



MIKE McCALLISTER  
PLANNING AND ZONING DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING  
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

CLACKAMAS COUNTY BOARD OF COMMISSIONERS  
2051 Kaen Road, Oregon City  
BCC Hearing Room - 4th Floor

**LAND USE HEARING**  
**December 7, 2016**  
**9:30 AM**

The item will not begin before time noted. Interested parties may appear and be heard during the testimony phase of any hearing at the above address. If a hearing is set for decision only, the evidence phase has been completed, so interested parties may no longer be heard. Applications or comments may be inspected, and calls or correspondence directed to: Planning & Zoning Division, 150 Beaver Creek Road, Oregon City, OR 97045, (503) 742-4500.

**HEARING**

**File No.:** ZDO-260: Mt. Hood Pedestrian and Bikeway Implementation Plan

**Applicants:** Clackamas County

**Proposal:** ZDO-260 is a legislative text amendment to the Clackamas County Comprehensive Plan. ZDO-260 amends the Comprehensive Plan by adding the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* to Appendix B and updating the list of needed transportation projects in the County's 20-Year Capital Improvement Plan (Tables 5-3a-d and Map 5-11b). ZDO-260 also updates the Mount Hood Community Plan in Chapter 10 of the Comprehensive Plan with appropriate policies that guide development in consideration of the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*.

**Staff Contact:** Lori Mastrantonio-Meuser, Senior Transportation Planner, 503-742-4511, LoriM@clackamas.us

# Land Use Hearing Item

## Staff Report to the Board of County Commissioners

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**File Number:** ZDO-260

**Staff Contact:** Lori Mastrantonio-Meuser, Senior Transportation Planner; 503-742-4511

**Board of County Commissioners Hearing Date:** December 7, 2016

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### PROPOSAL

ZDO-260 is a legislative text amendment to the Clackamas County Comprehensive Plan. ZDO-260 amends the Comprehensive Plan by adding the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* to Appendix B and updating the list of needed transportation projects in the County's 20-Year Capital Improvement Plan (Tables 5-3a-d and Map 5-11b). ZDO-260 also updates the Mount Hood Community Plan in Chapter 10 of the Comprehensive Plan with appropriate policies that guide development in consideration of the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*.

Specifically, the amendments include the following components:

1. Chapter 10 of the Comprehensive Plan; Community and Design Plans:The proposed amendments include updates to the Mt. Hood Community Plan, one of seven community and design plans in Chapter 10. The majority of the text amendments are in the Transportation section and reflect policies that focus on the provision of safer pedestrian and bicycle improvements including road crossings, multi-use paths, improved connections to schools, trails and destinations, addressing access management issues, and recognizing the *Villages Plan* as the guiding document for the development of a connected multi-modal system in the Villages communities. Recommended policies also support the development of gateway and wayfinding signage, continuation and/or expansion of the bus system and enhancement of transit facilities.
2. Chapter 5 of the Comprehensive Plan; Transportation System Plan:The proposed amendments include one change to the text in Chapter 5, involving adding one word, "crossings" is recommended for policy 5.J.5. This addition is added to include achieving safe and convenient "crossings" to the remainder of the policy as noted below.

Chapter 5 also contains the County's 20-year Capital Improvement Plan (CIP), which is a list of needed transportation-related projects to address gaps and deficiencies in the network. This amendment package updates the Capital Projects to make them consistent with the *Villages Plan*, as noted below.

- The 20-Year Capital Projects (Table 5-3a of the Comprehensive Plan) include two projects (Arrah Wanna Blvd and Welches Rd) within the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan (the Villages Plan)*. It is recommended that these projects and an additional project (Brightwood Loop Rd) include allowing interim 4' paved shoulders (the standard is 6').
  - The Preferred Projects (Table 5-3b) include one project (Sleepy Hollow Rd) within the *Villages Plan*. It is recommended that this project include allowing interim 4' paved shoulders.
  - The Long Term Capital Projects (Table 5-3c) include five projects (multi-use paths; specific segments on the north and south sides of US 26, crossing improvements on US 26 of an existing facility and new crossing improvements, etc.) within the *Villages Plan*. It is recommended that these projects include allowing interim 4' paved shoulders and/or a multi-use path in certain areas.
  - The Regional Capital Projects (Table 5-3d) includes an existing project on US 26. It is recommended that this project include a multi-use path and certain pedestrian improvements, e.g. crossings, sidewalk, etc. It is recommended that five additional projects along US 26 be added to include multi-use paths, crossings, ADA improvements, etc.
  - Capital Improvement Plan Map 5-11b includes capital projects in east county. ZDO-260 would update Map 5-11b to include the recommended projects.
3. Appendix B of the Comprehensive Plan; Summary of Supporting Documents: ZDO 260 would add the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* to Appendix B.

**Background:** In fall 2014, Clackamas County received a Transportation and Growth Management (TGM) grant from the Oregon Department of Transportation (ODOT) to prepare a pedestrian and bicycle plan for the Villages at Mt. Hood area, which includes the communities of Brightwood, Welches/Wemme, Zig Zag and Rhododendron.

At a May 21, 2015 Business Meeting, the Board of County Commissioners approved an intergovernmental agreement with ODOT to prepare the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan (the Villages Plan)*.

The four main objectives of the Villages Plan are to:

1. Identify bicycle and pedestrian needs within The Villages at Mt. Hood
2. Develop a Safe Routes to School Plan for Welches elementary and middle schools
3. Identify potential locations for additional or enhanced US 26 pedestrian crossings
4. Evaluate the feasibility of a multi-use path in the area

One of the main goals of this project is to update the Mount Hood Community Plan in the Clackamas County Comprehensive Plan which includes some of the policies that directly relate to the four main objectives of the Plan.

When work began with the communities on this project, it became clear that many people already walk and bike in the area. A number of “demand” paths or dirt paths, especially adjacent to US 26, have already been established and are being used by community members and visitors. The communities are interested in safer pedestrian and bicycle travel especially to the various local destinations, e.g. library, post office, grocery stores, etc. They support a safer and more improved multi-use path to connect to the destinations that they frequent.

A well-connected pedestrian and bicycle system would improve the quality of life of residents and allow visitors to leave their cars behind when enjoying the area’s numerous destinations. The *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* provides a long-term, prioritized set of pedestrian and bicycle infrastructure improvements to increase transportation choices within the Villages, including access to transit. The infrastructure improvements can create a connected pedestrian and bicycle system, integrated with transit, to meet the daily needs of residents and visitors.

As the Plan developed, the focus was on determining projects that would implement the objectives. The Plan includes a summary of the projects for each community including the project priority as well as a map of each with a detailed description of each project.

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## **RELATED PRIOR BCC ACTION**

In October 11, 2016 the Board of County Commissioners (BCC) held a study session on *the Villages Plan*. Discussion was brief and supportive.

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## **PLANNING COMMISSION (PC) ACTION**

A public hearing was held on November 14, 2016 before the Planning Commission for consideration of ZDO-260. The Planning Commission unanimously recommended approval of the amendments as proposed.

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## **CPO, HAMLET AND VILLAGE RECOMMENDATIONS**

The area impacted by the proposed amendments is within the Rhododendron CPO and Mt. Hood Corridor CPO. The Mt. Hood Corridor is not currently recognized. A letter of support from the Rhododendron CPO was received November 10, 2016 (Exhibit 4)

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## **SIGNIFICANT ISSUES**

No significant issues were brought forward during the Planning Commission public hearing.

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## STAFF RECOMMENDATION

Approval of ZDO-260, as recommended by the Planning Commission and described in **Attachments 1-6** of the *Staff Report and Recommendation to the Planning Commission*.

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## ATTACHMENTS

- A. PowerPoint presentation to be presented by staff at the December 7, 2016 hearing;
- B. *Staff Report and Recommendation to the Planning Commission*, dated November 7, 2016, including the attachments (proposed Clackamas County Comprehensive Plan amendments)
  - Attachment 1: Chapter 10, the Mt. Hood Community Plan;
  - Attachment 2: Chapter 5 (text change);
  - Attachment 3: Chapter 5 Table 5-3a to 5-3d;
  - Attachment 4: Chapter 5 Map 5-11b;
  - Attachment 5: Appendix B (added reference to the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*);
  - Attachment 6: The *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*; and
  - The *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan, Appendices Volumes I and II*. (Appendices are not attached to with electronic copies of all attachments at <http://www.clackamas.us/planning/zdo260.html>)
- C. Draft minutes from the November 14, 2016 Planning Commission hearing regarding ZDO-260
- D. Exhibits 1-4

# Clackamas County Board of County Commissioners

## Public Hearing ZDO-260: The Villages at Mt. Hood Pedestrian & Bikeway Implementation Plan

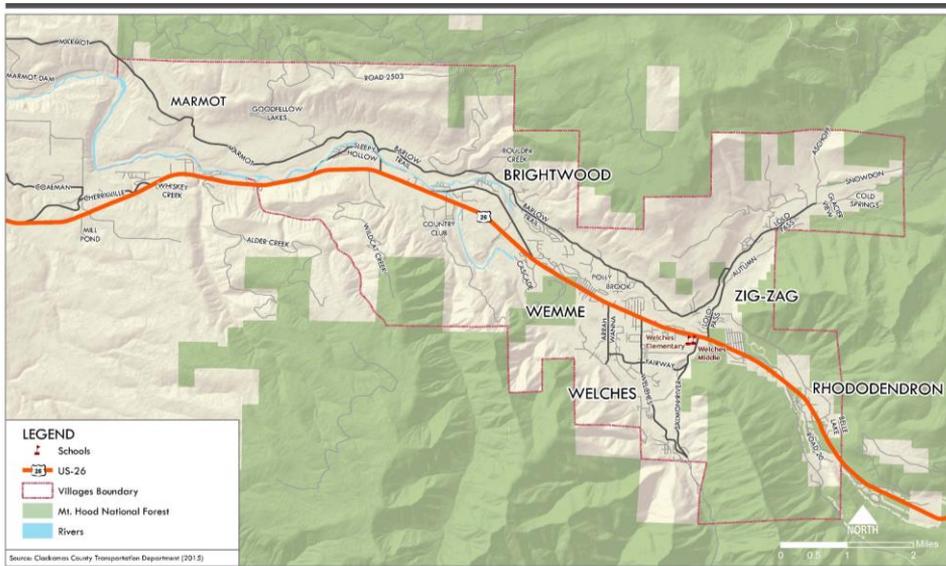
December 7, 2016; 9:30 am



## The Project

- **The area:** Mt. Hood communities of Brightwood, Welches / Wemme, Zig Zag and Rhododendron, connected by US 26 and county roadways
- **The problem:** Limited, inadequate and poorly connected bicycle and pedestrian pathways
  - Narrow or non-existent shoulders
  - Poorly-lit shoulders and footpaths
  - Bicyclists forced into lanes with motorized traffic
  - Communities bisected by US 26, which is a significant crossing barrier
  - Lack of directional signage
- **The solution:** A long-term, prioritized set of pedestrian and bicycle infrastructure improvements to increase transportation choices, including access to transit





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## Why this project? *Regional needs*

- Support projects of regional significance
  - ODOT's *US 26 Multi-Modal Plan* findings show need for:
    - safety improvements
    - better transit and access to transit
    - safe pedestrian crossings at strategic places in the Villages
  - State Transportation Growth Management grant to study needs
- Update *Mount Hood Community Plan, 1976*
  - Encourages crosswalks, signals, etc. in Rhododendron
  - Relates to development of shuttle bus system to serve ski areas



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## Why this project? *Local needs*

- Community supports:
  - Safe bike/pedestrian travel, multi-use path
  - Increased transit service
    - More choices, including better connection through Mt. Hood Express
    - Resident and visitor access to area destinations
    - Tourism
- Opportunity for Safe Routes to School (SRTS) Plan
- Aligns with county Transportation System Plan (TSP) and Active Transportation Plan (ATP)
  - Barlow Trail Rd is a Principal Active Transportation Route
  - Several TSP projects in area, including widening shoulders



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## Project objectives

- Identify bicycle and pedestrian needs in Brightwood, Wemme/Welches, Zig Zag and Rhododendron
- Develop a *Safe Routes to School Plan (SRTS)* for Welches Elementary and Middle School
- Identify locations for additional or enhanced US 26 pedestrian crossings, including at-grade and grade-separated
- Evaluate the feasibility of a multi-use path



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## Process

### •The study

- Review state and county plans and policies
- Analyze safety issues
  - conditions of roads, paths, crossings
  - pedestrian and bicycle needs
- Gather data on existing conditions
- Develop project analysis criteria



### •The outreach

- Walking tours and stakeholder interviews
- Interactive website, social media
- Open houses and questionnaires for the public
- Meetings with school staff and community groups
- Project Advisory Committee and Technical Advisory Committee



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## Brightwood: Project Highlights

- Barlow Trail Road Principal Active Transportation route
- Undercrossing and transit directional signs
- Strategic/targeted shoulder-widening
  - Marmot Road
  - Coalman Road
  - Cherryville Road
  - Sleepy Hollow Road
  - Brightwood Loop Road



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## Welches

- US 26 multi-use paths
  - On south side between Wildwood Recreation site and E. Salmon River Road
  - On north side between Arrah Wanna Blvd and Welches Road
- US 26 crossing improvements
- Shoulder-widening at Welches Road and E. Salmon River Road
- Crossing improvements at Welches Road & the Resort
- Speed feedback signs on Welches Road, E. Salmon River Road, Lower Lolo Pass Road



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## Rhododendron

- Pedestrian crossing improvements
- Curbs/gutters/sidewalks
- Access management plan/ driveway consolidation
- Multi-use path between Lolo Pass Road and Rhododendron
- Gateway and transit signs



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## Welches: Safe Routes to School Plan

- County partnership with Welches school to create action plan
  - Identify challenges and barriers that keep children from walking and biking to school
  - Recommend projects/improvements to make walking and biking to schools safer
- Though most students will continue to be bused to school ...
  - It's challenging for students to safely connect to their schools
  - Schools are the center of community activities
  - Community sees need to link activity centers and schools with everyone, including students
  - Multiple projects recommended – including safer and additional crossings, strategic pathways and shoulder widening



**Welches**  
SCHOOL



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## Goal of Today's Hearing

- Review Proposed Amendments to Comprehensive Plan that are needed to enable the implementation of the Villages Plan.
- Decide whether to approve the package of Proposed Amendments (ZDO-260).



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## Proposed Amendments

(changes described in detail in PC staff report)

- Chapter 10: Mt. Hood Community Plan Update; majority of changes in the Transportation Section
- Chapter 5
  - Policy 5.J.5.: add the word “crossings”
  - Add projects to TSP tables 5-3a to 5-3d and update Map 5-11b
  - Add the Villages Pedestrian and Bikeway Implementation Plan to Appendix B



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## Findings

- This proposal meets the applicable Statewide Planning Goals and applicable Zoning and Development Ordinance criteria including the public involvement process.



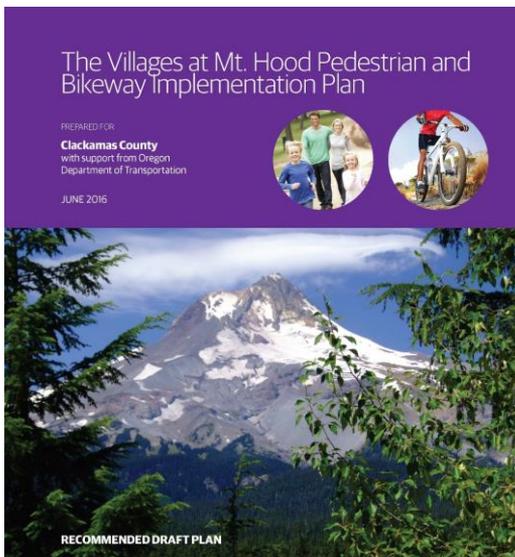
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## Recommendations

- Staff recommends approval of ZDO-260, as proposed in the attachments in the Planning Commission staff report.
- Planning Commission unanimously recommended approval of ZDO-260 at a November 14, 2016 public hearing.



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Thank You!



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DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING  
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

### **STAFF REPORT**

TO: Planning Commission

FROM: Lori Mastrantonio, Senior Planner

DATE: November 7, 2016

RE: ZDO-260: Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan

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### **PROPOSAL**

ZDO-260, a legislative text amendment to the Clackamas County Comprehensive Plan, includes amendments to Chapters 5 and 10 and Appendix B. Specifically, the amendments include the following components:

1. Amend Chapter 10 of the Comprehensive Plan

The proposed changes to Chapter 10, the Community Plans and Design Plans, are included in Attachment 1. There are seven community and design plans including the Mt. Hood Community Plan. The proposed amendments include updates to the Mt. Hood Community Plan. The majority of the text amendments are in the Transportation section and reflect policies that focus on the provision of safer pedestrian and bicycle improvements including road crossings, multi-use paths, improved connections to schools, trails and destinations, addressing access management issues, and recognizing the *Villages Plan* as the guiding document for the development of a connected multi-modal system in the Villages communities. Recommended policies also support the development of gateway and wayfinding signage, continuation and/or expansion of the bus system and enhancement of transit facilities.

2. Amend Chapter 5 of the Comprehensive Plan

The proposed changes to Chapter 5, the Transportation System Plan, are included in Attachments 2, 3, and 4.

One text change involving adding one word, “crossings” is recommended for policy 5.J.5. This addition is added to include achieving safe and convenient “crossings” to the remainder of the policy as noted below.

“5.J.5. Coordinate with pedestrian, bicycle, and trail master plans, and with special transportation plans of the County, Oregon Department of Transportation, the United States Forest Service, Metro, and parks providers to achieve safe and convenient crossings and off-road, multi-use path and trail systems connecting to on-road pedestrian facilities and the bikeway networks.”

Chapter 5 of the Comprehensive Plan also contains the County's TSP and the 20-year Capital Improvement Plan, which is a list of needed transportation-related projects to address gaps and deficiencies in the network.

The 20-Year Capital Projects (Table 5-3a of the Comprehensive Plan) include two projects (Arrah Wanna Blvd and Welches Rd) within the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan (the Villages Plan)*. It is recommended that these projects and an additional project (Brightwood Loop Rd) include allowing interim 4' paved shoulders (the standard is 6').

The Preferred Projects (Table 5-3b of the Comprehensive Plan) include one project (Sleepy Hollow Rd) within the *Villages Plan*. It is recommended that this project include allowing interim 4' paved shoulders.

The Long Term Capital Projects (Table 5-3c of the Comprehensive Plan) include five projects (multi-use paths; specific segments on the north and south sides of US 26, crossing improvements on US 26 of an existing facility and new crossing improvements, etc.) within the *Villages Plan*. It is recommended that these projects include allowing interim 4' paved shoulders and/or a multi-use path in certain areas.

The Regional Capital Projects (Table 5-3d of the Comprehensive Plan) includes an existing project on US 26. It is recommended that this project include a multi-use path and certain pedestrian improvements, e.g. crossings, sidewalk, etc. It is recommended that five additional projects along US 26 be added to include multi-use paths, crossings, ADA improvements, etc.

Capital Improvement Plan Map 5-11b includes capital projects in east county. It is recommended that this map be updated to include the recommended projects. This amendment package updates the Capital Projects to make them consistent with the *Villages Plan*.

### 3. Amend Comprehensive Plan Appendix B

Appendix B, similar to a bibliography listing publications, includes the various sources and documents used in the preparation of the Comprehensive Plan policies and goals. The amendment package for this project adds the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* to Appendix B of the Clackamas County Comprehensive Plan (Attachment 5).

## **BACKGROUND**

In fall 2014, Clackamas County received a Transportation and Growth Management (TGM) grant from the Oregon Department of Transportation (ODOT) to prepare a pedestrian and bicycle plan for the Villages at Mt. Hood area, which includes the communities of Brightwood, Welches/Wemme, Zig Zag and Rhododendron.

At a May 21, 2015 Business Meeting, the Board of County Commissioners approved an intergovernmental agreement with ODOT to prepare the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan (the Villages Plan)*.

The four main objectives of the Villages Plan are to:

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4. Evaluate the feasibility of a multi-use path in the area

One of the main goals of this project is to update the Mount Hood Community Plan in the Clackamas County Comprehensive Plan which includes some of the policies that directly relate to the four main objectives of the Plan.

When work began with the communities on this project, it became clear that many people already walk and bike in the area. A number of “demand” paths or dirt paths, especially adjacent to US 26, have already been established and are being used by community members and visitors. The communities are interested in safer pedestrian and bicycle travel especially to the various local destinations, e.g. library, post office, grocery stores, etc. They support a safer and more improved multi-use path to connect to the destinations that they frequent.

A well-connected pedestrian and bicycle system would improve the quality of life of residents and allow visitors to leave their car behind when enjoying the area’s numerous destinations. The *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* provides a long-term, prioritized set of pedestrian and bicycle infrastructure improvements to increase transportation choices within the Villages, including access to transit. The infrastructure improvements can create a connected pedestrian and bicycle system, integrated with transit, to meet the daily needs of residents and visitors.

As the Plan developed, the focus was on determining projects that would implement the objectives. The Plan includes a summary of the projects for each community including the project priority as well as a map of each with a detailed description of each project.

### **PLANNING COMMISSION STUDY SESSION**

An overview of the project and the draft *Villages Plan* were presented to the Planning Commission at a study session on August 22, 2016. The following are staff responses to the main items discussed at the study session and from comments received.

- **US 26 Multi-Use Path:** A question was raised regarding the maintenance of a multi-use path or paths along US 26 and the impacts of snow removal on a path. Maintenance of a multi-use path would need to be coordinated with various entities such as ODOT, Bureau of Land Management, etc. It is likely during heavy snow fall a path may not be useable just as the existing demand paths in the area may not be useable during a snowy weather event. In addition, consideration of the path construction material would be needed to ensure cost effective maintenance and longevity.
- **Equestrian Trails:** A member inquired about equestrian trails in the project area. The Villages Plan does not include recommendations regarding equestrian trail projects.

- Support of the Villages Plan: A letter of support was received from “Michele Lamoreaux and Rhododendron CPO Members” dated July 10, 2016 especially regarding a crossing in the Rhododendron area associated with pedestrian environment enhancements such as gateway signage, landscaping, sidewalks and/or lighting.

## **BOARD OF COUNTY COMMISSION POLICY SESSION**

An overview of the project and the draft *Villages Plan* was presented to the Board of County Commission at a policy session on October 11, 2016. Discussion was brief and supportive.

## **COMMENTS RECEIVED FROM THE PUBLIC**

- Rhododendron CPO Letter; July 10, 2016 (Exhibit 2, attached)
- Barlow Trail Association Letter; November 1, 2016 (Exhibit 3, attached)

## **ANALYSIS AND FINDINGS**

1. Section 1307 of Zoning and Development Ordinance (ZDO): The proposed amendments are legislative in nature. Section 1307 of the ZDO establishes review procedures for legislative amendments. However, the ZDO contains no review criteria that must be applied when considering an amendment to the text of the Comprehensive Plan.
2. Chapter 11: The Planning Process of the Comprehensive Plan (Plan) contains a section titled City, Special District and Agency Coordination. The Oregon Department of Transportation, the Oregon Department of State Lands, Clackamas River Water District, Oak Lodge Sanitary District and all cities within the county are on a standing list to receive notice of all proposed amendments. This level of notification furthers the goals and policies of this section of the Plan. (See Exhibit 1 regarding public notices)

Chapter 11 of the Plan also contains a section entitled Amendments and Implementation. This section contains procedural standards for Plan amendments, requires the Plan and the ZDO to be consistent with Statewide Planning Goals and Guidelines and Metro’s Urban Growth Management Functional Plan, and requires the ZDO to be consistent with the Plan. Policy 3.0 establishes the procedural standards. The process followed for ZDO-260 is in compliance with these standards. Specifically, notice was mailed to all recognized Community Planning Organizations, Hamlets and Villages at least 35 days before the scheduled public hearing, and the Department of Land Conservation and Development and Metro were provided with an opportunity to review and comment on the proposed amendments. Advertised public hearings are scheduled before the Planning Commission and the Board of County Commissioners to consider the proposed amendments. The Statewide Planning Goals and Guidelines and the Urban Growth Management Functional Plan are addressed below.

### 3. Statewide Planning Goals and Guidelines

- a. Goal 1: Citizen Involvement: The text amendment does not propose to change the structure of the county’s citizen involvement program. Notice of the proposed amendment was provided to

Community Planning Organizations, Hamlets, Villages and a list of interested parties. Also, notice of the Planning Commission and Board of County Commissioners hearings was published in the newspaper. The Department of Land Conservation and Development (DLCD) was notified of this proposal, but no response has been received.

- b. Goal 2: Land Use Planning: Not applicable because the text amendment does not propose to change the county's land use planning process. The county will continue to have a comprehensive land use plan and implementing regulations that are consistent with the plan. No exceptions from the Goals are required.
- c. Goal 3: Agricultural Lands: Not applicable because the text amendment does not propose to change the county's Plan policies or implementing regulations for agricultural lands.
- d. Goal 4: Forest Lands: Not applicable because the text amendment does not propose to change the county's Plan policies or implementing regulations for forest lands.
- e. Goal 5: Open Spaces, Scenic and Historic Areas, and Natural Resources. Not applicable because the text amendment does not propose to change the county's Plan policies or implementing regulations for Goal 5 open spaces, scenic and historic areas, and natural resources.
- f. Goal 6: Air, Water and Land Resources Quality. Not applicable because the text amendments do not propose to change the county's Plan policies or implementing regulations for compliance with Goal 6.
- g. Goal 7: Areas Subject to Natural Disasters and Hazards: Not applicable because the text amendment does not propose to change the county's Plan or implementing regulations regarding natural disasters and hazards.
- h. Goal 8: Recreational Needs: Not applicable because the text amendment does not propose to change the county's Plan or implementing regulations regarding recreational needs.
- i. Goal 9: Economy of the State: Not applicable because the text amendments do not propose to change the county's Plan or implementing regulations regarding the economy of the state. The proposed text amendments will not prohibit, and the authorization of similar uses provisions may encourage, development proposals that enhance the local, regional and state economy.
- j. Goal 10: Housing: Not applicable because the text amendments do not propose to change the county's Plan or implementing regulations regarding housing.
- k. Goal 11: Public Facilities and Services: Not applicable because the text amendments do not propose to change the county's Plan or implementing regulations regarding public facilities and services.
- l. Goal 12: Transportation: Goal 12 is implemented by Oregon Administrative Rules Chapter 660, Division 12, the Transportation Planning Rule (TPR). Regulations described in the TPR are largely directed at the development of a jurisdiction's Transportation System Plan (TSP) as a whole or at a land use regulation and land use changes that affect the transportation system. Clackamas County's TSP (Chapter 5 of the Comprehensive Plan) has been acknowledged by the

state and is therefore in compliance with OAR 660-012. The changes recommended by the proposed *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* represent relatively minor changes to the County's TSP and are consistent with the general TPR requirement that a local TSP should identify a system of planned transportation facilities for all modes of transportation. This proposal is in compliance with Goal 12.

- m. Goal 13: Energy Conservation: Not applicable because the amendments do not propose to change the county's Plan or implementing regulations regarding energy conservation.
- n. Goal 14: Urbanization: Not applicable because the amendments do not propose to change the county's Plan or implementing regulations regarding urbanization. Authorization of similar uses in areas outside urban growth boundaries would not waive the square footage limitations that apply to rural uses under the Oregon Administrative Rules that implement Goal 14.
- o. Goal 15: Willamette River Greenway: Not applicable because the amendments do not propose to change the county's Plan or implementing regulations regarding the Willamette River Greenway.

#### 4. Metro Urban Growth Management Functional Plan:

- a. Title 1. Requirements for Housing and Employment Accommodation. Not applicable because the proposed text amendments would not decrease the amount of land zoned for residential or commercial/industrial use, affect design type boundaries, alter permitted densities or prohibit accessory dwelling units.
- b. Title 2. Regional Parking Policy: Not applicable because the proposed text amendments would not change the county's Plan or implementing regulations regarding parking.
- c. Title 3. Water Quality and Flood Management: Not applicable because the proposed text amendments would not change the county's Plan or implementing regulations regarding water quality and flood management.
- d. Title 4. Industrial and Other Employment Areas: Not applicable because the proposed text amendment would not change the county's Plan or implementing regulations concerning designation of industrial and other employment areas, minimum lot sizes in these areas, or permitted uses in these areas. The ZDO has been found to comply with Title 4, based in part on the fact that the urban industrial zones regulated by Title 4 do not provide for the types of service and retail uses restricted by Title 4. The urban industrial zones regulated by Title 4 include strict limits or outright prohibitions on retail and service uses that would not be overridden by the proposed authorization of similar uses standards.
- e. Title 5. Neighbor Cities and Rural Reserves: Not applicable because the proposed text amendments would not change the county's Plan or implementing regulations concerning neighbor cities and rural reserves.
- f. Title 6. Central City, Regional Centers, Town Centers and Station Communities: Not applicable because the proposed text amendments would not change the boundaries of any of the centers.

- g. Title 7. Housing Choice: Not applicable because the proposed text amendments would not change the county's Plan or implementing regulations concerning housing choices.
- h. Title 8. Compliance Procedures: Not applicable. This Title is administrative and relates to Metro's process for ensuring local governments comply with the Functional Plan.
- i. Title 9. Performance Measures: Not applicable. This Title is administrative and relates to requirements for measuring whether the Functional Plan is achieving the intended outcomes in the region.
- j. Title 10. Functional Plan Definitions: Not applicable. This Title contains definitions only.
- l. Title 11. Planning for New Urban Areas: Not applicable because the proposed text amendment would not change the county's Plan or implementing regulations concerning planning for new urban areas.
- m. Title 12. Protection of Residential Neighborhoods: Not applicable because the proposed text amendment would not change the county's Plan or implementing regulations concerning residential density, designation of neighborhood centers or access to parks and schools.
- n. Title 13. Nature in Neighborhoods: Not applicable because the proposed text amendment would not change the county's Plan or implementing regulations regarding Habitat Conservation Areas, the regulation of which is required by Title 13.

## **RECOMMENDATION**

Staff recommends that the Planning Commission recommend approval of ZDO-260 to the Board of County Commissioners which includes amendments to the Comprehensive Plan:

- 1) Attachment 1: Amendments to Chapter 10, the Mt. Hood Community Plan;
- 2) Attachment 2: Amendments to Chapter 5 (text change);
- 3) Attachment 3: Amendments to Chapter 5 Tables 5-3a to 5-3d;
- 4) Attachment 4: Amendments to Chapter 5 Map 5-11b;
- 5) Attachment 5 ; Appendix B (added reference to the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*);
- 6) Attachment 6: The *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*; and
- 7) The *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan, Appendices Volumes I and II*. (Appendices are not attached to this staff report but can be found along with electronic copies of all attachments at <http://www.clackamas.us/planning/zdo260.html>)

*Clackamas County Comprehensive Plan***Chapter 10: COMMUNITY PLANS  
AND DESIGN PLANS**

The following Community Plans and Design Plans are included in Chapter 10:

- 1. Mount Hood Community Plan**
- 2. Kruse Way Design Plan** (*Repealed 03/01/2014, per Ordinance ZDO-246*)
- 3. Sunnyside Village Plan**
- 4. Clackamas Industrial Area and North Bank of the Clackamas River Design Plan**
- 5. Clackamas Regional Center Area Design Plan**
- 6. Sunnyside Corridor Community Plan**
- 7. McLoughlin Corridor Design Plan**

*Clackamas County Comprehensive Plan*

[10-2]

*Clackamas County Comprehensive Plan*

## **MOUNT HOOD COMMUNITY PLAN**

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

The rest of the Comprehensive Plan is applicable to the Mt. Hood area; however, the Mt. Hood Community Plan takes precedence where conflicts exist.

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

### **LAND USE**

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

### **VILLAGE DISTRICTS**

#### **1.0 Government Camp**

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

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- 1.5 Require new commercial or residential development of more than three units to provide a plan for snow removal and stockpiling.
- 1.6 Require one on-site parking space for each single-family residence developed on a lot of record existing prior to the adoption of this provision.
- 1.7 Require all new residential development of more than three units to provide covered parking.

**2.0 Rhododendron**

- 2.1 Provide for a development character of low intensity.

~~2.2 Encourage development of crosswalks, signals, or a pedestrian overpass or underpass to facilitate movement across Highway 26/US 26.~~

**3.0 Wemme/Welches**

- 3.0 Provide for a development character of medium intensity.

~~3.1 Orient new development away from Highway 26, which is designated a scenic highway.~~

~~3.23.1~~ Encourage development of recreational-resort facilities to provide accommodations for the users of the area's recreational amenities.

~~3.33.2~~ Encourage development of a shuttle bus system to provide access to the ski areas.

