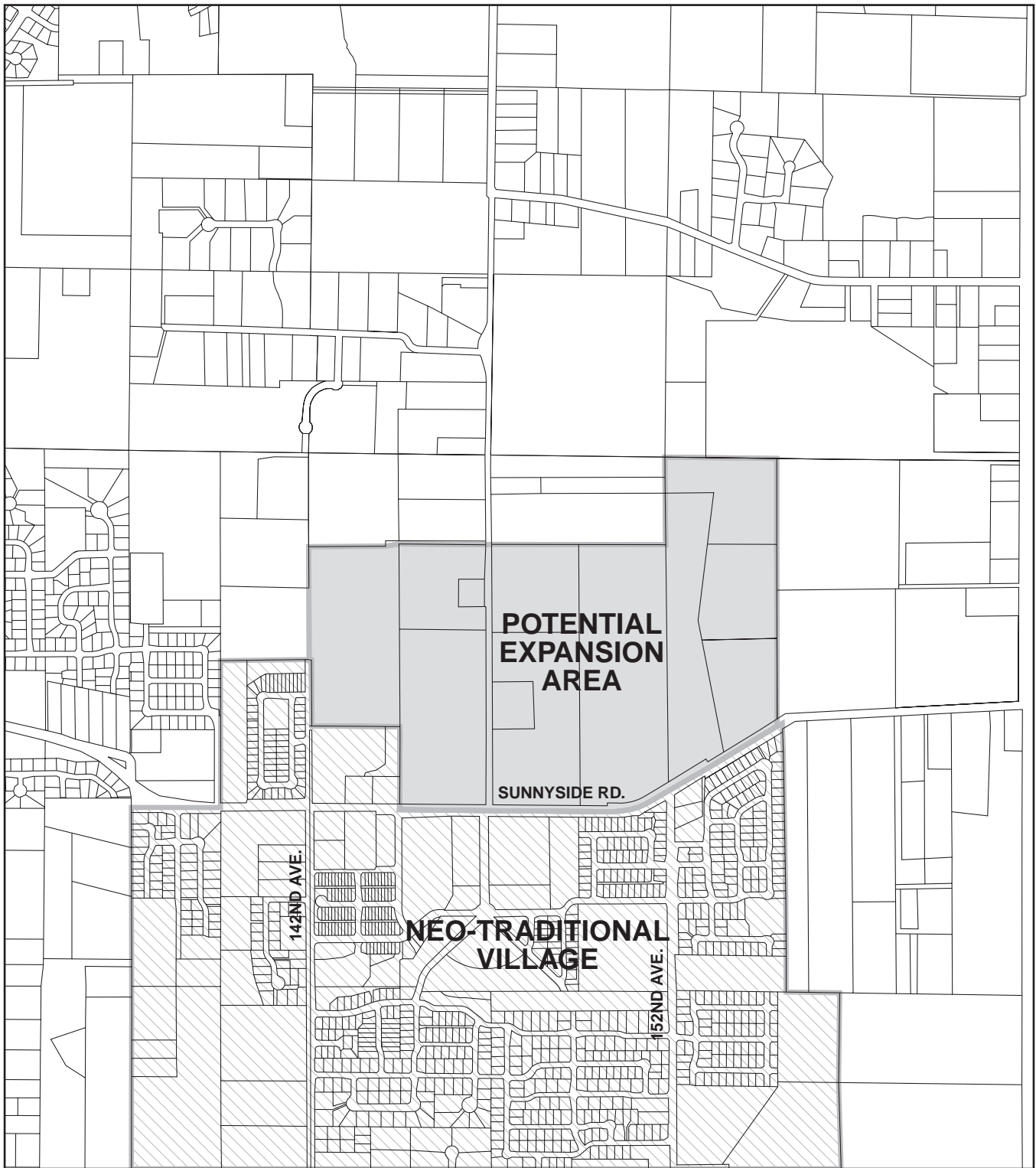
-  ROOKERY AREA
-  BUFFER

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

  
**MAP III-4**



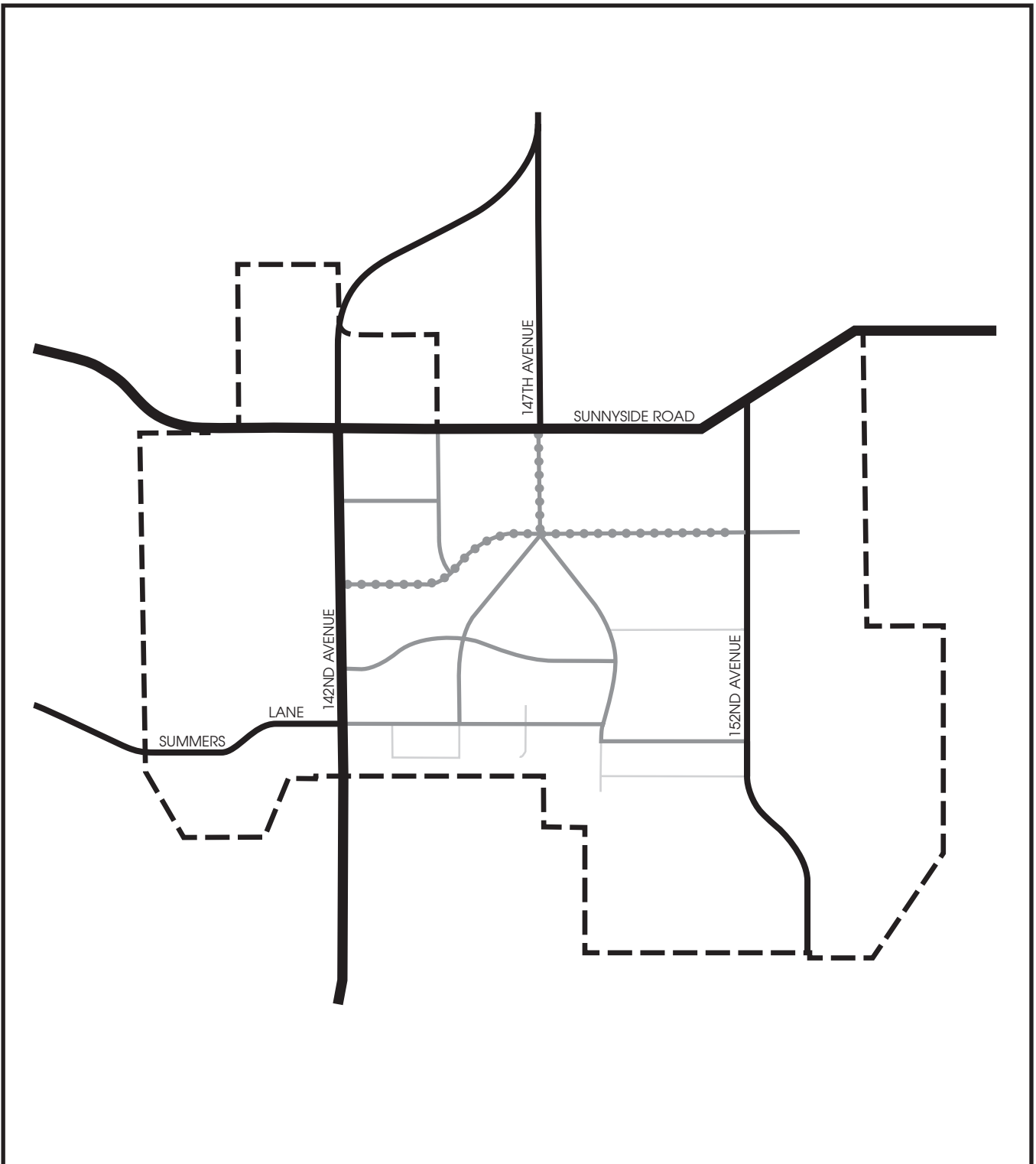




**Sunnyside Village Plan**  
**Potential Expansion Areas**






CLACKAMAS COUNTY  
COMPREHENSIVE PLAN  
**MAP X-SV-2**

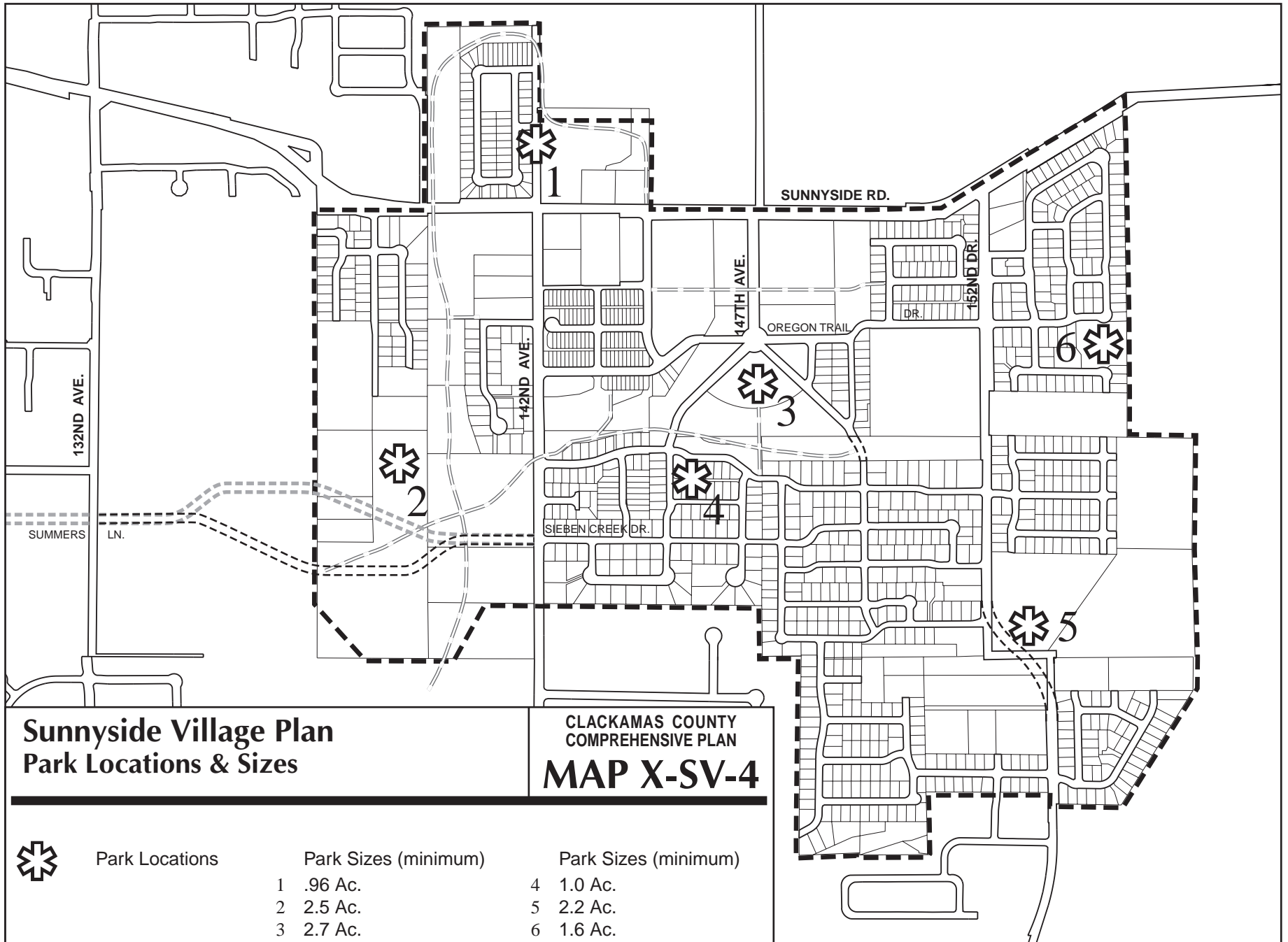




**Sunnyside Village Plan  
Street Classifications**

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN  
**MAP X-SV-3**

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



**Sunnyside Village Plan  
Park Locations & Sizes**

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN  
**MAP X-SV-4**



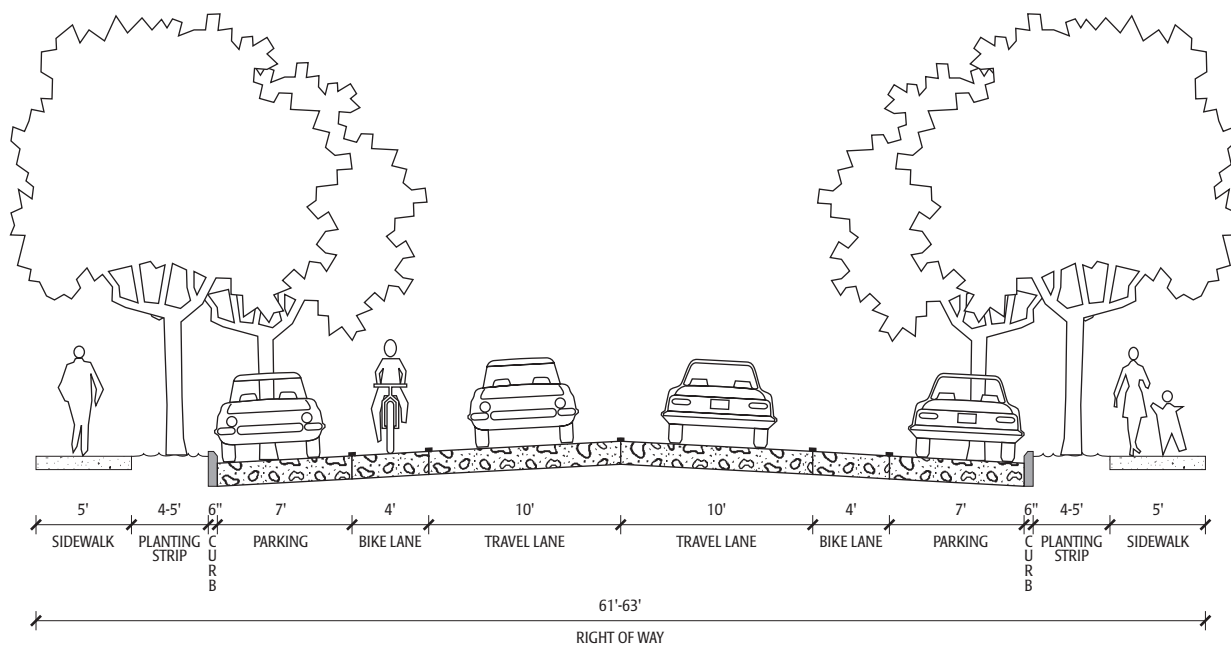
Park Locations

Park Sizes (minimum)

Park Sizes (minimum)

- 1 .96 Ac.
- 2 2.5 Ac.
- 3 2.7 Ac.

- 4 1.0 Ac.
- 5 2.2 Ac.
- 6 1.6 Ac.

