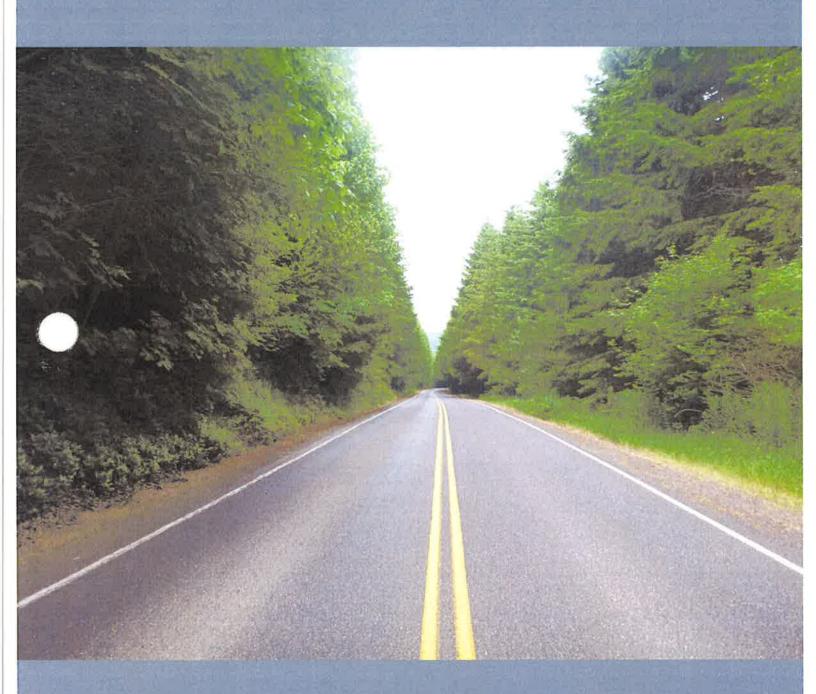
2017 Columbia County Transportation System Plan: Volume 2



February 2017

Columbia County Transportation System Plan

Prepared for:

Columbia County

Oregon Department of Transportation

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Volume 2 Contents

The contents of Volume 2 represent an iterative process in the development of the TSP. Refinements to various plan elements occurred throughout the process as new information was obtained. In all cases, the contents of Volume 1 supersede those in Volume 2.

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Section A

Glossary



Glossary

- Access Management: Access management is a broad set of techniques that balance the need to provide for efficient, safe, and timely travel with the ability to allow access to individual destinations. Measures may include but are not limited to restrictions on the type and amount of access to roadways, and use of physical controls such as signals and channelization including raised medians, to reduce impacts of approach road traffic on the main facility.
- Alternative Modes: Transportation alternatives other than single-occupant automobiles such as rail, transit, bicycles and walking.
- Aspirational Projects: Projects that are not reasonably likely to be funded during the 20-year planning horizon, but do address an identified problem and are supported by the County and ODOT.
- **Capacity:** The maximum number of vehicles or individuals that can traverse a given segment of a transportation facility with prevailing roadway and traffic conditions.
- Constrained Projects: Constrained projects are those projects that the County and ODOT believe are reasonably likely to be funded during the 20-year planning horizon based on the constrained funding threshold established through County and ODOT funding analysis.
- Level of Service (LOS): LOS is a "report card" rating (A through F) based on the average delay experienced by vehicles at the intersection. LOS A, B, and C indicate conditions where traffic moves without significant delays over periods of peak hour travel demand. LOS D and E are progressively worse operating conditions. LOS F represents conditions where average vehicle delay is excessive and demand exceeds capacity, typically resulting in long queues and delays.
- Local Roads: These roadways provide more direct access to residences. These roadways are often lined with homes and are designed to serve lower volumes of traffic.
- Major Collector Roadways: These roadways are intended to serve local traffic traveling to and from principal arterial or minor arterial roadways. These roadways provide greater accessibility to neighborhoods, often connecting to major activity generators and providing efficient through movement for local traffic.
- Minor Arterial Roadways: These roadways are intended to move traffic between principal arterials and major collector roadways. These roadways generally experience higher traffic volumes and often act as a corridor connecting many parts of the County.
- Minor Collector Roadways: These roadways often connect the neighborhoods to the major collector roadways. These roadways serve as major neighborhood routes and generally provide more direct access to properties or driveways than arterial or major collector roadways.
- Mobility Targets: The level of congestion the corresponding jurisdiction has defined as acceptable. Mobility targets are in the form of LOS or v/c ratios.
- Multi-Modal: Involving several modes of transportation including bus, rail, bicycle, motor vehicle, etc.
- Oregon Highway Plan (OHP): The document that establishes long range policies and investment strategies for the state highway system in Oregon.

- Peak Period or Peak Hour: The period of the day with the highest number of travelers. This is normally between 4-6 p.m. on weekdays.
- Principal Arterial Roadways: These are state roadways. These roadways serve the highest volume of motor vehicle traffic and are primarily used for longer distance regional trips.
- Right-Of-Way (ROW): A general term denoting publicly-owned land or property upon which public facilities and infrastructure is placed.
- Safety Priority Index System (SPIS): An indexing system used by Oregon Department of Transportation to prioritize safety improvements based on crash frequency and severity on state facilities.
- Shared-Use Path: Off-street route (typically recreationally focused) that can be used by several transportation modes, including bicycles, pedestrians and other non-motorized modes (i.e. skateboards, roller blades, etc.).
- Transportation Demand Management (TDM): A policy tool as well as any action that removes single occupant vehicle trips from the roadway network during peak travel demand periods.
- Transportation Impact Analysis (TIA): A study that evaluates the potential impacts a project may have on the transportation system, and determines mitigations required to meet transportation standards. These are necessary for projects to be approved (e.g., proposed developments, roadway extensions, zone changes).
- Transportation Road Advisory Committee (TRAC): A committee comprised of local residents, business representatives, and agency technical staff that reviewed and commented on each memorandum and met with the project team at key stages during the project. This group helped the project team find agreement on project issues and alternatives.
- Transportation System Management (TSM): Management strategies such as signal improvements, traffic signal coordination, traffic calming, access management, local street connectivity, and intelligent transportation systems.
- Transportation System Management and Operations (TSMO): Strategies and policies that work towards improving mobility through cost-effective methods, and can be categorized as transportation system management or transportation demand management.
- Transportation System Plan (TSP): Is a comprehensive plan that is developed to provide a coordinated, seamless integration of continuity between modes at the local level as well as integration with the regional transportation system.
- Urban Growth Boundary (UGB): The regional boundary that encompasses zoning designations in an urban area.
- Volume-to-capacity (v/c) ratio: A v/c ratio is a decimal representation (between 0.00 and 1.00) of the proportion of capacity that is being used at a turn movement, approach leg, or intersection. The ratio is the peak hour traffic volume divided by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. A ratio approaching 1.00 indicates increased congestion and reduced performance.



Section A

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Section B

Memo I: Public and Stakeholder Involvement Strategy

The contents of Volume 2 represent an iterative process in the development of the TSP. Refinements to various plan elements occurred throughout the process as new information was obtained. In all cases, the contents of Volume 1 supersede those in Volume 2.



MEMORANDUM

DATE: June 26, 2014

TO: Columbia County TSP Project Management Team

FROM: John Bosket, DKS Associates

Garth Appanaitis, DKS Associates

SUBJECT: Columbia County Transportation System Plan Update

Technical Memorandum #1: Public and Stakeholder Involvement Strategy

P11086-022

Columbia County has recognized that citizen involvement is necessary in making wise and legitimate decisions through its Comprehensive Plan. The following strategy provides specific actions for engaging citizens and stakeholders in the Transportation System Plan (TSP) update process.

