Oregon
Theodore R. Kulongoski, Governor

Department of Land Conservation and Development
635 Capitol Street, Suite 150
Salem, OR 97301-2540
(503) 373-0050
Fax (503) 378-5518
www.lcd.state.or.us

NOTICE OF ADOPTED AMENDMENT

09/24/2012

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

FROM: Plan Amendment Program Specialist

SUBJECT: Clackamas County Plan Amendment
DLCD File Number 005-12

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

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: Monday, October 08, 2012

This amendment was submitted to DLCD for review prior to adoption pursuant to ORS 197.830(2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

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

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

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

<paa> YA

FORM 2

DLCD Notice of Adoption

This Form 2 must be mailed to DLCD within **5-Working Days after the Final Ordinance is signed** by the public Official Designated by the jurisdiction and all other requirements of ORS 197.615 and OAR 660-018-000

DATE STAMP

☐ In person ☐ electronic ☐ mailed

DEPT OF

SEP 18 2012

LAND CONSERVATION AND DEVELOPMENT

For Office Use Only

Jurisdiction: **Clackamas County**

Local file number: **ZDO-238**

Date of Adoption: **9/13/2012**

Date Mailed: **9/17/2012**

Was a Notice of Proposed Amendment (Form 1) mailed to DLCD? ☒ Yes ☐ No Date: 4/12/12

☒ Comprehensive Plan Text Amendment

☐ Comprehensive Plan Map Amendment

☒ Land Use Regulation Amendment

☐ Zoning Map Amendment

☐ New Land Use Regulation

☐ Other:

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached".

This project involved amendments in conjunction with the TGM grant funded Clackamas Regional Center (CRC) Area Pedestrian and Bicycle Connection project. The adopted amendments include: 1) Text amenndments to Section 1700.03: Clackamas Regional Center Area Design Standards; 2) Text amendments to Chapter 10 of the Comprehensive Plan and 3) Updates to Comprehensive Plan Map X-CRC-7.

Does the Adoption differ from proposal? Yes, Please explain below:

The adopted Comprehensive Plan Map X-CRC-7 differs from the proposal as follows: 1) a new map, X-CRC-7A, was adopted. This map shows existing and proposed walkways within the Town Center and Promenade on a larger scale. 2) "Signalized intersections" were removed from Map X-CRC-7. 3) Some mapping conventions were modified.

Plan Map Changed from: **N/A** to: **N/A**

Zone Map Changed from: **N/A** to: **N/A**

Location: **Clackamas Regional Center** Acres Involved: **0**

Specify Density: Previous: **N/A** New: **N/A**

Applicable statewide planning goals:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐

Was an Exception Adopted? ☐ YES ☒ NO

Did DLCD receive a Notice of Proposed Amendment...

35-days prior to first evidentiary hearing? ☒ **Yes** ☐ **No**

If no, do the statewide planning goals apply? ☐ Yes ☐ No

If no, did Emergency Circumstances require immediate adoption? ☐ Yes ☐ No

DLCD file No. 005-12 (19287) [17171]

Please list all affected State or Federal Agencies, Local Governments or Special Districts:

Local Contact: **Lori Mastrantonio** Phone: **(503) 742-4511** Extension:

Address: **150 Beaverceek Road** Fax Number: **503-742-4550**

City: **Oregon City** Zip: **97045-** E-mail Address: **Lorim@clackamas.us**

ADOPTION SUBMITTAL REQUIREMENTS

This Form 2 must be received by DLCD no later than 5 working days after the ordinance has been signed by the public official designated by the jurisdiction to sign the approved ordinance(s)

per ORS 197.615 and OAR Chapter 660, Division 18

1. This Form 2 must be submitted by local jurisdictions only (not by applicant).
2. When submitting the adopted amendment, please print a completed copy of Form 2 on light **green paper if available**.
3. Send this Form 2 and **one complete paper copy** (documents and maps) of the adopted amendment to the address below.
4. Submittal of this Notice of Adoption must include the final signed ordinance(s), all supporting finding(s), exhibit(s) and any other supplementary information (ORS 197.615).
5. Deadline to appeals to LUBA is calculated **twenty-one (21) days** from the receipt (postmark date) by DLCD of the adoption (ORS 197.830 to 197.845).
6. In addition to sending the Form 2 - Notice of Adoption to DLCD, please also remember to notify persons who participated in the local hearing and requested notice of the final decision. (ORS 197.615).
7. Submit **one complete paper copy** via United States Postal Service, Common Carrier or Hand Carried to the DLCD Salem Office and stamped with the incoming date stamp.
8. Please mail the adopted amendment packet to:

ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540

9. **Need More Copies?** Please print forms on **8½ -1/2x11 green paper only if available**. If you have any questions or would like assistance, please contact your DLCD regional representative or contact the DLCD Salem Office at (503) 373-0050 x238 or e-mail **plan.amendments@state.or.us**.

CLACKAMAS COUNTY

OFFICE OF COUNTY COUNSEL
PUBLIC SERVICES BUILDING
2051 KAEN ROAD OREGON CITY, OR 97045

Stephen L. Madkour
County Counsel

David W. Anderson
Kimberley Ybarra
Kathleen Rastetter
Scot A. Sideras
Chris Storey
Scott C. Ciecko
Alexander Gordon
Rhett C. Tatum
Assistants

CERTIFICATE OF MAILING

I hereby certify that the enclosed Ordinance No. ZDO-238 was deposited in the mail on September 17, 2012

Signed: Cheryl J. Cornelison

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

ORDINANCE NO. ZDO-238

An Ordinance amending Chapter 10 and Appendix A of the Clackamas County Comprehensive Plan and Section 1700 of the Clackamas County Zoning and Development Ordinance

WHEREAS, in June 2010, the County was awarded a Transportation and Growth Management grant by the Oregon Department of Transportation to identify and prioritize safe pedestrian and bicycle connections within the Clackamas Regional Center area, especially between the TriMet Max Green Line and area major employers and to identify gaps and deficiencies in the existing pedestrian and bicycle system; and

WHEREAS, in January 2011, an Intergovernmental Agreement between the Oregon Department of Transportation and the County was executed for the *Clackamas Regional Center Pedestrian/Bicycle Connection Project*; and

WHEREAS, following public outreach and coordination with affected property owners and interested stakeholders, County Transportation Planning staff and a Project Advisory Committee developed the *Clackamas Regional Center Pedestrian/Bicycle Plan* which includes the pedestrian and bicycle projects within the study area; and

WHEREAS, amendments to the Comprehensive Plan and Zoning and Development Ordinance are necessary to adopt and therefore implement the *Clackamas Regional Center Pedestrian/Bicycle Plan*; and

WHEREAS, the proposed amendments are consistent with the Statewide Planning Goals and Guidelines, the Metro Urban Growth Management Functional Plan, the Metro Regional Transportation Plan, and all other applicable state and county laws and regulation; and

WHEREAS, after a duly-noticed public hearing, the Clackamas County Planning Commission recommended approval of ZDO-238 on May 21, 2012; and

WHEREAS, the Board of County Commissioners held a public hearing on June 20, 2012, during which the Board voted unanimously to approve ZDO-238, as proposed, now therefore;

The Board of Commissioners of Clackamas County ordains as follows:

Section 1: Chapter 10, Appendix A and Map X-CRC-7 of the Clackamas County Comprehensive Plan are hereby amended and Map X-CRC-7a is adopted as shown in Exhibit A, hereto attached.

Section 2: The *Clackamas Regional Center Pedestrian/Bicycle Plan*, as shown in Exhibit B, hereto attached, is adopted by reference in Appendix A of the Clackamas County Comprehensive Plan.

Section 3: Section 1700 of the Clackamas County Zoning and Development Ordinance is hereby amended as shown in Exhibit C, hereto attached.

Section 4: This ordinance shall be effective on October 15, 2012.

ADOPTED this 13th day of September 2012

BOARD OF COUNTY COMMISSIONERS

Chair

Recording Secretary

Appendix A

MAPS AND DOCUMENTS ADOPTED BY REFERENCE

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

NATURAL RESOURCES AND ENERGY

Habitat Conservation Area Maps

Water Quality Resource Area Maps

TRANSPORTATION

Clackamas County Pedestrian Master Plan

Clackamas County Bicycle Master Plan

Clackamas County Airport Plan

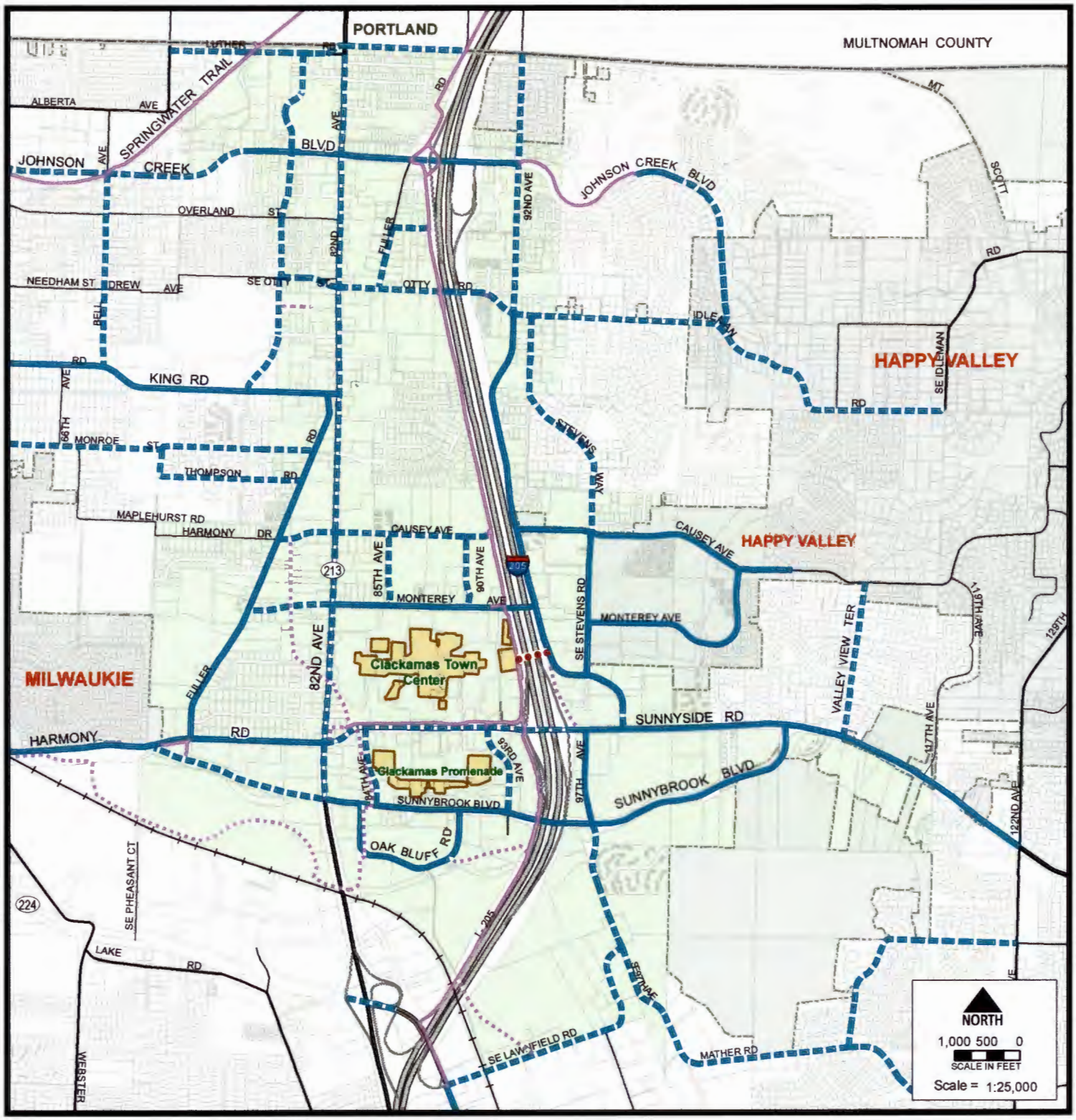
SE 172nd Avenue/ SE 190th Drive Corridor Management Plan, Clackamas County, Oregon, December 2011

COMMUNITY AND DESIGN PLANS, Clackamas Regional Center Area Design Plan

Phillips Creek Greenway Framework Plan

Clackamas Regional Center Pedestrian/Bicycle Plan

[Added by Board Order 2001-89, 5/3/01; Amended by Board Order 2001-256, 11/1/01; Amended by Board Order 2008-197, 1/5/09; Amended by Ord. ZDO-232, 3/12/12]



Clackamas Regional Center Area Design Plan

PEDESTRIAN AND BICYCLE CIRCULATION NETWORK

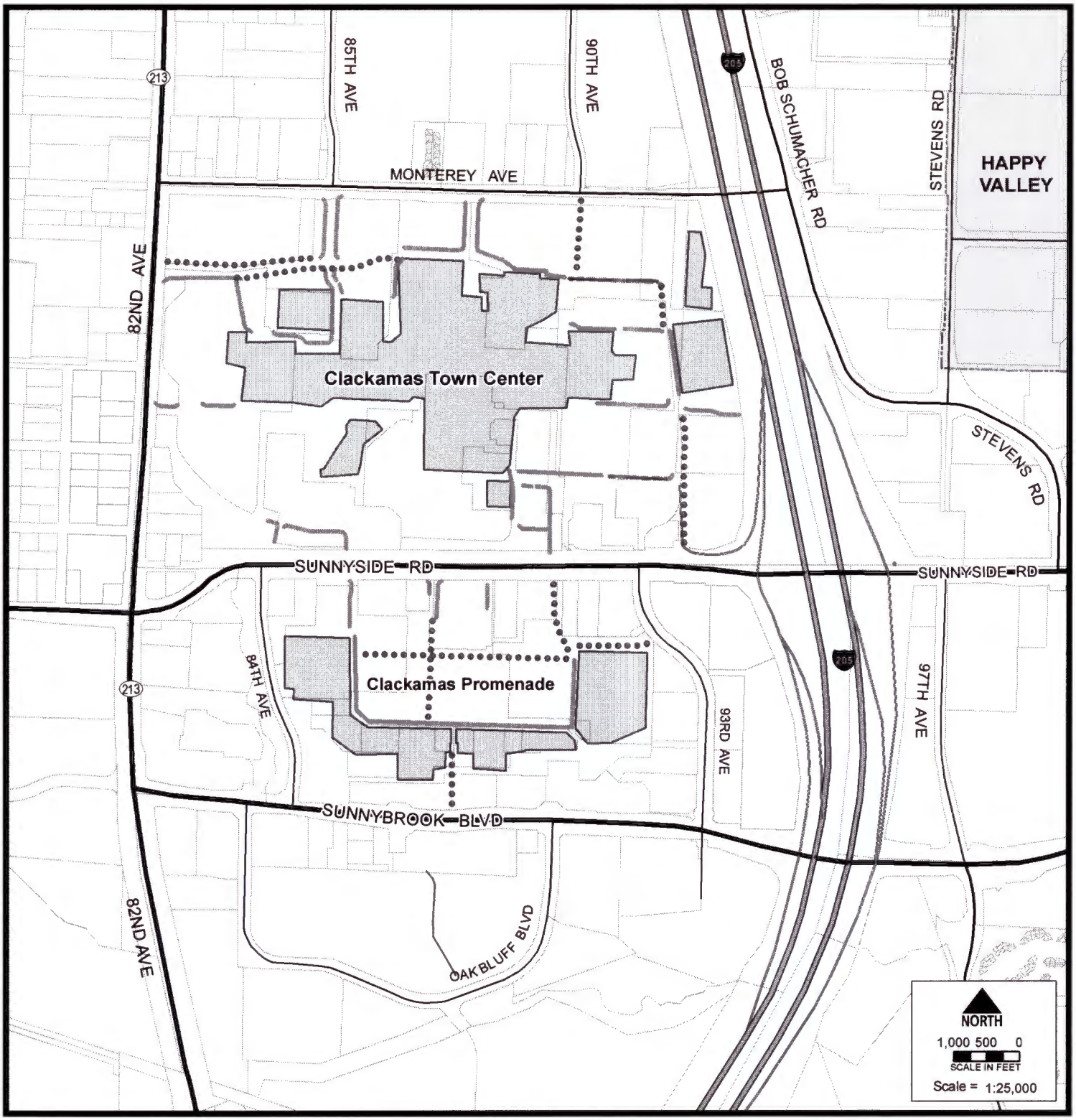
Clackamas County Comprehensive Plan

MAP X-CRC-7

Last Amended 10/15/2012

- Clackamas Regional Center Area
- Existing Bikeways
- Planned Bikeways
- Existing Multi-Use Trails
- Planned Multi-Use Trails
- Planned Pedestrian/Bicycle Bridge (approximate location)

CLACKAMAS COUNTY



Clackamas Regional Center Area Design Plan

WALKWAY NETWORK

Clackamas County Comprehensive Plan

MAP X-CRC-7a

Adopted 10/15/2012

Existing Walkways

Planned Walkways

CLACKAMAS COUNTY

Ordinance ZDO-238

Comprehensive Plan Amendments

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

Only the Clackamas Regional Center Area Design Plan section of Chapter 10 is hereby amended.

