CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Planning Session

Presentation Date: 11-6-2013 Approx. Start Time: 9:00 a.m. Approx. Length: 2.5 hours

Presentation Title: Transportation System Plan – Outcomes from Planning Commission

Department: Department of Transportation & Development

Presenters: Mike Bezner, Engineering Manager; Karen Buehrig, Transportation Planning

Supervisor; Larry Conrad, Principal Transportation Planner,

Other Invitees: Barbara Cartmill, Acting Director; Thomas Peterson, Planning Commission Chair

BACKGROUND

On November 4th, the Planning Commission is expected to make a recommendation on ZDO-246 – Transportation System Plan. The purpose of this Planning Session is to provide the BCC with an overview of the staff recommendation related to ZDO-246 and discuss the outcomes of the Planning Commission meeting. The goal is to share information about the proposed changes to the Comprehensive Plan included in ZDO-246 as well as focus on key issues that emerged during the Planning Commission process. Planning Commission Chair Peterson has been invited to attend this meeting.

NOVEMBER 6th PLANNING SESSION AGENDA

- Overview of proposed amendments to Comprehensive Plan and ZDO
- Highlighted Projects
- Planning Commission Recommendation
- Discussion
- Next Steps

ATTACHMENTS:

- 1. Staff Report submitted to Planning Commission for ZDO-246
- 2. Proposed Comprehensive Plan Chapter 5 language
- 3. Chapter 5 Policy Change Tracking Table
- Capital Improvement Plan Project lists Table 5-3a-d
- 5. Capital Improvement Plan Project Maps
- 6. Link to proposed amendments- http://www.clackamas.us/planning/zdoproposed.html

SUBMITTED BY:

Division Director/Head Approval	111	
Department Director/Head Approval	.B. Carfinil	10-30-13
County Administrator Approval	1	

For information on this issue or copies of attachments, please contact Diedre Landon @ Karenb@@co.clackamas.or.us or 503-742-4683.





DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

DEVELOPMENT SERVICES BUILDING
150 BEAVERCREEK ROAD OREGON CITY, OR 97045

STAFF REPORT

To: Clackamas County Planning Commission

From: Karen Buehrig, Manager; Transportation Planning Division

Larry Conrad, Principal Planner; Transportation Planning Division

Martha Fritzie, Senior Planner; Planning & Zoning Division

Date: October 21, 2013

RE: File ZDO-246; Proposed Comprehensive Plan and Zoning &

Development Ordinance (ZDO) Amendments: Transportation System

Plan Update

PROPOSAL

Planning File ZDO-246 includes a proposed legislative amendment to the County's Comprehensive Plan and Zoning & Development Ordinance (ZDO) for consideration by the County Planning Commission (PC) and Board of County Commissioners (BCC) which would adopt an updated Transportation System Plan (TSP) for the County.

A Transportation System Plan (TSP) is a series of identified capital projects, programs and policies that guide transportation-related decisions and investments and identify the transportation needs and priorities within a jurisdiction. This proposal would adopt major revisions to the County's TSP, including a revised list of 20-year needed capital improvements for the transportation system in the unincorporated areas of the County. It would also adopt policy and regulatory changes to reflect current transportation needs and conform to recent state & regional regulatory changes.

Comprehensive Plan: The most substantial Comprehensive Plan text and map amendments are proposed to Chapter 5, which is the County's Transportation System Plan (TSP). Less substantive revisions are proposed to Chapter 10 (Community & Design Plans), with minor conforming amendments to Chapter 4 (Land Use) and Map III-2 (Scenic & Distinctive Resource Areas).

ZDO-246: Transportation System Plan

Draft: October 21, 2013

The proposed Comprehensive Plan amendments include:

• A complete reformat and substantial rewrite of Chapter 5 of the Comprehensive Plan. Each policy in Chapter 5 was scrutinized by staff and several advisory groups. Many existing policies were revised, a few deleted, and 81 new policies were created. New policies generally reflect a greater focus on the different transportation needs of the urban and rural areas; a greater emphasis on safety; and include policies related to equity, health and sustainability. As noted in the table below, approximately half the policies in the proposal were existing that did not change, or received only minor edits for clarity, readability or consistency.

Policy Status	Number of Policies (% of Total)	Major Reasons
New	81 <i>(41%)</i>	 Differing urban and rural needs Greater emphasis on safety and economic development (i.e. freight-supportive) Policies related to equity, health and sustainability Support TSP Vision and Goals
Existing, no change	5 <i>(</i> 2% <i>)</i>	No change needed
Existing, minor edits	45 (23%)	Clarification, readability and consistency
Existing, major/substantive edits	53 (27%)	 Change in operating (performance) standards Other regulatory changes Existing policy not fully compliant with state or regional regulations Support TSP Vision and Goals
Existing, removed	14 (7%)	 Eliminating redundancy Not implementable Too specific for Comp Plan – moved to ZDO or Roadway Standards

- A change in roadway operating standards from the current Level of Service (LOS) calculation to a Volume-to-Capacity (V/C) calculation. This change is proposed in response to regulatory changes on the state and regional level and would affect how impacts of individual development proposals are analyzed, as well as how the operation of the transportation system as a whole is analyzed.
- An update of the County's Capital Improvement Plan (CIP), which identifies
 the major improvements that are needed to the County's transportation
 system over the next 20 years. The project recommendations were
 established through extensive public outreach and discussions with the Policy

Advisory Committee (PAC). The CIP is prioritized into three tiers 1) 20-Year Capital Projects; 2) Preferred Capital Projects and 3) Long Term Capital Projects. Given current financial constraints, only the 20-Year Capital Projects are expected to be funded and built over the next 20 years.

- An update of the TSP maps, so they are consistently formatted and reflect the recommended changes in policies, projects and, in some cases, roadway functional classification.
- The conversion of the standards found listed in several tables to figures illustrating typical road cross sections by functional classification, to more clearly illustrate roadway design guidelines.
- The removal of the Kruse Way Design Plan from Chapter 10. This design plan has been implemented and the majority of the properties in the design plan area have subsequently annexed into the city of Lake Oswego.

Zoning and Development Ordinance (ZDO): The most substantial ZDO text amendments are proposed to Sections 1007 (Roads and Connectivity) and 1015 (Parking & Loading). Less substantive revisions are proposed to Section 1005 (Sustainable Site and Building Design) and Section 202 (Definitions), specifically to add more clarity for transportation-related terms used in the ZDO.

The proposed ZDO amendments would:

- Implement the proposed change in performance standards from the current Level of Service (LOS) calculation to a Volume-to-Capacity (V/C) calculation. This change effectively eliminates the need to a number of the exceptions previously needed under the LOS calculation. Eliminate the need for some of the exceptions.
- Clarify requirements for street trees. Currently landscape strips are required on all roads but street trees are required only in certain areas of the unincorporated urban area. The proposal would require street trees on all new or substantially reconstructed roads in the urban area.
- Refine siting requirements for developments located at major transit stops to more closely mirror those outlined in state and regional regulations

Related housekeeping amendments are proposed throughout the ZDO to ensure consistency (correcting citations, formatting, etc.). This proposal includes housekeeping amendments to ZDO Sections 306, 309, 310, 312, 314, 809, 810, 822, 1009, and 1202.

The complete text of the Comprehensive Plan and ZDO amendments proposed by County staff for adoption can be found in ATTACHMENTS A and B to this staff report.

More details about the process to update the TSP, and additional background information and analyses can be found in the *TSP Background Document*, found

on the TSP project website at www.clackamascountytsp.com. This proposal would add the TSP Background Document to Appendix B of the Comprehensive Plan. Hard copies are not provided with this Staff Report.

BACKGROUND

The County's current TSP is outdated; it has not undergone a major update in more than a decade. In late 2010, Clackamas County began a comprehensive review of its TSP. After working closely for over two years with a Public Advisory Committee (PAC) and a Technical Advisory Committee (TAC) and providing numerous opportunities for public input, through regional open houses, small subcommittee meetings, virtual open houses, and presentations to community groups, County staff has completed a draft of a major revision to the TSP, which is now being proposed for adoption.

The Public Involvement Report, included in ATTACHMENT D, details the extensive outreach that was conducted over the past two years.

One of the first significant actions of the TSP process was to identify and adopt a vision and goals for the county's transportation system. The vision and goals guided the review of both policies and projects throughout the process.

TSP 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.

- 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.

PUBLIC NOTICE

Notice of this proposal was sent to the following parties, agencies and

departments (see EXHIBIT 2 for complete list of notified parties):

- a. DLCD, ODOT, Metro, TriMet
- b. All incorporated Cities within the County
- c. All County Community Planning Organizations, Hamlets and Villages
- d. County Planning Commission members
- e. Members of the TSP Public Advisory Committee (PAC) and Technical Advisory Committee (TAC)
- f. A list of interested parties generated from public outreach activities
- g. Local Newspaper (Oregonian)

EXHIBITS 3 through 10 include responses the County has received from parties from this list.

ANALYSIS AND FINDINGS

Transportation system planning in Oregon is required by state law as one of the 19 statewide planning goals (Goal 12 - Transportation). The Transportation Planning Rule (TPR), OAR 660-012-0015, which defines how to implement State Planning Goal 12, requires local jurisdictions to prepare a local Transportation System Plan (TSP) that is consistent with the Oregon Transportation Plan (OTP) and Regional Transportation Plan (RTP).

This proposal is subject to the above regulations, as well as the relevant County Comprehensive Plan (Plan) policies and Zoning & Development Ordinance (ZDO) regulations.

1. <u>County Comprehensive Plan (Plan) policies and Zoning & Development</u> Ordinance (ZDO)

- <u>Legislative text amendment</u>. The proposed amendments are legislative. Section 1400 of the Clackamas County ZDO establishes procedural requirements for legislative amendments, which have been or are being followed in this case. The ZDO contains no review criteria that must be applied when considering an amendment to the text of the ZDO or the Plan.
- <u>Required coordination</u>. Chapter 11 of the Plan contains a section entitled City, Special District and Agency Coordination. Development of the TSP was completed through an extensive coordinated effort between the county, its cities and affected agencies, including the following advisory committees:
 - Public Advisory Committees (PAC): consisted of 21 citizens from urban and rural areas of the county;
 - Technical Advisory Committee (TAC): consisted of 20 stakeholder representatives, including city and county planners and transportation experts; representatives from Metro, ODOT, DLCD, area transit

providers; representatives from health, human services and diversity groups; and

 Clackamas County Coordinating Committee Transportation Advisory Committee (CTAC): includes of staff representatives of all cities within Clackamas County and various agencies, such as Metro, ODOT, and Trimet. Their role in the Clackamas County TSP update project was to review the proposed projects, and policies and coordinate with local plans.

In addition, County Staff implemented a broad public involvement program, including a project website (http://clackamascountytsp.com/); social media postings and newsletters; two virtual open houses; seven open houses in different regions of the county; and more than 50 staff presentation to Community Planning Organizations (CPOs), hamlets, other community and business groups; and at public events. See ATTACHMENT D for a more detailed description for the TSP's public outreach program.

The Oregon Department of Transportation, the Oregon Department of State Lands, Clackamas River Water District, Oak Lodge Sanitary District, North Clackamas Parks and Recreation District, Clackamas County Service District No. 1 and all cities within the county are on a standing list to receive notice of all proposed amendments. The notice list for ZDO-246 also included over 200 individuals and agency representatives who participated in the two-year process to develop the TSP update.

This level of notification and coordination furthers the goals and policies of this section of the Plan.

3. Procedural Standards for Plan Amendments. 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-246 is compliant with these standards. Specifically, notice was mailed to all recognized Community Planning Organizations at least 35 days before the first scheduled public hearing, and the Department of Land Conservation and Development (DLCD) and Metro were provided with an opportunity to review and comment on the proposed amendments in accordance with state law. 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 Regional Transportation Functional Plan are addressed below.

Finding: This proposal is consistent with all relevant County Comprehensive Plan (Plan) policies and Zoning & Development Ordinance (ZDO) regulations.

2. Statewide Planning Goals and Guidelines

a. <u>Goal 1: Citizen Involvement</u>: The proposed amendment would not change the structure of the county's citizen involvement program. Notice of the proposed amendment was provided to Community Planning Organizations, Hamlets and Villages and over 200 interested parties and agencies. Also, notice of the Planning Commission and Board of County Commissioners hearings was published in the newspaper.

The process to develop this proposal utilized two advisory committees made up of and agencies representatives, as well as an extensive involvement program, including a project website; social media postings and newsletters; three virtual open houses; seven open houses in different regions of the county; and more than 50 staff presentation to Community Planning Organizations (CPOs), hamlets, other community and business groups; and at public events. This level of notification and coordination meets the intent of this Goal.

- b. <u>Goal 2: Land Use Planning</u>: 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.
- c. <u>Goal 3: Agricultural Lands</u>: Not applicable because the text amendment does not propose to change the county's Plan policies or implementing regulations for agricultural lands.
- d. <u>Goal 4: Forest Lands</u>: Not applicable because the text amendment does not propose to change the county's Plan policies or implementing regulations for forest lands.
- e. <u>Goal 5: Open Spaces, Scenic and Historic Areas, and Natural Resources</u>. 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. <u>Goal 6: Air, Water and Land Resources Quality</u>. 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. <u>Goal 7: Areas Subject to Natural Disasters and Hazards</u>: Not applicable because the text amendment does not propose to change the county's

Plan or implementing regulations regarding natural disasters and hazards.

- h. <u>Goal 8: Recreational Needs</u>: Not applicable because the text amendment does not propose to change the county's Plan or implementing regulations regarding recreational needs.
- Goal 9: Economy of the State: Not applicable because the proposed amendments do not propose to alter the supply of land designated for employment or the implementing regulations regarding economic development.
- j. <u>Goal 10: Housing</u>: Not applicable because the text amendments do not propose to change the county's Plan or implementing regulations regarding housing.
- k. <u>Goal 11: Public Facilities and Services</u>: The TSP is the transportation element of the county's public facilities plan. Goal 11 requires that public facilities and services be provided in a timely, orderly and efficient manner and is implemented by Oregon Administrative Rules (OAR) Chapter 660, Division 11. This proposal contains all of the required elements identified in OAR 660-11-0010 and will be adopted into the Comprehensive Plan, as required in OAR 660-11-0010(3).
- Goal 12: Transportation: Goal 12 is implemented by Oregon Administrative Rules Chapter 660, Division 12. Local governments are required to adopt a Transportation System Plan and land use regulations to implement the TSP. This proposal in compliance with Goal 12 Detailed findings of compliance related to OAR 660-12 can be found in Regulatory Compliance: Clackamas County Transportation System (TSP) Plan Update, Draft: October 21, 2013 (ATTACHMENT C).
- h. <u>Goal 13: Energy Conservation</u>: Not applicable because the text amendments do not propose to change the county's Plan or implementing regulations regarding energy conservation.
- n. <u>Goal 14: Urbanization</u>: Not applicable because the text amendments do not propose to change the county's Plan or implementing regulations regarding urbanization.
- Goal 15: Willamette River Greenway: Not applicable because the text amendments do not propose to change the county's Plan or implementing regulations regarding the Willamette River Greenway.

Finding: This proposal is consistent with all applicable Statewide Planning Goals.

3. <u>Metro Regional Transportation Plan (RTP) and Regional Transportation</u> Functional Plan (RTFP)

The Regional Transportation Plan (RTP) establishes the framework for regional and local transportation planning. The Regional Transportation Functional Plan (RTFP) directs jurisdictions on how to implement the RTP through the TSP and other land use regulations. If a TSP is consistent with this RTFP, Metro will find it to be consistent with the RTP.

Finding: This proposal is consistent with all applicable Regional Transportation Plan regulations. Metro produced and Implementation and Guidance document (October 2011) for the Regional Transportation Function Plan (RTFP), which provides a checklist table to help local jurisdictions comply with each of elements in the RTFP. This checklist, including findings demonstrating compliance of the proposed TSP with each item, is provided in Regulatory Compliance: Clackamas County Transportation System (TSP) Plan Update, *Draft: October 21, 2013* (ATTACHMENT C).

4. <u>State Statutes and Administrative Rules (Transportation Planning Rule, Oregon Highway Plan and other Plans)</u>

Summary and reference to compliance document

a. <u>OAR 660-12 (Transportation Planning)</u>: The purpose of the TPR is to implement Statewide Planning Goal 12 (Transportation) and "promote the development of safe, convenient and economic transportation systems that are designed to reduce reliance on the automobile so that the air pollution, traffic and other livability problems faced by urban areas in other parts of the country might be avoided."

Finding: This proposal is consistent with the Transportation Planning Rule. Detailed findings demonstrating compliance of the proposed TSP with each applicable section of OAR 660-12 is provided in <u>Regulatory Compliance: Clackamas County Transportation System (TSP) Plan Update, *Draft: October 21, 2013* (ATTACHMENT C).</u>

b. Other Relevant Elements of State Statutes and Plans:

The Clackamas County Transportation System Plan Update developed a set of needed transportation project based on the TSP goals, system analysis of gaps and deficiencies and forecast level of available funding. The result of this analysis was a 20-Year Capital Projects List containing more than 120 projects that can reasonably be added to the transportation system between now and 2035. It should be noted that, while the total TSP Capital Project Lists identify more than 320 need transportation system projects, the 20-Year Capital Projects list contain all of the projects that can reasonably be expected to be undertake given the forecast funding levels.

Using this list of projects, a final transportation system analysis (see Tech Memo 12.4: Tier 1 Scenario Analysis) was undertaken that forecast levels of vehicular traffic on individual road segment and operation performance of fifty selected signalized intersections in the TSP planning area. This analysis used the proposed performance targets instead of the County current performance targets to insure that the Clackamas County Transportation System Plan Update conformed to the Oregon Highway Plan and the Regional Transportation Function Plan to the maximum extent practical.

The results of this analysis are as follows:

Forecast Road Segment Performance

The Preferred Alternative Scenario analysis identified a limited number of road segment that were very congested and in some cases were forecast to exceed regional and state performance targets points of PM Peak Hour congestion (v/c > 1.1), including the following road segments:

- I-5 (portions) on the County Line between Boones Ferry Road and Kruse Way
- I-205 east of the Stafford Road Interchange
- I- 205 / OR 213 Interchange area
- OR 551 and Arndt Road Corridor west of Canby
- OR 212 in the vicinity of 172nd Avenue
- OR 43 north of Lake Oswego
- OR 43 at the Arch Bridge in Oregon City
- Borland Road near the Tualatin city limits
- Springwater Road between the Carver Bridge and OR 224

Forecast Intersection Performance

The Preferred Alternative Scenario analysis identified a five signalized intersection are forecast to exceed regional and state performance targets points of PM Peak Hour operations.

These intersections are as follows: ODOT Urban Intersections

- OR 224 / Lake Road / Webster Road forecast v/c = 1.30
- OR 212 / 172nd Ave forecast v/c = 1.03

ODOT Rural Intersections

OR 213 / Henrici Road – forecast v/c = 0.84

OR 212 / 282nd Ave (in Boring) – forecast v/c = 1.07

Local Intersection (on the border between Milwaukie and the County)

Linwood Ave / Harmony Rd / Railroad Ave – forecast v/c = 1.41

In addition, 10 of the 50 intersections analyzed in this process are operating at or near their performance standards including the following

- OR 213N (82nd) / Johnson Creek Road forecast v/c = 0.99
- OR 213N (82nd) / Sunnyside Rd / Harmony Rd forecast v/c = 0.99
- OR 224 / Rusk Rd forecast v/c = 0.97
- OR 212/224 / 82nd Dr forecast v/c = 0.93
- OR 212 / OR 224 (Rock Creek Junction) forecast v/c = 0.95
- I-205 SB on Ramp at Sunnyside Road forecast v/c = 0.81
- OR 99E / South End Rd forecast v/c = 0.84
- Arndt Rd / Airport Rd forecast v/c = 0.97
- Lake Rd / International Way forecast v/c = 0.99
- Harmony Rd / Fuller Rd forecast v/c = 0.93

Oregon Highway Plan Policy 1F: Highway Mobility Policy states -

It is the policy of the State of Oregon to maintain acceptable and reliable levels of mobility on the state highway system, consistent with the expectations for each facility type, location and functional objectives. Highway mobility targets will be the initial tool to identify deficiencies and consider solutions for vehicular mobility on the state system.

Specifically, mobility targets shall be used for:

- Identifying state highway mobility performance expectations for planning and plan implementation;
- Evaluating the impacts on state highways of amendments to transportation plans, acknowledged comprehensive plans and land use regulations pursuant to the Transportation Planning Rule (OAR 660-12-0060); and
- Guiding operational decisions such as managing access and traffic control systems to maintain acceptable highway performance.

Mobility targets for state highways, as established in this policy or as otherwise adopted by the Oregon Transportation Commission as alternative mobility targets, are considered the highway system performance standards in compliance with the TPR (OAR 660-012), including applicability for actions that fall under Section -0060 of the TPR.

Where it is infeasible or impractical to meet the mobility targets, acceptable and reliable levels of mobility for a specific facility, corridor or area will be determined through an efficient, collaborative planning process between ODOT and the local jurisdiction(s) with land use authority. The resulting mobility targets will reflect the balance between relevant objectives related to land use, economic development, social equity, and mobility and safety for all modes of transportation. Alternative mobility targets for the specific facility shall be adopted by the Oregon Transportation Commission as part of the OHP.

Oregon Transportation Commission adoption of alternative mobility targets through system and facility plans should be accompanied by acknowledgement in local policy that state highway improvements to further reduce congestion and improve traffic mobility conditions in the subject area are not expected.

Traffic mobility exemptions in compliance with the TPR do not obligate state highway improvements that further reduce congestion and improve traffic mobility conditions in the subject area.

Given the Oregon Highway Plan policy language state above, it is the recommendation of the staff that:

- The County commit to working with the ODOT over the next five years to evaluation and develop Alternative Mobility Targets for the four ODOT intersection that do not meet the Oregon Highway Plan Mobility Target.
- The County commit to working with ODOT to over the next 5 years to evaluate and develop proposal to address road segment conditions on the identified State Highway system facilities previous mentioned.

The Regional Transportation Functional Plan (RTFP) states the following in 3.08.210 Transportation Needs

A. Each city and county shall update its TSP to incorporate regional and state transportation needs identified in the 2035 RTP and its own transportation needs. The determination of local transportation needs shall be based upon:

- 1. System gaps and deficiencies identified in the inventories and analysis of transportation systems pursuant to Title 1;
- 2. Identification of facilities that exceed the Deficiency Thresholds and Operating Standards in Table 3.08-2 or the alternative thresholds and standards established pursuant to section 3.08.230;
- 3.08.230 Performance Targets and Standards
 A. Each city and county shall demonstrate that solutions adopted pursuant to section 3.08.220 will achieve progress toward the targets and standards in Tables 3.08-1, and 3.08-2 and measures in subsection D, or toward alternative targets and standards adopted by the city or county pursuant to subsections B and, C. The city or county shall include the regional targets and standards or its alternatives in its TSP.
- B. A city or county may adopt alternative targets or standards in place of the regional targets and standards prescribed in subsection A upon a demonstration that the alternative targets or standards:
- 1. Are no lower than the modal targets in Table 3.08-1 and no lower than the ratios in Table 3.08-2;
- 2. Will not result in a need for motor vehicle capacity improvements that go beyond the planned arterial and throughway network defined in Figure 2.12 of the RTP and that are not recommended in, or are inconsistent with, the RTP; and
- 3. Will not increase SOV travel to a degree inconsistent with the non-SOV modal targets in Table 3.08-1.
- C. If the city or county adopts mobility standards for state highways different from those in Table 3.08-2, it shall demonstrate that the standards have been approved by the Oregon Transportation Commission.

The County has identified three non-state facilities within the Metro Boundary and the County TSP planning area that are forecast to not meet regional performance standards in 2035. The most complicated of these facilities is the Linwood Ave / Railroad Ave / Harmony Road Intersection and rail crossing. This facility sits astride the Milwaukie City limits with the intersection and two of the approach roads in the City and the other two approach roads in the County. Developing a solution to the operational problems of this intersection and railroad crossing with require a cooperative effort on the part of Clackamas County, the City of Milwaukie, Metro, the ODOT Rail Division and the Union Pacific Railroad.

The other two facilities will need to be address by the County in cooperation with the Cities of Damascus and Tualatin.

It is the recommendation of the staff that:

- The County commit to working with the City of Milwaukie, Metro, the ODOT Rail Division and the Union Pacific Railroad over the next five years to evaluate and develop a solution to the problems at the Linwood Ave / Railroad Ave / Harmony Road Intersection and rail crossing, including the possibility of developing Alternative Mobility Targets for this intersection.
- The County commit to working with the Cities of Damascus and Tualatin to over the next 5 years to evaluate and develop proposals to address road segment conditions on the identified road facilities previous mentioned.

Finding: This proposal is consistent with all applicable State Statutes and Administrative Rules.

SUMMARY AND RECOMMENDATION

Based upon the findings in this report, the proposed Comprehensive Plan text amendments satisfy all applicable Statewide Planning Goals, state statutes and administrative rules, and regional regulations, and all applicable policies found in the County's Comprehensive Plan.

Based upon the findings in this report, staff recommends approval of the Comprehensive Plan and Zoning & Development Ordinance amendments to adopt the updated Transportation System Plan, as proposed in ATTACHMENTS A & B.

ATTACHMENTS

A. Proposed Clackamas County Comprehensive Plan amendments

- A1. Chapter 5: Transportation System Plan text (PROPOSED)
- A2. Chapter 5 text tracking document (tracking changes from existing to new text
- A3. Chapter 5 tables, figures and maps list (PROPOSED)
- A4. Chapter 5 tables (PROPOSED)
- A5. Chapter 5 figures (PROPOSED)
- A6. Chapter 5 maps (PROPOSED)
- A7. Chapter 5: text (EXISTING)
- A8. Chapter 5 tables and maps (EXISTING)
- A9. Chapter 10 text (PROPOSED & EXISTING)
- A10. Chapter 10 maps (PROPOSED & EXISTING)
- A11. Chapter 3 & 4 conforming amendments
- A12. Appendix B (PROPOSED & EXISTING)

B. Proposed Zoning & Development Ordinance (ZDO) amendments

- B1. ZDO Section 202 (PROPOSED & EXISTING)
- B2. ZDO Section 1005 (PROPOSED & EXISTING)
- B3. ZDO Section 1007 (PROPOSED & EXISTING)
- B4. ZDO Section 1015 (PROPOSED & EXISTING)
- B5. ZDO conforming amendments list
- C. Regulatory Compliance: Clackamas County Transportation System (TSP) Plan Update, *Draft: October 21, 2013*
- D. Public Involvement Report, October 2013

EXHIBIT LIST

- Exhibit 1. DLCD Notice
- **Exhibit 2.** Other notices and list of noticed parties
- Exhibit 3. Letter from Oak Lodge Community Council
- Exhibit 4. Letter from Jennings Lodge CPO
- Exhibit 5. Letter from North Clackamas Urban Watersheds Council
- Exhibit 6. Email from Boring Fire District 59
- Exhibit 7. Packet of information from C. Kosinski
- Exhibit 8. Letters from C. James and T. Hanson
- Exhibit 9. Petition and letters from citizens of Hamlet of Mulino
- Exhibit 10. Email from D. Gambell

File ZDO-246

Proposed Comprehensive Plan and Zoning and Development Ordinance Amendment

Draft October 21, 2013

Note: The current text of Chapter 5 is proposed to have substantial amendments, so tracking changes with the strike-through and underline method would create an un-readable document. This document, then, is the draft of proposed Chapter 5 presented to the Planning Commission at its September 23rd study session, with tracked changes made subsequent to that study session. The draft of proposed Chapter 5 will be supported by a separate document that provides each section with all proposed text amendments from the current Chapter 5.

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.

ZDO-246: Transportation System Plan

Draft: October 21, 2013

File ZDO-246: Clackamas County's Transportation System Plan Tracking Proposed Amendments FOR PC HEARING (draft dated OCT 21, 2013)

The proposed update to Clackamas County's Transportation System Plan (Chapter 5 in the Comprehensive Plan) includes amendments to, and a few deletions of, existing policies and addition of new policies. This document may be used with Chapter 5, DRAFT dated 10/21/2013, to follow the changes and additions that created the policies in Draft Chapter 5.

These tables of tracked changes have the following columns:

- Column 1: Policy numbers in order of policies in Draft Chapter 5 (10/21/2013). The order of some policies has changed from the Sept. 23rd DRAFT of Chapter 5. To indicate those changes, the "new" policy number is shown in **bold text**, and the original policy number is shown just below the new number in parentheses. For example, Policy **5.C.4** previously was policy (5.C.5).
- Column 2: Either text of current policy or the word <u>New</u>, indicating a policy new to Chapter 5.

 Where current policy language is entered, the current policy number is listed first, followed by the policy language. The page number of the policy in <u>current</u> Chapter 5 is found at the end of the text. For example, policy 5.A.4 is based on existing policy "Roadways 6.0" which is on page V-6 of Chapter 5.
- Column 3: The recommended policy language. Current language appears in regular text, new language is <u>underlined</u>, and deleted language is struck through.

Note: Existing policies that are proposed to be deleted or combined, and new policies proposed not to be used are listed on pages 35-37.