The county will involve the public and stakeholders primarily through a series of stakeholder interviews, committee meetings, public open houses, and work sessions with elected officials, in addition to the distribution of project information through a variety of media, including a project website. The following describes each of these outreach mechanisms and a milestone schedule showing the public process is attached.

Transportation Road Advisory Committee

Columbia County's existing Transportation Road Advisory Committee (TRAC) will be asked to inform and guide the TSP update. Their primary function in this process will be to review drafts and provide comments on technical and regulatory memoranda/reports, as well as provide recommendations for the TSP. This committee maintains representation from a variety of public agency and private interests in the county. Committee members are listed in Table 1.

The TRAC is currently scoped to meet six times throughout the plan development process. The first meeting will provide a project orientation and begin the discussion of the goals and objectives that best describe how the transportation system should be developed and managed in Columbia County. The second meeting will be a review and discussion of existing and future transportation conditions. The third meeting will discuss how transportation solutions will be identified, how much funding the county is expected to have, and updated tandards to manage the transportation system. In the

Table I: Transportation Road Advisory Committee Members					
Name	Affiliation				
Jeff Burch	Vernonia Public Work				
Jeff Flatt	Mid Columbia Bus Company, Inc.				
Nita Greene	Land Owner				
Mike Greisen	Scappoose Rural Fire District				
Jim Jackson	Wildish Standard Paving Co.				
Pat LaPointe	Onward Communications				
Rosemary Lohrke	Land Owner				
Rodney Moore	M.E. Moore Construction				
Eric Oien	Teevin Bros.				
Don Rose	West Oregon Electric Company				
Paul Simmons	Clatskanie Bus Services				

fourth meeting, the TRAC will review and discuss potential transportation solutions. The fifth meeting will be a review of recommended projects and programs with projected planning-level cost estimates for each. The final meeting will be a review of recommended modifications to existing ordinances and a draft TSP, prior to beginning the public hearings process.

TRAC meetings will be open to the general public, but general public comments will be allowed only during designated periods at the end of the meetings.

Stakeholder Interviews

At the outset of the project, up to 10 key community stakeholders will be interviewed to inquire about interests in transportation within the county and the surrounding region. This input will be used to direct the development of recommended improvements, establish priorities, and evaluate plan outcomes.

Public Open House Meetings

Two public open house meeting series' will be held during the project. For each series, an open house will be held in the north half of the county and another one in the south half of the county, for a total of four meetings. The first meeting series will introduce the TSP project, obtain input regarding existing and future transportation needs and interests, as well as key areas of interest for inclusion in the goals and objectives. The second meeting series will again provide an overview of the project and obtain input on potential solutions to address transportation needs.

Advertisement of public open houses will be made through the project website, the County's website, and media notices in local newspapers. The county may supplement advertising through local radio stations and posters/flyers displayed in public areas or at other community events.

Board of Commissioners Work Sessions

The County Board of Commissioners will be directly engaged in the TSP update process through two work sessions held at key milestones that precede the public open houses.

Engaging Seniors, Non-English Speakers, and Low Income **Populations**

As part of the outreach to engage citizens and stakeholders in the TSP update process, efforts will be made to involve minority and low-income groups within the county.

Estimates based on the 2010 census show that approximately 90% of the population of Columbia County is Caucasian, with people of Hispanic or Latino origin making up the next largest race at less than 5%. Compared to the statewide average, Columbia County has a greater percentage of Caucasians and lower percentages of every other race identified. The county also has a slightly lower percentage compared to the statewide average that are living below the poverty level and approximately the same percentage of residents over the age of 65.

With only the English language being spoken in more than 95% of Columbia County homes, project documentation will be written in English. However, translation services will be made available upon request.



The county will also post project advertisements in locations where representatives or members of Native merican tribes in the region, such as the Confederated Tribes of the Grand Ronde, Confederated Tribes of Siletz Indians, Confederated Tribes of Warm Springs, Clatsop-Nehalem Confederated Tribes, and the Chinook Indian Nation are likely to see them.

To assist those that cannot drive, public meetings will be at locations accessible via transit when feasible. The county will provide downloadable materials on the project website. Hard copies of project documents will be available upon request for those without internet access.

To help engage senior citizens, the county will post project advertisements in locations where seniors will be likely to see them. Such locations may include drugstores, grocery stores, and retirement and assisted living communities.

Distribution and Review of Work Products

The county will distribute project work products to TRAC members, work products will also be available on the project website for access by the general public. The project website will provide information on the schedule of events, and will provide access to relevant draft and final deliverables. TRAC members will be able to comment directly through regular committee meetings. The general public will be able to comment during the public comment period at the end of TRAC meetings, at open house meetings, and through the project website. The project website will facilitate public input by including a comment mapping feature and online surveys. The project team will review comments input through the website and include them as part of the project record of public comments.



Section B

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Section C

Memo 2: Stakeholder Interviews

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TECHNICAL MEMORANDUM #2

DATE:

October 13, 2014

TO:

Columbia County TSP Project Management Team

FROM:

John Bosket, DKS Associates

Kevin Chewuk, DKS Associates

Edith Lopez Victoria, DKS Associates

SUBJECT: Columbia County Transportation System Plan Update

Technical Memorandum #2: Stakeholder Interviews

P11086-022

Stakeholder Interviews

Project staff performed telephone interviews with sixteen local stakeholders between May 12th and July 3rd 2014. The purpose of these interviews was to identify the transportation needs that takeholders feel are the most important in Columbia County and to gather input on potential inprovements that are needed to the transportation system. This document summarizes the outcome of those meetings, with input provided from the following stakeholders:

- Dave Carpenter, Dyno Nobel Business Operations Superintendent.
- Paul Langner, Teeven Brothers Rainier.
- Mark Buffington, Clatskanie ODOT Maintenance Manager.
- Janine Salisbury, St. Helens School District Business Manager.
- Scott Parker, President Scappoose Sand & Gravel.
- Scott Jensen, Port Planner.
- Charley O'Hare, Clatskanie PUD.
- Kerry Kallunki, Clatskanie PUD.
- Glen Crinklaw, Citizen.
- Brad Brooks, St. Helens Post Master.
- Trevor Kaech, Timber Industry.
- Earl Fisher, Columbia County Commissioner.
- Henry Heinmuller, Columbia County Commissioner.
- Jay Tappan, Chief Columbia River Fire and Rescue.

- Janet Wright, Columbia County Rider Transit Director.
- Tony Hyde, Columbia County Commissioner.

Driving

Safety

Stakeholders identified safety issues along the following streets or at the following locations:

- There is a need for more signage along county roads to alert drivers of warnings and advisory speeds.
- Overhead and horizontal clearances mandated by the State are not maintained on all roads.
- Collisions occur on narrow roads when large logging trucks turn sharp corners and encroach into the opposite lane.
- There are sight line issues along Tide Creek Road, Apiary Road, and at US 30 and Gable Road, and US 30.
- Upper McDermott Road is vulnerable to wash-outs.
- Apiary Road and the Scappoose-Vernonia Highway have inadequate superelevation, sharp turns, and missing guardrails.

Congestion

The following locations were identified as having a congestion problem:

- Queuing on the Longview Bridge.
- Congestion at the intersections of US 30 and Gable Road, and US 30 and Havlik Drive.
- Congestion on the segments of US 30 between Scappoose and St. Helens, particularly in the beach travel months of July and August.
- Other roads with congestion issues include Wyeth Road and Timber Road.
- Apiary Road is overly used by heavy vehicles.