CLACKAMAS REGIONAL CENTER AREA DESIGN PLAN

INTRODUCTION

Moving Towards a Preferred Future

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

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

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

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

REGION 2040 GROWTH CONCEPT PLAN DESIGN TYPES

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

Regional Center

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

Corridors

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

Station Community

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

VISION AND GOALS

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

Vision

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

- The dominant commercial and business center for the east Portland metropolitan area;

- A cultural, civic and transportation center for the east Portland metropolitan area;

- An area of diverse residential neighborhoods, commercial districts, natural features, and public attractions and spaces that serve both the local community and the region.

Goals

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

- Allow and promote compact development as a means to encourage efficient use of land, promote non-auto trips, and protect air quality.

- Promote development patterns which use land efficiently and support transportation investments.

- Transition towards more intensive use of land through infill and redevelopment, and phased development of infrastructure and urban design improvements.

- Accommodate and encourage appropriate land uses in the Regional Center, along Corridors and in the Station Community.

- Balance growth with the preservation of existing neighborhoods and affordable housing.

- Create districts and neighborhoods.

- Provide a range of housing types and density.

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

CLACKAMAS REGIONAL CENTER AREA DESIGN PLAN POLICIES

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

LAND USE POLICIES

I. LAND USE POLICIES GENERALLY

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

1.0 Mixed Use

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

2.0 Commercial

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

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

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

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

2.2 Create a district accessible by all modes of transportation.

2.3 Create walkable districts by providing improvements and urban design features that encourage and support pedestrian use.

2.4 Allow land uses that generate pedestrian activity and transit ridership.

2.5 Require public or private street layouts that allow for future development of sites with redevelopment potential.

2.6 Maintain and improve pedestrian connections between commercial uses, transit corridors, recreation areas, open space and adjacent residential areas.

2.7 Locate all buildings to maximize access by emergency vehicles.

2.8 Require Design Review for all development.

3.0 Multifamily Residential

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

3.1 Establish minimum densities to help meet local and regional housing needs.

3.2 Provide for multifamily residential uses within walking distance of public transportation, parks, schools, employment areas and local shopping areas.

3.3 Create walkable districts by providing improvements and urban design features that encourage and support pedestrian use.

3.4 Locate all buildings to maximize access by emergency vehicles.

3.5 Require design review for all development.

4.0 Public and Community Use, Open Space

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

5.0 Low Density Residential

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

6.0 Industrial

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

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

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

1.1 Provide for high intensity development to accommodate projected regional increases in housing and employment, including mixed use development.

1.2 Provide for and capitalize on high quality transit service.

1.3 Allow for a mix of land uses to support public transportation and bicycle and pedestrian usage.

1.4 Provide for the open space and recreation needs of residents and employees of the area.

1.5 Support a multi-modal street network.

2.0 Planned Mixed Use

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

2.1 Create an area with a mix of land uses, both within the site itself (mix of uses) and within buildings (mixed uses), which:

a. Provide for high employment and residential densities that support use of public transportation.

b. Protect key natural features.

c. Provide for essential public facilities and services, including parks and public spaces.

d. Are accessible by all modes of transportation.

2.2 Establish through zoning required and allowed land uses, transportation improvements, and design standards that encourage and support pedestrian-oriented streets, buildings and public places. Apply specific requirements to specific Planned Mixed Use sites through zoning.

2.3 Apply the Planned Mixed Use designation within the Regional Center as shown on Map X-CRC-1.

2.4 Sites planned for Planned Mixed Use but zoned for other uses may be converted to Planned Mixed Use zoning when:

a. Adequate transit services are provided to the site; and,

b. Minimum site size requirements are satisfied.

3.0 Regional Center Office

3.1 Apply the Regional Center Office designation within the Regional Center boundary shown on Map X-CRC-1 to:

a. Areas with an historical commitment to office use.

b. Areas served by high capacity transit service.

c. Areas with high visibility from a freeway.

d. Areas generally within ½ mile of a freeway interchange.

3.2 Provide support services for office development.

3.3 Limit retail uses in order to maximize the land available for office uses and to provide for the highest employment density in the Regional Center.

3.4 Require a minimum density to help meet regional employment needs, support public transportation and use land more efficiently.

3.5 Create walkable districts within the regional center with improvements, urban design features, and urban design standards that encourage and support pedestrian use.

3.6 Require master plans of large sites to allow for future development of sites with redevelopment potential.

4.0 Regional Center High Density Residential

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

4.1 Determine the density of development through zoning.

4.2 Provide for multifamily residential uses within walking distance of public transportation, parks, schools, employment areas and local shopping areas.

4.3 Allow for a mix of land uses provided the minimum residential density is achieved for the entire development site prior to or concurrent with establishment of other allowed uses.

5.0 Regional Center Commercial

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

5.1 Provide areas for regional and local shopping.

5.2 Require a minimum floor area ratio to help meet regional employment needs, support public transportation and use land more efficiently.

5.3 Create walkable districts within the regional center with improvements, urban design features, and urban design standards that encourage and support pedestrian use.

6.0 Amendments to the Clackamas Regional Center Boundary

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

6.1 The property is contiguous to the Clackamas Regional Center boundary.

6.2 The area is, or is planned to be, a focus of compact, high density development with a mix of uses.

6.3 The area has, or is planned to have, high quality transit service, and a multi-modal street network.

6.4 The area has, or is planned to have; a density of 60 persons per acre on lands developed or planned to be developed (not including open space, parks, plazas or natural areas).

III. LAND USE POLICIES FOR CORRIDOR DESIGN TYPE AREAS

1.0 Land uses in Corridors shall be planned to:

1.1 Provide for both employment and housing, including mixed use.

1.2 Emphasize providing for a high level of bus usage, with land uses and transportation facilities to support bus use.

1.3 Encourage and support pedestrian travel with supportive land uses, frequent street connections, and sidewalks and pedestrian-ways.

1.4 Provide for vehicular traffic and auto-oriented uses, while expanding the share of trips via transit and other modes.

2.0 Corridor Land Use Designations

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

2.1 Commercial designations that may be applied include: Corridor Commercial, Retail Commercial, and Office Commercial. Any site designated for a commercial use shall be located adjacent to the corridor street.

2.2 Multifamily designations that may be applied include: High Density Residential and Medium High Density Residential. Multifamily designations should generally be located so as to form a buffer between commercial uses adjacent to the corridor street and low density residential areas located outside the corridor.

2.3 Industrial designations that may be applied in corridors include: Light Industrial and Business Park.

2.4 Existing single family neighborhoods and mobile home parks should be zoned to discourage redevelopment to other uses.

3.0 Corridor Commercial

3.1 The following areas may be designated Corridor Commercial when located within a transportation corridor as identified on Map X-CRC-1 and when all of the following criteria have been met:

a. The site has an historical commitment to commercial uses,

b. The designation will not cause a decrease in housing capacity in the county,

c. The designation will not cause a significant traffic increase on local streets serving residential areas,

d. Adverse effects including but not limited to traffic and noise, will have a minimal effect on adjacent neighborhoods or can be minimized through on-site improvements, and

e. The designation will not substantially increase an existing commercial strip or create new strips.

3.2 Provide commercial areas located in transportation corridors to meet local and regional needs for a wide range of goods and services.

3.3 Provide for the sale of large-scale items in areas with good transportation access and minimal conflict with other uses.

3.4 Allow mixed uses in the same building(s) or in a separate building(s) in the development.

3.5 Establish design and dimensional standards that encourage and support pedestrian use.

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

1.0 The Regulating Plan Map, which will be incorporated in the Zoning and Development Ordinance, shall be the basis of the design and development standards for the Station Community and shall establish the requirements for street types, block pattern, existing and new streets, building frontage types, and landscaping types.

2.0 Within the Station Community boundary shown on Map X-CRC-1, future development and redevelopment shall conform to the Regulating Plan Map, and areas shall be planned to:

2.1 Provide for development utilizing urban design elements that create and support a dynamic, safe and convenient public realm made up of inter-connected streets, parking areas, parks and plazas framed by buildings with facades and entrances facing the streets and meeting other requirements of transit oriented design.

2.2 Provide for a mix of retail, services, office and high intensity housing in buildings meeting the requirements of transit oriented design, located on a street network with excellent pedestrian connectivity and supportive of local services, bicycle and pedestrian usage, and high capacity transit ridership.

2.3 Support a multi-modal street network with shared, public on-street parking on all but the most heavily traveled streets, building facades and entrances oriented to the street, and parking located to the side and behind buildings.

2.4 Provide for the open space and recreation needs of residents and employees of the area.

3.0 Corridor Commercial

3.1 Apply the Corridor Commercial designation within the Station Community boundary shown on Map X-CRC-1 to:

a. Areas with an historical commitment to retail uses.

b. Areas with high visibility and access from a major arterial street.

c. Areas located within ½ mile of a high capacity transit station, and providing actual or potential pedestrian connections between high capacity and bus transit.

3.2 Create an area with a mix of land uses, both within the site itself (mix of uses) and within buildings (mixed uses), which:

a. Provide for high employment and residential densities that support use of public transportation.

b. Provide for essential public facilities and services, including shared public parking on public and private streets, accessible and attractive walkways between and through developments, and public spaces.

c. Are accessible by all modes of transportation.

d. Orient buildings and parking areas to support and encourage pedestrian trips and utilization of high capacity transit.

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

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

3.5 In designated sectors on the Regulating Plan Map, where substantial shopping center development exists, provide for a limited amount of redevelopment to occur without requiring full compliance with transit-oriented design and connectivity requirements.

a. Ensure that such redevelopment does not reduce multimodal connectivity or hinder future development of additional planned connections.

4.0 Station Community Mixed Use

4.1 Apply the Station Community Mixed Use designation within the Station Community boundary shown on Map X-CRC-1 to:

a. Areas with an historical commitment to residential, office and employment uses.

b. Areas in proximity to high capacity transit service.

c. Areas with access to major and minor arterial and collector streets.

4.2 Create an area with a mix of residential, office, service and service commercial uses within buildings and developments that meet transit oriented development standards, which:

a. Provide for high employment and residential densities that support use of public transportation.

b. Provide for essential public facilities and services, including shared public parking on public and private streets, accessible and attractive walkways between and through developments, and public spaces.

c. Orient buildings and parking areas to support and encourage pedestrian trips and utilization of high capacity transit.

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

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

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

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

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

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

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

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

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

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

1.0 High Density Residential

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

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

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

3.0 Low Density Residential – Single Family Attached

3.1 In Low Density Residential areas, areas may be zoned for single family attached residences on lots that average 2,500 square feet when the area has access to a residential collector or higher functional class street.

3.2 The size of the site and adjoining properties zoned for 2,500 square foot lots should generally not exceed ten (10) acres. Sites greater than 10 acres must include a combination of attached and detached housing within the allowed Single Family Attached density.

3.3 Design dwellings to provide variation in architectural appearance.

3.4 Require Design Review for single family attached residences.

URBAN DESIGN, PUBLIC AMENITIES, AND OPEN SPACE POLICIES

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

VII. URBAN DESIGN ELEMENTS

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

2.0 Provide for the most intense development around public transportation routes.

3.0 Provide multi-modal connections that link neighborhoods with commercial areas, schools, parks and greenways.

4.0 Increase the visual identity of the Regional Center Area through streetscape improvements including pedestrian zones, landscaped strips between streets and sidewalks, lighting, street trees, landscaped medians, and gateways.

5.0 Protect natural features by directing development away from these areas and using remaining land more efficiently.

6.0 Provide public or private street layouts that support future development and increase connectivity for all modes of transportation.

7.0 The Urban Design Elements shown on Map X -CRC-3 shall be provided in the Clackamas Regional Center Design Plan Area as development occurs and public improvements are provided.

7.1 All new development or major modifications to existing approved development shall provide the design elements on Map X-CRC-3.

7.2 For phased development, urban design requirements will generally be roughly proportional to the amount of development occurring in a phase.

7.3 Key urban design elements shown on Map X-CRC-3 are defined as follows:

a. Boulevards: Streets characterized by landscaped medians and other pedestrian crossing improvements, a sidewalk separated from the street by planting strips and street trees, and bike lanes.

b. Main Streets: Streets characterized by a pedestrian/furnishing zone that includes sidewalks, street trees, and space for street lights and other furnishings, on-street parking, more frequent pedestrian crossings, and buildings oriented to the street with storefronts close to the sidewalk.

c. Special Street Standards: Streets that are characterized by a landscaped planting strip separating the sidewalk from the curb, pedestrian lighting, and pedestrian amenities.

d. Street Connections: General locations for new or enhanced street connections to improve connectivity in the area have been identified on Map X-CRC-3. Street connections may be public or private streets and in some cases line up with important driveways to commercial areas.

e. Local Street Grid: An interconnected public or private street system that provides multi-modal access to all activities and uses.

f. Off-street Pedestrian Linkages: Street, bicycle and pedestrian paths, and greenway paths to link parks, civic spaces, retail centers, neighborhoods, and other points of interest.

g. Multi-Use Paths: Off-street pedestrian and bicycle paths. These paths may be developed primarily as a transportation facility, as an amenity, or may serve multiple purposes.

h. Parks and Open Space: The general locations of parks needed in the Clackamas Regional Center Design Plan area are shown on the Map X-CRC-3. Park locations are not site-specific.

i. Greenway Trails: Off-street trails within designated greenways (e.g. Phillips Creek and Mt. Scott Creek) that provide opportunities for environmental restoration, recreation and education.

j. Plazas: Public gathering places are typically one acre or less and may be publicly or privately owned. Plazas are intended as public gathering places and community focal points.

k. Natural Features: Natural features to be protected include creeks, wetlands, steep slopes and wooded bluffs.

l. Gateways: Key intersections to be reconstructed with special design and landscape treatments that are intended to provide a visual announcement that people are entering a special area.

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

VIII. STREETS AND GATEWAYS

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

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

a. Improve pedestrian safety at crossings.

b. Improve visual appeal of the streets.

c. Improve the pedestrian environment along sidewalks.

d. Provide on-street parking where appropriate to help provide a supply of public parking that supports reduced parking standards on private property, and separate pedestrians from auto traffic.

e. Provide strong visual identity to distinguish the Regional Center from adjacent areas.

f. Create a local block pattern for new roads to improve circulation for motor vehicles and pedestrians by providing shorter and more direct connections between uses.

3.0 Boulevards, Main Streets, Gateways, and streets planned for Special Street Standards have been identified on Map X-CRC-3. Figures X-CRC-1through X-CRC-11 illustrate the intended standards for improvement.

3.1 Exceptions to these standards may be allowed subject to topography, environmental constraints, available right of way, safety considerations, and as follows:

a. General elements of a gateway intersection are illustrated in Figures X-CRC-1 and X-CRC-7. Establish specific requirements through design.

b. Elements of the Main Street cross section may be modified to accommodate Light Rail Transit alignment.

3.2 When developing Boulevard improvements, the County should develop and implement a strategy to minimize adverse impacts to adjacent businesses.

4.0 New public and private streets should be designed to accommodate future development.

5.0 Encourage retention and development of a local street network as shown on Map X-CRC-4, and as otherwise required in the Clackamas Regional Center Design Plan.

6.0 Require new streets to connect uses within a development and to adjacent property, when applicable.

7.0 Allow new buildings to be oriented to private streets when these streets include sidewalks or raised walking surfaces, curbs, pedestrian scale street lighting and street trees.

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

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

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

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

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

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

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

X. PHILLIPS CREEK GREENWAY

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

XI. URBAN DESIGN STANDARDS

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

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

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

1.3 Buildings on corner lots are encouraged to have entrances at the corner.

1.4 When feasible and practical, buildings shall be placed to allow future infill and intensification of the site.

1.5 Pedestrian amenities, as defined by the Zoning and Development Ordinance, may be used to satisfy specific percentages of landscape requirements.

1.6 Where appropriate, the County may allow developments to utilize regional storm water facilities and/or for multiple property owners to utilize joint facilities.

1.7 Drive-through facilities may be prohibited, limited or conditioned to support the goal of creating high quality pedestrian environments.

1.8 Architectural design shall support and promote urban character.

TRANSPORTATION POLICIES

XII. ROADS AND STREETS SYSTEM POLICIES

1.0 Construct all roadway improvements identified in Map X-CRC-4 to maintain regional accessibility to the Regional Center and provide a network for all transportation modes that interconnects neighborhoods and districts, the Station Community, commercial areas, community centers, parks, libraries, and employment places, other major activities, off-street pedestrian linkages, regional multi-use paths, and area Greenway trails.

2.0 Street Connectivity Policies

2.1 Develop a block and grid street network that serves all transportation modes with short and direct public right-of-way routes.

2.2 In all new developments adjacent to corridor arterial streets, require public or private street, or private driveway connections to provide traffic flow parallel to the arterial.

2.3 On major arterial streets, encourage public or private street connections at intervals of no more than 660'. Encourage more frequent public or private connections on other streets, especially those in areas planned for mixed-use or dense development.

2.4 To reduce the number of local trips using 82nd Avenue, require and develop local street and commercial driveway connections on the east side of 82nd Avenue from Causey Blvd. to Otty Road. These public or private connections shall be open to public access, and may be indirect if appropriate direct routes are not feasible. This policy applies to all land use, transportation and development permits.