Foundation and Framework

Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 – Recommended Language
5.A	Compliance and Coordination	
5.A.1	New - Intergovernmental Partnerships and Coordination	Support intergovernmental partnerships needed to promote coordination and address multi-jurisdictional transportation needs.
5.A.2	<u>New</u> - Safety and Road Condition	Work collaboratively with federal, state, regional, and local agencies and with County residents to pursue the County's road safety programs and plans.
5.A.3	<u>New</u> - Traffic Safety Action Plan	Work with state and local partners to implement the Oregon Transportation Safety Plan.
5.A.4	Roadways 6.0 Coordinate with the Oregon Department of Transportation (ODOT) in implementing the Oregon Transportation Plan (OTP), Oregon Highway Plan (OHP), Statewide Transportation Improvement Program (STIP), and with other state, local	Coordinate with the Oregon Department of Transportation (ODOT) in implementing the Oregon Transportation Plan (OTP), Oregon Highway Plan (OHP), Statewide Transportation Improvement Program (STIP), and with other state transportation planning policies, guidelines and programs.

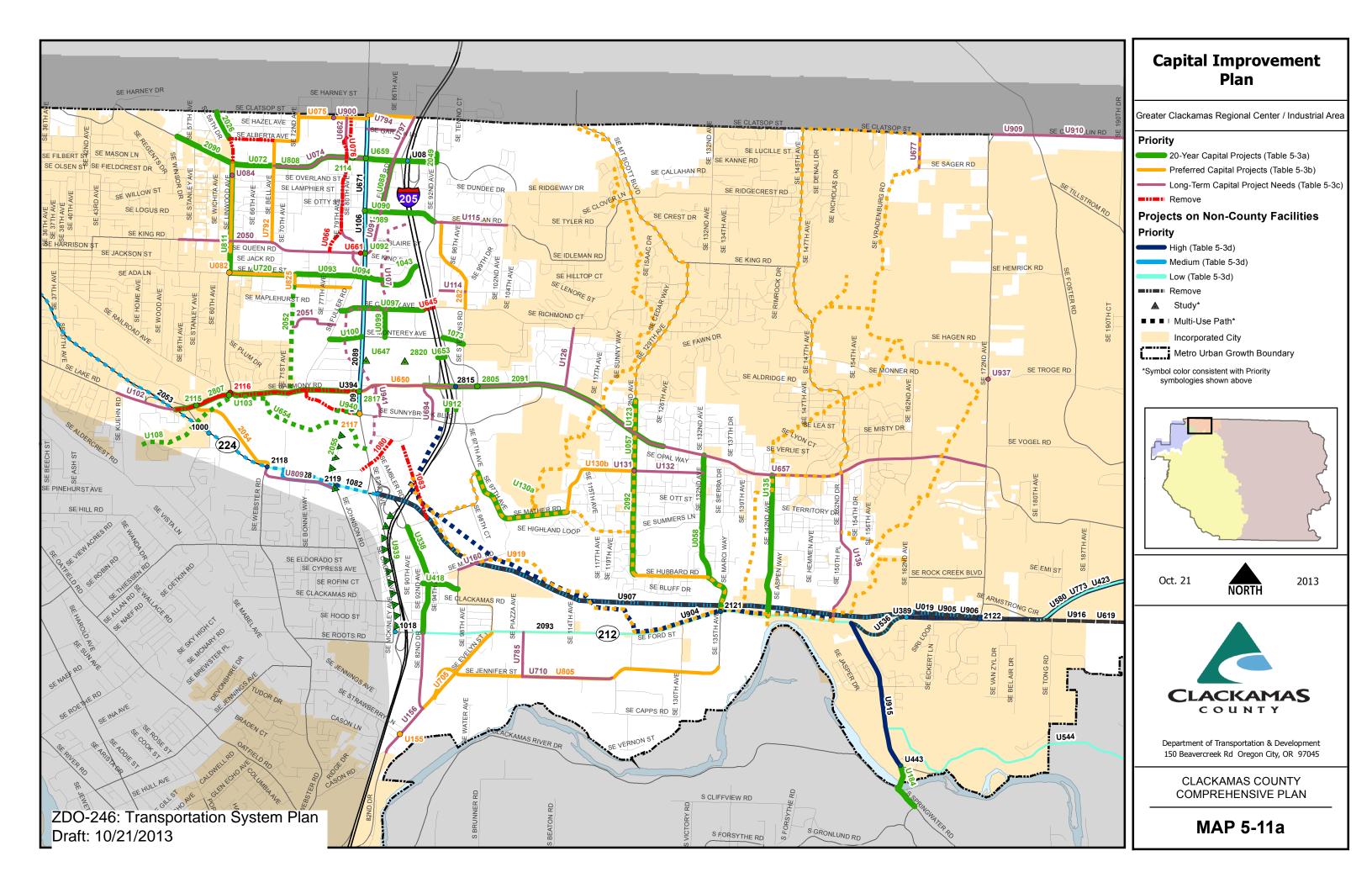
ZDO-246: Transportation System Plan

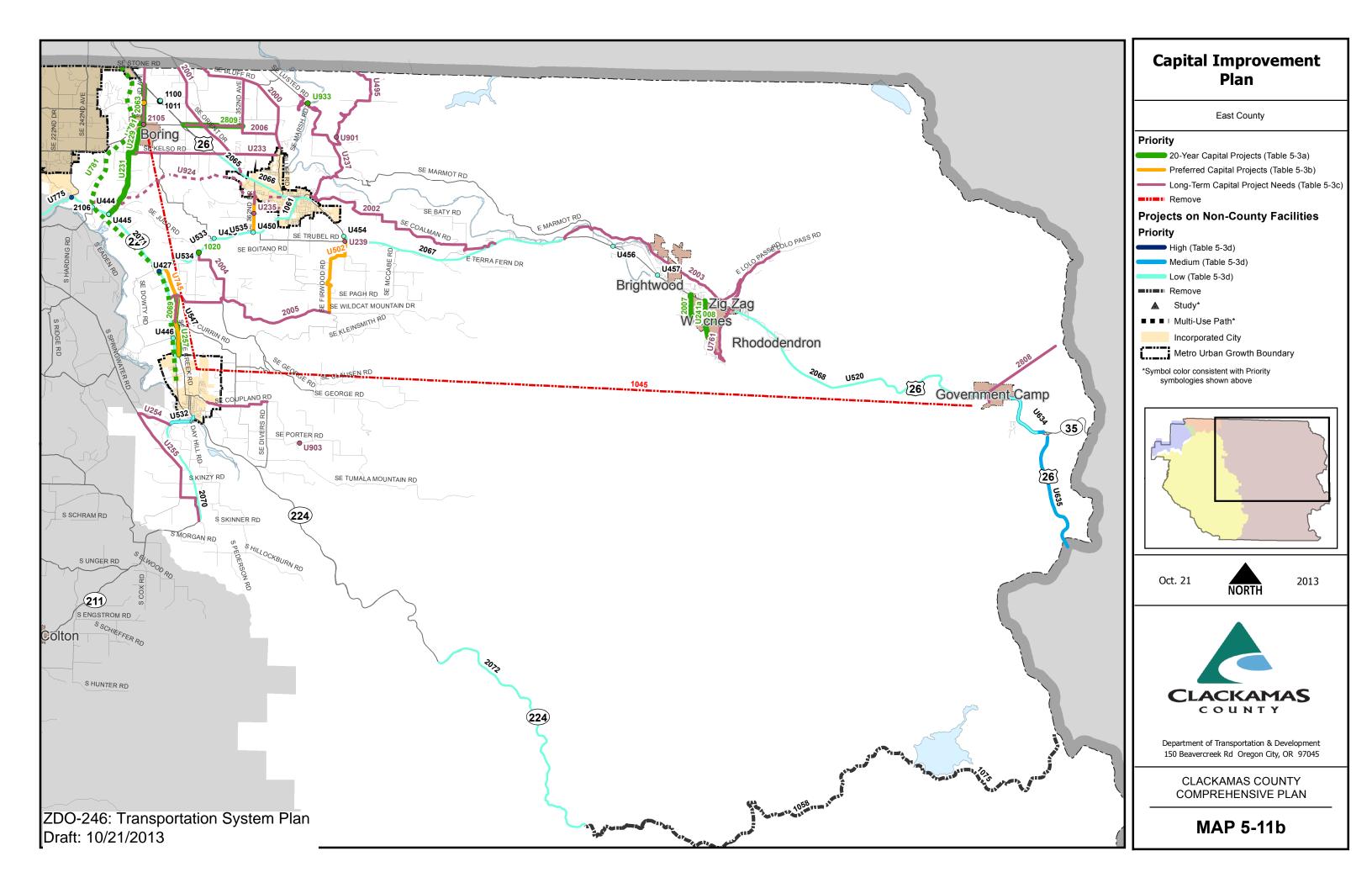
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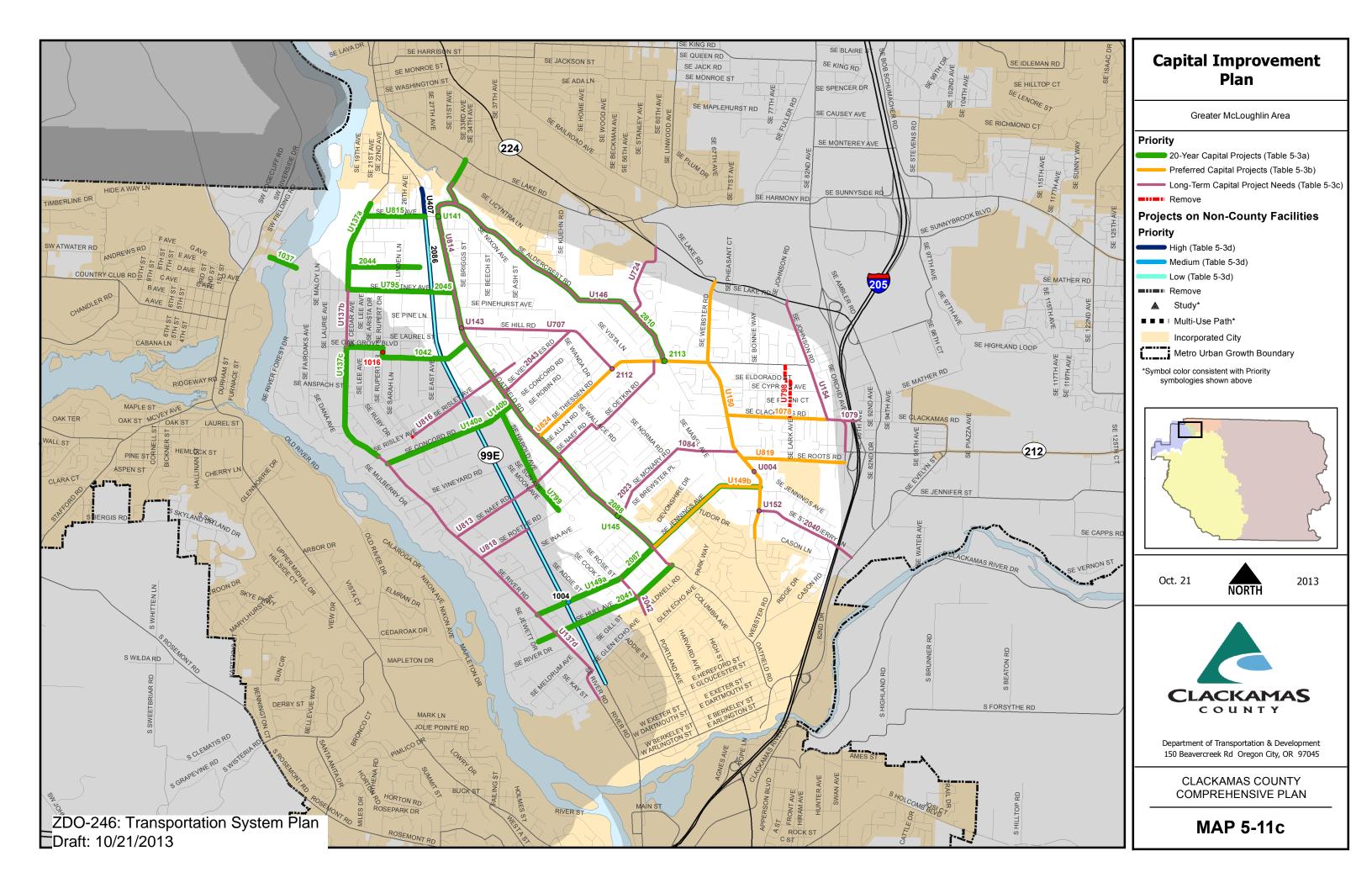
Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

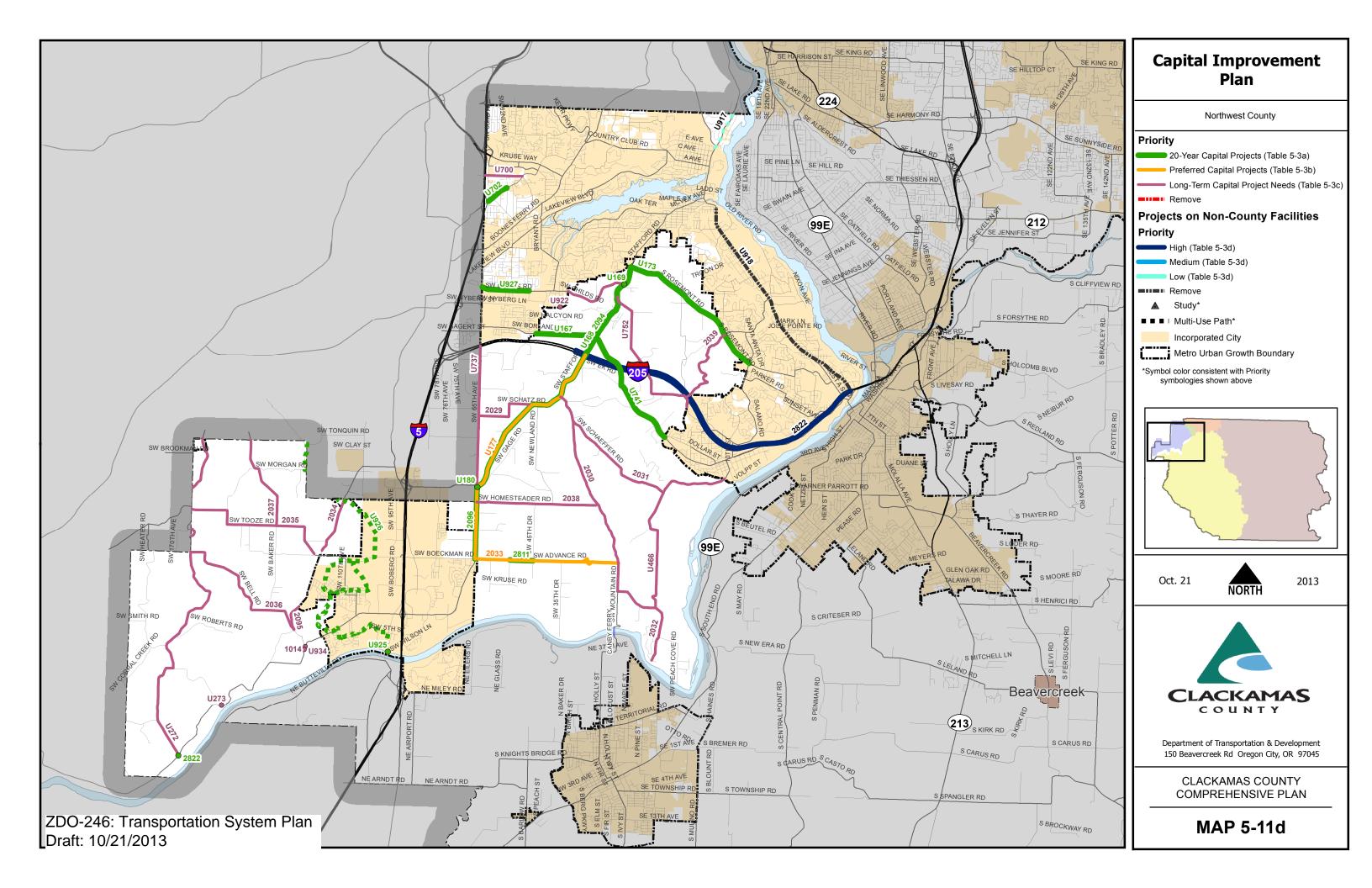
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Project	TSP	RTP	TSP	Project Name /	_	Project Description
ID	Update	ID	Geographic	Street Name	Locations	
	ID		Area			
	2821		Countywide	Transportation	N/A	Develop a program to support the implementation of the County's
	2021		Countywide	Safety Action Plan		TSAP and support the County's efforts to make improvements
				Program		based on the outcomes of the road safety audits and other safety
						studies.
	1043	-	CRC	Boyer Dr / 85th	OR 213 to I-205 bike	Add bikeways
	1043	-	CKC	Ave / Spencer Dr	path	Add bineways
				., .,		
	1072		CDC	N. 4 4	Charrens Dal to Dala	Construct and antique of a citation
	1073	-	CRC	Monterey Ave	Stevens Rd to Bob Schumacher Rd	Construct collector roadway with bikeways and pedestrian facilities
	2026	-	CRC	Flavel Dr	Alberta Ave to	Add bikeways
					County boundary	,
	2049	-	CRC	92nd Ave	Johnson Creek Blvd	Fill gaps in pedestrian facilities
	2043		CITC	SZIIG AVC	to Emmert View Ct	This gaps in pedestrian racinities
	2052		CDC	72 - 4 0 00 - 4:	The server and the	Construct would was made
	2052	-	CRC	72nd Ave Multi- Use Path	Thompson Rd to Harmony Rd	Construct multi-use path
				Connection	Trainiony Na	
	2055	-	CRC	Johnson Rd	SE Lake Rd to North	Identify bike/pedestrian connections to fill gaps along 82nd Ave
					Clackamas Park Trail	
	2090	-	CRC	Johnson Creek Blvd	FF+b Avo to 1 20F	Perform road safety audit or transportation safety review to
	2090	-	CKC	Johnson Creek Bivu	35tii Ave to 1-205	identify appropriate safety improvements
						identify appropriate surecy improvements
	2091	-	CRC	Sunnyside Rd	93rd Ave to 126th	Perform road safety audit or transportation safety review to
					Ave	identify appropriate safety improvements
	2092	_	CRC	122nd Ave	Eagle Glen Dr to	Perform road safety audit or transportation safety review to
	2092	-	CKC	122IIu Ave	Hubbard Rd	identify appropriate safety improvements
						, , , ,
	2114	1	CRC	Johnson Creek Blvd	Johnson Creek Blvd	Add signal to either Johnson Creek Blvd and 79th Pl or 80th Ave
					near 79th Pl	
	2115	-	CRC	Lake Rd	Lake Rd /	Add northbound right-turn lane
					International Way	
					intersection	
	2805		CRC	Sunnyside Rd	Sunnyside Rd /	Intersection improvements, such as additional turn lanes, turn lane
					Stevens Rd	extensions, and/or signal timing modifications
					intersection	
	2007		CBC	Harmony Pd	OP 212 to OP 224	Construct hikoways and nodostrian facilities
	2807		CRC	Harmony Rd	OR 213 to OR 224	Construct bikeways and pedestrian facilities
	2817		CRC	Harmony Rd /	Harmony Rd /	Extend queue storage on westbound approach and rebuild median;
				Sunnyside Rd	Sunnyside Rd / OR 213 intersection	extend queue storage on eastbound approach and install median; convert to right-in-right-out accesses on frontage road.
						some to have in have out accesses on nontage road.

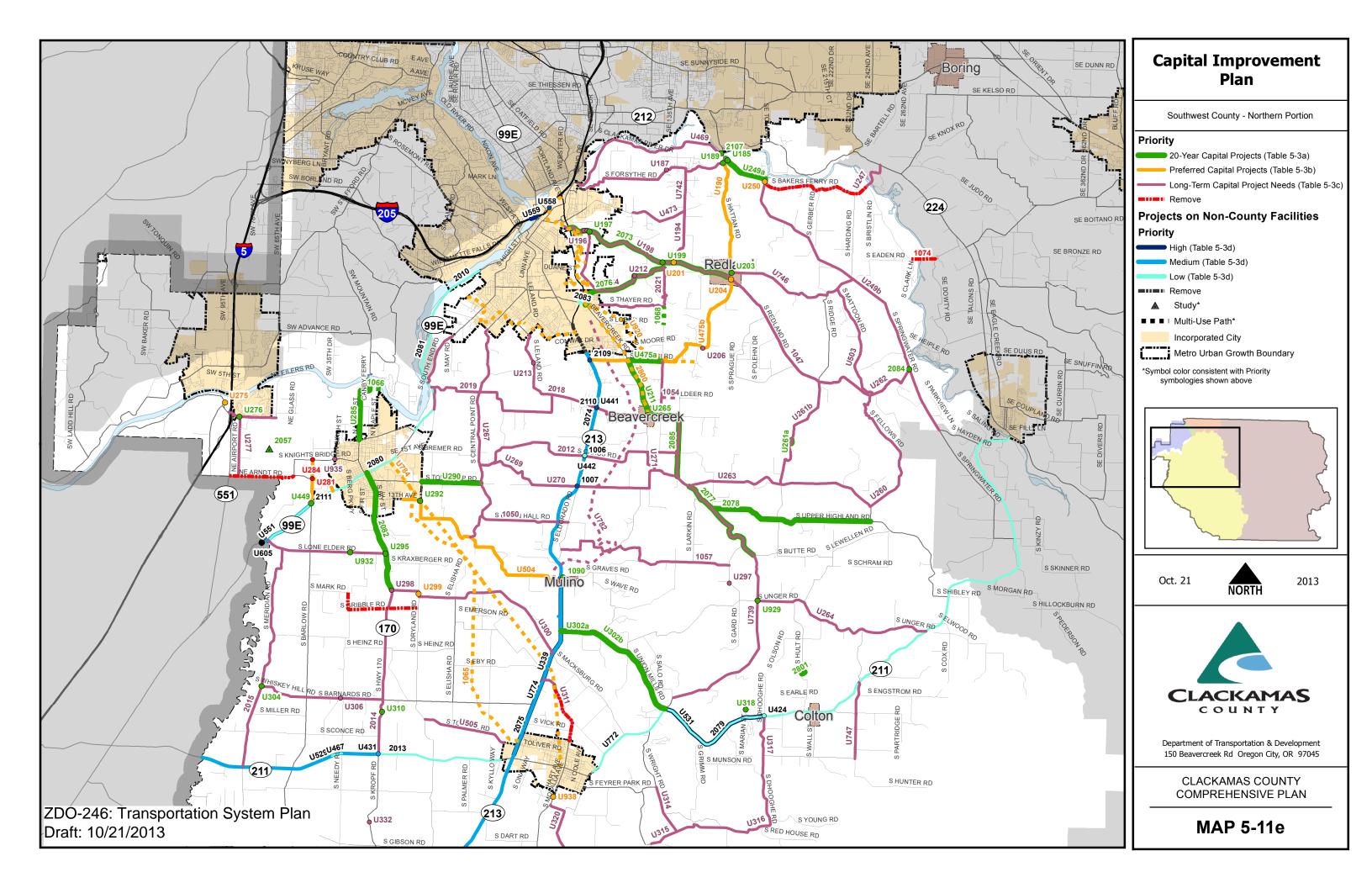
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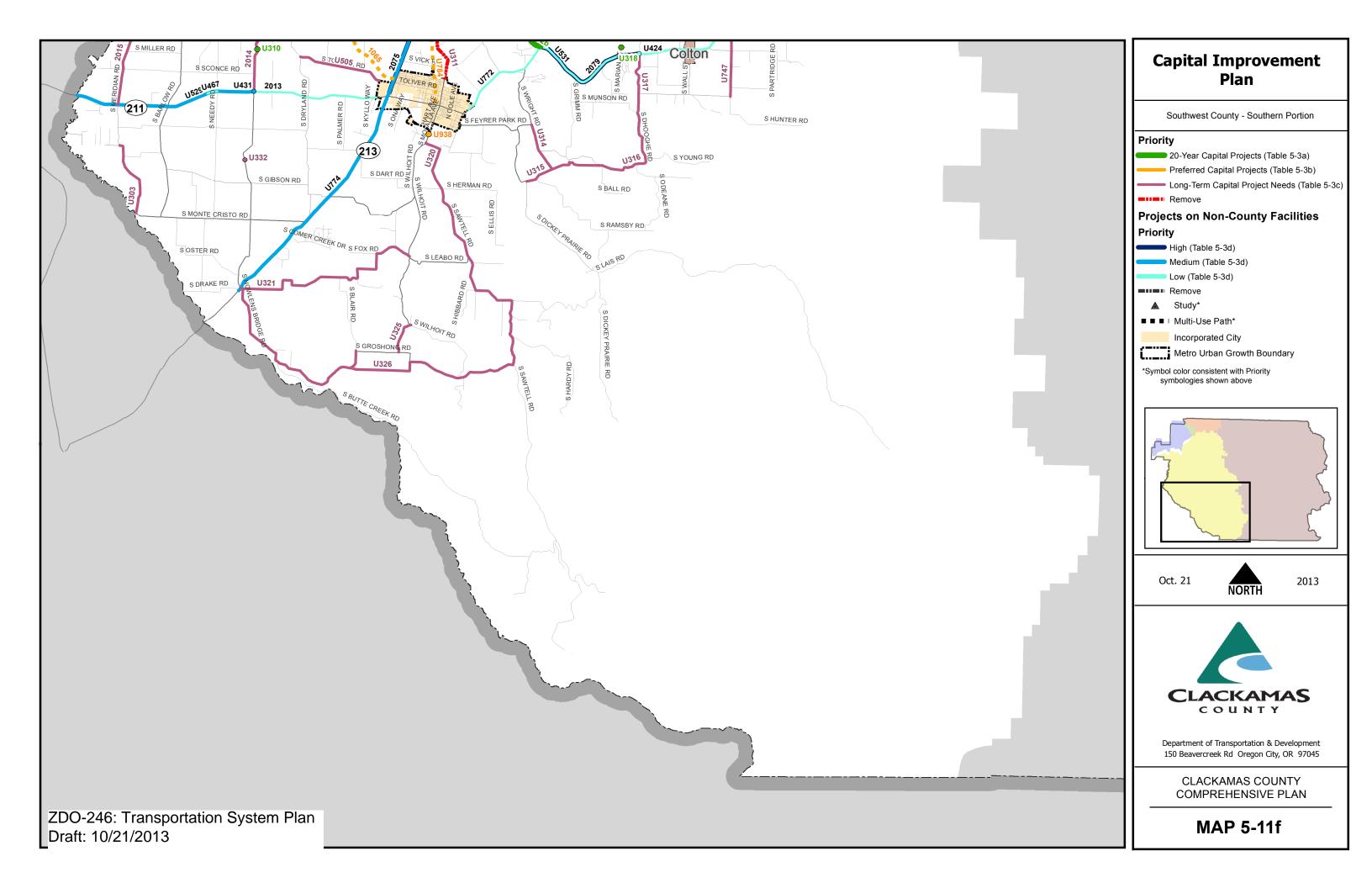












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Project	ct ID Number wi		I be determ	ined during the	TSP adoption process to replace the TSP Update ID			
Project ID	TSP Update ID	RTP ID	TSP Geographic Area	Project Name / Street Name	Segment / Locations	Project Description		
	2820		CRC	Clackamas Town Center Alternative Performance Standards Study	Clackamas Regional Center	Develop alternative performance standards for the intersections within the Clackamas Regional Center.		
	U057	-	CRC	122nd Ave	Sunnyside Rd to Hubbard Rd	Fill gaps in pedestrian facilities, turn lanes at Mather Rd		
	U058	-	CRC	132nd Ave	Sunnyside Rd to OR 212	Add bikeways, pedestrian facilities, traffic calming and turn lanes at major intersections		
	U072	10002	CRC	Johnson Creek Blvd	55th Ave to Bell Ave	Widen to 3 lanes with bikeways and pedestrian facilities		
	U088	10009	CRC	Fuller Rd	Otty St to Johnson Creek Blvd	Add pedestrian facilities, turn lanes, on-street parking, central median and landscaping.		
	U089	-	CRC	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.		
	U090	10004	CRC	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		
	U092	-	CRC	Fuller Rd / King Rd Improvements	Fuller Rd / King Rd intersection	Restrict access to right-in/right-out only		
	U093	-	CRC	Monroe St	72nd Ave to Fuller Rd	Add bikeways, pedestrian facilities and traffic calming		
	U094	10013	CRC	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.		
	U097	-	CRC	Causey Ave	Fuller Rd to I-205	Add bikeways and shared facility markings		
	U099	-	CRC	85th Ave	Causey Ave to Monterey Ave	Add sidewalks and bikeways		
	U100	10005	CRC	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.		
	U103	-	CRC	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		

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Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

