

MOUNT HOOD COMMUNITY PLAN

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

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

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

LAND USE

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

VILLAGES

1.0 Government Camp

- 1.1 The Government Camp Village is identified as an Urban Unincorporated Community in compliance with Chapter 660, Division 22 of the Oregon Administrative Rules (OARs).
- 1.2 Provide for a high intensity development character in Government Camp Village.
- 1.3 Development of US Forest Service lands inside the Government Camp Urban Unincorporated boundary may occur only if it complies with the US Forest Service regulations. Upon completion of a land transfer to private ownership, development of these lands may occur only if it complies with the provisions of this Plan.

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

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

RESIDENTIAL

- 1.0 Property may be zoned Recreational Residential in areas designated Rural within the Mount Hood Community Plan, when all of the following criteria are met:
 - a. Parcels are generally two acres or smaller,
 - b. The area is significantly affected by development, and
 - c. There are no natural hazards and the topography and soils conditions are well-suited for the location of homes.

- 2.0 Allow density bonuses within the Low Density Residential and Mountain Recreation designations pursuant to the County Comprehensive Plan and the Zoning and Development Ordinance. In the Mountain Recreation designation, units allowed through the density bonus provisions shall be developed with the same unit size mixture as provided in the base density for the development. For example, if a development is proposed with a mixture of 50 units of 700 square feet each, and 50 units of 500 square feet each, and a bonus density of 10 units is allowed -- the ten units shall include 5 units of 700 square feet each, and 5 units of 500 square feet.

- 3.0 The Low Density Residential designation of the Comprehensive Plan may be applied within the Mt. Hood urban area, according to the policies for designation stated in the Comprehensive Plan.

- 4.0 Implement the Low Density Residential designation by application of only the Hoodland Residential (HR) zone, which shall allow a maximum density of four (4) units per acre.

- 5.0 The Mountain Recreation areas provide overnight housing for the users of the recreational facilities in the Mt. Hood area, in addition to providing for a variety in housing types at a density higher than allowed in the Low Density Residential areas. Uses allowed include multifamily residential structures, resort housing and motels.
 - 5.1 The Mountain Recreation designation may be applied within the Mt. Hood urban area, when all of the following criteria are met:
 - a. The land is located within a village district,
 - b. Public sewer and a State approved water system are available and adequate to support the development potential of this designation, and

c. The pattern and character of development within the area would not be adversely affected by uses allowed by this designation.

5.2 Encourage a variety of housing types and individual unit sizes within the Mountain Recreational Resort zoning district by calculating density based on floor area. The unique character of individual village districts shall be recognized by varying density according to the village.

5.3 Government Camp Densities: Mountain Recreational Resort zoning district - 22 units per acre. Rural Tourist Commercial zoning district - 50 units per acre for resort accommodations.

5.31 The following development level chart establishes the densities for other village districts:

Floor Area per unit in sq. ft.	No. of units per acre at development levels	
	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.

COMMERCIAL

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

OPEN SPACE

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

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

PUBLIC FACILITIES

- 1.0 Prohibit lot divisions or development requiring subsurface disposal systems, within the Mt. Hood urban area, except for:
 - a. Remodeling or additions to existing development, when such remodeling would not require any alteration or expansion of the subsurface disposal system, or
 - b. Parcels with unique topographic or other natural features which make sewer extension impractical.
- 2.0 Insure that subsurface sewage disposal systems in non-urban areas are allowed only when lot sizes give maximum assurance that no failures will occur that could require annexation to the Hoodland Service District.
- 3.0 Extension of sanitary sewer service to lands outside an unincorporated community boundary may be allowed in the Hoodland Service District or Government Camp Sanitary District boundary only under the following circumstances:
 - a. The property is located within an acknowledged unincorporated community boundary or the sanitary sewer line extension is the only practicable alternative to resolve a health hazard as defined by the State of Oregon; or
 - b. The sanitary sewer extension provides service to an existing, committed nonforest public use area, such as Timberline Lodge and its related facilities, Silcox Hut, or a Boy Scout lodging facility provided: (1) these uses are approved as an exception to Goal 4 of the Statewide Planning Goals; and (2) the extension is approved as an exception to Goal 11 of the Statewide Planning Goals.
- 4.0 The Government Camp Water System Master Plan, dated July 2000, shall be acknowledged as the water element of the Government Camp Facilities Plan.

- 5.0 The Government Camp Sanitary District Wastewater Facilities Plan, dated October 1995, shall be acknowledged as the sanitary sewer element of the Government Camp Facilities Plan.
- 6.0 The Rural Transportation System Plan, approved February 14, 2001, shall be acknowledged as the transportation element of the Government Camp Facilities Plan.
- 7.0 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. Multorpor 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 Multorpor 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 Multorpor/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.