Other

- Major thoroughfares are in need of resurfacing, there is not enough funding to keep up with maintenance, and some roads have deteriorated to the extent that they have to be converted to gravel.
- Roads are not kept clear during winter maintenance and most drivers are not notified when the road restrictions are lifted after a heavy freeze.



Main Highways

Stakeholders feel the following corridors need to be reviewed for improvements:

US 30

- Bridges along US 30 were designed for trucks of significantly less weight and length than the trucks presently being served.
- All of US 30 within Columbia County should be four lanes or include passing lanes to ease the circulation of trucks and emergency vehicles, and prevent bottlenecks.
- There should be an alternative route to US 30 to prevent bottlenecks during traffic incidents, thus it is imperative that all incidents are cleared in a timely manner.
- Striping along US 30 gets worn off from winter maintenance and there are visibility issues when vegetation is not maintained.
- Safer school connections are needed on US 30 across from St. Helens High School.

OR 202, OR 47 and Scappoose-Vernonia Highway

There are traffic safety concerns along OR 202, OR 47 and Scappoose-Vernonia Highway because these highways are narrow, there are land sliding issues, and they are heavily trafficked by heavy vehicles.

Cornelius Pass

Cornelius Pass Road is a significant commuter route to Columbia County residents and it is windy, narrow, congested, and heavily trafficked by heavy vehicles.

Bridges

Stakeholders provided the following information regarding bridges in Columbia County:

- Bridges along main arterial and collector roads do not have the weight capacity to accommodate most of the heavy vehicles that circulate along them. This includes mainly logging trucks and emergency vehicles.
- Agencies responsible for maintaining bridges throughout Columbia County should be clearly designated.
- Reevaluate bridge weight restrictions. Some bridges may have capacity to accommodate heavier trucks than what is currently allowed and vice-versa.
- A new bridge is needed to connect Columbia County and Washington State.



Transit

Existing Services

Stakeholders provided the following information regarding bus service in Columbia County:

- Existing service routes include commuter routes between Westport and St Helens, Rainier and Longview, and other routes that connect the County to the Portland metro area.
- Stakeholder were aware of transit flex routes that run between Scappoose and St. Helens and to other major destinations.

Transit Needs

Stakeholders feel that the following are existing issues or needs of the Columbia County Transit System:

- General infrastructural improvements are needed to facilitate transit access, such as safe transit stops along US 30, transit centers in Clatskanie and Rainier, and Park-and-Rides at key locations throughout the County.
- Additional funds are needed to maintain or improve existing transit operations, to provide demand response services and to use as matching funds when federal grants become available.
- Additional transit connections are needed between the northern part of the county and Portland and Astoria.
- Public transportation needs to be incorporated in the improvement of major thoroughfares as part of new land development, and at interfaces with existing business.
- Improve flexible connections to Portland to provide better access for people that need to travel for medical services, shopping, and college.

Bike and pedestrian

Stakeholders stated that due to geography and size, Columbia County is not conducive to biking and walking, however, they would like to see improvements in the following intersections and roadway segments:

- Improve bike connectivity along US 30.
- Define designated bike paths, routes, and lanes throughout Columbia County
- Provide a pedestrian crossing at US 30 and Gable Road.
- Promote bicycle education for commuter and recreational bike riders.
- Improve bike detection on major intersections.
- Provide pedestrian crossings along major thoroughfares, especially at bus stop locations along US 30.
- Promote the use of buses to transport bikes to reduce bike-vehicle conflicts along US 30.
- Provide more and better connections to recreational bike facilities and/or shared-use paths.



Rail

Stakeholders provided the following information regarding rail transportation:

- A second rail track is needed at single rail track locations to expand rail capacity and promote commerce.
- Improve rail crossings in terms of safety and vehicular access to accommodate all modes of transportation, including heavy vehicles.
- There are frequent problems with trains blocking traffic, which affects all users of the transportation system, such as school traffic, public transportation and emergency services. Train blockages of up to 20 minutes regularly occur.

Needs of Disadvantaged Populations

Stakeholders feel that the following are transportation needs of disadvantaged populations:

- Improve overall public transportation for the elderly, in particular demand response transit, which includes non-emergency medical transportation and Dial-a-Ride programs.
- Provide public transportation to the mental health facility in St. Helens and to health providers outside of Columbia County.
- Meals on Wheels offers meals to seniors, but participation of this service is limited because there are not enough drivers.
- Veterans need medical transportation to get to Portland.
- Transportation services that can serve lower-income minorities; options are not always well communicated to the elderly and the disabled.

Funding Allocation

Stakeholders feel that the following transportation areas should be prioritized as funding becomes available; topics are ranked in order of importance:

- 1. Prioritize maintenance and repair of existing county roads and highways.
- Prioritize investments that support economic development and help create new revenue for further transportation improvements.
- 3. Increase funding for transit.
- 4. Improve the safety of railroad crossings and reduce crossing closure times.
- 5. Improve overall transportation safety.
- 6. Provide improvements for bicycle and pedestrian infrastructure, including recreational shareduse paths.



Additional Stakeholders

Stakeholders identified the following entities as additional stakeholders that should be consulted in the development of the Transportation System Plan:

- ODOT Public Transit Division
- County Transportation Safety Committee
- Columbia County Emergency Management
- Pacific Gas & Electric Company
- Police and fire districts
- Towing truck companies
- Bicycle groups
- School district administrators
- Industrial park residents
- US Gypsum
- Kiwanis
- Rotary Clubs
- Chambers of Commerce

Other

Stakeholders provided the following information regarding other transportation topics:

- Increase law enforcement to enforce weight limits and posted speeds.
- Provide parking for public transportation, currently public transportation has to rely on private parking lots.
- Provide access to the Columbia River to promote development near port facilities and expand the use of maritime transportation.



Section C

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Section D

Memo 3: Plan Review Summary

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TECHNICAL MEMORANDUM #3

DATE: July 11, 2014

TO: Columbia County TSP Project Management Team

FROM: John Bosket, PE - DKS Associates

Garth Appanaitis, PE - DKS Associates Edith Lopez Victoria - DKS Associates Darci Rudzinski - Angelo Planning Group Shayna Rehberg - Angelo Planning Group

SUBJECT: Columbia County Transportation System Plan

Technical Memorandum #3: Plan Review Summary

P11086-022

This memorandum summarizes planning documents, policies, and regulations that are applicable to the 2014 Columbia County Transportation System Plan (TSP) update (see Attachment A for a complete list). The County's current TSP will serve as the foundation for the update process, upon which new information obtained from system analysis and stakeholder input will be applied to address changing ransportation needs through the year 2035. As new strategies for addressing transportation needs are proposed, compliance and coordination with the plans, policies, and regulations described in this document will be required.

Transportation System Planning in Oregon

Transportation system planning in Oregon is required by Statewide Planning Goal 12 – Transportation. The Transportation Planning Rule (TPR), OAR 660-012, describes how to implement Statewide Planning Goal 12.2

By implementing Statewide Planning Goal 12 (Transportation), the TPR promotes the development of safe, convenient, and economically supportive transportation systems that are designed to reduce reliance on single occupant vehicle travel. Key elements include direction for preparing, coordinating, and implementing transportation system plans. In particular, OAR 660-012-0060 addresses amendments to plans and land use regulations and includes measures to be taken to ensure allowed land uses are consistent with the identified function and capacity of existing and planned transportation facilities. This rule includes criteria for identifying significant effects of plan or land use

Statewide Planning Goals: http://www.oregon.gov/LCD/goals.shtml

Transportation Planning Rule: http://arcweb.sos.state.or.us/rules/OARS 600/OAR 660/660 012.html

regulation amendments on transportation facilities, actions to be taken when a significant effect would occur, identification of planned facilities, and coordination with transportation facility providers.