3.0 Require public local streets, private streets, and driveway connections between developments to provide public access and circulation between land uses and reduce local trips on collectors and arterials. This policy applies to all land use, transportation and development permits.

4.0 In the Station Community, a network of public and private streets, including arterial, collector and local streets, will provide excellent connectivity and pedestrian access to support transit access and utilization. Generally blocks will be no more than 450 feet in length.

5.0 Congestion Performance Standards for portions of 82nd Avenue, Sunnyside Road, and Johnson Creek Boulevard located within the Regional Center boundary or Fuller Road Station Community boundary (consistent with Metro

Regional Transportation Plan standards for Centers, such as Station Communities) 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

6.0 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 or the Fuller Road Station Community 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

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

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

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

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

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

XIII. TRANSIT POLICIES

1.0 Coordinate with Tri-Met to implement Clackamas Regional Center Design Area transit service improvements planned in the Tri-Met Primary Transit Network and Tri-Met Choices for Livability, and implement additional transit improvements identified on Map X-CRC-6.

2.0 Coordinate with Tri-Met, Metro, ODOT, and other agencies in funding and implementing the planned Clackamas Regional Center Design Plan Area transportation improvements identified on Map X-CRC-6.

3.0 Coordinate with Tri-Met to implement Light Rail Transit (LRT) service to the Clackamas Regional Center area.

4.0 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.

8.0 Coordinate with Tri-Met to encourage and support development of structured park-and-ride lots at high capacity transit stations. When surface parking facilities are provided, encourage TriMet to re-use these sites for transit-oriented development.

XIV. PEDESTRIAN AND BIKEWAY NETWORK POLICIES

1.0 Construct all pedestrian~~walkway~~ and bikeway network improvements identified on~~in~~ Maps X-CRC-3, ~~and~~ X-CRC-7, and X-CRC-7a, and in the Clackamas Regional Center Pedestrian/Bicycle Plan adopted by reference in Appendix A,

in order to provide a network connecting Clackamas Regional Center Area Design Plan ~~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 pedestrian~~sidewalks, walkways~~ and bikeway~~s~~ network improvements may be identified and developed during land use review and as part of public improvements.

2.0 Collaborate with public agencies and private property owners, as appropriate, to implement the sign plan element of the Clackamas Regional Center Pedestrian/Bicycle Plan adopted by reference in Appendix A.

3.0 Consider the prioritized list of projects identified in the Clackamas Regional Center Pedestrian/Bicycle Plan adopted by reference in Appendix A, when allocating public funds for pedestrian and bicycle network improvements in the Clackamas Regional Center.

4.0 In the development review process, new residential and mixed use developments within the Station Community, Corridors, and Regional Center shall encourage pedestrian and bicycle travel by:

4.1 Providing direct and convenient public right-of-way routes connecting residential uses with planned commercial uses, schools, parks, and other neighborhood facilities.

4.2 Providing bike and pedestrian connections on public easements or right-of-way when full street connections are not possible, with connection spacing no more than 330' except where topography, barriers such as freeways, railroads, or environmental constraints such as streams, rivers, slopes, or environmentally sensitive areas prevent street extension.

~~3.0~~5.0 Sidewalks shall be constructed on all public and private streets in the Clackamas Regional Center Design Plan Area, subject to topography and environmental constraints.

XV. TRANSPORTATION DEMAND MANAGEMENT (TDM)

1.0 Work with Clackamas Regional Center Design Area employers and businesses to develop strategies that will reduce vehicle miles traveled to decrease congestion and improve air quality. Strategies to be considered include but are not limited to the following:

1.1 Employer strategies that increase vehicle occupancy, encourage work trips outside peak travel times, and promote telecommuting.

1.2 Facilities 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.

XVI. ACCESS MANAGEMENT

1.0 Implement the following access management standards on 82nd Avenue within the Clackamas Regional Center Design Plan Area.

1.1 Consolidate driveways/accesses to the targets shown on Map X-CRC-8.

1.2 Reduce signal spacing requirements from 1,320' to 500', contingent on maintaining adequate signal progression.

1.3 Coordinate with ODOT to reassess 82nd 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.

XVII. PARKING STANDARDS

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

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

HOUSING

XVIII. HOUSING POLICIES

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

1.0 Provide for a range and variety of housing types (size and density) and variety of ownership and rental opportunities, in a range of prices.

2.0 Encourage housing opportunities for employees in the Clackamas Regional Center Design Plan Area by investigating partnerships to develop housing for workers in the area.

3.0 Limit expansion of commercial zoning into residential neighborhoods along the 82nd Avenue corridor.

4.0 Preserve existing mobile home parks by requiring a relocation plan to be developed and implemented by the developer for residents of mobile home parks whenever the zone designation on a mobile home park is changed to a zone other than MR-1. The County must approve the relocation plan as part of the zone change application.

5.0 Replace housing capacity lost in the study area by future Comprehensive Plan or zone changes. Any application for a change in Comprehensive plan designation within the Clackamas Regional Center Design Plan Area will be accompanied by a demonstration of how an equal amount of housing capacity is replaced on another site, or constructed on the site as part of a mixed use development.

5.1 The purpose of this policy is to maintain the potential for the amount of housing identified in the Clackamas Regional Center Area Plan.

5.2 This policy would apply to plan or zone changes made subsequent to adoption of the Clackamas Regional Center Area Plan.

5.3 This policy would apply to quasi-judicial changes from residential to a non-residential use.

5.4 Replacement housing capacity could be located anywhere within unincorporated Clackamas County located within the Urban Growth Boundary.

5.5 Approval of a design review application and any other applicable land use permit for the required amount of replacement housing on a site in a commercial or office district, not including PMU sites, will meet the requirements of policy 5.0.

6.0 Form a County Housing Advisory Committee to counsel and advise the Board of County Commissioners on housing issues.

6.1. Clackamas County shall review its policies and ordinances regarding affordable housing and develop an affordable housing strategy with a series of tools to provide for a mix of housing types and prices in the County.

Clackamas Regional Center Pedestrian/Bicycle Plan

CLACKAMAS REGIONAL CENTER PEDESTRIAN/BICYCLE PLAN

Adopted September 13, 2012

Clackamas County

Department of Transportation and Development

Cam Gilmour, Director Transportation and Development

Mike Bezner, Transportation Engineering Manager

150 Beavercreek Road

Oregon City, OR 97045

Acknowledgements

Karen Buehrig, Randall Gray, Scott Hoelscher, Joe Marek, Lori Mastrantonio-Meuser, Rick Nys, and Sarah Robertson with Clackamas County contributed to this document. Thank you to Technical Advisory Committee and Project Advisory Committee members who helped collect information and recommend solutions for pedestrian and bicycle infrastructure gaps and deficiencies identified within the project study area.

Technical Advisory Committee

Sandi Burns, Clackamas Regional Center – Transportation Management Association
Basil Christopher, ODOT (Oregon Department of Transportation)
Gail Curtis, ODOT
Jessica Engelmann, TriMet
Ralph Goldstein, PBAC (Clackamas County Pedestrian/Bikeway Advisory Committee)
Peter Goodkin, PBAC
Rick Nys, Clackamas County
Avi Tayar, ODOT
Dick Weber, PBAC

Project Advisory Committee

Basil Christopher, ODOT (Oregon Department of Transportation)
Gail Curtis, ODOT
Dennis Curtis, General Growth Properties
Jessica Engelmann, TriMet
Jim Gersbach, Kaiser
Peter Goodkin, PBAC (Clackamas County Pedestrian/Bikeway Advisory Committee)
Dan Johnson, Clackamas County
Cyndi Lewis-Wolfram, North Clackamas CPO (Community Planning

Organization)
Rick Nys, Clackamas County
Shelly Parini, Clackamas Community College Harmony Campus
Wilda Parks, North Clackamas Chamber of Commerce
Dave Queener, Clackamas County
Rob Sandowsky, Bicycle Transportation Alliance
Martha Waldemar, Sunnyside CPO
Dick Weber, PBAC

For more information about the Clackamas Regional Center Pedestrian/Bicycle Connection Project please contact:

Lori Mastrantonio-Meuser, Senior Planner
Engineering Division, Transportation Planning
lorim@clackamas.us
503 742-4511

This project is partially funded by a grant from the Transportation and Growth Management (TGM) Project, a joint program of the Oregon Department of Transportation and the Oregon Department of Land Conservation and Development. This TGM grant is financed, in part, by federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), local government, and State of Oregon funds.

Table of Contents

Clackamas Regional Center

Pedestrian and Bicycle Connection Project

Project Overview

INTRODUCTION

The purpose of the Clackamas Regional Center (CRC) Area Pedestrian and Bicycle Connection project is to create safe pedestrian and bicycle connections between the Clackamas Regional Center Max Green Line station and major area employers and services. This is done by working with the community to identify and prioritize safe pedestrian and bicycle connections in the study area. The major destinations or routes were identified and the bicycle and pedestrian system gaps and deficiencies for those routes and recommendations on way-finding signage were completed. This information provides a framework for the recommended system improvements associated with pedestrian and bicycle facilities within the project area.

The study area includes the CRC area from Causey Avenue west to Fuller Road, south to below Harmony Road and east to include the area just south of Sunnybrook Boulevard, east of the freeway, past SE 97th Avenue and up to Sunnyside Road back to Causey Avenue.

SUMMARY OF ROUTES AND DESTINATIONS

Seven routes leading to seven major destinations in the CRC study area were examined for system gaps, deficiencies and obstacles. (See Clackamas Regional Center Pedestrian/Bicycle Connection Project Routes and Projects Map). All of the routes have various needs regarding street access, sidewalk/walkway and bike lane gaps and deficiencies. In some cases there are obstacles that are in the way of connecting sidewalks and/or access to bike lanes and the I-205 multi-use path.

The seven destinations include Kaiser Permanente Sunnyside Hospital, Stevens Road Commercial Area/Eagle Landing Mixed Use Development, Mixed Housing North of Clackamas Town Center, 82nd Avenue Development/Housing, Clackamas Promenade Shopping Center, Clackamas Community College Harmony Campus/OIT/Aquatic Center and Clackamas Town Center. The routes leading to these destinations and the various pedestrian and bicycle system gaps, deficiencies and obstacles between the Clackamas Town Center Transit Centers and Max Green Line are described in this report.

DESTINATIONS

There are seven primary destinations within the study area including the CTC. Since all seven routes pass through or near the Town Center it is not distinguished with a separate route but is listed as a destination.

The seven destinations, listed in the table below, have been identified as the employers, services and areas with the CRC that would benefit most from improved pedestrian and bicycle facilities. The seven routes within the CRC have been defined as from the TriMet Max Green Line/Transit Center to the destinations listed below and are shown on the Clackamas Regional Center Pedestrian/Bicycle Connection Project Routes and Projects Map.

Routes	Destinations
	Clackamas Town Center
1	Kaiser Permanente Sunnyside Hospital
2	Stevens Rd. Commercial Area / Eagle Landing Mixed Use Development
3	Mixed Housing North of Clackamas Town Center
4	82nd Avenue Development / Housing
5	Clackamas Promenade Shopping Center
6	Clackamas Community College Harmony Campus/OIT/Aquatic Center

System Gaps and Deficiencies

The system gaps and deficiencies were identified using information gathered from the Technical Advisory Committee's[1] study area field visit and the Project Advisory Committee's[2] study area field visit.

Gaps are defined as missing pieces in the system in contrast to system deficiencies. A system deficiency is where the standard is not met. For example, 8-foot wide sidewalks are the standard for 82nd Avenue within the study area (outside of the gateway intersections) whereas, the majority of sidewalks along 82nd Avenue are less than 8 feet in width and in some cases there are obstacles in the sidewalk in the form of signal and utility poles creating multiple types of deficiencies. Deficiencies can also include hazards such as a buckling or raised sidewalk.

The seven routes in order of priority as determined by the Project Advisory Committee include the following:

1. Kaiser Permanente Sunnyside Hospital (Route 1)
2. Clackamas Community College/Oregon Institute of Technology/Aquatic Center (Route 6)
3. CCC Harmony Campus Connection to Kaiser Hospital. (Route 7)
4. Mixed Housing North of Clackamas Town Center Shopping Center (Route 3)
5. 82nd Avenue Development/Housing (Route 4)
6. Clackamas Promenade Shopping Center (Route 5)
7. Eagle Landing Mixed Use Development/Stevens Road Commercial Area (Route 2)

[1] The Technical Advisory Committee for this project includes representatives from the Oregon Department of Transportation, the Clackamas County Pedestrian/Bikeway Advisory Committee, TriMet and County staff.

[2] The Project Advisory Committee includes representatives from the Town Center, Kaiser, Clackamas Community College Harmony Campus, Oregon Department of Transportation, the Clackamas County Pedestrian/Bikeway Advisory Committee, TriMet, Community Planning Organizations and County staff.

The system gaps, deficiencies and obstacles by route for each of the destinations are described in a separate document and attached. They are colored coded and match the colors illustrated on the Clackamas Regional Center Pedestrian/Bicycle Connection Project Routes and Projects Map.

Project Rating and Evaluation System

The pedestrian and bicycle improvement projects were rated against criteria in order to evaluate and prioritize the projects. Examples of the criteria utilized included connectivity, safety, route completion cost and proximity to pedestrian generator. A detailed description of the rating system is attached.

Sign Plan

An important element to improve the walking and cycling experience in the Town Center Area is wayfinding signage for both pedestrians and bicyclists, especially between the TriMet Max Green Line and area major employers and services. The goal of the Pedestrian and Bicycle Sign Plan (Sign Plan) for the CRC Area Pedestrian / Bicycle Connection Project is to provide a comprehensive wayfinding system for both walkers and bikers within the Study Area.

This Sign Plan includes information on sign placement; sign content (general destinations) and sign type. The plan recommends installation of 21 new pedestrian signs (five map-based signs and 15 pole signs) and 16 bicycle wayfinding signs along bikeways within the Study Area. Detailed maps showing recommended sign locations are attached to the Sign Plan as Map 1: Pedestrian Sign Locations and Map 2: Bicycle Sign Locations.

Priority Pedestrian/Bicycle Projects								
Projects		Evaluation Criteria						
		Connectivity	Safety	Route Completion or Pedestrian Volume	Cost: Low, Med., High	Proximity to Pedestrian Generators	Total Score
ROUTE 1: KAISER PERMANENTE SUNNYSIDE HOSPITAL							
1C	Construct walkway from Max Green Line platform directly south through existing fence along north and eastern edges of the Clackamas Town Center southeast parking lot to the I-205 multi-use path via stairway and/or to Sunnyside Road. (Needs Report 1.a.)	3	3	2	3	3	14
4L	Travelling south on the I-205 multi-use path, install a pedestrian signal to cross the I-205 northbound/Sunnyside intersection across the right turn lane. (Needs Report 1.k.)	0	4	0	4	5	13
3A/3B	Widen I-205 overpass on Sunnyside Road for bicyclists/pedestrians. (Needs Report 1.b.) OR, construct separate bicycle/pedestrian bridge over I-205. (Needs Report 1.b.)	3	3	3	1	3	13
1D	Construct sidewalk extension/bulb to accommodate pedestrians and cyclists around signal pole at the Sunnyside Road/I-205 northbound interchange. (Needs Report 1.j.)	2.5	3	3	3	3	14.5
2A	Install "green" transition bike lane from where bike lane ends on Sunnyside Road travelling west to the I-205 overpass. (Needs Report 1.c.)	3	3	3	3	2.5	14.5
2B	Widen Sunnyside Road to the north for a bike lane on Sunnyside Road from the I-205 northbound/Sunnyside intersection to approximately 200 feet to the east. (Needs Report 1.c.)	3	3	3	2	2.5	13.5
ROUTE TOTAL:							82.5
AVERAGE ROUTE SCORE:							13.75

Priority Pedestrian/Bicycle Projects								
Projects		Evaluation Criteria						
		Connectivity	Safety	Route Completion or Pedestrian Volume	Cost: Low, Med., High	Proximity to Pedestrian Generators	Total Score
ROUTE 2: EAGLE LANDING MIXED-USE DEVELOPMENT/STEVENS ROAD COMMERCIAL AREA							
1L	Construct contiguous walkway from Max Green Line station north to strip mall/Clackamas Corner Library. (Needs Report 3.d.)	2.5	2	1.5	3	2	11
1K	Construct a pedestrian stairway with bike grooves for cyclists from the intersection of Monterey Avenue/90th Avenue to the Clackamas Town Center parking lot. (Needs Report 3.c.)	3	3	3	3	2	14
6D	Install bicycle signs on Monterey Avenue directing cyclists to I-205 multi-use path and/or median refuge/crossing treatment. (Needs Report 3.e.)	0	0	2	5	3	10
7D	Install parabolic mirror and/or signage to resolve limited sight distance issue at the intersection of the I-205 multi-use path and the path extension at Monterey Avenue. (Needs Report 3.m.)	0	0	3	3	3	9
1I	Analyze feasibility of constructing multi-use path from I-205 northbound/Sunnyside Road intersection north to Bob Schumacher Road. (Needs Report 2.c.)	2	3	2	1	1	9
1E	Construct walkway from Max Green Line transit station north to Monterey Avenue/90th Avenue through Clackamas Town Center parking lot. (Needs Report 2.a.)	2	2	2	3	2.5	11.5
ROUTE TOTAL:							64.5
AVERAGE ROUTE SCORE:							10.75