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Project	TSP	RTP	TSP	Project Name /	_	Project Description
ID	Update	ID	Geographic	Street Name	Locations	
	ID		Area			
	U108	1	CRC	North Clackamas	Linwood Ave to	Construct multi-use path
				Regional Park Trail	North Clackamas	
					Park Complex	
	U123	10081	CRC	122nd Ave	Sunnyside Rd to	Add bikeways and turn lanes at major intersections
	11120~		CRC	07th Ave / Mather	Timber Valley Dr Lawnfield Rd to	Add bikeways, pedestrian facilities and eastbound left turn lanes at
	U130a	_	CRC	97th Ave / Mather Rd	Summers Ln	Mather Rd / Summers Ln
				Nu	Summers En	Watter Na / Summers En
	U135	10061	CRC	142nd Ave	Sunnyside Rd to OR	Add bikeways and pedestrian facilities
					212	
			00.0		00.004	
	U184	-	CRC	Springwater Rd	OR 224 to Hattan Rd	
						remains two lanes
	U338	_	CRC	82nd Dr	OR 212 to Lawnfield	Fill in bikeways and pedestrian facilities gaps
	-		5.1.5		Rd	and the second s
	U418		CRC	Tolbert St	82nd Dr to Industrial	, ,
	U647		CRC	Overcrossing Clackamas Town	Way West of the Town	facilities Study area circulation and create plan
	0047		CKC	Center Circulation	Center	Study area circulation and create plan
				Plan	Conte	
	U653	-	CRC	I-205 Pedestrian /	Between Causey Ave	Construct a bike / pedestrian crossing over I-205 to connect transit
				Bike Overpass	and Sunnyside Rd	services, businesses and residents
	U654	_	CRC	North Clackamas	OR 213 to Linwood	Construct multi-use path
	0034		CIC	Regional Parks Trail		Construct multi-use patri
				Tregrenari arno rran	7.1.0	
	U659	-	CRC	Johnson Creek Blvd	Johnson Creek Blvd /	Extend westbound left-turn lane and rebuild median; install dual
					OR 213 intersection	northbound and southbound left-turn lanes
	U720	_	CRC	Monroe St	Linwood Ave to 72nd	Add bikeways and traffic calming
	0720		CITC	Widili de St	Ave	And sineways and traffic cultiling
	U808	-	CRC	Johnson Creek Blvd	OR 213 to 92nd Ave	Add pedestrian facilities, restripe for bikeways
	U811	10102	CRC	Linwood Ave	Monroe St to	Add pedestrian facilities
					Johnson Creek Blvd	
	U912		CRC	I-205 Multi-Use	Between Sunnyside	Construct ADA compliant access to the commercial area from the I-
	3312		Cite	Path Connection	Rd and Sunnybrook	205 Multi-Use Path
					Blvd	
	U939		CRC	I-205 Multi-Use	OR 224/OR 213 to	Study the I-205 multi-use path gap to create a plan for connection
				Path Gap	OR 212	and path completion
	110.15		20.5	C. II.	No all Cl. 1	Control of the control
	U940		CRC	Southwest	North Clackamas	Construct multi-use path
				Connector Multi- Use Path	Aquatic Center access road to 82nd	
				OSC F deli	Ave	
	1020	Е	E	OR 211	OR 211 / Judd Rd	Realign roadway
					intersection	
		1				

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Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

Project	ct ID Number wil		l be determ	ined during the	TSP adoption pr	ocess to replace the TSP Update ID		
Project ID	TSP Update ID	RTP ID	TSP Geographic Area	Project Name / Street Name	Segment / Locations	Project Description		
	2007	-	E	Arrah Wanna Blvd	US 26 to Fairway Ave	Add paved shoulders		
	2008	-	E	Fairway Ave	Arrah Wanna Blvd to Salmon River Rd	Add paved shoulders		
	2063	-	E	282nd Ave	US 26 to OR 212	Perform road safety audit or transportation safety review to identify appropriate safety improvements		
	2069	-	E	Eagle Creek Rd	Firwood Rd to Duus Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements		
	2809		E	Compton Rd	US 26 to 352nd Ave	Perform road safety audit or transportation safety review to identify appropriate safety improvements		
	U229	-	E	Richey Rd	Kelso Rd to OR 212	Add paved shoulders and left turn lane at Richey Rd and OR 212		
	U231	-	E	Amisigger Rd / Kelso Rd	OR 224 to Kelso / Richey Rd	Add paved shoulders; turn lanes at Amisigger/OR 212 and Kelso/Richey; smooth curves.		
	U241a	-	E	Welches Rd	US 26 to Birdie Ln	Add paved shoulders; add pedestrian facilities in Welches rural center		
	U257	-	E	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		
	U781	-	E	Cazadero Multi- Use Trail	Community of Boring to City of Estacada	Construct multi-use path		
	U933		E	Dodge Park Rd Bridge	~192 feet south of Pipeline Rd	Replace bridge nearing the end of its useful life and include paved shoulders		
	1037	-	М	Lake Oswego to Milwaukie Bridge	Between Sellwood and Oregon City	Construct bike/pedestrian crossing over the Willamette River		
	1042	-	М	Oak Grove Blvd	Oatfield Rd to River Rd	Fill gaps in pedestrian facilities and bikeways		
	2041	-	М	Hull Ave	Wilmot St to Tims View Ave	Fill gaps in pedestrian facilities		
	2044	-	M	Torbank Rd	River Rd to Trolley Trail	Fill gaps in pedestrian facilities		
	2045	-	М	Courtney Ave	OR 99E to Oatfield Rd	Fill gaps in pedestrian facilities and bikeways		
	2087	-	М	Jennings Ave	Webster Rd to OR 99E	Perform road safety audit or transportation safety review to identify appropriate safety improvements		
	2088	-	М	Oatfield Rd	Jennings Ave to Lake Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements		
	2113	÷	М	Thiessen Rd	Thiessen Rd / Aldercrest Rd intersection	Add turn lanes on Thiessen Rd; consider converting to two-way stop controlled		

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Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

		er wil	I be determ			ocess to replace the TSP Update ID		
Project ID	TSP Update ID	RTP ID	TSP Geographic Area	Project Name / Street Name	Segment / Locations	Project Description		
	2810		М	Aldercrest Dr	Thiessen Rd to Oatfield Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements		
	U137a	-	М	River Rd	Lark St to Courtney Ave	Add pedestrian facilities		
	U137c	-	М	River Rd	Oak Grove Blvd to Risley Ave	Fill gaps in bikeways and pedestrian facilities		
	U140a	-	M	Concord Rd	River Rd to Oatfield Rd	Fill gaps in pedestrian facilities		
	U140b	-	M	Concord Rd	River Rd to Oatfield Rd	Add turn lanes at major intersections		
	U141	10054	M	Oatfield Rd	Oatfield Rd / Park Rd intersection	Install traffic signal and add turn lanes		
	U145	10056	М	Oatfield Rd	Oatfield Rd / McNary Rd intersection	Add southbound and eastbound left-turn lanes		
	U149a	-	M	Jennings Ave	River Rd to Oatfield Rd	Widen to 2-lane urban minor arterial standard with bikeway and pedestrian facilities infill		
	U795	-	M	Courtney Ave	River Rd to OR 99E (McLoughlin Blvd)	Construct pedestrian facilities / complete gaps on the south side; add bikeways		
	U799	-	М	Harold Ave	Concord Rd to Roethe Rd	Add pedestrian facilities and traffic calming		
	U815	-	М	Park Ave	River Rd to OR 99E (McLoughlin Blvd)	Add pedestrian facilities		
	2094	-	NW	Stafford Rd	Rosemont Rd to I- 205	Perform road safety audit or transportation safety review to identify appropriate safety improvements		
	2096		NW	Stafford Rd	I-205 to Boeckman Rd / Advance Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements		
	2811		NW	Advance Rd	53rd Ave to 43rd Dr	Grade and sight distance improvements		
	2822		NW	Wilsonville Rd / Ladd Hill Rd	Wilsonville Rd / Ladd Hill Rd	Install Collision Countermeasure System		
	U167	10043	NW	Borland Rd		Add paved shoulders and turn lanes at major intersections		
	U168	10029	NW	Stafford Rd	Rosemont Rd to I- 205	Add paved shoulders and turn lanes at major intersections		
	U169	-	NW	Stafford Rd	Stafford Rd / Childs Rd intersection	Install traffic signal and southbound and northbound turn lanes or roundabout		

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Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

Project ID	TSP Update ID	RTP ID	TSP Geographic Area	Project Name / Street Name	Segment / Locations	Project Description
	U173	-	NW	Rosemont Rd	Stafford Rd to West Linn	Add paved shoulders and turn lanes at major intersections
	U180	10134	NW	65th Ave	65th Ave / Elligsen Rd / Stafford Rd intersection	Construct roundabout
	U702		NW	Carman Dr	Lake Oswego city limits to Roosevelt Ave	Add bikeways and pedestrian facilities; analyze for turn lanes
	U741	-	NW	Borland Rd	Stafford Rd to West Linn city limits	Add paved shoulders
	U925		NW	French Prairie Bridge	Willamette River near I-5	Construct a bridge consistent with the Connecting Clackamas Plan
	U926		NW	Tonquin Trail	Willamette River through Wilsonville	Construct bike / pedestrian bridge consistent with the Connecting Clackamas Plan
	U927	-	NW	Childs Rd	Sycamore Ave to 65th Ave	Transfer roadway to local jurisdiction
	1066	-	SW	Emerald Necklace Trail	To Canby Ferry	Extend Molalla Forest Rd to Locust St
	1068	-	SW	Ferguson Multi-Use Path	Thayer Rd to Ferguson Rd	Multi-use path to connect Ferguson Rd to Thayer Rd
	1090		SW	Graves Rd/Passmore Rd/Mulino Rd/ OR 213	Graves Rd/Passmore Rd/Mulino Rd/ OR 213	Realign to create four-way intersection of Mulino Road/Graves Road/ OR 213; install traffic signal; disconnect Passmore Road east of OR 213 (at school) and create cul-de-sac on western portion of roadway segment.
	2057		SW	Greater Arndt Rd/l- 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.
	2073	-	SW	Redland Rd	OR 213 to Hattan Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
	2076	-	SW	Maplelane Rd	Beavercreek Rd to Ferguson Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
	2077	-	SW	Beavercreek Rd	Lower Highland Rd to Butte Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
	2078	-	SW	Upper Highland Rd	Beavercreek Rd to Lower Highland Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
	2082	-	SW	OR 170	OR 99E to Macksburg Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements
	2084	-	SW	Redland Rd	Redland Rd / Springwater Rd intersection	Perform road safety audit or transportation safety review to identify appropriate safety improvements
	2085	-	SW	Beavercreek Rd	Ferguson Rd to Spangler Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements

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Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

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Project ID	TSP Update	RTP ID	TSP Geographic	Project Name / Street Name	Segment / Locations	Project Description		
	ID		Area					
	2107	1	SW	Springwater Rd	Springwater Rd / Clackamas River Dr intersection	Install signal at Clackamas River Dr		
	2801		SW	Hult Rd	OR 211 to Unger Rd	Re-open and improve Hult Rd		
	U185	-	SW	Springwater Rd	400 ft east of Hattan Rd	Construct bridge to accommodate paved shoulders		
	U189	-	SW	Hattan Rd	Hattan Rd / Gronlund Rd intersection	Install southbound right-turn lane		
	U197	-	SW	Redland Rd	Redland Rd / Holly Rd intersection	Install traffic signal and westbound and northbound left-turn lanes or roundabout		
	U199	-	SW	Redland Rd	Redland Rd / Ferguson Rd intersection	Construct roundabout		
	U203	-	SW	Fischers Mill Rd	Fischers Mill / Hattan Rd intersection	Install eastbound left-turn lane		
	U211	-	SW	Beavercreek Rd	Henrici Rd to Yeoman Rd/Steiner Rd	Add paved shoulders and turn lanes at major intersections		
	U249a	-	SW	Springwater Rd	Hattan Rd to Bakers Ferry Rd	Add paved shoulders and turn lanes at major intersections		
	U261a	-	SW	Ridge Rd	~1 miles north of Lower Highland Rd	Fix sinkhole		
	U265	-	SW	Beavercreek Rd	Beavercreek Rd / Leland Rd / Kamrath Rd intersection	Construct roundabout with additional analysis		
	U276	-	SW	Airport Rd	Airport Rd / Miley Rd intersection	Install traffic signal		
	U285	-	SW	Holly St	Territorial Rd to Canby Ferry	Add paved shoulders		
	U290	-	SW	Township Rd	Central Point Rd to Canby City limit	Add paved shoulders and turn lanes at major intersections		
	U292	-	SW	Mulino Rd	Mulino Rd / 13th Ave	Relocate intersection to south away from railroad trestle		
	U295	-	SW	Canby-Marquam Highway	Canby-Marquam Hwy / Lone Elder Rd intersection	Reconstruct intersection; install northbound left-turn lane and southbound right-turn lane		
	U302a	-	SW	Union Mills Rd	OR 213 to OR 211	Add turn lanes at major intersections		
	U302b	-	SW	Union Mills Rd	OR 213 to OR 211	Construct a shoulder on the south side of the roadway		
	U304	-	SW	Meridian Rd	Meridian Rd / Whiskey Hill Rd intersection	Limit access/egress points to and from school on NE corner of intersection		
	U310	-	SW	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		

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Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

Project ID	TSP Update ID	RTP ID	TSP Geographic Area	Project Name / Street Name	Segment / Locations	Project Description
	U318	-	SW	Klang's Mill Bridge	~1,000 ft north of OR 211	Replace bridge nearing the end of its useful life
	U449		SW	Barlow Rd	Barlow Rd / OR 99E intersection	Add dual left-turn lanes on southbound Barlow Rd
	U475a	-	SW	Henrici Rd	Beavercreek Rd to Ferguson Rd	Add paved shoulders and turn lanes at major intersections. Remove horizontal and vertical curves
	U929		SW	Clarks Four Corners Intersection	Beavercreek Rd / Unger Rd	Reconstruct intersection
	U932		SW	Lone Elder Rd Bridge	~5,800 feet east of Barlow Rd	Replace bridge (nearing the end of its useful life) and include paved shoulders

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TABLE 5-3b Preferred Capital Projects

Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

Project	Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID Project TSP RTP TSP Project Name / Segment / Project Description							
		RTP	TSP	Project Name /	Segment /	Project Description		
ID (Update	ID	Geographic	Street Name	Locations			
	ID		Area					
	2048	_	CRC	Hubbard Rd	122nd Ave to 132nd	Fill gaps in pedestrian facilities		
	2040	-	CKC	Tidbbara Ku	Ave	in gaps in pedestrian raciities		
					7.00			
	2054	-	CRC	Lake Rd		Fill gaps in pedestrian facilities		
					east to OR 224			
	2117	-	CRC	Sunnybrook Blvd	Sunnybrook Blvd /	Add dual southbound left-turn lanes, extend queue storage		
				-	82nd Ave	for southbound lefts and westbound lefts		
					intersection			
	2022		CDC	Chavena Del /	Causau Aua ta	And made was a substant bracks and are		
	2823		CRC	Stevens Rd / Stevens Way	Causey Ave to Idleman Rd	Add pedways and optional traffic calming		
				Stevens way	luleillaii ku			
	U075	-	CRC	Clatsop St / Luther	72nd Ave to Fuller	Add turn lanes and signals at OR 213 intersection; add		
				Rd	Rd	bikeways, pedestrian facilities and traffic calming		
	U082	10102	CRC	Linwood Ave	Linwood Ave /	Add curbs/sidewalks, improve horizontal alignments		
					Monroe St			
	114201		CDC	Mather Rd	intersection	Add biles and setting feetities and seether and left true		
	U130b	-	CRC	Mather Ru	Summers Ln Rd to 122nd Ave	Add bikeways, pedestrian facilities and eastbound left turn lanes at Mather Rd / 122nd Ave		
					122IIu Ave	laties at Wather Nu / 122hu Ave		
	U155	-	CRC	Strawberry Ln	Strawberry Ln / 82nd	Install traffic signal and eastbound turn lane		
				•	Dr intersection			
	11650		CDC	Communistic Del	OD 242 to 07th Ave	Madification and the strength in shading because design		
	U650	-	CRC	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.		
	U705	-	CRC	Evelyn St / Mangan	Jennifer St to Water	Add bikeways		
				Dr	Ave			
	U715	10102	CRC	Linwood Ave	Queen Rd to	Add bikeways		
		*-			Johnson Creek Blvd	,		
	=c-		<u></u>	- 11 - 7 - 11				
	U792	-	CRC	Bell Ave / Alberta	King Rd to County	Add bikeways and pedestrian facilities		
				St / 72nd Ave	line			
	U796	-	CRC	Evelyn St	OR 224 to Jennifer St	Add bikeways and pedestrian facilities		
	U805		CRC	Jennifer St	82nd Dr to 135th	Add pedestrian facilities		
	0003	-	CNC	Denniner of	Ave	The peacetrian racinities		

TABLE 5-3b Preferred Capital Projects

Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

						rocess to replace the TSP Update ID
Project	TSP	RTP	TSP	Project Name /	Segment /	Project Description
ID	Update	ID	Geographic	Street Name	Locations	
	ID		Area			
	U825	-	CRC	Monroe St / 72nd	Linwood Ave to	Add pedestrian facilities
				Ave / Thompson Rd	Fuller Rd	
	11010		CDC	Casutana Mauratain	Loop trail through	Council was the council to the counc
	U919		CRC	Scouters Mountain		Construct multi-use path consistent with the Connecting Clackamas Plan
				/ Mt Scott Loop Trail	Happy Valley, Damascus,	Clackattias Pidti
				IIali	Clackamas County	
ĺ					and Portland	
	1010	_	E	282nd Ave	282nd / Haley Rd	Install traffic signal and reduce speed limit on 282nd
	1010		_	20211d AVC	intersection	install traffic signal and reduce speculiffic on 20211a
	1062	-	E	362nd Ave		Add paved shoulders
ĺ			_			
	U502	-	E	Firwood Rd	Wildcat Mountain Dr	Add paved shoulders and turn lanes at major intersections.
1					to US 26	
	U745	-	E	Eagle Creek Rd	OR 211 to Duus Rd	Add paved shoulders
	<u> </u>					
	1078	-	M	Clackamas Rd	Johnson Rd and	Fill gaps in bikeways and pedestrian facilities
					Webster Rd	
<u> </u>	111.151			In a section of	0-16-14-5-1	Milden to 2 lane unless
	U149b	-	M	Jennings Ave	Oatfield Rd to	Widen to 2-lane urban minor arterial standard with bikeway
					Webster Rd	and pedestrian facilities infill
	U150	-	M	Webster Rd	OR 224 to Gladstone	Fill gaps in bikeways and pedestrian facilities
	2200					O. p. S. M. S. M. S. M. P. S. S. M.
	U819	-	M	Roots Rd	Webster Rd to	Add pedestrian facilities
					McKinley Rd	
1						
	U824		M	Thiessen Rd	Oatfield Rd to	Add bikeways and pedestrian facilities
	0024	_	IVI	i iliesseii Ku	Webster Rd	Aud bikeways and pedestrian identities
					vvebster nu	
1						
	1077	-	NW	Advance Rd	~2,900 ft west of	Realign roadway and grade improvements
					Mountain Rd	
	2033	-	NW	Advance Rd	65th Ave to	Add paved shoulders
					Mountain Rd	
	U177	10030	NW	Stafford Rd / 65th	I-205 to Boeckman	Add paved shoulders and turn lanes at major intersections
				Ave	Rd / Advance Rd	
	1065	-	SW	Molalla Forest Rd		Pave to provide bicycle access
1					of Molalla	
	2800		SW	Beavercreek Multi-	Loder Rd to	Construct multi-use path consistent with the Beavercreek
			· · · · · ·	Use Path	Ferguson Rd	Road Concept Plan
					_	·
	2806		SW	Arndt Rd Extension	Barlow to OR 99E	Construct new 2 or 3 lane roadway
	11400		0		er i sement	
	U190	-	SW	Hattan Rd	Fischers Mill Rd to	Add paved shoulders and turn lanes at major intersections
	11204		CIA	Dodland Dd	Gronlund Rd	Install easthound left turn lans
	U201	-	SW	Redland Rd		Install eastbound left-turn lane
					Rd intersection	
	L			l .	1	l

TABLE 5-3b Preferred Capital Projects

Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

Project	TSP	RTP	TSP	Project Name /	Segment /	Project Description
ID	Update	ID	Geographic	Street Name	Locations	
	ID		Area			
	U204	-	SW	Redland Rd	Redland Rd /	Install eastbound left-turn, eastbound right-turn and
	0207				Fischers Mill Rd /	westbound right-turn lanes at Henrici Rd
					Henrici Rd	
					intersection	
	U210	-	SW	Henrici Rd	OR 213 to	Add paved shoulders and turn lanes at major intersections
					Beavercreek Rd	
	U250	-	SW	Springwater Rd	Springwater Rd /	Install southbound left-turn lane; realign intersection to fix
					Bakers Ferry Rd	skew
					intersection	
	U275	-	SW	Boones Ferry Rd	Boones Ferry Rd /	Remove bank, remove/decrease horizontal curve
					Butteville Rd	
					intersection	
	U299	-	SW	Dryland Rd	Macksburg Rd S to	Realign to form one intersection at Dryland Rd
					Macksburg Rd N	
	U475b	-	SW	Henrici Rd	Ferguson Rd to	Add paved shoulders and turn lanes at major intersections.
					Redland Rd	Remove horizontal and vertical curves
	U504	-	SW	Mulino Rd (13th St	Canby city limits to	Add paved shoulders and turn lanes at major intersections
			_	segment)	OR 213	
	U738	-	SW	Barlow Rd	Knights Bridge Rd to	Add paved shoulders
					OR 99E	·
	U784	-	SW	Canby - Molalla	City of Canby to City	Construct multi-use path
				Railroad Trail	of Molalla	
	U920		SW	Newell Creek Trail /	Loop around the	Construct multi-use path consistent with the Connecting
				Oregon City Loop	perimeter of Oregon	Clackamas Plan
				Trail	City	
	U938		SW	Molalla Ave	Just south of city of	Construct bridge to resolve flooding issues
				Flooding	Molalla	

Project	TSP	RTP	TSP	Project Name /	Segment /	Project Description
ID	Update	ID	Geographic	Street Name	Locations	rioject bescription
	ID		Area			
	2050	-	CRC	King Rd	Milwaukie City Limits to 82nd Ave	Fill gaps in pedestrian facilities
	2051	-	CRC	Michael Dr	72nd Ave to Fuller Ave	Fill gaps in pedestrian facilities
	U074	10002	CRC	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
	U084	-	CRC	Linwood Ave Bridge over Johnson Creek	Bridge	Construct bridge with bike lanes and sidewalks
	U091	10016	CRC	Fuller Rd	Otty Rd to King Rd / OR 213	Construct new 2 lane extension with pedestrian facilities and bikeways
	U102	-	CRC	Lake Rd	OR 224 west to Milwaukie city limits	Add pedestrian facilities and turn lanes at major intersections
	U107	10067	CRC	Phillips Creek Multi- Use Path	Causey Ave to North Clackamas Regional Parks Trail	Construct multi-use path
	U114	-	CRC	Hillcrest St	92nd Ave to Stevens Rd	Add pedestrian facilities
	U115	-	CRC	Idleman Rd	92nd Ave to Westview Ct	Fill gaps in bikeways and pedestrian facilities
	U126	-	CRC	Valley View Terrace	Sunnyside Rd to Otty Rd	Add bikeways and pedestrian facilities
	U131	-	CRC	Mather Rd	Mather Rd / 122nd Ave intersection	Install traffic signal or compact roundabout
	U132	-	CRC	Mather Rd	122nd Ave to 132nd Ave	Construct new 2 lane roadway with pedestrian facilities and bikeways
	U136	-	CRC	152nd Ave Phase 2	Sunnyside Rd to OR 212	Add bikeways, pedestrian facilities and turn lanes at major intersections
	U156	10023	CRC	82nd Dr	OR 212 to Gladstone	Widen to 5 lane with bikeways and pedestrian facilities
	U160	-	CRC	Mather Rd	Industrial Way to 98th Ave	Maintain as pedestrian facilities and bikeway. Construct undercrossing at Sunrise Expressway.
	U657	-	CRC	Sunnyside Rd Adaptive Signal Timing	OR 213 to 172nd Ave	Add adaptive timing to traffic signals
	U662	-	CRC	West 82nd Ave Parallel Road	King Rd to Luther Rd	Construct collector road parallel to OR 213 with bikeways and pedestrian facilities

				_		rocess to replace the TSP Update ID
Project	TSP	RTP	TSP	Project Name /	_	Project Description
ID	Update ID	ID	Geographic Area	Street Name	Locations	
	U677	10540	CRC	162nd Ave	Sager Rd north to County line	Add bikeways, pedestrian facilities, turn lanes at major intersections
	U694	-	CRC	93rd Ave	Sunnyside Rd to Sunnybrook Blvd	Add bikeways
	U710	-	CRC	Jennifer St	106th Ave to 130th Ave	Add bikeways
	U785	-	CRC	106th Ave	OR 212 to Jennifer St	Add bikeways and pedestrian facilities
	U794	-	CRC	Cornwell Ave	OR 213 to Fuller Rd	Add pedestrian facilities; connect to I-205 Multi-Use Path
	U797 - CRC Fuller Rd Johnson Creek Blvd to County line		Johnson Creek Blvd to County line	Add pedestrian facilities		
			Johnson Rd to Webster Rd	Fill gaps in pedestrian facilities and bikeways		
	U900	-	CRC	Luther Rd Bridge	Bridge crossing Johnson Creek	Replace bridge
	U909	10534	CRC	Cheldelin Rd (Clatsop St extension)	172nd Ave to Foster Rd	Construct new two lane roadway with bikeways and pedestrian facilities
	U910		CRC	Cheldelin Rd	Foster Rd to 190th Dr	Add bikeways and pedestrian facilities
	U937		CRC	172nd Ave Bridge	~140 feet south of Troge Rd	Replace bridge nearing the end of its useful life
	U941		CRC	84th Ave	Sunnyside Rd to Sunnybrook Blvd	Fill in bikeways and pedestrian facilities gaps
	2000	-	E	Bluff Rd	Kelso Rd to County line	Add paved shoulders
	2001	-	E	Orient Dr	US 26 north to County line	Add paved shoulders
	2002	-	E	Coalman Rd	City of Sandy to US 26	Add paved shoulders
	2003	-	Е	Barlow Trail Rd/ Lolo Pass Rd	Between communities of Timberline, Welches and Zig Zag	Add paved shoulders
	2004	-	E	Howlett Rd	OR 211 to Wildcat Mountain Dr	Add paved shoulders

			_		rocess to replace the TSP Update ID	
Project	TSP	RTP	TSP	Project Name /	Segment /	Project Description
ID	Update ID	ID	Geographic Area	Street Name	Locations	
	2005	-	E	Wildcat Mountain Dr	OR 224 to Firwood Rd	Add paved shoulders
	2006	-	E	352nd Ave / Dunn Rd	Bluff Rd to Bluff Rd	Add paved shoulders
	2105		E	282nd Ave	282nd Ave / OR 212 intersection	Add second right-turn lane on 282nd Ave and additional intersection improvements as needed
	2808 E Mt Hood Aerial Transportation Link		Between Ski Bowl, Aerial transportation link Government Camp Village and Timberline Lodge			
	U226	-	E	282nd Ave	OR 212 to Multnomah County line	Add paved shoulders
	U227	-	E	Compton Rd	US 26 to 352nd Ave	Remove vertical curve near Orient Dr and relocate intersection; add paved shoulders
	U232	-	E	Kelso Rd	Richey Rd to Orient Dr	Add paved shoulders
	U233	-	- E 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
	U234	-	E	362nd Dr	Colorado Rd to Dubarko Rd	Remove or decrease horizontal and vertical curves
	U235	-	E	362nd Dr	362nd Ave / Deming Rd intersection	Remove or decrease vertical curve, relocate intersection
	U237	- E		Ten Eyck Rd		Remove vertical curve, relocate intersection, add paved shoulders, turn lanes at major intersections; investigate speed zone
	U239 - E Firwood Rd		Firwood Rd	Firwood Rd / Trubel Rd intersection	Realign Trubel Rd to remove or decrease downgrade	
	U241b	-	E	Welches Rd	Birdie Ln to Salmon River Rd	Add paved shoulders
	U245	-	E			Safety analysis; add paved shoulders
	U254	-	E	Hayden Rd	Springwater Rd to OR 211	Add paved shoulders
	U255	-	E	Springwater Rd	Hayden Rd to OR 211	Add paved shoulders
	U256	-	E	Eagle Creek Rd	Keegan Rd to Currin Rd	Realign Eagle Creek Rd to remove or decrease downgrade
	U258	-	E	Coupland Rd	Estacada City limits to Divers Rd	Add paved shoulders and turn lanes at major intersections
	U495	-	Е	Bull Run Rd	Ten Eyck Rd to Multnomah County line	Add paved shoulders and turn lanes at major intersections.