Recent amendments to the TPR (effective January 1, 2012) include new language in 660-012-060 that allows a local government to exempt a zone change from the "significant effect" determination if the proposed zoning is consistent with the comprehensive plan map designation and the TSP (Section 9). The amendments also allow a local government to amend a functional plan, comprehensive plan, or land use regulation without applying mobility standards if the subject area is within a designated multi-modal mixed-use area (MMA). In order to implement these recent amendments to the TPR, the plan amendment language in the county's zoning code may need to be revised during the implementation phase of this TSP update.

OAR 660-012-0045 requires each local government to amend its land use regulations to implement the TSP. It also requires local government to adopt land use or subdivision ordinance regulations consistent with applicable federal and state requirements, to protect transportation facilities, corridors and sites for their identified functions. This policy is achieved through a variety of measures, including access control measures, standards to protect future operations of roads, and expanded notice requirements and coordinated review procedures for land use applications. Measures also include a process to apply conditions of approval to development proposals, and regulations assuring that amendments to land use designations, densities, and design standards are consistent with the functions, capacities, and performance standards of facilities identified in the TSP.

Specifically, the TPR requires:

- The state to prepare a TSP, referred to as the Oregon Transportation Plan (OTP); and
- Counties and cities to prepare local TSPs that are consistent with the OTP.

As the guiding document for local TSPs, the OTP³ establishes goals, policies, strategies and initiatives that address the core challenges and opportunities facing transportation in Oregon. The goals and





Columbia County Fransportation System Plan

³ Oregon Transportation Plan: http://www.oregon.gov/ODOT/TD/TP/OTP.shtml



policies are further implemented by various modal plans, including the Aviation System Plan, Bicycle d Pedestrian Plan, Freight Plan, Highway Plan, Public Transportation Plan, Rail Plan and the Transportation Safety Action Plan. Each of the OTP's seven goals is defined by more specific policies and strategies:

OTP Goal 1, Mobility and Accessibility, aims to enhance Oregon's quality of life and economic vitality by providing a balanced, efficient, cost-effective and integrated multimodal transportation system that ensures appropriate access to all areas of the state, the nation and the world, with connectivity among modes and places.

- Policy 1.1: Development of an Integrated Multimodal System. It is the policy of the State of Oregon to plan and develop a balanced, integrated transportation system with modal choices for the movement of people and goods.
 - Strategy 1.1.1: Plan and develop a multimodal transportation system that increases the efficient movement of people and goods for commerce and production of goods and services that is coordinated with regional and local plans. Require regional and local transportation plans to address existing and future centers of economic activity, routes and modes connecting passenger facilities and freight facilities, intermodal facilities and industrial land, and major intercity and intra-city transportation corridors and supporting transportation networks.
 - Strategy 1.1.2: Promote the growth of intercity bus, truck, rail, air, pipeline and marine services to link all areas of the state with national and international transportation facilities and services. Increase the frequency of intercity services to provide travel options.
 - Strategy 1.1.4: In developing transportation plans to respond to transportation needs, use the most cost-effective modes and solutions over the long term, considering changing conditions and based on the following:
 - Managing the existing transportation system effectively.
 - Improving the efficiency and operational capacity of existing transportation infrastructure and facilities by making minor improvements to the existing system.
 - Adding capacity to the existing transportation system.
 - Adding new facilities to the transportation system.
- Policy 1.2: Equity, Efficiency and Travel Choices. It is the policy of the State of Oregon to promote a transportation system with multiple travel choices that are easy to use, reliable, cost-effective and accessible to all potential users, including the transportation disadvantaged.
 - Strategy 1.2.1: Develop and promote inter and intra-city public transportation.
 - Strategy 1.2.2: Better integrate, locate, and design passenger and freight multimodal transportation facilities
 and connections to expedite travel and provide travel options. Locate and design transportation facilities to
 connect with other modes.



- Policy 1.3: Relationship of Interurban and Urban Mobility. It is the policy of the State of Oregon to provide intercity mobility through and near urban areas in a manner which minimizes adverse effects on urban land use and travel patterns and provides for efficient long distance travel.
 - Strategy 1.3.1: Use a regional planning approach and inter-regional coordination to address problems that extend across urban growth boundaries.
 - Strategy 1.3.2: In coordination with affected jurisdictions, develop and manage the transportation network so that local trips can be conducted primarily on the local system and the interstate and statewide facilities can primarily serve intercity movement and interconnect the systems. Develop, maintain and improve parallel roadways, freight rail, transit, bus rapid transit, commuter rail and light rail to provide alternatives to using intercity highways for local trips where possible.

What this means for the Columbia County TSP Update: The TSP update will promote the growth of existing and future centers of economic activity, routes and modes connecting passenger facilities and freight facilities, intermodal facilities, and major intercity and intra-city transportation corridors and supporting transportation networks. It will also promote the most cost-effective modes and solutions over the long term that are easy to use, reliable, cost-effective and accessible to all potential users, including the transportation disadvantaged.

OTP Goal 2, Management of the System, aims to improve the efficiency of the transportation system by optimizing the existing transportation infrastructure capacity with improved operations and management.

- Policy 2.1: Capacity and Operational Efficiency. It is the policy of the State of Oregon to manage the transportation system to improve its capacity and operational efficiency for the long term benefit of people and goods movement.
 - Strategy 2.1.1: Promote transportation demand management and other transportation system operations techniques that reduce peak period travel, help shift traffic volumes away from the peak period and improve traffic flow. Such techniques may include high occupancy vehicle lanes with express transit service, truck-only lanes, van/carpools, park-and-ride facilities, parking management programs, telework, flexible work schedules, peak period pricing, ramp metering, traveler information systems, traffic signal optimization, route diversion strategies, incident management and enhancement of rail, transit, bicycling and walking.
 - Strategy 2.1.2: Protect the integrity of statewide transportation corridors and facilities from encroachment by such means as managing access to state highways, limiting interchanges, creating safe rail crossings and controlling incompatible land use around airports, ports, pipelines and other intermodal passenger and freight facilities.
 - Strategy 2.1.3: Use advanced traveler information devices, incident management, speed management, improvements to signaling systems and other technologies to extend the efficiency, safety and capacity of transportation systems. Develop protocols and implement methods for alternate routing to respond to incidents.



• Strategy 2.1.4: Enhance efficiency and reduce conflicts among transportation users, for example by reducing bottlenecks and geometric constraints, and improving or removing modal crossings. Provide for a network of arterials and highways to efficiently move goods and services while enhancing safety and community movements on local streets. Provide for signal prioritization and road patterns that support public transit. Support rail reconfiguration and additional tracks that benefit passenger and freight movements.

What this means for the Columbia County TSP Update: The TSP update will promote travel demand management and transportation system operations techniques that fine tune existing systems and policies over costly major roadway capacity improvements.

OTP Goal 3, Economic Vitality, promotes the expansion and diversification of Oregon's economy through the efficient and effective movement of people, goods, services and information in a safe, energy-efficient and environmentally sound manner.