Priority Pedestrian/Bicycle Projects							
Projects		Evaluation Criteria					
		Connectivity	Safety	Route Completion or Pedestrian Volume	Cost: Low, Med., High	Proximity to Pedestrian Generators	Total Score
ROUTE 3: MIXED HOUSING NORTH OF CLACKAMAS TOWN CENTER SHOPPING CENTER							
4D	Install crosswalk(s) where needed at Town Center access drive off of Monterey Avenue leading to the Mall Transit Center. (Needs Report 3.n.)	0	4	0	5	4	13
1J	Remove trees and construct separated sidewalk with landscape strip or curb tight sidewalk along part of 85th Avenue between Causey Avenue and Monterey Avenue. (Needs Report 3.a.)	3	2.5	3	2	2.5	13
6F	Remove "End Bike Route" sign at the end of the Causey Avenue cul-de-sac at the I-205 multi-use path. (Needs Report 3.s.)	0	0	2	5	3	10
2D	Install bike boulevard on Causey Avenue between 82nd Avenue east to the I-205 multi-use path. The bike boulevard should include consideration of the following: left turn lane removal, curb extensions, raised crosswalks for traffic calming and bike sharrows. (Needs Report 3.b.)	3	3	3	2	2.5	13.5
1M	Repair heaving sidewalks along Causey Avenue between 82nd Avenue and 90th Avenue. (Needs Report 3.g.)	3	1.5	1.5	2	2.5	10.5
7C	At the intersection on 82nd Avenue/Causey Avenue (SE and SW corners), install sidewalk ADA ramps. (Needs Report 3.h.)	0	0	3	4	4	11
7E	82nd Avenue/Causey Transit Stop: install pedestrian amenities, e.g. covered shelter. (Needs Report 3.v.)	0	0	4	3	3	10
1R	Replace/repair sidewalks on Causey Avenue west of 82nd Avenue to standard requirement. (Needs Report 4.o.)	2.5	1.5	1.5	3	2.5	11
2F	Install bike lanes on Causey Avenue between Fuller Road and 82nd Avenue. (Needs Report 3.u.)	3	2	3	3	2.5	13.5
ROUTE TOTAL:							105.5
AVERAGE ROUTE SCORE:							11.7

Priority Pedestrian/Bicycle Projects							
Projects		Evaluation Criteria					
		Connectivity	Safety	Route Completion or Pedestrian Volume	Cost: Low, Med., High	Proximity to Pedestrian Generators	Total Score
ROUTE 4: 82ND AVENUE DEVELOPMENT/HOUSING							
4F	Install pedestrian safety devices (e.g. pedestrian signal, signage) for the crosswalk at the Max Green Line Park & Ride to JC Penney. (Needs Report 3.p.)	0	5	0	5	5	15
4G	Install pedestrian safety devices (e.g. pedestrian signal, signage) for the crosswalks leading to the Transit Center on the north side of the mall. (Needs Report 3.r.)	0	4	0	5	4.5	13.5
7B	Upgrade sidewalks and crosswalks on the north side of the mall to ADA standards. (Needs Report 3.f.)	0	0	2	3	2	7
1N	Construct a pedestrian connection through the north Clackamas Town Center parking area west to 82nd Avenue. Construct sidewalk between 82nd Avenue access driveway and the Transit Center north of the cinema. (Needs Report 4.a.)	3	3	2.5	2	3	13.5
2H	Install bike lane on Town Center driveway (northernmost access) from 82nd Avenue to the CTC North Mall Transit Center. (Needs Report 4.g.)	1	1.5	1	2	2.5	8
1P	Construct east/west connector street with sidewalk/bike boulevard treatment between 82nd Avenue and Fuller Road. (Needs Report 4.c.1.)	3	2	3	1	2	11
4H	Increase walk time at crosswalks along 82nd Avenue within project area. (Needs Report 4.k.)	0	3	0	5	4.5	12.5
1O	Construct sidewalk/landscape strip along both sides of 82nd Avenue from Sunnyside Road north to Causey Avenue as per boulevard standard. (Needs Report 4.b.)	3	3	3	1	3	13
7G	Install transit amenities along 82nd Avenue within project area. (Needs Report 4.i.)	0	0	4	3	4	11
2G	Install bike lanes on 82nd Avenue within the project area, if adequate right-of-way exists. If not, acquire right-of-way for bike lanes along 82nd Avenue. (Needs Report 4.d.)	3	3	3	1	3	13
7H	Analyze feasibility of decreasing number of driveways and implementing 82nd Avenue Access Management Targets (Map X-CRC-8). (Needs Report 4.l.)	0	0	4	3	4	11
ROUTE TOTAL:							128.5
AVERAGE ROUTE SCORE:							11.6

Priority Pedestrian/Bicycle Projects							
Projects		Evaluation Criteria					
		Connectivity	Safety	Route Completion or Pedestrian Volume	Cost: Low, Med., High	Proximity to Pedestrian Generators	Total Score
ROUTE 5: CLACKAMAS PROMENADE SHOPPING CENTER							
1T	Construct pedestrian connection along access drive within the Promenade from the crosswalk on Sunnyside Road at about the 9000 block (Petco). (Needs Report 5.b.)	2.5	2.5	2	3	2.5	12.5
1S	Analyze feasibility of strategically locating and constructing walkways within Clackamas Promenade parking lot. (Needs Report 5.a.)	3	2	2	1	2.5	10.5
1U	Construct walkway(s) from the second driveway heading south through the Promenade Shopping Center parking lot. (Needs Report 5.c.)	3	2	2	1	2.5	10.5
1V	Construct an east/west connector walkway west of 93rd Avenue along the north side of the Target store. (Needs Report 5.d.)	2.5	2.5	2.5	1	2.5	11
2I	Install bike lanes along 93rd Avenue. (Needs Report 5.f.)	3	3	3	3	3	15
1X	Construct sidewalks along the west side of 84th Avenue. (Sidewalks exist along east side of 84th Avenue.) (Needs Report 5.h.)	1.5	1.5	2.5	1	1.5	8
2J	Install bike lanes along 84th Avenue. (Needs Report 5.i.)	2	1.5	1.5	3	1.5	9.5
ROUTE TOTAL:							77
AVERAGE ROUTE SCORE:							11

Priority Pedestrian/Bicycle Projects							
	Projects	Evaluation Criteria					
		Connectivity	Safety	Route Completion or Pedestrian Volume	Cost: Low, Med., High	Proximity to Pedestrian Generators	Total Score
ROUTE 6: CLACKAMAS COMMUNITY COLLEGE (CCC)/OREGON INSTITUTE OF TECHNOLOGY/AQUATIC CENTER							
1B	Construct walkway along existing north/south street in the Clackamas Town Center southeast parking lot to Sunnyside Road. (Needs Report 1.a.)	3	3	2	3	3	14
7F	Prepare traffic study to analyze feasibility of reducing travel lanes or other modifications to add pedestrian/bike improvements including landscaping on Sunnyside Road between 82nd Avenue and I-205. (Needs Report 4.f.)	0	0	5	5	5	15
1W	Repair heaving sidewalks (as per the Sunnyside Road design in Figure X-CRC-3) along south side of Sunnyside Road adjacent to Promenade and on south side of Sunnyside Road between 82nd and I-205. (Needs Report 5.g.)	3	3	3	2	3	14
4J	Analyze need for additional crosswalks across Sunnyside Road between 82nd Avenue and the I-205 overpass. If needed, provide additional crosswalk(s)/pedestrian refuge areas. (Needs Report 6.k.)	0	4	0	4	3.5	11.5
7K	Add and paint bike stencils along Harmony Road. (Needs Report 6.e.)	0	0	4	5	4	13
5C	Install lighting along Harmony Road west of Sunnyside Road. (Needs Report 6.f.)	0	5	0	2	3.5	10.5
4K	Analyze need for additional crosswalks across Harmony Road west of 82nd Avenue at the CCC Harmony Campus area. If needed, provide additional crosswalk(s). (Needs Report 6.l.)	0	4	0	5	4	13
2K	Provide safer left turn movement for cyclists from Harmony Road to the CCC Harmony Campus. (Needs Report 6.j.)	2	3	2	3	3	13
4I	Paint crosswalk at intersection of Harmony Road and Fuller Road. (Needs Report 6.g.)	0	3	0	5	3.5	11.5
7J	Analyze ingress/egress to CCC Harmony Campus west of 82nd Avenue. Consider requiring vehicles to use entrance further west at signalized intersection if traffic issue exists or require modifications to existing accessways to increase safety for pedestrians and bicyclists. (Needs Report 6.d.)	0	0	5	5	5	15
1AA	Construct/replace sidewalks along Harmony Road, west of 82nd to Fuller Road as per the Harmony Road Regional Boulevard design in Figure X-CRC-4. (Needs Report 6.i.)	3	2	2	2	3	12
1BB	Extend Sunnyside Road multi-use path to the intersection of 82nd Avenue/Harmony Road.	3	3	3	3	3	15
ROUTE TOTAL:							157.5
AVERAGE ROUTE SCORE:							13.13

Priority Pedestrian/Bicycle Projects								
Projects		Evaluation Criteria						
		Connectivity	Safety	Route Completion or Pedestrian Volume	Cost: Low, Med., High	Proximity to Pedestrian Generators	Total Score
ROUTE 7: CLACKAMAS COMMUNITY COLLEGE HARMONY CAMPUS TO KAISER PERMANENTE HOSPITAL							
1Z	Construct bikeway from existing aquatic center multi-use path east to 82nd Avenue/Sunnybrook Boulevard.	3	3	3	1	3	13
ROUTE TOTAL:							13
AVERAGE ROUTE SCORE:							13

DESCRIPTION OF PROJECT RATING AND EVALUATION SYSTEM

To evaluate the bicycle and pedestrian projects recommended and developed by the Project Advisory Committee evaluation criteria were developed. Five evaluation criteria as shown below were established for the Sidewalks/Walkways/Paths/Bicycle Lanes/Sharrows/Parking/I-205 Overpass projects. Four evaluation criteria were established for the Crosswalks/Lighting projects. And three evaluation criteria were established for the Signage/Other projects. The rating system was designed so that the maximum number of points for each project did not exceed 15 points to ensure parity among the project categories. A summary of each of the categories with the corresponding rating system, evaluation criteria and descriptions is offered below.

SIDEWALKS/WALKWAYS/PATHS/BICYCLE LANES/SHARROWS/PARKING/I-205 OVERPASS

Rating System

3	Alternative meets evaluation Criterion	2.5	Alternative mostly meets evaluation criterion	2	Alternative somewhat meets evaluation criterion	1.5	Alternative barely meets evaluation criterion	1	Alternative does not meet evaluation criterion

Evaluation Criteria (5)

Connectivity	Safety	Route completion	Cost; Low, Med, High	Proximity to Pedestrian Generators

For this group of projects five criteria were scored on a rating system from 1 to 3. The maximum score for each project does not exceed 15 points to ensure more parity among the various project categories, therefore projects were assigned 3, 2.5, 2, 1.5 or 1 point(s).

CROSSWALKS/LIGHTING

Rating System

5	Alternative meets evaluation Criterion	4	Alternative mostly meets evaluation criterion	3	Alternative somewhat meets evaluation criterion	2	Alternative barely meets evaluation criterion	1	Alternative does not meet evaluation criterion

Evaluation Criteria (4)

Safety	Pedestrian Volume	Cost; Low, Med, High	Proximity to Pedestrian Generators

For this group of projects four criteria were scored on a rating system from 1-5 points. The Pedestrian Volume and Proximity to Pedestrian Generators criteria were averaged to ensure a score of no greater than 15 points.

SIGNAGE/OTHER

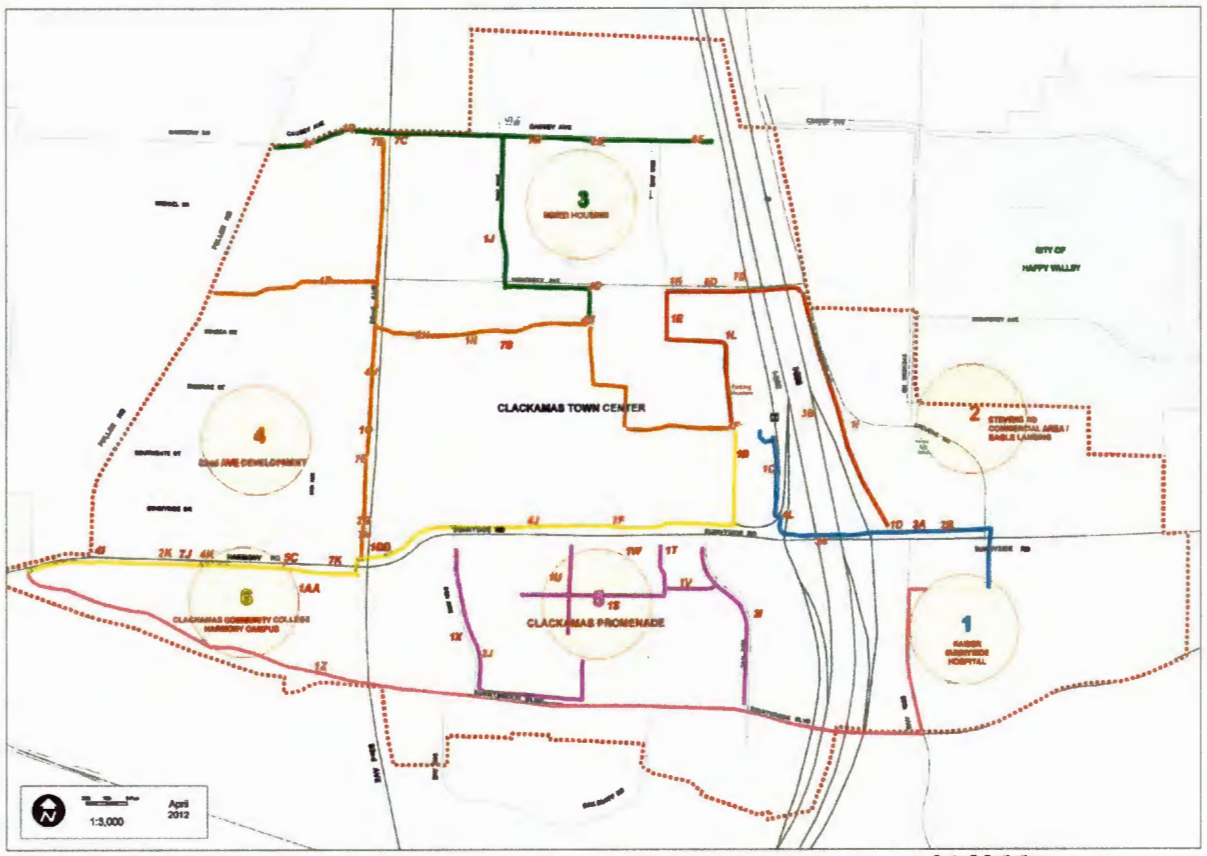
Rating System

5	Alternative meets evaluation Criterion	4	Alternative mostly meets evaluation criterion	3	Alternative somewhat meets evaluation criterion	2	Alternative barely meets evaluation criterion	1	Alternative does not meet evaluation criterion

Evaluation Criteria (3)

Pedestrian Volume	Cost; Low, Med, High	Proximity to Pedestrian Generators

For this group of projects three criteria were scored on a rating system from 1-5 points. The total score will be no greater than 15 points.



Clackamas Regional Center
Pedestrian / Bicycle Connection Project
ROUTES AND PROJECTS

PEDESTRIAN & BICYCLE SIGN PLAN

1. Introduction

The purpose of Clackamas Regional Center (CRC) Area Pedestrian / Bicycle Connection Project is to create a plan for safe pedestrian and bicycle connections within the Study Area. An important element to improve the walking and cycling experience in the Town Center Area is wayfinding signage for both pedestrians and bicyclists, especially between the TriMet Max Green Line and area major employers and services. The goal of the Pedestrian and Bicycle Sign Plan (Sign Plan) for the CRC Area Pedestrian / Bicycle Connection Project is to provide a comprehensive wayfinding system for both walkers and bikers within the Study Area. The Study Area includes the CRC area from Causey Avenue west to Fuller Road, south to below Harmony Road and east to include the area just south of Sunnybrook Boulevard, east of the freeway, past SE 97th Avenue and up to Sunnyside Road back to Causey Avenue.

This Sign Plan includes information on sign placement; sign content (general destinations) and sign type. The plan recommends installation of 21 new pedestrian signs (five map-based signs and 15 pole signs) and 16 bicycle wayfinding signs along bikeways within the Study Area. Detailed maps showing recommended sign locations are attached as Map 1: Pedestrian Sign Locations and Map 2: Bicycle Sign Locations.