						Project Description
Project	TSP	RTP	TSP	Project Name /	_	Project Description
ID	Update	ID	Geographic	Street Name	Locations	
	ID		Area			
	U761	-	E	Salmon River Rd	US 26 to Welches Rd	Add paved shoulders
	0701	-	E.	Saimon River Ru	03 20 to Welches Na	Add paved silodiders
	U901		E	Bull Run Truss	Bull Run truss	Replace bridge nearing the end of its useful life
					between	
					Waterworks Rd and	
					Bowman Rd	
	U903		E	Porter Rd Bridge	~100 ft east of	Replace bridge
	U924		E	over Delph Creek Tickle Creek Trail	Wilcox Rd	Construct multi-use path consistent with the Connecting
	0924			TICKIE CIEEK ITAII	to Sandy city limits	Clackamas Plan
					to Sundy city illints	Cidekumus Tidii
	1072	-	M	Oetkin Way and	Oatfield Rd and	Add bikeways
				Naef Rd	Wallace Rd	·
	1079		N 4	Clackamas Rd	Clackamas Dd / Lags	Construct bike/pedestrian bridge over I-205
	1079		M	Сіаскатаѕ ка	interchange	Construct bike/pedestrian bridge over i-205
	1084		M	Oatfield Ridge	Between Jennings	Construct multi-use path
	1007			Connection	Ave and Thiessen	construct mater use patri
					Ave over Oatfield	
					Ridge	
	2023		M	McNary Rd / Mabel	Oatfield Rd to	Add bikeways and pedestrian facilities
				Ave	Webster Rd	
	2040	_	M	Strawberry Ln	Webster Rd to 82nd	Add pedestrian facilities and fill bikeway gaps
	2010			oc. a y	Dr Dr	and peacetrian radinates and implicating gaps
	2042	-	M	Portland Ave	Jennings Ave to Hull	Fill gaps in pedestrian facilities
					Ave	
	2043	-	M	View Acres Rd	Oatfield Rd to Hill Rd	Add pedestrian facilities and traffic calming
	2112	_	M	Thiessen Rd	Thiessen Rd / Hill Rd	Add right-turn lane on Thiessen Rd; consider converting
	2112	_	IVI	Tillessell Nu	intersection	to two-way stop controlled or installing roundabout
					e.seedie	to the may stop contained or motaming realisation
	U004	10064	M	Webster Rd	Webster Rd /	Construct traffic signals, turn lanes
					Jennings Ave and	
					Webster Rd / Roots Rd intersections	
-	U137b	_	M	River Rd		Add pedestrian facilities
	01375		141	iniver nu	Grove Blvd	, and penestrial racinities
	U137d	-	M	River Rd	Risley Ave to	Add pedestrian facilities
					Rinearson Rd	
		1	i	i	1	i

Project	TSP	RTP	TSP	Project Name /	Segment /	Project Description
ID				Street Name	Locations	Project Description
טו	Update ID	ID	Geographic Area			
	U143	10055	М	Oatfield Rd	Oatfield Rd / Hill Rd intersection	Add left-turn lanes, install signal if warranted
	U146		M	Aldercrest Dr	Thiessen Rd to Oatfield Rd	Add pedestrian facilities to one side of the road and bikeways
	U152	10065	М	Webster Rd	Webster Rd / Strawberry Ln intersection	Add signal; construct southbound and westbound left- turn lane
	U154	10050	М	Johnson Rd / McKinley Rd	OR 224 to I-205 multi-use path	Bikeway and pedestrian facilities infill
	U707	-	M	Hill Rd	Oatfield Rd to Thiessen Rd	Add bikeways and pedestrian facilities
	U724		M	Rusk Rd	OR 224 South to Aldercrest Rd	Add pedestrian facilities on one side of the roadway and bikeways
	U813		M	Naef Rd	Oatfield Rd to River Rd	Add pedestrian facilities
	U814	-	M	Oatfield Rd	Milwaukie city limits to Gladstone city limits	Fill gaps in pedestrian facilities and bikeways
	U816		М	Risley Ave	Arista Dr to Hager Rd	Fill gaps in pedestrian facilities
	U818	-	М	Roethe Rd	River Rd to OR 99E (McLoughlin Blvd)	Add bikeways, pedestrian facilities and traffic calming
	1014	-	NW	Wilsonville Rd	Wilsonville Rd / Bell Rd intersection	Realign roadway and grade improvements
	2029	-	NW	Schatz Rd / 55th Ave / Meridian Way	65th Ave to Stafford Rd	Add paved shoulders
	2030	-	NW	Mountain Rd	Stafford Rd to Hoffman Rd	Add paved shoulders
	2031	-	NW	Schaeffer Rd	Mountain Rd to Petes Mountain Rd	Add paved shoulders
	2032	-	NW	Hoffman Rd / Peach Cove Rd / Riverwood Rd	Mountain Rd to Tualatin River	Add paved shoulders
	2034	-	NW	Graham's Ferry Rd	County line to Westfall Rd	Add paved shoulders

_				_	e TSP adoption process to replace the TSP Update ID		
Project		RTP	TSP	Project Name /	_	Project Description	
ID	Update ID	ID	Geographic Area	Street Name	Locations		
	2035	-	NW	Pleasant Hill Rd / McConnell Rd / Tooze Rd	Ladd Hill Rd to Westfall Rd	Add paved shoulders	
	2036	-	NW	Bell Rd	Ladd Hill Rd to Wilsonville Rd	Add paved shoulders	
	2037	-	NW	Baker Rd	Tooze Rd to County line	Add paved shoulders	
	2038	-	NW	Homesteader Rd	Stafford Rd to Mountain Rd	Add paved shoulders	
	2039	-	NW	Wisteria Rd / Woodbine Rd	Rosemont Rd to Johnson Rd	Add paved shoulders	
	2095		NW	Graham's Ferry Rd	Wilsonville Rd to Wilsonville city limits	Add paved shoulders	
	U272	10693	NW	Ladd Hill Rd	Wilsonville Rd to Washington County line	Add paved shoulders and turn lanes at major intersections	
	U273	-	NW	Wilsonville Rd	Wilsonville Rd / Remove bank, remove horizontal curve, relocate intersection		
	U462	-	- NW Childs Rd		Stafford Rd to Lake Oswego city limits	Add pedestrian facilities, bikeways and turn lanes at major intersections	
	U466 - NW Petes Mountain		Petes Mountain Rd	West Linn city limits to Hoffman Rd	Add paved shoulders and turn lanes at major intersections		
	U700		NW	Bonita Rd	Carman Dr to I-5	Add bikeways and pedestrian facilities	
	U737	-	NW	65th Ave	Stafford Rd to Tualatin city limits	Add paved shoulders	
	U752	-	NW	Johnson Rd	Stafford Rd to West Linn city limits	Add paved shoulders and turn lanes at major intersections	
	U922		NW	Tualatin / Lake Oswego Pedestrian and Bicycle Bridge	Tualatin River Bridge	Construct bike / pedestrian bridge consistent with the Connecting Clackamas Plan	
	U934		NW	Wilsonville Rd Bridge	~300 feet south of Bell Rd	Replace bridge nearing the end of its useful life	
	1047	-	SW	Redland Rd	Fischers Mill Rd to Springwater Rd	Add paved shoulders	
	1050	-	SW	Union Hall Rd	Central Point Rd to El Dorado Rd	Add paved shoulders	
	1053		SW Ferguson Rd		Beavercreek Rd and Henrici Rd	Reduce the speed limit and install traffic calming	
	1054	-	SW	S Killdeer Rd	Ferguson Road and Yeoman Road	Extend S Killdeer Rd to connect with S. Ivel Rd. and provide bike/pedestrian access	
	1057	-	SW	Buckner Creek Rd	Gard Rd to Cochell Rd	Add paved shoulders	
	2012	-	SW	Carus Rd	Central Point Rd to Beavercreek Rd	Add paved shoulders	

						rocess to replace the TSP Update ID
Project	TSP	RTP	TSP	Project Name /	_	Project Description
ID	Update ID	ID	Geographic Area	Street Name	Locations	
	2014	-	SW	Canby-Marquam Highway	City of Canby to OR 211	Add paved shoulders
	2015	-	SW	Meridian Rd	Lone Elder Rd to OR 211	Add paved shoulders
	2016	ı	SW	Lone Elder Rd	County line to Canby- Marquam Hwy	Add paved shoulders
	2017	-	SW	Barnards Rd	Meridian Rd to Canby-Marquam Hwy	Add paved shoulders
	2018	-	SW	Leland Rd	Oregon City line to Beavercreek Rd	Add paved shoulders
	2019	1	SW	New Era Rd / Haines Rd	OR 99E to Leland Rd	Add paved shoulders
	2020	-	SW	Forsythe Rd	Oregon City line to Bradley Rd	Add paved shoulders
	2021	-	SW	Thayer Rd/Ferguson Rd	Oregon City line to Redland Rd	Add paved shoulders
	U186	1	SW	Forsythe Rd	Oregon City limit to Bradley Rd	Add center turn lane and paved shoulders
	U187 - SW Forsythe Rd		Forsythe Rd		Realign, widen Victory Rd; remove or decrease curves along Forsythe Rd; relocate intersection	
	U188 - SW Gronlund Rd /		Gronlund Rd / Hattan Rd	Bradley Rd to Springwater Rd	Add paved shoulders and turn lanes at major intersections	
	U194	-	SW	Bradley Rd	Redland Rd to Holcomb Blvd	Add turn lanes at major intersections
	U195	-	SW	Redland Rd		Widen to include shoulders and bikeways
	U196	-	SW	Redland Rd	~400 ft west of Holly Ln	Widen to include shoulders and bikeways
	U198	-	SW	Redland Rd	Henrici Rd to Oregon City limit	Add paved shoulders
	U206 - SW Henrici Rd		Henrici Rd	Between Driftwood Dr and Shore Vista Dr	Widen bridge to accommodate paved shoulders	
	U212	-	SW	Maplelane Rd	~1,800 ft west of Walker Rd	Add paved shoulders
	U213	-	SW	Leland Rd	~1,000 ft north of Warnock Rd	Construct bridge to accommodate paved shoulders
	U214	-	SW	South End Rd		Smooth curves; add paved shoulders
	U247	-	SW	Bakers Ferry Rd	Springwater Rd to OR 224	Add paved shoulders and turn lanes at major intersections; remove horizontal curve and relocate intersection from Eaden Rd to OR 224
	U249b	-	SW	Springwater Rd	Bakers Ferry Rd to Hayden Rd	Add paved shoulders and turn lanes at major intersections
	U260	-	SW	Fellows Rd	Redland Rd to Lower Highland Rd	Add paved shoulders and turn lanes at major intersections

	1					rocess to replace the TSP Update ID
Project ID	TSP Update ID	RTP ID	TSP Geographic Area	Project Name / Street Name	Segment / Locations	Project Description
	U261b	-	SW	Ridge Rd	Lower Highland Rd to Redland Rd	Add paved shoulders
	U262	-	SW	Redland Rd	Henrici Rd to Springwater Rd	Add paved shoulders and turn lanes at major intersections
	U263	-	SW	Lower Highland Rd	Beavercreek Rd to Fellows Rd	Add paved shoulders and turn lanes at major intersections
	U264	-	SW	Unger Rd	Beavercreek Rd to OR 211	Add paved shoulders and turn lanes at major intersections
	U267	-	SW	Central Point Rd	Parrish Rd to Mulino Rd	Add paved shoulders; smooth curves
	U269	-	SW	Casto Rd	Spangler Rd to Central Point Rd	Add paved shoulders and turn lanes at major intersections
	U270	-	SW	Spangler Rd	Casto Rd to Beavercreek Rd	Add paved shoulders and turn lanes at major intersections
	U271	-	SW	Kamrath Rd	Carus Rd to Spangler Rd	Safety analysis at Carus Rd, add paved shoulders, remove or decrease horizontal curves north of Spangler Rd
	U277	-	SW	Airport Rd	Arndt Rd to Miley Rd	Add turn lanes at major intersections
	U297	-	SW	Gard Rd	~100 ft south of Old Clarke Rd	Construct bridge to accommodate paved shoulders
	U298	=	SW	Canby-Marquam Highway	OR 170 / Macksburg Rd intersection	Reconstruct intersection; install southbound left-turn lane and northbound right-turn lane
	U300	-	SW	Macksburg Rd	Canby Marquam Hwy to OR 213	Add paved shoulders and turn lanes at major intersections
	U303	-	SW	Meridian Rd	Elliott Prairie Rd to Barlow Rd	Add paved shoulders; remove or decrease horizontal and vertical curves
	U306	-	SW	Barnards Rd	Needy Rd to Stuwe Rd	Reconstruct bridge and widen to 36 feet
	U311	-	SW	Molalla Ave	OR 213 to Molalla City limits	Add paved shoulders
	U314	ı	SW	Wright Rd	OR 211 to Callahan Rd	Add paved shoulders
	U315	-	SW	Callahan Rd S (beginning on Ramsby Rd)	Dickey Prairie Rd to Fernwood Rd	Add paved shoulders and turn lanes at major intersections
	U316	-	SW	Fernwood Rd	Dhooghe Rd to Callahan Rd	Add paved shoulders and turn lanes at major intersections
	U317	-	SW	Dhooghe Rd	OR 211 to Fernwood Rd	Add paved shoulders and turn lanes at major intersections
	U320	-	SW	Sawtell Rd	Maple Grove Rd to Wilhoit Rd	Add paved shoulders and turn lanes at major intersections
	U321	-	SW	Wildcat Rd	Wilhoit Rd to OR 213	Add paved shoulders and turn lanes at major intersections
	U322	-	SW	Nowlens Bridge Rd	OR 213 to Maple Grove Rd	Add paved shoulders and turn lanes at major intersections
	U323	-	SW	Blair Rd	Groshong Rd to Maple Grove Rd	Add paved shoulders and turn lanes at major intersections
	U325	-	SW	Bird Rd	Groshong Rd to Wilhoit Rd	Add paved shoulders and turn lanes at major intersections

Project	TSP	RTP	TSP	Project Name /	Segment /	Project Description	
ID	Update	ID	Geographic	Street Name	Locations		
	ID		Area				
	U326 - SW Maple Grove Rd		Nowlens Bridge Rd	Add paved shoulders and turn lanes at major			
					to Sawtell Rd	intersections	
	U332	-	SW	Rock Creek (Kropf	~3,500 ft north of	Replace bridge	
				Rd) Bridge	Gibson Rd		
	U469	-	SW	Clackamas River Dr	Oregon City limits to	Add paved shoulders and turn lanes at Springwater Rd	
					Springwater Rd	and Forsythe Rd	
	U473	10047	SW	Holcomb Blvd	Edenwild Ln to	Add paved shoulders and turn lanes at Holcomb Blvd /	
				Bradley Rd	Bradley Rd		
	U503	-	SW	Mattoon Rd	Fischers Mill Rd to	Add paved shoulders and turn lanes at major	
					Redland Rd	intersections; remove vertical curves, remove horizontal	
						curves north of Redland Rd	
	U505		SW	Toliver Rd	Dryland Rd to	Add paved shoulders	
					Molalla city Limits		
	U739	-	SW	Beavercreek Rd	Yeoman Rd/Steiner	Add paved shoulders	
					Rd to OR 211		
	U742	-	SW	Bradley Rd	Gronlund Rd to	Add paved shoulders	
					Redland Rd		
	U746	-	SW	Fischers Mill Rd	Redland Rd to	Add paved shoulders	
					Springwater Rd		
	U747	-	SW	Gray's Hill Rd	Green Mountain Rd	Add paved shoulders	
	11750	10040	CVA	Hallerta	to OR 211	Add seved shouldons	
	U750	10048	SW	Holly Ln	Maplelane Rd to Redland Rd	Add paved shoulders	
	U754		SW	Maplelane Rd	Oregon City Urban	Add paved shoulders	
	0734	-	300	імарівіане ки	Growth Boundary to	Add paved silouiders	
					Ferguson Rd		
	U755	_	SW	Miley Rd	Airport Rd to Eilers	Add paved shoulders	
	0,33		3**	Timey na	Rd	That pared shoulders	
	U782	-	SW	Mulino Trail	Oregon City	Construct multi-use path	
					boundary to Mulino	'	
	U935		SW	Knights Bridge Rd	~3,200 feet east of	Replace bridge (nearing the end of its useful life)	
				Bridge	Barlow Rd		

Project	TSP	RTP ID	TSP	Project	Segment / Locations	Project Description	Recommended
ID	Update		Geographic	Name /			Priority
	ID		Area	Street Name			
				TSP	State facility locations	TSP Refinement to develop alternative	High
				Refinement	applicable where mobility	mobility targets for state facilities	
					target is not met in 2035	consistent with Oregon Highway Plan (OHP) 1F3.	
	2118	-	CRC	OR 224	OR 224 / Lake Rd / Webster Rd	Add turn-lanes, including second left-	High
					intersection	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	
	2110		CDC	OD 224	OD 224 / Inhanna Dd		110-6
	2119	-	CRC	OR 224	OR 224 / Johnson Rd intersection	Add second left-turn lane on westbound OR 224	High
					mersection	500.224	
	2121	-	CRC	OR 224	OR 224 / Hubbard Rd / 135th	Add intersection improvements,	High
					Ave intersection	including right-turn lanes	· ·
	2122	-	CRC	OR 212	OR 212 / 172nd Ave	Add second eastbound left-turn lane	High
					intersection		
	2815		CRC	Sunnyside Rd	I-205 / Sunnyside Road	Add dual northbound right-turns; install	High
	11422	10073	CRC	OR 212	interchange SE 162nd to Anderson Rd	bike signal.	⊔iah
	U423	10073	CRC	OR 212	SE 162nd to Anderson Rd	Add bikeways, pedestrian facilities ways, and landscape pedestrian facilities	High
						buffer; widen to 6 lanes within Happy	
						Valley; add center turn lane within	
						Damascus	
	U443	-	CRC	OR 224	Springwater Rd / OR 224	Add signal and turn lanes on all	High
					intersection	approaches	
	U671	-	CRC	OR 213	Sunnybrook Blvd to Portland	Extend fiberoptic communications, CCTV	High
					City Limits	at key intersections and adaptive signal timing	
	U904	11347	CRC	SunriseProject	122nd to Rock Creek Junction	Construct multi-use path from 122nd to	High
				Multi-use Path		Rock Creek Junction parallel to the	
	HOOF	10894	CRC	Cunnica Dunicat	Webster Rd/ OR 224 to 172nd	Sunrise project consistent with FEIS. Preliminary engineering from Webster	Hiab
	U905	10894	CRC		Ave / OR 212	Rd to 172nd Ave	High
				Engineering	,c, o	1.0 1/2.10 / 1.0	
	11000	10000	CDC	Consider Duniont	W-b-t D-/ OD 224 t- 472	Aii	110-6
	U906	10890	CRC	Sunrise Project - Right-of-	Webster Rd/ OR 224 to 172nd Ave / OR 212	Acquire right-of-way to accommodate 6 lane expressway plus auxiliary lanes	High
				Way	ON LIL	contessively plus duxillary lattes	
	U915	10078	CRC	OR 224	•	Widen to four lanes; add bikeways.	High
					St		
	2106	-	E	OR 224	OR 224 /232nd Ave	Install traffic signal or roundabout	High
					intersection		
	U427	-	E	OR 224	Eaglecreek Rd / OR 224	Install signal	High
					intersection		
	11407	10024	N //	OB 005	Milwaukie city limit to	Add bikeways, pedestrian facilities ways,	⊔iah
	U407	10024	M	OR 99E	Gladstone city limit to	median enhancements, crosswalks and	High
						pedestrian facilities refuges	
	2022		AD	1.205	CWC (C. ID.): 05.005	her to a to the second	111.1
	2822		NW	I-205	SW Stafford Rd to OR 99E	Widen to 3-lanes in each direction	High

Project ID	TSP Update ID	RTP ID	TSP Geographic Area		Segment / Locations	Project Description	Recommended Priority
	1007	-	SW	OR 213	OR 213 / Spangler Rd intersection	Install traffic signal to replace existing two-way stop	High
	2075	-	SW	OR 213	Mulino to Molalla	Perform road safety audit or transportation safety review to identify appropriate safety improvements	High
	2109	-	SW	OR 213	OR 213 / Henrici Rd intersection	Install traffic signal or roundabout and additional intersection improvements as needed	High
	2110	-	SW	OR 213	OR 213 / Leland Rd intersection	Add northbound through auxiliary lane	High
	2111	-	SW	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
	U441	-	SW	OR 213	Leland Rd / Union Hall Rd intersection	Add southbound auxiliary lane	High
	U531	-	SW	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
	U558	-	SW	I-205	I-205 Corridor	Corridor-wide operational improvements	High
	U559	-	SW	I-205	Willamette River to West Linn city limit	Add southbound truck climbing lane	High
	1000	-	CRC	OR 224	OR 224 / Rusk Rd off-ramp	Extend right-turn lane on OR 224	Medium
	1004	-	CRC	OR 99E	OR 99E / Jennings Ave intersection	Determine safe connection of Trolley Trail at OR 99E / Jennings Ave intersection	Medium
	1018	-	CRC	I-205 / OR 212/224 Interchange	In vicinity of Roots Rd and McKinley Ave	Connect bikeways	Medium
	2053	=	CRC	OR 224	Milwaukie city limits to I-205	Construct multi-use path as parallel route to OR 224	Medium
	U019	11301	CRC	Sunrise Project	I-205 to 172nd Ave	Construct improvements to 172nd	Medium
	U087	10001	CRC	Johnson Creek Blvd	I-205 / Johnson Creek Blvd interchange	Add loop ramp and northbound on- ramp; realign southbound off-ramp and install dual right-turn lanes	Medium
	U109	10014	CRC	OR 213	Sunnyside Rd to Sunnybrook Rd	-	Medium
	U389	10073	CRC	OR 212	OR 212 / SE 162nd Ave intersection	Add left-turn pockets and traffic signal	Medium
	U394	-	CRC	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
	U536	-	CRC	OR 212	Rock Creek Junction to 172nd	Construct climbing lane	Medium

Project ID Number will be determined during the TSP adoption process to replace the TSP Update ID

Project	TSP	RTP ID	TSP	Project	Segment / Locations	Project Description	Recommended
ID	Update		Geographic	Name /		·	Priority
	ID		Area	Street Name			,
	U928		CRC	OR 224	Lake Rd / Johnson Rd /	Realign Lake Rd / Johnson Rd to provide	Medium
					Pheasant Ct	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	
	U532	_	E	OR 211	Hayden Rd to OR 224	Widen to rural arterial standard with	Medium
					,	shoulders, bikeways and turn lanes at	
						major intersections	
	U634	-	E	US 26	Govt. Camp Loop W to OR 35	Implement Finding of Mt Hood	Medium
						Multimodal Study including phased	
						safety improvements	
	U635	-	Е	US 26	OR 35 Junction to Wasco	Widen roadway to include bikeways	Medium
					County line	/shoulders, add passing lanes where	
						needed and turn lanes at major	
	U431	_	SW	OR 211	OR 170 (Canby-Marguam Hwy)	Install eastbound and westbound left-	Medium
	0431	_	300	OR 211	/ OR 211 intersection	turn lanes, and eastbound right-turn	ivieululli
					/ On ZII microccion	lane; remove or decrease horizontal	
						curve	
	U529	-	SW	OR 211	Marion County line to OR 170	Widen to include shoulders, bikeways,	Medium
					(Canby-Marquam Hwy)	add passing lanes where needed and	
						turn lanes at major intersections	
	U551	-	SW	OR 99E	Barlow Rd to Marion County	Four lane widening with median, left-	Medium
					line	turn lanes from mile post 24.05	
	U774	_	SW	OR 213	Oregon City boundary to	Add shoulders and bikeways	Medium
	• • • •			5.1.225	Marion County line		
	4000			00.004	,		
	1082	-	CRC	OR 224	Webster Rd and 82nd Ave	Provide frontage connection on the north side of OR 244	Low
						north side of OR 244	
	2089	-	CRC	OR 213 (82nd	Luther Road to Sunnybrook	Perform road safety audit or	Low
				Ave)	Blvd	transportation safety review to identify	
						appropriate safety improvements	
	2093		CRC	OR 212	I-205 to OR 224	Perform road safety audit or	Low
	2033	_	CITC	OK 212	11-203 to OK 224	transportation safety review to identify	LOW
						appropriate safety improvements	
						,, ,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	U106	10018	CRC	OR 213	Clatsop St to Sunnyside Rd	OR 213/82nd Avenue Boulevard Design	Low
		10014				Improvements - Widen to add sidewalks,	
						lighting, central median, planting strips	
						and landscaping; fill gaps in the bike and	
						pedestrian facilities network. 2014	
						ODOT OR213 paving project	
						programmed King to OR222.	
-	U544		CRC	OR 224	Springwater Rd to 232nd Dr	Shoulder widening, horizontal	Low
	0344	_	CNC	OR 224	Springwater nu to 232110 DI	realignment, realignment of roadway to	LUW
						bluff	
	U773	10138	CRC	OR 212	Within the Damascus City	Obtain right-of-way for future 4 lane	Low
	-		-		Limits (Armstrong Cr to 257th)	facility with planted median and 5 lanes	-
						at major intersections; build as major	
						development occurs and apply access	
						management to reduce number of	
				1		driveways.	
	1011	-	E	US 26	US 26 / Haley Rd intersection	Develop a plan to address to address	Low
	1011	-	E	US 26	US 26 / Haley Rd intersection		Low

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Project	TSP	RTP ID	TSP	Project	Segment / Locations	Project Description	Recommended
ID	Update ID		Geographic Area	Name / Street Name			Priority
	1061	-	E	OR 211	Bornstedt Rd to City of Sandy	Add shoulders and bikeways	Low
	2064	-	E	OR 211	OR 224 to eastbound US 26	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
	2065	-	E	US 26	Kelso Rd to Duncan Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
	2066	-	E	US 26	Duncan Rd to Langensand Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
	2067	-	E	US 26	Firwood Rd to Sleepy Hollow Dr	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
	2068	-	E	US 26	Rhododendron to OR 35	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
	2070	-	E	OR 211	OR 224 to Hillcockburn Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
	2071	-	E	OR 224	232nd Ave to OR 211	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
	2072	-	E	OR 224	Fish Creek Rd to National Forest Rd 46	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Low
	U425	-	E	OR 211	Tickle Creek Rd/OR 211 intersection	Remove or decrease horizontal curve, relocate intersection	Low
	U444	-	E	OR 224	Bakers Ferry Rd / OR 224 intersection	Add eastbound right-turn lane	Low
	U445	-	E	OR 224	Amisigger Rd / OR 224 intersection	Install traffic signal; add southbound and eastbound left-turn lanes and westbound right-turn lane	Low
	U446	-	Е	OR 224	Heiple Rd / OR 224 intersection	Add southbound right-turn lane	Low
	U450	-	E	OR 211	362nd Dr / OR 211 intersection	Remove or decrease vertical curve and remove vegetation	Low
	U454	-	E	US 26	US 26 / Firwood Rd intersection		Low
	U456	-	E	US 26	US 26 / Brightwood Loop W	Add westbound right-turn lane	Low
	U457	-	E	US 26	US 26 / Brightwood Loop E	Add westbound right-turn lane	Low
	U520	-	E	US 26	Lolo Pass Rd to Govt. Camp Loop Rd. W	Implement Finding of Mt Hood Multimodal Study including ITS approach with variable speed signage	Low

_	ct ID Number will be determined during the TSP adoption process to replace the TSP Update ID t TSP RTP ID TSP Project Segment / Locations Project Description Recommend			Recommended			
Project		KIPID		Project	Segment / Locations	Project Description	
ID	Update		Geographic	Name /			Priority
	ID		Area	Street Name			
	U533	-	E	OR 211	Eagle Creek Rd to Tickle Creek	Widen to include bikeways /shoulders	Low
					Rd	and add passing /climbing lanes where	
	11524		F	OD 244	0.14	needed	1
	U534	-	E	OR 211	0.14 miles east of Coop Rd to Jacknife Rd	Widen to add shoulder / bikeways; realign to remove horizontal and vertical	Low
					Jackille Ku	curves	
	U535	_	E	OR 211	Tickle Creek Rd to 362nd Dr	Widen to include bikeways /shoulders	Low
	0000		_	0222	Thomas Greek Ha to Sozina Di	and add passing /climbing lanes where	2011
						needed	
	U547	-	E	OR 224	Bakers Ferry Rd to Estacada city	Widen to include shoulders and	Low
					limits	bikeways; add passing lanes where	
						needed	
	U775	-	E	OR 224	OR 212 to City of Estacada	Add shoulders and bikeways	Low
	2086	-	M	OR 99E	Park Ave to Gladstone city	Perform road safety audit or	Low
					limits	transportation safety review to identify	
						appropriate safety improvements	
	U917		NW	OR 43	Lake Oswego to Portland	Develop active transportation connection	Low
						consistent with the Connecting	
	1000			00.010		Clackamas Plan	
	1006	-	SW	OR 213	OR 213 / Carus Rd intersection	Install traffic signal to replace existing	Low
						two-way stop See U339	
	2010	_	SW	OR 99E	Oregon City to Canby	Add shoulders and bikeways	Low
	2010		· · · ·	0.0352	oregon enty to carry,	rad shoulders and smerrays	2011
	2010			00.011	0.000		
	2013	-	SW	OR 211	OR 170 (Canby-Marquam Hwy)	Add shoulders and bikeways	Low
	2079	_	SW	OR 211	to City of Molalla Beavercreek Rd to Upper	Perform road safety audit or	Low
	2073		300	OK 211	Highland Rd	transportation safety review to identify	LOW
						appropriate safety improvements	
						, , ,	
	2080	-	SW	OR 99E	Sequoia Parkway to Lone Elder	Perform road safety audit or	Low
					Rd	transportation safety review to identify	
						appropriate safety improvements	
	2004			00.005			
	2081	-	SW	OR 99E	Territorial Rd to Metro	Perform road safety audit or	Low
					boundary	transportation safety review to identify appropriate safety improvements	
						appropriate safety improvements	
	2083	_	SW	OR 213	OR 213 / Beavercreek Rd	Perform road safety audit or	Low
				5.1.22	intersection	transportation safety review to identify	-2
						appropriate safety improvements	
	U339	10042	SW	OR 213	Macksburg Rd to Liberal Way	Widen shoulders to state standards	Low
	0333	10042	300	OK 213	Iviacksburg hu to Liberal way	Widen shoulders to state standards	LOW
	U424	-	SW	OR 211	Dhooghe Rd / OR 211	Remove or decrease horizontal curve,	Low
					intersection	relocate intersection	
	U442	-	SW	OR 213	Carus Rd / OR 213 intersection	Install southbound left-turn and right-	Low
					,	turn lanes	
	<u> </u>						
	U467	-	SW	OR 211	Needy Rd to 0.6 miles west of	Remove or decrease vertical curve to	Low
					Needy Rd	allow passing zone, add passing lane in	
						one or both directions, possible	
						relocation of intersection	