- Policy 3.2 Moving People to Support Economic Vitality. It is the policy of the State of Oregon to develop an integrated system of transportation facilities, services and information so that intrastate, interstate and international travelers can travel easily for business and recreation.
 - Strategy 3.2.2: In regional and local transportation system plans, support options for traveling to employment, services and businesses. These include, but are not limited to, driving, walking, bicycling, ridesharing, public transportation and rail.
 - Strategy 3.2.4: Address scenic values in state, regional and local planning, improvements and maintenance. Support state and federal Scenic Byways and Tour Routes and connections to parks and recreation areas.
 - Strategy 3.2.5: Promote tourism via air, bicycles, motor vehicles, rail and ships. Support connections to recreational trails.
- Policy 3.3 Downtowns and Economic Development. It is the policy of the State of Oregon to provide transportation improvements to support downtowns and to coordinate transportation and economic development strategies.
 - Strategy 3.3.1: Coordinate private and public resources to provide transportation improvements and services to help stimulate active and vital downtowns, economic centers and main streets.

What this means for the Columbia County TSP Update: The TSP update will identify projects that support a prosperous and competitive economy by preserving and enhancing business opportunities, and ensuring the efficient movement of people and goods to recreational, employment, housing and other destinations in Columbia County.

OTP Goal 4, Sustainability, seeks to provide a transportation system that meets present needs without compromising the ability of future generations to meet their needs from the joint perspective of environmental, economic and community objectives. This system is consistent with, yet recognizes differences in, local and regional land use and economic development plans. It is efficient and offers choices among transportation modes. It distributes benefits and burdens fairly and is operated, haintained and improved to be sensitive to both the natural and built environments.



- Policy 4.1 Environmentally Responsible Transportation System. It is the policy of the State of Oregon to provide a transportation system that is environmentally responsible and encourages conservation and protection of natural resources.
 - Strategy 4.1.1: Practice stewardship of air, water, land, wildlife and botanical resources. Take into account the natural environments in the planning, design, construction, operation and maintenance of the transportation system. Create transportation systems compatible with native habitats and species and help restore ecological processes, considering such plans as the Oregon Conservation Strategy and the Oregon Plan for Salmon and Watersheds. Where adverse impacts cannot reasonably be avoided, minimize or mitigate their effects on the environment. Work with state and federal agencies and other stakeholders to integrate environmental solutions and goals into planning for infrastructure development and provide for an ecosystem-based mitigation process.
 - Strategy 4.1.2: Encourage the development and use of technologies that reduce greenhouse gases.
- Policy 4.3 Creating Communities. It is the policy of the State of Oregon to increase access to goods and services and promote health by encouraging development of compact communities and neighborhoods that integrate residential, commercial and employment land uses to help make shorter trips, transit, walking and bicycling feasible. Integrate features that support the use of transportation choices.
 - Strategy 4.3.1: Support the sustainable development of land with a mix of uses and a range of densities, land use intensities and transportation options in order to increase the efficiency of the transportation system. Support travel options that allow individuals to reduce vehicle use.
 - Strategy 4.3.2: Promote safe and convenient bicycling and walking networks in communities. Fill in missing gaps in sidewalk and bikeway networks, especially to important community destinations such as schools, shopping areas, parks, medical facilities and transit facilities. Enhance walking, bicycling and connections to public transit through appropriate community and main street design. Promote facility designs that encourage walking and biking.
 - Strategy 4.3.4: Promote transportation facility design, including context sensitive design, which fits the physical setting, serves and responds to the scenic, aesthetic, historic and environmental resources, and maintains safety and mobility.
 - Strategy 4.3.5: Reduce transportation barriers to daily activities for those who rely on walking, biking, rideshare, car-sharing and public transportation by providing: Access to public transportation and the knowledge of how to use it. Facility designs that consider the needs of the mobility-challenged including seniors, people with disabilities, children and non-English speaking populations.

What this means for the Columbia County TSP Update: The TSP update will identify solutions that support the movement of people over vehicles, and that reduce transportation barriers to daily activities for walkers, bikers



and public transportation users. The solutions will be environmentally responsible and should fit the physical setting and neext of the surrounding land use.

OTP Goal 5, Safety and Security, aims to plan, build, operate and maintain the transportation system so that it is safe and secure.

- Policy 5.1 Safety. It is the policy of the State of Oregon to continually improve the safety and security of all modes and transportation facilities for system users including operators, passengers, pedestrians, recipients of goods and services, and property owners.
 - Strategy 5.1.3: Ensure that safety and security issues are addressed in planning, design, construction, operation and maintenance of new and existing transportation systems, facilities and assets.
- Policy 5.2 Security. It is the policy of the State of Oregon to provide transportation security consistent with the leadership of federal, state and local homeland security entities.
 - Strategy 5.2.3: Improve the evacuation and emergency response capabilities of the urban and rural transportation system.

What this means for the Columbia County TSP Update: The TSP update will develop transportation projects to maintain and improve individual safety and security and maximize public safety and service access.

OTP Goal 6, Funding the Transportation System, seeks to create a transportation funding structure that will support a viable transportation system to achieve state and local goals today and in a future.

- Policy 6.1 Funding Structure. It is the policy of the State of Oregon to develop a transportation finance structure that addresses the public funding aspects of all modes and reinforces plan strategies. This structure should include provisions for flexibility in the use of new funding sources and new partnerships to achieve system integration while also protecting transportation funds for transportation purposes.
 - Strategy 6.1.2: Develop and maintain adequate resources for demonstrated and proven transportation needs for all transportation modes and jurisdictions.

What this means for the Columbia County TSP Update: The TSP update will include an assessment of the level of transportation funding projected to be available through the 20-year planning horizon in comparison to the cost of developing a transportation system that is able to meet the County's needs. Opportunities to establish stable funding sources will be discussed and project prioritization will consider the feasibility of funding.

OTP Goal 7, Coordination, Communication and Cooperation, pursue coordination, communication and cooperation among transportation users, providers and those most affected by transportation activities to align interests, remove barriers and bring innovative solutions so the transportation system functions as one system.

■ Policy 7.1 – A Coordinated Transportation System. It is the policy of the State of Oregon to work collaboratively with other jurisdictions and agencies with the objective of removing barriers so the transportation system can function as one system.



- Strategy 7.1.1: Examine transportation functions among and within state and local agencies and providers in order to make the delivery of transportation services and facilities more efficient. Consider consolidation of functions where it can improve efficiency, accountability and service delivery.
- Policy 7.3 Public Involvement and Consultation. It is the policy of the State of Oregon to involve Oregonians to the fullest practical extent in transportation planning and implementation in order to deliver a transportation system that meets the diverse needs of the state.
 - Strategy 7.3.1: In all phases of decision-making, provide affected Oregonians early, open, continuous, and meaningful opportunity to influence decisions about proposed transportation activities. When preparing and adopting a multimodal transportation plan, modal/topic plan, facility plan or transportation improvement program, conduct and publicize a program for citizen, business, and tribal, local, state and federal government involvement. Clearly define the procedures by which these groups will be involved.
 - **Strategy 7.3.3:** Seek out and facilitate the involvement of those potentially affected including traditionally underserved populations.

What this means for the Columbia County TSP Update: The TSP update will offer public involvement opportunities to all stakeholders and residents, and will coordinate with other jurisdictions and agencies to ensure the transportation system limits barriers and functions as one system.



Why does Columbia County need an Updated TSP?

The County's current Transportation System Plan was adopted in 1998. Since then, several regulations and requirements have been integrated or modified in the TPR, OTP, and State Modal Plans. The current effort will develop a TSP for Columbia County that brings them into compliance with the TPR and more appropriately serves the County's transportation needs. In addition, new improvement lists are needed as projects have been constructed and transportation needs have changed over time.