2. Clackamas County Bike Wayfinding Sign Program

Clackamas County is currently developing a network of wayfinding signage to direct bicyclists to various destinations. The bicycle wayfinding signs include approximate ride time and distance to destinations in the urban portion of Clackamas County and selected areas in rural County. A typical bicycle wayfinding sign is shown in Figure 1 on page 3. Currently, wayfinding signs have been installed in the urban portion of Clackamas County on River Road, Webster Road and Oatfield Road. Bicycle sign placement within the Town Center Area should tie into the existing network of wayfinding signage to insure a cohesive network of bicycle signs.

3. Destinations

The Sign Plan will direct travelers to various destinations in the CRC Pedestrian / Bicycle Connection Project area. Some of the destinations to be signed include the Town Center, public transit, parks, Kaiser Permanente Hospital, Clackamas Community College Harmony Campus, Aquatic Center and other major destinations. A complete list of destinations is shown in Table 1. Destinations located outside of the Study Area (Mt. Talbert, for example) may be included on the wayfinding signs. With the assistance of the Project Management Team, staff developed the destination list shown on Table 1 below.

TABLE 1: DESTINATIONS		
#	NAME	SIGNED AS
1	Sunnyside Kaiser Permanente Hospital	Hospital
2	Clackamas Community College Harmony Campus	CCC Harmony Campus
3	Mt. Talbert Nature Preserve	Mt. Talbert
4	MAX Green Line	Max Green Line
5	TriMet Bus Stop on north side of Town Center	Transit Station
6	Clackamas Promenade Shopping Center	Clackamas Promenade
7	Eagle Landing Neighborhood	Eagle Landing
8	I-205 Multi-use Path	I-205 Path
9	Clackamas Town Center Shopping Mall	Clackamas Town Center (or "Shopping Center")
10	82nd Avenue Commercial Area	82nd Ave.
11	Clackamas Aquatic Center	Aquatic Center
12	Sunnybrook Boulevard	Sunnybrook Blvd.

4. Bike Sign Design

The CRC Sign Plan recommends wayfinding signage for both pedestrians and bicyclists. Different types of signs are proposed for the different travel modes. The type of bicycle signage proposed for the CRC Area Pedestrian / Bicycle Connection Project is the design shown in Figure 1. Installation of this sign will insure consistency with the existing County Sign Plan and adjacent jurisdictions including the Cities of Milwaukie and Portland. The ODOT approved sign is green and measures 24" x 30". The bicycle wayfinding signs are typically placed in the public right-of-way.

4.1: Bike Design Protocol:

- Each sign can hold one to three destinations but a given sign may have fewer destinations.
- Destinations should be named so as to be consistent with adjacent jurisdictions (e.g. the Milwaukie plan uses Dntwn. Milwaukie; Max Green Line, this project should sign similarly.)
- The straight ahead destination shall be listed on top, the left destination in the middle and the right destination on the bottom.
- For a destination with a straight arrow, the arrow shall be placed to the left of the destination; for a destination with a left arrow, the arrow shall be placed to the left of the destination and the right arrow to the right of a destination.

Figure 1: Bicycle Wayfinding Sign

5. Pedestrian Sign Design

Pedestrian signage should be located primarily in the Town Center and Promenade shopping center complexes and the multi-use paths in the area. Two types of pedestrian signs are recommended: map-based signs and pole signs. A description and examples of the two types of pedestrian signs are shown on pages 5-7 of this report. The sign examples shown on pages 5-7 are for illustrative purposes only; final sign design will be considered during the Sign Plan implementation stage. The two types of signs should work together to create a comprehensive wayfinding system.

The Town Center is planning to install a monument welcoming sign at the southeast corner of the Town Center property near the I-205 exit ramp at Sunnyside Road. Figure 2 shows a version of the proposed monument sign. A pedestrian sign design using a similar color scheme and/or graphics to the signs planned for the Town Center should be considered during the Sign Plan implementation stage. Wayfinding signage at the Town Center proposed under this Sign Plan should be consistent in design with the existing signage and new sign placement shall coordinate with existing directional signage on the Town Center property. In addition, new signs (content, design, location, etc.) proposed in conjunction with this Sign Plan will be coordinated with the Clackamas Town Center and Clackamas Promenade management. Color, content, placement and theme synchronization would create a consistent and recognizable network of signs for the Town Center area.

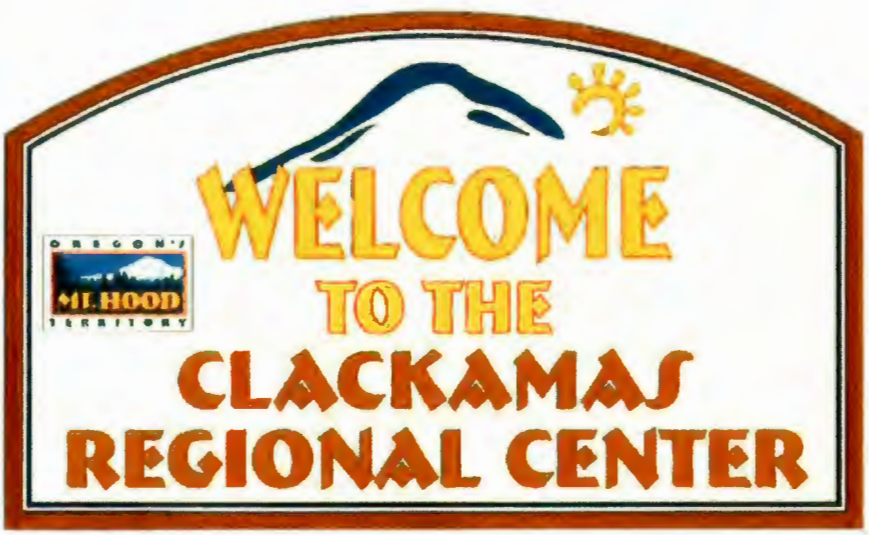


Figure 2: Monument Sign

A) Map-Based Signs

As shown in Figures 3 and 4, the map-based signs would include a simple map of the Study Area as well as directional arrows to destinations. These types of signs would help visitors navigate the Study Area. Staff suggests a limited number (five) of the map-based signs. The final design, specific placement and dimensions of the map-based signs will be considered during the Sign Plan implementation stage.

Figure 3: Map-Based Sign Example.

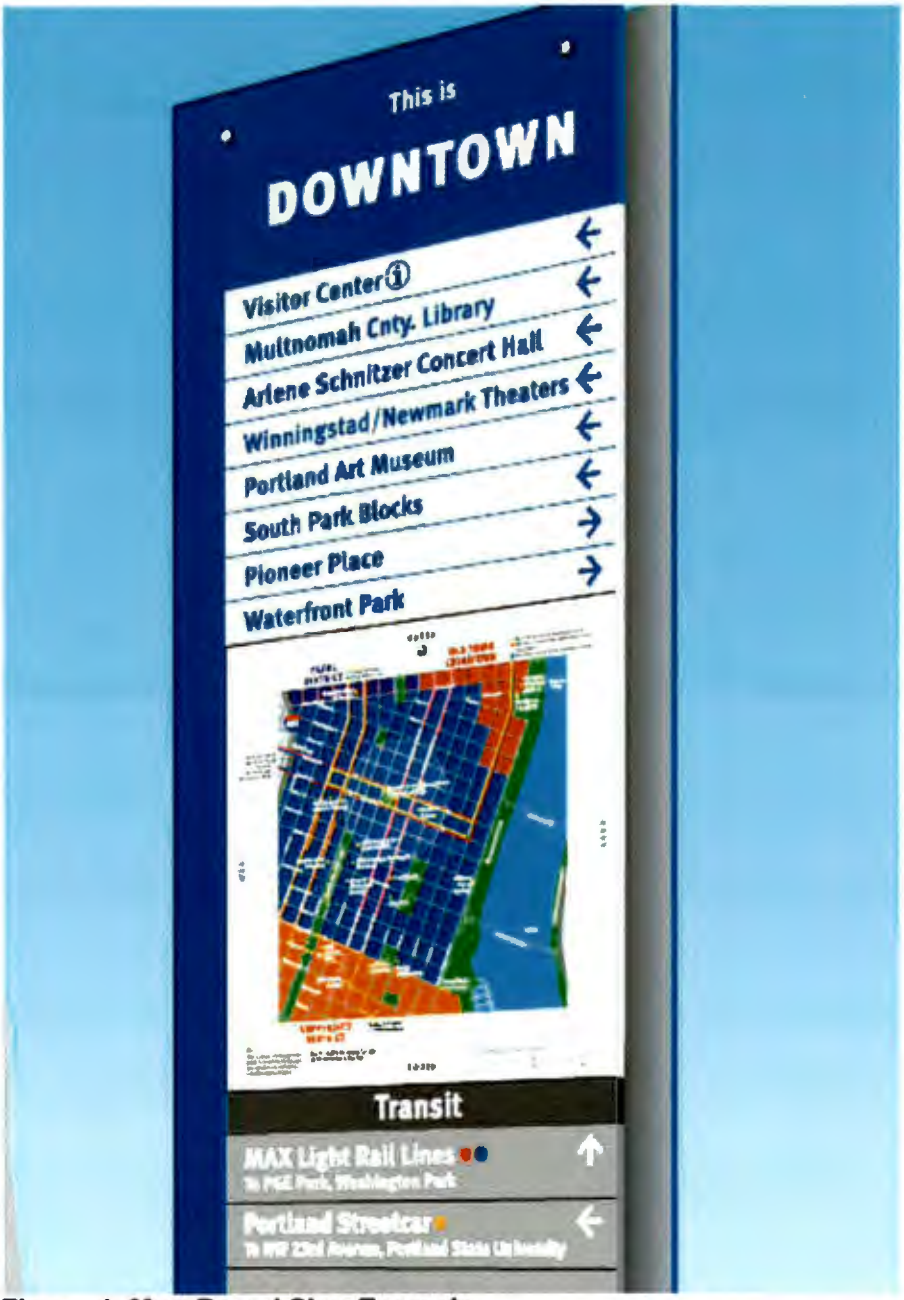


Figure 4: Map-Based Sign Example.

B) Pole Signs

As shown in Figure 5, the pole signs include destination and directional arrows. Distance could also be placed on these signs. Pole signs can be "collocated" with other road signs located in the public right-of-way.

Figure 5: Pole Sign Example

6. Pedestrian and Bicycle Sign Locations

The bicycle wayfinding signs should be located along existing bikeway facilities. Pedestrian wayfinding signs should be located in areas with significant pedestrian traffic. In order to limit clutter, streets with extremely low volume pedestrian or bicycle traffic should not be signed. For example, the local east-west streets between Fuller Road and 82nd Ave. (Southgate Street; Sunnyside Drive, etc.) and north-south streets between Sunnybrook and Sunnyside (84th Avenue and 93rd Avenue) should not be signed for pedestrians. With the assistance of the Project Management Team, staff developed a list of locations appropriate for wayfinding signage. Sign locations include streets such as Monterey Avenue as well as general areas such as the Town Center and Clackamas Promenade. General locations suitable for sign placement are shown in Table 2 which will be further refined when the Sign Plan is implemented. Installation of the signs indicated on Map 1: Proposed Pedestrian Sign Locations and on Map 2: Proposed Bike Sign Locations shall be in coordination with the underlying property owners (Clackamas Town Center management; Clackamas Promenade management; Clackamas Community College/OIT and the Clackamas County Traffic Engineering Division, as appropriate) and may change during implementation.

6.1 Bike Wayfinding Sign Locations

Bike wayfinding signs should be located on roads within the CRC Pedestrian / Bicycle Connection Project area with existing bike facilities, i.e. streets with bike lanes and multi-use paths. Placement should be coordinated with the broader County Bike Sign Plan in order to achieve adequate sign coverage.

6.2 Pedestrian Wayfinding Sign Locations

Pedestrian signs should be located in high traffic pedestrian areas. For example, at the end of the Max Green Line and the Tri-Met Transit Station located on the north side of the Town Center shopping mall. Areas with a low volume of pedestrian traffic such as Sunnybrook Boulevard should not be signed for pedestrians.

TABLE 2: PEDESTRIAN AND BICYCLE SIGN LOCATIONS

LOCATION	PEDS	BIKES
Monterey Avenue	Yes	Yes
Sunnyside Road Multi-Use Path	Yes	Yes
Harmony Road	No	Yes
I-205 Multi-Use Path	Yes	Yes
Town Center	Yes	No
Promenade	Yes	No
Sunnybrook Blvd.	No	Yes
Stevens Road/Schumacher	No	Yes
"Costco Path"	Yes	Yes
Clackamas Community College Harmony Campus	Yes	No

7. Sign Placement: Bike Wayfinding Signs

Bicycle wayfinding signs should be installed along streets within the Study Area that have bike lanes. Sign placement (the specific site of the sign) typically occurs at the intersection of all established bikeways and anywhere else a cyclist faces a decision point. The existing bikeways in the Study Area include Fuller Road, Sunnybrook Boulevard, Monterey Avenue, Causey Avenue, 84th Avenue and Harmony Road.

This Sign Plan recommends installation of 16 bicycle wayfinding signs along bikeways within the Study Area. The 16 signs are listed in Table 3, which provides sign placement and content (e.g. destinations and directional arrows). A map of the Study Area showing proposed bicycle sign placement is attached as Map 2.

7.1: Sign Placement Protocol

- Placement along streets with bike lanes only.
- Signs should be placed at major intersections, high bicycle traffic areas and at important wayfinding decision points / directional changes in route.
- Distance from intersection: signs shall be placed at a distance to allow adequate notification of left or right turns.
- Frequency: sign spacing and overall quantity is critical. Signs should be frequent enough so cyclists can find destinations but not too numerous that they clutter the urban environment. Periodic signs at regular, predictable intervals are recommended. A Primary Destination that is signed at a distance of 5-6 miles might have 2-3 wayfinding signs along a given route. (Note: urban areas typically need more signs per mile than rural areas because of more route intersections and more decision points).
- Destinations will be signed from multiple directions.

TABLE 3: BICYCLE SIGN PLACEMENT		
#	PLACEMENT	CONTENT
1	East end of Causey Avenue @ the cul-de-sac, near the I-205 bike path.	Left Arrow: I-205 Path North Bound Right Arrow: I-205 Path South Bound
2	85th Avenue southbound @ SE Monterey Avenue	Left Arrow: Mt. Scott Left Arrow: Eagle Landing Straight Arrow: Clackamas Town Center
3	Causey Avenue eastbound @ 85th Avenue	Straight Arrow: I-205 Path Right Arrow: Clackamas Town Center Right Arrow: Mt. Scott
4	Causey Avenue west bound @ 82nd Avenue	Straight Arrow: Downtown Milwaukie Straight Arrow: Aquatic Center Straight Arrow: OIT
5	Causey Avenue eastbound @ 82nd Avenue	Straight Arrow: I-205 Path Straight Arrow: Max Green Line Straight Arrow: Mt. Scott
6	Fuller Road northbound @ Causey Avenue	Left Arrow: Springwater Trail Left Arrow: Downtown Milwaukie Right Arrow: I-205 Path
7	Causey Avenue west bound @ Fuller Road.	Straight Arrow: Downtown Milwaukie Left Arrow: CCC Harmony Campus/Aquatic Center/OIT
8	Fuller Road southbound @ Causey Avenue	Straight Arrow: CCC Harmony Campus/Aquatic Center/OIT Right Arrow: Downtown Milwaukie Left Arrow: I-205 Path
9	Harmony Drive eastbound @ Fuller Road	Straight Arrow: I-205 Path Straight Arrow: Clackamas Town Center Right Arrow: CCC Harmony Campus/Aquatic
10	Fuller Road southbound @ Harmony Road	Straight Arrow: CCC Harmony Campus/Aquatic Center Left Arrow: Clackamas Town Center
11	Harmony Road westbound @ Fuller Road	Straight Arrow: N. Clackamas Park Right Arrow: Springwater Trail
12	Harmony Road eastbound @ 82nd Avenue	Right Arrow: I-205 Path/Max Green Line Right Arrow: Mt. Talbert
13	82nd Ave. southbound @ Sunnybrook Blvd.	Left Arrow: Max Green Line Left Arrow: I-205 Path Left Arrow: Mt. Talbert Park
14	Sunnybrook Boulevard eastbound @ the I-205 bike path.	Straight Arrow: Mt. Talbert Park Left Arrow: I-205 Path North Bound Right Arrow: I-205 Path South Bound
15	SE Monterey Avenue eastbound @ SE Bob Schumacher Boulevard.	Left Arrow: Mt. Scott Right Arrow: Eagle Landing Right Arrow: Mt. Talbert Park
16	SE Monterey Avenue eastbound @ 9100 block.	Left Arrow: I-205 Path Straight Arrow: Mt. Scott / Eagle Landing Straight Arrow: Mt. Talbert Park

8. Sign Placement: Pedestrian Wayfinding Signs

Pedestrian wayfinding signs should be installed in areas with high amounts of pedestrian traffic. For example, at the end of the Max Green Line and the Tri-met Transit station at the north side of the Town Center. Pedestrian wayfinding sign placements are described in Table 4 which can be further refined when the Sign Plan is implemented.