**RESIDENTIAL**

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

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- 2.0 Allow density bonuses within the Low Density Residential and Mountain Recreation designations pursuant to Chapter 6, *Housing*, and the Zoning and Development Ordinance. In the Mountain Recreation designation, units allowed through the density bonus provisions shall be developed with the same unit size mixture as provided in the base density for the development. For example, if a development is proposed with a mixture of 50 units of 700 square feet each, and 50 units of 500 square feet each, and a bonus density of 10 units is allowed—the ten units shall include five units of 700 square feet each, and five units of 500 square feet.
- 3.0 The Low Density Residential land use plan designation may be applied within the Mt. Hood urban area, according to the policies for designation stated in Chapter 4, *Land Use*.
- 4.0 Implement the Low Density Residential designation by application of only the Hoodland Residential (HR) zone, which shall allow a maximum density of four units per acre.
- 5.0 The Mountain Recreation areas provide overnight housing for the users of the recreational facilities in the Mt. Hood area, in addition to providing for a variety in housing types at a density higher than allowed in the Low Density Residential areas. Uses allowed include multifamily dwellings, resort housing, and motels.
- 5.1 The Mountain Recreation designation may be applied within the Mt. Hood urban area, when all of the following criteria are met:
- a. The land is located within a village district,
  - b. Public sewer and a State-approved water system are available and adequate to support the development potential of this designation, and
  - c. The pattern and character of development within the area would not be adversely affected by uses allowed by this designation.
- 5.2 Recognize the unique character of individual village districts by varying density according to the village.
- a. In Wemme/Welches and Rhododendron, encourage a variety of housing types and individual unit sizes by calculating density based on floor area, according to the following development level chart:

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

- b. In Government Camp, allow a density of 22 units per acre.
- 5.3 Allow incidental commercial uses within a development in the Mountain Recreation area, as a limited use.
- 5.4 Implement the Mountain Recreation designation with the Mountain Recreational Resort zone.
- 6.0 Establish density standards for fragile or hazardous areas within the Mt. Hood urban area as follows:
- a. Land within the 100-year floodplain shall be excluded from land area calculations; there is no density credit allowed for this area.
  - b. Except as modified by policy 6.1, identified land movement areas, wetlands, and slopes over 25 percent shall not be developed; 50 percent of the density allowed by zoning may be transferred to an unrestricted area within the development.
  - c. Except as modified by policy 6.1, development shall not occur within stream corridor areas; 100 percent of the density allowed by zoning may be transferred to an unrestricted area.
- 6.1 Notwithstanding Policy 6.0, one single-family dwelling may be developed on a lot of record, provided that such development is otherwise consistent with the provisions of the Comprehensive Plan and the Zoning and Development Ordinance. The policies stated in Policy 6.0 apply only to residential development; all other development shall be controlled by other provisions of the Comprehensive Plan and by the Zoning and Development Ordinance.

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- 7.0 Implement dimensional and development standards to address compatibility, function, and aesthetics.

**COMMERCIAL**

- 1.0 The Community Commercial land use plan designation may be applied in the Mt. Hood urban area, according to the criteria for designation stated in Chapter 4, *Land Use*.
- 1.1 Implement the Community Commercial designation by application of only the Rural Tourist Commercial (RTC) zoning district.
- 1.2 Apply the density standards of Policy 5.2 of the Residential section to resort accommodations in Community Commercial areas.
- 2.0 The Rural Commercial land use plan designation may be applied outside of the Mt. Hood urban area, according to the criteria for designation stated in Chapter 4.
- 3.0 The Neighborhood Commercial zone shall not be applied in the Mt. Hood area.
- 4.0 Implement dimensional and development standards to address compatibility, function, and aesthetics.

**OPEN SPACE**

- 1.0 All areas within the 100-year floodplain, wetlands, and slopes exceeding 25 percent in the Mt. Hood area shall be designated Resource Protection Open Space. See Maps X-MH-1, X-MH-2, and X-MH-3.
- 2.0 For the Government Camp Urban Unincorporated Community, there are two Open Space designations that are implemented through the Government Camp Open Space Management District: (1) Public and Community Use, and (2) Buffer areas.
- 2.1 Designate Public and Community Use areas for utility facilities and public and private recreation uses and structures, including ski facilities, ice skating arenas, and indoor and other outdoor athletic and sport training facilities.
- 2.2 Designate buffer areas as open to maintain the area's environmental character and residential privacy. Development shall be minimized in these areas to the fullest possible extent.

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- 3.0 Open space uses shall not substantially contribute to vehicular trip generations.

**PUBLIC FACILITIES**

- 1.0 Prohibit lot divisions or development requiring subsurface disposal systems, within the Mt. Hood urban area, except for:
- a. Remodeling or additions to existing development, when such remodeling would not require any alteration or expansion of the subsurface disposal system, or
  - b. Parcels with unique topographic or other natural features which make sewer extension impractical.
- 2.0 Ensure that subsurface sewage disposal systems in non-urban areas are allowed only when lot sizes give maximum assurance that no failures will occur that could require annexation to the Hoodland Service District.
- 3.0 Extension of sanitary sewer service to lands outside an unincorporated community boundary may be allowed in the Hoodland Service District or Government Camp Sanitary District boundary only under the following circumstances:
- a. The property is located within an acknowledged unincorporated community boundary or the sanitary sewer line extension is the only practicable alternative to resolve a health hazard as defined by the State of Oregon; or
  - b. The sanitary sewer extension provides service to an existing, committed nonforest public use area, such as Timberline Lodge and its related facilities, Silcox Hut, or a Boy Scout lodging facility provided: (1) these uses are approved as an exception to Statewide Planning Goal 4; and (2) the extension is approved as an exception to Statewide Planning Goal 11.
- 4.0 The Government Camp Water System Master Plan, dated July 2000, shall be acknowledged as the water element of the Government Camp Facilities Plan.
- 5.0 The Government Camp Sanitary District Wastewater Facilities Plan, dated October 1995, shall be acknowledged as the sanitary sewer element of the Government Camp Facilities Plan.

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- 6.0 The County shall acknowledge periodic updates of the sanitary sewer, water and transportation elements of the Government Camp Facilities Plan.
- 7.0 Review of development applications shall be coordinated with all service agencies to ensure facility service capacity is available to new developments.

**TRANSPORTATION**

The development of ~~roads~~ the transportation system shall be in accordance with the following policies.

- 1.0 Encourage intersection improvements at the following intersections with ~~Highway 26~~ US 26:

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

~~2.0~~ ~~3.0~~ Encourage development of a loop road south of ~~Highway 26~~ US 26 in Government Camp. The loop would complete access from the west to the east side of Government Camp, and would improve access to the Multitorpor/Ski Bowl facilities. Interchanges should be developed at the intersections with ~~Highway 26~~ US 26.

~~2.03.0~~ Recognize the Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan as the guiding document for the development of a connected multi-modal system within the Villages of Mt Hood, as established pursuant to Clackamas County Code, Chapter 2.10.

- 4.0 Cooperate with the Oregon Department of Transportation (ODOT) to maintain a reasonable level of service and safety on ~~Highway 26~~ US 26, in the Mt. Hood Corridor.

~~4.1~~ 4.1 Limit access to ~~Highway 26~~ US 26, and encourage shared access where access to ~~Highway 26~~ US 26 is necessary.

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- 4.14.2 Focus access management strategies on areas where access points are not defined and where driveways can be consolidated with new development or redevelopment according to the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*.
- 4.2 4.3 ——— Encourage redesign of older platted areas along Highway ~~26~~US 26, to reduce the number of access points.
- 4.4 Encourage the development of alternatives to automobile transportation to ski facilities, to reduce parking needs at ski areas and to reduce congestion on Highway ~~26~~US 26. Individual developers and existing resort facilities should be encouraged to provide shuttle systems or other facilities such as an aerial tram between Government Camp and Timberline Lodge.
- 4.5 Coordinate with the community and ODOT to refine the design and location of safe and convenient pedestrian and bicycle crossings across Highway ~~US 26~~, enhanced with rapid flashing beacons or other safety measures and/or signals, or a pedestrian overpass or underpass as identified in the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* and Tables 5-3a-de and Map 5-11b.
- 4.6 Support the design and construction of a multi-use path adjacent to US 26 connecting Wildwood Recreation Site to E. Salmon River Road according to the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*.
- 5.0 Cooperate with ODOT to provide a rest area and information center between Sleepy Hollow and Zigzag.
- 6.0 Encourage development of a community-wide network of pedestrian trails.
- 6.1 Ensure continued public access to recreation trails shown on Map X-MH-5 and located within the Government Camp Urban Unincorporated Community boundary. Provisions may be made through appropriate legal documents, and may include requirements such as retaining conservation easements on these lands.
- 6.2 Encourage the efficient connection of Forest Service trails located outside the Government Camp Urban Unincorporated Community Boundary to trail systems located within the boundary, to provide an integrated network of walkways, bikeways, and trails.

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- 6.3 Support connections to destinations and to Forest Service and Bureau of Land Management trails in and adjacent to the Villages at Mt. Hood as part of an integrated network of pedestrian and bicycle facilities in Brightwood, Wemme/Welches and Rhododendron/Zigzag.
- 7.0 Support development and installation of gateway signs that identify the entrances of the Villages at Mt. Hood.
- 8.0 Promote the active transportation by pProvide wayfinding signs including signs to an existing underpass and “bike hubs” – areas of secure and sheltered parking, benches, bike tools, and/or other amenities – to maximize investment in existing and new transportation facilities that accommodate multimodal travel and tourism in the Villages at Mt. Hood.
- 9.0 Support continuation and/or expansion of a shuttle bus system providing access to the Villages at Mt. Hood and ski areas.
- 10.0 Enhance existing and planned transit facilities and services by providing supportive facilities and features such as park and ride facilities and wayfinding signs in the Villages at Mt. Hood.
- 11.0 Support the development of pedestrian and bikeway connections along Huckleberry Drive, Woodsey Way and Learning Lane in order to provide safe routes to schools.

**PLANNING PROCESS**

- 1.0 The statements of issues and alternatives and the inventories and data of the 1976 Mt. Hood Community Plan, the 1976 Mt. Hood Planning Unit Draft Environmental Statement, 1989 Government Camp Village Revitalization Plan and Report, 1999 Government Camp Village Design Incentives Plan, 1980 Summit Ski Area Expansion Environmental Assessment Report, 1981 Multorpor Ski Bowl Master Plan, 1995 Government Camp Sanitary District Wastewater Facility Plan, 2000 Government Camp Water System Master Plan, 2000 Rural Transportation System Plan, Mt. Hood Corridor Plan-Final Environmental Impact Statement, and the revisions and additions to these documents are adopted as background reports for the policies and designations of the Mt. Hood Community Plan.
- 2.0 The Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan are adopted as a background report for the policies and designations of the Mount Hood Community Plan.

[10-MH-9]

## **Chapter 5: TRANSPORTATION SYSTEM PLAN**

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

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

### **TSP GOALS**

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

### **BACKGROUND AND ISSUES**

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

Government agencies, public and private service providers, and developers are involved in building and maintaining the County's transportation system. Metro, Portland's metropolitan planning organization, sets general policy guidelines for design, distributes regional funding for certain types of projects within its boundary, and sets standards for the operation of the

transportation system located within the Portland Metropolitan Urban Growth Boundary (UGB). All transportation facilities must conform to standards and guidelines outlined by federal, state and, in some cases, Metro regulatory documents.

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

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

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

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

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

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

### **TSP ORGANIZATION**

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

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

- **Foundation and Framework:** includes policies relating to coordination; safety; equity, health and sustainability; intelligent transportation systems; and transportation demand management
- **Land Use and Transportation:** includes policies relating to the integration of land use and transportation; parking; rural tourism; and scenic roads.
- **Active Transportation:** includes policies relating to pedestrian and bicycle facilities and multi-use paths.
- **Roadways:** includes policies relating to functional classification; urban and rural roadway considerations; project development; improvements to serve development; and performance evaluation and access standards.
- **Transit:** includes policies relating to transit and transit-supportive amenities.
- **Freight, Rail, Air, Pipeline and Water Transportation:** includes policies relating to general freight movement; freight trucking; rail; airports; pipelines; and water transportation.
- **Finance and Funding:** includes policies relating to funding capital transportation improvements and maintenance.
- **Transportation Projects and Plans:** includes policies relating to the 20-year and five-year capital improvement plans. Also identifies Special Transportation Plans that are adopted by

reference as refinements of the TSP and plans or studies that need to be completed in the future to support the TSP.

- **Definitions:** relevant definitions for use within this chapter.

The TSP also contains the following components:

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

## ACTIVE TRANSPORTATION

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

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

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

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

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

The Clackamas County Active Transportation Plan (ATP), adopted by reference in Appendix A, contains priority routes connecting communities in both the urban and rural portions of the County. Development of the principal active transportation routes described in the ATP would provide opportunities for residents to safely bicycle or walk to schools, parks, shopping, and employment centers.

### 5.J. General Active Transportation Policies

- 5.J.1 Coordinate the implementation of pedestrian facilities and bikeways with neighboring jurisdictions and jurisdictions within the county.

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

### 5.K. Design Policies

- 5.K.1 Require bikeways and pedestrian facilities for all new roadway construction or substantial reconstruction, allowing for flexibility to accommodate characteristics of terrain, scenic qualities, existing development, and environmental constraints.
- 5.K.2 Design and implement innovative bicycle and pedestrian facilities that improve the convenience and safety of these facilities. Use facility types described in the Active Transportation Plan as a reference.
- 5.K.3 Improve the safety and appeal of walking and biking by supporting the development of bikeways and pedestrian facilities and networks on low volume or local roads and off of existing street rights-of-way.

- 5.K.4 **Urban** Identify pedestrian facilities and bikeway improvements necessary to ensure direct and continuous networks of pedestrian facilities and bikeways on the county road system.
- 5.K.5 **Urban** Identify locations where bicycle and pedestrian access is blocked by rivers and other natural barriers and encourage the creation of bicycle and pedestrian facilities to extend across these barriers.
- 5.K.6 **Urban** Review development plans to ensure that they provide bicycle and pedestrian access.
- 5.K.7 **Urban** Create a networked system of pedestrian facilities and bikeways connecting cities, neighborhoods, commercial areas, community centers, schools, recreational facilities, employment centers, other major destinations, regional and city bikeways and pedestrian facilities, and other transportation modes. Utilize separate accessways for pedestrian facilities and bikeways where street connections are impractical or unavailable.
- 5.K.8 **Rural** Support the safe movement of equestrians in rural areas.

#### 5.L. Construction Policies

- 5.L.1 Construct all pedestrian facilities, bikeways, and multi-use paths according to the current County design standards and to the applicable cross section, allowing for flexibility to accommodate characteristics of terrain, scenic qualities, existing development, and environmental constraints, and different designs identified in adopted Special Transportation Plans.
- 5.L.2 Construct all pedestrian facilities, bikeways, and multi-use paths designated on the Planned Bikeway Network (Maps 5-2a and 5-2b); the Essential Pedestrian Network (Map 5-3); and the Active Transportation Plan (Maps 5-12a and 5-12b).
- 5.L.3 Construct interim pedestrian facilities and bikeways, as appropriate, on existing streets that are not built to the applicable cross section and where the construction of full street improvements is not practicable or imminent as determined by the County Planning Director and County Road Official or County Engineer.
- 5.L.4 **Urban** Require that new development include construction of walkways and accessways within the development and between adjacent developments, where appropriate.

- 5.L.5 **Rural** In Unincorporated Communities, construct walkways adjacent to or within areas of development (such as schools, businesses, or employment centers) and at rural transit stops.

#### 5.M. Facilities Policies

- 5.M.1 Encourage the provision of appropriate, supportive facilities and services for bicyclists, including showers, lockers, bike racks on buses, bike repair and maintenance information/clinics, and secure bicycle parking.
- 5.M.2 Establish and maintain way-finding systems to facilitate bicycle travel.
- 5.M.3 Install and maintain the signage and bicycle amenities identified in the Active Transportation Plan.
- 5.M.4 **Urban** Encourage the provision of street lighting to increase the visibility and personal security of pedestrians and bicyclists.

#### 5.N. Multi-Use Path Policies

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

**Table 5-3a 20-Year Capital Projects**

| Project ID | Map         | Project Name / Street Name                                    | Segment / Locations                             | Project Description   |
|------------|-------------|---|---|---|
| 1000       | County-wide | ITS Plan Program  | N/A   | Develop a program to support the implementation of the County's ITS Plan and support the County's efforts to make improvements to traffic operations based on the ITS Plan.- Deploy traffic responsive signal timing, ramp metering, traffic management equipment for better routing of traffic during incidents along the three key ODOT corridors - I-205, I-5, 99E. Install signal controller upgrades and update County ITS plan. |
| 1001       | County-wide | Transportation Safety Action Plan Program                     | N/A   | Develop a program to support the implementation of the County's TSAP and support the County's efforts to make improvements based on the outcomes of the road safety audits and other safety studies.  |
| 1002       | 5-11a       | 122nd Ave   | Eagle Glen Dr to Hubbard Rd                     | Perform road safety audit or transportation safety review to identify appropriate safety improvements   |
| 1003       | 5-11a       | 122nd Ave   | Sunnyside Rd to Hubbard Rd                      | Fill gaps in pedestrian facilities, turn lanes at Mather Rd   |
| 1004       | 5-11a       | 122nd Ave   | Sunnyside Rd to Timber Valley Dr                | Add bikeways and turn lanes at major intersections  |
| 1005       | 5-11a       | 132nd Ave   | Sunnyside Rd to OR 212                          | Add bikeways, pedestrian facilities, traffic calming and turn lanes at major intersections  |
| 1006       | 5-11a       | 142nd Ave   | Sunnyside Rd to OR 212                          | Add bikeways and pedestrian facilities  |
| 1007       | 5-11a       | 72nd Ave Multi-Use Path Connection                            | Thompson Rd to Harmony Rd                       | Construct multi-use path  |
| 1008       | 5-11a       | 82nd Dr   | OR 212 to Lawnfield Rd                          | Fill in bikeways and pedestrian facilities gaps   |
| 1009       | 5-11a       | 85th Ave  | Causey Ave to Monterey Ave                      | Add sidewalks and bikeways  |
| 1010       | 5-11a       | 92nd Ave  | Johnson Creek Blvd to Emmert View Ct            | Fill gaps in pedestrian facilities  |
| 1011       | 5-11a       | 97th Ave / Mather Rd  | Lawnfield Rd to Summers Ln                      | Add bikeways, pedestrian facilities and eastbound left turn lanes at Mather Rd / Summers Ln   |
| 1012       | 5-11a       | Boyer Dr  | OR 213 to Fuller Rd                             | Construct new 2 lane roadway with turn lanes at OR 213 and Fuller Rd, bikeways and pedestrian facilities; install flashing yellow arrow for left turns on northbound and southbound approaches at OR 213 intersection.  |
| 1013       | 5-11a       | Boyer Dr / 85th Ave / Spencer Dr                              | OR 213 to I-205 bike path                       | Add bikeways  |
| 1014       | 5-11a       | Causey Ave  | Fuller Rd to I-205                              | Add bikeways and shared facility markings in accordance with the Active Transportation Plan.  |
| 1015       | 5-11a       | Clackamas Industrial area multi-modal improvements            | N/A   | Complete bike and pedestrian connections within the Clackamas Industrial area on Jennifer St., Evelyn St., 106 <sup>th</sup> Ave, 122 <sup>nd</sup> Ave, 130 <sup>th</sup> Ave and 135 <sup>th</sup> Ave.   |
| 1016       | 5-11a       | Clackamas Regional Center Bike/Pedestrian Corridors           | N/A   | Construct pedestrian and bike improvements as described in the Clackamas Regional Center Pedestrian / Bicycle Plan  |
| 1017       | 5-11a       | Clackamas Town Center Alternative Performance Standards Study | Clackamas Regional Center                       | Develop alternative performance standards for the intersections within the Clackamas Regional Center.   |
| 1018       | 5-11a       | Clackamas Town Center Circulation Plan                        | West of the Town Center                         | Study area circulation and create plan  |
| 1019       | 5-11a       | Flavel Dr   | Alberta Ave to County boundary                  | Add bikeways in accordance with the Active Transportation Plan.   |
| 1020       | 5-11a       | Fuller Rd   | Otty St to Johnson Creek Blvd                   | Add pedestrian facilities, turn lanes, on-street parking, central median and landscaping.   |
| 1021       | 5-11a       | Fuller Rd / King Rd Improvements                              | Fuller Rd / King Rd intersection                | Restrict access to right-in/right-out only  |
| 1022       | 5-11a       | Harmony Rd  | OR 213 to OR 224                                | Construct bikeways and pedestrian facilities. Linwood Ave to Aquatic Center, construct in accordance with the Active Transportation Plan.   |
| 1023       | 5-11a       | Harmony Rd  | Railroad Ave / Linwood Ave / Harmony Rd         | Railroad crossing and intersection improvements based on further study of intersection operations including bikeways and pedestrian facilities to be undertake jointly by the City of Milwaukie and the County  |
| 1024       | 5-11a       | Harmony Rd / Sunnyside Rd                                     | Harmony Rd / Sunnyside Rd / OR 213 intersection | Extend queue storage on westbound approach and rebuild median; extend queue storage on eastbound approach and install median; convert to right-in-right-out accesses on frontage road.  |

**Table 5-3a 20-Year Capital Projects**

| Project ID | Map   | Project Name / Street Name                     | Segment / Locations                                    | Project Description  |
|------------|-------|--|--|--|
| 1025       | 5-11a | I-205 Multi-Use Path Connection                | Between Sunnyside Rd and Sunnybrook Blvd               | Construct ADA compliant access to the commercial area from the I-205 Multi-Use Path  |
| 1026       | 5-11a | I-205 Multi-Use Path Gap                       | OR 224/OR 213 to OR 212                                | Study the I-205 multi-use path gap to create a plan for connection and path completion in accordance with the Active Transportation Plan   |
| 1027       | 5-11a | Johnson Creek Blvd                             | 55th Ave to I-205                                      | Perform road safety audit or transportation safety review to identify appropriate safety improvements  |
| 1028       | 5-11a | Johnson Creek Blvd                             | Johnson Creek Blvd near 79th Pl                        | Add signal to either Johnson Creek Blvd and 79th Pl or 80th Ave  |
| 1029       | 5-11a | Johnson Creek Blvd                             | 55th Ave to Bell Ave                                   | Widen to 3 lanes with bikeways and pedestrian facilities   |
| 1030       | 5-11a | Johnson Creek Blvd                             | Johnson Creek Blvd / OR 213 intersection               | Extend westbound left-turn lane and rebuild median; install dual northbound and southbound left turn lanes   |
| 1031       | 5-11a | Johnson Creek Blvd                             | OR 213 to 92nd Ave                                     | Add pedestrian facilities, restripe for bikeways   |
| 1032       | 5-11a | Johnson Rd                                     | SE Lake Rd to North Clackamas Park Trail               | Identify bike/pedestrian connections to fill gaps along 82nd Ave   |
| 1033       | 5-11a | Lake Rd  | Lake Rd / International Way intersection               | Add northbound right-turn lane   |
| 1034       | 5-11a | Linwood Ave                                    | Monroe St to Johnson Creek Blvd                        | Add pedestrian facilities in accordance with the Active Transportation Plan.   |
| 1035       | 5-11a | Monroe St                                      | 72nd Ave to Fuller Rd                                  | Add bikeways, pedestrian facilities and traffic calming in accordance with the Active Transportation Plan.   |
| 1036       | 5-11a | Monroe St / 72nd Ave / Thompson Rd / Fuller Rd | Linwood Ave to Causey Ave                              | Add bikeways and traffic calming in accordance with the Active Transportation Plan.  |
| 1037       | 5-11a | Monterey Ave                                   | Stevens Rd to Bob Schumacher Rd                        | Construct collector roadway with bikeways and pedestrian facilities  |
| 1038       | 5-11a | Monterey Ave                                   | OR 213 to Fuller Rd                                    | Construct new 2 lane extension with pedestrian facilities and bikeways. Install flashing yellow arrow for left-turns on northbound and southbound approaches at OR 213 intersection.                 |
| 1039       | 5-11a | North Clackamas Regional Park Trail            | Linwood Ave to North Clackamas Park Complex            | Construct multi-use path   |
| 1040       | 5-11a | North Clackamas Regional Parks Trail           | OR 213 to Linwood Ave                                  | Construct multi-use path   |
| 1041       | 5-11a | Otty Rd  | OR 213 to 92nd Ave                                     | Improve to minor arterial standard consistent with Fuller Road Station Plan; improve curb radius; add turn lanes, on-street parking, central median, landscaping, bikeways and pedestrian facilities |
| 1042       | 5-11a | Otty St  | Otty St / OR 213 / Otty Rd                             | Realign Otty St with Otty Rd at OR 213; install dual westbound left-turn lanes; install flashing yellow arrow for left-turns on northbound and southbound approaches.                                |
| 1043       | 5-11a | Southwest Connector Multi-Use Path             | North Clackamas Aquatic Center access road to 82nd Ave | Construct multi-use path in accordance with the Active Transportation Plan.  |
| 1044       | 5-11a | Springwater Rd                                 | OR 224 to Hattan Rd                                    | Widen to 3 lanes with shoulders (in accordance with the Active Transportation Plan between Clackamas River Dr and Gronlund Rd) and pedestrian facilities; bridge remains two lanes                   |
| 1045       | 5-11a | Sunnyside Rd                                   | 93rd Ave to 126th Ave                                  | Perform road safety audit or transportation safety review to identify appropriate safety improvements  |
| 1046       | 5-11a | Sunnyside Rd                                   | Sunnyside Rd / Stevens Rd intersection                 | Intersection improvements, such as additional turn lanes, turn lane extensions, and/or signal timing modifications   |
| 1047       | 5-11a | Tolbert St Overcrossing                        | 82nd Dr to Industrial Way                              | Construct new 2 lane overcrossing with bikeways and pedestrian facilities  |
| 1048       | 5-11b | 282nd Ave                                      | US 26 to OR 212  | Perform road safety audit or transportation safety review to identify appropriate safety improvements  |
| 1049       | 5-11b | Amisigger Rd / Kelso Rd                        | OR 224 to Kelso / Richey Rd                            | Add paved shoulders; turn lanes at Amisigger/OR 212 and Kelso/Richey; smooth curves.   |
| 1050       | 5-11b | Arrah Wanna Blvd                               | US 26 to Fairway Ave                                   | Add paved shoulders. <b>In the interim, add 4-foot paved shoulders.</b>  |
| 1051       | 5-11b | Cazadero Multi-Use Trail                       | Community of Boring to City of Estacada                | Construct multi-use path in accordance with the Active Transportation Plan.  |

**Table 5-3a 20-Year Capital Projects**

| Project ID | Map   | Project Name / Street Name | Segment / Locations                               | Project Description   |
|------------|-------|----------------------------|---|---|
| 1052       | 5-11b | Compton Rd                 | US 26 to 352nd Ave                                | Perform road safety audit or transportation safety review to identify appropriate safety improvements   |
| 1053       | 5-11b | Dodge Park Rd Bridge       | ~192 feet south of Pipeline Rd                    | Replace bridge nearing the end of its useful life and include paved shoulders   |
| 1054       | 5-11b | Eagle Creek Rd             | Firwood Rd to Duus Rd                             | Perform road safety audit or transportation safety review to identify appropriate safety improvements   |
| 1055       | 5-11b | Eagle Creek Rd             | Currin Rd to Duus Rd                              | Remove horizontal curve, relocate intersection, add paved shoulders and turn lanes at major intersection; investigate speed zone south of Currin Rd   |
| 1056       | 5-11b | Fairway Ave                | Arrah Wanna Blvd to Salmon River Rd               | Add paved shoulders   |
| 1057       | 5-11b | OR 211                     | OR 211 / Judd Rd intersection                     | Realign roadway   |
| 1058       | 5-11b | Richey Rd                  | Kelso Rd to OR 212                                | Add paved shoulders and left turn lane at Richey Rd and OR 212  |
| 1059       | 5-11b | Welches Rd                 | US 26 to Birdie Ln                                | Add paved shoulders; add pedestrian facilities in Welches rural center; <a href="#">evaluate pedestrian crossing near Stage Stop Rd; add multi-use path. Improve pedestrian crossing near Fairway Ave with advance signs and split flashing beacons</a> |
| 1060       | 5-11c | Aldercrest Dr              | Thiessen Rd to Oatfield Rd                        | Perform road safety audit or transportation safety review to identify appropriate safety improvements   |
| 1061       | 5-11c | Concord Rd                 | River Rd to Oatfield Rd                           | Fill gaps in pedestrian facilities  |
| 1062       | 5-11c | Concord Rd                 | River Rd to Oatfield Rd                           | Add turn lanes at major intersections   |
| 1063       | 5-11c | Courtney Ave               | OR 99E to Oatfield Rd                             | Fill gaps in pedestrian facilities and bikeways   |
| 1064       | 5-11c | Courtney Ave               | River Rd to OR 99E (McLoughlin Blvd)              | Construct pedestrian facilities / complete gaps on the south side; add bikeways   |
| 1065       | 5-11c | Harold Ave                 | Concord Rd to Roethe Rd                           | Add pedestrian facilities and traffic calming   |
| 1066       | 5-11c | Hull Ave                   | Wilmot St to Tims View Ave                        | Fill gaps in pedestrian facilities  |
| 1067       | 5-11c | Jennings Ave               | Webster Rd to OR 99E                              | Perform road safety audit or transportation safety review to identify appropriate safety improvements   |
| 1068       | 5-11c | Jennings Ave               | River Rd to Oatfield Rd                           | Widen to 2-lane urban minor arterial standard with bikeway and pedestrian facilities infill   |
| 1069       | 5-11c | Oak Grove Blvd             | Oatfield Rd to River Rd                           | Fill gaps in pedestrian facilities and bikeways   |
| 1070       | 5-11c | Oatfield Rd                | Jennings Ave to Lake Rd                           | Perform road safety audit or transportation safety review to identify appropriate safety improvements   |
| 1071       | 5-11c | Oatfield Rd                | Oatfield Rd / Park Rd intersection                | Install traffic signal and add turn lanes   |
| 1072       | 5-11c | Oatfield Rd                | Oatfield Rd / McNary Rd intersection              | Add southbound and eastbound left-turn lanes  |
| 1073       | 5-11c | Park Ave                   | River Rd to OR 99E (McLoughlin Blvd)              | Add pedestrian facilities   |
| 1074       | 5-11c | River Rd                   | Lark St to Courtney Ave                           | Add pedestrian facilities   |
| 1075       | 5-11c | River Rd                   | Oak Grove Blvd to Risley Ave                      | Fill gaps in bikeways in accordance with the Active Transportation Plan and fill gaps in pedestrian facilities  |
| 1076       | 5-11c | School Pedways             | Johnson Rd / Clackamas Rd / Webster Rd            | Fill gaps in pedestrian facilities on Johnson Rd, Clackamas Rd and Webster Rd within 1/4 mile of schools  |
| 1077       | 5-11c | Thiessen Rd                | Thiessen Rd / Aldercrest Rd intersection          | Add turn lanes on Thiessen Rd; consider converting to two-way stop controlled   |
| 1078       | 5-11c | Torbark Rd                 | River Rd to Trolley Trail                         | Fill gaps in pedestrian facilities  |
| 1079       | 5-11d | 65th Ave                   | 65th Ave / Elligsen Rd / Stafford Rd intersection | Construct roundabout  |
| 1080       | 5-11d | Advance Rd                 | 53rd Ave to 43rd Dr                               | Grade and sight distance improvements   |
| 1081       | 5-11d | Borland Rd                 | Tualatin city limits to Stafford Rd               | Add paved shoulders in accordance with the Active Transportation Plan and turn lanes at major intersections   |
| 1082       | 5-11d | Borland Rd                 | Stafford Rd to West Linn city limits              | Add paved shoulders in accordance with the Active Transportation Plan   |