MAPS

Mount Hood Community Plan

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

KRUSE WAY DESIGN PLAN

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

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

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

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

According to the Buttke report, the assumed future land uses in the southwest quadrant of the Kruse Way Corridor are 200 multifamily dwellings, 300 hotel rooms, 193 thousand gross square feet (TGsf) of buildings for Service/Commercial (General retail, service retail, banks, restaurants), and 2,355 TGsf of Office. See Table 1, page 7 of Buttke report.

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

LAND USE

Design Plan Area

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

Plan Policies

- 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.
- 2.0 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".

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

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

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

7. Bangy Road and Meadows Road

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

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

8. Carman Drive and Meadows/Quarry Roads

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

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

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

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

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

9. Carman Drive and Bonita/Waluga Roads

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

10. Meadows Road

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

TRANSPORTATION MANAGEMENT

1. Traffic generation limitations will be placed on development to assist in maintaining the capacity of Kruse Way at p.m. peaks with consideration given to the Lake Oswego Comprehensive Plan General Policy VIII, 2a. which states " Congested Travel during peak hours will be acceptable, at D level of service, where other community policies put priority on minimum street widths".
2. A developer proposing a development which generates more traffic than the assumptions in the Buttke report (see page 7, Table 1 Assumed Future Land Use), shall submit a traffic management analysis to the County which demonstrates that any increased traffic is compatible with the 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".

Pedestrian & Bicycle Improvements

1. Pedestrian overcrossings of Kruse Way shall be installed if and when conflicts between pedestrian and turning vehicles occur and require this separation to reduce accident hazards or to increase street capacity.
2. Require each development to provide its share of an interconnected system of pedestrian/bikeways which links transit facilities and development and is separated from the improved portion of the right-of-way.
3. All pedestrian/bikeways shall be developed to ODOT standards.
4. Require each development to provide covered bicycle racks near building entrances, where appropriate.
5. Require each development to provide 8 foot sidewalks along all County road rights-of-way pursuant to the criteria in Section 1007.05B(2) of the Clackamas County Zoning and Development Ordinance.

PUBLIC FACILITIES

1. Sanitary sewer service is provided by the Unified Sewerage Agency (Washington County).
2. Water service is provided by the Lake Grove Water District.
3. Storm Drainage and Erosion Control Plans shall conform to Section 1008 of the Clackamas County Zoning and Development Ordinance.

4. Encourage provision of street lighting for all developments within the Kruse Way area.
5. Street lighting is required, and subject to Section 1006 of the Clackamas County Zoning and Development Ordinance.
6. Fire protection is provided by Tualatin Fire District #64, and Lake Grove Fire District #57.

FINANCIAL ALTERNATIVES

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

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

Local Revenue Alternatives

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

1. Developer Contributions

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

2. Service District

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

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

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

3. Local Improvement District (LIDs)

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

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

4. Local Development Corporation (LDC)

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

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

Federal, State and Regional Revenue Alternatives

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

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

MAPS

Kruse Way Design Plan

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

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.

MAPS & FIGURES

Sunnyside Village Plan

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

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

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

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

CLACKAMAS REGIONAL CENTER AREA DESIGN PLAN

INTRODUCTION

Moving Towards a Preferred Future

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

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

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

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

LAND USE POLICIES

I. LAND USE POLICIES GENERALLY

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

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

- 2.4 design features that encourage and support pedestrian use:
- 2.5 Allow land uses that generate pedestrian activity and transit ridership.
- 2.6 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:

- 3.2 Establish minimum densities to help meet local and regional housing needs.
- 3.3 Provide for multifamily residential uses within walking distance of public transportation, parks, schools, employment areas and local shopping areas.
- 3.4 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.

- 3.1 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.
- 3.2 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.
- 3.3 Apply the Planned Mixed Use designation within the Regional Center as shown on Map X-CRC-1.
- 2.4 Sites planned for Planned Mixed Use but zoned for other uses may be converted to Planned Mixed Use zoning when:
- a. Adequate transit services are provided to the site; and,
 - b. Minimum site size requirements are satisfied.

3.0 Regional Center Office

- 3.1 Apply the Regional Center Office designation within the Regional Center boundary shown on Map X-CRC-1 to:
- a. Areas with an historical commitment to office use.
 - b. Areas served by high capacity transit service.
 - c. Areas with high visibility from a freeway.
 - d. Areas generally within ½ mile of a freeway interchange.
- 3.2 Provide support services for office development.
- 3.3 Limit retail uses in order to maximize the land available for office uses and to provide for the highest employment density in the Regional Center.

- 3.4 Require a minimum density to help meet regional employment needs, support public transportation and use land more efficiently.
- 3.5 Create walkable districts within the regional center with improvements, urban design features, and urban design standards that encourage and support pedestrian use.
- 3.6 Require master plans of large sites to allow for future development of sites with redevelopment potential.