Project ID	TSP Update	RTP ID	TSP Geographic	_	Segment / Locations	Project Description	Recommended Priority
	ID		Area	Street Name			
	U772	-	SW	OR 211	Molalla city limits to Estacada city limits	Widen to rural arterial standard (2 lanes) with shoulders and bikeways	Low
	U418	10052	CRC	Tolbert St Overcrossing	82nd Dr to Industrial Way	Construct new 2 lane overcrossing with bikeways and pedestrian facilities ways - Funded and programmed as part of the Sunrise JTA	Moved to County List
	1020	-	E	OR 211	OR 211 / Judd Rd intersection	Realign roadway	Moved to County List
	U619	-	CRC	Sunrise Corridor Unit 2	172nd Ave to US 26	Construct 4 lane roadway with interchanges	Remove
	U907	10869	CRC	Sunrise JTA	I-205 to 122nd Ave / OR 212/224	Current RTP FC # 10869 \$ 150M. Remove from list. Currently under construction	Remove
	U916	10114	CRC	Sunrise Parkway	Rock Creek Junction to US 26	Preliminary engineering and Environmental Impact Statement (EIS)	Remove
	1058	-	E	OR 224	Mount Hood National Forest	Pave 8 additional miles east into Mount Hood National Forest	Remove
	1075	-	E	OR 224	OR 224 and US 26	Extend OR 224 to US 26 via Skyline Road	Remove
	U918		NW	OR 43 South	West Linn to Lake Oswego	Implement the OR 43 design plan for an active transportation corridor consistent with the Connecting Clackamas Plan	Remove
	2074	-	SW	OR 213	Molalla Ave to S Spangler Rd	Perform road safety audit or transportation safety review to identify appropriate safety improvements	Remove
	U605	-	SW	OR 99E	Pudding River Bridge	Replace bridge	Remove - no replacement needed
	1100	-	E	US 26	US 26 / Haley Rd intersection	Install traffic signal	Remove - Redundant with 1011
	U580	10138	CRC	OR 212	Sunrise JTA mainline to 257th Ave	Widen to 4 lanes with bike lanes, planted median and turn pockets at signalized locations	Remove Redundant to U773

Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 – Recommended Language
	and regional jurisdictions in their roadway planning efforts. (Roadways/ Efficiency & Finance 6.0, pg V-6)	
5.A.5	New - Emergency Response and Disasters	Work with the Oregon Office of Emergency Management to ensure that the TSP supports effective responses to natural and human-caused disasters and emergencies and other incidents, and access during these incidents.
5.A.6	<u>New</u> – Regional Design Types	Urban Coordinate with Metro and local governments to implement the Regional Transportation Plan (RTP), Regional Transportation Functional Plan (RTFP), Urban Growth Management Functional Plan (UGMFP), and local transportation plans.
5.A.7	<u>New</u> - Rural Road	Rural Pursue formation of an Area Commission on Transportation (ACT) for the portions of Clackamas County outside the Portland Metropolitan Urban Growth Boundary to facilitate a coordinated approach to addressing issues on the state transportation system.
5.B	Safety and Road Conditions	
5.B.1	<u>New</u> - Traffic Safety Action Plan	Update the Clackamas County Transportation Safety Action Plan (TSAP) every five years to include necessary changes and document the progress toward the plan's goal of a 50 percent reduction in fatal and serious injury crashes by 2022.
5.B.2	<u>New</u> - Safety Topics	Identify transportation system safety improvements that will reduce fatal and serious injury crashes for all modes of travel and meet the TSAP goal.
5.B.3	New - Safety Topics	Address the County's top three crash cause factors of Aggressive Driving, Young Drivers (ages 15-25) and Roadway Departure utilizing education, emergency medical services, enforcement, engineering and evaluation.
5.B.4	New - Safety Topics	Support programs, policies, regulations and actions that increase awareness and education about the safety of the transportation system for all users.
5.B.5	New	Support programs that utilize data-driven approaches to improve safety of the transportation system.

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 – Recommended Language
5.B.6	New	Align County departments, external safety groups, and other public agencies toward common state, regional, county and city transportation safety goals.
5.B.7	New	Integrate roadway, safety and traffic data management, health and emergency services data sources.
5.B.8	New	Integrate Highway Safety Manual (HSM) principles into the planning, engineering, design, operation and maintenance of the transportation system.
5.C	Equity, Health and Sustainability	
5.C.1	<u>New</u> – Equity & Health	Support programs and projects, such as pedestrian and bike connections to transit stops, that expand and improve transportation options for residents in areas with identified transportation-disadvantaged populations.
5.C.2	Transit 8.0 Protect neighborhoods, recreation areas and pedestrian/bikeways from transportation related environmental degradation. (Transit 8.0, pg V-17)	Protect neighborhoods, recreation areas, and pedestrian facilities, folikeways and sensitive land uses (such as schools and senior centers whose users are more vulnerable to pollution) from transportation-related environmental degradation. Coordinate transportation and land use planning, and use mitigation strategies, such as physical barriers and design features, to minimize transmission of air, noise and water pollution from roads to neighboring land uses.
5.C.3	New - Sustainability Topics	Work with public agencies, private businesses and developers to increase and improve infrastructure necessary to support use of vehicles that use alternative fuels.
5.C.4 (5.C.5)	New	Ensure that programs to encourage and educate people about bicycle, pedestrian, and transit transportation options are appropriate for all County residents, particularly transportation disadvantaged populations.
5.C.5 (5.C.6)	New	Build working partnerships between the County's Public Health and Transportation Divisions and utilize tools, such as health impact assessments, to better connect the effects of transportation projects with the health of communities.
5.C.6	<u>New</u> -Rural Equity Issues	Rural Support the continued provision of public

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 – Recommended Language
(5.C.4)	Change from Sept. 23 rd document: this policy is a Rural area policy, so was re-ordered within section 5.C.	transportation services to County populations that are un-served or under-served, as well as the network of community-based, transportation services for seniors and persons with disabilities.
5.D	Intelligent Transportation Systems (ITS)	
5.D.1	New	Implement a wide range of ITS strategies aligned with the TSP vision and goals by ensuring safe, efficient, and equitable mobility for people and goods.
5.D.2	New	Update the ITS Action Plan every five years as part of the County's 5-Year Capital Improvement Program.
5.E	Transportation Demand Management	
5.E.1	New	Implement Transportation Demand Management techniques—including education, encouragement, and enforcement—appropriate for all County residents, in order to increase efficient use of existing transportation infrastructure and minimize congestion and safety concerns by offering choices of mode, route, and time.
5.E.2	TDM 3.0 Coordinate with DEQ and Tri-Met to implement TDM programs and the Employer Commute Options (ECO) rule. (TDM 3.0, pg V-13)	Support and participate in efforts by Metro, the Department of Environmental Quality Coordinate with (DEQ), and Tri-Mettransit providers and Transportation Management Associations (TMAs) to develop, monitor and fund regional-implement_TDM programs_and the Employer Commute Options (ECO) rule.
5.E.3	TDM 4.0 Provide adequate bicycle and pedestrian facilities to employment areas of Clackamas County to encourage use of alternative modes for the commute to work. (TDM 4.0, pg V-13)	Provide adequate bicycle and pedestrian facilities to employment areas of Clackamas County to encourage use of alternative modes for the commute to work and to improve access to jobs for workers without cars.
5.E.4	New Transportation Demand Management (and Active Transportation)	Support programs that work with schools to identify safe bicycle and pedestrian routes to connect neighborhoods and schools. Seek partnerships and funding to support improvement of these routes.

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 – Recommended Language
5.E.5	TDM 5.0 Work with Clackamas County employers located in concentrated employment areas to develop Transportation Management Associations (TMAs) to coordinate and support private sector TDM efforts. (TDM 5.0, pg V-13)	<u>Urban</u> Work with Clackamas County employers located in concentrated employment areas to develop Transportation Management Associations (TMAs) to coordinate and support private sector TDM efforts and to work toward mode share targets (Table 5-1) adopted in this Plan.
	TDM 2.0 Encourage employers in Clackamas County to implement a range of TDM policies to help their employees reduce VMT. Examples are, subsidized bus passes, company owned vanpools, preferred parking for carpools and vanpools, bicycle racks, and flexible work schedules. (TDM 2.0, pg V-13)	TDM 2.0 amended and combined with TDM 5.0 as Policy 5.E.5 Encourage employers in Clackamas County to implement a range of TDM policies to and to work toward mode share targets adopted in this Plan.help their employees reduce VMT. Examples are, subsidized bus passes, company owned vanpools, preferred parking for carpools and vanpools, bicycle racks, and flexible work schedules.
5.E.6	TDM 6.0 Establish the following Year 2040 Non-Single Occupancy Vehicle (SOV) modal split targets for Regional 2040 Design Types. (TDM 6.0, pg V-14)	<u>Urban</u> Establish the following Year 2040 <u>non-drive-alone</u> Non-Single Occupancy Vehicle (SOV) modal split-targets for Regional 2040 growth concept Design-design Ttypes (as identified on Map IV-8):-Insert Table 5-1 Non-Drive-Alone Targets by 2040 Design Types.
5.E.7	TDM 2.0 Encourage employers in Clackamas County to implement a range of TDM policies to help their employees reduce VMT. Examples are, subsidized bus passes, company owned vanpools, preferred parking for carpools and vanpools, bicycle racks, and flexible work schedules. (TDM 2.0, pg V-13)	Rural Encourage employers and schools outside urban growth boundaries in Clackamas County to implement a range of TDM policies to help their employees and students reduce vehicle miles traveled, VMT maximize use of existing transportation facilities, and increase walking, biking and transit use. Examples are, subsidized bus passes, company owned vanpools, preferred parking for carpools and vanpools, bicycle racks, and flexible work schedules

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Land Use and Transportation Planning

Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.F	Integration of Land Use & Transportation Planning	
5.F.1	New See also 5.F.3 based on policy Roadways/ Improvement to Serve Development 24.0	Land use and transportation policies shall be integrated consistent with state law regarding preservation of farm and forest lands.
5.F.2	New	Support efforts to enhance and maintain the function of State highways and County arterials through land use policies, access management strategies, and roadway improvements.
5.F.3	New - Integration of Urban Land Use and Transportation and also based on existing policy Roadways 24.0: Encourage a relationship between land use and roadways which decreases average trip length. (Roadways/Improvement to Serve Dev 24.0, pg V-9)	Support and promote an integrated approach to land use and transportation planning and implementation that encourages livable and sustainable communities, decreases average trip length and increases accessibility for all modes.
5.F.4	New - Integration of Urban Land Use and Transportation	Support and promote transportation investments that support complete and sustainable communities as a long-term strategy to reduce reliance on long commutes out of the County to employment destinations.
5.F.5	New	Recognize the County's rural economic engine and the importance of moving goods from rural businesses (including farms, nurseries, livestock, and lumber) to distribution centers.
5.G	Parking Policies	
5.G.1	Parking 1.0 Set minimum and maximum parking limits on allowed off-street parking relative to building size, location and use, and adjacent land uses. (Parking 1.0, pg V-15)	Set minimum and, where appropriate, maximum parking limits on allowed off-street parking of motor vehicles relative to building size, location and use, and to adjacent land uses. In the urban area, parking standards shall be coordinated with regional parking requirements.
5.G.2	PedBike 14.0 Require new development to provide bicycle parking, and initiate a program for adding bicycle parking in areas frequented by bicyclists. (PedBike 14.0, pg V-21)	Require new multi-family, commercial and institutional development to provide bicycle parking. and initiate a program for adding bicycle parking in areas frequented by bicyclists Implementing language for bicycle parking is in ZDO.
5.G.3 Added 10/21	Parking 6.0 Allow shared parking where feasible, such as within mixed use development and where adjacent land uses	Countywide Such Allow shareding of parking and, where appropriate, on-street parking can to be used to help satisfy compliance comply with parking

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
	are compatible. Such sharing of parking can be used to help satisfy compliance with parking standards. (Parking 6.0, pg V-15)	standards. (This policy is from the second sentence in Parking 6.0.)
5.G.4 (5.G.3)	Parking 3.0 Existing curbside parking along arterials and collectors may be removed to allow the striping of bike lanes, construction of travel or turning lane improvements or for increasing sight distance. Where parking standards are adopted by the County in Special Transportation Plans, those standards shall apply. (Parking 3.0, pg V-15)	Urban Allow the removal of Eexisting curbside onstreet parking along arterials and collectors may be removed to allow create the striping of bike ways lanes, construction of travel or turning lanes, improvements or for increaseing sight distance. Where parking standards are adopted by the County in Special Transportation Plans, those standards shall apply.
5.G.5 (5.G.4)	Parking 7.0 Increase on-street parking in residential areas by minimizing the width of driveway curb cuts. (Parking 7.0, pg V-15)	<u>Urban</u> Increase <u>area for on-street</u> parking in residential <u>zoning districts areas</u> by minimizing the width of driveway <u>accessescurb cuts</u> .
5.G.6 (5.G.5)	Parking 2.0 Encourage off-street parking in commercial, industrial, and high density residential areas to be at the sides or rear of buildings where practical, with buildings oriented to the street in a manner that is convenient to pedestrians and aesthetically pleasing to passers-by, but does not interfere with sight distance on the roadway, or preclude road widening. (Parking 2.0, pg V-15)	<u>Urban</u> Encourage off-street parking in commercial, industrial, and high density residential areas to be at the sides or rear of buildings where practical. with buildings oriented to the street in a manner that is convenient to pedestrians and aesthetically pleasing to passers-by, but does not interfere with sight distance on the roadway, or preclude road widening. Standards deleted here are already in the zoning code
5.G.7 (5.G.6)	Parking 4.0 Allow developments along transit routes to decrease their parking area requirements if they provide pedestrian and transit amenities. (Parking 4.0, pg V-15)	<u>Urban</u> <u>Consider</u> Aallowing developments along transit routes to for decreased their parking area requirements for development along transit routes if they the development provides pedestrian, bicycle and transit amenities. See Map 5-8a.
5.G.8 (5.G.7)	Parking 6.0 Allow shared parking where feasible, such as within mixed use development and where adjacent land uses are compatible. Such sharing of parking can be used to help satisfy compliance with parking standards. (Parking 6.0, pg V-15)	<u>Urban</u> <u>Consider requiring Allow</u> -shared parking where feasible, such as within mixed-use development and where adjacent land uses are compatible. Amended, first sentence of Parking 6.0 is this Urban policy 5.G.8. Second sentence is revised Countywide policy, new 5.G.3.
5.H	Rural Tourism Policy	
5.H.1	New – Rural tourism	Rural Encourage agri-tourism and other commercial events and activities that are related to and supportive of agriculture, in accordance with the provisions of ORS 215. Mitigation of traffic impacts and other event impacts may be required to reduce

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
		the effects of these limited land uses on the County road system.
5.1	Rural Scenic Roads Policies	
5.I.1	Roadways 39.0 Implement a County Scenic Road System. (Roadways/Scenic Roads 39.0, pg V-11)	Rural Implement a County Scenic Road System that is safe and attractive for all users.
5.1.2	Roadways 39.1 The Scenic Road designation is intended to protect recreation values, scenic features, and an open, uncluttered character along the roadway. Developments adjacent to scenic roads shall be designed with sensitivity to natural conditions. (Roadways/ Scenic Roads 39.1, pg V-11) The following policies are intended to accomplish these ends: a) Scenic roads shall have strict access control on new developments. b) Scenic roads should have shoulders wide enough for pedestrians or bicycles. c) Turnouts should be provided where appropriate for viewpoints or recreational needs. d) Design review of developments adjacent to scenic roads shall require visual characteristics and signing appropriate to the setting. e) Buildings should be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer zone. f) Parking areas adjacent to scenic roads should be separated from the right-of-way by a landscaped buffer. g) Frontage roads, if any, adjacent to scenic roads should be separated by a vegetative buffer. h) Encourage underground placement of utilities.	Rural Promote the The Scenic Road designation is intended to protection of recreation values, scenic features, and an open, uncluttered character along designated scenic roads. the roadway. Developments adjacent to scenic roads shall be designed with sensitivity to natural conditions and: The following policies are intended to accomplish these ends: a) Scenic roads should shall have strict access control on new developments. b) Scenic roads should have shoulders wide enough for pedestrians or bicycles, or a separated path where feasible and when funding is available. c) Turnouts should shall be provided where appropriate for viewpoints or recreational needs. d) Design review of developments adjacent to scenic roads shall require visual characteristics and signing appropriate to the setting. e) Buildings should shall be set back a sufficient distance from the right-of-way to permit a landscaped or natural buffer zone. f) Parking areas adjacent to scenic roads should shall be separated from the right-of-way by a landscaped buffer. g) Any Ffrontage roads, if any, adjacent to scenic roads shall be separated by a vegetative buffer where feasible h) Underground placement of utilities shall be encouraged.
5.1.3	Roadways 39.2 The following shall be designated scenic roads: (see Map V-5). (Roadways/ Scenic Roads 39.2, pg V-12)	Rural The following <u>facilities</u> shall be designated scenic roads: (see Map <u>5-1, Scenic RoadsV-5</u>).
5.1.4	Roadways 39.3 Designate that portion of the Mt. Hood Loop in Clackamas County (Dodge Park Road, Lusted Road, Ten Eyck Road, US 26, and OR 35) as an official Oregon	Rural Support implementation of the Oregon Scenic Byway System, including the Mt. Hood Scenic Byway and the West Cascades Scenic Byway. Designate that portion of the Mt. Hood Loop in

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
	Scenic Byway. (Roadways/ Scenic Roads 39.3, pg V-12)	Clackamas County (Dodge Park Road, Lusted Road, Ten Eyck Road, US 26, and OR 35) as an official Oregon Scenic Byway

Active Transportation

Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.J	General Active Transportation Policies	
5.J.1	Ped/Bike 12.0 Coordinate the implementation of pedways and bikeways with neighboring jurisdictions and jurisdictions within the county. (PedBike 12.0, pg V-20)	Coordinate the implementation of pedways pedestrian facilities and bikeways with neighboring jurisdictions and jurisdictions within the county.
5.J.2	Ped/Bike 20.0 Ensure an opportunity for representative citizen involvement in the county pedestrian and bicycle planning process by sponsoring the Clackamas County Pedestrian and Bikeway Advisory Committee as a forum for public input. (PedBike 20.0, pg V-21)	Ensure an opportunity for 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	Ped/Bike 22.0 Monitor and update the Clackamas County Pedestrian and Bicycle Master Plans through data collection, evaluation, and review activities necessary to maintain and expand the programs established in these plans. (PedBike 22.0, pg V-21)	Monitor and update the Clackamas County Pedestrian and Bicycle Master Plans through data collection, and evaluation, and review activities necessary to maintain and expand the programs established in these plans
5.J.4	<u>New</u> - Pedestrian and Bicycle Facilities	Support bicycle, pedestrian and transit projects that serve the needs of transportation disadvantaged populations.
5.J.5	Ped/Bike 11.0 Coordinate with pedestrian, bicycle, and trail master plans of the Oregon Department of Transportation, the United States Forest Service, Metro, parks districts, and city parks departments to achieve a safe and convenient off-road trail system connecting to the on-road pedway and bikeway network. (PedBike 11.0, pg V-20)	Coordinate with pedestrian, bicycle, and trail master plans and with special transportation plans of the County, of the Oregon Department of Transportation, the United States Forest Service, Metro, and parks districts, and city parks departmentsproviders to achieve a safe and convenient off-road trail system connecting to the on-road pedway pedestrian facilities and bikeway network.

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Policy #	Current Policy Language or New	Draft Chapter 5 - Recommended Policy Language
5.J.6	Ped/Bike 13.0 Support the continuation of the "Bikes on Transit" program on all public transit routes. (PedBike 13.0, pg V-20)	Support the continuation of the "Bikes on Transit" program on all public transit routes.
5.J.7	Ped/Bike 19.0 Inform the public of their responsibilities for sidewalk and bikeway maintenance. (PedBike 19.0, pg V-21)	Inform the <u>public-property owners</u> of their responsibilities for <u>the maintenance of</u> sidewalks and <u>pedestrian pathways.</u> bikeway maintenance.
5.J.8	<u>New</u> - Pedestrian and Bicycle Facilities	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	<u>New</u> - Rural Equity Issues	Rural Support bike and pedestrian projects that improve access to public transit stops and provide connections to significant local destinations.
5.K	Design Policies	
5.K.1	Ped/Bike 9.0 The implementation of bikeways and sidewalks shall be considered in all new collector or arterial construction or reconstruction, even if not designated on Maps V-7a, V-7b, and V-8. (PedBike 9.0, pg V-20)	The implementation of Require bikeways and sidewalks pedestrian facilities according to the applicable cross section shall be considered for in all new collector or arterial construction or substantial reconstruction, even if not designated on the Planned Bikeway Network (Maps 5-2a and 5-2b), or on the Essential Pedestrian Network (Map 5-3), Maps V-7a, V-7b, and V-8. allowing for flexibility to accommodate characteristics of terrain, scenic qualities, existing development, and environmental constraints, and adopted Special Transportation Plans.
5.K.2	New	Seek out and implement innovative bicycle and pedestrian treatments that improve the convenience and safety of these facilities.
5.K.3 (5.K.7)	New Countywide policy (from Rural) Change from Sept. 23 rd document: this policy was changed to a Countywide policy, so was re-ordered with section 5.K.	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	Ped/Bike 2.0 Identify walkway and bikeway improvements necessary to ensure direct and continuous networks of walkways and bikeways on the county road system. (PedBike 2.0, pg V-20)	Urban Identify walkway pedestrian facilities and bikeway improvements necessary to ensure direct and continuous networks of pedestrian facilities walkways and bikeways on the county road system.

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.K.5	Ped/Bike 4.0 Encourage bicycle and pedestrian access across rivers and other natural barriers. (PedBike 4.0, pg V-20)	<u>Urban</u> <u>Identify locations where Encourage</u> bicycle and pedestrian access <u>across-is blocked by</u> rivers and other natural barriers <u>and encourage the creation of bicycle and pedestrian facilities to extend across these barriers</u> .
5.K.6	New	Urban Review development plans to ensure that they provide bicycle and pedestrian access.
5.K.7 (5.K.3)	Ped/Bike 1.0 Provide networked systems of walk-ways and bikeways connecting neighborhoods, transit stops, commercial areas, community centers, schools, parks, libraries, employment places, other major destinations, regional bikeways and walkways, and other transportation modes. (PedBike 1.0, pg V-20)	Urban Create a Provide networked systems of pedestrian facilities walkways and bikeways connecting cities, neighborhoods, transit stops, commercial areas, community centers, schools, recreational facilities, parks, libraries, employment places, other major destinations, regional and city bikeways and walkwayspedestrian facilities, and other transportation modes. Utilize separate accessways for pedestrian facilities and bikeways where street connections are impractical or unavailable.
5.K.8	New	Rural Support the safe movement of equestrians in rural areas.
5.L	Construction Policies	
5.L.1	Ped/Bike 7.0 Construct all walkways designated in this Plan and any other walkways proposed, according to the current county design standards, the American Association of State Highway and Transportation Officials (AASHTO) standards, and the Americans with Disabilities Act (ADA) standards. (PedBike 7.0, pg V-20) Ped/Bike 8.0 Construct all bikeways designated in this Plan and any other bikeways proposed, according to the current standards in the Oregon Bicycle and Pedestrian Plan and the American Association of State Highway and Transportation Officials (AASHTO) standards. (PedBike 8.0, pg V-20)	Construct all walkways-pedestrian facilities and bikewaysdesignated in this Plan and any other walkways proposed, according to the current eCounty design standards., the American Association of State Highway and Transportation Officials (AASHTO) standards, and the Americans with Disabilities Act (ADA) standards. Construct all bikeways designated in this Plan and any other bikeways proposed, according to the current standards in the Oregon Bicycle and Pedestrian Plan and the American Association of State Highway and Transportation Officials (AASHTO) standards.
5.L.2	Ped/Bike 6.0 Construct all walkways, bikeways, and trails as designated on maps V-7a, V-7b, and V-8, and as adopted in Special Transportation Plans. (PedBike 6.0, pg V-20)	<u>Urban</u> <u>Countywide</u> Construct all <u>pedestrian</u> <u>facilitieswalkways</u> , bikeways, <u>multi-use paths</u> and trails as designated on <u>mMaps 5-2a, 5-2b, and 5-3V-7a, V-7b, and V-8</u> , and as adopted in Special Transportation Plans.

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Po	olicy #	Current Policy Language or New	Draft Chapter 5 - Recommended Policy Language
	5.L.3	Ped/Bike 10.0 Require that new development include construction of pedestrian and bikeway connections within the development and between adjacent developments for the purpose of increasing non-motorized mobility. (PedBike 10.0, pg V-20)	<u>Urban</u> Require that new development include construction of pedestrian-walkways and bikeway connections accessways within the development and between adjacent developments, where appropriate for the purpose of increasing non-motorized mobility
	5.L.4	<u>New</u> – Ped/Bike	Urban Construct interim pedestrian facilities and bikeways, as appropriate, on existing streets that are not built to the applicable cross section and where the construction of full street improvements is not practicable or imminent as determined by the County Planning Director and County Road Official or County Engineer.
	5.L.5	Ped/Bike 24.0 In Unincorporated Communities, construct walkways adjacent to or within areas of development, such as schools, businesses, or employment centers near or along highways. (PedBike 24.0, pg V- 21)	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.near or along highways.
į	5.M	Facility Policies	
5	.M.1	Ped/Bike 15.0 Encourage the provision of appropriate supportive facilities and services for bicyclists, including showers, lockers, bike racks on buses, bike repair and maintenance information/clinics, and secure bicycle parking. (PedBike 15.0, pg V-21)	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	New – Rural Ped/Bike Facilities.	Establish and maintain way-finding systems to facilitate bicycle travel.
5	.M.3	Ped/Bike 21.0 Encourage the provision of street lighting for the purpose of increasing the visibility and personal security of pedestrians and bicyclists. (PedBike 21.0, pg V-21)	<u>Urban</u> Encourage the provision of street lighting to increase for the purpose of increasing the visibility and personal security of pedestrians and bicyclists.
,	5.N	Multi-Use Path Policies	
5	5.N.1	Ped/Bike 3.0 Support acquisition and development of multi-use paths on abandoned public and private rights-of-way. (PedBike 3.0, pg V-20)	Support acquisition and development of multi-use paths on abandoned public and private rights-ofway.

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Poli	cy#	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.N	N.2	New Equestrian and multi-use paths	Collaborate with the appropriate service providers, such as park providers, to plan for multi-use paths that accommodate equestrian facilities where possible.
5.0	N.3	Ped/Bike 23.0 Construct separate multi-use paths in rural areas according to American Association of State Highway and Transportation Officials (AASHTO) standards where travel lanes or wide paved shoulders along roadways may be unacceptable to pedestrians or bicyclists. (PedBike 23.0, pg V-21)	Rural Consider Construct separate multi-use paths in rural areas according to American Association of State Highway and Transportation Officials (AASHTO) standards where travel lanes or wide paved shoulders along roadways may not provide adequate safety forbe unacceptable to pedestrians or bicyclists.
5.N	N.4	<u>New</u> – Rural Equestrian	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.

Roadway Policies

Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.0	Functional Classification Policies	
5.0.1	Roadways 9.0 Designate and develop roadways according to the functional classifications and guidelines listed in Tables V-2 and V-3 while allowing flexibility to accommodate characteristics of terrain, scenic qualities, existing development, and adopted Special Transportation Plans. (Roadways/ Functional Class 9.0, pg V-7)	Designate and develop roadways according to the functional classifications and guidelines illustrated in the County Road Typical Cross Sections (Figures 5-1a through 5-1f, and Figures 5-2a through 5-2f) -listed in Tables V 2 and V 3 while allowing flexibility to accommodate characteristics of terrain, scenic qualities, environmental constraints, existing development, and adopted Special Transportation Plans.
5.0.2	Roadways 10.0 Designate freeways, arterials, collectors and connectors as shown on Maps V-2a and V-2b. Roadways that do not presently exist but are shown on these maps are shown in approximate locations. (Roadways/Functional Class 10.0, pg V-7)	Designate freeways, arterials, collectors and connectors as shown on Map 5-4a and Map 5-4bMaps V-2a and V-2b. Roadways that do not presently exist but are shown on these maps are shown in approximate locations.
5.0.3	New	Maintain and improve roads consistent with their functional classification, and reclassify roads as appropriate to reflect function and use.