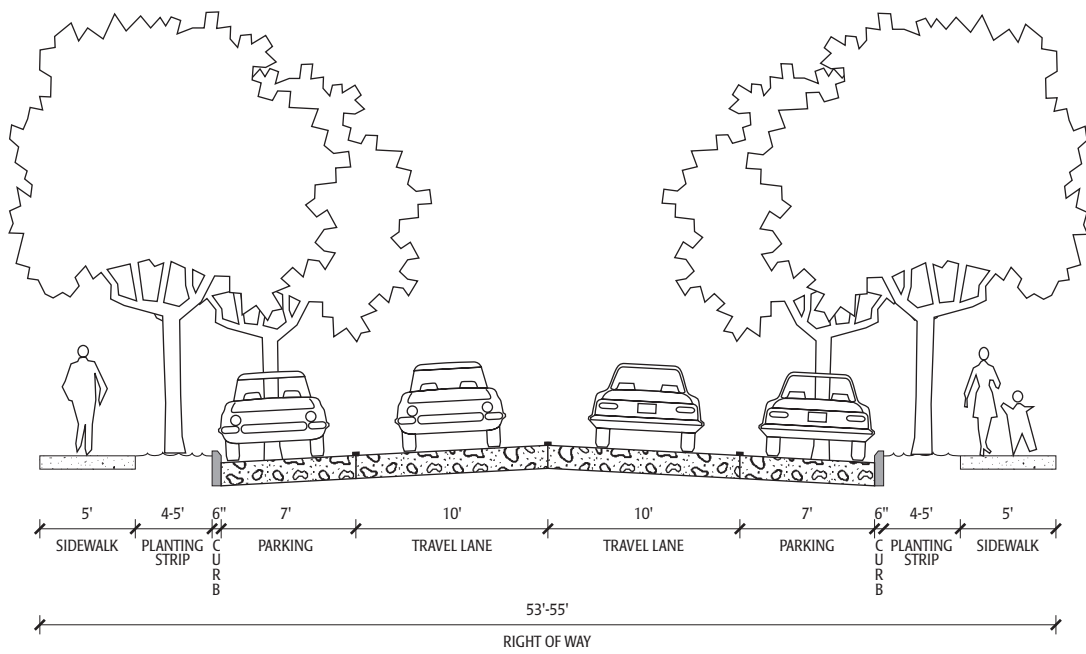


**Sunnyside Village Plan  
Connector Street with  
Planting Strips and Bike Lanes**

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN



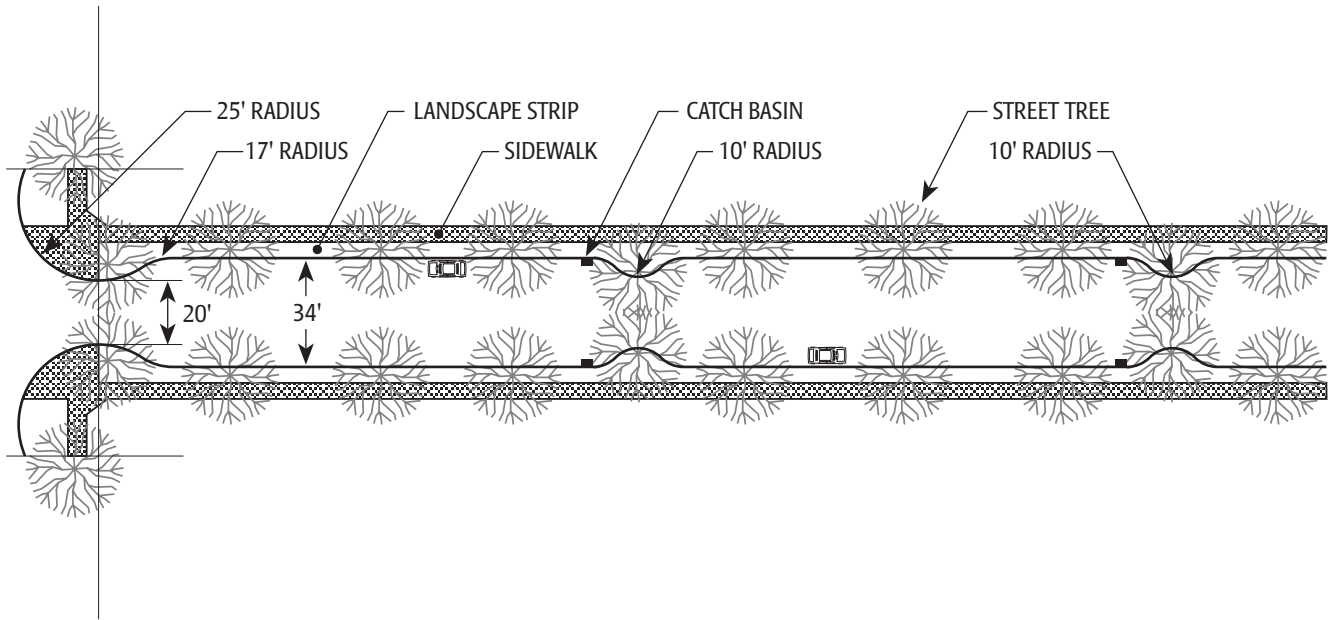
**FIGURE X-SV-1**



**Sunnyside Village Plan**  
**Connector Street with Planting Strips**

CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN

●  
**FIGURE X-SV-2**



**TABLE 1  
MID-BLOCK CHOKER SPACING**

BLOCK LENGTH (FEET)	NUMBER OF MID-BLOCK CHOKERS
LESS THAN 300 FEET	0
300 TO 400 FEET	1
400 TO 700 FEET	2
GREATER THAN 700 FEET	EVERY 150 TO 200 FEET

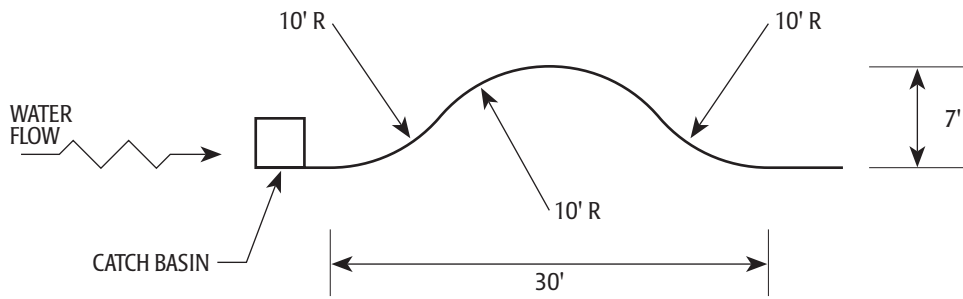
**Sunnyside Village Plan  
Typical Connector Street Plan**

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

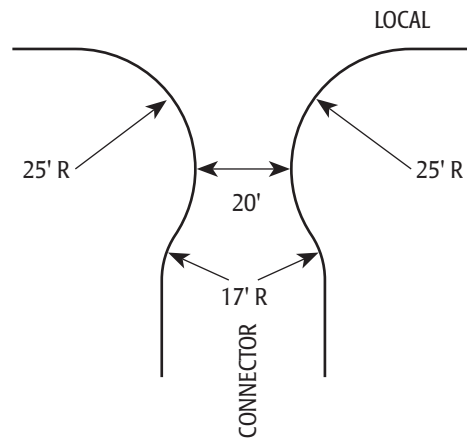
●

**FIGURE X-SV-3**

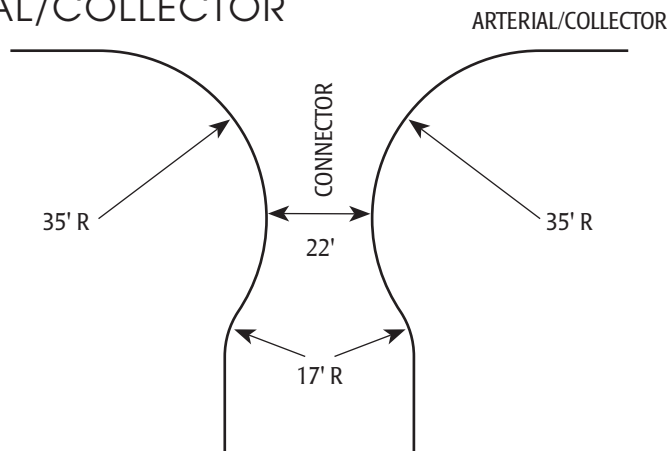
# CHOKER



# STANDARD BULB



# BULB AT ARTERIAL/COLLECTOR

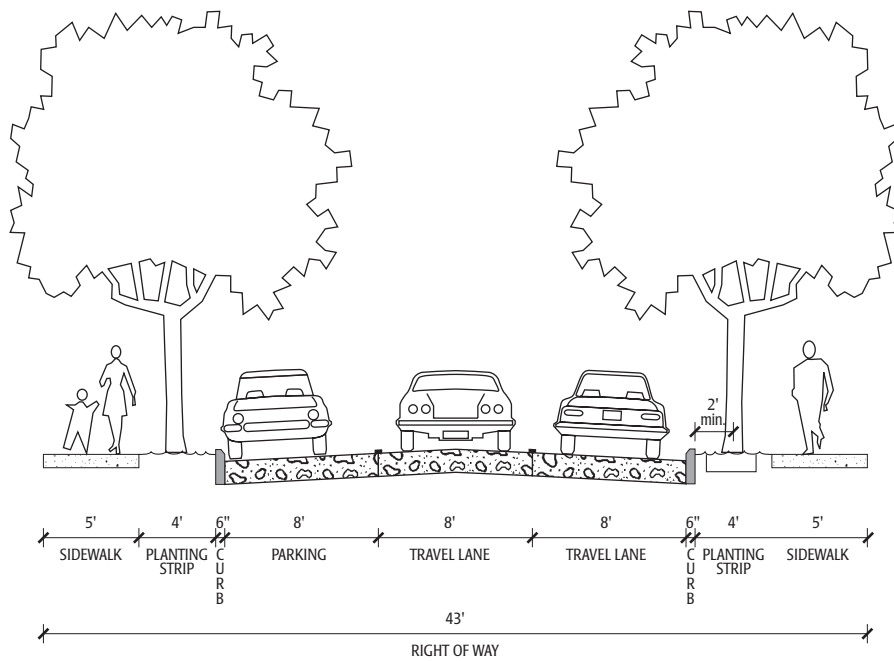


**Sunnyside Village Plan**  
**Choker and Curb Extension Design**

**Connector Street**

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

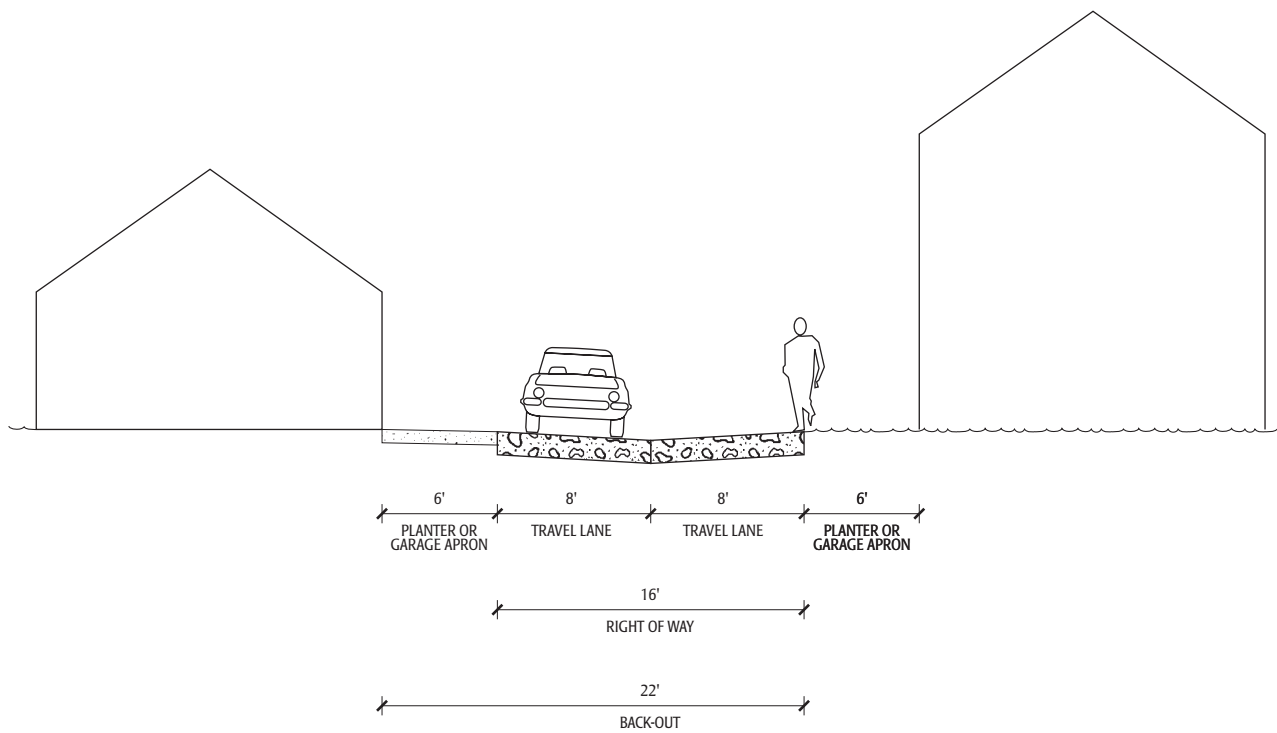
●  
**FIGURE X-SV-4**



**Sunnyside Village Plan**  
**Local Street With Planting Strips**

CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN

**FIGURE X-SV-5**



**Sunnyside Village Plan**  
**Alleys**

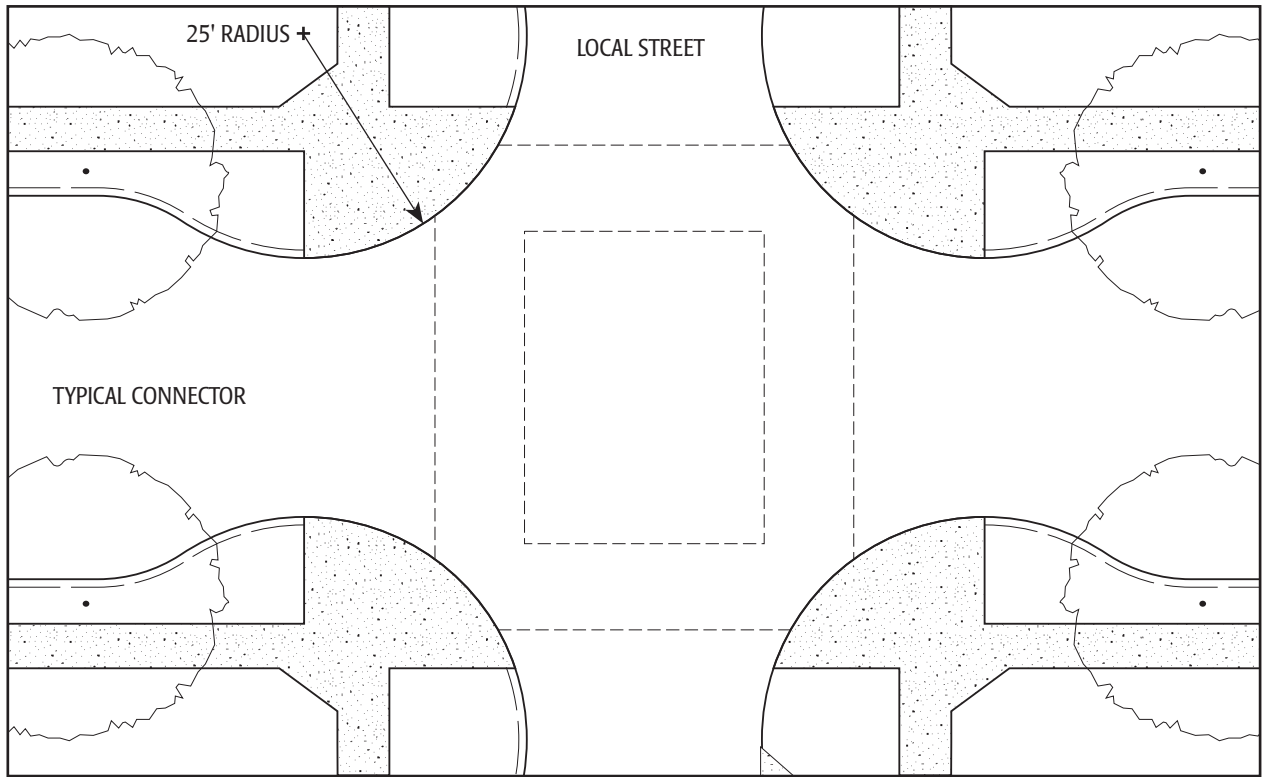
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CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN



**FIGURE X-SV-6**





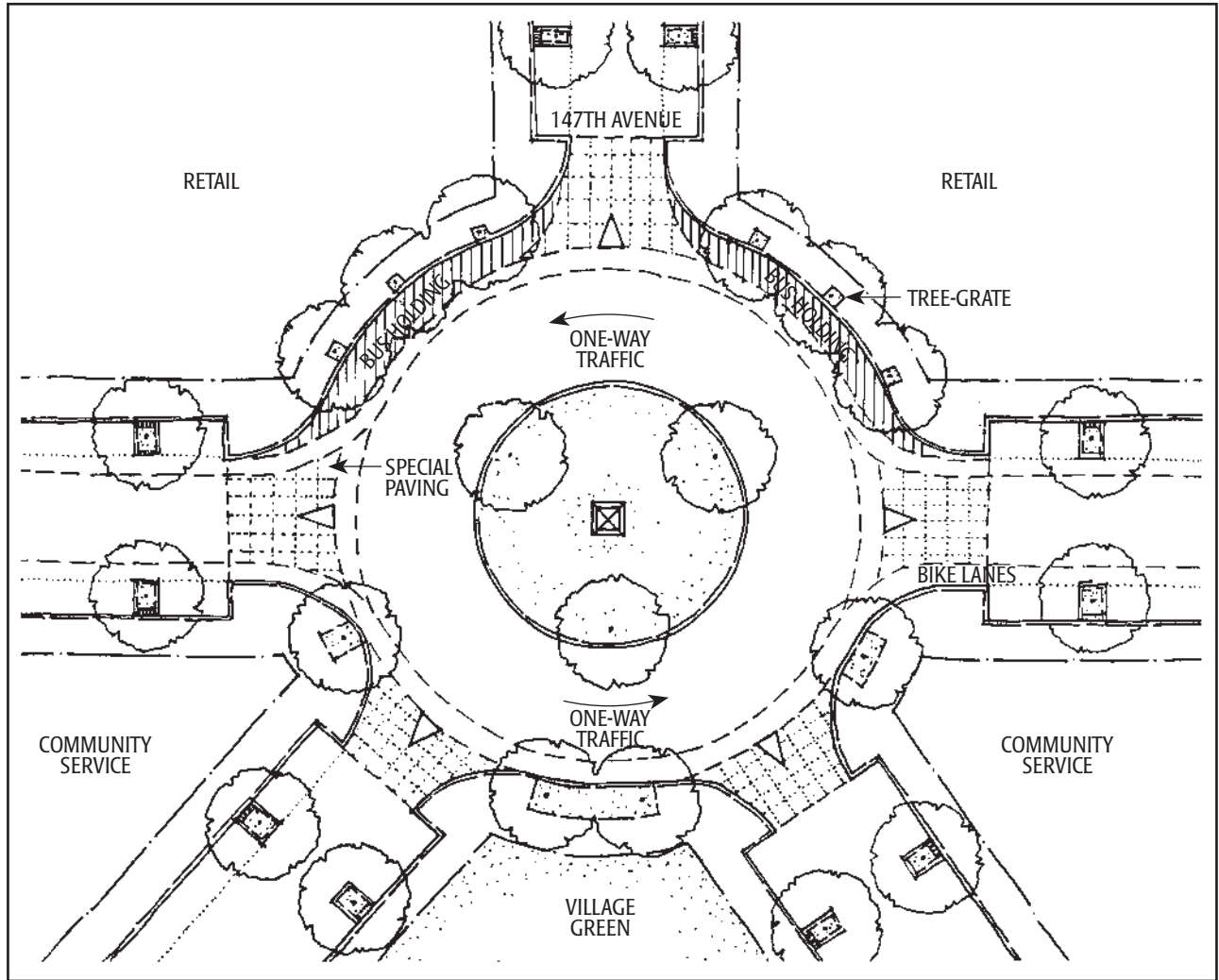
**Sunnyside Village Plan  
Intersections**

**Minimum Curb Radius at Intersections**

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN



**FIGURE X-SV-7**



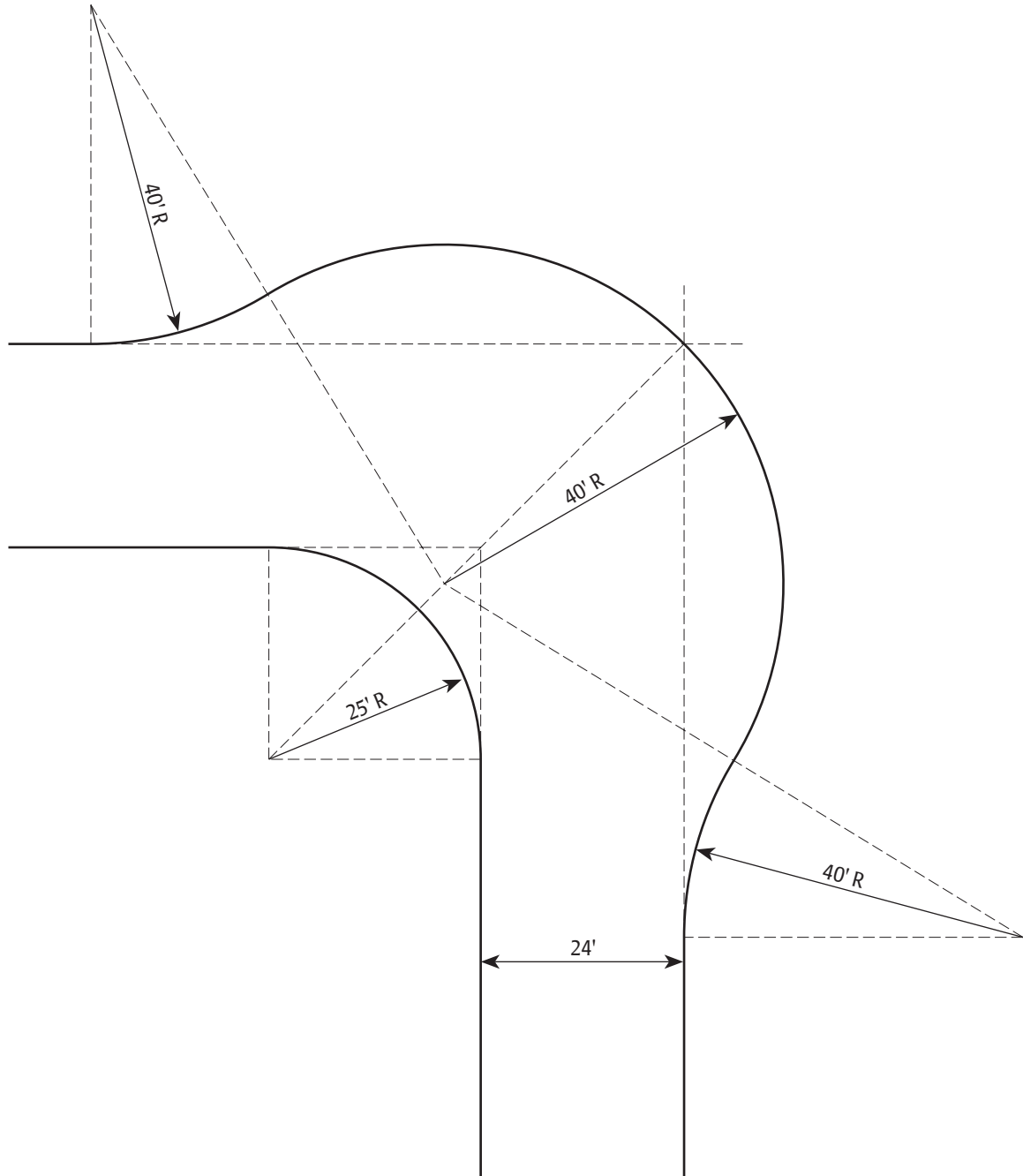
**Sunnyside Village Plan**  
**Traffic Circle**