4.0 Regional Center High Density Residential

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

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

5.0 Regional Center Commercial

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

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

6.0 Amendments to the Clackamas Regional Center Boundary

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

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

III. LAND USE POLICIES FOR CORRIDOR DESIGN TYPE AREAS

1.0 Land uses in Corridors shall be planned to:

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

2.0 Corridor Land Use Designations

A range of land use designations may be applied within a designated Corridor 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.
- 3.4 Existing single family neighborhoods and mobile home parks should be zoned to discourage redevelopment to other uses.

3.0 Corridor Commercial

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.

VII. 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 POLICIES

- 1.0 Construct all roadway improvements identified in Map X-CRC-4 to maintain regional accessibility to the Regional Center and provide a network for all transportation modes that interconnects neighborhoods and districts, 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:

CONGESTION PERFORMANCE STANDARDS (Level of Service)

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

- 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:

CONGESTION PERFORMANCE STANDARDS (Level of Service)

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

- 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 POLICIES

- 1.0 Coordinate with Tri-Met to implement Clackamas Regional Center Design Area transit service improvements planned in the Tri-Met Primary Transit Network and Tri-Met Choices for Livability, and implement additional transit improvements identified on Map X-CRC-6.
- 2.0 Coordinate with Tri-Met, Metro, ODOT, and other agencies in funding and implementing the planned Clackamas Regional Center Design Plan Area transportation improvements identified on Map X-CRC-6.
- 3.0 Coordinate with Tri-Met to implement Light Rail Transit (LRT) service to the Clackamas Regional Center area.
- 4.0 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.

XIII. 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.

MAPS & FIGURES

Clackamas Regional Center Area Design Plan

Map X-CRC-1	Regional Center & Corridors
Map X-CRC-2	Comprehensive Plan Designations
Map X-CRC-3	Urban Design Elements
Map X-CRC-4	Transportation Network (Public & Private)
Map X-CRC-5	Functional Classification
Map X-CRC-6	Transit Network
Map X-CRC-7	Bikeway & Path Network
Map X-CRC-8	82 nd Avenue Access Management Targets
Figure X-CRC-1	82 nd Avenue Regional Boulevard (Gateway Intersections)
Figure X-CRC-2	82 nd Avenue Regional Boulevard (Between Gateway Intersections)
Figure X-CRC-3	Sunnyside Road
Figure X-CRC-4	Harmony Road Regional Boulevard (Fuller Road to 82 nd Avenue)
Figure X-CRC-5	Monterey Avenue Main Street (I-205 to 82 nd Avenue with Causey Avenue Overpass)
Figure X-CRC-6	Causey Avenue Main Street (I-205 82 nd Avenue)
Figure X-CRC-7	Gateway Intersection (Boulevard & Main Street)

SUNNYSIDE CORRIDOR COMMUNITY PLAN

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

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

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

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

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

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

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

GOALS

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

- Protect the character of existing neighborhoods.

POLICIES

I. LAND USE

- 1.0 Map X-SC-2 illustrates the Land Use Plan designations for the Sunnyside Corridor Community Plan Area. The following uses may be allowed: Low Density Residential, Medium High Density Residential, Office Apartment, Community Commercial, and Public and Community Use. Policies directing the application of these plan designations are located in Chapter 4 of this Plan. In addition, policies establishing special standards for these plan designations when applied in the Sunnyside Corridor Community Plan Area are set out in policies 2.0 to 5.0 below.
- 2.0 The Growth Concept Design Type Corridor, as defined in Chapter 4, shall be applied along Sunnyside Road from approximately SE 117th Avenue to SE 138th Avenue. The Corridor Design Type location shall be defined within the Sunnyside Corridor Community Plan as development nodes, which are delineated on Map X-SC-1.
 - 2.2 The development nodes will contain concentrations of higher intensity development, separated by Office Apartment or Low Density Residential uses.
 - 2.3 Corridor Policies 2.1 - 2.5 stated in Chapter 4: Urban Growth Concept shall be applicable to the development nodes.
 - 2.4 The development nodes will include a complementary mix of land uses. The following uses are expected to be found in the Corridor design type area: retail, services, offices, schools, religious facilities, community facilities, and multifamily residential. The following Plan designations may be located within the development nodes: Community Commercial, Office Apartment, Medium High Density Residential and Low Density Residential.
 - 2.5 The Corridor design type development nodes shall not be expanded to include additional land area.