How is the County's Transportation System Defined?

The following sections summarize the state and local roadway classifications and land use designations for areas of Columbia County derived from the identified documents. This information ultimately determines the adopted standards, regulations, and policies that apply to the transportation system in Columbia County.

ODOT Classifications for State Highways in Columbia County

OHP Goal 1, Policy 1A (State Highway Classification System) categorizes state highways for planning and management decisions. Within Columbia County, state highways are either classified as Statewide or District Highways (see summary at the end of this section). Statewide Highways typically provide atter-urban and inter-regional mobility and provide connections to larger urban areas, ports, and major ecreation areas that are not directly served by Interstate Highways. A secondary function is to provide connections for intra-urban and intra-regional trips. The management objective is to provide safe and efficient, high-speed, continuous-flow operation.

District Highways are facilities of county-wide significance and function largely as county and city arterials or collectors. They provide connections and links between small urbanized areas, rural centers and urban hubs, and also serve local access and traffic. The management objective is to provide for safe and efficient, moderate to high-speed continuous-flow operation in rural areas reflecting the surrounding environment and moderate to low-speed operation in urban and urbanizing areas for traffic flow and for pedestrian and bicycle movements.

What this means for the Columbia County TSP Update: While this policy places importance on the efficient travel of through motor vehicle trips on the highways, the policy must still be balanced with other goals and objectives of the Oregon Transportation Plan to ensure its multi-modal intentions are addressed.

State Highway Freight System: OHP Goal 1, Policy 1C addresses the need to balance the movement of goods and services with other uses. It states that the timeliness of freight movements should be considered when developing and implementing plans and projects on freight routes. Within Columbia County, US 30 is classified as an Oregon Freight Route and a Federal Truck Route.

What this means for the Columbia County TSP Update: Transportation solutions along US 30 through Columbia County must be accommodating to the Truck Route designations.



Reduction Review Routes: An Administrative Rule was recently adopted to provide clear direction in the implementation of ORS 366.215 (Creation of state highways; reduction in vehicle – carrying capacity. The rule requires review of all potential actions that will alter, relocate, change or realign a Reduction Review Route that could result in permanent reductions in vehicle-carrying capacity. Reduction of vehicle-carrying capacity means a permanent reduction in the horizontal or vertical clearance of a highway section, by a permanent physical obstruction to motor vehicles located on useable right-of-way subject to Commission jurisdiction, unless such changes are supported by the Stakeholder Forum. If ODOT identifies that an action may result in a reduction of vehicle-carrying capacity, a Stakeholder Forum will be convened to help advise ODOT regarding the effect of the proposed action on the ability to move motor vehicles through a section of highway.

What this means for the Columbia County TSP Update: Changes in cross-sections to roadways on Reduction Review Routes require review by the Freight Advisory Committee. For Columbia County, this may affect US 30 if additions of sidewalks, bike lanes or other improvements alter the vehicle carrying capacity of the roadway.

Lifeline Routes: OHP Goal 1, Policy 1E designates certain routes to be maintained for emergency response in the event of an earthquake. Seismic Lifeline Routes were originally identified by local emergency coordinators in 1995. Based on the geological analysis available at the time, these routes were determined to most likely be available after a seismic event. The routes were initially used to help assess the need for retrofitting state and local bridges. ODOT has updated the list of designated routes, and recommended US 30 as a Tier 1 Lifeline Route. Tier 1 routes are consider to be the most significant and necessary to ensure a functioning statewide transportation network.⁴

What this means for the Columbia County TSP Update: The County can use the TSP update to designate US 30 as a Lifeline Route to ensure its intended function is considered in system investment and management decisions.

Summary of ODOT Classifications

Updates to the TSP will support the existing highway classifications and will enhance the ability of the highways in Columbia County to serve their defined functions. The following summarizes the classifications of state highways in Columbia County:

- US 30 (Lower Columbia River Highway, No. 2W (92)) is classified as a Statewide Highway, part of the NHS, a Federal Truck Route, an Oregon Freight Route, a Reduction Review Route, and a Tier 1 Lifeline Route.
- OR 47 (Nehalem Highway, No. 102, Mist-Clatskanie Highway, No. 110) is classified as a District Highway.
- OR 202 (Nehalem Highway, No. 102) is classified as a District Highway until it meets OR 47 in Mist and becomes OR 47.

⁴ Lifeline Selection Summary Report: http://www.oregon.gov/ODOT/TD/TP/Reports/Lifeline%20Selection%20Summary%20Report.pdf



Columbia County Classification for Readways

To manage the roadway network, the County classified roadways based on a hierarchy according to the intended purpose of each road. From highest to lowest intended usage, the classifications are major arterials, minor arterials, major collectors, minor collectors and local streets. Roadways with a higher intended usage generally provide more efficient traffic movement (or mobility) through the county, while roadways with lower intended usage provide greater access for shorter trips to local destinations such as businesses or residences.

In rural Columbia County, the only two roadways classified as arterials are Scappoose-Vernonia Road and Apiary Road. Except for the minor collector Honeyman Road, near Scappoose Industrial Airport, and the three roads classified as state highways (US 30, OR 47, and OR 202), all other county roads are rural major collectors or local roads.

What this means for the Columbia County TSP Update: The functional classification system for the County will be revisited for the TSP update.



How is the Transportation System Managed?

State Highway Mobility Targets: OHP Goal 1, Policy 1F sets mobility targets for ensuring a reliable and acceptable level of mobility on the highway system. Each intersection along state highways has a mobility target requiring that the highway operate at or below a specified volume to capacity (v/c) ratio. The mobility targets shown in Table 1 are applicable to highways in Columbia County (pursuant to Policy 1F, Table 6).

Volume to capacity (V/C) ratio: A decimal representation (between 0.00 and 1.00) of the proportion of capacity that is being used (i.e., the saturation) at a turn movement, approach leg, or intersection. It is determined by dividing the peak hour traffic volume by the hourly capacity of a given intersection or movement. A lower ratio indicates smooth operations and minimal delays. As the ratio approaches 1.00, congestion increases and performance is reduced. If the ratio is greater than 1.00, the turn movement, approach leg, or intersection is oversaturated and will experience excessive queues and long delays.

	Inside Urban Growth Boundary				Outside Urban Growth Boundary	
Highway (classification)	Non-MPO Outside of STAs where non- freeway posted <=35 mph, or a Designated UBA	Non-MPO Outside of STAs where non- freeway posted > 35 mph, but <45 mph	Non-MPO where non-freeway speed limit >=45mph	Unincorporated Communities	Rural Lands	
US 30 (Statewide)	0.85	0.80	0.80	0.70	0.70	
OR 47 (District)	0.95	0.90	0.90	0.75	0.75	
OR 202 (District)	0.95	0.90	0.90	0.75	0.75	

Source: 1999 Oregon Highway Plan, Policy 1F Revisions, Table 6

OHP Action 1F.3, of Policy 1F allows local jurisdictions to consider alternate mobility standards for state highways where it would be infeasible to meet the standards listed in Table 1 above. The alternative standards shall be clear and objective and must be related to v/c ratios. The standards must demonstrate that it would be infeasible to meet the highway mobility standards listed in Table 1 above and must be adopted as part of the local TSP. In addition, the TSP shall include all feasible actions for:

- Providing a network of local streets, collectors and arterials to relieve traffic demand on state highways and to provide convenient pedestrian and bicycle ways;
- Managing access and traffic operations to minimize traffic accidents, and make the most efficient use of highway capacity;
- Managing traffic demand, where feasible, to manage peak hour traffic loads on state highways;



- Providing alternative modes of transportation; and
- Managing land use to limit vehicular demand on state highways consistent with the Land Use and Transportation Policy (1B).