---

CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN



**FIGURE X-SV-8**

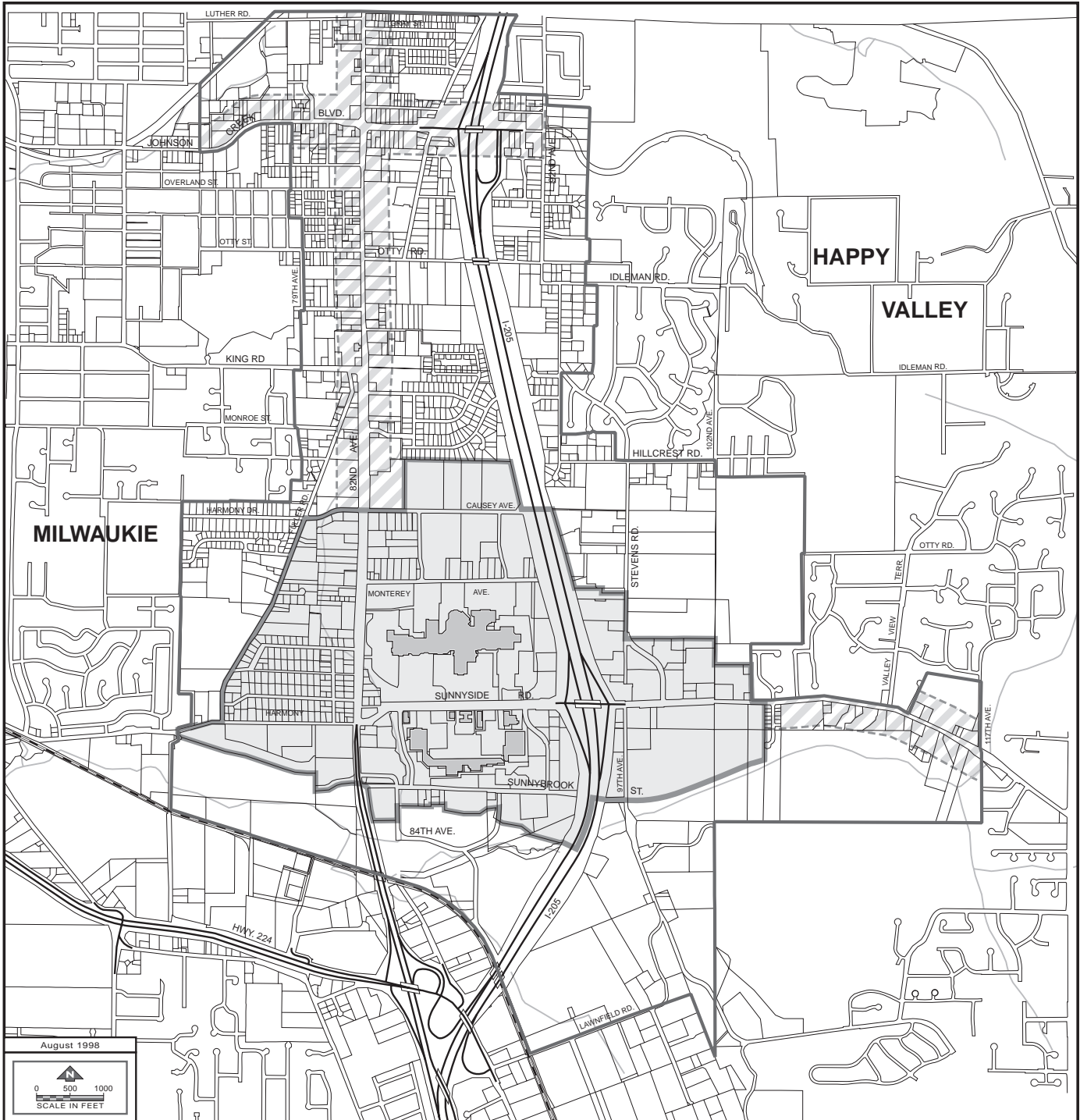


**Sunnyside Village Plan**  
**Alternative Horizontal Curve for Local Streets**

CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN



**FIGURE X-SV-9**



# Clackamas Regional Center Area Design Plan

## Regional Center and Corridors

# CLACKAMAS COUNTY COMPREHENSIVE PLAN MAP X-CRC-1



CLACKAMAS REGIONAL  
CENTER AREA DESIGN  
PLAN BOUNDARY

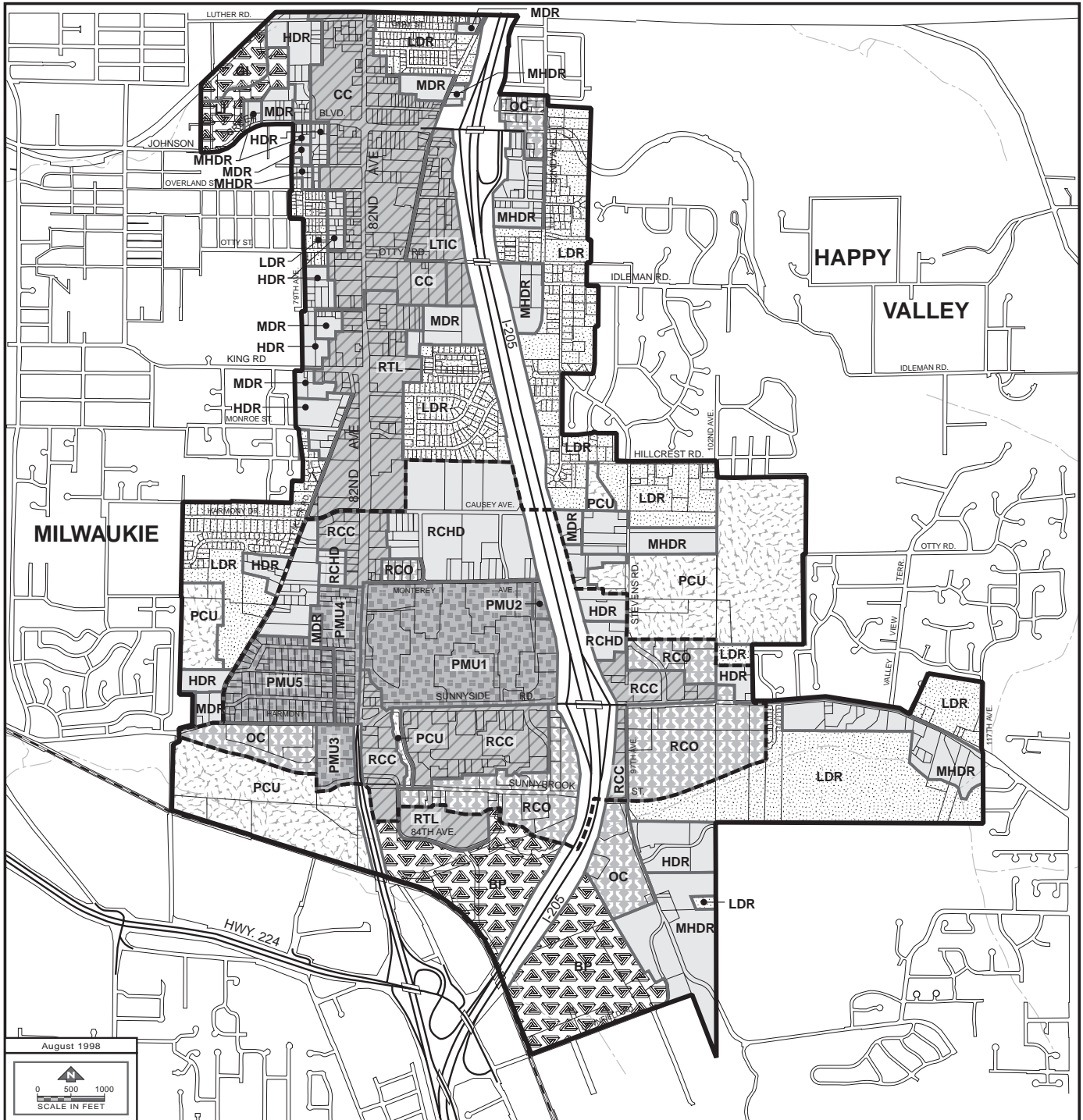
### 2040 DESIGN TYPES



CORRIDOR



REGIONAL CENTER



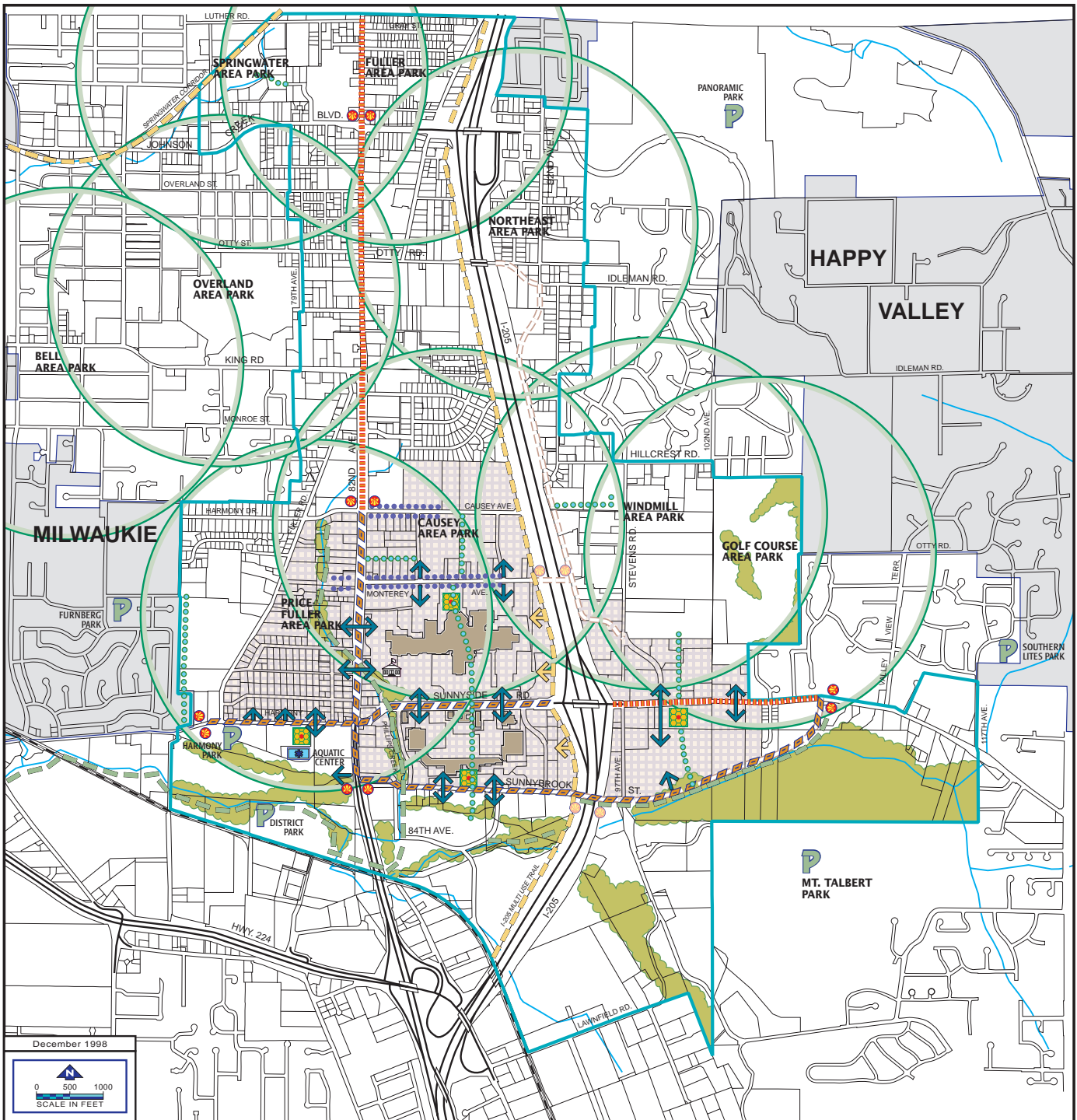
August 1998  
 0 500 1000  
 SCALE IN FEET

# Clackamas Regional Center Area Design Plan Land Use Plan Map

## CLACKAMAS COUNTY COMPREHENSIVE PLAN MAP X-CRC-2

LDR	LOW DENSITY RESIDENTIAL	RCC	REGIONAL CENTER COMMERCIAL	PMU	PLANNED MIXED USE
MDR	MEDIUM DENSITY RESIDENTIAL	RC	RETAIL COMMERCIAL	BUSINESS PARK	
MHDR	MEDIUM HIGH DENSITY RESIDENTIAL	CC	CORRIDOR COMMERCIAL	LIGHT INDUSTRIAL	
HDR	HIGH DENSITY RESIDENTIAL	LTIC	LOW TRAFFIC IMPACT COMM.	GENERAL INDUSTRIAL	
RCHD	REGIONAL CENTER HIGH DENSITY RES.	RCO	REGIONAL CENTER OFFICE	DESIGN PLAN BOUNDARY	
PCU	PUBLIC AND COMMUNITY USE	OC	OFFICE COMMERCIAL	REGIONAL CENTER BOUNDARY	





# Clackamas Regional Center Area Design Plan

## Urban Design Elements

# CLACKAMAS COUNTY COMPREHENSIVE PLAN

## MAP X-CRC-3

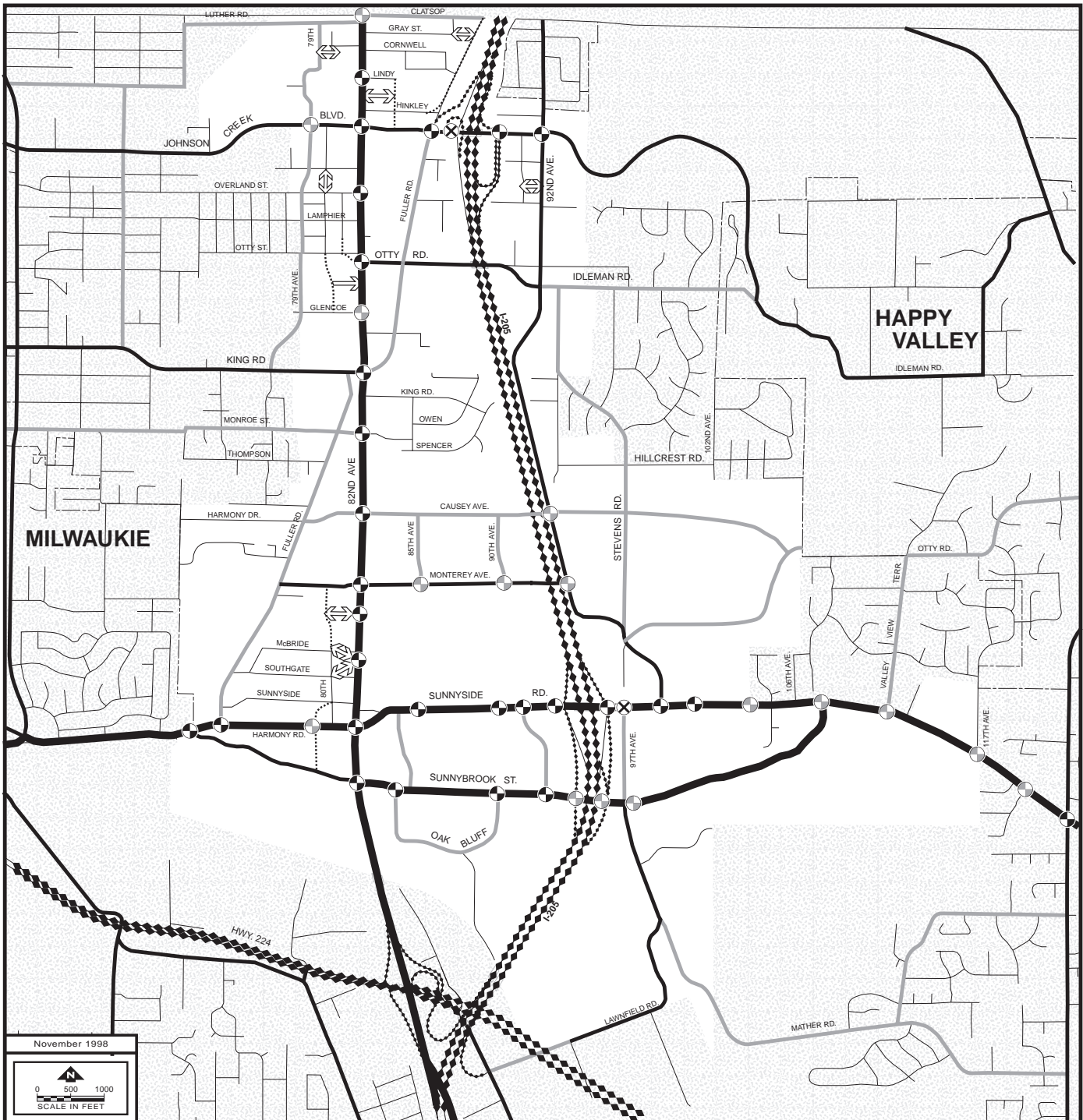
- |                         |                                  |                   |
|-------------------------|----------------------------------|-------------------|
| STUDY AREA BOUNDARY     | STREET CONNECTION                | PARK - OPEN SPACE |
| COMMITTED ROAD          | LOCAL STREET GRID                | GREENWAY TRAIL    |
| MAIN STREET             | OFF-STREET PEDESTRIAN LINKAGE    | PLAZA             |
| BOULEVARD               | MULTI-USE PATH                   | NATURAL FEATURES  |
| SPECIAL STREET STANDARD | POTENTIAL COMMUNITY CENTER       | PRIMARY GATEWAY   |
|                         | GENERAL LOCATION OF NEEDED PARKS | FREEWAY GATEWAY   |

December 1998

0 500 1000  
SCALE IN FEET







November 1998

0 500 1000  
SCALE IN FEET

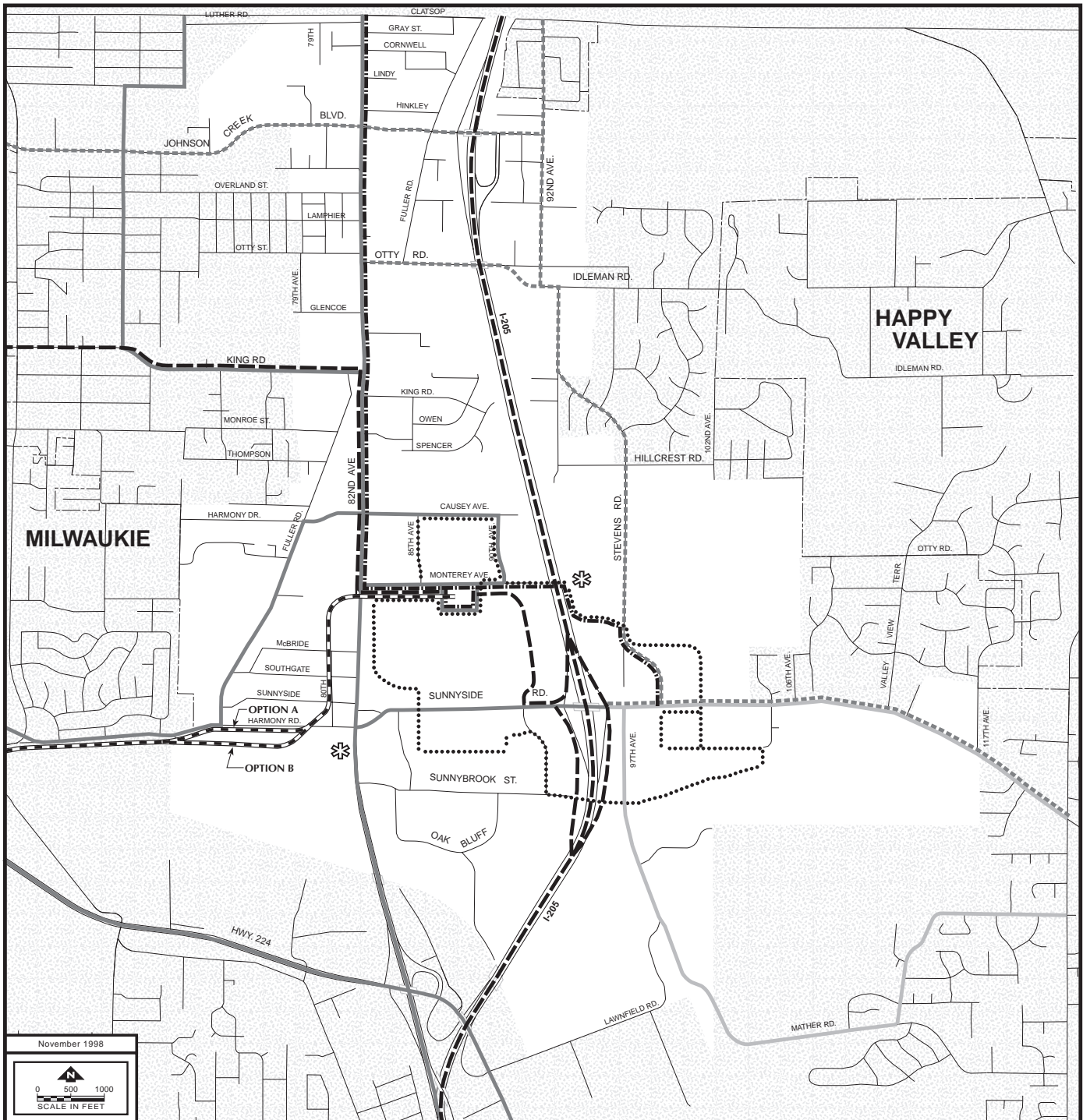
# Clackamas Regional Center Area Design Plan

## Functional Classification

# CLACKAMAS COUNTY COMPREHENSIVE PLAN MAP X-CRC-5

- |   |                |  |                                 |
|---|----------------|--|---------------------------------|
| CRCA DESIGN PLAN AREA (STUDY AREA IN WHITE) | FREEWAY RAMP   | LOCAL STREET LOCATION TO BE DETERMINED (PUBLIC OR PRIVATE) | <b>SIGNALIZED INTERSECTIONS</b> |
| MAJOR ARTERIAL                              | MINOR ARTERIAL | LOCAL STREET (PUBLIC OR PRIVATE)                           | EXISTING                        |
| COLLECTOR                                   |                |  | NEW                             |
|   |                |  | TO BE REMOVED                   |











# Clackamas Regional Center Area Design Plan Transit Network



## CLACKAMAS COUNTY COMPREHENSIVE PLAN MAP X-CRC-6

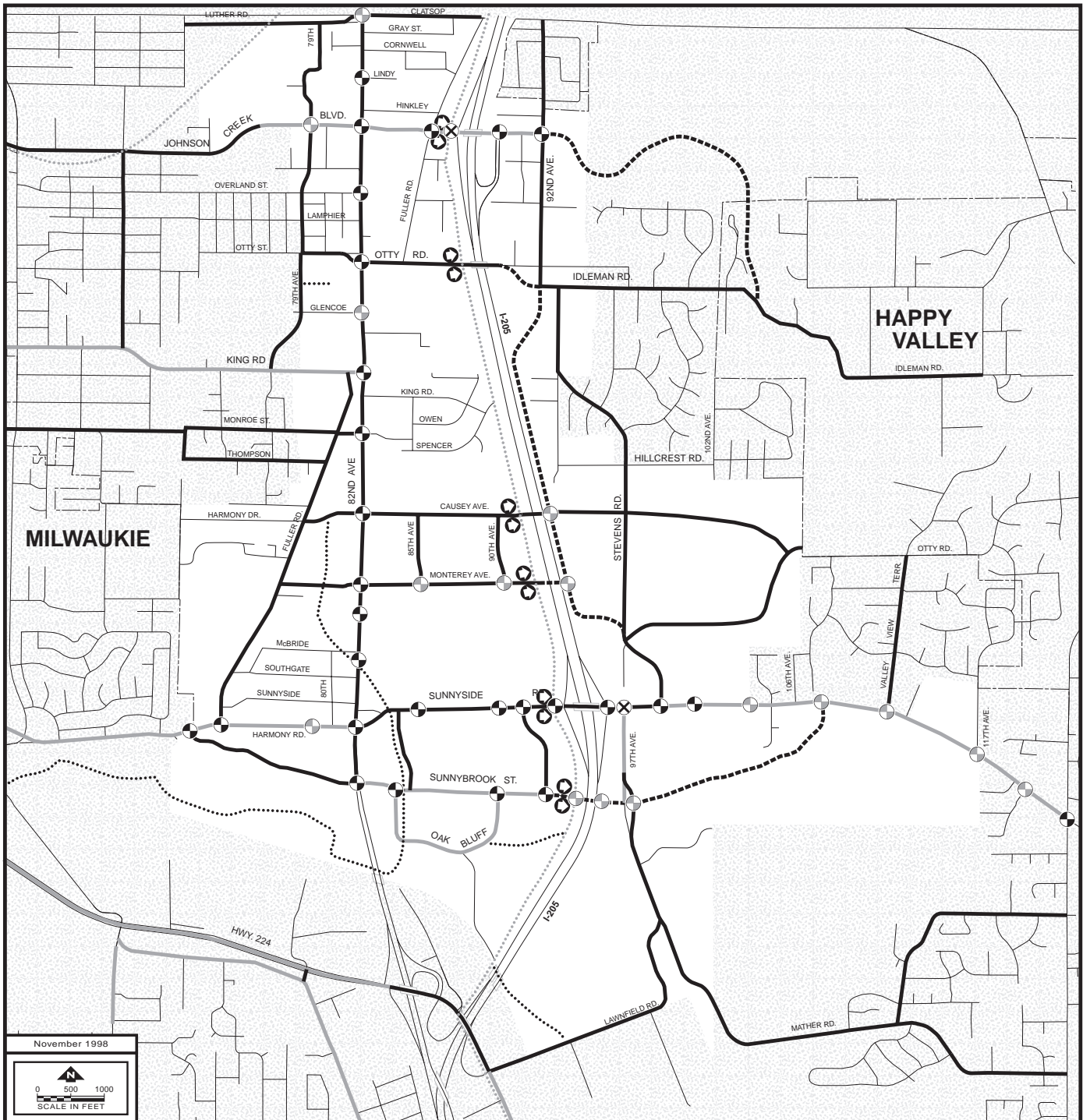
 CRC STUDY AREA  
(STUDY AREA IN WHITE)