**Table 5-3a 20-Year Capital Projects**

| Project ID | Map   | Project Name / Street Name                          | Segment / Locations                                    | Project Description  |
|------------|-------|---|--|--|
| 1083       | 5-11d | Carman Dr   | Lake Oswego city limits to Roosevelt Ave               | Add bikeways and pedestrian facilities; analyze for turn lanes   |
| 1084       | 5-11d | Childs Rd   | Sycamore Ave to 65th Ave                               | Transfer roadway to local jurisdiction   |
| 1085       | 5-11d | French Prairie Bridge                               | Willamette River near I-5                              | Construct a bridge in accordance with the Active Transportation Plan   |
| 1086       | 5-11d | Rosemont Rd   | Stafford Rd to West Linn                               | Add paved shoulders and turn lanes at major intersections  |
| 1087       | 5-11d | Stafford Rd   | I-205 to Boeckman Rd / Advance Rd                      | Perform road safety audit or transportation safety review to identify appropriate safety improvements  |
| 1088       | 5-11d | Stafford Rd   | Rosemont Rd to I-205                                   | Add paved shoulders in accordance with the Active Transportation Plan and turn lanes at major intersections  |
| 1089       | 5-11d | Stafford Rd   | Stafford Rd / Childs Rd intersection                   | Install traffic signal and southbound and northbound turn lanes or roundabout  |
| 1090       | 5-11d | Stafford Rd   | Rosemont Rd to I-205                                   | Perform road safety audit or transportation safety review to identify appropriate safety improvements  |
| 1091       | 5-11d | Tonquin Trail                                       | Willamette River through Wilsonville                   | Construct bike / pedestrian facilities pursuant to the Tonquin Trail Master Plan   |
| 1092       | 5-11d | Wilsonville Rd / Ladd Hill Rd                       | Wilsonville Rd / Ladd Hill Rd                          | Install Collision Countermeasure System  |
| 1093       | 5-11e | Airport Rd  | Airport Rd / Miley Rd intersection                     | Install traffic signal   |
| 1094       | 5-11e | Barlow Rd   | Barlow Rd / OR 99E intersection                        | Add dual left-turn lanes on southbound Barlow Rd   |
| 1095       | 5-11e | Beavercreek Rd                                      | Lower Highland Rd to Butte Rd                          | Perform road safety audit or transportation safety review to identify appropriate safety improvements  |
| 1096       | 5-11e | Beavercreek Rd                                      | Ferguson Rd to Spangler Rd                             | Perform road safety audit or transportation safety review to identify appropriate safety improvements  |
| 1097       | 5-11e | Beavercreek Rd                                      | Henrici Rd to Yeoman Rd/Steiner Rd                     | Add paved shoulders in accordance with the Active Transportation Plan and turn lanes at major intersections.   |
| 1098       | 5-11e | Beavercreek Rd                                      | Beavercreek Rd / Leland Rd / Kamrath Rd intersection   | Construct roundabout with additional analysis  |
| 1099       | 5-11e | Canby-Marquam Highway                               | Canby-Marquam Hwy / Lone Elder Rd intersection         | Reconstruct intersection; install northbound left-turn lane and southbound right-turn lane   |
| 1100       | 5-11e | Canby-Marquam Highway                               | ~1,900 ft south of Barnards Rd                         | Replace bridge nearing the end of its useful life with 2-lane structure including paved shoulders  |
| 1101       | 5-11e | Clarkes Four Corners Intersection                   | Beavercreek Rd / Unger Rd                              | Reconstruct intersection   |
| 1102       | 5-11e | Emerald Necklace Trail                              | To Canby Ferry   | Extend Molalla Forest Rd to Locust St in accordance with the Active Transportation Plan.   |
| 1103       | 5-11e | Ferguson Multi-Use Path                             | Thayer Rd to Ferguson Rd                               | Multi-use path to connect Ferguson Rd to Thayer Rd   |
| 1104       | 5-11e | Fischers Mill Rd                                    | Fischers Mill / Hattan Rd intersection                 | Install eastbound left-turn lane   |
| 1105       | 5-11e | Graves Rd/Passmore Rd/Mulino Rd/ OR 213             | Graves Rd/Passmore Rd/Mulino Rd/ OR 213                | Work in conjunction with the Molalla River School District, ODOT and community stakeholders to complete a safety audit to look at all options for the safe movement of Mulino Elementary School students in relation to the adjacent transportation system. Utilize the results from the audit to develop a list of projects and/or programs to maximize safety for all users. |
| 1106       | 5-11e | Greater Arndt Rd/I-5/Canby Access Feasibility Study | Southwest County in the vicinity of Arndt Rd/I-5/Canby | Conduct an alternatives analysis and land use study to identify and consider roadway improvements to address access to I-5 within the Southwest County and address capacity deficiencies.  |
| 1107       | 5-11e | Hattan Rd   | Hattan Rd / Gronlund Rd intersection                   | Install southbound right-turn lane   |
| 1108       | 5-11e | Henrici Rd  | Beavercreek Rd to Ferguson Rd                          | Add paved shoulders and turn lanes at major intersections. Remove horizontal and vertical curves   |
| 1109       | 5-11e | Holly St  | Territorial Rd to Canby Ferry                          | Add paved shoulders in accordance with the Active Transportation Plan.   |
| 1110       | 5-11e | Hult Rd   | OR 211 to Unger Rd                                     | Re-open and improve Hult Rd  |

**Table 5-3a 20-Year Capital Projects**

| Project ID  | Map          | Project Name / Street Name | Segment / Locations                              | Project Description   |
|-------------|--------------|----------------------------|--|---|
| 1111        | 5-11e        | Klang's Mill Bridge        | ~1,000 ft north of OR 211                        | Replace bridge nearing the end of its useful life   |
| 1112        | 5-11e        | Lone Elder Rd Bridge       | ~5,800 feet east of Barlow Rd                    | Replace bridge (nearing the end of its useful life) and include paved shoulders                             |
| 1113        | 5-11e        | Maplelane Rd               | Beavercreek Rd to Ferguson Rd                    | Perform road safety audit or transportation safety review to identify appropriate safety improvements       |
| 1114        | 5-11e        | Meridian Rd                | Meridian Rd / Whiskey Hill Rd intersection       | Limit access/egress points to and from school on NE corner of intersection                                  |
| 1115        | 5-11e        | Molalla Ave Flooding       | Just south of city of Molalla                    | Construct bridge to resolve flooding issues   |
| 1116        | 5-11e        | Mulino Rd                  | Mulino Rd / 13th Ave                             | Relocate intersection to south away from railroad trestle   |
| 1117        | 5-11e        | OR 170                     | OR 99E to Macksburg Rd                           | Perform road safety audit or transportation safety review to identify appropriate safety improvements       |
| 1118        | 5-11e        | Redland Rd                 | OR 213 to Hattan Rd                              | Perform road safety audit or transportation safety review to identify appropriate safety improvements       |
| 1119        | 5-11e        | Redland Rd                 | Redland Rd / Springwater Rd intersection         | Perform road safety audit or transportation safety review to identify appropriate safety improvements       |
| 1120        | 5-11e        | Redland Rd                 | Redland Rd / Holly Rd intersection               | Install traffic signal and westbound and northbound left-turn lanes or roundabout                           |
| 1121        | 5-11e        | Redland Rd                 | Redland Rd / Ferguson Rd intersection            | Construct roundabout  |
| 1122        | 5-11e        | Ridge Rd                   | ~1 miles north of Lower Highland Rd              | Fix sinkhole  |
| 1123        | 5-11e        | Springwater Rd             | Springwater Rd / Clackamas River Dr intersection | Install signal at Clackamas River Dr  |
| 1124        | 5-11e        | Springwater Rd             | 400 ft east of Hattan Rd                         | Construct bridge to accommodate paved shoulders   |
| 1125        | 5-11e        | Springwater Rd             | Hattan Rd to Bakers Ferry Rd                     | Add paved shoulders in accordance with the Active Transportation Plan and turn lanes at major intersections |
| 1126        | 5-11e        | Township Rd                | Central Point Rd to Canby City limit             | Add paved shoulders and turn lanes at major intersections   |
| 1127        | 5-11e        | Union Mills Rd             | OR 213 to OR 211                                 | Add turn lanes at major intersections   |
| 1128        | 5-11e        | Union Mills Rd             | OR 213 to OR 211                                 | Construct a shoulder on the south side of the roadway   |
| 1129        | 5-11e        | Upper Highland Rd          | Beavercreek Rd to Lower Highland Rd              | Perform road safety audit or transportation safety review to identify appropriate safety improvements       |
| 1130        | 5-11c        | Oetkin Rd - Naef Rd        | Thiessen Rd to River Rd                          | Construct bike boulevard consistent with the Active Transportation Plan                                     |
| 1131        | 5-11c        | River Rd                   | Park Ave to Glen Echo Ave                        | Construct buffered bike lane in accordance with the Active Transportation Plan.                             |
| <u>1137</u> | <u>5-11b</u> | <u>Brightwood Loop Rd</u>  | <u>US 26 to US 26</u>                            | <u>Add 4-foot paved shoulders</u>   |

**Table 5-3b Preferred Projects**

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

**Table 5-3b Preferred Projects**

| Project ID  | Map          | Project Name / Street Name                  | Segment / Locations                                     | Project Description  |
|-------------|--------------|---|---|--|
| 2024        | 5-11c        | Thiessen Rd                                 | Oatfield Rd to Webster Rd                               | Add bikeways and pedestrian facilities. For the Oetkin Rd to Webster Rd section, construct in accordance with the Active Transportation Plan |
| 2025        | 5-11c        | Webster Rd                                  | OR 224 to Gladstone                                     | Fill gaps in bikeways and pedestrian facilities  |
| 2026        | 5-11d        | Advance Rd                                  | ~2,900 ft west of Mountain Rd                           | Realign roadway and grade improvements   |
| 2027        | 5-11d        | Advance Rd                                  | 65th Ave to Mountain Rd                                 | Add paved shoulders  |
| 2028        | 5-11d        | Stafford Rd / 65th Ave                      | I-205 to Boeckman Rd / Advance Rd                       | Add paved shoulders in accordance with the Active Transportation Plan and turn lanes at major intersections                                  |
| 2029        | 5-11e        | Arndt Rd Extension                          | Barlow to OR 99E  | Construct new 2 or 3 lane roadway  |
| 2030        | 5-11e        | Barlow Rd                                   | Knights Bridge Rd to OR 99E                             | Add paved shoulders  |
| 2031        | 5-11e        | Beavercreek Multi-Use Path                  | Loder Rd to Ferguson Rd                                 | Construct multi-use path consistent with the Beavercreek Road Concept Plan   |
| 2032        | 5-11e        | Boones Ferry Rd                             | Boones Ferry Rd / Butteville Rd intersection            | Remove bank, remove/decrease horizontal curve  |
| 2034        | 5-11e        | Dryland Rd                                  | Macksburg Rd S to Macksburg Rd N                        | Realign to form one intersection at Dryland Rd   |
| 2035        | 5-11e        | Hattan Rd                                   | Fischers Mill Rd to Gronlund Rd                         | Add paved shoulders and turn lanes at major intersections  |
| 2036        | 5-11e        | Henrici Rd                                  | OR 213 to Beavercreek Rd                                | Add paved shoulders and turn lanes at major intersections  |
| 2037        | 5-11e        | Henrici Rd                                  | Ferguson Rd to Redland Rd                               | Add paved shoulders and turn lanes at major intersections. Remove horizontal and vertical curves   |
| 2038        | 5-11e        | Molalla Forest Rd                           | City of Canby to City of Molalla                        | Pave to provide bicycle access in accordance with the Active Transportation Plan   |
| 2039        | 5-11e        | Mulino Rd (13th St segment)                 | Canby city limits to OR 213                             | Add paved shoulders and turn lanes at major intersections  |
| 2040        | 5-11e        | Newell Creek Trail / Oregon City Loop Trail | Loop around the perimeter of Oregon City                | Construct Oregon City Loop Trail and Newell Creek Trail in accordance with the Active Transportation Plan                                    |
| 2041        | 5-11e        | Redland Rd                                  | Redland Rd / Bradley Rd intersection                    | Install eastbound left-turn lane   |
| 2042        | 5-11e        | Redland Rd                                  | Redland Rd / Fischers Mill Rd / Henrici Rd intersection | Install eastbound left-turn, eastbound right-turn and westbound right-turn lanes at Henrici Rd   |
| 2043        | 5-11e        | Springwater Rd                              | Springwater Rd / Bakers Ferry Rd intersection           | Install southbound left-turn lane; realign intersection to fix skew  |
| <u>2044</u> | <u>5-11b</u> | <u>Sleepy Hollow Rd</u>                     | <u>Barlow Trail Rd to US 26</u>                         | <u>Add 4-foot paved shoulders</u>  |

**Table 5-3c Long Term Capital Projects**

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

**Table 5-3c Long Term Capital Projects**

| Project ID | Map   | Project Name / Street Name         | Segment / Locations  | Project Description  |
|------------|-------|------------------------------------|--|--|
| 3029       | 5-11a | West 82nd Ave Parallel Road        | King Rd to Luther Rd   | Construct collector road parallel to OR 213 with bikeways and pedestrian facilities  |
| 3030       | 5-11b | 282nd Ave                          | 282nd Ave / OR 212 intersection                                | Add second right-turn lane on 282nd Ave and additional intersection improvements as needed   |
| 3031       | 5-11b | 282nd Ave                          | OR 212 to Multnomah County line                                | Add paved shoulders  |
| 3032       | 5-11b | 352nd Ave / Dunn Rd                | Bluff Rd to Bluff Rd   | Add paved shoulders  |
| 3033       | 5-11b | 362nd Dr                           | Colorado Rd to Dubarko Rd                                      | Remove or decrease horizontal and vertical curves  |
| 3034       | 5-11b | 362nd Dr                           | 362nd Ave / Deming Rd intersection                             | Remove or decrease vertical curve, relocate intersection   |
| 3035       | 5-11b | Barlow Trail Rd/ Lolo Pass Rd      | Between communities of Timberline, Welches and Zig Zag         | Add paved shoulders in accordance with the Active Transportation Plan. <u>In the interim, install 4-foot shoulders or 4-foot shoulders at specific areas with limited sight distance or steep uphill sections.</u> |
| 3036       | 5-11b | Bluff Rd                           | City of Sandy to County line                                   | Add paved shoulders in accordance with the Active Transportation Plan  |
| 3037       | 5-11b | Bull Run Rd                        | Ten Eyck Rd to Multnomah County line                           | Add paved shoulders and turn lanes at major intersections.   |
| 3038       | 5-11b | Bull Run Truss                     | Bull Run truss between Waterworks Rd and Bowman Rd             | Replace bridge nearing the end of its useful life  |
| 3039       | 5-11b | Coalman Rd / <u>Cherryville Dr</u> | Ten Eyck Rd to US 26   | Add paved shoulders. <u>In the interim, add 4-foot paved shoulders.</u>  |
| 3040       | 5-11b | Compton Rd                         | US 26 to 352nd Ave   | Remove vertical curve near Orient Dr and relocate intersection; add paved shoulders  |
| 3041       | 5-11b | Coupland Rd                        | Estacada City limits to Divers Rd                              | Add paved shoulders and turn lanes at major intersections  |
| 3042       | 5-11b | Eagle Creek Rd                     | Keegan Rd to Currin Rd   | Realign Eagle Creek Rd to remove or decrease downgrade   |
| 3043       | 5-11b | Firwood Rd                         | Firwood Rd / Trubel Rd intersection                            | Realign Trubel Rd to remove or decrease downgrade  |
| 3044       | 5-11b | Hayden Rd                          | Springwater Rd to OR 211                                       | Add paved shoulders in accordance with the Active Transportation Plan  |
| 3045       | 5-11b | Howlett Rd                         | OR 211 to Wildcat Mountain Dr                                  | Add paved shoulders  |
| 3046       | 5-11b | Kelso Rd                           | Richey Rd to Orient Dr   | Add paved shoulders  |
| 3047       | 5-11b | Kelso Rd                           | Orient Dr to Sandy Urban Growth Boundary                       | Remove vertical curve, relocate intersection, add paved shoulders and turn lanes at major intersections; investigate speed zone  |
| 3048       | 5-11b | Lolo Pass Rd                       | US 26 to Barlow Trail Rd                                       | Safety analysis; add paved shoulders in accordance with the Active Transportation Plan   |
| 3049       | 5-11b | Mt Hood Aerial Transportation Link | Between Ski Bowl, Government Camp Village and Timberline Lodge | Aerial transportation link   |
| 3050       | 5-11b | Orient Dr                          | US 26 north to County line                                     | Add paved shoulders  |
| 3051       | 5-11b | Porter Rd Bridge over Delph Creek  | ~100 ft east of Wilcox Rd                                      | Replace bridge   |
| 3052       | 5-11b | Salmon River Rd                    | US 26 to Welches Rd  | Add paved shoulders. <u>Between US 26 and Fairway Ave, add paved shoulders or multi-use path</u>   |
| 3053       | 5-11b | Springwater Rd                     | Hayden Rd to OR 211  | Add paved shoulders  |

**Table 5-3c Long Term Capital Projects**

| Project ID | Map   | Project Name / Street Name | Segment / Locations   | Project Description  |
|------------|-------|----------------------------|---|--|
| 3054       | 5-11b | Ten Eyck Rd                | Lusted Rd to City of Sandy  | Remove vertical curve, relocate intersection, add paved shoulders, turn lanes at major intersections; investigate speed zone. For paved shoulders between City of Sandy and Marmot Rd, refer to the Active Transportation Plan |
| 3055       | 5-11b | Tickle Creek Trail         | Springwater Corridor to Sandy city limits                         | Construct multi-use path in accordance with the Active Transportation Plan   |
| 3056       | 5-11b | Welches Rd                 | Birdie Ln to Salmon River Rd                                      | Add paved shoulders <u>or add multi-use path</u>   |
| 3057       | 5-11b | Wildcat Mountain Dr        | OR 224 to Firwood Rd  | Add paved shoulders  |
| 3058       | 5-11c | Aldercrest Dr              | Thiessen Rd to Oatfield Rd  | Add pedestrian facilities to one side of the road and bikeways   |
| 3059       | 5-11c | Clackamas Rd               | Clackamas Rd / I-205 interchange                                  | Construct bike/pedestrian bridge over I-205  |
| 3060       | 5-11c | Hill Rd                    | Oatfield Rd to Thiessen Rd  | Add bikeways and pedestrian facilities   |
| 3061       | 5-11c | Johnson Rd / McKinley Rd   | OR 224 to I-205 multi-use path                                    | Bikeway and pedestrian facilities infill. From Thiessen Rd to I-205 Multi-use Path, construct in accordance to the Active Transportation Plan  |
| 3062       | 5-11c | McNary Rd / Mabel Ave      | Oatfield Rd to Webster Rd   | Add bikeways and pedestrian facilities   |
| 3063       | 5-11c | Naef Rd                    | Oatfield Rd to River Rd   | Add pedestrian facilities in accordance with the Active Transportation Plan  |
| 3064       | 5-11c | Oatfield Rd                | Oatfield Rd / Hill Rd intersection                                | Add left-turn lanes, install signal if warranted   |
| 3065       | 5-11c | Oatfield Rd                | Milwaukie city limits to Gladstone city limits                    | Fill gaps in pedestrian facilities and bikeways  |
| 3066       | 5-11c | Oatfield Ridge Connection  | Between Jennings Ave and Thiessen Ave over Oatfield Ridge         | Construct multi-use path   |
| 3068       | 5-11c | Portland Ave               | Jennings Ave to Hull Ave  | Fill gaps in pedestrian facilities   |
| 3069       | 5-11c | Risley Ave                 | Arista Dr to Hager Rd   | Fill gaps in pedestrian facilities   |
| 3070       | 5-11c | River Rd                   | Courtney Ave to Oak Grove Blvd                                    | Add pedestrian facilities  |
| 3071       | 5-11c | River Rd                   | Risley Ave to Rinearson Rd  | Add pedestrian facilities  |
| 3072       | 5-11c | Roethe Rd                  | River Rd to OR 99E (McLoughlin Blvd)                              | Add bikeways, pedestrian facilities and traffic calming  |
| 3073       | 5-11c | Rusk Rd                    | OR 224 South to Aldercrest Rd                                     | Add pedestrian facilities on one side of the roadway and bikeways  |
| 3074       | 5-11c | Strawberry Ln              | Webster Rd to 82nd Dr   | Add pedestrian facilities and fill bikeway gaps  |
| 3075       | 5-11c | Thiessen Rd                | Thiessen Rd / Hill Rd intersection                                | Add right-turn lane on Thiessen Rd; consider converting to two-way stop controlled or installing roundabout  |
| 3076       | 5-11c | View Acres Rd              | Oatfield Rd to Hill Rd  | Add pedestrian facilities and traffic calming  |
| 3077       | 5-11c | Webster Rd                 | Webster Rd / Jennings Ave and Webster Rd / Roots Rd intersections | Construct traffic signals, turn lanes  |
| 3078       | 5-11c | Webster Rd                 | Webster Rd / Strawberry Ln intersection                           | Add signal; construct southbound and westbound left-turn lane  |
| 3079       | 5-11d | 65th Ave                   | Stafford Rd to Tualatin city limits                               | Add paved shoulders  |
| 3080       | 5-11d | Baker Rd                   | Tooze Rd to County line   | Add paved shoulders  |

**Table 5-3c Long Term Capital Projects**

| Project ID | Map   | Project Name / Street Name                           | Segment / Locations                        | Project Description  |
|------------|-------|--|--|--|
| 3081       | 5-11d | Bell Rd  | Ladd Hill Rd to Wilsonville Rd             | Add paved shoulders  |
| 3082       | 5-11d | Bonita Rd  | Carman Dr to I-5                           | Add bikeways and pedestrian facilities   |
| 3083       | 5-11d | Childs Rd  | Stafford Rd to Lake Oswego city limits     | Add pedestrian facilities, bikeways and turn lanes at major intersections  |
| 3084       | 5-11d | Graham's Ferry Rd                                    | County line to Westfall Rd                 | Add paved shoulders  |
| 3085       | 5-11d | Graham's Ferry Rd                                    | Wilsonville Rd to Wilsonville city limits  | Add paved shoulders  |
| 3086       | 5-11d | Hoffman Rd / Peach Cove Rd / Riverwood Rd            | Mountain Rd to Tualatin River              | Add paved shoulders  |
| 3087       | 5-11d | Homesteader Rd                                       | Stafford Rd to Mountain Rd                 | Add paved shoulders  |
| 3088       | 5-11d | Johnson Rd   | Stafford Rd to West Linn city limits       | Add paved shoulders and turn lanes at major intersections  |
| 3089       | 5-11d | Ladd Hill Rd   | Wilsonville Rd to Washington County line   | Add paved shoulders and turn lanes at major intersections  |
| 3090       | 5-11d | Mountain Rd  | Stafford Rd to Canby Ferry                 | Add paved shoulders in accordance with the Active Transportation Plan  |
| 3091       | 5-11d | Petes Mountain Rd                                    | West Linn city limits to Hoffman Rd        | Add paved shoulders and turn lanes at major intersections  |
| 3092       | 5-11d | Pleasant Hill Rd / McConnell Rd / Tooze Rd           | Ladd Hill Rd to Westfall Rd                | Add paved shoulders  |
| 3093       | 5-11d | Schaeffer Rd   | Mountain Rd to Petes Mountain Rd           | Add paved shoulders  |
| 3094       | 5-11d | Schatz Rd / 55th Ave / Meridian Way                  | 65th Ave to Stafford Rd                    | Add paved shoulders  |
| 3095       | 5-11d | Tualatin / Lake Oswego Pedestrian and Bicycle Bridge | Tualatin River Bridge                      | Construct bike / pedestrian bridge   |
| 3096       | 5-11d | Wilsonville Rd                                       | Wilsonville Rd / Bell Rd intersection      | Realign roadway and grade improvements   |
| 3097       | 5-11d | Wilsonville Rd                                       | Wilsonville Rd / Edminston Rd intersection | Remove bank, remove horizontal curve, relocate intersection  |
| 3098       | 5-11d | Wilsonville Rd Bridge                                | ~300 feet south of Bell Rd                 | Replace bridge nearing the end of its useful life  |
| 3099       | 5-11d | Wisteria Rd / Woodbine Rd                            | Rosemont Rd to Johnson Rd                  | Add paved shoulders  |
| 3100       | 5-11e | Airport Rd   | Arndt Rd to Miley Rd                       | Add turn lanes at major intersections  |
| 3101       | 5-11e | Bakers Ferry Rd                                      | Springwater Rd to OR 224                   | Add paved shoulders in accordance with the Active Transportation Plan and turn lanes at major intersections; remove horizontal curve and relocate intersection from Eaden Rd to OR 224 |
| 3102       | 5-11e | Barnards Rd  | Meridian Rd to Canby-Marquam Hwy           | Add paved shoulders  |
| 3103       | 5-11e | Barnards Rd  | Needy Rd to Stuwe Rd                       | Reconstruct bridge and widen to 36 feet  |
| 3104       | 5-11e | Beavercreek Rd                                       | Yeoman Rd/Steiner Rd to OR 211             | Add paved shoulders  |
| 3105       | 5-11e | Bradley Rd   | Redland Rd to Holcomb Blvd                 | Add turn lanes at major intersections  |
| 3106       | 5-11e | Bradley Rd   | Gronlund Rd to Redland Rd                  | Add paved shoulders  |

**Table 5-3c Long Term Capital Projects**

| Project ID      | Map              | Project Name / Street Name | Segment / Locations                              | Project Description   |
|-----------------|------------------|----------------------------|--|---|
| 3107            | 5-11e            | Buckner Creek Rd           | Gard Rd to Cochell Rd                            | Add paved shoulders   |
| 3108            | 5-11e            | Canby-Marquam Highway      | OR 170 / Macksburg Rd intersection               | Reconstruct intersection; install southbound left-turn lane and northbound right-turn lane  |
| 3109            | 5-11e            | Canby-Marquam Highway      | City of Canby to OR 211                          | Add paved shoulders   |
| 3110            | 5-11e            | Carus Rd                   | Central Point Rd to Beaver Creek Rd              | Add paved shoulders in accordance with the Active Transportation Plan   |
| 3111            | 5-11e            | Casto Rd                   | Spangler Rd to Central Point Rd                  | Add paved shoulders and turn lanes at major intersections   |
| 3112            | 5-11e            | Central Point Rd           | Parrish Rd to Mulino Rd                          | Smooth curves; add paved shoulders (Parrish Rd to Bremer Rd in accordance with the Active Transportation Plan)  |
| 3113            | 5-11e            | Clackamas River Dr         | Oregon City limits to Springwater Rd             | Construct bikeway in accordance with the Active Transportation Plan. Add turn lanes at Springwater Rd and Forsythe Rd.  |
| 3114            | 5-11e            | Fellows Rd                 | Redland Rd to Lower Highland Rd                  | Add paved shoulders and turn lanes at major intersections   |
| 3115            | 5-11e            | Ferguson Rd                | Beaver Creek Rd and Henrici Rd                   | Reduce the speed limit and install traffic calming  |
| 3116            | 5-11e            | Fischers Mill Rd           | Redland Rd to Springwater Rd                     | Add paved shoulders in accordance with the Active Transportation Plan   |
| <del>3117</del> | <del>5-11e</del> | <del>Forsythe Rd</del>     | <del>Oregon City line to Bradley Rd</del>        | <del>Add paved shoulders</del>  |
| 3118            | 5-11e            | Forsythe Rd                | Oregon City limit to Bradley Rd                  | Add center turn lane and paved shoulders  |
| 3119            | 5-11e            | Forsythe Rd                | Forsythe Rd / Victory Rd intersection            | Realign, widen Victory Rd; remove or decrease curves along Forsythe Rd; relocate intersection   |
| 3120            | 5-11e            | Gard Rd                    | ~100 ft south of Old Clarke Rd                   | Reconstruct bridge to accommodate paved shoulders   |
| 3121            | 5-11e            | Gronlund Rd / Hattan Rd    | Bradley Rd to Springwater Rd                     | Add paved shoulders and turn lanes at major intersections   |
| 3122            | 5-11e            | Henrici Rd                 | Between Driftwood Dr and Shore Vista Dr          | Widen bridge to accommodate paved shoulders   |
| 3123            | 5-11e            | Holcomb Blvd               | Edenwild Ln to Bradley Rd                        | Add paved shoulders and turn lanes at Holcomb Blvd / Bradley Rd   |
| 3124            | 5-11e            | Kamrath Rd                 | Carus Rd to Spangler Rd                          | Safety analysis at Carus Rd, add paved shoulders, remove or decrease horizontal curves north of Spangler Rd   |
| 3125            | 5-11e            | Knights Bridge Rd Bridge   | ~3,200 feet east of Barlow Rd                    | Replace bridge (nearing the end of its useful life)   |
| 3126            | 5-11e            | Leland Rd                  | Oregon City line to Beaver Creek Rd              | Add paved shoulders   |
| 3127            | 5-11e            | Leland Rd                  | ~1,000 ft north of Warnock Rd                    | Reconstruct bridge to accommodate paved shoulders   |
| 3128            | 5-11e            | Lone Elder Rd              | County line to Canby-Marquam Hwy                 | Add paved shoulders   |
| 3129            | 5-11e            | Lower Highland Rd          | Beaver Creek Rd to Fellows Rd                    | Add paved shoulders and turn lanes at major intersections   |
| 3130            | 5-11e            | Macksburg Rd               | Canby Marquam Hwy to OR 213                      | Add paved shoulders and turn lanes at major intersections   |
| 3131            | 5-11e            | Maplelane Rd               | ~1,800 ft west of Walker Rd                      | Add paved shoulders   |
| 3132            | 5-11e            | Maplelane Rd               | Oregon City Urban Growth Boundary to Ferguson Rd | Add paved shoulders   |
| 3133            | 5-11e            | Mattoon Rd                 | Fischers Mill Rd to Redland Rd                   | Add paved shoulders in accordance with the Active Transportation Plan and turn lanes at major intersections; remove vertical curves, remove horizontal curves north of Redland Rd |

**Table 5-3c Long Term Capital Projects**

| Project ID | Map   | Project Name / Street Name   | Segment / Locations               | Project Description  |
|------------|-------|------------------------------|-----------------------------------|--|
| 3134       | 5-11e | Meridian Rd                  | Lone Elder Rd to OR 211           | Add paved shoulders  |
| 3135       | 5-11e | Meridian Rd                  | Elliott Prairie Rd to Barlow Rd   | Add paved shoulders; remove or decrease horizontal and vertical curves   |
| 3136       | 5-11e | Miley Rd                     | Airport Rd to Eilers Rd           | Add paved shoulders  |
| 3137       | 5-11e | Molalla Ave                  | OR 213 to Molalla City limits     | Add paved shoulders  |
| 3138       | 5-11e | New Era Rd / Haines Rd       | OR 99E to Leland Rd               | Add paved shoulders  |
| 3140       | 5-11e | Redland Rd                   | ~900 ft west of Holly Ln          | Reconstruct bridge to include shoulders and bikeways   |
| 3141       | 5-11e | Redland Rd                   | ~400 ft west of Holly Ln          | Reconstruct bridge to include shoulders and bikeways   |
| 3142       | 5-11e | Redland Rd                   | Henrici Rd to Oregon City limit   | Add paved shoulders and bikeway in accordance with the Active Transportation Plan  |
| 3143       | 5-11e | Redland Rd                   | Henrici Rd to Springwater Rd      | Add paved shoulders and turn lanes at major intersections. For the section between Mattoon Rd and Jubb Rd, see the Active Transportation Plan.     |
| 3144       | 5-11e | Ridge Rd                     | Lower Highland Rd to Redland Rd   | Add paved shoulders  |
| 3145       | 5-11e | Rock Creek (Kropf Rd) Bridge | ~3,500 ft north of Gibson Rd      | Replace bridge   |
| 3146       | 5-11e | S Killdeer Rd                | Ferguson Road and Yeoman Road     | Extend S Killdeer Rd to connect with S. Ivel Rd. and provide bike/pedestrian access  |
| 3147       | 5-11e | South End Rd                 | Oregon City limits to OR 99E      | Smooth curves; add paved shoulders   |
| 3148       | 5-11e | Spangler Rd                  | Casto Rd to Beaver Creek Rd       | Add paved shoulders and turn lanes at major intersections  |
| 3149       | 5-11e | Springwater Rd               | Bakers Ferry Rd to Hayden Rd      | Add paved shoulders and turn lanes at major intersections. For paved shoulders between Eaden Rd and Hayden Rd, see the Active Transportation Plan. |
| 3150       | 5-11e | Thayer Rd/Ferguson Rd        | Oregon City line to Redland Rd    | Add paved shoulders  |
| 3151       | 5-11e | Toliver Rd                   | Dryland Rd to Molalla city Limits | Add paved shoulders in accordance with the Active Transportation Plan  |
| 3152       | 5-11e | Unger Rd                     | Beaver Creek Rd to OR 211         | Add paved shoulders and turn lanes at major intersections  |
| 3153       | 5-11e | Union Hall Rd                | Central Point Rd to El Dorado Rd  | Add paved shoulders  |
| 3154       | 5-11f | Bird Rd                      | Groshong Rd to Wilhoit Rd         | Add paved shoulders and turn lanes at major intersections  |
| 3155       | 5-11f | Blair Rd                     | Groshong Rd to Maple Grove Rd     | Add paved shoulders and turn lanes at major intersections  |
| 3156       | 5-11f | Callahan Rd S / Ramsby Rd    | Dickey Prairie Rd to Fernwood Rd  | Add paved shoulders and turn lanes at major intersections  |
| 3157       | 5-11f | Dhooghe Rd                   | OR 211 to Fernwood Rd             | Add paved shoulders and turn lanes at major intersections  |
| 3158       | 5-11f | Fernwood Rd                  | Dhooghe Rd to Callahan Rd         | Add paved shoulders and turn lanes at major intersections  |
| 3159       | 5-11f | Gray's Hill Rd               | Green Mountain Rd to OR 211       | Add paved shoulders  |
| 3160       | 5-11f | Maple Grove Rd               | Nowlens Bridge Rd to Sawtell Rd   | Add paved shoulders and turn lanes at major intersections  |
| 3161       | 5-11f | Nowlens Bridge Rd            | OR 213 to Maple Grove Rd          | Add paved shoulders and turn lanes at major intersections  |