The TSP shall include a financially feasible implementation program and shall demonstrate strong public and private commitment to carry out the identified improvements and other actions. The alternate highway mobility standards will become effective only after the Transportation Commission has adopted them.

What this means for the Columbia County TSP Update: System performance for the highways will be measured, in part, using the adopted mobility targets. The TSP update will evaluate the need for adopting alternate mobility targets for the highways if there are no feasible project alternatives identified to meet the existing mobility targets.

County Mobility Targets: Columbia County does not have adopted mobility targets for intersections under their jurisdiction. The existing County TSP measures traffic Level of Service (LOS) at a corridor level for rural County roads classified as major collector or higher.

Access Management on Highways: The Oregon Access Management Rule⁵ (OAR 734-051) attempts to balance the safety and mobility needs of travelers along state highways with the access needs of property and business owners. ODOT's rules manage access to the state's highway facilities in order to maintain highway function, operations, safety, and the preservation of public investment consistent with the policies of the 1999 OHP. Access management rules allow ODOT to control the issuing of permits for access to state highways, state highway rights of way and other properties under 'he State's jurisdiction.

In addition, the ability to close existing approaches, set access spacing standards and establish a formal appeals process in relation to access issues is identified. These rules enable the State to direct location and spacing of intersections and approaches on state highways, ensuring the relevance of the functional classification system and preserving the efficient operation of state routes.

OHP Goal 3, Policy 3A and OAR 734-051 set access spacing standards for driveways and approaches to the state highway system.⁶ The standards are based on state highway classification and differ based on posted speed. The applicable standards for highways in Columbia County can been seen in Table 2a and Table 2b.



	Posted Speed Limit (mph)	5,000 AADT or less			Over 5,000 AADT	
Highway		Rural Areas	Urban Areas	Unincorporated Communities in Rural Areas	Rural Areas	Urban Areas
US 30 (Statewide Highway)	30 & 35	770	250	425	770	500
	40 & 45	990	360	750	990	800
	50	1,100	1,100	1,100	1,100	1,100
	55 or higher	1,320	1,320	1,320	1,320	1,320

Source: 1999 Oregon Highway Plan, State Highway Classification System and Appendix C Revisions to Address Senate Bill 264

Table 2b: Highway Access Spacing Standards – OR 47 and OR 202 (mindistance feet)				
	Posted	Posted 5,000 AADT or less		00 AADT
Highway	Speed Limit (mph)	Rural and Urban Areas	Rural Areas	Urban Areas
OR 47	30 & 35	250	400	350
OR 202	40 & 45	360	500	500
(District Highway)	50	425	550	550
0 ,,	55 or higher	650	700	700

Source: 1999 Oregon Highway Plan, State Highway Classification System and Appendix C Revisions to Address Senate Bill 264

What this means for the Columbia County TSP Update: ODOT access spacing standards for highways should be incorporated into the TSP, along with supporting policies that work towards meeting the access spacing standards in Table 2.

Access Management on County Roadways: Columbia County requires that access to County roads, public roads, and private roads shall conform to the Columbia County Approach Roads Ordinance and an access approach permit must be obtained from the Columbia County Road Department prior



to construction. The TSP identifies locations of access points, promotes shared driveways and offset rive spacing, and dictates a spacing of 150 feet on arterial roads.

What this means for the Columbia County TSP Update: The TSP update will review and adjust if necessary access spacing standards for streets in Columbia County.

Major Projects: OHP Goal 1, Policy 1G requires maintaining performance and improving safety by improving efficiency and management before adding capacity. The intent of policy 1G and Action 1G.2 is to ensure that major improvement projects to state highway facilities have been through a planning process that involves coordination between state, regional, and local stakeholders and the public, and that there is substantial support for the proposed improvement.

What this means for the Columbia County TSP Update: The TSP update will consider project alternatives that improve or manage the existing transportation system before implementing higher cost street capacity enhancement projects.

Projects off Highways: OHP Goal 2, Policy 2B establishes ODOT's interest in projects on local roads that maintain or improve safety and mobility performance on state roadways, and supports local jurisdictions in adopting land use and access management policies.

What this means for the Columbia County TSP Update: The TSP will include sections describing existing and future land use patterns, access management and implementation measures, and will consider solutions that reduce the need for local trips on the highways.

'raffic Safety: OHP Goal 2, Policy 2F identifies the need for projects in the state to improve safety for all users of the state highway system through engineering, education, enforcement, and emergency services. One component of the TSP is to identify existing crash patterns and rates and to develop strategies to address safety issues. ODOT's Safety Priority Index System (SPIS) will also be used to identify potential safety problems on state highways. Proposed projects will aim to reduce the vehicle crash potential and/or improve bicycle and pedestrian safety by providing upgraded facilities that meet current standards.

What this means for the Columbia County TSP Update: The TSP update will develop projects that ensure the transportation system maintains and improves individual safety and security by maximizing the comfort and convenience of walking, biking and transit transportation options, public safety and service access.

Alternative Passenger Modes: OHP Goal 4, Policy 4B, requires that highway projects encourage the use of alternative passenger modes to reduce local trips. The TSP will also consider ways to support and increase the use of alternative passenger modes to reduce trips on highways and other facilities.

What this means for the Columbia County TSP Update: The TSP update will identify improvements that could enhance safety, increase connectivity and provide seamless connections between walking and biking facilities and other travel modes.

Transportation Demand Management: OHP Goal 4, Policy 4D, encourages efficient use of the state transportation system through investment in transportation demand management strategies.



What this means for the Columbia County TSP Update: The TSP update will consider transportation demand management strategies to create greater mobility, reduce auto trips, make more efficient use of the roadway system, and minimize air pollution.

Projects on Highways: The Highway Design Manual⁷ (HDM) provides uniform design standards and procedures for ODOT and is in general agreement with the 2011 American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets. Some key areas where guidance is provided are the location and design of new construction, major reconstruction, and resurfacing, restoration or rehabilitation (3R) projects. The HDM should be used for all projects on highways in Columbia County to determine design requirements, including the minimum required volume to capacity ratios for use in the design of highway projects.

What this means for the Columbia County TSP Update: System performance of highway improvement projects will be measured, in part, using the HDM v/c ratios. While HDM standards must be applied to ODOT facilities, design exceptions can be granted to those standards where conditions justify such action in order to balance the policies and objectives of the Oregon Transportation Plan.

Oregon Bike and Pedestrian Plan: The provision of safe and accessible bicycling and walking facilities in an effort to encourage increased levels of bicycling and walking is the goal of the Oregon Bicycle and Pedestrian Plan, which is an element of the Oregon Transportation Plan. The plan identifies actions that will assist local jurisdictions in understanding the principals and policies that ODOT follows in providing bike and walkways along state highways. In order to achieve the plan's objectives, the strategies for system design are outlined, including:

- Providing bikeway and walkway systems and integrating with other transportation systems
- Providing a safe and accessible biking and walking environment
- Developing educational programs that improve bicycle and pedestrian safety

The Policy & Action section contains background information, legal mandates and current conditions, goals, actions and implementation strategies ODOT proposes to improve bicycle and pedestrian transportation. The Bikeway & Walkway Planning Design, Maintenance & Safety section assists ODOT, cities and counties in designing, constructing and maintaining pedestrian and bicycle facilities. Design standards are recommended and information on safety is provided.