8.1: Sign Placement Protocol

- Signs should be placed in high pedestrian traffic areas.
- A combination of map-based wayfinding signage and pole-based signs is recommended.
- Signs should be placed along the "walking routes" identified in Table 2.
- The map-based signs should be placed at key "origin/destination points" such as the Max Green Line and the transit station on the north side of the Town Center.
- To enhance the sense of place and provide navigational assistance, pole signs should be placed at points between the map-based signs.

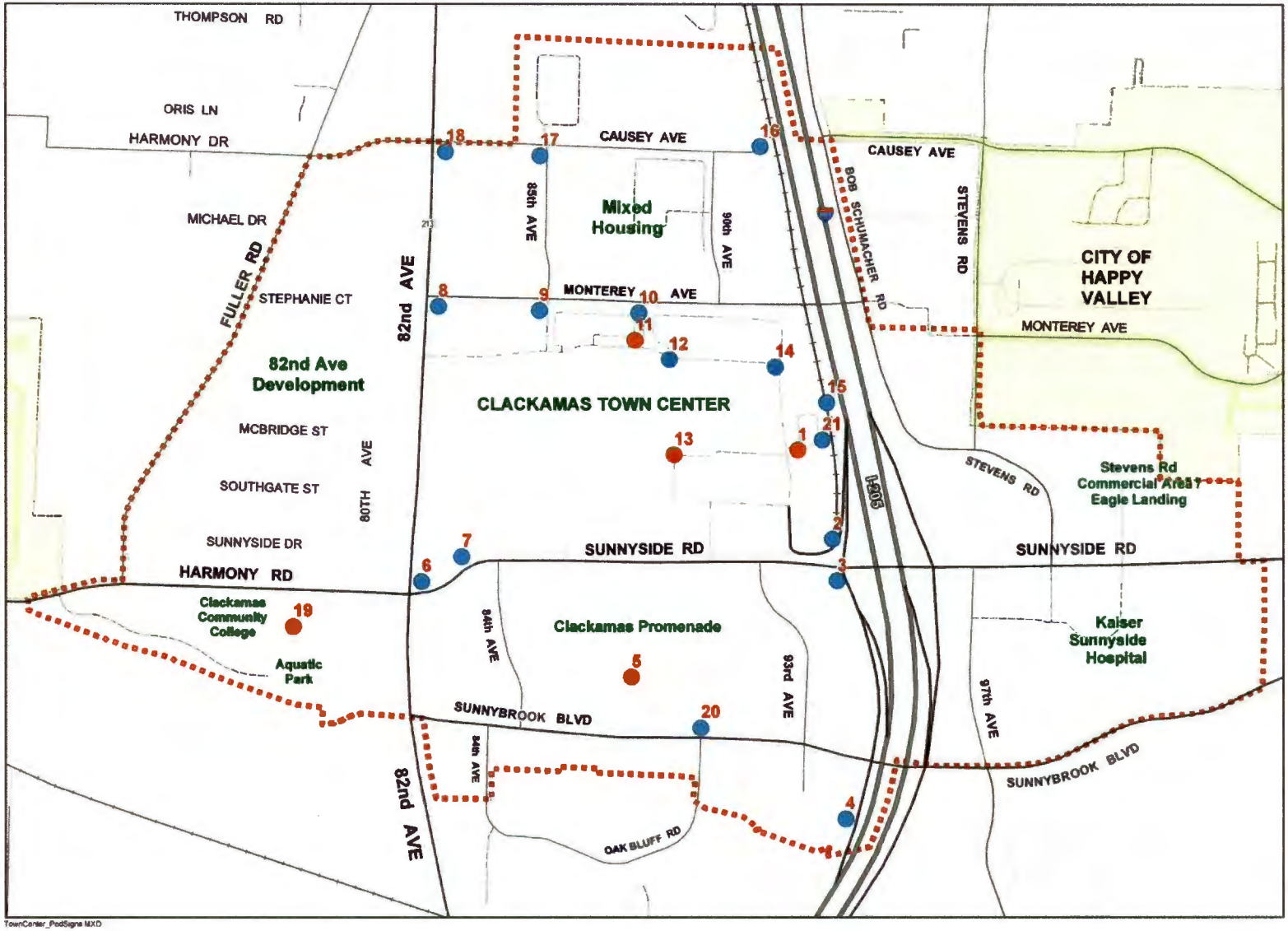
TABLE 4: PEDESTRIAN SIGN PLACEMENT

#	PLACEMENT	TYPE	CONTENT
1	SE corner of Max Green Line Park N Ride	Map Sign	Map of CRC area with destinations labeled.
2	SE corner of Town Center property at the intersection of the I-205 & Sunnybrook multi-use paths.	Pole Sign	East Bound: Mt. Talbert, Hospital, I-205 path West Bound: CCC Harmony Campus, Aquatic Center, OIT
3	Northbound I-205 path and Sunnyside Road	Pole Sign	North bound: Max Green Line East bound: Hospital; Mt. Talbert West bound: OIT, Aquatic Center
4	"Costco Path" and I-205 path intersection.	Pole Sign	Oregon City, Portland
5	Walkway in central portion of Promenade	Map Sign	Map of CRC area with destinations labeled.
6	NE Corner of 82nd Avenue and Sunnyside Road	Pole Sign	CCC Harmony Campus, Aquatic Center, OIT
7	Beginning of Sunnyside Multi-use path – west end.	Pole Sign	East Bound: Mt. Talbert, Hospital, I-205 path West Bound: CCC Harmony Campus, Aquatic Center, OIT
8	SE corner of 82nd Ave. and Monterey Ave.	Pole Sign	CCC Harmony Campus, Aquatic Center, OIT
9	1st access driveway to Town Center Mall east of 82nd Ave.	Pole Sign	East Bound: I-205 path West Bound: CCC Harmony Campus, Aquatic Center, OIT
10	2nd access driveway to Town Center Mall east of 82nd Ave.	Pole Sign	East Bound: I-205 path West Bound: CCC Harmony Campus, Aquatic Center, OIT
11	Mall Transit Stop (north side of mall).	Map Sign	Map of CRC area with destinations labeled.
12	Walkway on the north side of the Town Center Mall.	Pole Sign	Max Green Line
13	SE Town Center Mall Plaza north of REI	Map Sign	Map of CRC area with destinations labeled.
14	Northeast corner of Town Center Mall.	Pole Sign	Max Green Line
15	Intersection of I-205 path and pathway leading to Max Green Line platform.	Pole Sign	Max Green Line

16	Intersection of Causey Avenue and the I-205 path.	Pole Sign	North Bound: Portland South Bound: Gladstone
17	Intersection of Causey Avenue and 85th Avenue	Pole Sign	South Bound: Clackamas Town Center West Bound: CCC Harmony Campus, Aquatic Center, OIT
18	Intersection of Causey Avenue and 82nd Avenue	Pole Sign	South Bound: CCC Harmony Campus, Aquatic Center, OIT.
19	CCC Harmony Campus/Aquatic Center	Map Sign	Map of CRC Area with destinations labeled.
20	Intersection of Sunnybrook Boulevard and Oak Bluff Road	Pole Sign	Clackamas Town Center; Clackamas Promenade; CCC Harmony Campus, Aquatic Center, OIT;
21	Max Green Line Platform	Pole Sign	Directional signage to the I-205 Multi-use path and bike parking.

9. Implementation

In order to implement a Sign Plan funding needs to be addressed. Sign production, funding and installation can be one of the recommended projects for the CRC Area Pedestrian / Bicycle Connection Project. Implementation should include further refinement of specific sign placements, sign content, and design (including color and logo).



TownCenter_PedSigns.MXD

Clackamas Regional Center Pedestrian/Bicycle Connection Project

MAP 1

PROPOSED PEDESTRIAN SIGN LOCATIONS

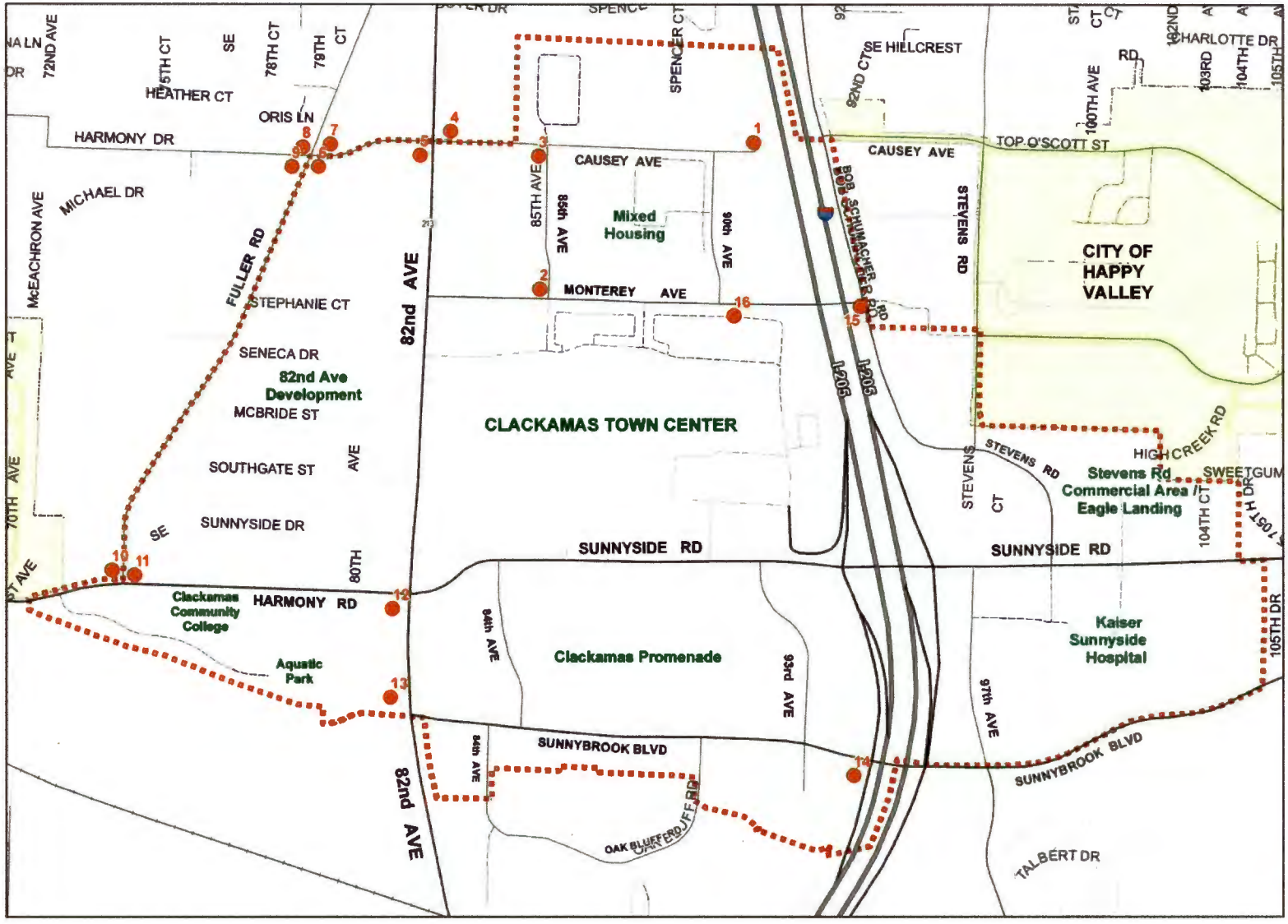
Legend

- Map-Based Sign
- Pole Sign
- Project Study Area
- Incorporated City

1:7,750

500 250 0 Feet

CLACKAMAS COUNTY



Clackamas Regional Center Pedestrian/Bicycle Connection Project

MAP 2

PROPOSED BIKE SIGN LOCATIONS

Legend

- BIKE SIGNS
- Project Study Area
- Incorporated City

1:7,750

500 250 0 Feet

CLACKAMAS COUNTY

Ordinance ZDO-238
Zoning and Development Ordinance Amendments

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

SECTION 1700

CLACKAMAS REGIONAL CENTER

1700 CLACKAMAS REGIONAL CENTER AREA GENERAL PROVISIONS

1700.01 PURPOSE

Section 1700 is adopted to:

A. Implement the policies of the Clackamas Regional Center Area Plan set forth in Chapter 10 of the Comprehensive Plan;

B. Provide for a transition to more intense land uses;

C. Create districts and neighborhoods;

D. Provide for more efficient parking;

E. Improve circulation and connections for all modes of transportation within the Clackamas Regional Center and transportation corridors;

F. Integrate land use, transportation, and urban design to encourage transit, bicycle, and pedestrian use;

G. Provide more community attractions;

H. Create civic spaces;

I. Protect key natural features and open space;

J. Provide attractive streetscapes;

K. Ensure the most efficient use of land;

L. Add parks and enhance open spaces; and

M. Provide a safe and pleasant environment.

[Renumbered and amended by Ord. ZDO-226, 3/7/11]

1700.02 APPLICABILITY

Section 1700 applies to development in the Clackamas Regional Center Area. This area is shown on Comprehensive Plan Map X-CRC-1, *Clackamas Regional Center Area Design Plan, Regional Center, Corridors, and Station Community.*

[Renumbered and amended by Ord. ZDO-226, 3/7/11]

1700.03 CLACKAMAS REGIONAL CENTER AREA DESIGN STANDARDS

Subsection 1700.03 applies in the Clackamas Regional Center Area, including the Regional Center and the Fuller Road Station Community, as shown on Comprehensive Plan Map X-CRC-1, *Clackamas Regional Center Area Design Plan, Regional Center, Corridors, and Station Community.*

A. Clackamas Regional Center Area Design Plan: Development is subject to the Clackamas Regional Center Area Design Plan in Chapter 10 of the Comprehensive Plan.

B. Urban Design Elements: New development is subject to the urban design elements shown on Comprehensive Plan Map X-CRC-3, *Clackamas Regional Center Area Design Plan, Urban Design Elements*. The urban design elements are described in the Clackamas Regional Center Area Design Plan in Chapter 10 of the Comprehensive Plan.

1. Urban design elements provided in a development may be used to reduce gross site area for calculating minimum density requirements in Subsection 1012.08, and to meet minimum landscaping requirements in Section 1009.

2. For phased development approved through a master plan, requirements for the urban design elements may be roughly proportional to the amount of the master planned approved development being developed in any one phase.

C. Parking Structure Orientation: Entrances for ground-level retail uses in parking structures located within 20 feet of a street shall be oriented to a street.

D. Corner Lot Buildings:

1. A corner lot is a lot, parcel, tax lot, or land area created by a lease agreement at the intersection of two streets.

2. Buildings on street corners shall have corner entrances or other architectural features to enhance the pedestrian environment at the intersection.

3. Development on lots at a Gateway intersection as shown on Comprehensive Plan Map X-CRC-3, and Comprehensive Plan Figure X-CRC-7, *Clackamas Regional Center Area Design Plan, Gateway Intersection (Boulevard and Main Street)*,shall be designed to accommodate future Gateway improvements.

E. Drive-Thru Window Service Facilities: Outside the Regional Center boundary shown on Comprehensive Plan Map X-CRC-1, drive-thru window service facilities are allowed, except for Main Streets designated on Comprehensive Plan Map X-CRC-3, or where otherwise limited in the underlying zoning district, subject to the following standards:

1. When drive-thru window service facilities are oriented toward front yards or street corners, pedestrian areas shall be buffered from the noise and exhaust of drive-thru vehicles.

2. When building entrances are separated from sidewalks by drive-thru window service facilities, special design features may be required to ensure safe, direct, and convenient crossings and to screen pedestrian areas from drive-thru window service facilities. These may include different paving types, raised elevation, warning signs, landscaping, walls, bollards, or other similar methods.

F. Building Setbacks from Private Streets: Where a setback from a private street, as defined in Subsection 1700.03(I)(1), is required by the standards of the underlying zoning district, the setback shall be measured from the back edge of the sidewalk.

G. Pedestrian Amenities: The following guidelines apply to pedestrian amenities used to meet the minimum landscaping area standard, as allowed by Section 1009:

1. Pedestrian areas include plazas, courtyards, outdoor seating areas for restaurants, pocket parks, and atriums when there is direct access for pedestrians. Pedestrian areas in front of buildings should be visible from the street.

2. Pedestrian areas must include landscape planters and at least two of the following amenities for every 100 square feet of pedestrian area: lawn areas with trees and seating; awnings or other weather protection; kiosks; outdoor eating areas with seating; water features with seating; and drinking fountains.

H. Parking Structures: If a parking structure, including understructure parking, abuts a street, appropriate features shall be provided to create a transition between the parking structure, or the entrance to understructure parking, and the abutting street. Examples of appropriate features include, but are not limited to, landscape planters and trellises, awnings, canopies, building

ornamentation, and art. As used in Subsection 1700.03(H), a parking structure "abuts a street" if no other building is sited between the parking structure and the street.

I. Roads and Circulation: Roads and circulation shall comply with Section 1007 and the following:

1. Private Streets: Private streets used to meet the structure orientation and/or setback standards shall include:

   a. Sidewalks or raised walking surfaces on both sides;

   b. Curbs;

   c. Street trees, pursuant to Subsection 1007.08; and

   d. Pedestrian-scale lighting.

   e. Private streets may also provide on-street parking and at-grade loading zones, as applicable.