Residential

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

Office Apartment

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

Commercial

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

II. STREETS, ALLEYS AND PEDESTRIAN CONNECTIONS

- 1.0 Integrate land use with the transportation network in the Sunnyside Corridor Community Plan.
- 2.0 All new developments shall provide streets, vehicular connections and pedestrian connections as shown on the Maps X-SC-3 and 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 Southeast 132nd Avenue south of Sunnyside Road shall be constructed to the street standards as depicted in Figure X-SC-1.
 - 4.1 No new residential driveway accesses shall be allowed on SE 132nd Avenue south of Sunnyside Road.
 - 4.2 The fronts or sides of primary dwelling units shall be oriented to SE 132nd Avenue. Back yards shall not line SE 132nd Avenue.
 - 4.3 Facades facing SE 132nd Avenue shall not consist of a blank wall.
- 5.0 New local streets and new connector streets shall comply with the following design standards:
 - 5.1 Orient local streets whenever practical so that at least 50% of the lots front north or south to take advantage of solar access.
 - 5.2 Provide on-street parking, planting strips between sidewalk and street, sidewalks on both sides of the street, street trees, and short pedestrian crossing distances at intersections. Figure X-SC-2 illustrates a typical street cross section.

- 6.0 Street trees listed as prohibited in Section 1600 of the Zoning and Development Ordinance shall not be approved as street trees in the Sunnyside Corridor Community Plan Area.
- 7.0 Provide vehicular and/or pedestrian connections between residential developments, public facilities, neighborhood services, and the collector and arterial street system.
- 8.0 Alleys shall be allowed in all residential districts. All alleys shall be private streets and shall be constructed as depicted in Figure X-SC-3.
- 9.0 Access controls on Sunnyside Road shall be consistent with the preliminary design for Sunnyside Road as shown in the Sunnyside Road Environmental Assessment or more detailed design and engineering work undertaken for Sunnyside Road. In addition, the following shall be applied:
 - 9.1 Consolidate driveways to the targets shown on Map X-SC-5, Access Management Targets for Sunnyside Road.
 - 9.2 Whenever possible, driveway accesses shall be consolidated as development and re-development occurs. Temporary accesses may be allowed when Office Apartment sites develop incrementally, but only if a master plan has been approved demonstrating how and when further driveway consolidation shall occur.
 - 9.3 To maintain the flow of traffic on Sunnyside Road, driveways may be restricted to right-in, right-out only.
 - 9.4 Office Apartment and Commercial developments shall minimize vehicular access to Sunnyside Road, with primary access provided on side streets whenever possible.

III. NATURAL RESOURCE PROTECTION

- 1.0 Restrict development of natural resource areas, including: Slopes greater than 20%, confirmed landslide hazard areas, flood hazard areas, stream buffers, wetlands and significant natural areas.
- 2.0 Except in stream corridor and wetland buffers, residential development may be allowed within restricted areas when it is consistent with the Policies in the Natural Hazards section of Chapter 3, and the Open Space and Floodplains section of Chapter 4 of the Comprehensive Plan.

- 3.0 Allow the transfer of residential development density from restricted areas to other areas on the site, subject to the following standards:
 - 3.1 Resulting density on the developed portion of a Low-Density Residential site shall not exceed 15 dwelling units per acre.
 - 3.2 If the density on the developed portion of the site exceeds the next highest residential Plan category, buffering from adjacent low-density residential uses shall be considered in the development review process.

IV. PARKS, OPEN SPACE AND RECREATION TRAILS

- 1.0 Provide parks that are equitably distributed and accessible from throughout the Sunnyside Corridor Community Plan Area.
- 2.0 Facilitate park and recreation and storm water detention and treatment providers to cooperate in the development of facilities that meet the needs of both agencies.
- 3.0 At the time of site development, trails shown on Map X-SC-6 shall be constructed to standards established by the North Clackamas Parks and Recreation District.
- 4.0 Map X-SC-6 depicts the general location of a trail that will connect to an adjacent trail in the Sunnyside Village. The final location of this trail will be determined as development occurs. (1/6/05).
- 5.0 All designated trails identified on Map X-SC-6 shall be either dedicated to, or granted as an easement to, the North Clackamas Parks District, which will be responsible for their maintenance.

MAPS & FIGURES

Sunnyside Corridor Community Plan

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

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 a and b. Map X-MC-2 shows where the various cross sections generally apply. These cross sections for the area of the roadway adjacent to a development (generally sidewalks and landscaping strips) shall be required during development review.
 - 9.1 The standard arterial segment cross section is preferred at locations between intersections. In areas where the topography adjacent to the outside of the sidewalk slopes so that a retaining wall higher than 3 feet would be required, the landscaped buffer may be reduced in width. The topographically constrained cross section on Figure X-MC-1 a, portrays the maximum reduction in the improved width (landscaped buffer reduced to zero, but no reduction is allowed in sidewalk width). Reduction in the width of the landscaped buffer shall be the minimum necessary, considering a retaining wall 3 feet high.

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

MAPS & FIGURES

McLoughlin Corridor Design Plan

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