**Table 5-3c Long Term Capital Projects**

| Project ID      | Map              | Project Name / Street Name               | Segment / Locations                  | Project Description   |
|-----------------|------------------|--|--------------------------------------|---|
| 3162            | 5-11f            | Sawtell Rd                               | Maple Grove Rd to Wilhoit Rd         | Add paved shoulders and turn lanes at major intersections   |
| 3163            | 5-11f            | Wildcat Rd                               | Wilhoit Rd to OR 213                 | Add paved shoulders and turn lanes at major intersections   |
| 3164            | 5-11f            | Wright Rd                                | OR 211 to Callahan Rd                | Add paved shoulders   |
| 3165            | 5-11a            | Sunnyside Rd                             | 93rd Ave to OR 212                   | Add pedestrian facilities and bikeways in accordance with the Active Transportation Plan  |
| <del>3166</del> | <del>5-11b</del> | <del>Barlow Trail Rd</del>               | <del>Marmot Rd to Lolo Pass Rd</del> | <del>Add paved shoulders in accordance with the Active Transportation Plan</del>  |
| 3167            | 5-11b            | Marmot Rd                                | Ten Eyck to Barlow Trail Rd          | Add paved shoulders in accordance with the Active Transportation Plan. <u>In the interim, widen to 4-feet within Wildwood/Timberline, Zigzag, Rhododendron and Wemme/Welches.</u> |
| 3168            | 5-11c            | Thiessen Rd                              | Webster Rd to Johnson Rd             | Add pedestrian facilities and bikeways in accordance with the Active Transportation Plan  |
| 3169            | 5-11d            | Willamette River Greenway                | Lake Oswego north to County Line     | Construct multi-use path in accordance with the Active Transportation Plan.   |
| 3170            | 5-11d            | Willamette River Greenway                | Canby Ferry to City of Wilsonville   | Construct multi-use path in accordance with the Active Transportation Plan.   |
| 3171            | 5-11e            | Bremer Rd                                | Central Point Rd to Haines Rd        | Add paved shoulders in accordance with the Active Transportation Plan   |
| 3172            | 5-11e            | Butteville Rd                            | Willamette River to County line      | Add paved shoulders in accordance with the Active Transportation Plan   |
| 3173            | 5-11e            | Dryland Rd                               | Macksburg Rd to Toliver Rd           | Add paved shoulders in accordance with the Active Transportation Plan   |
| 3174            | 5-11e            | Eaden Rd                                 | Bakers Ferry Rd to Springwater Rd    | Add paved shoulders in accordance with the Active Transportation Plan   |
| 3175            | 5-11e            | Haines Rd                                | Bremer Rd to Territorial Rd          | Add paved shoulders in accordance with the Active Transportation Plan   |
| 3176            | 5-11e            | Harms Rd                                 | Kraxberger Rd to Macksburg Rd        | Construct bikeway in accordance with Active Transportation Plan   |
| 3177            | 5-11e            | Hwy 170 / Kraxberger Rd                  | City of Canby to Harms Rd            | Add paved shoulders in accordance with the Active Transportation Plan   |
| 3178            | 5-11e            | Jubb Rd                                  | Redland Rd to Springwater Rd         | Add paved shoulders in accordance with the Active Transportation Plan   |
| 3179            | 5-11e            | Kamrath Rd                               | Leland Rd to Carus Rd                | Add paved shoulders in accordance with the Active Transportation Plan   |
| 3180            | 5-11e            | Knights Bridge Rd / Barlow Rd / Arndt Rd | Canby boundary to Airport Rd         | Add bikeway in accordance with the Active Transportation Plan   |
| 3181            | 5-11e            | Territorial Rd                           | Haines Rd to OR 99E                  | Add bikeways in accordance with the Active Transportation plan  |
| 3182            | 5-11e            | Willamette River Greenway                | Oregon City to Canby                 | Construct multi-use path in accordance with the Active Transportation Plan.   |

Removed Projects:3117: removed due to duplication with 31183166: removed due to duplication with 3035

**Table 5-3d Regional Capital Projects**

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

**Table 5-3d Regional Capital Projects**

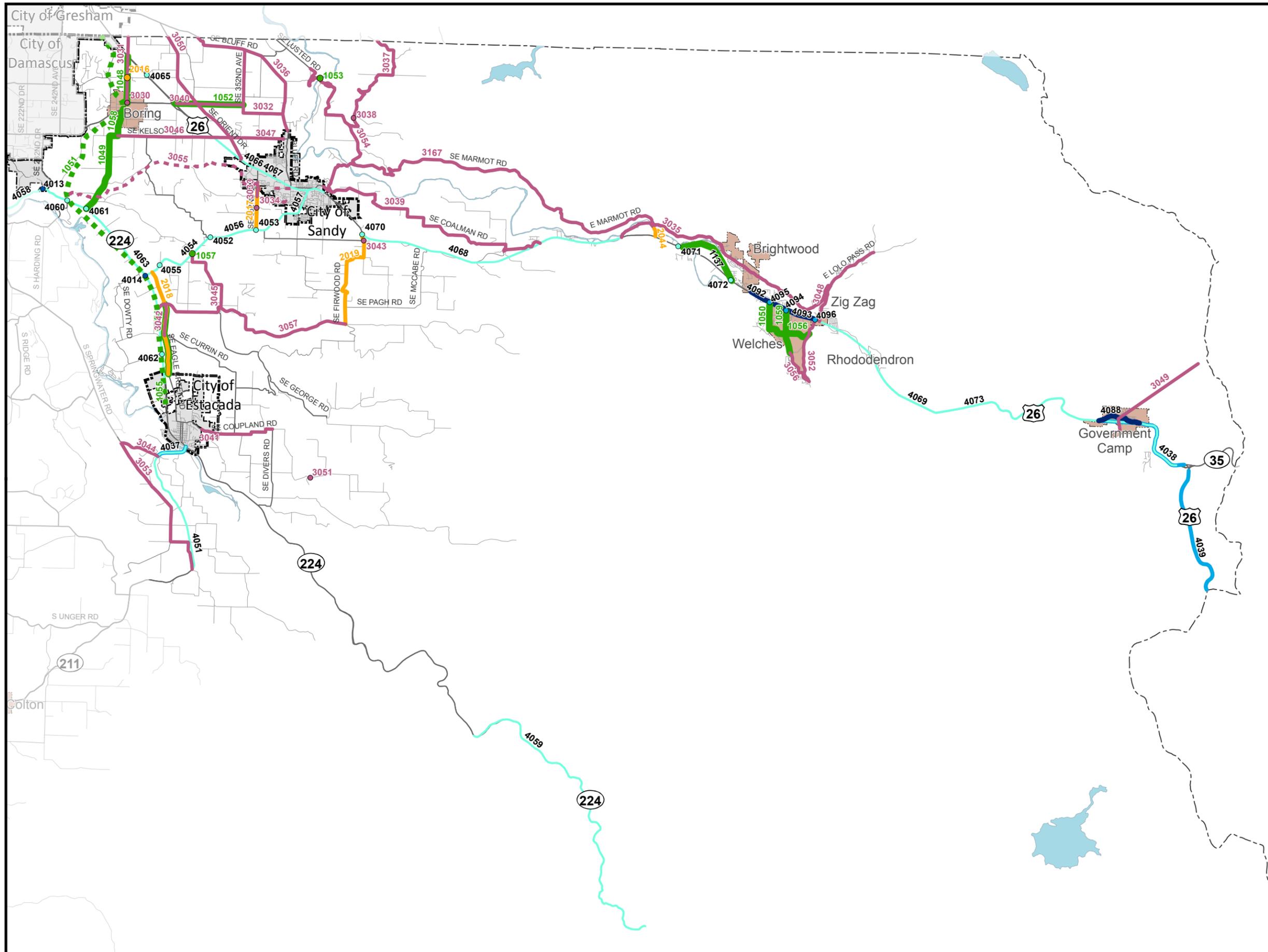
| Project ID | Map     | Project Name / Street Name             | Segment / Locations                              | Project Description   | Priority |
|------------|---------|--|--|---|----------|
| 4021       | 5-11e   | OR 213                                 | OR 213 / Henrici Rd intersection                 | Install traffic signal or roundabout and additional intersection improvements as needed   | High     |
| 4022       | 5-11e   | OR 213                                 | OR 213 / Leland Rd intersection                  | Add northbound through auxiliary lane   | High     |
| 4023       | 5-11e   | OR 213                                 | Leland Rd / Union Hall Rd intersection           | Add southbound auxiliary lane   | High     |
| 4024       | 5-11e   | OR 213                                 | Mulino to Molalla                                | Perform road safety audit or transportation safety review to identify appropriate safety improvements   | High     |
| 4025       | 5-11e   | OR 99E                                 | OR 99E / Barlow Rd intersection                  | Add left-turn lane on southbound Barlow Rd - To widen Barlow Rd to add a southbound left turn lane on the north approach would need to modify the existing railroad crossing warning system | High     |
| 4026       | 5-11a   | I-205 / Johnson Creek Blvd interchange | I-205 / Johnson Creek Blvd interchange           | Add loop ramp and northbound on-ramp; realign southbound off-ramp and install dual right-turn lanes   | Medium   |
| 4027       | 5-11a   | I-205 / OR 212/224 Interchange         | In vicinity of Roots Rd and McKinley Ave         | Connect bikeways in accordance with the Active Transportation Plan  | Medium   |
| 4028       | 5-11a   | OR 212                                 | Rock Creek Junction to 172nd                     | Construct climbing lane   | Medium   |
| 4029       | 5-11a   | OR 212                                 | OR 212 / SE 162nd Ave intersection               | Add left-turn pockets and traffic signal  | Medium   |
| 4030       | 5-11a   | OR 213                                 | Sunnyside Rd to Sunnybrook Rd                    | Widen to 7 lanes with boulevard treatments  | Medium   |
| 4031       | 5-11a   | OR 213                                 | OR 213 / Harmony Rd / Sunnyside Rd intersection  | Add bikeways, pedestrian facilities ways, dual northbound and southbound left-turn lanes, and lighting; convert driveways north of intersection to right-in / right-out                     | Medium   |
| 4032       | 5-11a   | OR 224                                 | OR 224 / Rusk Rd off-ramp                        | Extend right-turn lane on OR 224  | Medium   |
| 4033       | 5-11a   | OR 224                                 | Milwaukie city limits to I-205                   | Construct multi-use path as parallel route to OR 224  | Medium   |
| 4034       | 5-11a   | OR 224                                 | Lake Rd / Johnson Rd / Pheasant Ct               | Realign Lake Rd / Johnson Rd to provide southern OR 224 access via Pheasant Ct; add turn lanes at OR 224 / Pheasant Ct intersection; close access at Lake / Webster south of OR 224         | Medium   |
| 4035       | 5-11a   | OR 99E                                 | OR 99E / Jennings Ave intersection               | Determine safe connection of Trolley Trail at OR 99E / Jennings Ave intersection  | Medium   |
| 4036       | 5-11a   | Sunrise Project                        | I-205 to 172nd Ave                               | Construct improvements to 172nd   | Medium   |
| 4037       | 5-11b   | OR 211                                 | Hayden Rd to OR 224                              | Widen to rural arterial standard with shoulders, bikeways in accordance with the Active Transportation Plan and turn lanes at major intersections   | Medium   |
| 4038       | 5-11b   | US 26                                  | Govt. Camp Loop W to OR 35                       | Implement Finding of Mt Hood Multimodal Study including phased safety improvements  | Medium   |
| 4039       | 5-11b   | US 26                                  | OR 35 Junction to Wasco County line              | Widen roadway to include bikeways /shoulders, add passing lanes where needed and turn lanes at major intersections  | Medium   |
| 4040       | 5-11e   | OR 211                                 | OR 170 (Canby-Marquam Hwy) / OR 211 intersection | Install eastbound and westbound left-turn lanes, and eastbound right-turn lane; remove or decrease horizontal curve   | Medium   |
| 4041       | 5-11e   | OR 211                                 | Marion County line to OR 170 (Canby-Marquam Hwy) | Widen to include shoulders, bikeways, add passing lanes where needed and turn lanes at major intersections  | Medium   |
| 4042       | 5-11e   | OR 99E                                 | Barlow Rd to Marion County line                  | Four lane widening with median, left-turn lanes from mile post 24.05  | Medium   |
| 4043       | 5-11e/f | OR 213                                 | Oregon City boundary to Marion County line       | Add shoulders and bikeways  | Medium   |
| 4044       | 5-11a   | OR 212                                 | I-205 to OR 224                                  | Perform road safety audit or transportation safety review to identify appropriate safety improvements   | Low      |

**Table 5-3d Regional Capital Projects**

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

**Table 5-3d Regional Capital Projects**

| Project ID           | Map                   | Project Name / Street Name               | Segment / Locations                             | Project Description  | Priority               |
|----------------------|-----------------------|--|---|--|------------------------|
| 4070                 | 5-11b                 | US 26                                    | US 26 / Firwood Rd intersection                 | Add eastbound right-turn lane  | Low                    |
| 4071                 | 5-11b                 | US 26                                    | US 26 / Brightwood Loop W                       | Add westbound right-turn lane  | Low                    |
| 4072                 | 5-11b                 | US 26                                    | US 26 / Brightwood Loop E                       | Add westbound right-turn lane  | Low                    |
| 4073                 | 5-11b                 | US 26                                    | Lolo Pass Rd to Govt. Camp Loop Rd. W           | Implement Finding of Mt Hood Multimodal Study including ITS approach with variable speed signage; <a href="#">construct multi-use path between Lolo Pass Rd and John Lake Rd; add enhanced pedestrian crossing, sidewalks, curbs, gutters, pedestrian refuge island, pedestrian illumination and access management in Rhododendron; construct multi-use path connecting Mt. Hood Express transit stop and Pioneer Bridle Trailhead</a> | Low                    |
| 4074                 | 5-11c                 | OR 99E                                   | Park Ave to Gladstone city limits               | Perform road safety audit or transportation safety review to identify appropriate safety improvements  | Low                    |
| 4075                 | 5-11d                 | OR 43                                    | Lake Oswego to Portland                         | Develop active transportation connection in accordance with the Active Transportation Plan.  | Low                    |
| 4076                 | 5-11e                 | OR 211                                   | Dhooghe Rd / OR 211 intersection                | Remove or decrease horizontal curve, relocate intersection   | Low                    |
| 4077                 | 5-11e                 | OR 211                                   | OR 170 (Canby-Marquam Hwy) to City of Molalla   | Add shoulders and bikeways   | Low                    |
| 4078                 | 5-11e                 | OR 211                                   | Needy Rd to 0.6 miles west of Needy Rd          | Remove or decrease vertical curve to allow passing zone, add passing lane in one or both directions, possible relocation of intersection   | Low                    |
| 4079                 | 5-11e                 | OR 211                                   | Molalla city limits to Hayden Rd                | Widen to rural arterial standard (2 lanes) with shoulders and bikeways   | Low                    |
| 4080                 | 5-11e                 | OR 211                                   | Beavercreek Rd to Upper Highland Rd             | Perform road safety audit or transportation safety review to identify appropriate safety improvements  | Low                    |
| 4081                 | 5-11e                 | OR 213                                   | OR 213 / Carus Rd intersection                  | Install traffic signal to replace existing two-way stop See U339   | Low                    |
| 4082                 | 5-11e                 | OR 213                                   | OR 213 / Beavercreek Rd intersection            | Perform road safety audit or transportation safety review to identify appropriate safety improvements  | Low                    |
| 4083                 | 5-11e                 | OR 213                                   | Carus Rd / OR 213 intersection                  | Install southbound left-turn and right-turn lanes  | Low                    |
| 4085                 | 5-11e                 | OR 99E                                   | Oregon City to Canby                            | Add shoulders and bikeways   | Low                    |
| 4086                 | 5-11e                 | OR 99E                                   | Sequoia Parkway to Lone Elder Rd                | Perform road safety audit or transportation safety review to identify appropriate safety improvements  | Low                    |
| 4087                 | 5-11e                 | OR 99E                                   | Territorial Rd to Metro boundary                | Perform road safety audit or transportation safety review to identify appropriate safety improvements  | Low                    |
| 4088                 | 5-11b                 | Government Camp Loop Rd                  | US 26 to US 26                                  | Add bikeways through Government Camp in accordance with the Active Transportation Plan   | High                   |
| <a href="#">4092</a> | <a href="#">5-11b</a> | <a href="#">US 26</a>                    | <a href="#">Arrah Wanna Blvd to Welches Rd</a>  | <a href="#">Add multi-use path on north side of US 26</a>  | <a href="#">High</a>   |
| <a href="#">4093</a> | <a href="#">5-11b</a> | <a href="#">US 26</a>                    | <a href="#">Main Park Rd to Salmon River Rd</a> | <a href="#">Add multi-use path on south side of US 26</a>  | <a href="#">High</a>   |
| <a href="#">4094</a> | <a href="#">5-11b</a> | <a href="#">US 26 / Welches Rd</a>       | <a href="#">US 26 / Welches Rd</a>              | <a href="#">Pedestrian and ADA improvements at signal, including crossing improvements on the north side of the intersection.</a>  | <a href="#">Medium</a> |
| <a href="#">4095</a> | <a href="#">5-11b</a> | <a href="#">US 26 / Arrah Wanna Blvd</a> | <a href="#">US 26 / Arrah Wanna Blvd</a>        | <a href="#">Install a continental style crosswalk, accompanied by roadway and streetscape improvements</a>   | <a href="#">Medium</a> |
| <a href="#">4096</a> | <a href="#">5-11b</a> | <a href="#">US 26 / Salmon River Rd</a>  | <a href="#">US 26 / Salmon River Rd</a>         | <a href="#">Install an enhanced pedestrian crossing</a>  | <a href="#">High</a>   |



# Capital Improvement Plan

East County

## Priority

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

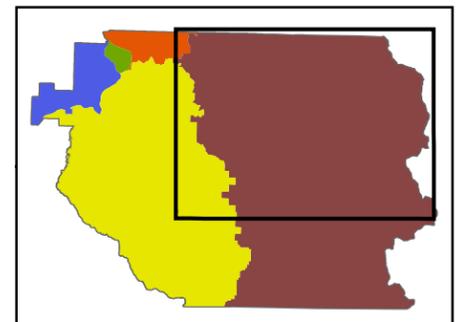
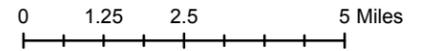
## Projects on Non-County Facilities

### Priority

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

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

\*Symbol color consistent with Priority symbologies shown above



Ordinance ZDO-260  
Draft Date October 10, 2016



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

CLACKAMAS COUNTY  
COMPREHENSIVE PLAN

**MAP 5-11b**

## **Appendix B**

### **SUMMARY OF SUPPORTING DOCUMENTS**

#### **CITIZEN INVOLVEMENT**

Citizen and Agency Involvement Program.

Clackamas County Citizen Involvement Program. Comprehensive Plan Chapter 2.

Committee for Citizen Involvement Bylaws.

Committee for Citizen Involvement Roster.

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

#### **NATURAL RESOURCES AND ENERGY**

Clackamas County Energy Project Publications, 1983:

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

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

General Resources

Agricultural Land Types and Major Production Areas

Forest Zones and Vegetative Types

Cubic Foot Forest Site Classes

Forest Ownerships

Urban Forest Cover

Detailed SCS Soil Mapping Index

Unique National and Scenic Features

Open Urban Land Inventory

Park and Recreation Facilities; Historic and Cultural Sites

Fisheries and Wildlife Habitats

Aggregate Sites

Groundwater Studies Index

Geologic Hazards, Northwest Clackamas County

River Corridors, Existing Conditions and Management Strategies

Precipitation and Physiography

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Drainage Areas, Northwestern Clackamas County, Oregon, M.S. Thesis, Matthew John  
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Planning Background Report, Energy; Clackamas County Dept. of Environmental Services, Planning Division.

Planning Background Report, Natural Hazards; Clackamas County Dept. of Environmental Services, Planning Division.

Planning Background Report, Natural Resources; Clackamas County Dept. of Environmental Services, Planning Division.

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Preliminary Willamette River Greenway, Royston, Hanamoto, Beck and Abey, 1974.

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SE 172nd Avenue/ SE190th Drive Corridor Management Plan, Appendix A - Environmental Baseline Report, MB&G, Inc., September 20, 2011

SE 172nd Avenue/ SE190th Drive Corridor Management Plan, Appendix B – Analysis of Preferred Alternative

SE 172nd Avenue/ SE190th Drive Corridor Management Plan, Appendix C – 15% Design Plans, Alignment Alternative AT2, Clackamas County, October 24, 2011

SE 172nd Avenue/ SE190th Drive Corridor Management Plan, Appendix E – Corridor Centerline Survey, November 10, 2011

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[Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan, June 2016](#)

# The Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan

PREPARED FOR

**Clackamas County**  
with support from Oregon  
Department of Transportation

JUNE 2016



**RECOMMENDED DRAFT PLAN**



*DRAFT*

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The contents of this document do not necessarily reflect views or policies of the State of Oregon.



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## Executive Summary

The Mt. Hood National Forest is one of Oregon’s most scenic and important lands—it provides some of the best recreational opportunities in the state, forest and habitat lands, and is a nationally recognized icon that supports the economy of Oregon. Located 66 miles east of downtown Portland, Mt. Hood National Forest extends south from the Columbia River Gorge across miles of forested mountains, lakes, and streams encompassing over a million acres. The area serves thousands of recreationalists, tourists and is home to permanent and seasonal residents.

The Villages at Mt. Hood include the communities of Brightwood, Welches/Wemme, Zig Zag, and Rhododendron. The Villages are connected by US 26 and county roadways. For travelers on foot or bicycle, conditions are uncomfortable and not well connected.

- People walk on shoulders that disappear into ditches. They walk in poorly-lit conditions and on dirt footpaths worn along roads over time, which are usually only known to residents.
- Bicycle riding is popular in the scenic area for recreation and to access Sandy Ridge Trail System. Pedestrians, bicycle riders, and cars are packed into roadway lanes with no shoulders, resulting in conflicts.
- Many residents would like to walk and bike for daily needs, but do not feel safe doing so. US 26 bisects The Villages at Mt. Hood, and poses a significant barrier to pedestrian and bicycle crossings.
- Missing directional signage for visitors in the area for both for day trips and overnight stays. Visitors are left to use their cars to go to restaurants and stores.

A well-connected pedestrian and bicycle system would improve the quality of life of residents and allow visitors to leave their car behind when enjoying the area’s numerous destinations.

The Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan (the Plan) provides a long-term, prioritized set of pedestrian and bicycle infrastructure improvements to increase transportation choices within The Villages, including access to transit. The infrastructure improvements create a connected pedestrian and bicycle system, integrated with transit, aimed to meet residents’ and visitors’ daily needs (Figure 1).

The Plan has been guided by the following project objectives:

- Identify bicycle and pedestrian needs within The Villages at Mt. Hood
- Develop a Safe Routes to School Plan for Welches Elementary and Middle School
- Identify potential locations for additional or enhanced US 26 pedestrian crossings. The project team will consider at-grade and grade-separated solutions, or enhancements to the current crossings
- Evaluate the feasibility of a multiuse path in the area

### *Priority Improvement Category and Costs*

This *Implementation Plan* describes all improvements and identifies whether they are low, medium or high priority. Improvements are grouped into the following categories of project types -- multiuse path, crossing treatment, shoulder expansion, safe routes to schools, and streetscape amenities – as described below.



**Multiuse Path:** A wide path (ideally 12 feet) separated from the roadway and shared by pedestrians, bicycle riders and people who use a mechanical device to help them travel due to a disability.



**Crossing Treatment:** Painted high-visibility crosswalk which may include a rapid-flashing beacon to warn drivers when people are crossing, as well as additional improvements (decorative streetlamps, curb "bulb-outs" that shorten crossing distances or landscaped paths along the road near crossings) to give drivers advance notice that they are in an area where people will be walking.<sup>1</sup>



**Shoulder Expansion:** Adding or expanding paved shoulders on roadways to provide a space for people to walk or bicycle outside of the travel lane. It is a lower cost alternative to sidewalks that can increase safety.



**Safe Routes to School:** Projects to better enable school children to walk or bike safely to school such as enhanced crossing treatments or a path that provides an alternative to busy streets.



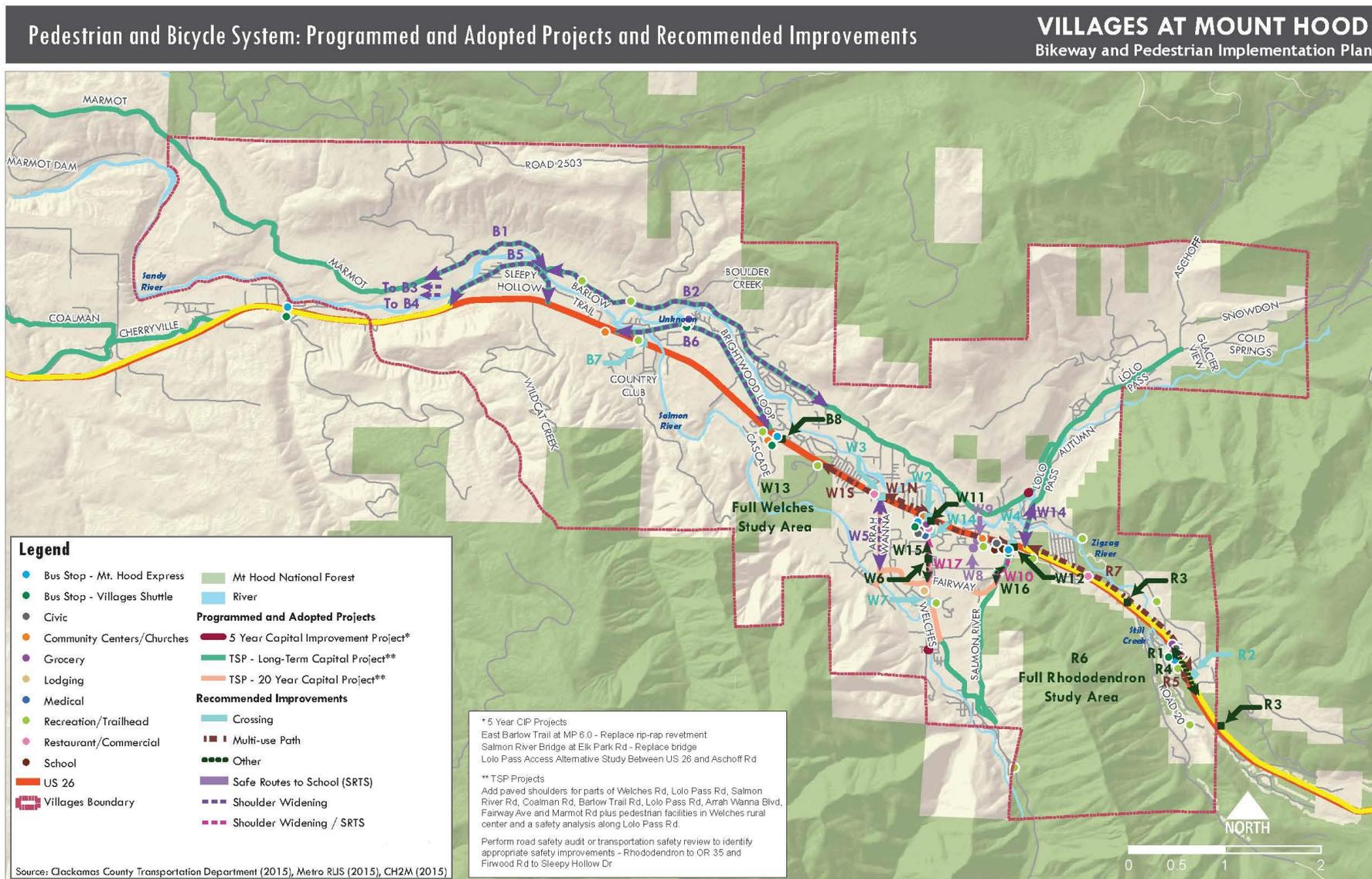
**Streetscape Amenities:** Curb extensions, pedestrian-oriented lighting and gateway signs can alert drivers to the presence of pedestrians and improve the pedestrian experience. Other options include directional signs, bike hubs and driver speed feedback signs.

Throughout the Plan cost estimates are provided based on general cost factors. More details on the cost of each proposed improvement can be found in Appendix D. Cost factors range from \$ - \$\$\$\$. The dollar signs equate to:

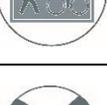
|          |                        |
|----------|------------------------|
| \$       | 0 -100,000             |
| \$\$     | 100,000- 500,000       |
| \$\$\$   | 500,000- 1 million     |
| \$\$\$\$ | Greater than 1 million |

<sup>1</sup> Pedestrian treatments, including crossings, will require a traffic engineering investigation/ analysis to determine which treatments are appropriate based on the existing conditions such as vehicular and pedestrian volumes. Approval by the ODOT Region 1 Traffic Engineer or the State Traffic Engineer (STE) would likely be required dependent on proposed treatment type.