PROPOSED ADDITIONAL TRANSIT NETWORK

-  REGIONAL RAPID BUS (3-10 min.)
-  FREQUENT BUS (10 min.)
-  PRIMARY BUS (15 min.)
-  CONCEPTUAL LOOP SHUTTLE (7-10 min.)
-  POTENTIAL LIGHT RAIL
-  PARK & RIDE

EXISTING TRANSIT NETWORK

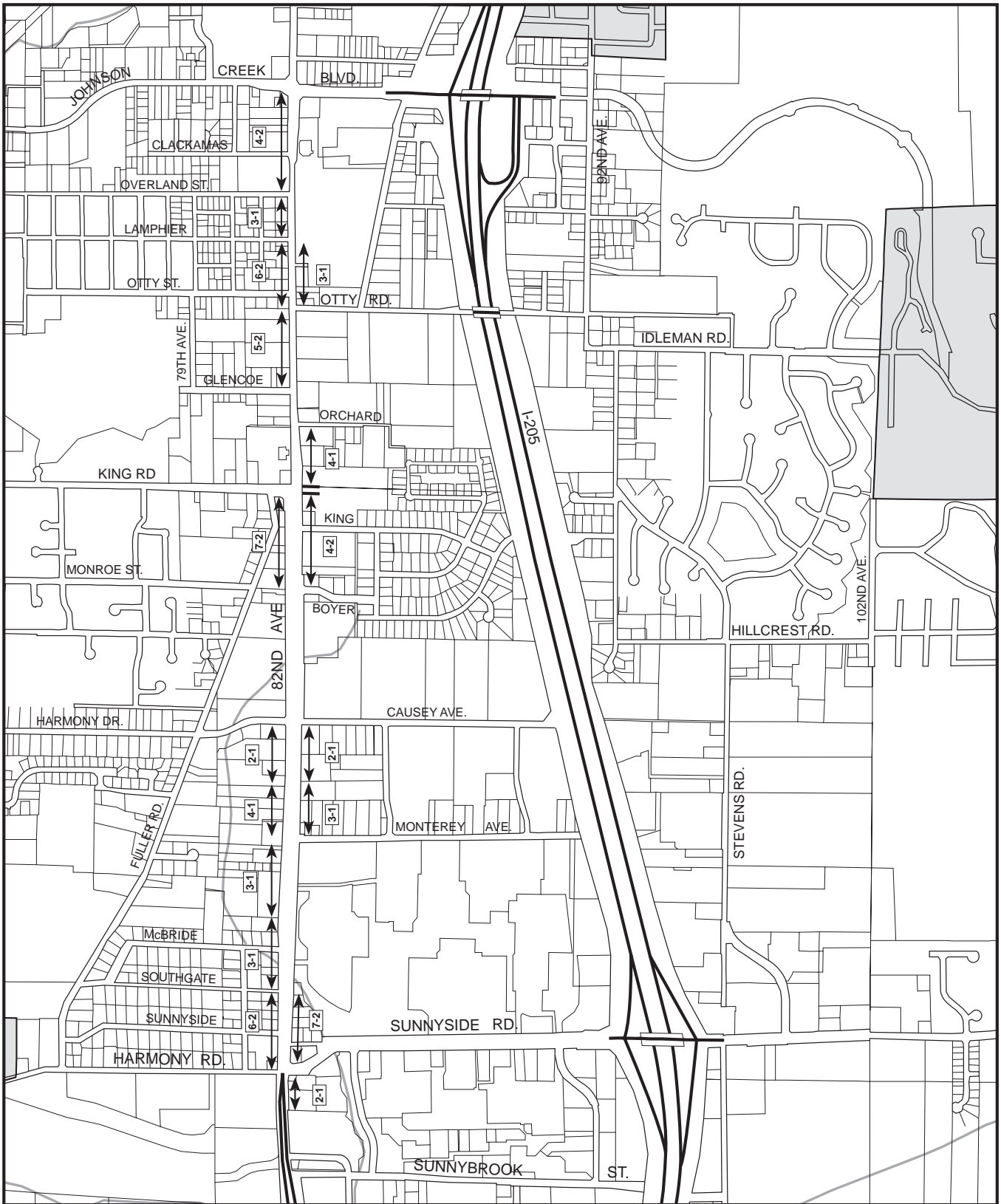
-  PRIMARY BUS (15 min.)
-  PEAK ONLY



# Clackamas Regional Center Area Design Plan Bikeway And Path Network

## CLACKAMAS COUNTY COMPREHENSIVE PLAN MAP X-CRC-7

- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li> CRCA DESIGN PLAN AREA (STUDY AREA IN WHITE)</li> <li> EXISTING BIKEWAY</li> <li> PROPOSED BIKEWAY</li> <li> COMMITTED NEW ROAD (WILL INCLUDE BIKEWAY)</li> </ul> | <ul style="list-style-type: none"> <li> EXISTING MULTI-USE TRAIL</li> <li> PROPOSED MULTI-USE TRAIL</li> <li> CONNECTIONS TO MULTI-USE TRAIL</li> </ul> | <p>SIGNALIZED INTERSECTIONS</p> <ul style="list-style-type: none"> <li> EXISTING</li> <li> NEW</li> <li> TO BE REMOVED</li> </ul> |
|--|---|---|

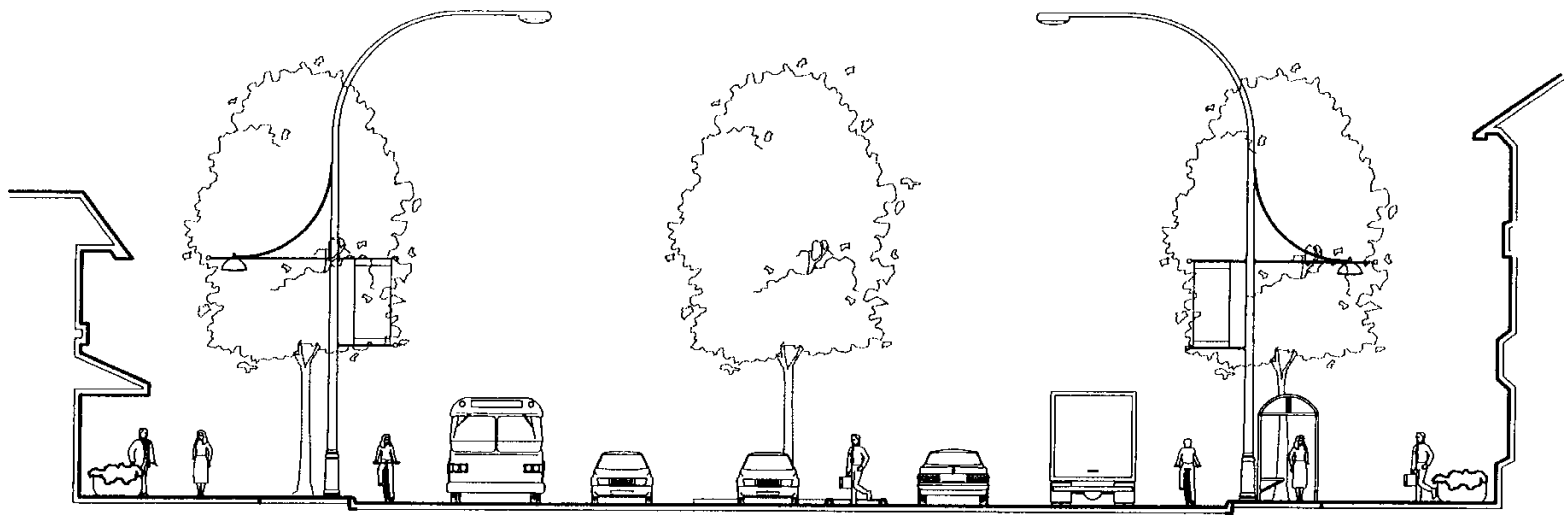


**Clackamas Regional Center Area Design Plan**  
**82nd Avenue Access Management Targets**

CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN  
**MAP X-CRC-8:**

EXAMPLE **4-2** Reduce Driveways from 4 to 2 for this Segment





CRCA  
PROPOSED  
STANDARD

PED. ZONE	FURN. ZONE	BIKE LANE	TRAVEL LANE	TRAVEL LANE	TURN REFUGE	PED. REFUGE	TRAVEL LANE	TRAVEL LANE	BIKE LANE	FURN. ZONE	PED. ZONE	BUILDING SETBACK
10'	8'	5-6'	11'	11'	12'	4'	11'	11'	5-6'	8'	10'	5' MIN.
(MEDIAN)												
106-108' ROW												

EXISTING  
ARTERIAL  
STANDARD

(TURN LANE)												UTIL. EASE.
6-8'	7'	6'	12'	12'	14'	12'	12'	6'	7'	6-8'	UTIL. EASE.	
5'	100' - 104' ROW										5'	
(W/O UTILITY EASEMENT)												

NOTES FOR EXISTING COUNTY STANDARDS:  
 1. PLANTER STRIP INCLUDED ON 5 LANE ARTERIALS ONLY  
 2. UTILITY EASEMENT MAY BE REQUIRED OUTSIDE OF RIGHT-OF-WAY

## Clackamas Regional Center Area Design Plan

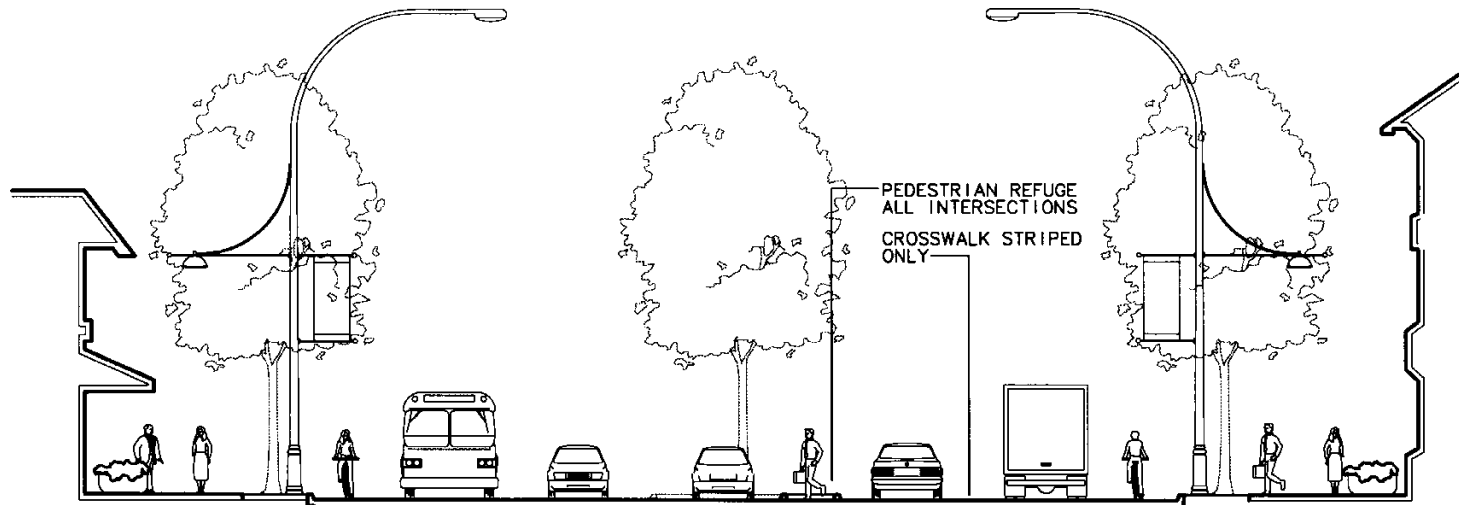
### 82nd Avenue Regional Boulevard

(Gateway Intersections)

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

●

# FIGURE X-CRC-1



CRCA  
PROPOSED  
STANDARD

PED. ZONE	FURN. ZONE	BIKE LANE	TRAVEL LANE	TRAVEL LANE	TURN LANE	PED. REFUGE	TRAVEL LANE	TRAVEL LANE	BIKE LANE	PLANT STRIP	PED. ZONE	BUILDING SETBACK
8'	6'	5-6'	11'	11'	12'	4'	11'	11'	5-6'	6'	8'	5' MIN.
(MEDIAN)												
98-100' ROW												

EXISTING  
ARTERIAL  
STANDARD

(TURN LANE)												
UTIL. EASE.	6-8'	7'	6'	12'	12'	14'	12'	12'	6'	7'	6-8'	UTIL. EASE.
5'	100' - 104' ROW											5'
(W/O UTILITY EASEMENT)												

NOTES FOR EXISTING COUNTY STANDARDS:

1. PLANTER STRIP INCLUDED ON 5 LANE ARTERIALS ONLY

2. UTILITY EASEMENT MAY BE REQUIRED OUTSIDE OF RIGHT-OF-WAY

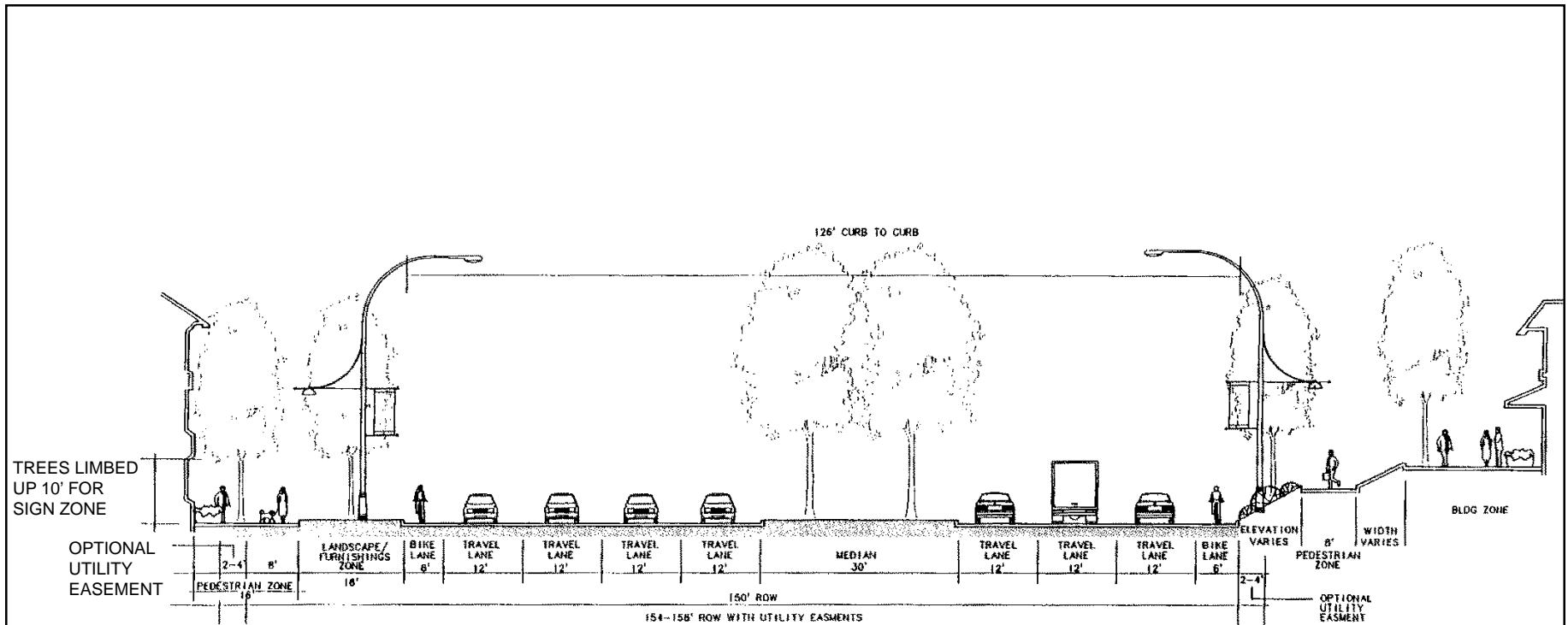
## Clackamas Regional Center Area Design Plan