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.0.4	Roadways 11.0 Limit zone change approvals to those that will not require a roadway as planned in the Capital Improvement Plan to be redesigned or increased to a higher functional classification in order to maintain the minimum acceptable performance evaluation level. State transportation facilities shall be evaluated according to the Oregon Highway Plan. (Roadways/Functional Class 11.0, pg V-7). Roadways 33.0 Limit zone change approvals to those that will not reduce the Level of Service of a roadway as planned in the Capital Improvement Plan below the minimum acceptable performance evaluation Level-of-Service standard. State facilities shall be evaluated according to the Oregon Highway. (Roadways/Operating Standards 33.0)	Limit zone change approvals to those that will not require a roadway as planned in the Capital Improvement Plan to be redesigned or increased to a higher functional classification in order to maintain the minimum acceptable performance evaluation level. Require changes in Comprehensive Plan designation and zoning designation to comply with the Transportation Planning Rule (OAR 660-012). Evaluations of the transportation system for this purpose shall rely on existing transportation facilities and on planned facilities found in the 20-Year Capital Projects list (Table 5-3a). State transportation facilities shall be evaluated according to the Oregon Highway Plan, Regional Transportation Plan, Transportation Planning Rule, and other applicable state requirements.
5.0.5 (5.R.3)	Roadways 26.0 Develop neighborhood traffic calming policies that will enable the County to address inappropriate travel patterns and speeds. (Roadways/Improvement to Serve Dev. 26.0, pg V-9)	Develop and implement neighborhood traffic calming strategies, appropriate for the road functional classification, that will improve the safety and convenience of travel by all modes, particularly in areas with high crash rates or high rates of bicycle and/or pedestrian activity.policies that will enable the County to address inappropriate travel patterns and speeds.
5.0.6 (5.0.5)	Roadways 12.0 The County shall consider the Regional Street Design Type Guidelines, as shown on Table V-4, when designing new county roads or redesigning existing county roads prior to construction or reconstruction. Map V-3 shows which roads are designated by each Design Type. (Roadways/ Functional Class 12.0, pg V-7)	Urban The County shall cConsider the Metro Regional Street Design Type Guidelines, Classifications -as shown on Table V-4, when designing new county roads or redesigning existing county roads prior to construction or reconstruction. Map 5-5V-3 shows which roads are designated by each Design Classification. Type.
5.0.7 (5.0.6)	New – RTFP street design	Urban Minimize impacts of managing storm water by allowing for Metro's alternative street standards, such as "green streets," as design alternatives.
5.0.8 (5.0.7)	Roadways 13.0 Design arterials and collectors to allow safe and convenient passage of buses in urban areas and, where necessary, rural areas. (Roadways/ Functional Class 13.0, pg V-7)	<u>Urban</u> Design arterials and collectors to allow safe and convenient passage of buses, bicycles, and pedestrians. in urban areas and, where necessary, rural areas

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Policy #	Current Policy Language or New	Draft Chapter 5 - Recommended Policy Language
5.0.9 (5.0.8)	Roadways 36.0 Streets and roads are an allowed use in all zoning districts. All state and County policies relating to roads shall be considered when widening or constructing new roads. (Roadways/Build Roads 36.0, pg V-10)	Urban Streets and roads alleys, bikeways, pedestrian facilities, multi-use paths, trails and transit stops are an allowed uses in all urban zoning districts. Consider Aall state and County policies relating to roads shall be considered when widening, improving or constructing new transportation infrastructure. roads
5.0.10 (5.0.9)	Roadways 35.0 Road projects located outside UGBs shall be planned to support the existing development pattern and through traffic needs, and are not planned to support or promote urbanization. Such projects will comply with Goal 11 (Transportation) to provide a safe and efficient transportation system meeting the needs of the rural area. (Roadways/Build Roads 35.0, pg V-10)	Rural Road projects located outside UGBs shall be pPlanned to support the existing development pattern and throughtraffic needs, and are not planned to support or promote urbanization. Such projects will comply with Goal 11 (Transportation) to provide a safe and efficient transportation system meeting the needs of the rural area.
5.0.11 (5.0.10)	Roadways 34.0 County road capital improvement projects outside UGBs may be designed and constructed to improve safety and bring the roads up to County standards. When projects are located within current rights-of-way, no conflicts with Goals 3 or 4 are anticipated. If the design of a project requires expansion of right-of-way into lands planned for Forest or Agricultural use, a goal exception may be necessary. (Roadways/Build Roads 34.0, pg V-10)	Rural Consistent with ORS 215.283(3) and OAR 660, Division 12, County road capital improvement projects outside UGBs may be designed and constructed to improve safety and bring the roads up to County standards outside the UGB. When projects are located within current rights of way, no conflicts with Goals 3 or 4 are anticipated of the road capital improvement design of aproject is not otherwise allowed and would requires expansion of right-of-way exceeding the road improvements allowed in the into lands planned for Forest or Agricultural usedistricts, a goal exception would be required for such projects, as provided for in ORS 215.282(3). may be necessary.
(5.0.11)	Roadways 7.2 Arndt Road goal exception. Moved to Special Transportation Plans Section, 5.DD.1	
(5.0.12)	Roadways 7.3 Arndt Road goal exception. Moved to Special Transportation Plans Section, 5.DD.1	
5.0.12 (5.0.13)	Roadways 36.0 Streets and roads are an allowed use in all zoning districts. All state and County policies relating to roads shall be considered when widening or constructing new roads. (Roadways/Build Roads 36.0, pg V-10)	Rural Streets, alleys, bikeways, pedestrian facilities, multi-use paths, trails and transit stops and roads are an-allowed uses in all rural zoning districts with the exception of Agricultural and Forest Districts in which they are conditionally allowed by ORS 215.213, 215.283 or OAR Chapter 660, Division 6 (Forest Lands). All state and County policies relating to roads shall be considered when widening or constructing new roads

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.0.13 (5.0.14)	New Roadways 13.0 Design arterials and	Rural Recognize the importance of resource- related uses such as agriculture and forestry to the local economy, and the need to maintain a transportation system that provides opportunities to harvest agricultural and forest products and deliver them to market. Rural Design, construct and reconstruct rural
(5.0.15)	collectors to allow safe and convenient passage of buses in urban areas and, where necessary, rural areas. (Roadways/Functional Class 13.0, pg V-7)	arterials and collectors to allow safe and convenient passage of trucks , buses, pedestrians and bicyclists.in urban areas and, where necessary, rural areas.
5.0.15 (5.0.16)	New Rural	Rural Support the safe movement of agricultural equipment in rural areas by improving existing roads to county standards and considering design features such as signs, pull-outs for slow-moving vehicles, reduced speeds, and limiting curbs where equipment may move to the shoulder or out of the right-of-way.
5.P	Project Development Policy	
5.P.1	Roadways 1.0 Consider strategies for using the existing road system and its capacity most efficiently before building new roads or adding new capacity to existing roads. Transportation System Management techniques are a set of strategies that shall be used to make roadways operate more efficiently. TSM strategies include: 1. Access Management; 2. Alternative/Modified Standards (Performance and/or Design Standards); 3. Intelligent Transportation System (ITS) applications; 4. Operational Improvements; 5. Parking Standards. (Roadways/ Efficiency & Finance 1.0, pg V-6)	Before building new roads or adding capacity to existing roads, Consider Transportation System Management (TSM) strategies for using the existing road system, including associated pedestrian and bicycle facilities, and its-system capacity most efficiently-before building new roads or adding new capacity to existing roads. Transportation System Management techniques are a set of strategies that shall be used to make roadways operate more efficiently. TSM strategies include: 1. Access Management; 2. Alternative/Modified Standards (Performance and/or Design Standards); 3. Intelligent Transportation System (ITS) applications; 4. Operational Improvements; 5. Parking Standards; 6. Enhanced Bike and Pedestrian Facilities; and 7. Road Diet. (for example, restriping a low volume, 4-lane road to a 3-lane configuration with bicycle and pedestrian facilities).
5.Q	Access Standard Policies	

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Policy #	Current Policy Language or New	Draft Chapter 5 - Recommended Policy Language
5.Q.1	New and part of policy Roadways 14.0, first 2 sentences: Plan and control access onto roads within the County, as shown on Table V-5, for urban areas and according to the American Association of State Highway and Transportation Officials (AASHTO) guidelines for rural areas, for both new and existing uses, and coordinate with the Oregon Department of Transportation for access control on state highways. Access standards need to be applied in a flexible manner that maintains reasonable access to property when access cannot be denied. (Roadways/Access 14.0, pg V-8)	Plan and control access onto roads within the County, as shown on Table V-5, for urban areas and according to the American Association of State Highway and Transportation Officials (AASHTO) guidelines for rural areas, for both new and existing uses, and coordinate with the Oregon Department of Transportation for access control on state highways—Ensure safe and convenient access for bicyclists, pedestrians, and transit users for land uses that are open to the public. Apply Aaccess management standards need to be applied in a flexible manner that maintains to allow reasonable access and balance the needs of all roadway users.to property when access cannot be denied.
5.Q.2	Roadways 16.0 Improve highway operations and safety by supporting construction of public roads that provide reasonable alternative access within Interchange Management Areas. When reasonable access is provided, support the elimination of direct access to state highway facilities. (Roadways/Access 16.0, pg V-8)	Improve highway multimodal operations and safety by supporting ensuring that construction of public roads that provide reasonable alternative access within Interchange Management Areas plans and other access plans and projects are coordinated with multimodal connectivity standards and are designed to support safe and convenient travel for all modes, as well as safe and convenient access for all modes, when appropriate. When reasonable access is provided, support the elimination of direct access to state highway facilities.
5.Q.3	Roadways 15.0 Support the implementation of state access management standards (OAR Chapter 734, Division 51, as amended, and the Oregon Highway Plan) on state highway facilities within the Interchange Management Areas. (Roadways/Access 15.0, pg V-8)	Support the implementation of state access management standards (OAR Chapter 734, Division 51, as amended, and the Oregon Highway Plan) on state highway facilities and within the Interchange Management Areas. Coordinate with the Oregon Department of Transportation for access control on state highways.
5.Q.4	New (Text instead of table)	If feasible, allow only collectors, connectors, or other arterials to intersect arterials.
5.Q.5	New and part of policy Roadways 14.0 (<i>last sentence</i>): Where access management standards are adopted by the County in Special Transportation Plans, those standards shall apply. (Roadways/Access 14.0, pg V-8)	Access Standards shall be implemented through the Zoning and Development Ordinance and the County Roadway Standards. Where access management standards are adopted by the County in Special Transportation Plans, those standards shall apply.

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Policy #	Current Policy Language or New	Draft Chapter 5 - Recommended Policy Language
5.Q.6 Added 10/21	New (staff addition)	Developments should be designed to place driveway accesses on streets with the lowest functional classification or the lowest traffic volume.
(5.Q.6)	Moved 5.Q.6 to 5.R.4	
(5.Q.7)	Moved 5.Q.7 to 5.R.5	
(5.Q.8)	Moved 5.Q.8 to 5.R.4	
5.R	Policies on Improvements to Serve Development	
5.R.1	Roadways 18.0 Require development to be served by adequate roadway facilities. (Roadways/Improvement to Serve Dev. 18.0, pg V-8)	Require development to be served by adequate roadway transportation facilities and access points that are designed and constructed to safely accommodate all modes of travel.
5.R.2	Roadways 17.0 Require right-of-way dedication, on-site improvements to the applicable roadway standard as shown on Tables V-2 and V-3, and off-site improvements for new developments and land divisions necessary to handle expected traffic loads and travel by alternative modes. Where roadway standards are adopted by the County in Special Transportation Plans, those standards shall apply. (Roadways/Improvement to Serve Dev. 17.0, pg V-8)	For new developments and land divisions, Rrequire right-of-way dedication, on-site frontage improvements to the applicable roadway standard as shown on-in the roadway Cross Sections (Figures 5-1a through 5-1f and Figures 5-2a through 5-2f) Tables V-2 and V-3, and the County Roadway Standards, and off-site improvements necessary for new developments and land divisions necessary to safely handle expected traffic generated by the development loads and travel by alternative active modes. Where roadway standards are adopted by the County in Special Transportation Plans, those standards shall apply.
(5.R.3)	Moved to 5.0.5	
5.R.3 (5.Q.8)	Roadways 22.0 Assess anticipated off-site traffic impacts caused by new developments and land divisions. The developer or subdivider may be required to participate financially or otherwise in the provision of off-site improvements, dedications or other requirements. (Roadways/Improvement to Serve Dev. 22.0, pg V-9)	Assess anticipated off-site traffic impacts caused by new developments-and land divisions. The developer or subdivider may be required to participate financially or otherwise in the provision of off-site improvements, dedications or other requirements.
5.R.4 (5.Q.6)	Roadways 20.0 Developers of new developments and land divisions that will require construction of new streets shall provide the County with a conceptual street plan map and street cross sections responding to the other requirements of this section, and full street connections at intervals of no more than 530	For new development proposed on a site identified on Map 5-6 (Parcels Requiring Street Circulation Plan), require a conceptual street plan that is Developers of new developments and land divisions that will require construction of new streets shall provide the County with a conceptual street plan

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Policy #	Current Policy Language or New	Draft Chapter 5 - Recommended Policy Language
	feet. Exceptions may be made when a full street connection is prevented by barriers such as topography, railroads, freeways, pre-existing development or environmental constraints such as streams and wetlands. (Roadways/Improvement to Serve Dev. 20.0, pg V-8)	map and street cross sections consistent with responding to the other requirements of this section, and provides for full street connections at intervals of no more than 530 feet, where feasible. Exceptions may be made when a full street connection is prevented by barriers such as topography, railroads, freeways, pre-existing development or environmental constraints such as streams and wetlands.
5.R.5 (5.Q.7)	Roadways 21.0 Before an exception is granted to the above requirement, it shall be determined if, at a minimum, an accessway for pedestrians, bicyclists or emergency vehicles may be constructed at intervals of 330 feet. Those accessways shall be constructed unless prevented by barriers or environmental constraints. (Roadways/Improvement to Serve Dev. 21.0, pg V-8)	Require new development that will require construction of new streets to provide full street connections at intervals of no more than 530 feet, where feasible. If full street connections are not feasible at such intervals, require Before an exception is granted to the above requirement, it shall be determined if, at a minimum, an accessways for pedestrians, bicyclists or emergency vehicles may be constructed at intervals of no more than 330 feet. Exceptions may be made where there are barriers, Those accessways shall be constructed unless prevented by barriers including topography, railroads, freeways, pre-existing development, existing easements, or environmental constraints such as streams and wetlands.
5.R.6 (5.R.13)	New Change from Sept 23 rd document: Policy changed to Countywide and re-ordered in section 5.R.	Rural Countywide New rural area-development shall accommodate on-site traffic circulation within the boundaries of the site, not by circulating on and off the site through multiple access points using the public road system. Internal circulation plans should avoid relying on "backing out" maneuvers for new driveways onto all rural arterials and collectors.
5.R.7 (5.R.4)	Roadways 19.0 Require implementation of a local street network for undeveloped sites illustrated on Map V-4. Existing streets shall be extended to provide a direct, connected street system. (Roadways/Improvement to Serve Development 19.0, pg V-8)	<u>Urban</u> Require implementation of a local street road network for undeveloped sites illustrated on Map 5-6V-4. Existing streets-roads shall be extended to provide a direct, connected street-system.
5.R.8 (5.R.5)	Roadways 23.0 Where appropriate, develop and implement neighborhood traffic circulation plans intended to improve circulation while minimizing neighborhood disruption and environmental problems. (Roadways/Improvement to Serve Development 23.0, pg V-9)	<u>Urban</u> Where appropriate, develop and implement neighborhood traffic circulation plans <u>for all modes</u> intended to improve circulation while minimizing <u>safety concerns and exposure to air and noise pollution.neighborhood disruption and environmental problems.</u>

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	Policy #	Current Policy Language or New	Draft Chapter 5 - Recommended Policy Language
	5.R.9 5.R.6)	Roadways 25.0 Discourage through trips on local, connector and collector roadways. (Improvement to Serve Dev. 25.0, pg V-9)	<u>Urban</u> Discourage <u>motor vehicle</u> through trips on local, connector and collector roadways, <u>and</u> <u>encourage bicycle and pedestrian travel on these roads.</u>
•	5.R.10 (5.R.7)	Roadways 27.0 Allow flexible roadway criteria and standards for local streets that are less than 200 feet in length, are expected to carry very low traffic volumes, and are not capable of being extended. (Roadways/Improvement to Serve Dev. 27.0, pg V-9)	<u>Urban</u> Allow flexible roadway criteria and standards for local streets that are less than 200 feet in length, are expected to carry very low traffic volumes, and are not capable of being extended.
	5.R.11 (5.R.8)	Roadways 28.0 Private streets may be appropriate in areas with topographic constraints that make construction of a road to County standards not feasible. Private roads are not classified as local streets, are not maintained by the County, and don't necessarily provide connectivity. (Roadways/Improvement to Serve Dev. 28.0, pg V-9)	<u>Urban</u> Private streets may be appropriate in areas with topographic constraints that make construction of a road to County standards not feasible. Private roads are not classified as local <u>roads streets</u> , and are not maintained by the County, and don't necessarily provide connectivity.
·	5.R.12 (5.R.9)	Roadways 29.0 Require that changes to the Comprehensive Plan land use designations within the Interchange Management Areas identified on Map V-12 must be consistent with OAR 660-012-0060. If the land uses allowed by the new Comprehensive Plan land use designation would cause the interchange mobility standards to be exceeded, the change either shall be denied. Or improvements shall be made such that the mobility standards are met. (Roadways/Improvement to Serve Development 29.0, pg V-9)	Urban Require that changes to the Comprehensive Plan land use designations within the Interchange Management Areas identified on Map 5-7V-12 must be consistent with OAR 660-012-0060. If the land uses allowed by the new Comprehensive Plan land use designation would cause the interchange mobility standards to be exceeded, either the change either shall be denied or improvements shall be made such that the mobility standards are met.
	(5.R.10)	New Not Used. Intent of proposed policy is covered by 5.0.1	<u>Urban</u> Require rights-of-way for urban arterials and collectors to be adequate to accommodate all required road improvements including bike ways, pedestrian facilities, and drainage facilities, where possible
	(5.R.11)	New – Not Used. Intent of proposed policy is covered by 5.O.1 Rural Pedestrian & Bicycle Facilities.	Rural Require rights-of-way for rural arterials and collectors to be adequate to accommodate all required road improvements including bikeways, shoulders, and drainage facilities, where possible.
	5.R.13 (5.R.12)	Roadways 25.0 Discourage through trips on local, connector and collector roadways. (Roadways/Improvement to Serve Development 25.0 for Rural, pg V-9)	Rural Discourage through trips on rural local, connector and collector roadways.

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Policy #	Current Policy Language or New	Draft Chapter 5 - Recommended Policy Language
(5.R.13)	New Change from Sept 23 rd document: Policy changed to Countywide and re-ordered in section 5.R. to 5.R.6.	
(5.R.14)	New Not Used. Intent of proposed policy is covered by 5.R.2	Rural Dedication of adequate right-of-way and construction of road improvements may be required to serve traffic that will be generated by new development.
5.S	Performance Evaluation Measures	
5.S.1	New – Operating Standards	For County roads, establish the method of calculating roadway capacity and the impact of new development on that capacity in the County Roadway Standards
5.S.2	Roadways 30.0 Evaluate capacity needs for regional roadways within Metro's boundaries using the Regional Motor Vehicle Performance Measures. The use of these measures is limited to network analysis, and priorities for funding through Metro; they are not for designing individual road improvements. (Roadways/Operating Standards 30.0, pg V-9) Roadways 31.0 Arterials and collectors shall be evaluated for performance to Level-of-Service "D" as the acceptable operating standard, except as established below. All capital construction shall be designed to achieve Level-of-Service "D" or better. (Roadways/Operating Standards 31.0 (a, b and c), V-9 & 10)	Evaluate capacity needs for regional roadways within Metro's boundaries using the Regional Motor Vehicle Performance Measures shown in Table 5-2a, except as established below. The use of these measures is limited to network analysis, and priorities for funding through Metro; they are not for designing individual road improvements. All capital construction shall be designed not to exceed the maximum V/C ratio. Arterials and collectors shall be evaluated for performance to Level of Service "D" as the acceptable operating standard, except as established below. All capital construction shall be designed to achieve Level of Service "D" or better Operating Standards – Table 5-2a
5.S.3	New	Exceptions to the performance evaluation measures for review of development proposed on property within Metro's boundary are established as follows:
5.S.3.1	Roadways 31.0(b.) Review of developments proposed on property with a Comprehensive Plan designation of Campus Industrial, Business Park, Light Industrial, General Industrial or Rural Industrial shall use a performance evaluation operating standard of Level-of-Service "E", except within the Clackamas Industrial Area and Government Camp Village where no performance evaluation operating standard shall apply. (Roadways/ Operating Standards 31.0(b), pg V-10)	Review of developments proposed on property with a Comprehensive Plan designation of Campus Industrial, Business Park, Light Industrial, General Industrial or Rural Industrial shall use a performance evaluation operating standard of Level-of-Service "E", except wWithin the Clackamas Industrial Area, and Government Camp Village where no performance evaluation operating standardmeasure shall apply.
5.S.3.2	New	For the intersections of SE Park Avenue/OR 99E, SE

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
		Park Avenue/SE Oatfield Road, and SE Park Avenue/SE 27 th Street, performance evaluation measures of the Station Community Design Type shall apply.
5.S.4	New	Evaluate capacity needs for roadways outside Metro's boundary using the performance evaluation measures shown in Table 5-2b. Insert Table 5-2b
5.S.5	New	Exception to the performance evaluation measures for review of development proposed on property in the rural area is established as follows:
5.S.5.1	Roadways 31.0(b.) Review of developments proposed on property with a Comprehensive Plan designation of Campus Industrial, Business Park, Light Industrial, General Industrial or Rural Industrial shall use a performance evaluation operating standard of Level-of-Service "E", except within the Clackamas Industrial Area and Government Camp Village where no performance evaluation operating standard shall apply. (Roadways/ Operating Standards 31.0(b), pg V-10)	Review of developments proposed on property with a Comprehensive Plan designation of Campus Industrial, Business Park, Light Industrial, General Industrial or Rural Industrial shall use a performance evaluation operating standard of Level-of-Service "E", except wWithin the Clackamas Industrial Area and Government Camp Village, where no performance evaluation operating standardmeasure shall apply.
5.S.6	Roadways 32.0 For state facilities within an Interchange Management Areas as identified on Map V-12, implement a mobility standard for the peak two hours of 0.99 v/c at the intersection and of 0.85 v/c at the ramp ends. (Roadways/ Operating Standards 32.0, pg V-10)	The maximum volume to capacity ratio for the ramp terminals of interchange ramps shall be v/c 0.85. (1999 Oregon Highway Plan, OHP Policy 1F Revisions, Adopted by OTC: Dec. 21, 2011).
5.S.7	New	Where more than one performance measure would apply at an intersection, the measure allowing the higher level of congestion will be used, except for ramp terminal intersections.
5.S.8	New - Traffic Safety Action Plan	Evaluate transitioning from transportation concurrency to safety analysis when a traffic impact study (TIS) is required of new development.
5.S.9	New	The County will work with Metro and ODOT over five years to develop Alternate Road Capacity Performance Standards, required by the Oregon Highway Plan Policy 1.F., to address the following five intersections. These intersections were forecast not to meet the Capacity Performance Standards adopted in the 2013 TSP and there was no project identified that could make the intersection meet the standard. • SE Harmony Road/SE Linwood Avenue

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
		 OR 212/SE 172nd Avenue – ODOT Intersection OR 212/SE 282nd Avenue – ODOT Intersection OR 213/S. Henrici Road – ODOT Intersection (traffic signal or roundabout) OR 224/SE Lake Road/SE Webster Road – ODOT intersection

Transit Policies

Policy #	Existing Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.T	Transit Policies	
5.T.1	Transit 1.0 Work with transit agencies to identify existing transit deficiencies in the County, needed improvements, and park and ride lots to increase the accessibility of transit services. (Transit 1.0, pg V-16)	Work with transit agencies to identify existing transit deficiencies in the County, needed improvements, and additional park and ride lots needed to increase the accessibility of transit services to all potential users.
5.T.2	Transit 4.0 Emphasize corridor or road- way improvements to increase transit speed, convenience and comfort. (Transit 4.0, pg V-17)	Emphasize corridor or roadway improvements that help ensure reliable and on-time transit service in the County. to increase transit speed, convenience and comfort
5.T.3	Transit 12.0 Encourage Tri-Met to restructure transit service to efficiently serve local as well as regional needs. (Transit 12.0, pg V-17)	Encourage Tri-Mettransit providers to restructure transit service to efficiently serve local as well as regional needs.
5.T.4	Transit 7.0 Emphasize transit improvements that best meet the needs of the County, including more east-west connections and service between the County's industrial and commercial areas and medium to high density neighborhood areas. (Transit 7.0, pg V-17)	Emphasize transit improvements that best meet the needs of the County, including more improve eastwest connections, improve and service between the County's industrial and commercial areas and medium to high density neighborhood neighborhoods areas and best meet the needs of all County residents, employees and employers, regardless of race, age, ability, income level and geographic location.
5.T.5	Transit 10.0 Coordinate with Tri-Met on all new residential, commercial or industrial developments to ensure appropriate integration of transit into the developments. (Transit 10.0, pg V-17)	Coordinate with Tri-Metall applicable transit agencies on all new residential, commercial or industrial developments to ensure appropriate integration of transit facilities and pedestrian access to transit facilities into the developments.
5.T.6	Transit 2.0 Major developments or road construction projects along transit routes shall be required to include provisions for	Require Mmajor developments or and road construction projects along transit routes shall be required to include provisions for transit shelters,

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Policy #	Existing Policy Language or New	Draft Chapter 5 - Recommended Policy Language
	transit shelters, pedestrian access to transit and/or bus turnouts where appropriate. (Transit 2.0, pg V-16)	pedestrian access to transit and/or bus turnouts where appropriate.
5.T.7	Transit 6.0 Promote park and ride lots, bus shelters and pedestrian/bikeway connections to transit. (Transit 6.0, pg V-17)	Promote park and ride lots, bus transit shelters and pedestrian/bikeway connections to transit. Coordinate the location of these facilities with other land uses to promote shared parking and bicycle/pedestrian-oriented transit nodes
5.T.8	Transit 5.0 Coordinate and cooperate with Tri-Met and other transit agencies to provide transportation to the elderly and people with disabilities. (Transit 5.0, pg V-17)	Coordinate and cooperate with Tri-Met and other transit agencies to provide transportation for seniors, to the elderly and people with disabilities and other transportation-disadvantaged populations. Provide continued support for para-transit services as required within a three-quarter-mile distance from fixed-route transit stops.
5.T.9 (5.T.10)	Transit 11.0 Bus routes will be improved and coordinated with financing and implementation of necessary roadway improvements and in cooperation with transit service providers. (Transit 11.0, pg V-17)	Coordinate transit supportive, roadway improvements Bus routes will be improved and coordinated with financing and implementation of necessary roadway improvements and in cooperation with transit service providers to ensure financing and implementation of such improvements.
5.T.10 (5.T.9)	Transit 9.0 Require pedestrian and transit-supportive features and amenities and direct access to transit through the Development Review Process. Such amenities may include pedestrian/bikeway facilities, street trees, outdoor lighting and seating, landscaping, shelters, kiosks, strict standards for signs, and visually aesthetic shapes, textures and colors. Buildings measuring more than 100 feet along the side facing the major pedestrian/transit access should have more than one pedestrian entrance. (Transit 9.0, pg V-17) Transit 17.0 Pedestrian access should be provided connecting transit centers or transit stops on bus routes, with centers of employment, shopping or medium to high density residential areas within one-quarter mile of these routes. (Transit 17.0, pg V-18)	Urban Require pedestrian and transit-supportive features and amenities and direct access to transit through the Development Review Process for new development. Such Pedestrian and transit supportive amenities may include pedestrian/bikeway facilities, street trees, outdoor lighting and seating, landscaping, shelters, kiosks, strict standards for signs, and visually aesthetic shapes, textures and colors. Buildings measuring more than 100 feet along the side facing the major pedestrian/transit access should have more than one pedestrian entrance. Pedestrian access should be provided to connect transit centers or transit stops on bus routes with centers of employment, shopping or medium-to-high density residential areas within one-quarter mile of these routes.