Figure 1 Recommended Improvements in the Villages at Mt. Hood



**Table 1 Summary of Proposed Improvements**

| Project Description  | Cost     | Improvement Category  |
|--|----------|---|
| High Priority Recommended Improvements   |          |   |
| B2: Barlow Trail Road Principal Active Transportation Route (Option A and B)<br>Strategically construct widened shoulders on Barlow Trail Road from Sleepy Hollow Road to Lolo Pass Road                     | \$\$\$\$ |    |
| B6: Brightwood Loop Shoulder Widening<br>Widen Brightwood Loop shoulder to 4 feet on each side from US 26 to US 26 (full extent)   | \$\$     |    |
| B7: US 26 Undercrossing Directional Signs<br>Provide directional signage to direct bicycle riders and pedestrians to an existing undercrossing of US 26  | \$       |    |
| W1S: Multiuse Path along US 26<br>Construct a multiuse path along US 26, along the south side, between the Wildwood Recreation Site and Salmon River Road.   | \$\$     |    |
| W6: Welches Road Shoulder Widening and Multiuse Path<br>Widen shoulders and/or develop a multiuse path on Welches Road, with a priority between Fairway Avenue and Huckleberry Drive, and extending to US 26 | \$\$     |    |
| W9: Woodsey Way and Learning Lane Path<br>Construct path along Woodsey Way that connects to the existing sidewalk on Cedar Hill Terrace and add crossing enhancements.                                       | \$       |   |
| W15: Driver Speed Feedback Signs<br>On US 26 on Welches Road, Salmon River Road, lower Lolo Pass Road and in the vicinity of Rhododendron  | \$       |  |
| W1N: Multiuse Path along US 26<br>Construct a multiuse path along the north side of US 26 between Arrah Wanna Road and Welches Road  | \$\$     |  |
| W4: Salmon River Road Crossing of US 26<br>Enhance crossing through a treatment such as the installation of a rectangular rapid flashing beacon at the Salmon River Road crossing of US 26                   | \$       |  |
| W7: Welches Road at The Resort at the Mountain Crossing Improvements<br>Enhance existing crossing by adding advance warning signs and a split rapid flash beacon   | \$       |  |
| W13: Directional Signs and Bike Hubs<br>Enhance pedestrian and bicycle accessibility within the area with the strategic placement of directional signage and bike hubs.                                      | \$       |  |
| R4: Pedestrian Accommodation along US 26 in Rhododendron<br>Install curbs, sidewalk, and gutter to accommodate pedestrians along US 26 in Rhododendron   | \$\$     |  |

| Project Description  | Cost     | Improvement Category  |
|--|----------|---|
| <p>R1: Consolidate and Define Driveways in Rhododendron</p> <p>Consolidate and define driveways within Rhododendron through access management</p>  | \$\$     |    |
| <p>R2 Enhanced Crossing of US 26 in Rhododendron</p> <p>Install a treatment such as marked, continental style crosswalk in Rhododendron on US 26 with a rapid flashing beacon to alert drivers</p>               | \$       |    |
| <p>R3: Rhododendron Gateway Sign</p> <p>Install gateway signs in advance of Rhododendron in both directions of US 26</p>   | \$       |    |
| <p>R5: Bicycle Facility for Trail Connection</p> <p>Construct a bicycle facility (multiuse path or other design) to connect Pioneer Bridle Trailhead to Rhododendron, particularly the Mt. Hood Express stop</p> | \$       |    |
| <p>W14: Lolo Pass Road Paved Shoulders</p> <p>Widen shoulders to 4 feet along Lolo Pass Road, with a priority between Barlow Trail Road and US 26</p>  | \$\$     |    |
| <p>W10: Salmon River Road Shoulder Widening</p> <p>Add paved shoulders or a path to Salmon River Road between US 26 and Fairway Avenue</p>   | \$\$     |    |
| <p>R6: Directional Signage and Bike Hub in Rhododendron</p> <p>Install directional signage to highlight the presence of Mt. Hood Express transit stops and a bicycle hub in Rhododendron</p>                     | \$       |  |
| Medium Priority Recommended Improvements   |          |   |
| <p>B1: Marmot Road Shoulder Widening</p> <p>Widen the Marmot Road shoulder to 4 feet on each side from The Villages boundary to Barlow Trail Road</p>  | \$\$\$\$ |  |
| <p>B8: Transit Park and Ride Direction Signage</p> <p>Provide directional signage at Hoodland Senior Center Park and Ride</p>  | \$       |  |
| <p>W2: Crossing Improvements on US 26 at Welches Road</p> <p>Construct sidewalk and relocate pedestrian activation buttons to be ADA-compliant at Welches Road crossing of US 26</p>                             | \$       |  |
| <p>W3: Arrah Wanna Boulevard Crossing of US 26</p> <p>Create an uncontrolled crossing of US 26 at Arrah Wanna Road, with a continental style crosswalk</p>   | \$       |  |
| <p>W5: Arrah Wanna Shoulder Widening</p> <p>Add a 4-foot-wide paved shoulder along each side of Arrah Wanna Boulevard</p>  | \$\$     |  |

| Project Description  | Cost   | Improvement Category  |
|--|--------|---|
| <p>W11: Welches Road Park and Ride</p> <p>Pave and formalize the Welches Road Mt. Hood transit stop location to create a park and ride</p>                                     | \$     |    |
| <p>W12: Salmon River Road Park and Ride</p> <p>Pave and formalize the Salmon River Road Mt. Hood transit stop location to create a park and ride</p>                           | \$     |    |
| <p>W13: Directional Signage and Bike Hubs</p> <p>Enhance pedestrian and bicycle accessibility with the strategic placement of directional signage and bike hubs</p>            | \$     |    |
| Low Priority Recommended Improvements  |        |   |
| <p>B3: Coalman Road Shoulder Widening</p> <p>Widen the Coalman Road shoulder to 4 feet on each side from The Villages boundary to Baty Road</p>                                | \$\$\$ |    |
| <p>B4: Cherryville Road Shoulder Widening</p> <p>Widen the Cherryville Road shoulder to 4 feet on each side from The Villages boundary to US 26</p>                            | \$\$\$ |    |
| <p>B5: Sleepy Hollow Road Shoulder Widening</p> <p>Widen the shoulder of Sleepy Hollow Road</p>  | \$\$   |    |
| <p>W8: Huckleberry Drive Path</p> <p>Formalize demand-path connecting Huckleberry Drive and Woodsey Way to create direct Safe Routes to Schools path</p>                       | \$     |  |
| <p>R7: Multiuse Path between Lolo Pass Road and Rhododendron</p> <p>Further evaluate the feasibility of a multiuse path/bike route between Lolo Pass Road and Rhododendron</p> | \$\$\$ |  |
| <p>W16: Welches Road Crossing at Stage Stop Road</p> <p>Further evaluate the potential for a high visibility crosswalk across Welches Road at Stage Stop Road</p>              | \$     |  |

# 1 The Villages at Mt. Hood

Visitors enjoy fishing, camping, boating, hiking, hunting, mountain biking, skiing and other snow sports in the winter. Popular destinations include Timberline Lodge and Ski Resort, Lost Lake, Trillium Lake, Rock Creek Reservoir and portions of the Old Oregon Trail. In addition, Mt. Hood offers two other major ski resorts, Ski Bowl and Mt. Hood Meadows. Preserving the pristine nature of Mt. Hood is important to Oregon’s environment, identity and collective legacy.



The project area includes communities along the US 26 corridor in Clackamas County, Oregon in the vicinity of Mt. Hood. The major populated areas include the communities of Brightwood, Welches/Wemme, Zig Zag, and Rhododendron. Together, these areas are recognized as The Villages at Mt. Hood.

The Villages at Mount Hood are home to over 5,000 permanent residents and 15,000 seasonal residents. The surrounding area serves thousands of recreational users every year—estimated at over 85,000 to the Mt. Hood area.

Residents and visitors alike enjoy the area’s beauty and recreational opportunities.

US 26 is the primary travel route connecting the communities, and local roads serve important circulation needs. US 26 is classified as a state highway and National Freight Route, and is part of the National Highway System (NHS). This high-volume section of US 26 connects the Portland metropolitan area with Central Oregon. Generally, US 26 in this area is five lanes with two vehicle travel lanes in each direction and a shared center turn lane. The roadway has wide shoulders that serve pedestrian and bicycle circulation. The roadway serves local needs as well as through travel, with average daily traffic between 15,800 vehicles at the western end of the project area (near Hoodland Senior Center in Welches) and 8,500 vehicles at the eastern end (near Rhododendron).

The Wildwood Recreation Site and the Sandy Ridge Trail System (a mountain biking trail system), managed by the Bureau of Land Management (BLM), are within the study area and have large numbers of visitors in the summer and fall. Several trailheads for camping and hiking in the Mt. Hood National Forest and study area contribute to higher traffic volumes on US 26 and collector and arterial roads, particularly during weekends and summer months. In the winter, snow sports enthusiasts contribute to increased weekend through-traffic while visiting snow parks east of the project area.

## Who lives in the Villages?

- 4.5% of population are youths (10-19)
- 18.9% of population are older adults (65+)
- 8.1% of population are low-income
- 10.2% of population have an ambulatory disability
- 98.6% of population identify as White, 1.4% identify as two or more races

## 1.1 Why this Plan?

The current pedestrian and bicycle network is poorly connected. People walk on shoulders that disappear into ditches or are poorly lit. Many use dirt footpaths worn along roads over time and only known to residents. At open houses, many residents cited bicycling as one of the ways they move around Mt. Hood, and bicycling is also popular in the scenic area for recreation and to access the Sandy Ridge Trail System. Pedestrians, bicycle riders and motorists often share roadway lanes with no shoulders, leading to conflicts. Many residents would like to walk and bike more for their daily needs, but do not feel safe doing so. Crossing US 26, the highway bisecting the Villages, is a significant barrier to pedestrian and bicycle travel.

The area hosts significant numbers of visitors, both for day trips and overnight stays. There is no directional signage for visitors who wish to walk or bike and they are left to use their cars to go to restaurants and stores. A well-connected pedestrian and bicycle system would support the quality of life of residents and allow visitors to leave their car behind when enjoying the area's numerous destinations.

*The Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* also provides an important update to the Clackamas County Mt. Hood Community Plan, which was adopted in 1976. The Plan considers changes to land use to support proposed transportation investments and further supports project needs identified in the Clackamas County Transportation System Plan. The Plan provides a long-term, prioritized set of pedestrian and bicycle infrastructure improvements aimed at increasing transportation choices within The Villages, including access to transit. The infrastructure improvements create a connected pedestrian and bicycle system, integrated with transit, aimed to meet residents' and visitors' daily needs.

## 1.2 Project Objectives

Clackamas County received a grant through the Oregon Department of Transportation's Transportation and Growth Management (TGM) program to define solutions. The Plan has been guided by the following project objectives:

- Identify bicycle and pedestrian needs within The Villages at Mt. Hood
- Develop a Safe Routes to School Plan for Welches Elementary and Middle School
- Identify potential locations for additional or enhanced US 26 pedestrian crossings. The project team will consider at-grade and grade-separated solutions, or enhancements to the current crossings.
- Evaluate the feasibility of a multiuse path in the area

The long-term, pedestrian and bikeway system proposed in this Plan meets these objectives within a 20-year timeframe.



**Figure 2: Existing walking conditions on Welches Road**

---

### **Project Advisory Committee (PAC)**

The PAC included:

- neighborhood representatives
- local pedestrian and bicycle advocates
- local business owners
- community volunteers
- agency-based technical advisors

### **Technical Advisory Committee**

The TAC included representatives from:

- Clackamas County Transportation Engineering and Planning
  - US Forest Service
  - Oregon Department of Transportation
  - Mt Hood Express
  - Clackamas County Tourism
-

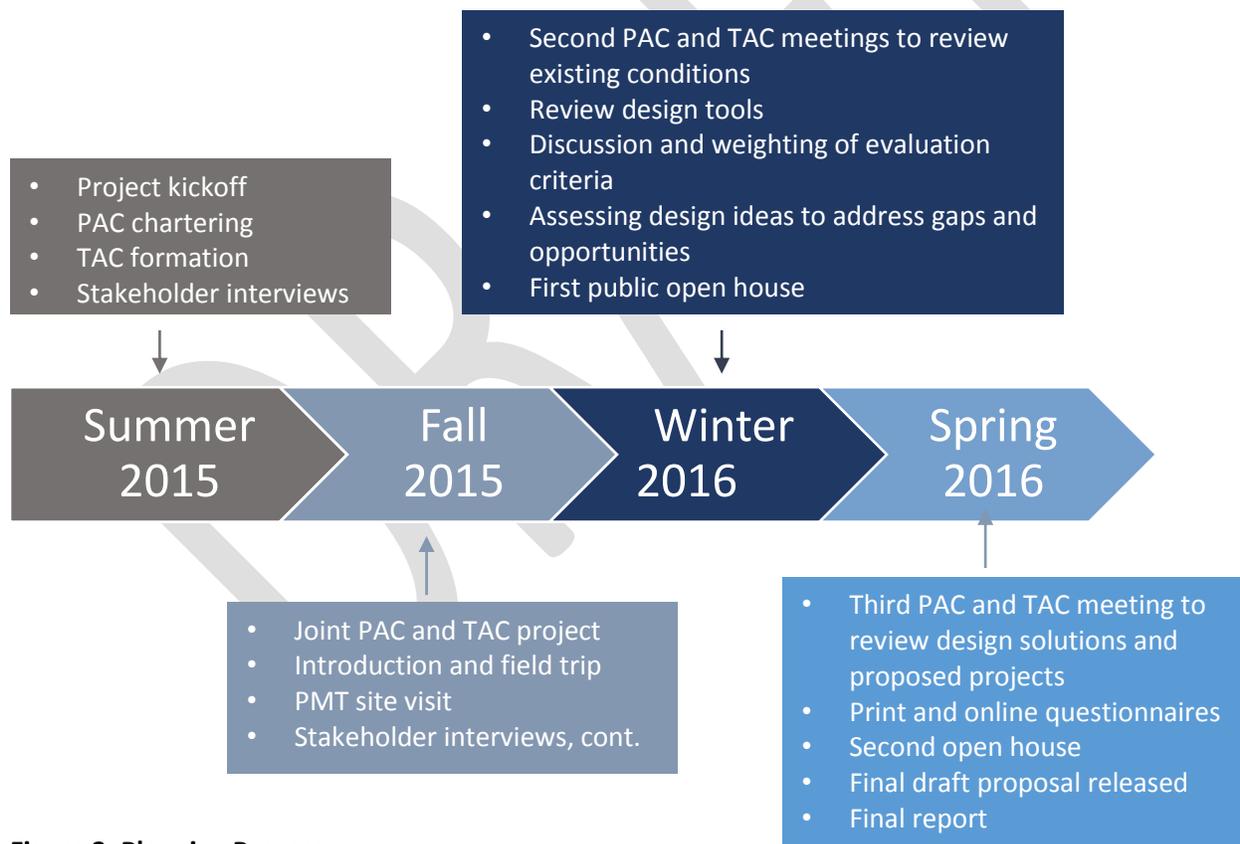
It is important to note that while funds do not currently exist to implement proposed projects, the Plan provides a foundation from which Clackamas County, agency partners and other stakeholders can seek funding through programs or grants. The existence of a well-supported, prioritized, community-driven plan provides credibility and heft to grant and program applications.

The Plan has several improvements for US 26. All US 26 improvement projects are subject to ODOT review and approval.

### 1.3 Planning Process

Stakeholders within The Villages at Mt. Hood communities contributed to the development of the Plan, as have technical staff at every stage. A public advisory committee, made up of stakeholders from the community, and a technical advisory committee, made up of Clackamas County and other agency staff, reviewed and advised development of the Plan. In addition, two public workshops were held to gain public feedback on proposed projects, their priority and the draft Plan.

The advisory committees and public workshop attendees provided substantive feedback on the projects, including design elements and prioritization, which is reflected in this Plan. Section 3 provides details about each project, and includes a short summary of public feedback regarding individual project proposals.



**Figure 3. Planning Process**

## 1.4 Planning Context

The Plan builds upon and recommends implementation of several plans.

- The *Clackamas County Active Transportation Plan* (ATP) identifies key active transportation routes connecting destinations and communities in Clackamas County, both rural and urban. The Clackamas County ATP identifies Barlow Trail Road within the project area as a principal active transportation route. The *Implementation Plan* provides more detail for implementation of Barlow Trail Road as a principal active transportation route.
- The 15-year *Mt. Hood Multi-Modal Transportation Plan*, with a planning time horizon of 2014-2029, is a multi-jurisdictional plan created to improve safety for all highway users and expand travel options along the Mt. Hood Highway Corridor. While the plan does not call for any projects specifically in The Villages at Mt. Hood, it does call for expansion of pedestrian and bicycle options integrated with transit, and of multi-modal directional signage within Mt. Hood. The *Implementation Plan* further describes the intent of the Mt. Hood Multi-Modal Plan with complementary projects.

The *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* will be used to update the Mt. Hood Community Plan and Chapter 10 of the Clackamas County Comprehensive Plan. The Mt. Hood Community Plan provides land use and transportation guidance for The Villages at Mt. Hood, such as facilitating pedestrian movement across US 26 within Rhododendron. The *Implementation Plan* also provides an update to Chapter 5: Transportation System Plan (TSP) of the Clackamas County Comprehensive Plan. Prioritized projects from this Plan will include improvements for pedestrians, bicycle riders and transit users. The projects will be integrated into the prioritized list of projects for the countywide TSP.

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### Priority

Priority indicates how important the improvement is to implementing a pedestrian and bicycle system.

- High – very important
  - Medium – important
  - Low – somewhat important
- 

## 1.5 Types of Transportation System Users

Descriptions of area improvements state what type of users would benefit from the improvement. It is important to note that throughout the public involvement process, the team learned many individuals often fall into multiple categories of users. For example, many residents also recreate in the area regularly and find the recreational opportunities a great benefit to living within the community.

- **Residents:** Residents want to walk and bicycle safely within their own community. In particular, low-income and zero-car households may have less access to auto travel and rely on transit, walking or riding a bicycle to meet their daily needs. Important destinations for residents include food markets, schools, medical offices and community centers or churches. Crossings and improvements along US 26 would be most heavily used by residents.
- **Transit Riders:** Mt. Hood Express and The Villages at Mt. Hood Shuttle serve both commuters and recreational users. Bus stops are not typically served by sidewalks or marked crossings. Pedestrians and bicycle riders rely on road shoulders and demand paths on US 26 to access bus stops. Two bus stops (at Welches Road and E Salmon River Road) are near crosswalks on US 26.
- **Lodgers:** Visitors staying at local area inns, resorts and vacation rentals may drive up to the area, but prefer to walk or bicycle during their stay. Many guests like to park their vehicles and enjoy the scenery by walking to area restaurants, stores or recreation attractions. These users may benefit from improved pedestrian and bicycle facilities and directional signage that link lodgings and commercial areas.
- **School Children/Older Adults:** These groups are particularly vulnerable as they may have slower reflexes, use mobility devices and need more time to cross roadways. The Welches Elementary

School, Middle School, area parks and the Hoodland Senior Center are common destinations. Sidewalks, separated paths and crossings would particularly benefit these user groups.

- **Recreational Visitors:** Mt. Hood is a common destination for both road cyclists and mountain bikers. Many recreational users ride through The Villages at Mt. Hood while traveling recreational routes advertised by Travel Oregon, Clackamas County Tourism and local cycling groups. These users often prefer to ride roads away from US 26 to avoid heavy and fast-moving vehicles. Improvements to roadway shoulders, particularly those designated by the Clackamas County Transportation Plan, would improve the experience of these users.



Figure 4: Example of recreational users

## 2 Proposed Projects in The Villages

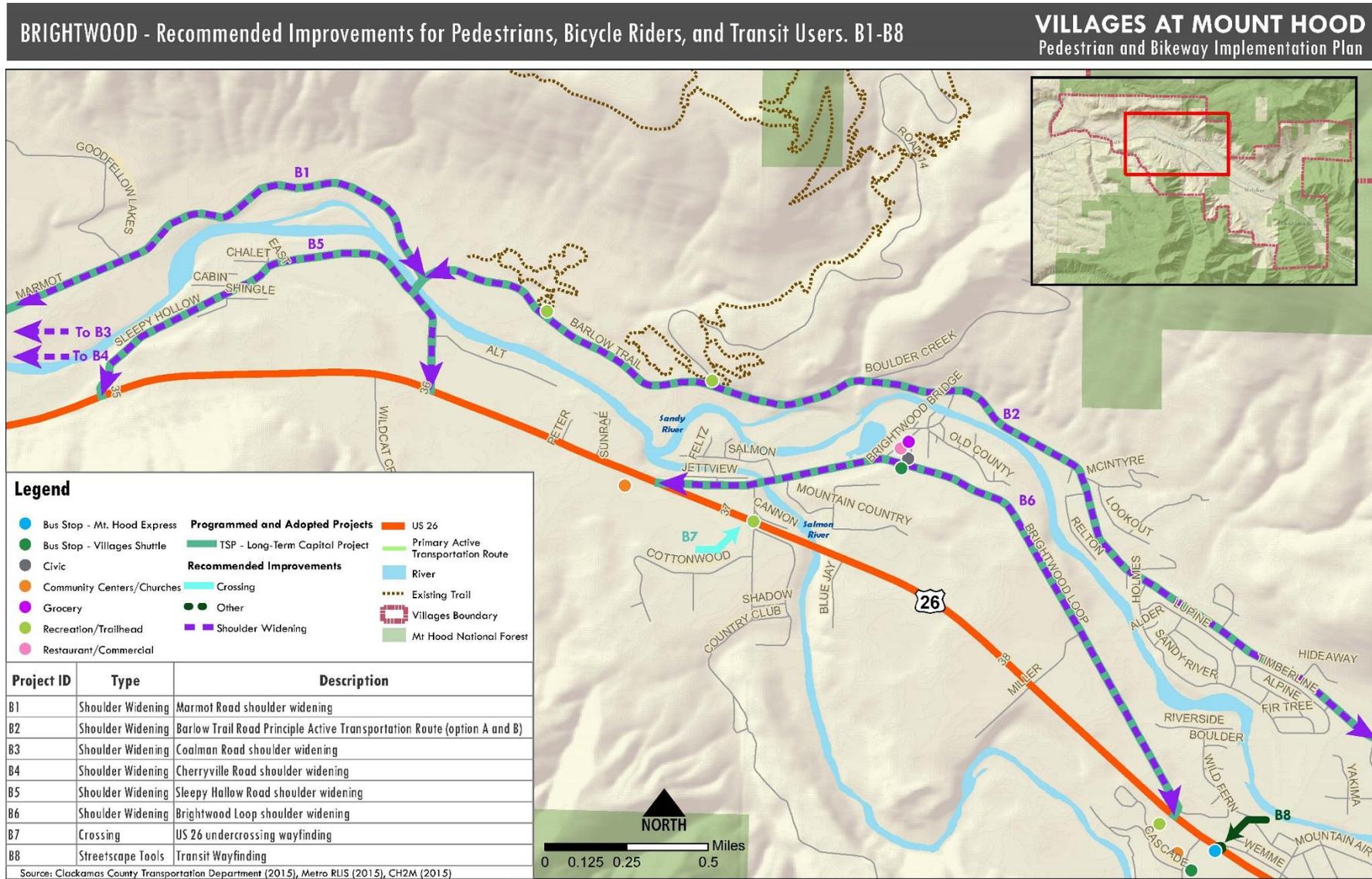
Projects proposed in the *Implementation Plan* reflect an analysis of existing conditions that considered the needs, opportunities and constraints within the existing pedestrian and bicycle system. Community stakeholders and PAC members helped define needs related to walking and bicycling, and defined the system values such as safety, access and safe routes to school.

PAC members, TAC members and the general public validated and augmented the team's assessment of needs, opportunities and constraints during Public Workshop #1. Following analysis of existing walking and bicycling conditions, the project team created a series of improvement projects to address needs, opportunities and gaps.

This section describes the background and need for each area improvement; the recommended improvement; any alternatives considered and dismissed; feedback from the public, committees and team; an order-of-magnitude cost factor, and priority for the improvement. Projects are grouped by geography in the communities of Brightwood/ Wemme, Welches and Rhododendron.



Figure 5: Brightwood/Wemme Potential Area Improvements for Pedestrians, Bicycle Riders, and Transit Users





2.1 *Brightwood/Wemme Area (B1-B8)*

Clackamas County identified projects in its Transportation System Plan (CCTSP) that reflect many of the same priorities identified by the PAC, TAC and public. These include adding paved shoulders to Marmot Road, Barlow Trail Road, Coalman Road and Arrah Wanna Boulevard.



*B1: Marmot Road shoulder widening*      *Medium Priority*      *\$\$\$\$*  
**Potential Improvement Recommendation: Widen Marmot Road shoulder to 4 feet on each side from The Villages boundary to Barlow Trail Road.**

Marmot Road is classified as a Clackamas County Active Transportation Route in the County’s Active Transportation Plan (CCATP), but lacks a facility adequate for pedestrians or bicyclists. The cross-section of Marmot Road is comprised of one 10-11-foot travel lane in each direction with a 0-1-foot-wide shoulder that is lacking fog lines defining the shoulder.

Marmot Road needs a widened shoulder to provide an adequate facility for pedestrians and bicycles. Adding paved shoulders to Marmot Road is identified as project #3167 in the CCTSP as a Long-term Capital Project. This project is also in accordance with the CCATP. Marmot Road is classified as a minor arterial. The standards in the CCTSP dictate that a typical section include a 6-foot bike lane and 6-foot pedestrian facility on each side of the street. Tight right-of-way constraints preclude this level of improvement in the near term.

**Improvement Description:** Add a 4-foot-wide paved shoulder along each side of Marmot Road with advisory signing to alert drivers to the presence of bicyclists and pedestrians along the route (Figure 6).



**Figure 6: Example of shoulder widening**

**Benefits:** Provide pedestrian and bicycle access to key destinations including the Sandy Ridge Trail, Brightwood Post Office, Brightwood Store, Brightwood Tavern and The Villages at Mt. Hood Shuttle Stop. It would benefit both residents and recreational users.

**Considered and Not Recommended:** Bike lanes, pedestrian paths and multiuse paths -- each would require additional right-of-way and construction expense not justified by the current level of use.

**Public Feedback and Discussion**

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority.



*B2: Barlow Trail Road Principal Active Transportation Route (Option A and B)*  
*High Priority A - \$\$\$\$ and B - \$\$\$*

Barlow Trail Road is classified as a Clackamas County Principal Active Transportation Route, but lacks a facility adequate for pedestrians or bicyclists. The cross-section of Barlow Trail Road is comprised of a single 11-12-foot travel lane in each direction with a total paved width varying between 22-25 feet, leaving little to no shoulder for pedestrian and bicycle use. Residential development along Barlow Trail Road would be served by improvements to this route.

The preferred improvement to Barlow Trail Road would be a shared path to separate bikes and pedestrians from vehicular traffic. Adding paved shoulders to Barlow Trail Road is identified in the CCTSP as a Long-term Capital Project (#3166). This project is also in accordance with the CCATP. STRAVA data, voluntarily recorded by riders tracking their riding performance, demonstrates Barlow Trail Road is one of the most popular area bicycle routes, and provides a parallel through route to US 26 (Appendix B). The Sandy Ridge mountain bike trail system is accessed by bicycle riders off of Barlow Trail Road.

It is unlikely that funding could be secured for a path; therefore, a widened shoulder to provide adequate space for pedestrians and bicyclists is recommended. Barlow Trail Road is classified as a minor arterial which per the CCTSP is a typical section that includes a 6-foot bike lane and 6-foot pedestrian facility on each side of the street. Tight right-of-way constraints, trees and drainage ditches preclude this level of improvement.

### Improvement Description Option A

Strategically add a 4-foot wide shoulder from Sleepy Hollow Road to Lolo Pass Road in key areas to facilitate walking and bicycle riding.

Determining strategic, spot improvements requires a topographic survey to determine sight-distance limitations. Criteria for future projects to use to determine key locations where widened shoulders would best serve bicycle riders are:

- Areas where bicycle riders face a steep uphill section, which requires survey and/or as-built records
- Areas of limited sight-distance around a curve or up a hill



**Figure 7: Mountain biker in Sandy Ridge Trail System**

**Benefits:** Provide pedestrian and bicycle access to key destinations including the Sandy Ridge Trail, Brightwood Post Office, Brightwood Store, Brightwood Tavern and The Villages at Mt. Hood Shuttle Stop. The project benefits both residents and recreational users.

### Improvement Description Option B

Widen the Barlow Trail Road shoulder to 4 feet on each side from Sleepy Hollow Road to Lolo Pass Road, with advisory signing to alert drivers to the presence of bicyclists and pedestrians along the route.



**Figure 8: Example of Bike Advisory Sign**

Residential development, which is more predominant along Barlow Trail Road, would be served by improvements to this route.

As previously mentioned, Barlow Trail Road is classified as a Principal Active Transportation Route and bicycle tourism is being promoted along this route. These factors along with the greater residential development led to this recommendation. Some signage does exist on the road and additional signage is recommended

due to the heavier usage of the route. Residents and recreational users would all benefit from these improvements.

This level of improvement has right-of-way constraints, cost constraints and potential objections from residents along Barlow Trail Road.

**Benefits:** Provide a continuous space for pedestrians and bicycle riders, and access to key destinations including the Sandy Ridge Trail, Brightwood Post Office, Brightwood Store, Brightwood Tavern and The Villages at Mt. Hood Shuttle Stop. It would benefit both residents and recreational users.

**Considered and Not Recommended:** Bike lanes, and pedestrian and multiuse paths. The tight right-of-way and construction expense eliminated these facilities from consideration in the near-term. This Plan recommends that any proposed projects avoid impacts to the ditches running parallel to Barlow Trail Road as this would greatly increase construction costs.

| Public Feedback and Discussion  | Project Team Response   |
|---|---|
| <p>Public feedback included that Barlow Trail Road is too narrow for cars, bicycles and pedestrians, but is used by all. It is a primary route for bicycle riders and provides access to the Sandy Ridge Trail System. There are concerns with volumes and speeds of truck traffic in and out of the gravel pit off Barlow Trail Road. Some requested consideration of a separated path instead of shoulder widening. The public preferred Option B, full shoulder widening instead of spot treatment, but acknowledged the need to evaluate its feasibility.</p> | <p>In response to public feedback, this Plan recommends a phased approach beginning with Option A. Targeted shoulder widening in critical areas (in places with sight distance issues or an uphill section) will be built first. Later phases will include full widening throughout the entirety of the corridor. The improvement will meet shoulder standards of 4 feet.</p> |



*B3: Coalman Road Shoulder Widening* *Low Priority \$\$\$*  
**Potential Improvement Recommendation: Widen Coalman Road shoulder to 4 feet on each side from The Villages boundary to Baty Road.**

Coalman Road, classified as a collector according to the CCTSP, has one 11-foot travel lane in each direction and no paved shoulder. Coalman Road is outside the project boundary, but was included in the Existing Conditions Memorandum, and adding paved shoulders to Coalman Road is project #3039 in the Long-term Capital Project list in the CCTSP. The CCTSP shows the typical section for a collector 6-foot bike lane and 6-foot pedestrian facility on each side of the street. Tight right-of-way constraints, trees and drainage ditches preclude this level of improvement in the near term.

**Improvement Description:** Adding a 4-foot wide paved shoulder along each side of Coalman Road. Due to its location outside the study area and lower vehicle volumes, this project is a lower priority.

**Benefits:** Provide pedestrian and bicycle access to key destinations, including the Sandy Ridge Trail, Brightwood Post Office, Brightwood Store, Brightwood Tavern and The Villages at Mt. Hood Shuttle Stop. Improvements would primarily serve residents.

| Public Feedback and Discussion  |
|---|
| <p>The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority.</p> |



#### *B4: Cherryville Road Shoulder Widening*

*Low Priority \$\$\$*

**Project Recommendation:** Widen Cherryville Road shoulder to 4 feet on each side from The Villages boundary to US 26.

Cherryville Road, classified as a collector according to the CCTSP, has one travel lane in each direction and no paved shoulder. While improvements to Cherryville Road are not included in the CCTSP, they are recommended in this Plan to provide connectivity from Coalman Road to US 26. Tight right-of-way, trees and drainage ditches are challenges for any level of improvement.

**Improvement Description:** Add a 4-foot-wide paved shoulder along each side of Cherryville Road. The added space for pedestrians and bicycles would be beneficial, but the location and low volumes of users make it a lower priority for near-term improvement.

**Benefits:** Provide pedestrian and bicycle access to key destinations including the Sandy Ridge Trail, Brightwood Post Office, Brightwood Store, Brightwood Tavern and The Villages at Mt. Hood Shuttle Stop. Improvements would primarily serve residents.

#### **Public Feedback and Discussion**

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority.



#### *B5: Sleepy Hollow Road Shoulder Widening*

*Medium Priority \$\$*

**Potential Improvement Recommendation:** Widen Sleepy Hollow Road shoulder to 4 feet on each side from US 26 to US 26 (full extent).

Sleepy Hollow Road, classified as a collector according to the CCTSP, has one travel lane in each direction and no paved shoulder. Improvements to Sleepy Hollow Road are not included in the CCTSP. Tight right-of-way constraints, trees and drainage ditches are challenges for any level of improvement.

**Improvement Description:** Add a 4-foot-wide paved shoulder along each side of Sleepy Hollow Road. Traffic analysis did not support any improvements to Sleepy Hollow Road, based on vehicle traffic volumes being too low; however, feedback from the PAC and TAC contributed to this recommendation.

**Benefits:** Provide pedestrian and bicycle access to key destinations including the Brightwood Post Office, Brightwood Store and Brightwood Tavern. Improvements would primarily serve residents.

#### **Public Feedback and Discussion**

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority. Within the pedestrian and bicycle system, Sleepy Hollow Road provides connections to other system facilities, such as Barlow Trail Road. This greater level of connectivity compared to other shoulder-widening improvements led to a medium priority ranking for the project.



*B6: Brightwood Loop Shoulder Widening*

*High Priority \$\$*

**Potential Improvement Recommendation:** Widen Brightwood Loop shoulder to 4 feet on each side from US 26 to US 26 (full extent).

Brightwood Loop, classified as a collector according to the CCTSP, has one travel lane in each direction and no paved shoulder. Improvements to Brightwood Loop are not included in the CCTSP, however the business cluster and transit stop are key destinations. The connection to Barlow Trail Road also elevates the need for improvements. Tight right-of-way constraints, trees and drainage ditches are challenges for any level of improvement.

**Improvement Description:** Add a 4-foot-wide paved shoulder along each side of Brightwood Loop. Traffic analysis did not support any improvements; however, feedback from the PAC and TAC contributed to this recommendation. Improvements at the intersections along Brightwood Loop would provide access to the business cluster on Brightwood Loop.

**Benefits:** Provide pedestrian and bicycle access to key destinations including the Mt Hood Express bus stop, Brightwood Post Office, Brightwood Store and Brightwood Tavern. Residents and recreational users would all benefit from the recommended improvements.

**Public Feedback and Discussion**

The public expressed moderate to high level support for this improvement, had no specific changes and ranked this improvement higher than others due to the connections to destinations and other system facilities offered via Brightwood Loop.



### B7: US 26 Undercrossing Directional Signs

High Priority \$

**Improvement Recommendation: Provide informational/directional signage to direct pedestrians and bicycle riders to an existing undercrossing of US 26**



**Figure 9: The underpass is in good condition, but not widely known by recreational riders or even residents in the area.**



**Figure 10: Entrance to the US 26 underpass for bicycle riders and pedestrians**

There is an undercrossing of US 26 at Salmon River that is vastly underused primarily due to the lack of knowledge of its existence.

**Potential Improvement:** Directional signage to the undercrossing on Barlow Trail Road, US 26 and within the vicinity to help direct bicycle riders and pedestrians to the undercrossing of US 26 accessed via Country Club Road. Directing bicycle riders to the undercrossing would allow those eastbound on the south side of US 26 to cross grade-separated, and access Brightwood Loop and Barlow Trail Road. Signage at intersections along Brightwood Loop and Barlow Trail Road would provide information on how to access key destinations.