### 82nd Avenue Regional Boulevard

(Between Gateway Intersections)

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

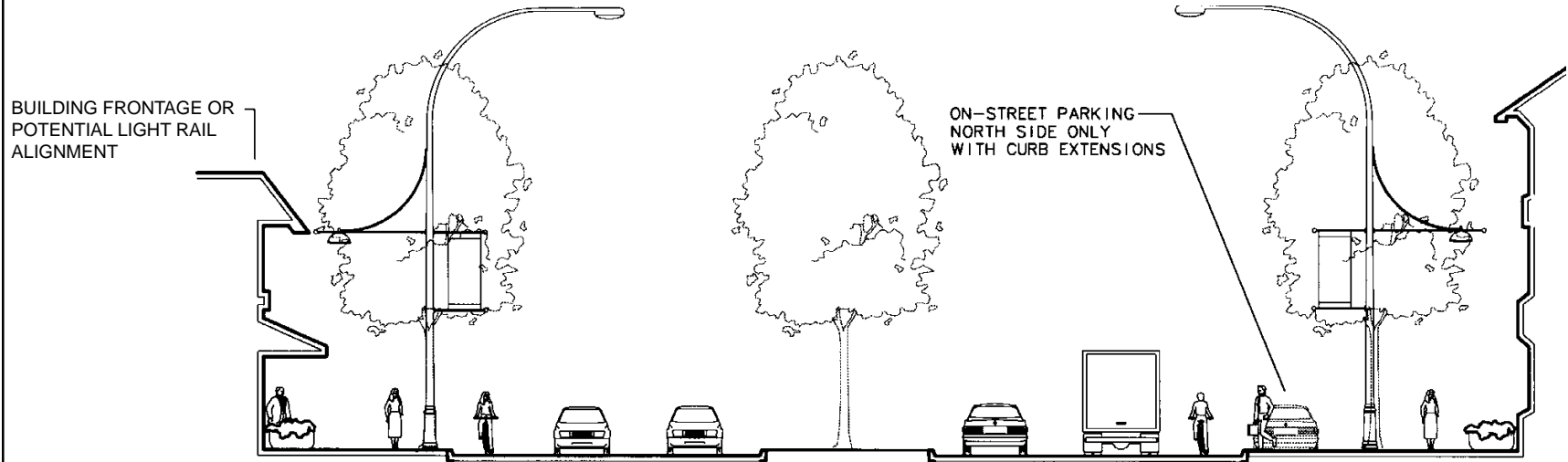
●  
**FIGURE X-CRC-2**



**Clackamas Regional Center Area Design Plan**  
**Sunnyside Road**

CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN

●  
**FIGURE X-CRC-3**



CRCA  
PROPOSED  
STANDARD

PEDESTRIAN/ FURNISHING ZONE	BIKE LANE	TRAVEL LANE	TRAVEL LANE	MEDIAN	TRAVEL LANE	TRAVEL LANE	BIKE LANE	PARKING	PEDESTRIAN/ FURNISHING ZONE	BUILDING SETBACK
12'	5-6'	11'	11'	16'	11'	11'	5-6'	8'	12'	5' MIN.
102-104' ROW										

EXISTING  
ARTERIAL  
STANDARD

UTIL. EASE. 5'	13 - 15' W/PLANTER	6'	12'	12'	TURN LANE 14'	12'	12'	6'	13 - 15' W/PLANTER	UTILITY EASEMENT 5'
100' - 104' ROW (W/O UTILITY EASEMENT)										
									PARKING N/A	

NOTES:  
PLANTER STRIP INCLUDED ON 5 LANE  
ARTERIALS ONLY  
UTILITY EASEMENT MAY BE REQUIRED  
OUTSIDE OF RIGHT-OF-WAY  
STREET SECTION SUBJECT TO  
CHANGE IN COORDINATION  
WITH LRT ALIGNMENT

## Clackamas Regional Center Area Design Plan

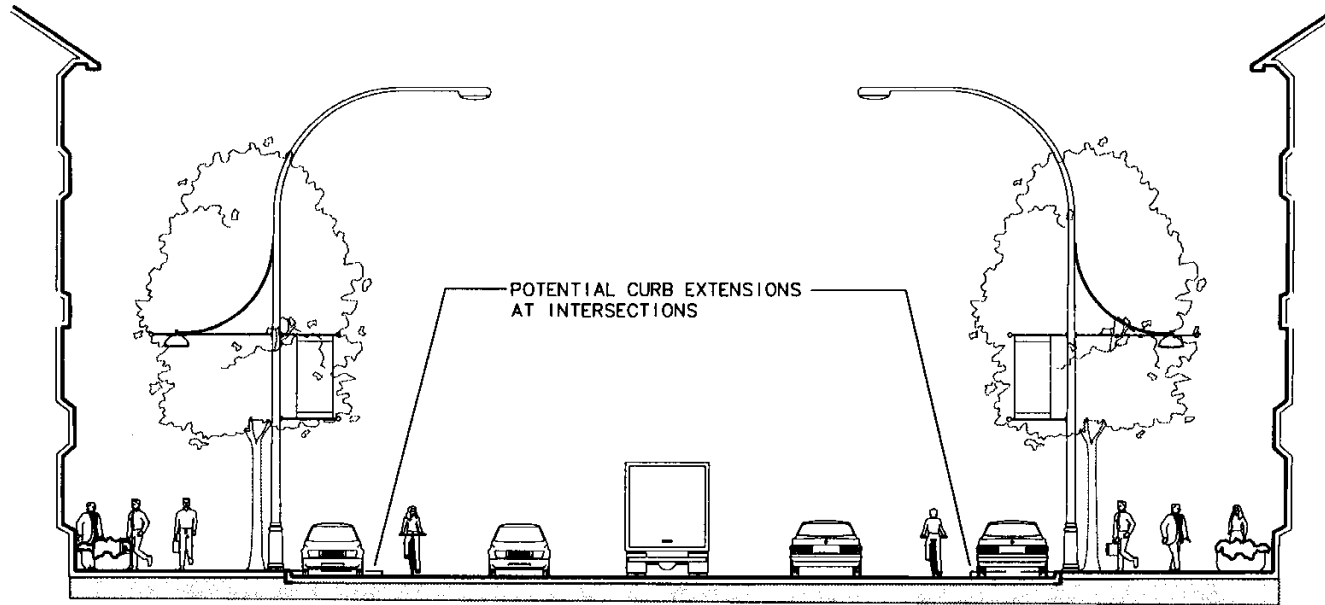
### Harmony Road Regional Boulevard

(Fuller Road to 82nd Avenue)

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

●

# FIGURE X-CRC-4



CRCA  
PREFERRED  
(3 LANES)

PED./FURN. ZONE	PARKING	BIKE LANE	TRAVEL LANE	CONTINUOUS TURN LANE	TRAVEL LANE	BIKE LANE	PARKING	PED./FURN. ZONE	BUILDING SETBACK
12'	8'	6'	12'	14'	12'	6'	8'	12'	5' MIN.
90' ROW									

CRCA  
MINIMUM

10'	7'	5'	11'	12'	11'	5'	7'	10'
78' ROW								

EXIST.  
MINOR ARTERIAL  
STANDARD

UTIL. EASE.	6-8'	6'	12'	14'	12'	6'	6-8'	UTIL. EASE.
5'	60-66'							5'
PARKING N/A		(W/O UTILITY EASEMENT)					PARKING N/A	

NOTES:  
UTILITY EASEMENT MAY BE REQUIRED  
OUTSIDE OF RIGHT-OF-WAY  
STREET SECTION SUBJECT TO CHANGE  
IN COORDINATION WITH LRT ALIGNMENT

## Clackamas Regional Center Area Design Plan

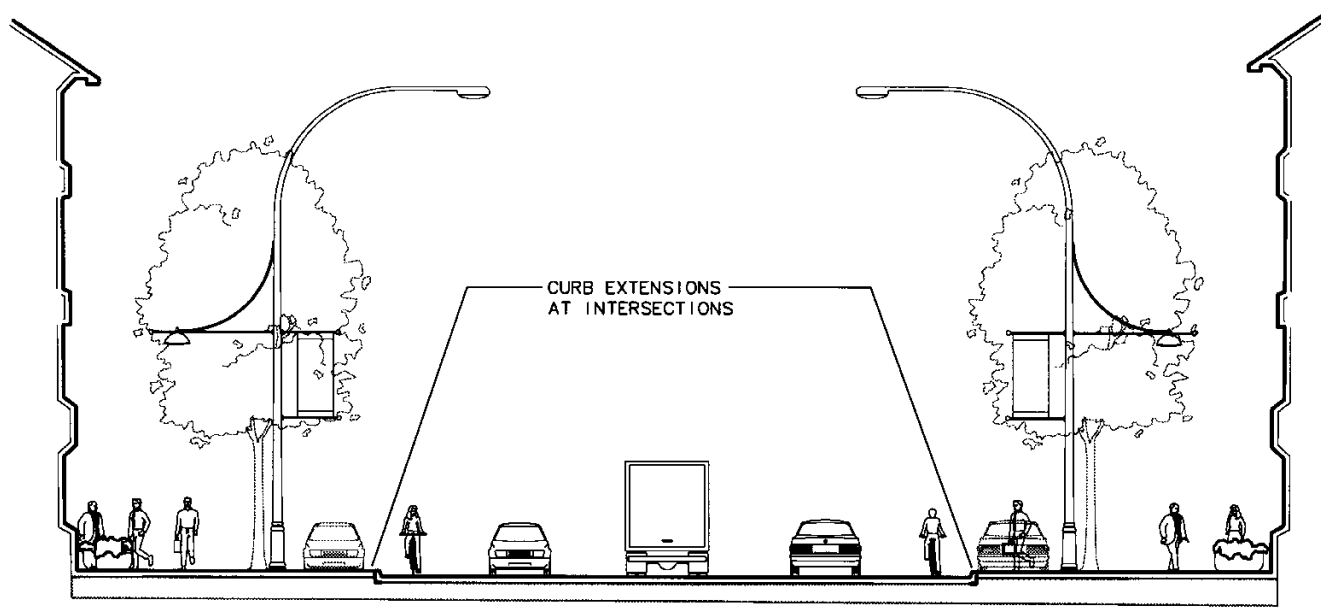
### Monterey Avenue Main Street

(I-205 to 82nd Ave. with Causey Ave. Overpass)

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

●  
**FIGURE X-CRC-5**





CRCA  
PROPOSED  
STANDARD

PED./FURN. ZONE	PARKING	BIKE LANE	TRAVEL LANE	CONTINUOUS TURN LANE	TRAVEL LANE	BIKE LANE	PARKING	PED./FURN. ZONE	BUILDING SETBACK
12'	8'	5-6'	11'	12'	11'	5-6'	8'	12'	5' MIN.
84-86' ROW									

EXIST.  
MINOR ARTERIAL  
STANDARD

UTIL. EASE.	6-8'	6'	12'	14'	12'	6'	6-8'	UTIL. EASE.
5'	60-66'							5'
	PARKING N/A		(W/O UTILITY EASEMENT)			PARKING N/A		

NOTE: UTILITY EASEMENT MAY BE  
REQUIRED OUTSIDE OF RIGHT-OF-WAY

## Clackamas Regional Center Area Design Plan

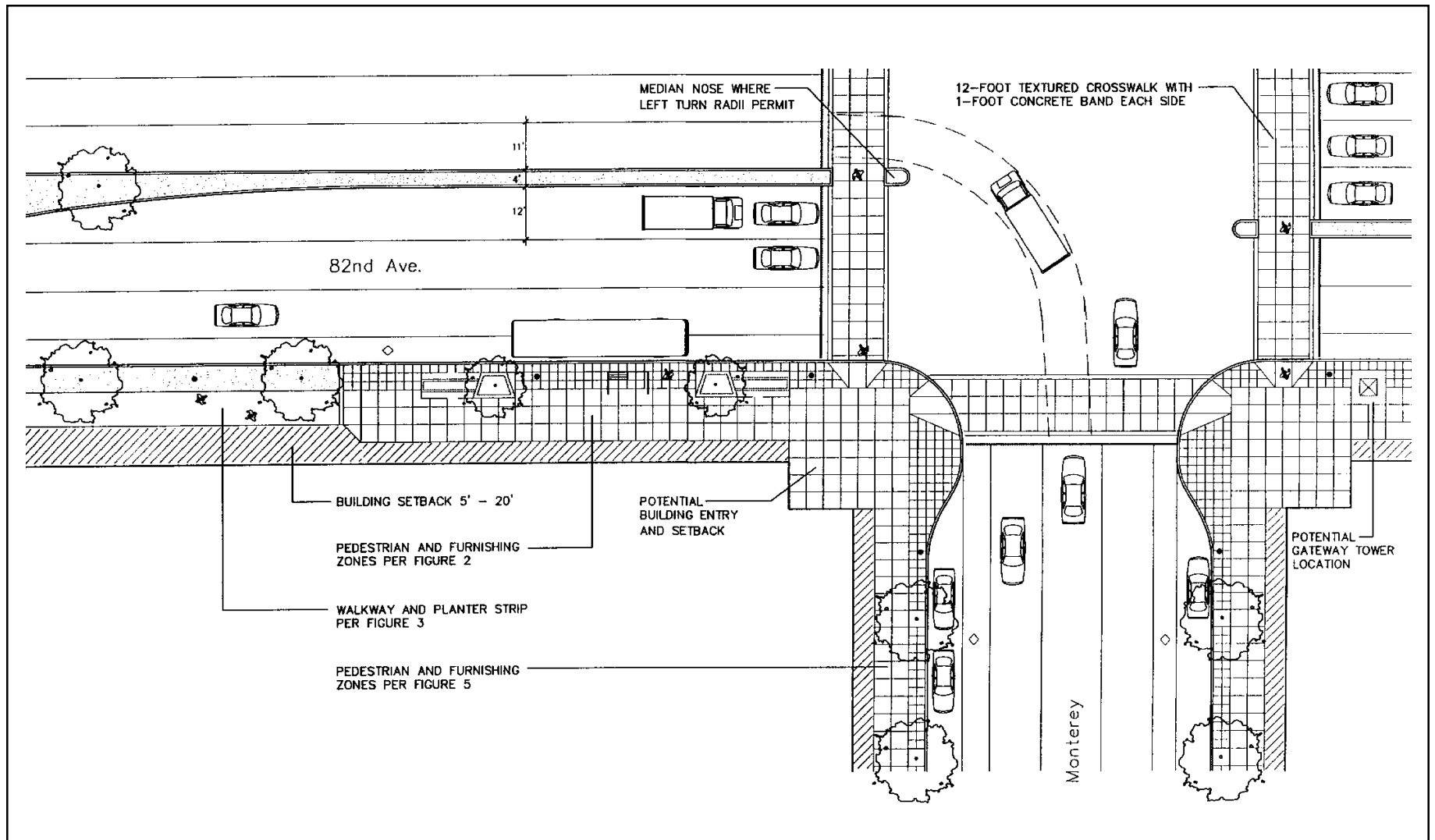
### Causey Avenue Main Street

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(I-205 to 82nd Avenue)