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	Policy #	Existing Policy Language or New	Draft Chapter 5 - Recommended Policy Language
	5.T.11	Transit 3.0 Coordinate with transit providers to achieve the goal of transit service within 1/4 mile of most residences and businesses within the Portland Metropolitan UGB. More frequent service should be provided within Regional Centers and Corridors. (Transit 3.0, pg V-16)	<u>Urban</u> Coordinate with transit providers to achieve the goal of transit service within <u>1/4one-quarter</u> mile of most residences and businesses within the Portland Metropolitan UGB. <u>Support Mm</u> ore frequent service <u>should be provided</u> within Regional Centers, <u>Town Centers</u> , <u>Station Communities</u> , <u>and</u> Corridors <u>and Main Streets</u> .
	5.T.12	Transit 13.0 Work with federal, state, and regional agencies to implement high capacity transit in the downtown Portland to Milwaukie (McLoughlin) Corridor, and the Highway 224 Corridor to Clackamas Town Center. (Transit 13.0, pg V-17)	Urban Work with federal, state, and regional agencies to implement high capacity transit in the regional High Capacity Transit (HCT) System Plan in order to help relieve traffic congestion, provide for transportation alternatives to the automobile, and promote the County's economy. See Map 5-8c for the HCT network in the County. downtown Portland to Milwaukie (McLoughlin) Corridor, and the Highway 224 Corridor to Clackamas Town Center.
-	Definition	Transit 15.0 Major Transit Streets, for the purpose of setting standards for orientation of development to transit, shall be those streets planned for High Capacity Transit and Primary Bus as shown on Map V-6, as well as any other street that receives 20 minute or better service at the PM traffic peak. (Transit 15.0, pg V-18)	Urban Moved Transit 15.0 to DEFINITIONS
	5.T.13	Transit 16.0 Major Transit Stops shall be any transit stop along a Major Transit Street where that stop is within 250 feet of the centerline of an intersection with a public or private street. Orientation of buildings to transit at Major Transit Stops shall be accomplished by siting new commercial buildings as close as possible to transit, with a door facing the transit street or side street, and with no parking between the building and front property lines. (Transit 16.0, pg V-18)	Urban Moved first sentence description of "Major Transit Stops" to DEFINITIONS. Site new commercial, institutional, and multifamily Orientation of buildings to transit at Mmajor Ttransit Stops shall be accomplished by siting new commercial buildings as close as possible to transit, with a door facing the transit street or side street, and with no parking between the building and front property lot lines.
}		Rural Transit Policy	
	5.T.14	New	Rural Focus safety improvements near existing or planned transit stops.

Freight, Rail, Air, Pipeline and Water Transportation

Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
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Policy #	Current Policy Language or New	CHEARING (draft dated OCT 21, 2013) Draft Chapter 5 - Recommended Policy Language
Policy #	Current Foncy Language or <u>New</u>	Drajt Chapter 3 - Recommended Policy Language
5.U	General Freight Policies	
5.U.1	New	Coordinate the planning, development, maintenance and operation of a safe and efficient freight system for all freight modes in Clackamas County with the private sector, ODOT, Metro, the Port of Portland and the cities of Clackamas County
5.U.2	New	Promote an inter-modal freight transportation strategy and work to improve multi-modal connections among rail, industrial areas, airports and regional roadways to promote efficient movement of people, materials, and goods.
5.U.3	Freight 5.0 Work with the private transportation industry, Oregon Economic Development Department, Port of Portland and others to identify and realize investment opportunities that enhance freight mobility and support the County, Regional and State economy. (Freight 5.0, pg V-23)	Work with the private transportation industry, Oregon Economic Development Department, Port of Portland and others to identify and realize investment opportunities that enhance freight mobility and support the County, Rregional and Sstate economy.
5.U.4	New	Make freight investments that, in coordination with the County's economic development strategies, help retain and grow the County's job base and strengthen the County's overall economy.
5.U.5	New	Ensure that freight rail lines and truck routes do not have disproportionately negative impacts on sensitive land uses (places where people with increased risk of adverse impacts from exposure to noise and air pollution are likely to gather, such as schools, senior centers, hospitals, parks, housing). Prioritize mitigation efforts for current sensitive land use areas near freight rail lines and truck routes. Mitigate impacts to sensitive land uses by using vegetative buffers, establishing rail "quiet zones," and coordinating land use plans.
5.V	Freight Trucking Policies	
5.V.1	New	Support the Truck Freight Route System while not prohibiting the use of other roads for local pickup and delivery of goods and services. (See Map 5-9a and Map 5-9b.)
5.V.2	Freight/Truck 1.0 Maintain a truck circulation plan, as shown on Map V-10, for movements of freight on arterial roads	Improve and Mmaintain the countywide Truck Freight Route System, the Regional Transportation Plan Freight Routes and Oregon Freight Plan Routes

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	where minimum impact will occur to neighborhoods, and industrial areas will have the service they need. (Freight/Truck 1.0, pg V-23)	a truck circulation plan, as shown on Maps 5-9a and 5-9b. V-10, for movements of freight on arterial roads where minimum impact will occur to neighborhoods, and industrial areas will have the service they need.
5.V.3	New	Consider Heavy and Oversize Freight Movement requirements on State and County facilities when developing plans for transportation improvements and land use changes along freight routes designated as ORS 366.215 Corridors, as shown on Maps 5-9c and 5-9d.
5.V.4	<u>New</u>	Consider the safety of all travel modes that use the Truck Freight Route System when designing improvements to this system.
5.V.5	New	Accommodate freight travel on the Truck Freight Route System by improving facility design and operations.
5.V.6	New	Identify street improvements to reduce delays and to improve travel time reliability on roadways in the Truck Freight Route system.
5.V.7	New	Work to improve the safety of Truck Freight Routes for all transportation modes.
5.V.8	New	Support the development of truck layover facilities/staging areas to reduce the conflicts between parked vehicles and adjoining land uses.
5.V.9	New	Utilize Intelligent Transportation Systems (ITS) solutions to improve safety and operations of freight movement.
5.W	Rail Policies	
5.W.1	New	Support the safe and efficient movement of goods by rail.
5.W.2	Rail 2.0 Reduce the number of at-grade crossings from those that currently exist. (Rail 2.0, pg V-23)	Support the reduction of Reduce-the number of atgrade crossings of arterial and collector streets on main rail lines to reduce conflicts between rail use and other transportation modes, and to improve safety. from those that currently exist.
5.W.3	Rail 3.0 On new or reconstructed arterials or urban collectors, prohibit at-grade crossings of heavy rail lines without traffic restrictive safety devices unless train traffic	On new or reconstructed arterials or and urban collectors, prohibit at-grade crossings of main heavy rail lines without traffic restrictive safety devices unless train traffic is very low.

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
	is very low. (Rail 3.0, pg V-23)	
5.W.4	Rail 4.0 Encourage use of the rail system for freight and passenger high speed rail service. Encourage additional stations for heavy rail service. (Rail 4.0, pg V-23)	Support expansion and maintenance needed to establish reliable, higher speed (110-125 mph) freight rail service and intercity rail passenger service in the Willamette Valley. Encourage use of the rail system for freight and passenger high speed rail service. Encourage additional stations for heavy rail service.
5.W.5	New	Encourage the development of rail-accessible land uses within industrial areas adjacent to main rail lines.
5.W.6	New	Support the development of convenient inter-modal facilities such as ramp, terminal and reload facilities for transfers from truck to rail for long-haul freight movement.
5.W.7	New	Improve the safety and operations of rail transport at at-grade rail crossings and ensure that all at-grade crossings meet the best practices for facilitating safe multi-modal crossing, as identified in the most recent version of the "Railroad-Highway Grade Crossing Handbook" (Federal Highway Administration [FHWA]).
5.W.8	New	Identify and protect existing and abandoned rail rights-of-way for future transportation facilities and services.
5.X	Airport Policies	
5.X.1	Airports 7.0 Work with the Port of Portland in the development of the Mulino Airport. (Airports 7.0, pg V-23)	Work with the Port of Portland, <u>Oregon Department</u> of Aviation, and other affected agencies to implement develop the Mulino Airport Plan.
5.X.2	Airports 8.0 Coordinate with Marion County to implement regulations on development near the Aurora Airport. (Airports 8.0, pg V-23)	Coordinate with Marion County, the City of Wilsonville and the Oregon Department of Aviation, and other affected agencies to develop and implement regulations on development nearthe Aurora Airport Plan.
5.X.3	Airports 9.0 Apply the following criteria when reviewing applications for new airports or expansions of existing ones. (Airports 9.0, pg V-23)	Apply the following criteria when reviewing applications for new airports or expansions of existing ones. Allow new airports as conditional uses in appropriate zoning districts. Require new public

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
		use airports to be located within: Locate new public use airports within *one mile of an arterial roadway, and Locate new public use airports *at least one mile away from urban residential areas.
	Airports 9.1 Locate new public use airports within one mile of an arterial roadway. (Airports 9.1, pg V-23)	First bullet in 5.X.3
	Airports 9.2 Locate new public use airports at least one mile away from urban residential areas. (Airports 9.2, pg V-23)	Second bullet in 5.X.3
5.X.4	Airports 9.4 Cooperate with regulatory agencies to minimize conflicts between airports and other uses. (Airports 9.4, pg V-23)	Cooperate with the Oregon Department of Environmental Quality, Oregon Department of Aviation and Federal Aviation Administration to minimize conflicts between airports and uses of surrounding lands.
5.X.5	Airports 9.7 New airports, airport expansions, or expansions of airport boundaries, except those limited to use by ultra-lights and helicopters, shall have a runway at least 1,800 feet long and control at least enough property at the end of each runway through ownership, aviation easement, or long term lease to protect their approach surfaces until they are 50 feet above the terrain. The runway shall be located so as to achieve at least a 20 foot clearance of the approach surface over a county, city or public road. (Airports 9.7, pg V-24)	Require that Nnew airports, airport expansions, or expansions of airport boundaries, except those limited to use by ultra-lights and helicopters, shall have a runway at least 1,800 feet long and shall control at least enough property at the end of each runway through ownership, aviation easement, or long term lease to protect their approach surfaces until the approach surfaces they are 50 feet above the terrain. Require Tthe runway shall to be located so as to achieve at least a 20-foot clearance of the approach surface over a county, city or public road.
5.X.6	Airports 10.0 The County will adopt ordinance provisions to implement regulations consistent with applicable statutes and administrative rules. (Airports 10.0, pg V-24)	The County will adopt ordinance provisions to implement regulations consistent with applicable statutes and administrative rules. Apply a Public-Use Airport and Safety overlay zoning district to public-use airports, consistent with ORS 836.600 through 836.630, and as shown on Map 5-10.
5.X.7	New Recommended language relates to existing policy Airports 10.0 requiring ordinance provisions to implement regulations.	Apply a Private-Use Airport and Safety overlay zoning district to privately-owned, private-use airports that served as the base for three or more aircraft, consistent with ORS 836.600 through 836.630, and as shown on Map 5-10.

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.X.8	Airports 11.0 Recognize airports in Clackamas County, classified as shown on Map V-11. (Airports 11.0, pg V-24)	Recognize <u>privately-owned</u> , <u>private-use</u> airports <u>that</u> <u>served</u> as the base for one or two aircraft on <u>December 31</u> , 1994, as shown in the records of the <u>Oregon Department of Transportation in Clackamas</u> <u>County, classified and</u> as shown on Map <u>5-10V-11</u> .
5.X.9	Airports 9.6 Encourage establishment of heliports in industrial areas in conjunction with state and federal standards for heliport design and location. (Airports 9.6, pg V-24)	Encourage establishment of heliports in industrial areas in conjunction with state and federal standards for heliport design and location.
5.X.10	New – Emergency response	Support the role Clackamas County airports serve in supporting emergency response and disaster assistance.
5.Y	Pipeline Policy	
5.Y.1	Pipeline 12.0 Work with pipeline companies to provide safe, quiet, efficient transport of bulk commodities. (Pipeline 12.0, pg V-24)	SAME Work with state and federal regulatory agencies, affected communities and pipeline companies to provide safe, quiet, efficient transport of bulk commodities.
5.Z	Water Transportation Policies	
5.Z.1	Water Transportation 13.0 Maintain land transportation access to docks, boat ramps and shippers using waterways for transportation. (Water Transportation 13.0, pg V-24)	Maintain <u>safe</u> and <u>convenient</u> , <u>multi-modal</u> land <u>transportation access to the Canby Ferry</u> , <u>and to public and commercial</u> docks, <u>and</u> boat ramps. and shippers using waterways for transportation.
5.Z.2	Water Transportation 14.0 Support efforts to minimize negative impacts on water quality caused by river transportation. (Water Transportation 14.0, pg V-24)	Support efforts to minimize <u>noise and</u> negative impacts <u>caused by river transportation</u> on <u>air and</u> water quality and <u>to</u> habitat for fish migration. <u>caused by river transportation</u> .
5.Z.3	New – Willamette Falls locks	Support the continued operation and maintenance of the Willamette Falls Locks to facilitate water transportation on the Willamette River.
(5.Z.4)	New Not used. Change from Sept. 23 rd document: Added access to Canby Ferry in Policy 5.Z.1, so do not need this separate policy.	(Ensure safe and convenient multi-modal access to the Canby ferry.)

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FINANCE, FUNDING AND MAINTENANCE

Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5-Recommended Policy Language
5.AA	Finance and Funding Policies	
5.AA.1	Ped/Bike 16.0 Support continuation of current (or equivalent) federal, state, and local funding mechanisms to construct county pedestrian and bicycle facilities. (PedBike 16.0, pg V-21)	Support continuation of current (or equivalent) federal, state, and local funding mechanisms to construct and maintain County pedestrian and bicycle facilities transportation projects. Identify and pursue new, permanent funding mechanisms to construct and maintain County transportation facilities and to support programs and projects identified in the TSP.
5.AA.2	Ped/Bike 17.0 Develop dedicated funding sources to implement the Clackamas County Pedestrian and Bicycle Master Plans. (PedBike 17.0, pg V-21)	Develop dedicated funding sources to implement active transportation projects. the Clackamas County Pedestrian and Bicycle Master Plans.
5.AA.3	<u>New</u> – Equity	Establish funding for bicycle, pedestrian and transit projects that serve the needs of transportation disadvantaged populations.
5.AA.4	New – System Development Charge	Consider a transportation system development charges methodology that calculates person trips to allow pedestrian, transit, and bicycle projects, as well as motor vehicle projects, to be funded by TSDCs.
5.AA.5	New	To the extent practical, invest unrestricted funding sources in a balanced manner in rural and urban areas.
5.AA.6	<u>New</u> - Funding	Urban Study creating a transportation facility funding program that establishes a "fee in lieu of" process that may be used by developers to pay for all on-site and off-site transportation facilities required as part of the land development process.
5.BB	Maintenance Policies	
5.BB.1	Roadways 2.0 Emphasize maintenance of existing roadways, with improvements where appropriate, to improve traffic flow and safety at a reasonable cost. (Roadways/Efficiency & Finance 2.0, pg V-6)	Emphasize maintenance of existing rights-of- way,roadways, with improvements where appropriate, to improve traffic flow and safety for all transportation modes at a reasonable cost.
5.BB.2	Roadways 3.0 Determine roadway maintenance needs and priorities and develop an effective and efficient roadway	Determine roadway maintenance needs and priorities and develop an effective and efficient roadway maintenance program.

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5-Recommended Policy Language
	maintenance program. (Roadways/Efficiency & Finance 3.0, pg V-6)	
5.BB.3	Ped/Bike 18.0 Develop routine maintenance standards and practices for pedestrian facilities and on-road and off-road bikeways, including traffic control devices. (PedBike 18.0, pg V-21)	Develop routine maintenance standards and practices for the transportation system, pedestrian facilities and on-road and off-road bikeways, including traffic control devices.
(5.BB.4)	New policy moved to Section 5.CC, Policy 5.CC.3	

Transportation Projects and Plans

Ī	Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language	
	5.CC	Capital Improvement Plan Policies		
	5.CC.1	Roadways 7.0 Fund and build the roadway improvement projects needed to accommodate & appropriately manage future traffic demands for the next 20 years. The list of these projects follows as Table V-1. Maps illustrating their locations are included as Maps V-1a and V-1b. (Roadways/ Needed Road Improvements 7.0, pg V-6)	Fund and build the roadway transportation improvement projects identified as needed to accommodate and appropriately manage future traffic transportation needs. These projects are found in the following lists: 20-Year Capital Projects (Table 5-3a); Preferred Capital Projects (Table 5-3b); and Long-Term Capital Projects (Table 5-3c). Project locations are shown on Maps 5-11a through 5-11g. demands for the next 20 years. The list of these projects follows as Table V-1. Maps illustrating their locations are included as Maps V-1a and V-1b.	
	5.CC.2	Roadways 8.0 Maintain a current and complete 5-year Capital Improvement Program. It shall contain needed future transportation projects in priority order, with estimated costs and assigned responsibility for funding. It should be updated and adopted periodically by the Board of County Commissioners. (Roadways/ Needed Road Improvements 8.0, pg V-7)	Maintain a current and complete 5-yYear Capital Improvement Program (CIP). It shall which contains needed future the programmed transportation projects in priority order, with estimated costs and assigned responsibility for funding. It should be uUpdated and adopted the 5-Year Capital Improvement Program periodically. by the Board of Commissioners.	
	5.CC.3 (5.BB.4)	New - Major projects by others.	Support the construction of prioritized, major transportation improvements in the County as identified by other jurisdictions including the Oregon Department of Transportation, Metro, cities, transit agencies and park providers. The list of needed transportation projects to be built by other jurisdictions is located in Table 5-3d. The project locations are shown on Maps 5-11a through 5-11g.	

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.DD	Special Transportation Plans and Studies	
5.DD.1	Special Transportation Plans This section lists special transportation plans that are adopted by reference and therefore made part of the Comprehensive Plan. (pg V-4)	This section lists Designate the following as sSpecial tTransportation pPlans: that are adopted by reference and therefore made part of the Comprehensive Plan
	Special Transportation Plans 1.0 The SE 172 nd Avenue/SE 190th Drive Corridor Management Plan is adopted by reference as part of Chapter 5 of the Clackamas County Comprehensive Plan. (Special Transportation Plans 1.0, pg V-4)	 A. The SE 172nd Avenue/ SE 190th Drive Corridor Management Plan, adopted by reference in Appendix A; is adopted by reference as part of Chapter 5 of the Clackamas County Comprehensive Plan. B. The Clackamas County Pedestrian Master Plan, adopted by reference in Appendix A; C. The Clackamas County Bicycle Master Plan, adopted by reference in Appendix A; D. The Clackamas County Airport Plan, adopted by reference in Appendix A; E. Transportation elements of the Community Plans and Design Plans included in Chapter 10.
	Roadways 7.2 Pursuant to OAR 660, Division 12 that requires an exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities & Services) and Goal 14 (Urbanization) for constructing new arterial roads on EFU lands, an exception has been taken to allow for Arndt Road improvement listed as project numbers 265 & 266 on Table V-1. For findings of fact and statement of reasons, see File ZDO 194. (Roadways/ Needed Road Improvements 7.2, pg V-7) NOTE: Board Order 2003-76 Roadways 7.3 Pursuant to OAR 660, Div 12 that requires an exception to Statewide Goal 3 (Ag Lands), Goal 11 (Public Facilities & Services) & Goal 14 (Urbanization) for constructing new arterial roads on EFU lands, an exception has been taken to allow for the Arndt Road improvement listed as project numbers 266 and 267 on Table V-1. For findings of fact and statement of reasons, see File ZDO 195. (Roadways/Needed Road Improvements 7.3, pg V-7) Note: Board Order 2003-104	In Sept. 23 rd version of Chapter 5, these were 5.0.11 and 5.0.12 . F. The exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities & Services) and Goal 14 (Urbanization), pursuant to OAR 660, Division 12, to allow for the Arndt Road improvement, which is not included on the CIP as it is substantially completed. (For findings of fact and statement of reasons, see Board Order 2003-76.) E-G.The exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities & Services) and Goal 14 (Urbanization), pursuant to OAR 660, Division 12, to allow for the Arndt Road improvement, listed as project number 2806 on Table 5-3b and shown on Map 5-11e. (For findings of fact and statement of reasons, see Board Order 2003-104.)

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Policy #	Current Policy Language or <u>New</u>	Draft Chapter 5 - Recommended Policy Language
5.DD.2	New: Locations for future studies are listed as	Complete the following studies to develop solutions to problems that were identified during the existing and future conditions analysis of the transportation system, but could not be solved within the scope of the TSP update. A. Conduct an alternatives analysis and land use
	subsections A, B, C, D, and E. Roadways 7.1 identifies Location F: Designate the Sunrise Corridor along a new alignment of Highway 212 in rural Clackamas County as a future, planned highway corridor. (Roadways/Needed Road Improvement 7.1, pg V-6)	study to identify and consider roadway improvements to address access to I-5 within the southwest portion of the County and capacity deficiencies along Arndt Road (project # 2057). B. Develop alternative performance standards for intersections and alternative mobility standards within the Clackamas Regional Center design plan area. Determine if this area should be designated as a multimodal mixed-use area (MMA) as provided in the Transportation Planning Rule (OAR 660-012-0060). (project #2820) C. Develop a circulation study for the area west of the Clackamas Town Center and conduct a Transportation Infrastructure Analysis. (project #U647) D. Study the I-205 Multi-use Path gap to identify near term solutions for completing the path. (project #U939) E. Identify bicycle and pedestrian improvements to better connect OR 224 to the Clackamas Regional Center along 82nd Avenue. (project #2055) F. Work with ODOT, the City of Happy Valley and the City of Damascus to review the future need for Designate the Sunrise Corridor Unit 2 along a new alignment of (parallel to Highway 212, between 172 devenue and US 26 in rural Clackamas County) identified as a future, planned highway corridor.

Existing Policies Recommended to be Deleted	Description
Roadways 4.0 Preserve as much as possible the efficient function of the regional roadway system in development of any new roads.	Efficient function of entire system is considered through application of operating standards.
Roadways 5.0 Investigate and cooperate with other jurisdictions in establishing a transportation financing plan.	County coordinates transportation planning with

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Existing Policies Recommended to be Deleted	Description	
	other jurisdictions, but does not create one financing plan.	
Roadways 31.0(a) Review of high-employment developments shall use a performance evaluation operating standard of Level-of-Service "E". Roadways 31.0(c) Segments of 82nd Avenue, Sunnyside Road, and Johnson Creek Boulevard located within the Clackamas Regional Center Area shall be evaluated for performance to standards adopted in Chapter 10, "Clackamas Regional Center Area Design Plan," Section XII Roads and Streets System Policies.	These exceptions to operating standards are not needed under the new performance evaluation measures.	
Roadways 37.0 Consider all types of interchange designs when developing a freeway interchange project to maximize traffic flow, safety and efficiency.	Interchange design is not under County authority.	
Roadways 38.0 Consider all transportation modes when building new roads or widening existing roads to maximize efficiency and safety for all users of the road.	Other policies address inclusion of all transportation modes on the road network.	
TDM 1.0 Work with Metro and the state to explore Congestion Pricing (Value Pricing) on appropriate transportation facilities to encourage reductions in VMT.	County is not pursuing value pricing.	
Parking 2.0 Encourage off-street parking in commercial, industrial, and high density residential areas to be at the sides or rear of buildings where practical, with buildings oriented to the street in a manner that is convenient to pedestrians and aesthetically pleasing to passers-by, but does not interfere with sight distance on the roadway, or preclude road widening.	Development standards are included in the zoning code.	
Parking 5.0 Allow commercial and industrial developments to decrease their parking area requirements if they provide and maintain ridesharing programs	Not practical to monitor private rideshare programs that may change over time.	
Parking 8.0 On-street parking may be prohibited in front of schools as needed to assure student safety and school security, and shall be reviewed on a school by school basis.	On-street parking evaluation is not a policy.	
Transit 14.0 Provide high capacity transit to the Oregon City and Tualatin areas, and in the I-205 corridor including the Gateway Transit Center. The purpose is to relieve traffic congestion, provide for transportation alternatives to the automobile, and to promote the economy of the Oregon City and Tualatin areas and the I-205 Corridor.	Support for high capacity transit is covered in policy 5.T.12. Further, the county does not itself provide transit service.	
Ped/Bike 5.0 Promote grid-street development patterns to provide direct routes from neighborhoods to destinations frequented by pedestrians and bicyclists.	Street network standards provided in other policies and in Design Plans.	
Airport 6.0 Work with the Port of Portland to make the Port's facilities for passenger and freight service more accessible to County residents.	Access to Port's facilities is not under County jurisdiction.	
Airport 9.3 Prevent air pollution and noise generated by airports from exceeding standards of appropriate regulatory agencies.	Air pollution and noise are regulated by other agencies.	

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	Existing Policies Recommended to be Deleted	Description
Airport 9.5 facilities.		Standards for height and clear zone are in other policies.

Existing Policies combined or in non-policy section of Chapter 5	Description
Ped/Bike 7.0 Construct all walkways designated in this Plan and any other walkways proposed, according to the current county design standards, the American Association of State Highway and Transportation Officials (AASHTO) standards, and the Americans with Disabilities Act (ADA) standards. (PedBike 7.0, pg V-20)	The purpose of Ped/Bike Policies 7.0 and 8.0 are combined in Policy 5.L.1
Ped/Bike 8.0 Construct all bikeways designated in this Plan and any other bikeways proposed, according to the current standards in the Oregon Bicycle and Pedestrian Plan and the American Association of State Highway and Transportation Officials (AASHTO) standards.	
Roadways 11.0 Limit zone change approvals to those that will not require a roadway as planned in the Capital Improvement Plan to be redesigned or increased to a higher functional classification in order to maintain the minimum acceptable performance evaluation level. State transportation facilities shall be evaluated according to the Oregon Highway Plan. (Roadways/Functional Class 11.0)	Existing Policies Roadways 11.0 and Roadways 33.0 are combined in Policy 5.0.4.
Roadways 33.0 Limit zone change approvals to those that will not reduce the Level of Service of a roadway as planned in the Capital Improvement Plan below the minimum acceptable performance evaluation Level-of-Service standard. State facilities shall be evaluated according to the Oregon Highway. (Roadways/Operating Standards 33.0)	
Roadways 7.2 Pursuant to OAR 660, Division 12 that requires an exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities & Services) and Goal 14 (Urbanization) for constructing new arterial roads on EFU lands, an exception has been taken to allow for Arndt Road improvement listed as project numbers 265 & 266 on Table V-1. For findings of fact and statement of reasons, see File ZDO 194. (Roadways/ Needed Road Improvements 7.2, pg V-7) NOTE: Board Order 2003-76	Not a policy statement. The approved goal exception will be included in Special Transportation Plans and Studies, 5.DD.1.
Roadways 7.3 Pursuant to OAR 660, Div 12 that requires an exception to Statewide Goal 3 (Ag Lands), Goal 11 (Public Facilities & Services) & Goal 14 (Urbanization) for constructing new arterial roads on EFU lands, an exception has been taken to allow for the Arndt Road improvement listed as project numbers 266 and 267 on Table V-1. For findings of fact and statement of reasons, see File ZDO 195. (Roadways /Needed Road Improvements 7.3, pg V-7) NOTE: Board Order 2003-104; In Table 5-3, Map 5-11F. <the 6-3="" a="" and="" as="" dlcd="" document="" first="" had="" listed="" sent="" table="" the="" to="" tracking="" typo=""></the>	Not a policy statement. The approved goal exception will be included in Special Transportation Plans and Studies, 5.DD.1.

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Existing Policies combined or in non-policy section of Chapter 5	Description
Transit 15.0 <u>Major Transit Streets</u> , for the purpose of setting standards for orientation of development to transit, shall be those streets planned for High Capacity Transit and Primary Bus as shown on Map V-6, as well as any other street that receives 20 minute or better service at the PM traffic peak. (Transit 15.0, pg V-18)	Urban Moved Transit 15.0 to Definitions
Transit 16.0 <u>Major Transit Stops</u> shall be any transit stop along a Major Transit Street where that stop is within 250 feet of the centerline of an intersection with a public or private street. (Transit 16.0, pg V-18)	Urban First sentence in Transit 16.0 (description of "Major Transit Stops") moved to Definitions.

Original policy #	Proposed language not being included in Chapter 5	Applicable Policy in Chapter 5
(5.R.10)	<u>Urban</u> Require all rights-of-way for urban arterials and collectors to be adequate to accommodate all required road improvements including bikeways, pedestrian facilities, and drainage facilities, where possible.	Policy 5.O.1 addresses developing roadways to adopted County Road Cross Sections.
(5.R.11)	Rural Require rights-of-way for rural arterials and collectors to be adequate to accommodate all required road improvements including bikeways, shoulders, and drainage facilities, where possible.	Policy 5.O.1 addresses developing roadways to adopted County Road Cross Sections.
(5.R.14)	Rural Dedication of adequate right-of-way and construction of road improvements may be required to serve traffic that will be generated by new development.	Policy 5.R.2 states requirement for right-of-way dedication.
(5.Z.4)	Rural Ensure safe and convenient multi-modal access to the Canby ferry.	Access to Canby Ferry added to Policy 5.Z.1.

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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.

- <u>Limited funding:</u> 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.
- <u>Balancing needs</u>: 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.
- <u>Safety</u>: 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

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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.

- <u>Fostering economic growth</u>: 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 multimodal 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.

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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 (Table 5-3).
- **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).