#### **Benefits:**

Bicycle riders eastbound on US 26 and trying to cross US 26 to access Brightwood Loop or Barlow Trail Road, for a parallel through route or because they have a destination on those roads, would benefit from knowing about this undercrossing. Use of the undercrossing instead of crossing at-grade on US 26 has tremendous safety benefits and directional signage is relatively low cost. Residents in the area would also benefit from the undercrossing and could use it as a walking path. The improvement has potential to benefit bicycle riders and pedestrians, with recreational or access purposes.

#### **Public Feedback and Discussion**

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority due to the relative ease of implementation and low cost.



*B8: Transit Park and Ride Directional Signage*

*Medium Priority \$*

**Potential Improvement Recommendation: Provide directional signage at Hoodland Senior Center Park and Ride.**

No signage currently marks the transit stop and the park-and-ride location at the Hoodland Senior Center. This stop is primarily used by residents.

**Improvement Description:** Adding signage along US 26 and onsite for the transit stop at the Hoodland Senior Center.

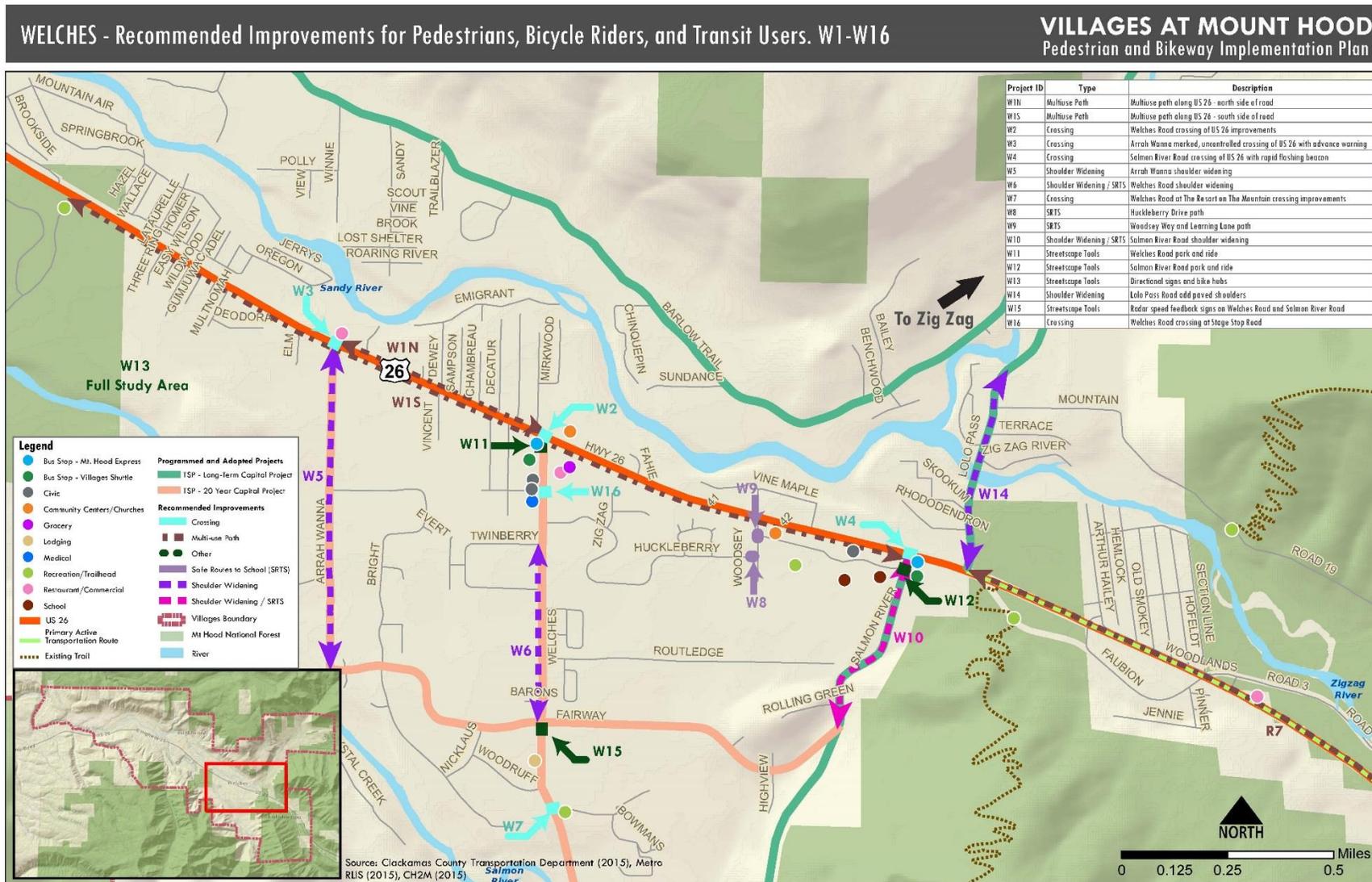
**Benefits:** Underutilization of RV parking allows for easy bus circulation and provides all-day parking for vehicles. The location just off US 26 makes the area an attractive spot to advertise the park-and-ride capability. Calling attention to the park-and-ride could attract riders traveling to the stop by car from a broader area. This addition would benefit transit users in the area, who are primarily residents.

**Public Feedback and Discussion**

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements as a higher priority.



Figure 11: Welches Potential Area Improvements for Pedestrians, Bicycle Riders, and Transit Users





## 2.2 Welches (W1-W16)



### W1S: Multiuse Path along US 26

High Priority \$\$

**Improvement Recommendation:** Construct a multiuse path along US 26, along the south side, between the Wildwood Recreation Site and Salmon River Road. This improvement is the recommended near-term phase of building an eventual path network to connect the full length of The Villages – from Brightwood to Rhododendron.

A dirt path, which has been worn down by pedestrians, parallels US 26 along the south side between Arrah Wanna and Salmon River Road. This area has the greatest concentration of destinations within the study area. Pedestrians regularly use the informal dirt paths to access destinations. The existing condition is not up to standard and uncomfortable for pedestrians because they are walking in marginal areas on uneven surfaces. Bike lanes on US 26 are provided for bicycle riders, but most riders find riding adjacent to high speeds and high traffic volumes intimidating and forgo riding their bicycle.

**Improvement Description:** Formalize the existing demand path to a multiuse path for bicycle riders and pedestrians. The preferred width for a multiuse path is 12 feet with 2-foot shoulders; however, 10 feet could be used as a minimum width where there are right-of-way constraints. Projects located on ODOT facilities are subject to ODOT review and approval.



**Figure 12: Example of a shared use path**

A multiuse path in this location could be concrete, asphalt or permeable pavement. Concrete is the most expensive option, however it lasts longer and requires less maintenance. Permeable pavement requires maintenance twice a year (sweeping to remove debris and moss), however any concerns with water runoff and stormwater are greatly reduced because water does not collect on or run-off the surface. Permeable pavement should be evaluated as a possible approach when the project is being developed, with consideration given to environmental priorities as well as ease of maintenance. For estimating purposes, concrete construction was calculated.

Although there are currently no plans to widen US 26, these pedestrian and bicycle improvements should be preserved if US 26 is ever widened. Likewise, during project development, the multiuse path should be located outside of potential future widening areas.

The paved section of US 26 is 73 feet wide. Analysis of US 26 right-of-way shows that available right-of-way for the entire extent of the path is 100-150 feet, providing ample room for a path on the south side. During project development, the site would need to be surveyed to determine precise right-of-way availability. It is likely the path would be able to be constructed within existing right-of-way; therefore, adjacent property owners would not have a liability for maintenance.

**Benefits:** Residents, transit users, lodging users, recreational users and any wheeled users who cannot navigate uneven dirt surfaces, such as wheelchair users and bicycle riders, would have better access to shopping, lodging, restaurants and transit stops.

| Public Feedback and Discussion  | Project Team Response   |
|---|---|
| <p>Of all of the proposed improvements, this project received the strongest support from the public and the highest priority. During the public workshop, attendees expressed concern for adjacent property owners' liability and called for greater lighting in the area in conjunction with a path. Workshop attendees also suggested some type of physical barrier from traffic.</p> | <p>This is the top priority. Analysis demonstrates ample available right-of-way for path construction (geometric survey would be required for a precise assessment during project development). With the ability to construct the path within right-of-way, adjacent property owners would not have liability for the path. However, this Plan recommends property owners be consulted during the project development process, and community advocates for the path could help during these discussions.</p> <p>Pedestrian lighting has been added as an element of the improvement.</p> <p>A maintenance agreement for the path will be evaluated by partner agencies.</p> |



*W1N: Multiuse Path along US 26*

*High Priority*    *\$\$*

**Improvement Recommendation: Construct a multiuse path along US 26, the north side, between Arrah Wanna Boulevard and Welches Road. Like Project W1S, this improvement is the recommended near-term phase of building an eventual path network to connect the full length of The Villages – from Brightwood to Rhododendron.**

A dirt path, worn down by pedestrians accessing business clusters off US 26 in Wemme and Welches, parallels US 26 along the north side between Arrah Wanna and Welches Road. Most destinations are on the south side of US 26, and this improvement would provide access to the crosswalk and signal at Welches Road. The existing path is not up to standards and uncomfortable for pedestrians because they are walking in marginal areas on uneven surfaces. Bike lanes on US 26 are provided, but most riders find riding adjacent to high speeds and high traffic volumes intimidating and forgo riding their bicycle.

### **Potential Improvement**

Formalize this demand path to a multiuse path for bicyclists and pedestrians. The preferred width for a multiuse path is 12 feet with a 2-foot shoulder; however 10 feet could be used as a minimum width where right-of-way constraints exist. The design would be subject to ODOT approval.

Similarly to the south side path, concrete has been used for estimating purposes.

Although there are currently no plans to widen US 26, these pedestrian and bicycle improvements should be preserved if US 26 is later widened. Likewise, during project development, the multiuse path should be located outside of potential future widening areas.

The paved section of US 26 is 73 feet wide. Analysis of US 26 right-of-way shows that available right-of-way for the entire extent of the path is 100-150 feet, providing ample room for a path on the south side. During project development, the site would need to be surveyed to determine precise right-of-way availability. It is likely the path would be able to be constructed within existing right-of-way; therefore, adjacent property owners would not have a liability for maintenance.

### **Benefits**

Residents, transit users, lodging users, recreational users and any wheeled users who cannot navigate uneven dirt surfaces, such as wheelchair users and bicycle riders, would have better access to shopping, lodging, restaurants and transit stops.

|  |   |
|--|---|
| <p><b>Public Feedback and Discussion</b></p> <p>Of all of the improvements, this improvement received the second highest support, second to the south path. During the public workshop, attendees expressed the same concerns as they did for the south path: adjacent property owners’ liability, greater lighting in the area in conjunction with a path and the desire for some type of physical barrier.</p> | <p><b>Project Team Response</b></p> <p>This Plan ranks this improvement as the second top priority. Right-of-way analysis demonstrates ample right-of-way for path construction (geometric survey would be required for a precise assessment during project development). With the ability to construct the path within right-of-way, adjacent property owners would not have liability for the path. However, the Plan recommends property owners be consulted during the project development process.</p> <p>Pedestrian lighting has been added as an element of the improvement.</p> |
|--|---|



*W2: Crossing Improvements on US 26 at Welches Road*      *Medium Priority*      \$

**Potential Improvement Recommendation: Construct sidewalk and relocate pedestrian activation buttons to be ADA compliant at Welches Road Crossing of US 26.**

There is a signal at the Welches Road intersection. The signal controls and intersection grading need improvements to meet current standards. The existing ramp facilities appear to be compliant with Americans with Disabilities Act (ADA) standards, however each corner should be surveyed.

The project team reviewed signal timing and used the crosswalks. Neither demonstrated a need to adjust signal timing and pedestrian crossing times are adequate.

**Improvement Description**

Construct sidewalk between ADA ramps on the northwest and northeast corners of the intersection. Coupled with multiuse paths recommended above, this signal would become more safely and comfortably accessible by pedestrians and bicycle riders. Relocate pedestrian activation buttons and add pedestrian countdown controls to each corner. Topographically survey the existing ADA ramps to ensure their compliance with applicable standards.

**Benefits**

Enhanced pedestrian access to key destinations at the intersection with US 26 for residents, lodging users, transit users and recreational users. Those in wheelchairs would benefit from compliance with ADA standards. Improved connectivity to the recommended multiuse path paralleling US 26.

|  |
|--|
| <p><b>Public Feedback and Discussion</b></p> <p>The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority.</p> |
|--|



W3: Arrah Wanna Boulevard Crossing of US 26

Medium Priority \$

**Potential Improvement Recommendation:** Create an uncontrolled crossing of US 26 at Arrah Wanna Boulevard, with a continental style crosswalk.



**Figure 13: Rendezvous Grill on US 26 in the vicinity of Arrah Wanna**

A cluster of restaurants is located in the vicinity of the Arrah Wanna Boulevard intersection with US 26. The number of restaurants and businesses at this location create pedestrian demand to cross at this location.

#### **Improvement Description**

Install a continental style crosswalk, accompanied by roadway and streetscape improvements.

Drivers respond to visual cues along the roadway more so than marked signs.

Visual cues that indicate to drivers that pedestrians may be present or crossing are sidewalks and curbs, clearly defined driveways, pedestrian scale lighting and curb extensions to narrow the visual roadway width. Additional cues such as buildings adjacent to the roadway with parking in the rear further emphasize an orientation towards pedestrians. Using a toolkit of streetscape elements added over time can contribute to a more safe and pleasant pedestrian environment.

To reduce conflicts and traffic, backage roads for property and parking access are recommended. Based on mapping data, geographic constraints would not limit construction of backage roads; however geometric survey would be required to precisely evaluate the possibility. This Plan recommends any crossing of US 26 to be implemented in conjunction with these streetscape elements. The crossing itself would be controlled with a high visibility treatment such as a rectangular rapid flashing beacon and continental style crosswalk.

Figure 23 demonstrates how these elements would come together to create a pedestrian-oriented environment and safer crossing conditions. Implementation of the range of improvements requires partnership and support from various agencies such as ODOT and the BLM. A collaborative effort would need to be undertaken to apply for grants and leverage redevelopment as it occurs.

ORS 366.215 states the Oregon Transportation Commission may not permanently reduce the vehicle-carrying capacity of an

#### **Creating a Pedestrian Environment for US 26 Crossings**

Drivers respond to visual cues more so than signs. A streetscape that cues drivers to the presence of pedestrians creates a safer crossing environment. This Plan presents a toolkit of elements that could be combined to accompany a crossing of US 26.

- Sidewalks and curbs
- Consolidated and clearly defined driveways
- Pedestrian scale lighting
- Curb extensions or bulb-outs
- Gateway signs at the entrance of a village
- A crosswalk with rapid flashing beacons and a refuge island for pedestrians
- Temporary speed detectors so drivers know how fast they are driving and if they are over the limit

identified freight route; US 26 is a freight route. This regulation requires that 26 feet of clear space be maintained on the roadway. Right-of-way is wide enough to accommodate this required clear space in conjunction with a continental style crossing with a pedestrian refuge island.

**Benefits**

Providing a marked crosswalk to key destinations at the intersection with US 26 would benefit residents, lodging users and recreational users. Improved connectivity to the recommended multiuse path paralleling US 26.

**Public Feedback and Discussion**

The public supports crossings of US 26; however, this particular crossing received modest support relative to other projects within the Welches area, and relative to other proposed locations for US 26 crossings described in this plan.



*W4: Salmon River Road Crossing of US 26*

*High Priority* \$

**Improvement Recommendation:** Install an enhanced crossing using treatments such as a rectangular rapid flashing beacon at the Salmon River Road crossing of US 26.



**Figure 14: Example of an advance warning beacon**

An uncontrolled crossing of US 26 at Salmon River Road, marked by a continental style crosswalk, provides access to a Mt. Hood Express transit stop, schools and other destinations including the Lions Club. Transit riders regularly use this crosswalk to access transit stops. Although the school does not encourage students to cross US 26, there are numerous events at the school that increase the potential for vulnerable users to cross US 26 at this location.

**Improvement Description**

Install an enhanced crossing, such as a rectangular rapid flashing beacon at the Salmon River Road crossing of US 26.

Change visual cues to drivers through streetscape improvements, such as sidewalks and curbs, few and clearly defined driveways, pedestrian-scale lighting and curb extensions to narrow the visual roadway width. Additional cues such as buildings adjacent to the roadway with parking in the rear further emphasize an orientation towards pedestrians.

**Considered but Not Recommended**

An under or overcrossing was ruled out for several reasons. Placement of the entrance and exit would be considerably setback from US 26, due to the required clearances for each structure. Pedestrians seek the shortest path, and under and overcrossings require out-of-direction travel. They also create points of isolation, and people can have concerns for their personal safety, especially at night or with low use. The very high cost for such structures would be difficult to justify given the limited potential of crossing use.

A High-intensity Activated Crosswalk (HAWK) was considered. However, pedestrian counts conducted for the traffic analysis showed the pedestrian volumes did not justify this level of improvement.

**Benefits**

Enhanced existing marked crosswalk to residential areas, Welches Elementary and Middle Schools (as a community activity hub) and transit stops, at the intersection with US 26 for residents, lodging users, transit users and recreational users. Improved connectivity to the recommended multiuse path paralleling US 26.



**Figure 15: Zig Zag Café on US 26 in the vicinity of Salmon River Road**

| Public Feedback and Discussion   | Project Team Response   |
|--|---|
| <p>PAC members were in strong support of this crossing because Welches is the largest population center within The Villages at Mt. Hood. Welches Elementary and Middle Schools on Salmon River Road are an activity hub within the community. The nearby firehouse also acts as neighborhood hub. A crossing enhancement at Salmon River Road is most helpful if a path connection is created on the north side of US 26 to Lolo Pass Road, which would provide a needed connection to residential areas along Lolo Pass Road.</p> | <p>The project team recognizes the importance of this crossing due to the nearby confluence of activity hubs and population centers. This crossing is a high priority, but is proposed to follow a proposed crossing improvement in Rhododendron based on Rhododendron’s existing roadway and development characteristics that have more pedestrian-oriented streetscape elements. Installing a crosswalk and flashing beacon in Rhododendron would serve immediate pedestrian needs, while also training drivers to expect crossings in The Villages on US 26.</p> |



*W5: Arrah Wanna Shoulder Widening* *Medium Priority* \$\$  
**Potential Improvement Recommendation: Add a 4-foot wide paved shoulder along each side of Arrah Wanna Boulevard between US 26 and Fairway Avenue.**

Arrah Wanna Boulevard is classified as a collector according to the CCTSP. The facility has one travel lane in each direction and no paved shoulder, with total roadway width varying from 18-21 feet. Improvements to Arrah Wanna Boulevard are not included in the CCTSP; however, feedback from the PAC and TAC contributed to this project recommendation to add a paved shoulder along each side between US 26 and Fairway Avenue. PAC and TAC members noted that the boulevard serves many residential neighborhoods.

**Improvement Description:** Add a 4-foot-wide paved shoulder along each side of Arrah Wanna Boulevard.

**Benefits:** Provide pedestrian and bicycle access to key destinations including the restaurant cluster at the intersection with US 26 for residents, transit users and recreational users . Provide connectivity to the recommended multiuse path paralleling US 26 and recommended crossing improvement.

#### Public Feedback and Discussion

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority.



*W6: Welches Road Shoulder Widening and Multiuse Path*

*High Priority    \$\$*

**Improvement Recommendation:** Widen shoulders and/or develop a multiuse path on Welches Road. The improvement should span from US 26 to Fairway Avenue.

The shoulder along Welches Road is narrow or nonexistent and pedestrians have to cross from side to side to find space to walk along the road. Options providing pedestrian and bicycle access considered including a multiuse path, a widened shoulder or a combination. The CCTSP shows adding paved shoulders in the Long-term Capital Projects list (#3056).

Welches Road is a key to providing Safe Routes to School and safe access to popular destinations. Many pedestrians use this roadway because of the density of residences and lodging along Welches, and the commercial cluster, including the largest supermarket in the Villages, at the intersection of Welches Road and US 26.

#### Improvement Description

Install a multiuse path, a widened shoulder or a combination of each. The long-term vision for Welches Road is to have a multiuse path along at least one side to provide separation between cars, and pedestrians and bicycles. While greater separation of users is preferred, widened shoulders may be an appropriate interim measure until a multiuse path can be built.

Shoulder-widening on Welches Road is particularly needed between Fairway Avenue and Huckleberry Drive. This segment of roadway is important for providing Safe Routes to Schools. The widened shoulder should be expanded to US 26, connecting residents and visitors along Welches Road to destinations and shopping on US 26.



**Figure 16: Existing walking conditions on Welches Road**

**Benefits**

Provide better access to shopping, lodging, restaurants and transit stops at the US 26 intersection for residents, transit users, lodging users, recreational users, school children and any wheeled users who cannot navigate ditches and uneven surfaces, such as wheelchair users.

| Public Feedback and Discussion   | Project Team Response  |
|--|--|
| <p>The improvement received strong support during the public workshop at a level equal with the multiuse paths along US 26. This corridor serves as a primary connection to destinations on US 26, but existing shoulders for walking or bicycling disappear into ditches.</p> <p>Community members expressed a desire to go beyond expanded shoulders to propose a multiuse path along Welches Road.</p> <p>A short multiuse path along Welches Road built as part of a private development was referenced as an example of a pleasant path. A future multiuse path should connect to the existing private path.</p> <p>Workshop attendees additionally urged the team to consider illumination because the area is extremely dark from tree cover. This limits the visibility of pedestrians and bicyclists.</p> | <p>This Plan recommends a multiuse path where feasible, and widened shoulders elsewhere. Reviewing mapping data, the right-of-way on Welches Road varies between 50 and 75 feet, with most places between 60 and 65 feet. The public expressed a preferences for a west side path; however it appears right-of-way is more available on the east side of the roadway. Based on mapping data, right-of-way may need to be acquired north of Fairway.</p> <p>PAC members have already started talking with property owners advocating for the project and gaining support. Continued efforts by community leaders will help project development. Geographic surveys will need to be conducted during project development to precisely understand the availability of right-of-way.</p> <p>The project recommends lighting that is cast down and in accordance with night sky ordinances. The lights should be illuminated during day and night.</p> <p>Finally, secure bike parking can be placed at the nearby trailheads for the Old Salmon River Trail and others. This would complement a multiuse path and widened shoulders, and create multimodal access to the trails.</p> |



*W7: Welches Road at The Resort at the Mountain* *High Priority* \$  
*Crossing Improvements*  
**Potential Improvement Recommendation: Enhance existing crossing by adding advance warning signs and a split rapid flash beacon.**

The Resort at the Mountain on Welches Road has constructed a painted crosswalk to provide connections between their lodging and the golf, spa and event facilities. Visitors, staff and residents frequently cross at the crosswalk. Although the crossing is in place, it is in an area of poor sight distance due to both horizontal and vertical curves in the road—the crossing is just north of a large hill.

**Improvement Description**

Improve the visibility of the crossing by adding advance warning signs and a split rapid flash beacon. Split flashing beacons offer flashing warnings both at the site of the crosswalk and down the approaching roadway to provide advance warning. On Welches Road, the beacon would need to be placed on the hill south of the crossing to provide drivers with advance warning where their sight distance is limited. Low level lighting at the crosswalk should also be considered to provide increased visibility for pedestrians.



**Figure 17: Crossing of Welches Road at The Resort at the Mountain**

**Benefits**

Benefit to residents, school children, recreational users, lodging users and staff. Based on site visits and public input, this is one of the most popular non-US 26 pedestrian crossing locations in the study area.

**Public Feedback and Discussion**

This project received strong support from the PAC and lower support during the public open house. Given the mixed support and the existence of a marked crosswalk now, the improvement is a high priority because it is a safety feature for a location with frequent pedestrian crossings.



*W8: Huckleberry Drive Path*

*Low Priority \$*

**Potential Improvement Recommendation:** Formalize demand-path connecting Huckleberry Drive and Woodsey Way to create direct Safe Routes to School path.

Huckleberry Drive offers direct access from Welches Road to the Welches Elementary and Middle Schools (via Woodsey Way and Learning Lane). Currently, a gap exists between Woodsey Way and Huckleberry Drive. In place of sidewalks, pedestrians - primarily school children - have worn a dirt path.

**Improvement Description**

Formalize a demand-path connection to connect a 20-30-foot gap between Huckleberry Drive and Woodsey Way. The path would be a Safe Routes to School improvement, providing access to the school away from US 26, and ideally would be a minimum of 10 feet wide and constructed with permeable pavement. Ownership of right-of-way along the route is unknown, and is likely private. County investments cannot be made on private property, requiring any improvements be made by the owner or other partnerships with the approval of the property owner.

**Benefits**

The location is in a fairly dense residential area and close to Welches Elementary and Middle Schools. The connection would primarily benefit residents and school children, and is already being informally used as an alternative to US 26.

**Public Feedback**

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority. The existing path is safe for walking, and due to the unknown ownership status of the area, the improvement was ranked as a low priority.



*W9: Woodsey Way and Learning Lane Path*

*High Priority* \$

**Potential Improvement Recommendation: Construct path along Woodsey Way that connects to the existing sidewalk on Cedar Hill Terrace and add crossing enhancements.**

Path improvements on Woodsey Way would provide a continuation of the proposed trail on Huckleberry Drive, and connect to the existing sidewalk between Cedar Hill Terrace and Woodsey Way. As the potential path continues on Woodsy Way, it would reach an intersection at Learning Lane, which provides direct access to the schools and the ball fields to the west of the school buildings. Learning Lane is not a County-owned facility, so the County would have to collaborate with the owners to implement proposed improvements.

**Improvement Description**

A proposed path along Learning Lane on the north side of the road to avoid conflicts with parking and access to sports fields. A crossing of Learning Lane to the school facilities is best placed at the west end of the observed parking areas. Learning Lane is owned by the school district, which would therefore be responsible for implementation.

To make this route complete and safe for school children to use, a painted crosswalk with advance signing should be considered at the intersection of Huckleberry Drive and Welches Road as a Safe Routes to School improvement. A path along the west side of Welches Road between Rutledge and Twinberry with a painted crossing at Twinberry Loop would provide access to the school children in these developments.

More secure bicycle parking at the schools would support the staff and students who bicycle to school. Existing bicycle parking at the school is dilapidated and should be replaced with staple-style racks.

**Benefits**

This project would benefit residents and primarily school children in one of the densest residential areas of the study area. Crossing enhancements would improve the visibility of school children walking and bicycling, and would reduce conflicts amongst modes.

**Public Feedback**

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority.



*W10: Salmon River Road Shoulder Widening*

*High Priority* \$\$

**Potential Improvement Recommendation: Add paved shoulders or a path to Salmon River Road between US 26 and Fairway Ave.**

Salmon River Road is classified as a minor arterial, and lacks pedestrian and bicycle facilities, particularly for school access. Both Welches Elementary and Middle Schools are located on Salmon River Road. Adding paved shoulders to Salmon River Road between US 26 and Welches Road is project #3052 in the CCTSP Long-Range Capital Projects list.

**Improvement Description**

Widened shoulders between US 26 and Fairway Avenue. In the longer-term, a multiuse path along the roadway is preferred.

**Benefits**

Provide optimal access to schools and the Mt. Hood Express bus stop for residents, transit riders and school children.

**Public Feedback and Discussion**

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority.



*W11: Welches Road Park and Ride*

*Medium Priority* \$

**Potential Improvement Recommendation: Pave and formalize existing Welches Mt. Hood transit stop location to create a park and ride.**

The Mt. Hood Express transit stop is in the southwest corner of the Welches Road/US 26 intersection in an empty gravel lot owned by The Resort at the Mountain. This could provide an ideal location for a park and ride facility. Signage along US 26 alerting recreational users to the presence of the stop could increase awareness of the transit service.

**Improvement Description**

The County should partner with The Resort at the Mountain to pave the empty lot at the Mt. Hood Express Welches transit stop. Formalize the lot with delineated parking to create a park and ride and provide directional signage for transit users.

**Benefits**

This project would benefit transit riders, residents, lodging users and recreational users by allowing them to drive and park to access transit.

**Public Feedback and Discussion**

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority.



### W12: Salmon River Road Park and Ride

Medium Priority \$

**Potential Improvement Recommendation:** Formalize Mt. Hood Express Salmon River Road stop with delineated parking and directional signage for a park and ride.

A Mt. Hood Express stop is located along the east side of Salmon River Road just south of US 26 and directly across from Welches Middle School. This stop is located on a County-owned parcel and also has ample space for a park-and-ride facility. The riders that utilize this stop are mostly commuters along with some recreational users.

#### Improvement Description

Formalize the Mt. Hood Express Salmon River Road stop with delineated parking and directional signage to create a park-and-ride.

#### Benefits

This project would primarily benefit transit users, including commuters and some recreational users.

#### Public Feedback and Discussion

The public and PAC expressed general support for this improvement, had no specific changes and ranked other improvements at a higher priority.



### W13: Directional Signs and Bike Hubs

Medium Priority \$

**Potential Improvement Recommendation:** Enhance pedestrian and bicycle accessibility within the area with the strategic placement of directional signage and bike hubs.

With the addition of the various pathways and widened shoulders, signage is key to directing users to bicycle/pedestrian/Safe Routes to School and key destinations within the area. Bike hubs would provide bicycle amenities in the area, such as secure sheltered parking, a bench, basic bike tools and other amenities that support bicycle riding. Directional signs and bike hubs support economic development and tourism goals for the area.

#### Improvement Description

Locate directional signs along US 26, Barlow Trail Road and at each major intersection. Add signs providing direction to the transit stops and park and rides.

Add bike hubs at key locations along US 26 to better allow long-distance bicycle riders to stop and patronize businesses. Potential locations for a bike hub within the Plan study area include the plaza at the Hoodland Shopping Center and the business cluster in Rhododendron. Bike hubs could also be located elsewhere throughout the US 26 corridor and bicycling destinations, such as the Sandy Ridge Trail System.

Bike hubs would at least have high-security, covered bike parking that could also be functional art. Other features could include a water fountain (where feasible), loaner locks or built-in locks, seating, pump, simple bicycle repair tools and directional signage to destinations within the area. Bike hubs can be designed with a consistent look for community branding.

#### Benefits

Directional signs and bike hubs would support bicycle tourism and economic development goals for the area, and would provide convenience and recreational opportunities for residents.

**Public Feedback and Discussion**

The public and some members of the PAC expressed strong support for this improvement, and suggested branding efforts to emphasize the corridor as a ride that is welcoming to visitors.



*W14: Lolo Pass Road Paved Shoulders*

*High Priority    \$\$*

**Potential Improvement Description: Widen shoulders to 4 feet along Lolo Pass Road. The highest priority is between US 26 and Barlow Trail Road.**

Although Lolo Pass Road does have an 1-2-foot shoulder, it is classified as a minor arterial and needs improved pedestrian and bicycle facilities. Adding paved shoulders to Lolo Pass Road is project #3048 in the CCTSP and is also noted in the ATP.

A safety analysis is also included in the CCTSP. A traffic signal warrant analysis for the intersection with US 26 completed as part of this study determined that, although a signal is warranted on US 26, it is not warranted on Lolo Pass Road. Per guidance in the Manual on Uniform Traffic Control Devices (MUTCD) and results from ODOT’s Preliminary Signal Warrant Analysis worksheet, a traffic signal warrant is not met. The warrant volumes must be met on both approaches to be considered for a controlled intersection.

**Improvement Description**

Widen existing 1-2-foot shoulders to 4-foot shoulders along Lolo Pass Road.

**Benefits**

This project would benefit residents in the area for their walking and bicycle riding needs, and benefit recreational bicycle riders. STRAVA data, a smartphone tool primarily used by bicycle riders to track their riding and post information to social media, show that Lolo Pass Road is often used as a bicycle riding route.

| Public Feedback and Discussion   | Project Team Response   |
|--|---|
| <p>This improvement received strong support in the public workshop, nearly equal to paths along US 26 and Welches Road. Lolo Pass Road is a well-used bicycling route and provides access to many residential areas.</p> <p>The public expressed concern that the improvement will be expensive.</p> | <p>Currently the entire roadway alignment of Lolo Pass Road is being evaluated as part of the Lolo Pass Road Alternatives Analysis due to its periodic washouts. The Plan recommends integrating a shoulder-widening project with the recommended improvements from the Lolo Pass Road Alternative Analysis.</p> <p>Priority for shoulder widening is between US 26 and Barlow Trail Road, which is often used by bicycle riders and pedestrians.</p> |



*W15: Driver Speed Feedback Signs on*

*High Priority \$*

**Potential Improvement Description:** Welches Road, Salmon River Road, lower Lolo Pass Road and US 26 in the vicinity of Rhododendron

Residents have described the presence of traffic with speeds above posted speed on both Welches Road and Salmon River Road. Permanent radar speed feedback signs would help with compliance of posted speed limits by making drivers aware of their travel speed. They are typically mounted on a speed limit sign and visually display drivers’ real-time speeds as they pass. Drivers see how fast they are actually driving compared to the posted speed limit.