2. Internal Streets

   a. Internal streets may be required to connect to adjacent properties to increase connectivity and provide grid patterns that allow for future development.

   b. Internal streets shall be designed to allow for future development when applicable.

   c. Development shall provide, when applicable, direct street and pedestrian connections between developments and schools, parks, open space, shopping areas, employment areas, and transit stops.

   d. To provide connectivity, existing platted roads within proposed developments shall not be vacated unless similar access is provided on the site.

3. Boulevards: The following streets are designated as Regional Boulevards, are shown on Comprehensive Plan Map X-CRC-3, and are subject to the design standards in Comprehensive Plan Figures X-CRC-1 through X-CRC-4.

   a. Harmony Road;

   b. Sunnyside Road;

   c. Sunnybrook Boulevard; and

d. 82nd Avenue, between Causey and Sunnybrook.

4. Pedestrian and Bicycle Facilities: Pedestrian and bicycle circulation connections shall be provided as follows:

a. The pedestrian and bicycle circulation connections shown on Comprehensive Plan Maps X-CRC-3, ~~and~~ X-CRC-7, *Clackamas Regional Center Area Design Plan, Pedestrian and Bicycle Circulation Network~~Bikeway and Path Network~~*, and X-CRC-7a, *Clackamas Regional Center Area Design Plan, Walkway Network*, shall be provided.

b. New development shall not be sited such that it precludes the construction of the new walkways, or eliminates the existing walkways, that are shown on Comprehensive Plan Map X-CRC-7a or identified in the *Clackamas Regional Center Pedestrian/Bicycle Plan* adopted by reference in Appendix A of the Comprehensive Plan, unless an alternative walkway location that provides a similar connection is established. An alternative walkway location shall not be deemed "similar" to a planned or existing location unless:

i. It provides comparably safe, direct, and convenient pedestrian access to significant destinations, such as transit facilities, major employers, multifamily dwelling complexes, and retail and service establishments; and

ii. It fulfills a comparable function in terms of filling gaps in the pedestrian circulation system planned for the Clackamas Regional Center Area.

J. Master Plan: A master plan for sites capable of future development shall be submitted for design review pursuant to Section 1102 with the application for the first phase of development. In the Regional Center Office zoning district, this requirement is limited to sites larger than two and one-half acres that are capable of future development. The master plan shall address the standards and requirements of this Ordinance, and should include:

1. General location of all proposed uses and improvements;

2. General building dimensions, number of stories, square footage of commercial uses, and number of dwelling units of residential uses;

3. Internal circulation, including that for auto, transit, pedestrian, and freight service;

4. Transportation connections to the external street system, including off-site circulation and site access;

5. Open space and natural features to be protected;

6. Urban design elements shown on Comprehensive Plan Map X-CRC-3 that are required on the subject property;

7. A demonstration that proposed street layout will accommodate future growth; and

8. General location of public facilities and private utilities.

[Renumbered and amended by Ord. ZDO-226, 3/7/11; Amended by Ord. ZDO-224, 5/31/11]

1700.04 REGIONAL CENTER DESIGN STANDARDS

Subsection 1700.04 applies in the Regional Center, as shown on Comprehensive Plan Map X-CRC-1, *Clackamas Regional Center Area Design Plan, Regional Center, Corridors, and Station Community.*

A. Freestanding parking structures located within 20 feet of pedestrian facilities, including public or private streets, pedestrian ways, greenways, a transit station or shelter, or plaza, shall provide a quality pedestrian environment on the façade facing the pedestrian facility. Techniques to use may include:

1. Provide retail or office uses on the ground floor of the parking structure facing the pedestrian facility;

2. Provide architectural features that enhance the first floor of the parking structure adjacent to the pedestrian facility, such as building articulation, awnings, canopies, building ornamentation, and art; and

3. Provide pedestrian amenities in the transition area between the parking structure and pedestrian facility, including landscaping, trellises, seating areas, kiosks, water features with seating, plazas, outdoor eating areas, and drinking fountains.

B. New buildings shall have at least one public entrance oriented to a street. Private streets used to meet this standard must include the elements identified in Subsection 1700.03(I)(1).

C. Drive-thru window service facilities are allowed, except for Main Streets designated on Comprehensive Plan Map X-CRC-3, *Clackamas Regional Center Area Design Plan, Urban Design Elements*, or where otherwise limited in the underlying zoning district. However, internal driveways are prohibited between the building and street to which building entrances are oriented.

D. Pedestrian amenities are required between the building and the front lot line. The following guidelines apply to pedestrian amenities used to meet this requirement:

1. Pedestrian areas include plazas, courtyards, outdoor seating areas for restaurants, pocket parks, and atriums when there is direct access for pedestrians. Pedestrian areas in front of buildings should be visible from the street.

2. Pedestrian areas must include landscape planters and at least two of the following amenities for every 100 square feet of pedestrian area: lawn areas with trees and seating; awnings or other weather protection; kiosks; outdoor eating areas with seating; water features with seating; and drinking fountains.

E. Internal streets and driveways are prohibited between buildings and the street to which building entrances are oriented.

[Moved from Subsection 1700.01 (renumbered as 1700.03) and amended by Ord. ZDO-226, 3/7/11, Amended by Ord. ZDO-224, 5/31/11]

1700.05 FULLER ROAD STATION COMMUNITY DIMENSIONAL AND DESIGN STANDARDS

Subsection 1700.05 applies in the Fuller Road Station Community, as shown on Comprehensive Plan Map X-CRC-1, *Clackamas Regional Center Area Design Plan, Regional Center, Corridors and Station Community*. If the text of Subsection 1700.05 is unclear as applied to a specific development, Figures 1700-1 through 1700-11, as applicable, may be used to resolve the ambiguity.

A. Subsections 1700.05(B) through (M) do not apply in Sectors 1 and 2, as shown on Map 1700-1, until:

1. One or more additional stories are to be added to one or more existing buildings that are more than 150 feet from 82nd Avenue in either Sector 1 or Sector 2. For the purpose of this provision, a mezzanine shall not be considered an additional story; or

2. More than 40,000 square feet of new building area is to be developed in either Sector 1 or Sector 2.

   a. The tally of new square footage will be cumulative starting with new development after March 7, 2011.

   b. If an existing building is expanded, the square footage of the new building outside the existing building footprint will be counted toward the total of 40,000 square feet.

   c. If a mezzanine is added inside an existing building, the square footage of the mezzanine will be counted toward the total of 40,000 square feet.

d. If one or more stories are added to a building 150 feet or less from 82nd Avenue, as allowed by Subsection 1700.05(A)(1), the additional square footage will be counted toward the total of 40,000 square feet.

e. If a building is damaged or destroyed, regardless of the cause, and the building is restored or replaced, the square footage of the restored or new building that is constructed inside the previous building footprint will not be counted toward the total of 40,000 square feet, provided that restoration or replacement lawfully commences within three years of the occurrence of the damage or destruction. "Lawfully commenced" shall have the meaning given in Subsection 1206.03(B). However, if the new building has more stories than the previous building, Subsections 1700.05(B) through (M) will become applicable, if required pursuant to Subsection 1700.05(A)(1).

3. Subsections 1700.05(A)(1) and (2) apply separately to Sectors 1 and 2, meaning that compliance with Subsections 1700.05(B) through (M) will not be required in Sector 1 or 2 until that particular sector exceeds the development threshold established by Subsection 1700.05(A)(1) or (2).

4. Prior to the point at which Subsections 1700.05(B) through (M) become applicable, new development in Sectors 1 and 2 shall not be sited such that it:

   a. Precludes establishment of the "conceptual street grid" identified on Map 1700-2, or eliminates or reduces existing elements of that grid. All streets shown on the grid are planned to be Type D.; or

   b. Precludes establishment of a connection, with a Type D street cross section, between a signalized intersection at 82nd Avenue and a point on Fuller Road within the "access area" shown on Map 1700-2.

B. Minimum Building Height: 20 feet, measured to top of parapet or roof.

C. Minimum Side and Rear Yard Setbacks: Five feet, except a zero setback is allowed for attached structures. (See Figure 1700-1.)

D. Maximum Driveway Width: The maximum width of a curb cut for a driveway is 24 feet (not including sidewalks or landscaping) unless otherwise required by the Clackamas County Roadway Standards or applicable fire district. (See Figure 1700-1.)

E. Regulating Plan: Map 1700-1 is the regulating plan for the Fuller Road Station Community. It identifies each existing or planned street in the Fuller Road Station Community as one of four street types: Type A, B, C, or D. As established by Subsections 1700.05(G) and (L), the building frontage and

landscape screening regulations for the Fuller Road Station Community are applied by street type and are thereby "keyed" to the regulating plan.

F. Streets: Street improvements are required as follows:

1. Except as set forth in Subsection 1700.05(F)(3), the locations of required new streets are shown on Map 1700-1, or will be determined pursuant to Subsection 1700.05(F)(2). New streets shown on Map 1700-1 are intended to create blocks with a perimeter no greater than 2,200 feet. Exact location of these new streets may vary up to 50 feet, provided the maximum block perimeter standard is met and provided that the new streets create the connections/intersections shown on Map 1700-1.

2. In addition to the mapped streets (existing and new) illustrated on Map 1700-1, a through-block connection is required for any block face longer than 450 feet. (See Figure 1700-2.)

   a. "Block face" means the curb to curb distance between any two streets, including Type E pedestrian/bicycle connections.

   b. These additional connections shall:

      i. Have a Type D street cross section or a Type E pedestrian/bicycle connection cross section;

      ii. Be located no closer than 100 feet to an adjacent street intersection, whether existing or planned; and

      iii. Align with other existing or planned streets or Type E pedestrian/bicycle connections where possible.

3. Subsections 1700.05(F)(1) and (2) do not apply in Sectors 1 and 2 shown on Map 1700-1. Instead, compliance with either Subsection 1700.05(F)(3)(a) or Subsections 1700.05(F)(3)(b) and(c) is required.

   a. Development shall not occur until a connection with a Type D street cross section is constructed between a signalized intersection at 82nd Avenue and a point on Fuller Road within the "access area" shown on Map 1700-2. In addition:

      i. New development shall not be sited such that establishment of the "conceptual street grid" identified on Map 1700-2 is precluded, or existing elements of that grid are eliminated or reduced. All streets shown on the grid are planned to be Type D.

      ii. New development is required to complete frontage improvements for all streets upon which it has street frontage, as necessary to achieve consistency with Subsection 1700.05(F)(4).

b. In lieu of compliance with Subsection 1700.05(F)(3)(a), development shall not occur until an alternative connectivity plan is approved for Sectors 1 and 2 shown on Map 1700-1. This connectivity plan shall:

   i. Connect the on-site transportation system to the existing and planned facilities shown on Map 1700-1;

   ii. Provide pedestrian, bicycle, and motor vehicle circulation that meets the needs of future residents and visitors;

   iii. Emphasize pedestrian mobility and accessibility, demonstrating an effective and convenient system of pedestrian walkways leading through the subject site;

   iv. Provide for bicycle connections and efficient motor vehicle movements through the site;

   v. Except where precluded by existing development, existing interests in real property, natural features, or topography, provide for block faces that do not exceed 450 feet between any two streets;

   vi. Include a minimum of three street connections to 82nd Avenue and a minimum of two street connections to Fuller Road. These connections must be Type D streets, and one must connect to Fuller Road within the "access area" shown on Map 1700-2;

   vii. Include a phasing plan for completion of the connectivity plan based on the submitted development application or conceptual future development, as appropriate. This phasing plan shall ensure that at no point is the overall connectivity in Sectors 1 and 2 reduced and that at least one connection from 82nd Avenue to Fuller Road is constructed to a Type D street cross section in conjunction with the first phase of new development; and

   viii. Comply with the Clackamas County Roadway Standards and the requirements of the Oregon Department of Transportation, as applicable.

c. Once an alternative connectivity plan is approved:

   i. New development shall not be sited such that establishment of the connections identified on the connectivity plan are precluded, or existing elements of that plan are eliminated or reduced.

   ii. New development shall not occur until at least one connection from 82nd Avenue to Fuller Road is constructed to a Type D street cross section. The other connections required by the connectivity plan shall be constructed in a manner consistent

with the approved phasing plan. However, at a minimum, if an existing connection is removed as allowed by the connectivity plan, a new connection that provides at least the same degree of connectivity shall be constructed.

iii. New development is required to complete frontage improvements for all streets upon which it has street frontage, as necessary to achieve consistency with Subsection 1700.05(F)(4). Frontage shall be determined based on the approved connectivity plan.

4. Streets and Type E pedestrian/bicycle connections shall be designed in conformance with the design standards shown in Comprehensive Plan Figures X-CRC-8 through X-CRC-11, unless an alternative design is required pursuant to the Clackamas County Roadway Standards or to accommodate fire access, necessary truck circulation, or other engineering factors. An alternative design shall not change the designated street type for purposes of applying the building frontage and landscape screening regulations. Cross section designs for SE Johnson Creek Boulevard and SE 82nd Avenue shall be determined by Clackamas County and the Oregon Department of Transportation.

G. Building Frontage Types: Four building frontage types are established, each of which is allowed on one or more of the four street types allowed in the Fuller Road Station Community. Subsection 1700.05(G) applies to existing or future Type A, B, C, and D streets, regardless of whether they are shown on Map 1700-1. Table 1700-1 establishes which building frontage types are permitted on each street type. Figure 1700-3 summarizes the four building frontage types.

Table 1700-1: Permitted Building Frontage Type by Street Type

Permitted Building Frontage Type:	Street Type:
Landscape	A Street
Linear	A, B, C, and D Streets
Forecourt	A, B, C, and D Streets
Porch/Stoop/Terrace	B, C, and D Streets

1. Buildings, except parking structures, located wholly or partially within 40 feet of a Type A, B, C or D street are required to comply with the standards for a building frontage type permitted on the applicable street type.

2. The entire length of street frontage designated on Map 1700-1 as "building frontage required," or "required retail opportunity area," excluding walkway cuts with a maximum width of eight feet and driveway cuts, shall be developed with one or more buildings that comply with the standards of a building frontage type permitted on the abutting street type.

    a. Except along Otty Road, where the building frontage requirement extends the entire length of the street, the "building frontage required" designation extends a distance of 60 feet from the street intersection, and the "required retail opportunity area" designation extends a distance of 100 feet from the street intersection. The beginning point for measurement is the outside edge of the right-of-way, or in the case of a private street, the outside edge of the improved street surface, including any landscape strip or sidewalk.

3. A minimum of 50 percent of the length of street frontage not designated as "building frontage required" or "required retail opportunity area" shall be developed with one or more buildings that comply with the standards of a building frontage type permitted on the abutting street type. The 50-percent building frontage requirement is calculated for each lot individually, rather than in the aggregate for an entire street.

    a. If part of the street frontage is designated as "building frontage required" or "required retail opportunity area," buildings developed pursuant to Subsection 1700.05(G)(2) may be counted toward meeting the 50-percent requirement for the entire street frontage.

4. If a lot has street frontage on more than one street:

    a. Compliance with Subsection 1700.05(G)(2) is required for all street frontage designated as "building frontage required" or "required retail opportunity area."

    b. Compliance with Subsection 1700.05(G)(3) is required for only one street frontage, unless one of the frontages is on Otty Road, in which case compliance with Subsection 1700.05(G)(3) is not required.

5. Lots developed solely with parks and open space uses are exempt from Subsection 1700.05(G)(2) and (3).

H. Landscape Building Frontage Type: Landscape Building Frontage, which is permitted on Type A Streets, shall comply with the following standards (see Figure 1700-4):

1. Front Yard Setback: The street-facing facade of the building shall be set back a minimum of 10 feet and a maximum of 15 feet.

a. If it is not possible for a development to comply with the maximum setback standard and the intersection sight distance and roadside clear zone standards of the County Roadway Standards, the setback may be increased to the minimum extent necessary.

b. The front yard setback area shall be landscaped with plants, or paved with masonry pavers or stamped concrete.

c. No parking, storage, or display of motorized vehicles or equipment is allowed in the front yard setback area.

d. Building service and utility equipment and outdoor storage of garbage or recycling is not permitted along the street-facing building facade or in the front yard setback area, except:

   i. Garbage and recycling receptacles for public use are permitted, provided that they do not exceed 35 gallons in size and are clad in stone or dark-colored metal.

e. Fences: Fences and walls are permitted in the front yard setback area, subject to the following standards:

   i. The fence or wall shall be a maximum of three feet high.

   ii. A fence shall be wrought iron, steel, or a similar metal and shall be dark in color. Chain-link fences are prohibited.

   iii. A wall shall be wood, masonry, concrete, or a combination thereof.

   iv. A fence shall be a minimum of 20 percent transparent. The transparent portions of the fence shall be distributed along the length of the fence in a recognizable pattern (e.g., two-inch gaps alternating with eight-inch solid sections).

2. Minimum Ground Floor Height: The ground floor of the building shall measure a minimum of 15 feet from floor to ceiling.