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FOUNDATION AND FRAMEWORK

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

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

5.A. Compliance and Coordination Policies

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

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5.B Road Safety Policies

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

5.C Equity, Health and Sustainability Policies

- 5.C.1 Support programs and projects, such as pedestrian and bike connections to transit stops, that expand and improve transportation options for residents in areas with identified transportation-disadvantaged populations.
- 5.C.2 Protect neighborhoods, recreation areas, pedestrian facilities, bikeways and sensitive land uses (such as schools, daycare centers and senior centers whose users are more vulnerable to pollution) from transportation-related environmental degradation. Coordinate transportation and land use planning and use mitigation strategies, such as physical barriers and design features, to minimize transmission of air, noise and water pollution from roads to neighboring land uses.
- 5.C.3 Work with public agencies, private businesses and developers to increase and improve infrastructure necessary to support use of vehicles that use alternative fuels.
- 5.C.4 Ensure that programs to encourage and educate people about bicycle, pedestrian, and transit transportation options are appropriate for all County residents, particularly transportation-disadvantaged populations.

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- 5.C.5 Build working partnerships between the County's Public Health and Transportation Divisions and utilize tools, such as health impact assessments, to better connect the effects of transportation projects with the health of communities.
- 5.C.6 **Rural** Support the continued provision of public transportation services to County populations that are un-served or under-served, as well as the network of community-based, transportation services for seniors and persons with disabilities.

5.D Intelligent Transportation Systems (ITS) Policies

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

5.E Transportation Demand Management (TDM) Policies

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

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5.E.6 **Urban** Establish the following year 2040 non-drive-alone targets for growth concept design types (as identified on Map IV-8):

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

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

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

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LAND USE AND TRANSPORTATION

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

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

5.F Integration of Land Use and Transportation Policies

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

5.G Parking Policies

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

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- 5.G.2 Require new multi-family, commercial and institutional development to provide bicycle parking.
- 5.G.3 Allow shared parking and, where appropriate, on-street parking to be used to comply with parking standards.
- 5.G.4 **Urban** Allow the removal of existing, on-street parking along arterials and collectors to create bikeways, construct travel or turning lanes, or increase sight distance.
- 5.G.5 **Urban** Increase area for on-street parking in residential zoning districts by minimizing the width of driveway accesses.
- 5.G.6 **Urban** Encourage off-street parking in commercial, industrial, and high density residential areas to be located at the sides or rear of buildings, where practical.
- 5.G.7 **Urban** Consider allowing for decreased parking area requirements for development along transit routes, if the development provides pedestrian, bicycle and transit amenities. See Map 5-8a.
- 5.G.8 **Urban** Consider requiring shared parking within mixed-use development and where adjacent land uses are compatible.

5.H Rural Tourism Policies

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

5.1 Rural Scenic Roads Policies

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

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

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

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landscaped or natural buffer zone.

- f) Parking areas adjacent to scenic roads shall be separated from the right-of-way by a landscaped buffer.
- g) Any frontage roads adjacent to scenic roads shall be separated by a vegetative buffer where feasible
- h) Underground placement of utilities shall be encouraged.
- 5.1.3 The following facilities shall be designated scenic roads: (see Map 5-1 Scenic Roads)
 - Wilsonville Road
 - Stafford Road (City of Lake Oswego to Mountain Road)
 - Schaeffer Road
 - Pete's Mountain Road (Schaeffer Road to the Tualatin River)
 - SW Mountain Road, Canby Ferry Road, N. Locust, NE 37th, and Holly Street
 - Canby-Marquam Highway (City of Canby to Hwy 211)
 - Clackamas River Drive
 - Springwater Road (Clackamas River Drive to Hayden Road)
 - Hayden Road
 - Redland Road
 - Fischer's Mill Road
 - Marmot Road/Barlow Trail Road/
 - Ten Eyck Road/SE Lusted Road from Ten Eyck Road to the County line.
 - Lolo Pass Road
 - Salmon River Road
 - Still Creek Road
 - Timberline Road and West Leg Road
 - I-205 west of the Willamette River
 - Highway 99E from Oregon City to New Era Rd
 - Oregon City Bypass (Newell Creek Canyon segment)
 - Highway 211 (Canby-Marquam Highway to Estacada)
 - Highway 224 (Carver to Barton and south of Estacada)
 - Highway 26 east of the City of Sandy
 - Highway 35/Forest Service Road 386
- 5.1.4 Support implementation of the Oregon Scenic Byway System, including the Mt. Hood Scenic Byway and the West Cascades Scenic Byway.

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ACTIVE TRANSPORTATION

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

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

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

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

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

5.J General Active Transportation Policies

- 5.J.1 Coordinate the implementation of pedestrian facilities and bikeways with neighboring jurisdictions and jurisdictions within the county.
- 5.J.2 Ensure an opportunity for a diverse and representative citizen involvement in the county pedestrian and bicycle planning process by sponsoring the Clackamas County Pedestrian and Bikeway Advisory Committee (CCPBAC) as a forum for public input. Recruit representatives of transportation disadvantaged populations as part of this process.
- 5.J.3 Monitor and update the Clackamas County Pedestrian Master Plan and Bicycle Master Plan through data collection and evaluation, and review activities necessary to maintain and expand the programs established in these plans.

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- 5.J.4 Support bicycle, pedestrian and transit projects that serve the needs of transportation disadvantaged populations.
- 5.J.5 Coordinate with pedestrian, bicycle, and trail master plans, and with special transportation plans of the County, Oregon Department of Transportation, the United States Forest Service, Metro, and parks providers to achieve a safe and convenient offroad multi-use path and trail system connecting to the on-road pedestrian facilities and bikeway network.
- 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 according to the applicable cross section for all new collector or arterial construction or substantial reconstruction, even if not designated on the Planned Bikeway Network (Maps 5-2a and 5-2b), or on the Essential Pedestrian Network (Map 5-3), allowing for flexibility to accommodate characteristics of terrain, scenic qualities, existing development, and environmental constraints, and adopted Special Transportation Plans.
- 5.K.2 Seek out and implement innovative bicycle and pedestrian treatments that improve the convenience and safety of these facilities.
- 5.K.3 Improve the safety and appeal of walking and biking by supporting the development of bikeways and pedestrian facilities and networks on low volume or local roads and off of existing street rights-of-way.
- 5.K.4 **Urban** Identify pedestrian facilities and bikeway improvements necessary to ensure direct and continuous networks of pedestrian facilities and bikeways on the county road system.
- 5.K.5 **Urban** Identify locations where bicycle and pedestrian access is blocked by rivers and other natural barriers and encourage the creation of bicycle and pedestrian facilities to extend across these barriers.
- 5.K.6 **Urban** Review development plans to ensure that they provide bicycle and pedestrian access.

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- 5.K.7 **Urban** Create a networked system of pedestrian facilities and bikeways connecting cities, neighborhoods, commercial areas, community centers, schools, recreational facilities, employment centers, other major destinations, regional and city bikeways and pedestrian facilities, and other transportation modes. Utilize separate accessways for pedestrian facilities and bikeways where street connections are impractical or unavailable.
- 5.K.8 **Rural** Support the safe movement of equestrians in rural areas.

5.L Construction Policies

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

5.M Facilities Policies

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

5.N Multi-Use Path Policies

5.N.1 Support acquisition and development of multi-use paths on abandoned public and private rights-of-way.

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

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ROADWAY POLICIES

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

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

5.0 Functional Classification and Design Policies

- 5.O.1 Designate and develop roadways according to the functional classifications and guidelines illustrated in the County Road Typical Cross Sections (Figures 5-1a through 5-1f, and Figures 5-2a through 5-2f) while allowing flexibility to accommodate characteristics of terrain, scenic qualities, environmental constraints, existing development, and adopted Special Transportation Plans.
- 5.O.2 Designate freeways, arterials, collectors and connectors as shown on Map 5-4a and Map 5-4b. Roadways that do not presently exist but are shown on these maps are shown in approximate locations.
- 5.O.3 Maintain and improve roads consistent with their functional classification, and reclassify roads as appropriate to reflect function and use.
- 5.O.4 Require changes in Comprehensive Plan designation and zoning designation to comply with the Transportation Planning Rule (OAR 660-12). Evaluations of the transportation system for this purpose shall rely on existing transportation facilities and on planned facilities found in the 20-Year Capital Projects list (Table 5-3a). State transportation facilities shall be evaluated according to the Oregon Highway Plan, Regional Transportation Plan, Transportation Planning Rule, and other applicable state requirements.
- 5.O.5 Develop and implement traffic calming strategies, appropriate for the road functional classification, that will improve the safety and convenience of travel by all modes, particularly in areas with high crash rates or high rates of bicycle and/or pedestrian activity.

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- 5.O.6 **Urban** Consider the Metro Regional Street Design Classifications when designing new county roads or redesigning existing county roads, prior to construction or reconstruction. Map 5-5 shows which roads are designated by each Design Classification.
- 5.O.7 **Urban** Minimize impacts of managing storm water by allowing for Metro's alternative street standards, such as "green streets," as design alternatives.
- 5.O.8 **Urban** Design arterials and collectors to allow safe and convenient passage of buses, bicycles, and pedestrians.
- 5.O.9 **Urban** Streets, alleys, bikeways, pedestrian facilities, multi-use paths, trails and transit stops are allowed uses in all urban zoning districts. Consider all state and County policies relating to these facilities when widening, improving or constructing new transportation infrastructure.
- 5.O.10 **Rural** Plan to support the existing development pattern and through traffic needs of the rural communities, and not to support or promote urbanization.
- 5.O.11 **Rural** Consistent with ORS 215.283(3) and OAR 660, Division 12, County road capital improvement projects may be designed and constructed to improve safety and bring roads up to county standards outside the UGB. If the road capital improvement project is not otherwise allowed and would require expansion of right-of-way exceeding the road improvements allowed in the Agriculture or Forest districts, a goal exception would be required for such project, as provided for in ORS 215.283(3).
- 5.O.12 **Rural** Streets, alleys, bikeways, pedestrian facilities, multi-use paths, trails and transit stops are allowed uses in all rural zoning districts with the exception of Agricultural and Forest Districts in which they are conditionally allowed by ORS 215.213, 215.283 or OAR Chapter 660, Division 6 (Forest Lands).
- 5.O.13 **Rural** Recognize the importance of resource-related uses such as agriculture and forestry to the local economy, and the need to maintain a transportation system that provides opportunities to harvest agricultural and forest products and deliver them to market.
- 5.O.14 **Rural** Design, construct and reconstruct rural arterials and collectors to allow safe and convenient passage of trucks, buses, pedestrians and bicyclists.
- 5.O.15 **Rural** Support the safe movement of agricultural equipment in rural areas by improving existing roads to county standards and considering design features such as signs, pull-outs for slow-moving vehicles, reduced speeds, and limiting curbs where equipment may move to the shoulder or out of the right-of-way.

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5.P Project Development Policies

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

TSM strategies include:

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

5.Q Access Standard Policies

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

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5.R Policies on Improvements to Serve Development

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

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being extended.

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

5.S Performance Evaluation Measure Policies

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

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

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

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

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

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

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

- 5.S.9 The County will work with Metro and ODOT over five years to develop Alternate Road Capacity Performance Standards, required by the Oregon Highway Plan Policy 1.F., to address the following five intersections. These intersections were forecast not to meet the Capacity Performance Standards adopted in the 2013 TSP and there was no project identified that could make the intersection meet the standard.
 - SE Harmony Road/SE Linwood Avenue
 - OR 212/SE 172nd Avenue ODOT Intersection
 - OR 212/SE 282nd Avenue ODOT Intersection
 - OR 213/S. Henrici Road ODOT Intersection (traffic signal or roundabout)
 - OR 224/SE Lake Road/SE Webster Road ODOT Intersection

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TRANSIT

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

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

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

5.T Transit Policies

- 5.T.1 Work with transit agencies to identify existing transit deficiencies in the County, needed improvements, and additional park-and-ride lots needed to increase the accessibility of transit services to all potential users.
- 5.T.2 Emphasize corridor or roadway improvements that help ensure reliable and ontime transit service in the County.
- 5.T.3 Encourage transit providers to restructure transit service to efficiently serve local as well as regional needs.
- 5.T.4 Emphasize transit improvements that improve east-west connections; improve service between the County's industrial and commercial areas and neighborhoods; and best meet the needs of all County residents, employees and employers, regardless of race, age, ability, income level and geographic location.
- 5.T.5 Coordinate with all applicable transit agencies on all new residential, commercial and industrial developments to ensure appropriate integration of transit facilities and pedestrian access to transit facilities.
- 5.T.6 Require major developments and road construction projects along transit routes to include provisions for transit shelters, pedestrian access to transit and/or bus turnouts, where appropriate.

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- 5.T.7 Promote park-and-ride lots, transit shelters and pedestrian/bikeway connections to transit. Coordinate the location of these facilities with other land uses to promote shared parking and bicycle/ pedestrian-oriented transit nodes.
- 5.T.8 Coordinate and cooperate with transit agencies to provide transportation for seniors, people with disabilities, and other transportation-disadvantaged populations. Provide continued support for paratransit services as required within a three-quarter-mile distance from fixed-route transit stops.
- 5.T.9 Coordinate transit-supportive, roadway improvements with transit-providers to ensure financing and implementation of such improvements.
- 5.T.10 **Urban** Require pedestrian and transit-supportive features and amenities and direct access to transit for new development.

Pedestrian and transit supportive amenities may include pedestrian/bikeway facilities, street trees, outdoor lighting and seating, landscaping, shelters, kiosks, strict standards for signs, and visually aesthetic shapes, textures and colors. Buildings measuring more than 100 feet along the side facing the major pedestrian/transit access should have more than one pedestrian entrance. Pedestrian access should be provided to connect transit centers or transit stops on bus routes with centers of employment, shopping or medium-to-high density residential areas within one-quarter mile of these routes.

- 5.T.11 **Urban** Coordinate with transit providers to achieve the goal of transit service within one-quarter mile of most residences and businesses within the Portland Metropolitan UGB. Support more frequent service within Regional Centers, Town Centers, Station Communities, and Corridors and Main Streets.
- 5.T.12 Urban Work with federal, state and regional agencies to implement high capacity transit in the regional High Capacity Transit (HCT) System Plan in order to help relieve traffic congestion, provide for transportation alternatives to the automobile, and promote the County's economy. See Map 5-8c for the HCT network in the County.
- 5.T.13 **Urban** Site new commercial, institutional, and multifamily buildings at major transit stops as close as possible to transit, with a door facing the transit street or side street, and with no parking between the building and front lot lines.
- 5.T.14 **Rural** Focus safety improvements near existing or planned transit stops.

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FREIGHT, RAIL, AIR, PIPELINE AND WATER TRANSPORTATION

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

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

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

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

5.U General Freight Policies

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

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5.V Freight Trucking Policies 5.V.1 Support the Truck Freight Route System, while not prohibiting the use of other roads for local pickup and delivery of goods and services. (See Map 5-9a and Map 5-9b) 5.V.2 Improve and maintain the countywide Truck Freight Route System, the Regional Transportation Plan Freight Routes and Oregon Freight Plan Routes, as shown on Maps 5-9a and 5-9b. 5.V.3 Consider Heavy and Oversize Freight Movement requirements on State and County facilities when developing plans for transportation improvements and land use changes along freight routes designated as ORS 366.215 Corridors, as shown on Maps 5-9c and 5-9d. 5.V.4 Consider the safety of all travel modes that use the Truck Freight Route System when designing improvements to this system. 5.V.5 Accommodate freight travel on the Truck Freight Route System by improving facility design and operations. 5.V.6 Identify street improvements to reduce delays and to improve travel time reliability on roadways in the Truck Freight Route system 5.V.7 Work to improve the safety of Truck Freight Routes for all transportation modes. 5.V.8 Support the development of truck layover facilities/staging areas to reduce the conflicts between parked vehicles and adjoining land uses. 5.V.9 Utilize Intelligent Transportation Systems (ITS) solutions to improve safety and operations of freight movement. **Rail Policies** 5.W 5.W.1 Support the safe and efficient movement of goods by rail. Support the reduction of the number of at-grade crossings of arterial and collector 5.W.2 streets on main rail lines to reduce conflicts between rail use and other transportation modes, and improve safety. 5.W.3 On new or reconstructed arterials and urban collectors, prohibit at-grade crossings of main rail lines without traffic restrictive safety devices. 5.W.4 Support expansion and maintenance needed to establish reliable, higher speed (110-125 mph) freight rail service and intercity rail passenger service in the Willamette Valley.

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adjacent to main rail lines.

Draft: October 21, 2013

5.W.5

Encourage the development of rail-accessible land uses within industrial areas

- 5.W.6 Support the development of convenient inter-modal facilities such as ramp, terminal and reload facilities for transfers from truck to rail for long-haul freight movement.
- 5.W.7 Improve the safety and operations of rail transport at at-grade rail crossings and ensure that all at-grade crossings meet the best practices for facilitating safe multi-modal crossing, as identified in the most recent version of the "Railroad-Highway Grade Crossing Handbook" (Federal Highway Administration [FHWA]).
- 5.W.8 Identify and protect existing and abandoned rail rights-of-way for future transportation facilities and services.

5.X Airport Policies

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

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- 5.X.9 Encourage establishment of heliports in industrial areas in conjunction with state and federal standards for heliport design and location.
- 5.X.10 Support the role Clackamas County airports serve in supporting emergency response and disaster assistance.

5.Y Pipeline Policy

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

5.Z Water Transportation Policies

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

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FINANCE AND FUNDING

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

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

5.AA General Finance and Funding Policies

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

5.BB Maintenance Policies

5.BB.1 Emphasize maintenance of existing rights-of-way, with improvements where appropriate, to improve traffic flow and safety for all transportation modes at a reasonable cost.

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5.BB.2	Determine road maintenance needs and priorities and develop an effective and efficient road maintenance program.
5.BB.3	Develop routine maintenance standards and practices for the transportation system, including traffic control devices.

ZDO-246: Transportation System Plan Draft: October 21, 2013

TRANSPORTATION PROJECTS AND PLANS

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

The purpose of the project prioritization was to identify a set of project that could reasonably be expected to be funded over the next 20 years. The funding forecast completed in 2012 indicates that only around 30% of the funding will be available to construct the needed projects. Therefore, the Capital Improvement Plan is divided into three project lists:

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

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

5.CC Capital Improvement Plan Policies

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

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

5.DD Special Transportation Plans and Studies

- 5.DD.1 Designate the following as Special Transportation Plans:
 - A. The SE 172nd Avenue/ SE 190th Drive Corridor Management Plan, adopted by reference in Appendix A;
 - B. The Clackamas County Pedestrian Master Plan, adopted by reference in Appendix A;
 - C. The Clackamas County Bicycle Master Plan, adopted by reference in Appendix A;
 - D. The Clackamas County Airport Plan, adopted by reference in Appendix A;
 - E. Transportation elements of the Community Plans and Design Plans included in Chapter 10.
 - F. The Exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities & Services) and Goal 14 (Urbanization), pursuant to OAR 660, Division 12, to allow for the Arndt Road improvement, which is substantially complete. (For findings of fact and statement of reasons, see Board Order 2003-76.)
 - G. The Exception to Statewide Planning Goal 3 (Agricultural Lands), Goal 11 (Public Facilities & Services) and Goal 14 (Urbanization), pursuant to OAR 660, Division 12, to allow for the Arndt Road improvement listed as project number 2806 on Table 5-3b and shown on Map 5-11e. (For findings of fact and statement of reasons, see Board Order 2003-104.)
- 5.DD.2 Complete the following studies to develop solutions to problems that were identified during the existing and future conditions analysis of the transportation system, but could not be solved within the scope of the TSP update.

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- A. Conduct an alternatives analysis and land use study to identify and consider roadway improvements to address access to I-5 within the southwest portion of the County and capacity deficiencies along Arndt Road (project # 2057).
- B. Develop alternative performance standards for intersections and alternative mobility standards within the Clackamas Regional Center design plan area. Determine if this area should be designated as a multimodal mixed-use area (MMA) as provided in the Transportation Planning Rule (OAR 660-012-0060). (project #2820)
- C. Develop a circulation study for the area west of the Clackamas Town Center and conduct a Transportation Infrastructure Analysis. (project #U647)
- D. Study the I-205 Multi-use Path gap to identify near term solutions for completing the path. (project #U939)
- E. Identify bicycle and pedestrian improvements to better connect OR 224 to the Clackamas Regional Center along 82nd Ave. (project #2055)
- F. Work with ODOT, the City of Happy Valley and the City of Damascus to review the future need for the Sunrise Unit 2 (parallel to Highway 212, between 172nd Avenue and US 26), identified as a future, planned highway corridor.

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DEFINITIONS

The following definitions apply to usage within Chapter 5.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Urban: Inside the Portland Metropolitan Urban Growth Boundary

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

ZDO-246: Transportation System Plan

Clackamas County -Transportation System Plan ZDO-246





Board of County Commissioners Planning Session

November 6, 2013







ZDO-246: Transportation System Plan

Proposed legislative amendment to Comprehensive Plan and Zoning & Development Ordinance (ZDO)

- Comp Plan
 - Chapter 5
 - Substantial revisions to text, tables, maps, figures
 - Chapter 10
 - Conforming amendments in Chapters 3 & 4

> ZDO

- Section 202
- Section 1005
- Section 1007
- Section 1015
- Conforming amendments in 10 other ZDO sections



Staff Report

Materials

- 1: Staff report prepared for the Planning Commission
- 2: Proposed amendments to Chapter 5
- 3: Tracking table for Chapter 5 amendments
- 4: Capital Improvement Plan Project Lists
- 5: Capital Improvement Plan Project Maps

What is the County's TSP?

- Chapter 5 of the Comprehensive Plan
 - POLICIES related to:
 - Roadways
 - Transportation Demand Management (TDM)
 - Parking
 - Transit
 - Pedestrian and bicycle facilities
 - Freight, Rail, Air, Pipelines and Water Transportation
 - PROJECTS: Roadway and other transportation facility improvements needed to accommodate traffic demands over the next 20 years

Why update the County's TSP?

- Last comprehensive review and update was more than 10 years ago
 - Needed to develop a vision for the transportation system to reflect and incorporate the full spectrum of people who use the system
 - Needed to reflect changes in state and regional regulatory requirements in local plans and zoning development ordinances
- Required by state law



Process for Updating the TSP

- Proposed POLICIES and PROJECTS emerged from a multi-year process
 - Fall 2010 Spring 2011: Developed Draft Transportation
 Policy Framework with involvement from County departments
 - Summer 2011 Summer 2013: Worked closely with Public Advisory Committee (TSP PAC) and the public to develop recommendations to the Planning Commission
 - Fall 2013: Planning Commission hearing and recommendations to the Board of County Commissioners

Highlights of Public Involvement

Key Public Involvement Strategies

1. Public Advisory Committee (PAC)

- 12 full PAC meetings
- 9 PAC informational/brown bag meetings
- 9 Policy Work Group meetings

2. Geographic Sub-areas

- Organized report and analysis by five localized sub-areas
- More than 15 Geographic Area Project
 Working Group (GAPS) meetings to engage
 local participation in PROJECT prioritization





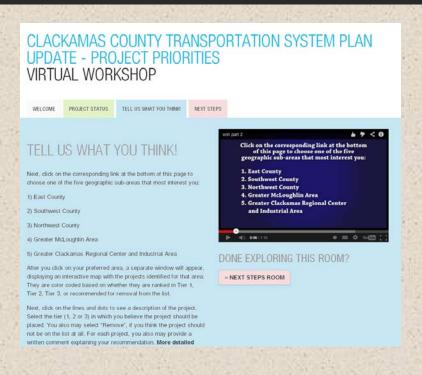
Highlights of Public Involvement (cont)

3. User friendly

- Six regional meeting and open houses
- Use of virtual (on-line)open houses at key points in the process
- Reached out to the public by attending dozens of local meetings

4. Keep people informed

- Website www.clackamascountytsp.com
- Four newsletters / flyers
- Articles in six editions of Citizen News
- Website, emails, Facebook and Twitter
- Fifteen news releases throughout the project
- 5. Check-in with Board of Commissioners (eight meetings)
- 6. Four work sessions with Planning Commission





TSP Vision and Goals

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.

Goals

- Sustainable
- Local Business and Jobs
- Livable and Local
- Safety and Health
- Equity
- Fiscally Responsible



Proposed Amendments – ZDO-246

- Most substantial changes are to Chapter 5: Transportation System Plan (TSP)
 - Reformatted and reorganized
 - New and revised POLICIES
 - 81 new policies
 - 98 revised existing policies
 - 5 existing policies remain the same
 - 14 existing policies recommended for removal
- Changes recommended to implement Vision and Goals, and/or State and Regional regulations

Proposed Amendments – ZDO-246 (cont.)

- Changed roadway operating standards
- Updated and prioritized PROJECTS in the Capital Improvement Plan
- Updated TSP maps to be consistently formatted and reflect policy changes
- Created Road Cross Section figures to illustrate standards previously found in tables
- Removed Kruse Way Design Plan from Chapter 10

Proposed Amendments – ZDO-246 (cont.)

Updated PROJECT lists in Capital Improvement Plan

- Evaluated existing projects and new projects that were identified through public outreach and system analysis
- Prioritized projects with TSP PAC and local area representatives using the GAPS groups
- Matched project priorities to expected funding resources over the next 20 years
- Created four project lists included in Chapter 5
 - Table 5-3a: 20-year Capital Projects
 - Table 5-3b: Preferred Capital Projects
 - Table 5-3c: Long-term Capital Projects
 - Table 5-3d: Regional Capital Projects



Proposed Amendments – ZDO-246 (cont.)

Zoning and Development Ordinance changes

- Implemented proposed changes to the Performance Standards
- Clarified requirements for street trees along urban roadways
- Refined siting requirements for development located near transit stops

Analysis and Findings

Proposed amendments are consistent with:

- All relevant County Comprehensive Plan policies
- All relevant ZDO regulations
- Statewide Planning Goals
- Regional Transportation Plan (RTP)
- Regional Transportation Functional Plan (RTFP)
- State Transportation Planning Rule
- Oregon Highway Plan

Summary

Accomplishments

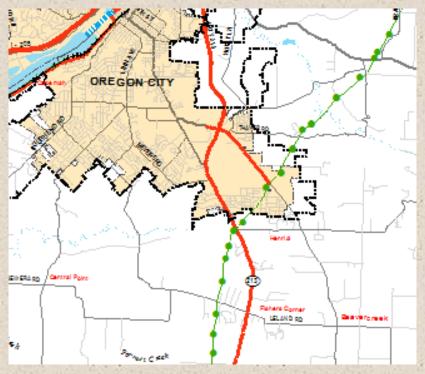
- Revised and updated policies to reflect a reinvigorated focus on:
 - Economic development
 - Equity
 - Health
 - Safety
 - Sustainability
- Successful two-year public process involving people throughout the County
- Over 300 prioritized projects recommended by PAC based on needs identified by residents for their local area

Citizen Comments about Staff Recommendation:

- 1. Removal of Freight Route from Beavercreek Road outside of UGB
- 2. Removal of the Oregon City to Mulino multi-use trail
- 3. Concern about paving shoulders and bike lanes on Holly Lane
- 4. Opposition to project to close Passmore Road
- 5. Request to move projects into Tier 1
 - South Molalla Ave./Bear Creek Bridge project
 - Clackamas Road / Theissen Road / Webster / Johnson Road
 - OR 213

Beavercreek Rd Freight Route

- Issue What is the appropriate end for this freight route?
- City of Oregon City TSP shows freight route along Beavercreek Rd ending at Meyers Road



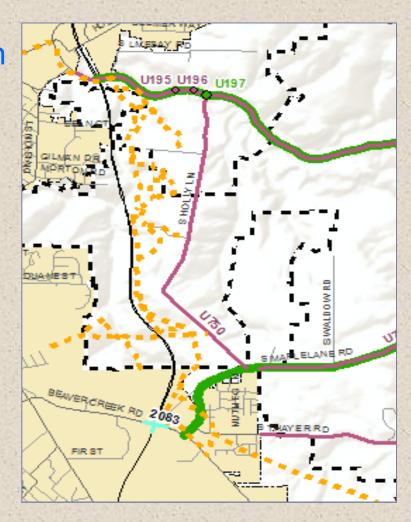
Staff Recommendation:

Remove the portion of Beavercreek Road from Meyers Road to Leland Road from the county's Truck Freight Route System, as shown on Map 5-9a

Holly Lane – Project U750 on Table 5-3c, Long-Term Capital Projects

- Concerns about safety and speed
- Issues detailed in neighborhood survey

Staff Recommendation: No change



Graves / Passmore / Mulino Road- Project 1090 on

Table 5-3a, 20-Year Capital

Projects

• Over 40 letters in opposition

Petition with 54 signatures in opposition

Staff Recommendation:

Change project description to

"Work in conjunction with Molalla
River School District and ODOT to

develop a solution to safety

concerns for school children using Passmore Road and
other operational issues where these roads intersect Hwy 213."





What's Next?

Discussion

Next Steps

- 20-Year Capital Project List to guide proposed update to RTP
- 2. BCC Hearings on ZDO-246
 - a. December 4, 9:30 a.m.
 - b. December 11, 6 p.m.