**Improvement Description:** Mount permanent radar speed feedback signs to keep drivers aware of their speeds and the need to slow down, especially near schools.

**Benefits:** Better speed limit compliance from motor vehicle drivers.

| Public Feedback and Discussion  | Project Team Response  |
|---|--|
| <p>This improvement received strong support in the public workshop. Participants added lower Lolo Pass Road as an additional location for a temporary radar speed feedback signs.</p> | <p>The County has a waiting list for radar speed feedback signs to be deployed and will add this location to the list. The highest priority location for a temporary radar speed feedback signs is on US 26 in the vicinity of Rhododendron.</p> |



*W16: Welches Road Crossing at Stage Stop Road*

*Low Priority \$*

**Potential Improvement Description:** Further evaluate the potential for a high visibility crosswalk across Welches Road at Stage Stop Road

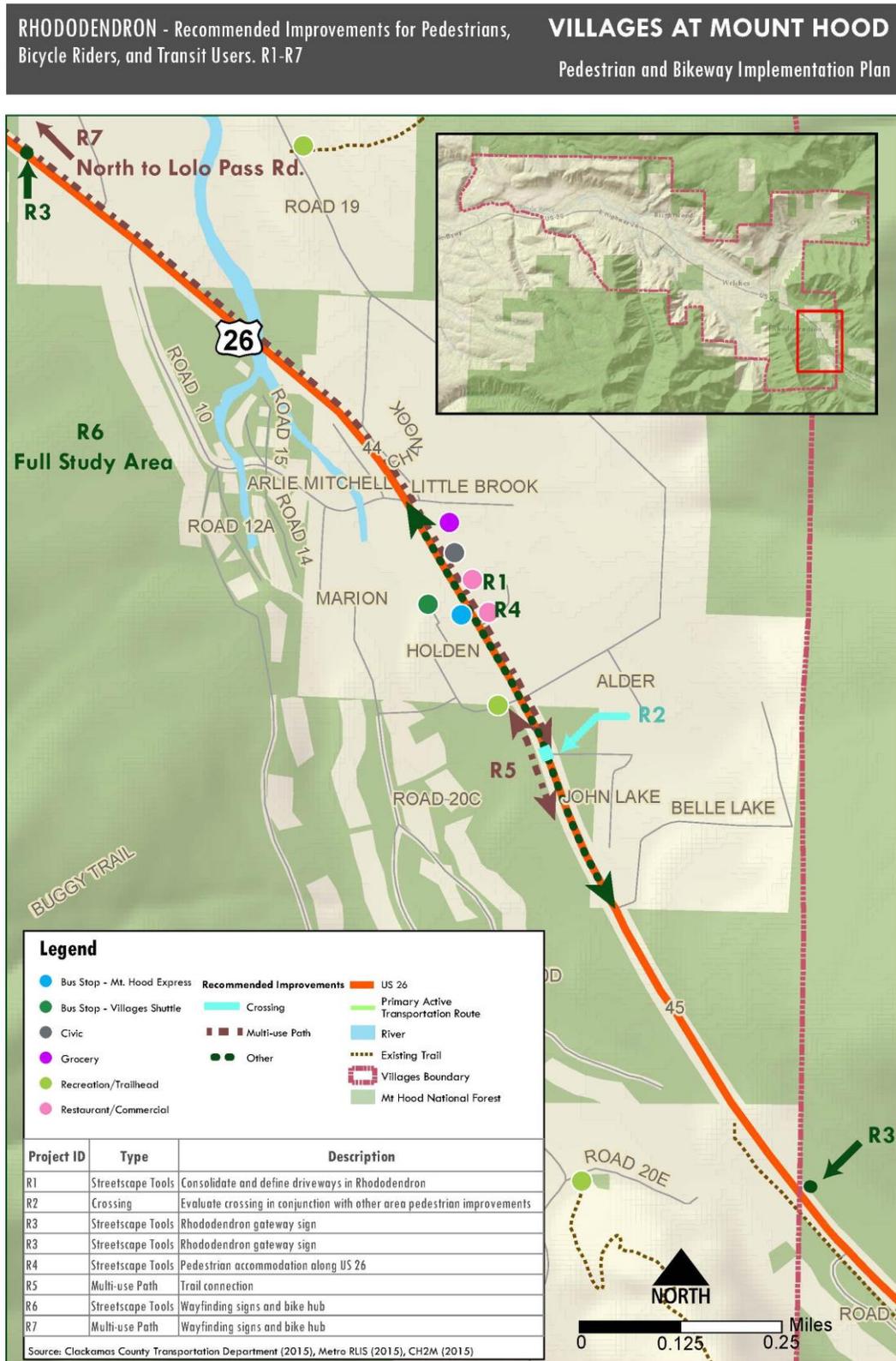
This project was proposed by community members over the course of two open houses. Residents describe Stage Stop Road as a popular crossing location because it serves the Hoodland Shopping Center on the east side of the street, and the Post Office, Welches Library and other community destinations on the west side of the street. The proximity of Stage Stop Road to the stoplight at US 26 may pose a potential issue if the crosswalk results in significant vehicle queueing unseen to vehicles turning onto Welches Road from US 26. A formal traffic and queueing analysis would be conducted in advance of installing crossing treatments.

**Improvement Description:** Paint a high visibility continental-style crosswalk on Welches Road at Stage Stop Road, accompanied by pedestrian advance warning signs.

| Public Feedback and Discussion   |
|--|
| <p>This improvement was initiated at the request of local residents who identified Stage Stop as a place where a high number of crossings currently take place. The team has added the crossing to the list of proposed project solutions while noting that a formal queuing study will need to take place due to the proximity to the stoplight at US 26.</p> |

2.3 Rhododendron (R1-R7)

Figure 18: Rhododendron Potential Area Improvements for Pedestrians, Bicycle Riders and Transit Users



Various destinations are located along both sides of US 26 through Rhododendron, including restaurants, a market, and a bicycle and winter sport rental shop. The area has few defined access points, which allows vehicles to enter along much of US 26 and pedestrians to cross US 26 at undefined points inconsistently. The lack of access management creates a challenging condition that will require a series of improvements to achieve a safe pedestrian and bicycle environment.

Within Rhododendron, this Plan recommends a series of improvements to change visual cues to better indicate to drivers they are entering an area with active pedestrian and bicycle use. Those improvements are:

- 1) access management,
- 2) US 26 crossing improvement,
- 3) a gateway treatment to cue drivers that they are entering a developed area, and
- 4) a path with buffered landscape along US 26.

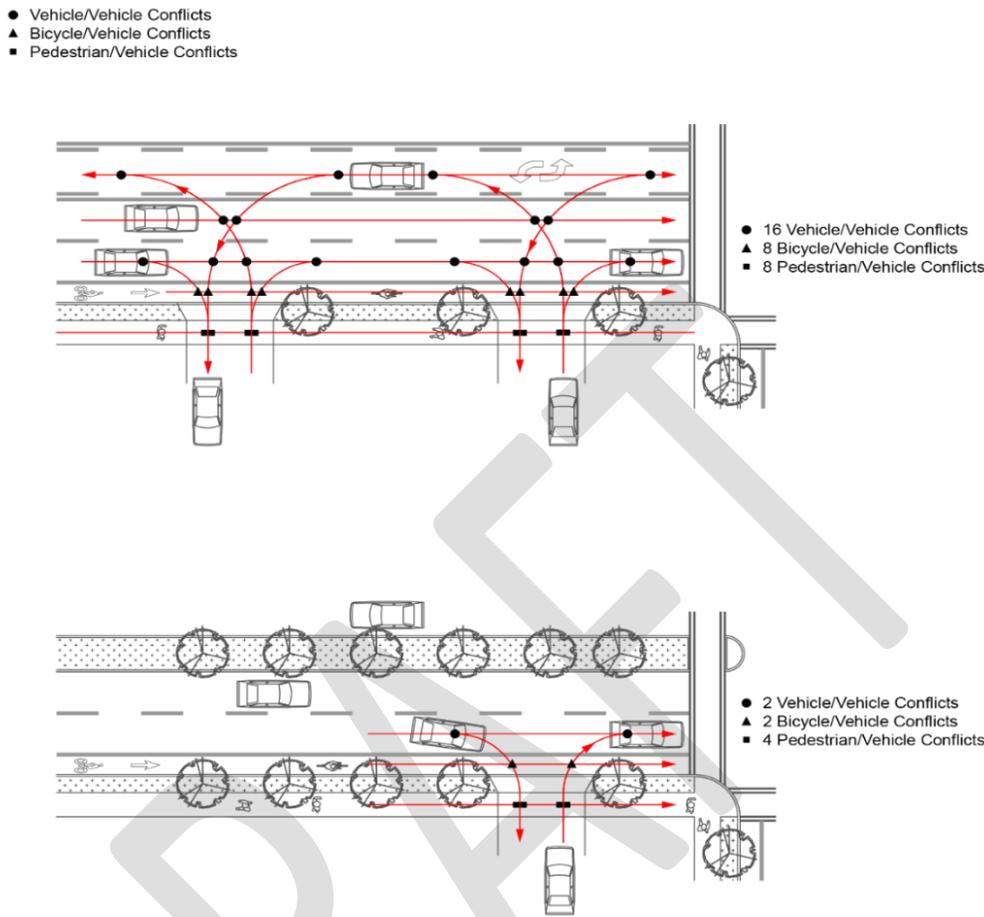


*R1: Consolidate and Define Driveways in Rhododendron*

*High Priority \$\$*

**Potential Improvement Recommendation: Consolidate and define driveways within Rhododendron through access management.**

The current condition, with no access management, allows vehicles to enter and leave the roadway at any location instead of only at intersections and driveways. As shown in Figure 22, creating specific access points decreases points of conflict between vehicles and pedestrians and bicyclists. The diagram below shows that allowing one access point instead of two drops the total potential conflict points from 32 to 8. While the Plan does not recommend installing a non-permeable median, limiting driveways on US 26 within Rhododendron would create more predictable traffic patterns, add gaps in traffic and provide opportunities for pedestrians to cross US 26 at a desired location.



**Figure 19: Reduction of conflict points due to access management**

**Improvement Descriptions**

Consolidate and define driveways within Rhododendron through access management, which would provide definition of driveways and intersections. The driveway(s) could be defined by breaks in a landscape buffer, by colored paved driveways, or by stamped concrete or pavers delineating the path across a driveway.

Land owners may be more open to negotiating access points if the state provides a path for pedestrians and bicycle riders in front of their parcel as an incentive. The path would enhance their property, while access management would enhance the transportation system. This would require outreach to affected property owners.

**Benefits**

Reducing the number of conflict points for pedestrians and drivers would benefit residents, lodging users, recreational users and transit riders.

**Public Feedback and Discussion**

Feedback during the public workshop was supportive of this project and agreed this improvement could be introduced with other pedestrian-oriented improvements.



*R2: Enhanced Crossing of US 26 in Rhododendron*

*High Priority \$*

**Potential Improvement Recommendation:** Install a marked, continental style crosswalk in Rhododendron on US 26 with enhanced crossing features such as a rapid flashing beacon to alert drivers. Install in conjunction with R1 streetscape improvements and access management practices.

Rhododendron has commercial uses on the north and south side of US 26, and during site visits pedestrians of many types, including mothers with children, recreational users and transit riders, were observed crossing the street. Mt. Hood Express transit stops are on either side of US 26, and the service reports that transit riders often cross US 26 to access a market or food. The crossing would service regional bus riders whose service stops at the Dairy Queen, allow riders a half-hour to be in town. The proposed improvements are in accordance with recommendations in the Mt. Hood Community Plan, which call for the “development of crosswalks, signals [...] to facilitate movement across Highway 26”.

ODOT’s greatest concern when placing a crosswalk on US 26 is safety. A crossing alone does not provide drivers with visual cues necessary for them to recognize the need to slow and watch for pedestrians.

For this reason, a crossing of US 26 in Rhododendron would need to be developed in conjunction with other changes to the streetscape of US 26 to change driver cues and alert them that they are entering an area with pedestrians.

To this end, a crossing would be evaluated with sidewalks, curb and gutter, which formalize the pedestrian realm, provide opportunities for bulb-outs to narrow the roadway width, managed access points and a pedestrian refuge island for any crossing. Decorative illumination at a pedestrian scale, which is cast down to protect the night sky would also emphasize the presence of pedestrians.

Mt. Hood Express transit stops are also located in Rhododendron. The stop for eastbound riders is located on the south side of US 26 in a pull-off area onto a property leased by Skibowl. The stop for westbound travelers is located in the plaza parking lot across the street. There is a small sign for the eastbound stop but no signage exists for the westbound stop.

**Improvement Description:** A painted, continental style crosswalk on US 26 placed within Rhododendron, with enhancements such as a rapid flashing beacon to further emphasize the presence of a crossing.

**Considered but Not Recommended**

An under or overcrossing was considered and ruled out for several reasons.

- Placement of the entrance and exit for both an under and overcrossing would be considerably setback from US 26, due to the clearances for each structure required.
- Pedestrians seek the shortest path, and under and overcrossings require out-of-direction travel.
- They also create points of isolation, and people can have concerns for their personal safety, especially at night or with low use.
- The cost for such structures is very high, and given the limited potential of crossing use, this cost would be difficult to justify in a competitive environment.

*How will sidewalks and multiuse paths on US 26 be integrated?*

- 1) Create a multiuse path using concrete, permeable pavement or other low maintenance material.
- 2) Install curbs and access management/consolidate driveways and add landscaped buffer.
- 3) Buildout full sidewalk. Priority areas for sidewalk buildout are in the vicinity of a US 26 crossing and more intense development.

A High-intensity Activated Crosswalk (HAWK) was considered, however pedestrian counts conducted for the traffic analysis showed that pedestrian volumes did not justify this level of improvement.

**Benefits**

A marked, continental style crosswalk would provide access across US 26 for users to access the transit stops on both sides. Transit riders, residents, lodging users and recreational users would all benefit from a marked crosswalk on US 26 in Rhododendron.

**Public Feedback**

The public strongly supported this improvement, and recognized the streetscape improvements to US 26 that would need to occur to emphasize the presence of pedestrians.



*R3: Rhododendron Gateway Sign*

*High Priority \$*

**Potential Improvement Recommendation: Install gateway signs in advance of Rhododendron in both the eastbound and westbound direction of US 26.**

The posted speed along US 26 through Rhododendron is 40 mph. However, actual speeds exceed that. US 26 is a major east-west route and traffic calming mechanisms such as speed bumps are not feasible. Currently, US 26 is enclosed with trees and forest both east and westbound on US 26 in advance of Rhododendron. It can seem like Rhododendron suddenly appears to drivers. Instead, this project recommends a gateway treatment leaving and entering Rhododendron to alert drivers that they are entering a developed area. A gateway treatment, along with pedestrian crossing signage and the access management improvements, would alert drivers and encourage them to slow down because they are entering a place with commercial uses and pedestrian and bicycle crossings.

**Improvement Description:** Install a gateway sign to provide drivers a visual cue and alert them that they are entering an area with commercial uses and pedestrian and bicycle crossings.

**Benefits:** Gateway signage alerts drivers that they are entering a place and could help slow traffic speeds. This would benefit transit riders, residents and recreational users.

| Public Feedback   | Project Team Response  |
|---|--|
| <p>This improvement received strong support during the public workshop. Attendees suggested that each village have a gateway sign to enhance driver awareness of the communities and the presence of pedestrians.</p> | <p>A gateway sign in Rhododendron, alongside other streetscape improvements, is a high priority. Other locations for gateway signs are Brightwood and Welches. Gateway signs must meet local and state standards. The most likely source of funds for these improvements is grant funding.</p> |



*R4: Pedestrian Accommodation along US 26 in Rhododendron High Priority \$\$*

**Potential Improvement Recommendation: Install curbs, sidewalk and gutter along US 26 in Rhododendron.**

While no pedestrian facility exists within Rhododendron, the area has several commercial uses and transit stops that attract pedestrian use, which are not well accommodated. A pedestrian facility along US 26 through Rhododendron would provide access to the transit stops and the businesses along the highway. It would also cue drivers they are entering a location with increased pedestrian activity as well as facilitate access to the businesses along the highway.

**Improvement Description**

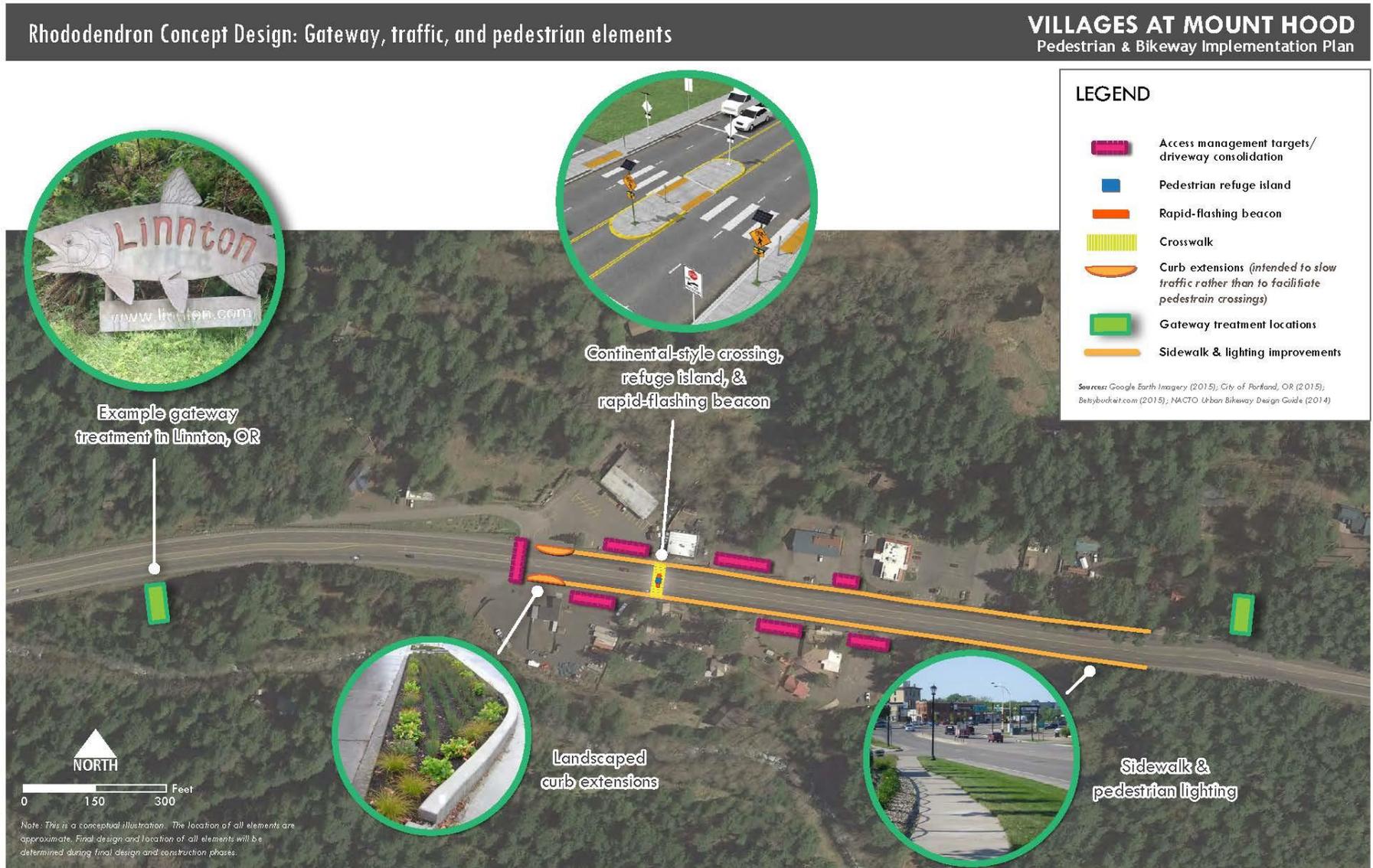
A crossing in conjunction with:

- Sidewalks, curbs and gutter
- Pedestrian-oriented illumination
- Pedestrian refuge island
- Managed access points (driveways)

**Benefits:** Safety, and drawing the attention of drivers to the presence of pedestrians -- Pedestrian sidewalk, curb and gutter provide visual cues to drivers that they are entering a place with pedestrians. Sidewalks can be ADA-accessible and compliant. Sidewalks provide an opportunity to construct bulb-outs, which narrow the roadway width and further emphasize the presence of pedestrians.

| Public Feedback   | Project Team Response   |
|---|---|
| <p>The public strongly supported this improvement, and recognized the streetscape improvements to US 26 would emphasize the presence of pedestrians and a pedestrian-oriented environment. Several business owners in Rhododendron began a conversation about how to grow support for the set of improvements among other stakeholders in the area.</p> | <p>A continental style crossing on US 26 with rapid flashing beacons can be part of a pedestrian-oriented environment that includes sidewalks, bulb-outs, gateways signs and lighting, which together create a stronger sense of a pedestrian-oriented environment.</p> |

Figure 20: Combined set of streetscape and crossing improvements within Rhododendron to create a safe pedestrian environment







### R5: Bicycle Facility for Trail Connection

High Priority \$

**Potential Improvement Recommendation:** Construct a bicycle facility (contraflow lane or multiuse path) to connect Pioneer Bridle Trailhead to Rhododendron, particularly at the Mt. Hood Express stop.

Currently, mountain bikers descend down the Pioneer Bridle Trail toward the Mt. Hood Express Transit Stop. The Mt. Hood Express acts as a shuttle for bicycle riders who loop between Skibowl and Rhododendron. At the trail's end, mountain bikers must either cross US 26 twice in a short distance or ride the wrong way westbound on the US 26 shoulder to access the stop. No direct connection exists between the trailhead and the Mt. Hood Express transit stop.

With the existing condition, cyclists are riding westbound along the eastbound shoulder of US 26. Existing right-of-way narrows from 90 feet to 80 feet as US 26 continues east out of Rhododendron; however, a path that provides room for two-way cyclists and pedestrians should be considered. Since right-of-way appears to be limited in this area, the available width for this facility is likely to be constrained. A typical shared facility is preferred to be 12 feet wide, but it is unlikely there is adequate space in this location. It may be worth considering a separated 4-foot lane for contraflow cyclists with eastbound cyclists and pedestrians sharing a 4-5-foot lane.

An 8-foot facility has been assumed for cost estimating purposes. Note, posted speeds are reduced to 40mph in this area, which creates safer conditions for a contraflow bike lane.

A contraflow bike lane would be subject to ODOT approval and may require a design exception.

**Improvement Description:** A separated bicycle facility to provide for contra-flow cyclists on the south side of US 26 for approximately 300 feet.

**Benefits:** This would benefit recreational users, residents who wish to easily access the trail and transit users who are also recreational users.



**Figure 21: Example of a contraflow bike lane that allows bicycle riders to ride in the opposite direction of vehicular traffic**

#### Public Feedback and Discussion

This improvement received moderate support from attendees at the public workshop, with no discussion of modifications. Support stems from the growing practice of the contraflow riding by recreationalists accessing the Mt. Hood Express transit stop.



### R6: Directional Signs and Bike Hub

High Priority \$

**Potential Improvement Recommendation:** Install directional signs to highlight the presence of the Mt. Hood Express transit stops and a bicycle hub.

Transit stops are located on both sides of US 26. Clear signage is needed to alert riders to the location of the stops.

Businesses are also located along both sides of US 26 and this is an ideal stopping location for recreational bicyclists. A bike hub would encourage bicyclists to stop by providing amenities and a safe place to secure their bike. Directional signage would direct visitors and recreational users between Rhododendron businesses and recreational areas.

**Improvement Description:** Install directional signs to alert users to the presence of the Mt. Hood Express stops, and a bicycle hub to better accommodate recreational bicycle rider use in Rhododendron. Recreational bicycle rider use is significant in Rhododendron due to the proximity to mountain biking trails.

**Benefits:** This would benefit recreational users, particularly bicycle riders, and transit users who are also often recreational users at this location.

**Public Feedback**

The public were generally supportive of this improvement and provided no suggestions for modification.



*R7 Multiuse Path between Lolo Pass Road and Rhododendron* Low Priority \$

**Potential Improvement Recommendation:** Further evaluate the feasibility of a multiuse path/bike route between Lolo Pass Road and Rhododendron.

US 26 is the only route that provides a continuous connection through The Villages at Mt. Hood. Presently, pedestrians and bicycle riders use US 26 to travel between Welches and Rhododendron, which can be uncomfortable to most pedestrians and bicycle riders due to the high volumes and high speed of traffic in adjacent lanes. A multiuse path offers increased comfort and protection.

**Improvement Description:** Construct a multiuse path along US 26 right-of-way that connects Lolo Pass Road to Rhododendron.

**Benefits:** An opportunity for pedestrians and bicycle riders to travel with separation from vehicles between Lolo Pass Road and the developed areas of Rhododendron.

| Public Feedback and Discussion   | Project Team Response  |
|--|--|
| <p>This improvement received strong support in the public workshop and from the PAC. Attendees recommended considering use of Road 19, which is currently unpaved and has deep ruts caused by the removal of culverts.</p> | <p>ODOT prefers the path to be set back from US 26; however, Road 19 is out-of-direction. Road 19 is owned by the Mt. Hood Forest Service, and would require further coordination and project evaluation. The project would provide a connection between the US 26 crossing at Salmon River Road, and points north and east.</p> |

## 3 Funding and Grant Opportunities

The recommended improvements do not have a funding source. A combination of agencies, such as ODOT, Clackamas County and BLM, or one agency may seek grant opportunities to implement improvement projects. Private entities alone or in partnership with agencies may also seek grant opportunities. Those improvement projects that are already programmed within the Transportation System Plan (TSP) and have funding are noted as part of the background description of each improvement.

### 3.1 Federal and State Grants

#### *Highway Trust Fund*

Revenues to the federal Highway Trust Fund (HTF) are comprised of motor vehicle fuel taxes, sales taxes on heavy trucks and trailers, tire taxes and annual heavy truck use fees. HTF funds are split into two accounts – the highway account and transit account. Funds are appropriated to the states annually based on allocation formulas in the adopted transportation authorization legislation.

Most federal grant monies are distributed by the Oregon Transportation Commission (OTC) through the Statewide Transportation Improvement Program (STIP). The application process for federal funds is described below. Funds are limited and the grants process is competitive.

#### *State Highway Fund*

State funds are distributed by the Oregon Transportation Commission (OTC). Revenues to the fund are comprised of fuel taxes, vehicle registration and title fees, driver's license fees and the truck weight-mile tax. State funds may be used for construction and maintenance of state and local highways, bridges and roadside rest areas. State law requires that a minimum of 1% of all highway funds be used for pedestrian and bicycle projects in any given fiscal year. However, cities and counties receiving state funds may "bank" their pedestrian and bicycle allotment for larger projects. Funds are limited and the grants process is competitive.

#### *Statewide Transportation Improvement Program (STIP)*

The STIP, the 4-year capital improvement program for transportation in Oregon, provides a schedule and identifies funding for projects throughout the state. Projects included are generally "regionally significant" and are prioritized by Metropolitan Planning Organizations and Area Commissions on Transportation (ACTs). All regionally significant state and local projects, as well as all federally-funded projects and programs, must be included in the STIP. About 80 percent of STIP projects use federal funds, most of which originate from federal programs. This includes the Surface Transportation Program (STP), Transportation Alternatives Program (TAP) and National Highway Performance Program (NHPP) funding for preservation and improvement of the National Highway System. In recent years Oregon has combined several types of available federal funds to create a statewide grant program called "Regional Flexible Funds." These competitive grants are awarded every two years towards bicycle, pedestrian, transit and Transportation Demand Management (TDM) projects proposed to be included in the STIP.

In previous STIPs, Oregon DOT organized available federal funds into six program categories: modernization, safety, preservation, bridge, operations and special programs. Starting with the 2015-2018 STIP, ODOT divided the funding pools into two broad categories: "Fix it" and "Enhance." "Fix it" projects are those that preserve and maintain the current transportation system; "Enhance" projects are those that enhance, expand or improve the transportation system. The main purpose behind this reorganization is to allow maximum flexibility to fund projects that reflect community and state values and needs, rather than those that fit best into prescriptive program definitions. More information on the STIP can be found at <http://www.oregon.gov/ODOT/TD/STIP/Pages/default.aspx>.

**Applicable “Fix-it” activities include:**

- Bridges (state-owned)
- High risk rural roads
- Illumination, signs and signals
- Safety

**Applicable “Enhance” activities include:**

- Bicycle and/or pedestrian facilities on or off the highway right-of-way
- Most projects previously eligible for Transportation Enhancement funds, now called Transportation Alternatives Program (TAP)
- Bike/Ped, Transit, TDM projects eligible for federal STP and CMAQ funds
- Safe Routes to School (infrastructure projects)

The application process for projects for the 2018-2021 STIP is virtually complete as of this writing, but future STIPs will continue to use this new funding arrangement. There is now one application for “Enhance” projects, with ODOT making a determination of which funding mechanism is most appropriate for individual projects. “Fix it” projects will be selected through a collaborative process between ODOT and ACTs. It should be noted that this reorganization of funding programs does not represent a fundamental change in the types of projects that will be funded through the STIP.

**Eligibility**

Only certain roadways are eligible to receive federal funds – generally those with federal functional classification as “major collector” and higher. However, STIP projects are also funded by other sources, meaning many streets in The Villages are likely eligible under either the “Fix it” or “Enhance” categories described above.

The Safe Routes to School Action Plan details specific programmatic actions as well as capital improvements that improve the walking and cycling environment around and between schools. Completing an Action Plan helps those projects near or adjacent to schools receive “Enhance” funding. More information about the Safe Routes to School program and Action Plans can be found at <http://oregonsaferoutes.org/>.

*Federal Lands Access Program Grants*

The Villages at Mt. Hood are uniquely qualified to obtain Federal Lands Access Program grants because of their proximity to federal lands (Mt. Hood National Forest) and proven track record of creating partnerships. The Mt. Hood Express transit service was expanded using a Federal Lands Access Program grant. The Federal Lands Access Program (Access Program) was established in 23 U.S.C. 204 to improve transportation facilities that provide access to, are adjacent to or are located within Federal lands. The Access Program supplements State and local resources for public roads, transit systems and other transportation facilities, with an emphasis on high-use recreation sites and economic generators.

Eligible activities are:

- Transportation planning, research, engineering, preventive maintenance, rehabilitation, restoration, construction and reconstruction of Federal lands access transportation facilities located on or adjacent to, or that provide access to, Federal land, and—
  - adjacent vehicular parking areas;
  - acquisition of necessary scenic easements and scenic or historic sites;
  - provisions for pedestrians and bicycles;
  - environmental mitigation in or adjacent to Federal land to improve public safety and reduce vehicle-caused wildlife mortality while maintaining habitat connectivity;

- construction and reconstruction of roadside rest areas, including sanitary and water facilities; and
- other appropriate public road facilities, as determined by the Secretary.
- Operation and maintenance of transit facilities.
- Any transportation project eligible for assistance under Title 23 of the United States Code that is within or adjacent to, or that provides access to, Federal land.

### 3.2 State Grants

#### *Recreational Trails Program (RTP)*

This federal funding program is administered by the Oregon Parks and Recreation Department. RTP funding is intended for recreational trail projects, and can be used for acquiring land and easement and building new trails. Grant funds pay up to 80% of project costs while project sponsors must match project costs by at least 20%. Funding varies greatly from year to year, with about \$1.3 million awarded state-wide in 2011 and \$2.1 million in 2010. Approximately \$1.5 million in state-wide funds were available in 2014. Funds are limited and the grants process is competitive. More information can be found at <http://www.oregon.gov/oprd/grants/Pages/trails.aspx>.

#### *ConnectOregon Program*

ConnectOregon provides grants and loans for non-highway transportation projects, backed by bonds on state lottery proceeds. \$43 million in bonds were authorized for the most recent biennium. The program funds rail, port/marine, aviation and transit projects. In addition, the Legislature made bicycle and pedestrian projects that are not eligible for State Highway Funds eligible to compete for ConnectOregon funding. Funds are limited and the grants process is competitive. More information on this program can be found at <http://www.oregon.gov/ODOT/TD/TP/pages/connector.aspx>.

#### *Oregon Immediate Opportunity Fund*

This fund supports economic development in Oregon through construction and improvements of streets and roads. Funds are discretionary and may only be used when other sources of financial support are unavailable or insufficient. The objectives of the Opportunity Fund are providing street or road improvements to influence the location, relocation or retention of a firm in Oregon, providing procedures and funds for the OTC to respond quickly to economic development opportunities, and providing criteria and procedures for the Oregon Economic and Community Development Department (OECD), other agencies, local government and the private sector to work with ODOT in providing road improvements needed to ensure specific job development opportunities for Oregon, or to revitalize business or industrial centers. More information can be found at <http://www.oregon.gov/ODOT/TD/TP/Plans/IOF.pdf>.