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

●  
**FIGURE X-CRC-6**

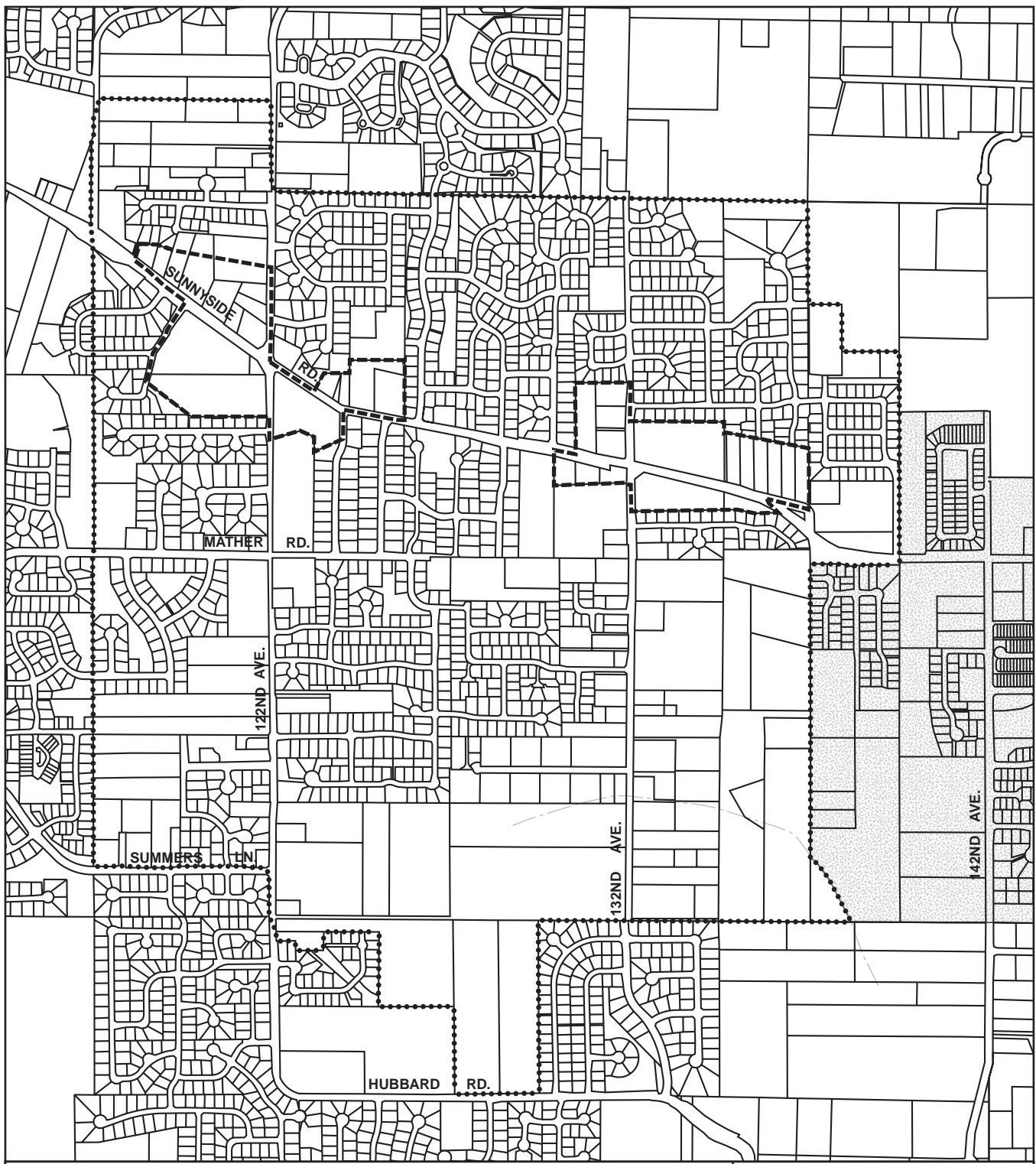


**Clackamas Regional Center Area Design Plan**  
**Gateway Intersection**  
 (Boulevard and Main Street)

CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN




●

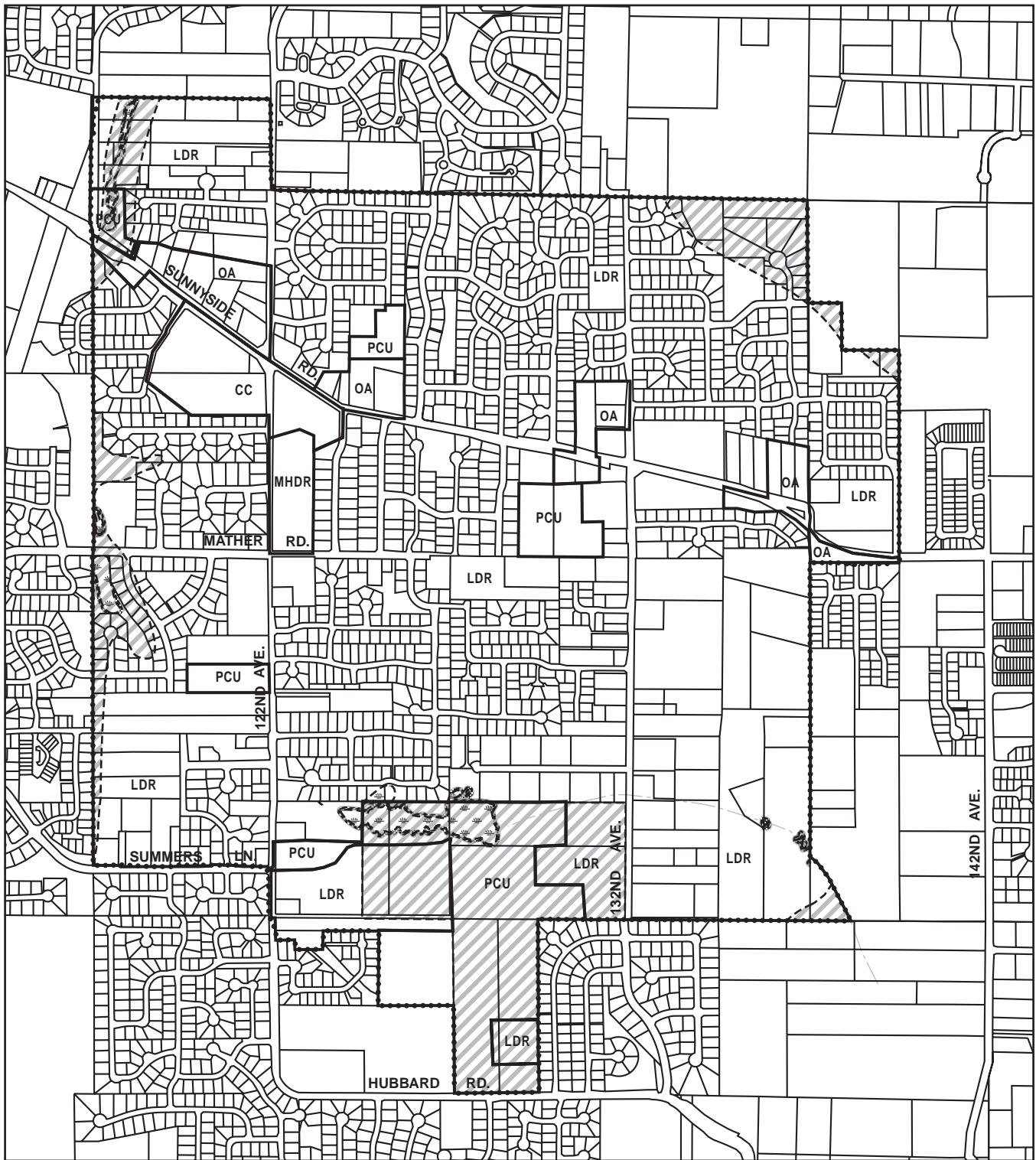
**FIGURE X-CRC-7**



**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

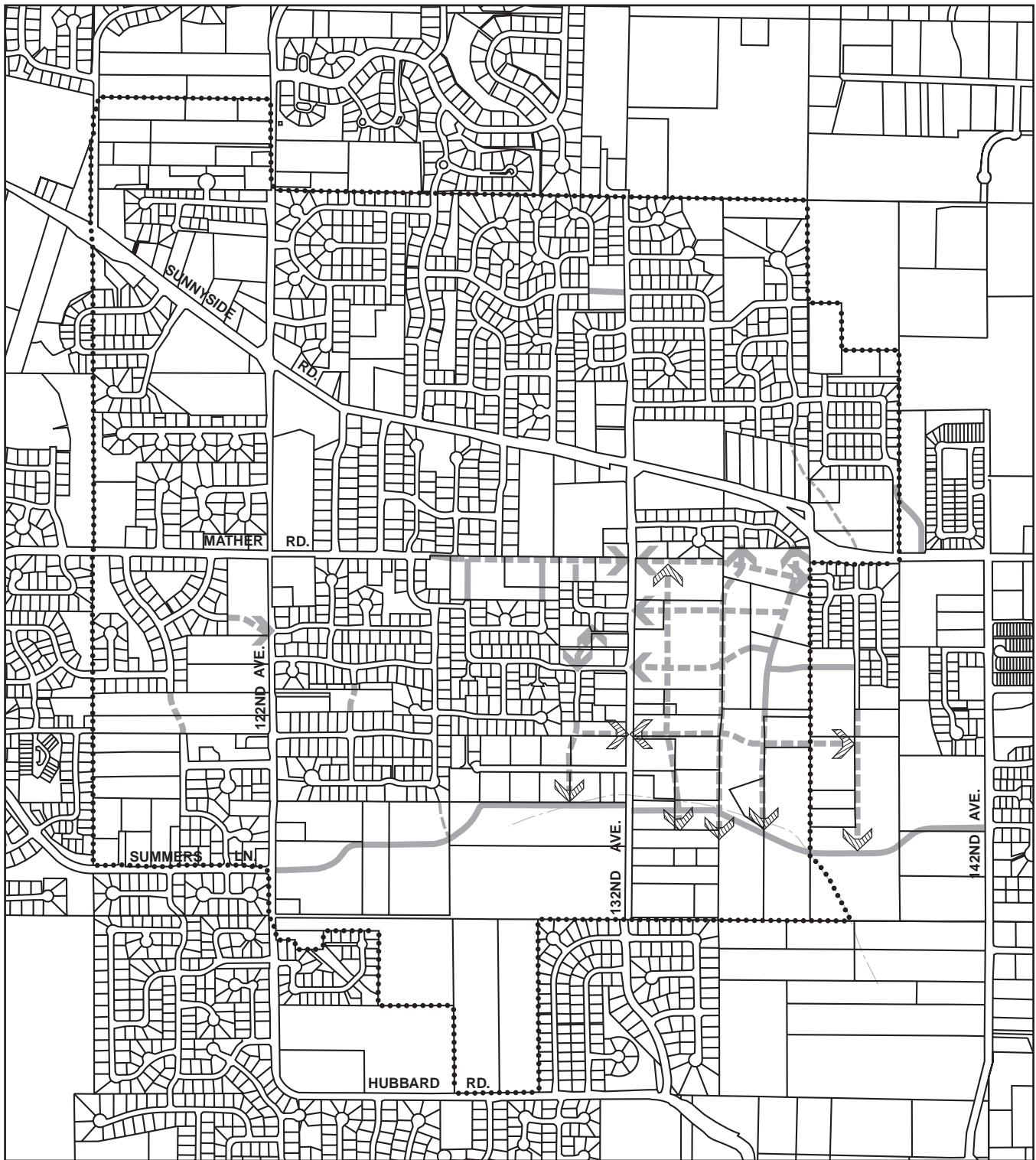


**Sunnyside Corridor Community Plan  
Land Use Plan Map**

**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        |   |                     |











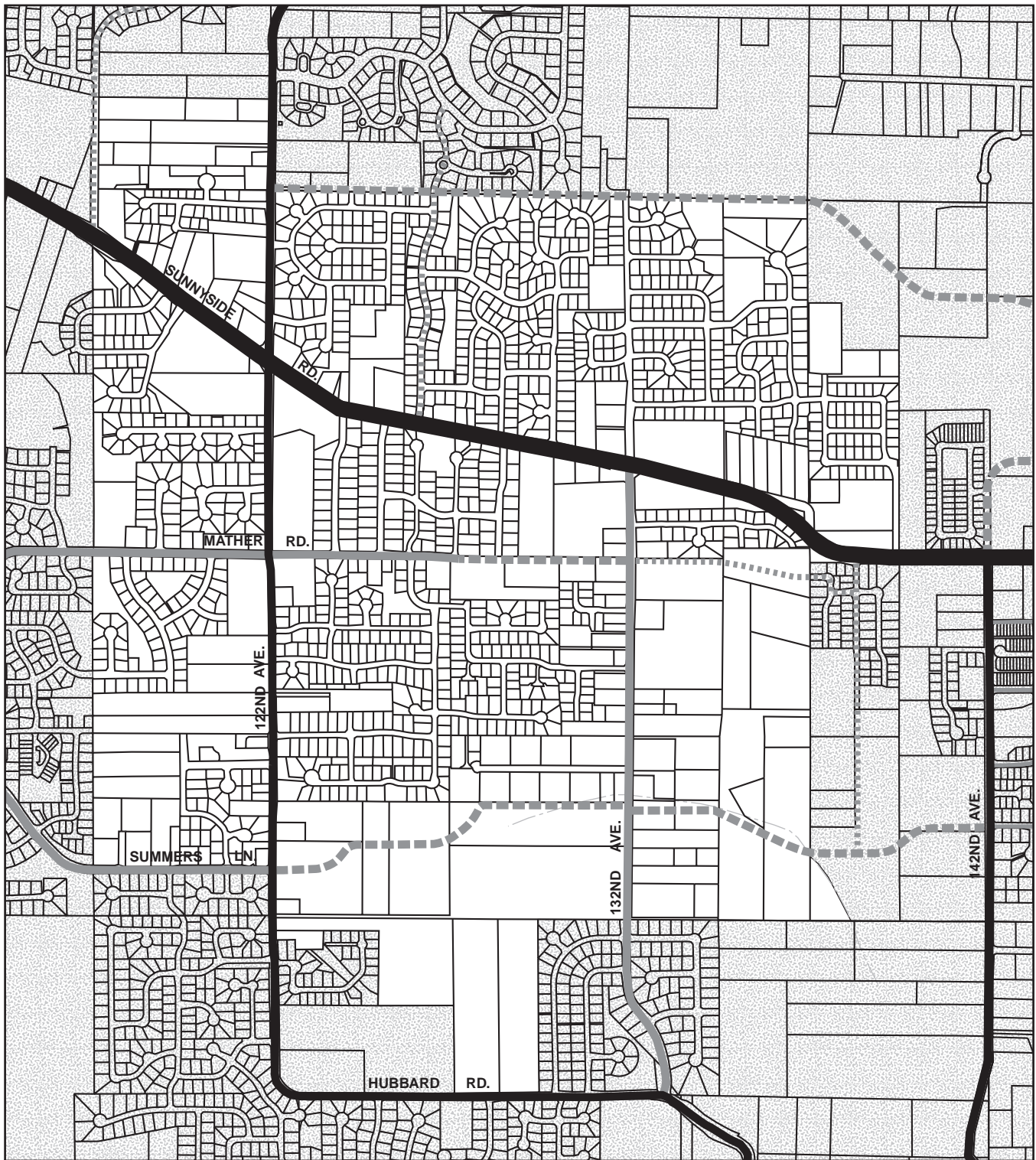
**Sunnyside Corridor Community Plan**  
**New Streets**

CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN  
**MAP X-SC-3**

 COMMUNITY PLAN AREA

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

 NEW CONNECTION, LOCATION DETERMINED  
 NEW CONNECTION, LOCATION FLEXIBLE

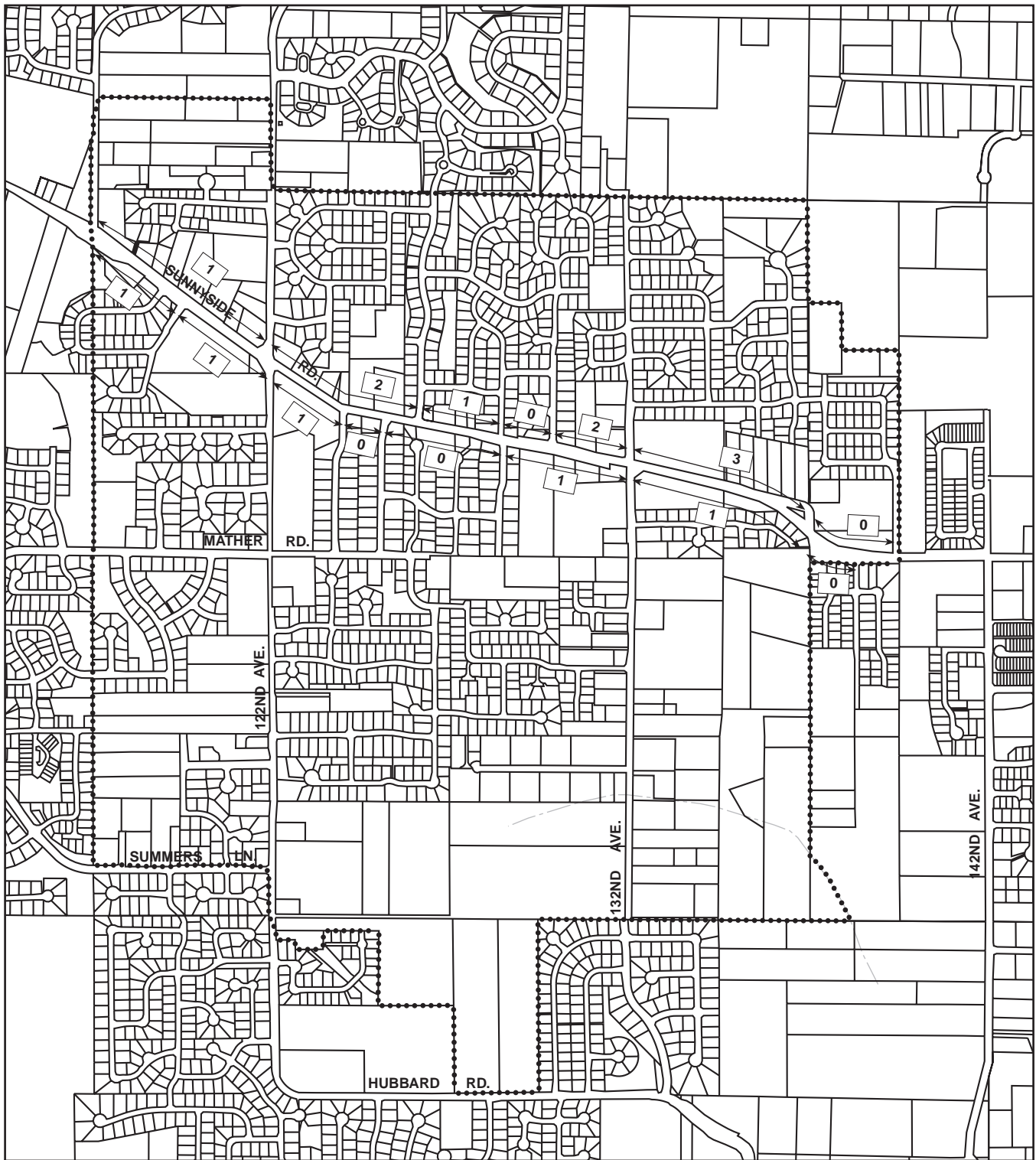


**Sunnyside Corridor Community Plan  
Functional Classification**

**CLACKAMAS COUNTY  
COMPREHENSIVE PLAN  
MAP X-SC-4**

 <p>COMMUNITY PLAN AREA (PLAN AREA IN WHITE)</p>	 <p>EXISTING RD.</p>	 <p>PROPOSED RD.</p>	<p>MAJOR ARTERIAL MINOR ARTERIAL COLLECTOR CONNECTOR</p>
			
			
			
			



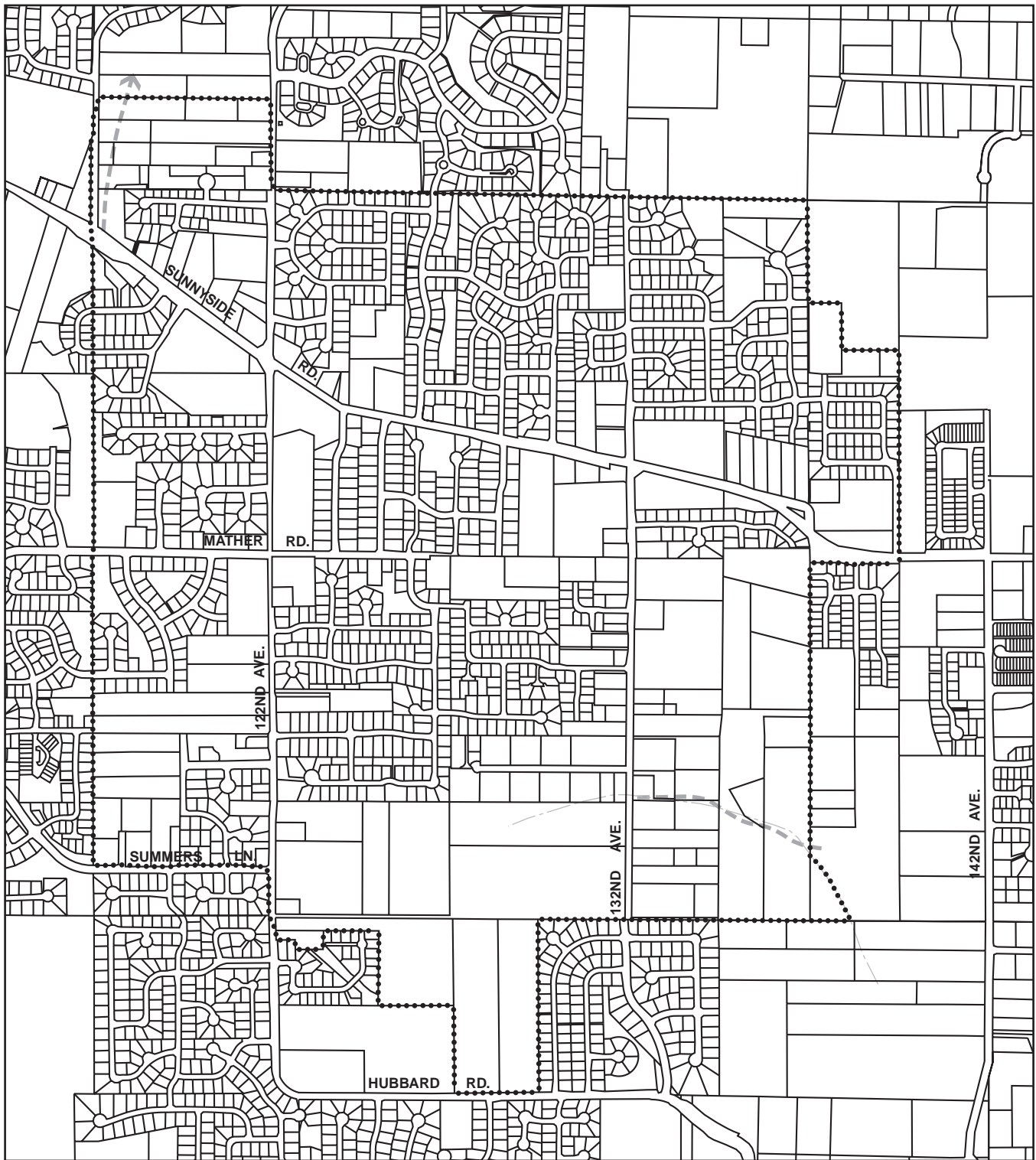


**Sunnyside Corridor Community Plan**  
**Sunnyside Road Access Management Targets**

CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN  
**MAP X-SC-5**

 COMMUNITY PLAN AREA

 NUMBER OF DRIVEWAYS TARGETED IN THIS SEGMENT

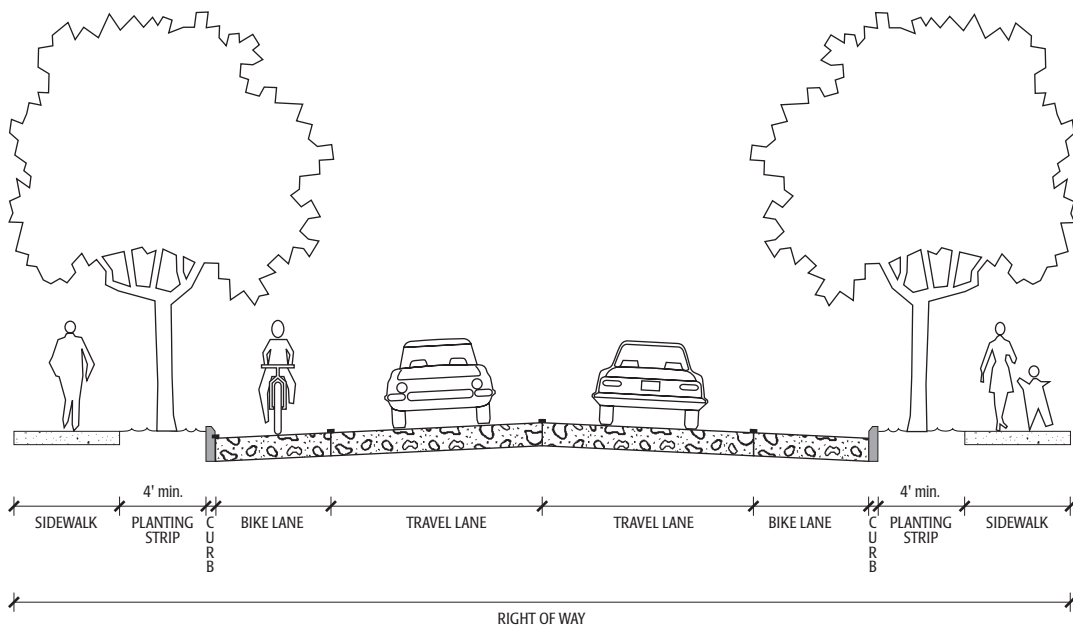


**Sunnyside Corridor Community Plan  
Trails**

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN  
**MAP X-SC-6**

 COMMUNITY PLAN AREA    
  TRAIL





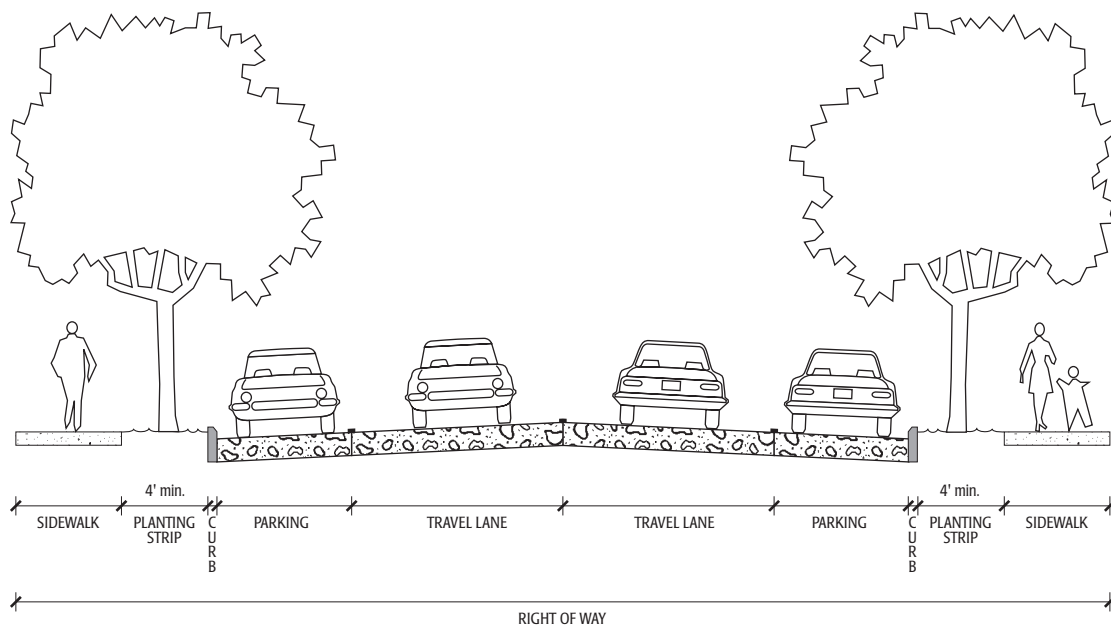
**Sunnyside Corridor Community Plan  
132nd Avenue South of Sunnyside Rd.**

**Street Cross Section**

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN



**FIGURE X-SC-1**



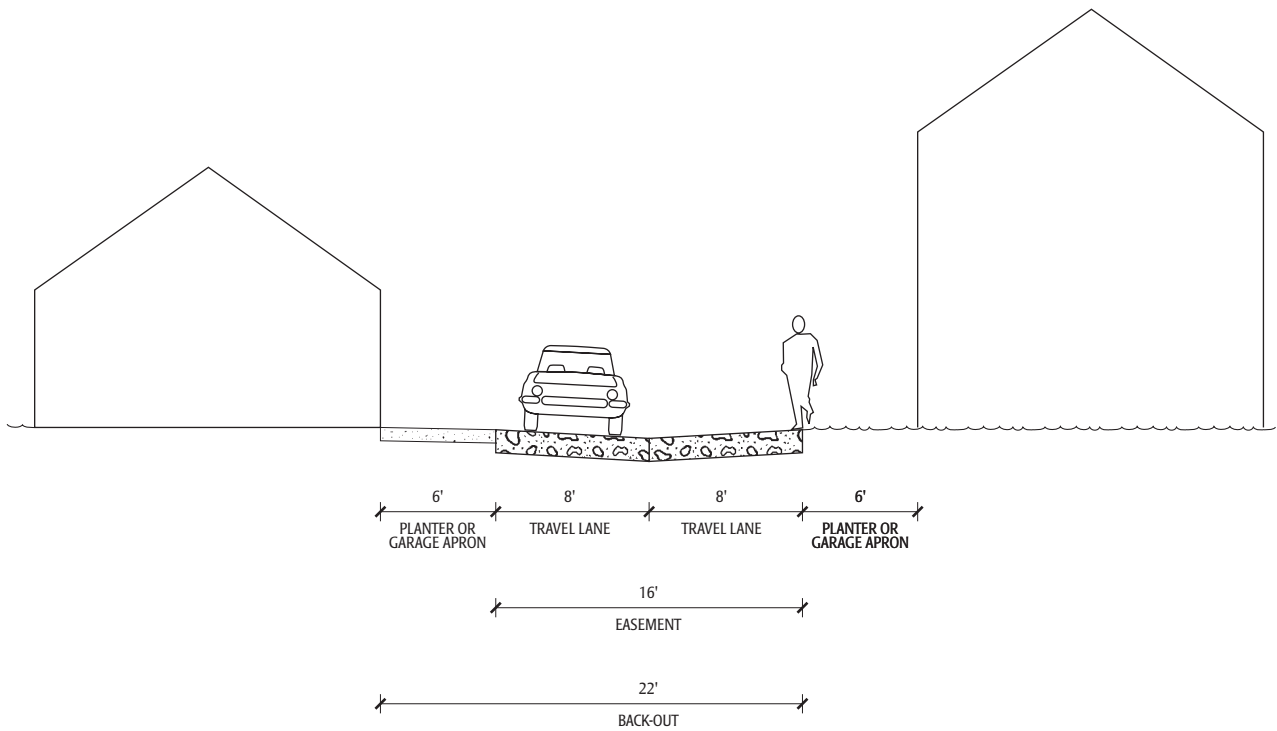
**Sunnyside Corridor Community Plan  
New Local Streets**

**Street Cross Section**

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN



**FIGURE X-SC-2**



**Sunnyside Corridor Community Plan**  
**Alley Cross Section**

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CLACKAMAS COUNTY  
 COMPREHENSIVE PLAN



**FIGURE X-SC-3**