3. Minimum Building Depth: Buildings shall be a minimum of 40 feet deep.

4. Building Entrances: Building entrances shall either be covered by an awning or canopy, or be covered by being recessed behind the front building facade. If an awning or canopy is provided, it shall have a minimum vertical clearance of eight feet and a maximum vertical clearance of 13 ½ feet. If only a recessed entry is provided, it shall be recessed behind the front facade a minimum of three feet.

5. Primary Building Entrances: Each building shall have at least one building entrance that faces the street and is directly connected to a public sidewalk by a walkway that is a minimum of five feet wide.

   a. If the entrance serves a business (other than a home occupation), the entrance must be open to the public during regular business hours.

   b. If a fence or wall is within the front yard setback as provided in Subsection 1700.05(H)(1)(e), a pedestrian opening a minimum of five feet wide shall be provided for the walkway.

6. Windows: Transparent ground-floor windows shall be provided along a minimum of 60 percent of the ground-floor, street-facing facade area.

7. Building Materials: Exterior building materials and finishes shall be high-image, such as masonry, architecturally treated tilt-up concrete, glass, wood, or stucco. Metal siding is prohibited, except as approved through design review pursuant to Section 1102 for specific high-image materials, canopies, awnings, doors, screening for roof-mounted fixtures, and other architectural features.

I. Linear Building Frontage Type: Linear Building Frontage, which is permitted on all street types, shall comply with the following standards (see Figure 1700-5):

1. Front Yard Setback: The street-facing facade of the building shall be set back a maximum of five feet. There is no minimum front yard setback.

   a. If it is not possible for a development to comply with the maximum setback standard and the intersection sight distance and roadside clear zone standards of the County Roadway Standards, the setback may be increased to the minimum extent necessary.

   b. The front yard setback area, if any, shall be landscaped with plants, or paved with masonry pavers or stamped concrete.

   c. No parking, storage, or display of motorized vehicles or equipment is allowed in the front yard setback area.

   d. Building service and utility equipment and outdoor storage of garbage or recycling is not permitted along the street-facing building facade or in the front yard setback area, except:

      i. Garbage and recycling receptacles for public use are permitted, provided that they do not exceed 35 gallons in size and are clad in stone or dark-colored metal.

e. Fences: Fences and walls are permitted in the front yard setback area, subject to the following standards:

i. The fence or wall shall be a maximum of three feet high.

ii. A fence shall be wrought iron, steel, or a similar metal and shall be dark in color. Chain-link fences are prohibited.

iii. A wall shall be wood, masonry, concrete, or a combination thereof.

iv. A fence shall be a minimum of 20 percent transparent. The transparent portions of the fence shall be distributed along the length of the fence in a recognizable pattern (e.g., two-inch gaps alternating with eight-inch solid sections).

2. Minimum Ground Floor Height: The ground floor of the building shall measure a minimum of 15 feet from floor to ceiling, except when the building is designed to accommodate residential uses, in which case the minimum floor-to-floor height shall be 12 feet.

3. Ground Floor Construction Type: In areas designated "required retail opportunity area" on Map 1700-1, the ground floor construction type shall meet at least the minimum requirements for a commercial use, as set forth in the current edition of the Oregon Structural Specialty Code.

4. Minimum Building Depth: In areas designated "required retail opportunity area" on Map 1700-1, buildings shall be a minimum of 40 feet deep.

5. Weather Protection: Awnings or canopies shall be provided for a minimum of 50 percent of the linear distance of the street-facing building facade and shall comply with the following:

a. Awnings and canopies shall project a minimum of five feet and a maximum of eight feet over the sidewalk.

b. Awnings and canopies shall have a minimum vertical clearance of eight feet and a maximum vertical clearance of 13 ½ feet.

6. Building Entrances: Building entrances shall either be covered by an awning or canopy, or be covered by being recessed behind the front building façade. If an awning or canopy is provided, it shall have a minimum vertical clearance of 8 feet and a maximum vertical clearance of 13 ½ feet. If only a recessed entry is provided, it shall be recessed behind the front façade a minimum of three feet.

7. Primary Building Entrances: Primary building entrances shall face the street and be a minimum of 40 percent transparent. The minimum amount

of transparency is measured as a percentage of the total area of the entrance.

a. Primary building entrances shall open onto an abutting public sidewalk, or be directly connected to a public sidewalk by a walkway that is a minimum of five feet wide.

b. If the entrance serves a business (other than a home occupation), the entrance must be open to the public during regular business hours.

c. If a fence or wall is within the front yard setback as provided in Subsection 1700.05(I)(1)(e), a pedestrian opening a minimum of five feet wide shall be provided for the walkway.

8. Windows: Transparent ground-floor windows shall be provided along a minimum of 60 percent of the ground-floor, street-facing façade area.

9. Building Materials: Exterior building materials and finishes shall be high-image, such as masonry, architecturally treated tilt-up concrete, glass, wood, or stucco. Metal siding is prohibited, except as approved through design review pursuant to Section 1102 for specific high-image materials, canopies, awnings, doors, screening for roof-mounted fixtures, and other architectural features.

J. Forecourt Building Frontage Type: Forecourt Building Frontage, which is permitted on all street types, shall comply with the following standards (see Figure 1700-6):

1. Front Yard Setback: The street-facing facade of the building shall be set back a maximum of five feet. There is no minimum front yard setback. Except for the portion of the façade located behind a recessed courtyard, as required by Subsection 1700.05(J)(2), the street-facing façade of the building shall be built to the chosen setback line.

a. If it is not possible for a development to comply with the maximum setback standard and the intersection sight distance and roadside clear zone standards of the County Roadway Standards, the setback may be increased to the minimum extent necessary.

b. No parking, storage, or display of motorized vehicles or equipment is allowed in the front yard setback area or in the required courtyard. Bicycle parking may be permitted in the courtyard, subject to compliance with Section 1015.

c. Building service and utility equipment and outdoor storage of garbage or recycling is not permitted along the street-facing building façade, in the front yard setback area, or in the required courtyard, except:

i. Garbage and recycling receptacles for public use are permitted, provided that they do not exceed 35 gallons in size and are clad in stone or dark-colored metal.

2. Courtyard: A recessed courtyard is required and shall comply with the following standards:

   a. The courtyard shall be set back from the street-facing building façade a minimum of 10 feet and a maximum of 30 feet.

   b. The courtyard shall not be covered.

   c. The courtyard shall be landscaped with plants, or paved with masonry pavers or stamped concrete.

   d. The courtyard shall span a minimum of 20 feet along the street-facing building façade and a maximum of 50 percent of the street-facing building facade. As a result, the building must have a street-facing building façade of at least 40 feet wide.

3. Incorporation of Linear Building Frontage Type: The street facing-building façade not located behind a recessed courtyard shall comply with the standards for the Linear Building Frontage Type in Subsection 1700.05(I).

4. Minimum Ground Floor Height: The ground floor of the building shall measure a minimum of 15 feet from floor to ceiling, except when the building is designed to accommodate residential uses, in which case the minimum floor-to-floor height shall be 12 feet.

5. Ground Floor Construction Type: In areas designated "required retail opportunity area" on Map 1700-1, the ground floor construction type shall meet at least the minimum requirements for a commercial use, as set forth in the current edition of the Oregon Structural Specialty Code.

6. Primary Building Entrances: Primary building entrances shall face the street or the courtyard and be a minimum of 40 percent transparent. The minimum amount of transparency is measured as a percentage of the total area of the entrance.

   a. Primary building entrances facing the street shall open onto an abutting public sidewalk, or be directly connected to a public sidewalk by a walkway that is a minimum of five feet wide.

   b. If the entrance serves a business (other than a home occupation), the entrance must be open to the public during regular business hours.

7. Windows: Transparent ground-floor windows shall be provided along a minimum of 50 percent of the ground-floor, courtyard-facing façade area. See the Linear Building Frontage Type for window requirements for the street-facing façade.

8. Building Materials: Exterior building materials and finishes shall be high-image, such as masonry, architecturally treated tilt-up concrete, glass, wood, or stucco. Metal siding is prohibited, except as approved through design review pursuant to Section 1102 for specific high-image materials, canopies, awnings, doors, screening for roof-mounted fixtures, and other architectural features.

9. Fences: Fences and walls are permitted in the courtyard setback area, subject to the following standards:

   a. The fence or wall shall be a maximum of three feet high.

   b. A fence shall be wrought iron, steel, or a similar metal and shall be dark in color. Chain-link fences are prohibited.

   c. A wall shall be wood, masonry, concrete, or a combination thereof.

   d. A fence shall be a minimum of 20 percent transparent. The transparent portions of the fence shall be distributed along the length of the fence in a recognizable pattern (e.g., two-inch gaps alternating with eight-inch solid sections).

   e. A minimum of one pedestrian opening per courtyard street frontage shall be provided in the fence or wall. Required pedestrian openings shall be a minimum of five feet wide.

K. Porch/Stoop/Terrace Building Frontage Type: Porch/Stoop/Terrace Building Frontage, which is permitted on Type B, C, and D Streets, shall comply with the following standards (see Figure 1700-7):

1. Front Yard Setback: The street-facing facade of the building shall be set back a minimum of five feet and a maximum of 15 feet. Entry thresholds, including roofs over the thresholds and steps to the thresholds, may extend to the front property line.

   a. If it is not possible for a development to comply with the maximum setback standard and the intersection sight distance and roadside clear zone standards of the County Roadway Standards, the setback may be increased to the minimum extent necessary.

   b. The front yard setback area shall be landscaped with plants. Hardscaping is permitted only to provide access to the threshold and shall consist of masonry pavers or concrete.

c. No parking, storage, or display of motorized vehicles or equipment is allowed in the front yard setback area.

d. Building service and utility equipment and outdoor storage of garbage or recycling is not permitted along the street-facing building facade or in the front yard setback area, except:

i. Garbage and recycling receptacles for public use are permitted, provided that they do not exceed 35 gallons in size and are clad in stone or dark-colored metal.

e. Fences: Fences and walls are permitted in the front yard setback area, subject to the following standards:

i. The fence or wall shall be a maximum of three feet high.

ii. A fence shall be wrought iron, steel, or a similar metal and shall be dark in color. Chain-link fences are prohibited.

iii. A wall shall be wood, masonry, concrete, or a combination thereof.

iv. A fence shall be a minimum of 50 percent transparent. The transparent portions of the fence shall be distributed along the length of the fence in a recognizable pattern (e.g., two-inch gaps alternating with two-inch solid sections).

2. Entry Threshold: An entry threshold, such as a porch, stoop, terrace, patio, or light court, is required and shall comply with the following standards:

a. The entry threshold shall have a minimum depth of five feet from the street-facing building façade to the front of the threshold.

b. The entry threshold height shall be no more than six feet above finished grade. An additional threshold may be provided to access a lower level and shall be no more than five feet below finished grade.

c. The entry threshold may be covered by a roof no larger than the threshold.

3. Primary Building Entrances: Primary building entrances shall face the street and be a minimum of 10 percent transparent. The minimum amount of transparency is measured as a percentage of the total area of the entrance. Each ground-floor dwelling unit, if any, shall have an individual entrance that complies with this requirement.

4. Windows: Transparent windows shall be provided along a minimum of 20 percent of the street-facing façade area. Windows shall be vertically

oriented, but vertical windows may be grouped together to create square or horizontally-oriented rectangular windows.

5. Building Materials: Exterior building materials and finishes shall be high-image, such as masonry, architecturally treated tilt-up concrete, glass, wood, or stucco. Metal siding is prohibited, except as approved through design review pursuant to Section 1102 for specific high-image materials, canopies, awnings, doors, screening for roof-mounted fixtures, and other architectural features.

L. Landscape Screening Types: Street frontage not developed with a building compliant with one of the four building types established by Subsections 1700.05(H) through (K), a walkway cut with a maximum width of eight feet, or a driveway cut, shall be developed with one of three landscape screening types, each of which is allowed on one or more of the four street types allowed in the Fuller Road Station Community. Table 1700-2 establishes which landscape screening types are permitted on each street type. Figure 1700-8 summarizes the three landscape screening types. If the subject property abuts an existing or future Type A, B, C, or D Street -- regardless of whether it is shown on Map 1700-1—compliance is required with the standards for a landscape screening type permitted on the applicable street type.

Table 1700-2: Permitted Landscape Screening Type by Street Type

Permitted Landscape Screening Type:	Street Type:
Low Wall and Trellis	A, B, C, and D Streets
Urban Fence or Wall	A, B, C, and D Streets
Landscaped Setback	A, B, and C Streets

1. Low Wall and Trellis Landscape Screening Type: Low Wall and Trellis Screening, which is permitted on all street types, shall comply with the following standards (see Figure 1700-9):

   a. The low wall and the support structure for the trellis shall be set back a maximum of five feet from the front lot line. The trellis itself may extend to the front lot line, or may overhang an abutting sidewalk or walkway if permitted by the County Engineering Division.

b. Any area between the back edge of the sidewalk or walkway and the low wall shall be planted with ground cover or shrubs, or paved with masonry pavers or stamped concrete. Shrubs at maturity shall not exceed the height of the low wall.

c. The underside of the trellis portion of a Low Wall and Trellis shall be a minimum of eight feet above grade and a maximum of 13½ feet above grade.

d. The trellis shall be heavy timber or steel (or a similar metal) and shall consist of an open structure with no decking or awning material. The trellis shall have masonry, heavy timber, or steel (or similar metal) supporting columns spaced no more than 30 feet on center.

e. The low wall portion of a Low Wall and Trellis shall be a minimum of 18 inches high and a maximum of three feet high and have a minimum depth of 16 inches. The low wall shall be wood, masonry, concrete, or a combination thereof.

f. Surface parking and loading areas shall be set back a minimum of five feet from the Low Wall and Trellis. Low shrubs, groundcover, and climbing plants shall be provided in this setback area, in lieu of trees ordinarily required pursuant to Section 1009 for perimeter surface parking and loading area landscaping. Climbing plants shall be planted at each support column.

g. Openings in the Low Wall and Trellis Screening are permitted for plazas that comply with Subsection 1700.05(M).

2. Urban Fence or Wall Screening Type: Urban Fence or Wall Screening, which is permitted on all street types, shall comply with the following standards (see Figure 1700-10):

a. The fence or wall shall be set back a maximum of five feet from the front lot line.

b. Any area between the back edge of the sidewalk or walkway and the fence or wall shall be paved with masonry pavers or stamped concrete.

c. The fence or wall shall be a minimum of two feet high and a maximum of three feet high.

d. A fence shall be wrought iron, steel, or a similar material and shall be dark in color. Chain-link fences are prohibited. A fence shall be a minimum of 50 percent transparent. The transparent portions of the fence shall be distributed along the length of the fence in a recognizable pattern (e.g., two-inch gaps alternating with two-inch solid sections).

e. A wall shall be wood, masonry, concrete, or a combination thereof.

f. Surface parking and loading areas shall be set back a minimum of five feet from the Urban Fence or Wall. This area shall be landscaped as follows:

i. One large tree is required a minimum of every 30 linear feet, except where a waiver is necessary to comply with the intersection sight distance and roadside clear zone standards of the County Roadway Standards.

ii. A minimum of six shrubs is required every 30 linear feet along the fence or wall. The minimum shrub height at maturity shall be the same as the height of the fence or wall, and the maximum shall be six feet.

iii. Ground cover plants must fully cover any remaining area at maturity.

g. Openings in the Urban Fence or Wall Screening are permitted for plazas that comply with Subsection 1700.05(M).

3. Landscaped Setback Screening Type: Landscaped Setback Screening, which is permitted on Type A, B, and C Streets, shall include a landscape strip a minimum of 10 feet wide adjacent to the property line. This area shall be landscaped as follows (see Figure 1700-11):

a. A continuous row of shrubs shall be planted at the inside edge of the landscape strip. The shrubs shall be a minimum of three feet high, and shall be mostly opaque year round.

b. One large tree is required a minimum of every 30 linear feet except where a waiver is necessary to comply with the intersection sight distance and roadside clear zone standards of the County Roadway Standards. The required shrub row may be interrupted with a gap of up to two feet wide, in order to accommodate each tree.

c. Ground cover plants must fully cover any remaining area at maturity.

d. A three-foot-high masonry wall may be substituted for the shrub row, but the trees and groundcover plants are still required.

e. Openings in the Landscaped Setback Screening are permitted for plazas that comply with Subsection 1700.05(M).

M. Plazas: Openings in required landscape screening are permitted for plazas, subject to the following standards:

1. The plaza shall be permanent space open to the public.

2. The plaza shall be integrated in the development and be accessible from and visible from the street(s) upon which it fronts.

3. The plaza shall be surfaced with masonry pavers or stamped concrete.

4. Ten percent of the total plaza area shall be landscaped. Landscape planters may count toward this requirement.

5. If the plaza abuts a surface parking or loading area, it shall be separated from that area by a landscape strip that complies with Subsection 1009.04(B).

[Added by Ord. ZDO-226, 3/7/11; Amended by Ord. ZDO-224, 5/31/11]

CLACKAMAS
COUNTY
PUBLIC SERVICES BUILDING
OFFICE OF COUNTY COUNSEL
2051 KAEN ROAD | OREGON CITY, OR 97045

Attn: Plan Amendment Specialist
Dept. of Land Conservation & Development
635 Capitol Street NE, Ste. 150
Salem, OR 97301-2540