#### *Oregon Transportation Infrastructure Bank (OTIB)*

OTIB is a statewide revolving loan fund available for highway projects on major collectors or higher classifications and bicycle or pedestrian access projects on highway right-of-way. Applications are accepted at any time. More information can be found at <http://www.oregon.gov/ODOT/cs/fs/Pages/otib.aspx>.

#### *Transportation Alternatives-Oregon Bicycle and Pedestrian Program*

The Transportation Alternatives-Oregon Bicycle and Pedestrian Program is a combined funding grant supported by federal TAP funds and state Bicycle/Pedestrian grant funds, and administered by ODOT on a 2-year funding cycle. ODOT combined these formerly separate solicitations in 2012 as part of the STIP Enhance process. Projects and activities that are eligible for this program include bicycle/pedestrian

facilities, scenic beautification, historic preservation and environmental mitigation. For more information about these grants, see [http://www.oregon.gov/ODOT/TD/AT/Pages/TE\\_OBPAC.aspx](http://www.oregon.gov/ODOT/TD/AT/Pages/TE_OBPAC.aspx).

### *All Roads Transportation Safety Program (ARTS)*

ARTS is a new funding program beginning in 2017 to reduce the instance of fatalities and serious injuries on all public roads statewide. ARTS grant funds are paid by Federal Highway Safety Improvement Program (HSIP) funds and will be awarded by ODOT on a 4-year cycle. At least half of the funding will be required to be spent on safety improvements to systemically reduce risks along a roadway or corridor. The ARTS program consists of three areas for systemic improvements: Roadway Departure, Intersection, and Pedestrian and Bicycle. Some funding may also be used on safety mitigation measures at locations where there are documented crash risks.

A total of \$166 million is available statewide for the program during this time period, with regional allocations based on the proportion of fatalities and serious injuries that occurred within the ODOT region during the previous five years. A local match of 7.78% will be required for projects that spend HSIP funds. For more information about these grants, see <http://www.oregon.gov/ODOT/HWY/TRAFFIC-ROADWAY/Pages/ARTS.aspx>.

### *3.3 Tourism Grants*

#### *Cycle Oregon Community and Signature Grants*

Cycle Oregon directs any proceeds from its events to the Cycle Oregon Fund to support projects and programs throughout Oregon in three key areas:

- Community projects
- Bicycle tourism and safety
- Environmental conservation and historic preservation

#### **Eligibility**

- Applicants must be a government agency or have 501(c)(3) tax-exempt status or have a qualified fiscal sponsor (i.e., a sponsoring and eligible tax-exempt organization).
- Applicants must have submitted required evaluation reports for all prior grants from the Oregon Community Foundation;
- The request must be at least \$500;
- Projects must be scheduled for the current grant cycle year;
- Only complete proposals will be considered.

Cycle Oregon's signature grants are determined by Cycle Oregon's board of directors. Signature grants have provided important funding to catalyze or conclude an important project that has statewide impact. For more information about these grants, see <http://cycleoregon.com/cycle-oregon-fund/granting-procedures/>.

#### *Travel Oregon Matching Grants*

This program makes awards available to eligible applicants for projects that contribute to the development and improvement of local communities throughout the state, to support Travel Oregon's mission of 'a better life for Oregonians through strong, sustainable local economies'.

Communities, visitor associations and tourism-related organizations are invited to apply for funding. An applicant may apply for a grant of \$2,500–100,000 per project and may apply for multiple projects during a cycle; however, each project requires its own application. Applicants must match the grant amount awarded, dollar for dollar. Up to 50% of the match may be in-kind.

#### **Eligibility**

- Applicants must have a Federal Tax Identification Number
- Projects should target the development of tourism infrastructure or strategic collaborative marketing initiatives that align with local, regional or statewide efforts and increase the likelihood of visitation from outside the local area
- Partnerships with local, regional and statewide tourism organizations, economic development, government organizations and/or tourism-related businesses are encouraged

For more information, see <http://industry.traveloregon.com/industry-resources/matching-grants-program/oregon-tourism-commission-matching-grants-program/eligibility/>

### *Clackamas County Tourism & Cultural Affairs Grants*

Tourism Development Grants are made possible through Transient Room Tax Collections within Clackamas County. Clackamas County Tourism & Cultural Affairs strives to increase overnight stays and encourage visitors to linger longer in Clackamas County by serving as the primary destination resource for trip planning resulting in destination visits and by working in partnership to develop and enhance local tourism assets.

#### **Project Objectives and Eligibility**

Funding is intended for infrastructure and capital projects that coincide with CCTCA's strategic priorities. Applications should reflect tourism best practices, innovation, collaboration and business ideas with strong commercial potential for the local economy. Grant recipients should be able to demonstrate enhanced experiences for visitors to Clackamas County through projects that build on the area's unique strengths and contribute to setting the region at the forefront of a competitive marketplace.

#### **Funding Strategic Priorities**

- Create and/or Enhance Tourism Assets
- Enhance Marketing and Promotion Efforts through New Technologies and Mediums
- Build and Strengthen Partnerships and Coalitions to Increase Collaboration
- Build and Strengthen Public and Private Partnerships
- Develop New Tourism Products, Markets and Packages
- Focus on at least one of the Three Pillars of Clackamas County Tourism:
  - Outdoor Recreation
  - Agri-tourism
  - Cultural/Heritage Tourism

#### **Budget**

\$200,000 in total funds was available for in FY 2015-16. The minimum request considered per project is \$5,000 with a maximum of \$100,000 awarded for a single grant. A maximum of one grant project per organization per cycle will be awarded. For more information, see [https://www.mthoodterritory.com/Scripts/tiny\\_mce/jscripts/tiny\\_mce/plugins/filemanager/files/Document\\_Center/devgrantover1516.pdf](https://www.mthoodterritory.com/Scripts/tiny_mce/jscripts/tiny_mce/plugins/filemanager/files/Document_Center/devgrantover1516.pdf)



**PLANNING COMMISSION  
DRAFT MINUTES**

November 14, 2016  
6:30 p.m., DSB Auditorium

Commissioners present: Mark Meek, Brian Pasko, Michael Wagner, John Drentlaw, Gail Holmes, Tom Peterson.

Commissioners absent: John Gray, Mark Fitz, Michael Wilson.

Staff present: Karen Buehrig, Lori Mastrantonio, Martha Fritzie, Darcy Renhard.

1. Commission Chair Meek called the meeting to order at 6:40 p.m.
2. This public hearing is for consideration of ZDO-260, a Comprehensive Plan amendment related to the Mt. Hood Pedestrian/Bicycle Plan, which is a part of the Active Transportation Plan (ATP).

Lori Mastrantonio provided some background information on the Ped/Bike Plan, which serves the communities of Brightwood, Welches, Wemme, Zig Zag, and Rhododendron, collectively known as the Villages at Mt. Hood. Currently there is a problem with a lack of safe bicycle and pedestrian routes in the Villages area. The ODOT multi-modal plan findings show that there is a need for better access and improved safety in this area. Clackamas County received a State transportation growth management grant to study these needs. There is strong community support for this project to improve both visitor and resident access to area destinations, to increase tourism, and to provide better choices and connections through the Mt. Hood Villages area. It also provides an opportunity to come up with a Safe Routes to School plan (SRTS), as well as aligning with the County TSP and ATP. The main objectives were to identify bicycle and pedestrian needs in the area and to develop a SRTS plan.

The public outreach component to this project was significant. Staff held walking tours, performed stakeholder interviews, maintained an interactive website and a social website, held open houses, and worked with a technical advisory committee (TAC) and a public advisory committee (PAC).

Staff is recommending shoulder widening on strategic roads, adding queues for safe crossing in areas (landscaping, sidewalks, crosswalks, etc.). There is also a need for better signage to indicate lower speed limits through the communities along this route. Many of the improvements address safety issues for kids walking to school. The proposed changes are described in detail within the staff report. Proposed changes would affect the Comprehensive Plan Chapters 5 and 10 and Appendix B. Staff finds that this proposal meets County criteria and is asking that the Planning Commission recommend approval of ZDO-260 as proposed in Attachments 1-6 of the staff report.

Commissioner Wagner asked if staff was proposing to reduce the speed limit to 45 mph. Lori answered that the speed limits in the community areas are between 40 and 45, but there has been talk of lowering it even further. That would have to be a coordinated effort between the County and ODOT. Commissioner Pasko asked how the priority rankings are determined. Karen Buehrig explained that the high priority projects are added to Tier 1 of the TSP, medium priority projects are added to Tier 2, and lower priority project go on Tier 3. These projects were determined to be high priority by both staff and by the community.

There were no other government entities who wished to provide testimony.

**Steve Graeper (P.O. Box 33, Rhododendron)** – Mr. Graeper is the president of the Rhododendron CPO. He thanked staff for the work they did in allowing the communities to provide their input. As things are right now, there is some infill available, but new structures won't come unless there is a good reason for them to. Rhododendron in particular is taking this opportunity to ride the coattails of County staff and the bikeway plan. Rhododendron was, at one time, a destination locations and a bustling community. Over the years, that has gone away to some degree. The CPO is working with businesses in Rhododendron to increase economic opportunities in the area, and making the area somewhere where infill would be desirable. The community would like to develop a comprehensive plan with ODOT. To have the County put in some improvements so that it is safer for pedestrians to cross the highway increases the appeal. The local business owners are fully behind putting in safety barriers, beautification measures, and ways to slow traffic down on Highway 26. If approved, the amendments in ZDO-260

would go a long way to improving safety in the community, and would also increase the appeal for mountain bikers and hikers.

**Michelle Lamoreaux (PO Box 167, Rhododendron)** – Ms. Lamoreaux is a lifelong resident and agrees with everything that Mr. Graeper just said. Nobody follows the posted speed limits, they just race through the area.

There was no additional public testimony. Chair Meek closed the public portion of the hearing.

Commissioner Drentlaw asked for clarification on what it means when it says “support” in Chapter 10. Lori explained that right now we are looking at the next application period for grant funding on projects (financial support). The community members and business owners are very supportive of all of the projects in these proposed amendments. The Bureau of Land Management is also in favor of these ideas. We look at projects that are going to have community support and that match that grant funding that we receive. Commissioner Pasko would like to see Arrah Wannah moved to a higher priority list. Karen answered that ultimately what is in the Comprehensive Plan makes things a higher priority.

Commissioner Drentlaw moved to recommend approval of ZDO-260 as submitted by staff. Commissioner Peterson seconded the motion. *Ayes=6; Nays=0. Motion passes.*

2. Dave Queener from the Development Agency presented an update to the Urban Renewal Plan. Specifically, he discussed the Clackamas Town Center Urban Renewal Plan. In 2013, the County stopped collecting urban renewal funds, so now we are looking at what the best use of the remaining funds would be. The proposed change is to expand and make improvements to Mt. Scott Elementary School. Because this is a substantial amendment (over \$500,000), it must go through the Planning Commission process. This amendment would not increase or impact the taxing in any way. It conforms to the Comprehensive Plan.

Commissioner Peterson asked where the funding came from when the school was originally constructed. Dave replied that it had been funded by the school district and that there is reserved funding in the urban renewal fund that has been set aside for this. The funding must be used within the boundaries of the district, and cannot be used for other projects outside of the urban renewal zone. Commissioner Pasko moved recommend that the Planning Commission made a finding that this project should be approved. Commissioner Wagner seconded the motion. *Ayes=6; Nays=0.*

3. Commissioner Pasko moved to approve the minutes from the October 10<sup>th</sup> meeting, with the correction that Commissioner Wagner was absent. Commissioner Peterson seconded the motion. *Ayes=4; Nays=0; Abstain=2 (Wagner, Drentlaw).*
4. Commissioner Wagner nominated Commissioner Pasko as the new Chair. Commissioner Drentlaw indicated that he is also interested in the Chair position. Commissioner Peterson said that he would consider another term if nobody else was interested. The Commission decided to postpone discussion and voting until December 12<sup>th</sup>. Staff will send an email to encourage all PC members to be present so that everyone can participate in the vote. Mike McCallister is also adding staffing levels and succession planning to the agenda for December 12<sup>th</sup>.
5. Our next meeting will be on December 12th.

There being no further business, the meeting was adjourned at 8:38 p.m.

**EXHIBIT LIST**  
**ZDO-260;**  
**Villages at Mt. Hood Pedestrian & Bikeway Implementation Plan**

| <i>Ex. No.</i> | <i>Date Received</i> | <i>Author or source</i>                                      | <i>Subject &amp; Date of document</i>   |
|----------------|----------------------|--|---|
| 1              | 10/10/2016           | Staff  | 10/10/16; Public/DLCD/newspaper notices   |
| 2              | 9/10/2016            | Michelle Lamoreaux, resident & Rhododendron CPO board member | 7/10/16 letter; Supports Plan, specifically addresses planned improvements in Rhododendron  |
| 3              | 11/3/2016            | Barlow Trail Association                                     | 11/1/16 letter; Disagrees with the prioritization of projects, suggests different projects be considered the highest priority               |
| 4              | 11/14/2016           | Rhododendron CPO   | 11/10/16 letter: Supports Plan, notes that the Plan addresses a number of concerns about pedestrian safety in the community of Rhododendron |
| 5              |                      |  |   |
| 6              |                      |  |   |
| 7              |                      |  |   |
| 8              |                      |  |   |
| 9              |                      |  |   |
| 10             |                      |  |   |
| 11             |                      |  |   |
| 12             |                      |  |   |
| 13             |                      |  |   |
| 14             |                      |  |   |
| 15             |                      |  |   |

\* Exhibits received during hearing



MIKE McCALLISTER  
PLANNING AND ZONING DIRECTOR

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING  
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

## MEMORANDUM

TO: Community Planning Organizations, Hamlets, Villages and Other Interested Parties

FROM: Lori Mastrantonio, Senior Planner

DATE: October 10, 2016

SUBJECT: **File ZDO-260**; Proposed Comprehensive Plan (Chapters 5 and 10) amendments: *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*

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**Clackamas County is proposing amendments to the Clackamas County Comprehensive Plan (Plan). Because this amendment may affect your community or area of interest, we want to give you and your organization the opportunity to review and comment on the proposed changes before or at public hearings scheduled in front of the Planning Commission on November 14, 2016 and in front of the Board of County Commissioners on December 7, 2016.**

Planning File #ZDO-260 would amend the Comprehensive Plan by adding the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* to Appendix B and updating Table 5-3a: 20-Year Capital Projects, Table 5-3b: Preferred Projects, Table 5-3c: Long Term Capital Projects, Table 5-3d: Regional Capital Projects, and Map 5-11b: Capital Improvement Plan East County. Planning File #ZDO-260 would also amend Chapter 10 of the Comprehensive Plan by updating the Mount Hood Community Plan. You are encouraged to review the draft *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* document and the associated draft Comprehensive Plan amendments, posted at <http://www.clackamas.us/planning/zdoproposed.html>.

In fall of 2014, Clackamas County received a Transportation and Growth Management (TGM) grant from the Oregon Department of Transportation (ODOT) to prepare a plan focusing on pedestrian and bicycle needs in the Villages at Mt. Hood. Construction of the recommended improvements described in the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* will provide safe, active transportation connections in the communities of Brightwood, Welches/Wemme, Zig Zag and Rhododendron. The main objectives of the plan include the following:

- Identify bicycle and pedestrian needs within the Villages at Mt. Hood

- Develop a Safe Routes to School Plan for Welches Elementary and Middle School
- Identify potential locations for and the feasibility of pedestrian crossings along US 26
- Evaluate the feasibility and location of a multi-use path in the area

The current pedestrian and bicycle network within the Villages at Mt. Hood is poorly connected. People walk on shoulders that disappear into ditches or are poorly lit. Many use dirt footpaths worn along roads over time. Community members indicated that safe paths, crossings and connections to transit were high priority projects.

The *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* includes recommended pedestrian and bikeway improvements within the Villages. Some of the major improvement projects include:

- Multi-use path connecting key destinations along US 26
- Strategic/targeted shoulder widening
- Undercrossings, gateway and transit directional signage
- Sidewalks
- Improvements to existing crossings

Amendments proposed in ZDO-260: the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* include:

- **Comprehensive Plan Appendices.**  
Appendix B of the Clackamas County Comprehensive Plan contains a list of supporting documents and publications. This amendment package proposes to add the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* to Appendix B of the Comprehensive Plan.
- **Comprehensive Plan Chapter 5.**  
Chapter 5 of the Comprehensive Plan contains the County’s Transportation System Plan (TSP). This amendment package proposes to add and/or amend projects in Table 5-3a: 20-Year Capital Projects, Table 5-3b: Preferred Projects, Table 5-3c: Long Term Capital Projects, Table 5-3d: Regional Capital Projects, and Map 5-11b: Capital Improvement Plan East County.
- **Comprehensive Plan Chapter 10.**  
Chapter 10 of the Comprehensive Plan includes community plans and design plans. This amendment proposes an update to the Mount Hood Community Plan

with appropriate policies to guide development in consideration of the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*.

The Planning Commission public hearing will begin at 6:30 p.m., Monday, November 14, 2016, at the Development Services Building Auditorium, Rm. 115, 150 Beaver Creek Rd., Oregon City, to consider these amendments. You are invited to attend the hearing and present oral comments to the Planning Commission. Typically, written correspondence received at least one week prior to the hearing will be included in the Planning Commission packets. Written testimony received after that time will be emailed to the Planning Commission, or provided to the Planning Commission on the evening of the hearing.

The Board of County Commissioners will consider the Planning Commission's recommendations on the proposed amendments beginning at 9:30 a.m., Wednesday, December 7, 2016, at the Public Services Building, Board of County Commissioners Hearing Room, 2051 Kaen Rd., Oregon City. Once again, you are invited to attend the hearing and present oral comments to the Commissioners. The Board will consider all written testimony submitted to the Planning Commission and will accept additional written testimony up to, and on the day of, the hearing.

For additional information regarding these proposed amendments, please contact Lori Mastrantonio, Senior Planner, at (503) 742-4511 or [lorim@clackamas.us](mailto:lorim@clackamas.us). The draft amendments are also available for review on the county web site at <http://www.clackamas.us/planning/zdoproposed.html>.



# NOTICE OF A PROPOSED CHANGE TO A COMPREHENSIVE PLAN OR LAND USE REGULATION

|                     |
|---------------------|
| <b>FOR DLCD USE</b> |
| File No.:           |
| Received:           |

Local governments are required to send notice of a proposed change to a comprehensive plan or land use regulation **at least 35 days before the first evidentiary hearing.** (See [OAR 660-018-0020](#) for a post-acknowledgment plan amendment and [OAR 660-025-0080](#) for a periodic review task). The rules require that the notice include a completed copy of this form.

Jurisdiction: **Clackamas County**

Local file no.: **ZDO-260**

Please check the type of change that best describes the proposal:

- Urban growth boundary (UGB) amendment** including more than 50 acres, by a city with a population greater than 2,500 within the UGB
- UGB amendment** over 100 acres by a metropolitan service district
- Urban reserve designation**, or amendment including over 50 acres, by a city with a population greater than 2,500 within the UGB
- Periodic review task** – Task no.:
- Any other change** to a comp plan or land use regulation (*e.g.*, a post-acknowledgement plan amendment)

Local contact person (name and title): Lori Mastrantonio

Phone: 503 742-4511 E-mail: lorim@clackamas

Street address: 150 Beaver Creek Road City: Oregon City Zip: 97045-

**Briefly summarize the proposal** in plain language. Please identify all chapters of the plan or code proposed for amendment (maximum 500 characters):

**Planning File #ZDO-260 would amend the Comprehensive Plan by adding the Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan to Appendix B and updating the list of needed transportation projects in the County's 20-Year Capital Improvement Plan (Tables 5-3a-d and Map 5-11b). It would also update the Mt. Hood Community Plan in Chapter 10 with appropriate policies that guide development in consideration of the Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan.**

Date of first evidentiary hearing: 11/14/2016

Date of final hearing: 12/07/16

This is a revision to a previously submitted notice. Date of previous submittal:

Check all that apply:

- Comprehensive Plan text amendment(s)
- Comprehensive Plan map amendment(s) – Change from \_\_\_\_\_ to \_\_\_\_\_  
Change from \_\_\_\_\_ to \_\_\_\_\_
- New or amended land use regulation
- Zoning map amendment(s) – Change from \_\_\_\_\_ to \_\_\_\_\_  
Change from \_\_\_\_\_ to \_\_\_\_\_
- An exception to a statewide planning goal is proposed – goal(s) subject to exception:
- Acres affected by map amendment:

Location of property, if applicable (site address and T, R, Sec., TL):

**ZDO-260  
EXHIBIT 1  
Page 4 of 8**

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

# NOTICE OF A PROPOSED CHANGE – SUBMITTAL INSTRUCTIONS

1. Except under certain circumstances,<sup>1</sup> proposed amendments must be submitted to DLCD's Salem office at least 35 days before the first evidentiary hearing on the proposal. The 35 days begins the day of the postmark if mailed, or, if submitted by means other than US Postal Service, on the day DLCD receives the proposal in its Salem office. **DLCD will not confirm receipt of a Notice of a Proposed Change unless requested.**

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

3. **Hard-copy submittal:** When submitting a Notice of a Proposed Change on paper, via the US Postal Service or hand-delivery, print a completed copy of this Form 1 on light green paper if available. Submit **one copy** of the proposed change, including this form and other required materials to:

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

This form is available here:

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

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

Submittals may also be uploaded to DLCD's FTP site at [http://www.oregon.gov/LCD/Pages/papa\\_submittal.aspx](http://www.oregon.gov/LCD/Pages/papa_submittal.aspx).

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

Include this Form 1 as the first pages of a combined file or as a separate file.

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

6. **Text:** Submittal of a Notice of a Proposed Change for a comprehensive plan or land use regulation text amendment must include the text of the amendment and any other information necessary to advise DLCD of the effect of the proposal. "Text" means the specific language proposed to be amended, added to, or deleted from the currently acknowledged plan or land use regulation. A general description of the proposal is not adequate. The notice may be deemed incomplete without this documentation.

7. **Staff report:** Attach any staff report on the proposed change or information that describes when the staff report will be available and how a copy may be obtained.

8. **Local hearing notice:** Attach the notice or a draft of the notice required under ORS 197.763 regarding a quasi-judicial land use hearing, if applicable.

9. **Maps:** Submittal of a proposed map amendment must include a map of the affected area showing existing and proposed plan and zone designations. A paper map must be legible if printed on 8½" x 11" paper. Include text regarding background, justification for the change, and the application if there was one accepted by the local government. A map by itself is not a complete notice.

10. **Goal exceptions:** Submittal of proposed amendments that involve a goal exception must include the proposed language of the exception.

<sup>1</sup> 660-018-0022 provides:

(1) When a local government determines that no goals, commission rules, or land use statutes apply to a particular proposed change, the notice of a proposed change is not required [a notice of adoption is still required, however]; and

(2) If a local government determines that emergency circumstances beyond the control of the local government require expedited review such that the local government cannot submit the proposed change consistent with the 35-day deadline, the local government may submit the proposed change to the department as soon as practicable. The submittal must include a description of the emergency circumstances.

<http://www.oregon.gov/LCD/Pages/forms.aspx>

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

**Notice checklist. Include all that apply:**

- Completed Form 1
- The text of the amendment (e.g., plan or code text changes, exception findings, justification for change)
- Any staff report on the proposed change or information that describes when the staff report will be available and how a copy may be obtained
- A map of the affected area showing existing and proposed plan and zone designations
- A copy of the notice or a draft of the notice regarding a quasi-judicial land use hearing, if applicable
- Any other information necessary to advise DLCD of the effect of the proposal

**NOTICE OF PUBLIC HEARINGS**  
**SCHEDULED ON PROPOSED COMPREHENSIVE PLAN AMENDMENT –**  
**Planning File # ZDO-260: The Villages at Mt. Hood Pedestrian and Bikeway**  
**Implementation Plan**

The Clackamas County Planning Commission and Board of County Commissioners will hold public hearings to consider proposed amendments to the County Comprehensive Plan. Planning File #ZDO-260 would amend the Comprehensive Plan by adding the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan* to Appendix B and updating the list of needed transportation projects in the County's 20-Year Capital Improvement Plan (Tables 5-3a-d and Map 5-11b). Planning file #ZDO-260 would also update the Mount Hood Community Plan in Chapter 10 of the Comprehensive Plan with appropriate policies that guide development in consideration of the *Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan*.

The amendments are available at <http://www.clackamas.us/planning/zdoproposed.html>. The public may review and comment on the proposed amendments before and during the public hearings.

**Planning Commission Public Hearing**

Monday, November 14, 2016, 6:30 p.m.

Development Services Building Auditorium, Rm. 115, 150 Beaver Creek Rd.,  
Oregon City

**Board of Commissioners Public Hearing**

Wednesday, December 7, 2016, 9:30 a.m.

Board Hearing Room, Public Services Building, 2051 Kaen Rd., Oregon City

For more information: Lori Mastrantonio, 503-742-4511 or [lorim@clackamas.us](mailto:lorim@clackamas.us)

July 10, 2016

To Whom it May Concern,

My name is Michelle Lamoreaux and I have lived full time in Rhododendron since 1971. My family has owned property with a homesteaders log cabin since approximately 1926.

I write this letter as both a long time, private resident and also a representative for the Rhododendron CPO for which I am an active board member. It is in this role that I attended meetings in the Hoodland area for the Villages at Mt. Hood Pedestrian and Bike way Implementation Plan.

One of the main elements of the Villages at Mt. Hood plan includes identifying locations for pedestrian crossings of US 26 within the project area which includes the Rhododendron (Rhody) community. The pedestrian crossing in Rhody is a high priority project in the Plan according to Lori Mastrantonio and Sumi Malik.

As the Rhododendron CPO, we maintain bimonthly meetings and have committed members functioning as President, Vice President/Treasurer, Secretary, and Board members. Traffic has been an ongoing concern for many years since US 26 runs directly through the community and serves a large recreational area. There are businesses and homes or cabins on both sides of 26 with no designated walkway anywhere.

At multiple meetings including the Project Advisory Committee meetings, Technical Advisory Committee meetings and two Open House meetings this pedestrian crossing was ranked with high priority. A pedestrian crossing in this area could also involve improvements in conjunction with other enhancements to a pedestrian environment such as a "Welcome to Rhododendron" gateway sign, sidewalks, landscaping, or lighting.

The CPO established and maintains a Community Garden at the west entrance to Rhody. It has been tended to for approximately 6 to 8 years and attempts to alert drivers that they are entering a community and need to show respect by slowing their speed. Members also support local businesses and engage in regular roadside garbage pickups.

There are two transit stops in the Rhody area, the Mt. Hood Express and the Villages at Mt. Hood Shuttle. A crosswalk in the vicinity of these two stops in conjunction with businesses and homes on the opposite side of US 26 is a high priority project in this plan.

Your attention and support for this plan is of the utmost concern. The safety of residents and travelers passing through is very important to us,

Michelle Lamoreaux and Rhododendron CPO members Thank you.



# Barlow Trail Association

P.O. Box 360  
Rhododendron, OR, 97049  
503-622-6429

*Creating Community Trails tying together the  
Villages at Mt. Hood*

To: Lori Mastrantonio  
From: Susan Corwin, Executive Director  
Re: Villages at Mt. Hood Ped/Bike draft plan of June 2016

November 1, 2016

CC: Planning Commission for Public Hearing 2016/11/14  
CC: BCC Review 2015-12-07

Our review of the draft plan indicates:  
the different parts of the elephant really do fit together.

## **Bottom line: - Limited Resources**

We have given input that this is rural, low population density area and not an urban area, but the prioritization seems to focus on low value projects.

There isn't a lot of money to work this far out in the rural area, even along an "interstate". We suggest the Planning Commission and the BCC act expediently.

## **Poor prioritization**

We are a bit disappointed that the multiple aspects of evaluation were less than rigorously viewed, resulting in "silly" decisions by people with very limited knowledge.

- A. attractive items of low value or high cost have been latched upon
- B. the rural, low population density of the area is ignored
- C. "urban" facilities are proposed to be implemented on the equivalent of an Interstate highway
- D. the most useful but not flashy items are given "short shift".

## **Important projects**

We suggest that, evaluating on what "will actually be heavily used" criteria, the highest priority items are:

1. W1S and W1N pedestrian paths along US 26 from Zigzag to Arrah Wanna, both sides  
=> ties together the business areas and the hotel housing
2. W6 and W5 - widening central area roads with shoulder/bike lane  
=> this is where there actually is some population density.

which the we have gotten on the CIP back in 2005

We note that the project R7 is actually "done": it is called Road 19 to anyone with local knowledge.

## **Silly, won't happen projects at top of list!**

The first three items on the ZBB, No. B2, B6, and B7 are just plan silly.

- B2 - Barlow Trail Road: the ROW isn't wide enough and in the land slide area and the Mt. Hood Rock Products driveway areas, it won't happen

- B6 - Brightwood loop - a no use area, doesn't go anywhere project and demanding the replacement of the bridge over the Sandy is not optimal.
- B7 - a US 26 under bridge splash area that doesn't start anywhere and doesn't go anywhere

While these may be "interesting", they are pretty worthless and not useful or likely to happen and, somehow, were put up as the "top three" projects!

### **Pedestrian Projects on an "Interstate"**

There are a number of projects that proposed "pedestrian improvements" that propose to obstruct a freight expressway.

=> Projects W15, W4, W7, R2, W2, W3, and W16 all propose to have pedestrians "step out in traffic. We view that the "collateral damage" of such projects is to have pedestrians feel they "have the right of way" as they step in front of a tractor-trailer speeding to Bend with the pedestrian being the loser.

It is our view that the few pedestrians who wish to cross US 26 are better if they feel the traffic is "aimed at them" and they must dodge/be clever/safe about crossing.

=> as we noted to the Rhody CPO,

- a pedestrian overpass is very expensive (ADA) and would not be used very much
- an underpass is dangerous, especially after dark for women
- a crossing light is likely to get someone hit

and we suggested a summer center "safety island" so pedestrians can dodge across one traffic lane at a time and it can be removed for snow issues in the winter

### **Local conditions preclude**

Some of the project ignore local conditions that make them unacceptable.

W10, widening Salmon River Road ignores the landslide area(!), B1 - Marmot road narrow ROW, W14 - Lolo Pass road - narrow ROW and the Sandy River(!), etc

### **Urban centric - not appropriate/useful for rural area**

The project list contains a number of "urban bike signage" and "urban bike facilities". While there are very attractive for an "urban" setting, in the remote, rural area, they are a very poor use of investment. W13, W12, W11, R5, B8, B5, B4, and B3.

### **Don't bully Rhody**

We note that Rhody (Rhododendron) is a very small isolated area and having ODOT close driveways - R1, put up signs - R6, R3, etc would not work very well.



# Rhododendron CPO

*Only through participation can we effect change*

November 10, 2016

Clackamas County Planning Commission  
Development Services Building  
150 Beaver Creek Road  
Oregon City, OR 97045

Attention: Planning Commission Board  
c/o Darcy Renhard, [drenhard@clackamas.us](mailto:drenhard@clackamas.us)

Regarding: ZDO-260 – **The Villages at Mt. Hood Pedestrian and Bikeway Implementation Plan**

Dear Planning Commission Board Members,

As President of the Rhododendron Community Planning Organization (RCPO), I am writing this letter in support of THE VILLAGES AT MT. HOOD PEDESTRIAN AND BIKEWAY IMPLEMENTATION PLAN. The community of Rhododendron is very concerned with the safety of both bikers and pedestrians that frequent our community and would like to enter, for the record, the CPO's comments of support for the Planning Commission to consider.

Since August 2015, a project advisory committee made up of Clackamas County planners, staff, stakeholders, and community members, has worked tirelessly to listen to, note, and document, the concerns of the citizens who reside within the boundaries of The Villages at Mt. Hood. As a result, the combined efforts of this committee resulted in the draft document, THE VILLAGES AT MT. HOOD PEDESTRIAN AND BIKEWAY IMPLEMENTATION PLAN. Included in this document are the proposed amendments to ZDO-260, which are being brought forward for your consideration. The Implementation Plan and accompanying ZDO amendments address many of the concerns voiced by, not only residents of the Villages as a whole, but also residents of the Rhododendron community.

Pedestrian safety, while crossing US Highway 26 in Rhododendron, is of utmost importance to our citizens. Speed reduction, sidewalks, and identifiable access and egress to the many businesses that line both sides of Highway 26 as it traverses through Rhododendron, are all concerns that the proposed ZDO Amendments address. The safety of pedestrians and bikers alike should be of utmost concern as you convene to consider the proposed amendments.

The Rhododendron CPO highly recommends the Planning Commission carefully consider and then adopt the proposed amendments contained within THE VILLAGES AT MT. HOOD PEDESTRIAN AND BIKEWAY IMPLEMENTATION PLAN.

Thank you for your consideration.

Sincerely,

*Steven Graeper*

Steven Graeper, President