What this means for the Columbia County TSP Update: The TSP update will incorporate the recommendations from the Oregon Bicycle and Pedestrian Plan, from Local TSP's, the Columbia County Community-wide Transit Plan and US 30 Transit Access Plan and the Columbia County Rider, and will consider additional solutions that will enhance multi-modal travel in Columbia County.

⁷ ODOT Highway Design Manual: http://www.oregon.gov/ODOT/HWY/ENGSERVICES/hwy-manuals.shtml



Other Background Information for the TSP Update

The following sections summarize additional background information or guidance documents that will be used in updating the Columbia County TSP.

Public Involvement: OHP Goal 2, Policy 2D requires that citizens, businesses, regional and local governments, state agencies, and tribal governments have opportunities to have input into decisions regarding proposed policies, plans, programs, and improvement projects that affect the state highway system.

What this means for the Columbia County TSP Update: The TSP update will offer public involvement opportunities to all stakeholders and residents.

Environmental Resources: OHP Goal 5, Policy 5A requires that the design, construction, operation, and maintenance of the state highway system should maintain or improve the natural and built environment including air quality, fish passage and habitat, wildlife habitat and migration routes, sensitive habitats (i.e. wetlands, designated critical habitat, etc.), vegetation, and water resources where affected by ODOT facilities.

What this means for the Columbia County TSP Update: The TSP update will consider the potential for environmental impacts of all proposed solutions.

Lolumbia County Transportation System Plan: The long-range transportation plan that forms the basis of this project was last updated in 1998. The guiding objectives of the document were:

- Objective 1: To utilize the various modes of transportation that are available in the County to provide services for the residents.
- Objective 2: To encourage and promote an efficient and economical transportation system to serve the commercial and industrial establishments in the County.
- Objective 3: To improve the existing transportation system.

By the completion of the TSP, Columbia County had outlined priorities for the transportation system for the next 20 years. The TSP focused on preservation and reconstruction of the primary County roads that serve as connections between the cities and rural communities. Deferred maintenance and reconstruction to meet updated design standards for roads was also a key feature. The TSP planned for increasing vehicle capacity on US 30 through intersection improvements, and turning and passing lanes. For bicyclists and pedestrians, emphasis was placed on constructing shoulders on primary Country roads and near incorporated cities.

What this means for the Columbia County TSP Update: The TSP update will offer an opportunity for the public to provide input on goals and objectives to guide the next twenty years of transportation projects. Through a visioning process, cataloguing of existing conditions, and evaluation of proposed projects, the updated TSP will feature a prioritized list transportation projects to be funded and built.



Columbia County Road Standards: The Columbia County Road Standards manual, adopted by the Columbia County Board of Commissioners, documents the standards required for the construction of all roadways in Columbia County. This includes roadway width, materials, drainage, grades, access spacing, design speed and more. This document also outlines cross section standards for each roadway classification.

What this means for the Columbia County TSP Update: Projects proposed in the updated TSP will need to meet Columbia County Road Standards, particularly new or reconstructed roadways. Alternatively, the Columbia County Road Standards manual may need to be amended to be consistent with the updated TSP and implement its recommendations, as well as to comply with state transportation regulations such as the TPR.

Columbia County Comprehensive Plan (Last Updated 2012): The Columbia County Comprehensive Plan is the County's long range plan (i.e., a plan with a 20-year horizon) for developing and protecting land and water in the county. The vision for development and resource protection is expressed in a series of goals and policies. The Comprehensive Plan policies summarized below are those that most directly relate to transportation planning and its coordination with land use planning in the county.

- **Agriculture** Encourage roads through agricultural areas to locate where they will have minimum impacts on agricultural management and the existing lot pattern (Policy 10, Part V).
- Rural Communities Allow construction or expansion of public facilities to a level that is consistent with the character of the Rural Community, up to but not exceeding the provision of public and community facilities including arterial access (Policy 5, Part VIII).
- Urbanization Review all subdivision plats in the urban growth areas areas within urban growth boundaries (UGBs) but outside city limits to ensure the establishment of a safe and efficient road system (Policy 13, Part IX). Limit development outside of UGBs to densities that do not require an urban level of public facilities or services (Policy 20, Part IX).
- Economy and Industrial Development Support local improvements in order to make the area attractive to private capital investment, including measures such as capital improvements programming (Policy 10, Part X). Encourage new industrial growth within the urban areas so as to utilize existing public facilities (Policy 12, Part X). Encourage industry that needs or can benefit from locating adjacent to one of the airports in the county (Policy 13, Part X).
- Resource Industrial Development Restrict industrial development on land zoned Resource Industrial Planned Development to uses that meet criteria, including sites where there is adequate rail, vehicle, deep water port, and/or airstrip access, and development that does not require facility and/or service improvements to be paid for by the public (Policy 3, Part XII).
- Public Facilities Require that the level of facilities and provided be appropriate for, but limited to, the needs and requirements of the area(s) to be served; urban levels of streets and other public facilities are inappropriate within forestry and agricultural resource areas (Policy 2, Part XIV). Review facility plans for urbanizable areas to assure proper coordination of facilities consistent with the long-range plans and procedures established within urban growth management agreements (Policy 11, Part XIV).
- Open Space Encourage the design of residential development to include corridors of open space along streams, waterways, cliffs, and other special features by using clustering and other



development techniques. Support public access to the Columbia River and other scenic and recreational features; work with commercial, industrial, and residential developers to promote public use and provide public access to these areas whenever possible (Policies 2 and 3, Part XVI, Article V).

- Oregon Recreational Trails Cooperate with the Oregon Department of Transportation (ODOT) in identifying a specific route for the Portland-to-the-Coast trail (Policy 1, Part XVI, Article XII). Support efforts to extend the Banks-Vernonia Linear Trail, primarily along the Crown Zellerbach Logging Road right-of-way, from Vernonia to Scappoose and the Multnomah Channel (Policy 2, Part XVI, Article XII).
- Scenic Sites, Views and Highways Support the designation of scenic corridors by federal and state land management agencies for land under their jurisdiction (Policy 3, Part XVI, Article XIII).

Transportation policies in the Comprehensive Plan are found in Part XII, and were updated and adopted as part of the 1998 TSP. These existing policies address multi-modal transportation, transit for the transportation disadvantaged, right-of-way dedication, off-site improvements, access management, port development, and airport protection. Transportation goals and policies will be reviewed in detail in Technical Memorandum #5.

What this means for the Columbia County TSP Update: The updated Columbia County TSP should consider and reflect the goals and policies of the Comprehensive Plan. The Comprehensive Plan may also need to be amended to reflect findings and implement updated transportation recommendations that result from this planning process.

Washington County, Transportation System Plan (2003): The Washington County TSP is currently being updated to address compliance with Metro's Regional Functional Transportation Plan (RTFP). In addition, the existing plan has a future horizon year of 2020, which will be updated to 2035. The existing plan (and update that his underway) generally has a focus on the urban/suburban County areas that are within the urban growth boundary and/or general proximity to the established suburban communities. Due to the shared border with Columbia County, several roads extend into Washington County and link the two counties. Arterial and collector roads that link the two counties include: Timber Road, Highway 47 (identified as a freight route), and Bacona Road. Due to the rural nature of these corridors, future projects would likely be focused on site-specific safety improvements.

What this means for the Columbia County TSP Update: The updated Columbia County TSP should account for improvement projects or strategies in the Washington County TSP that may influence roads that cross into Columbia County. As the Washington County TSP is updated the project team should remain vigilant to the recommended outcomes and assess how potential projects may influence Columbia County.

Clatsop County, Transportation System Plan (2003): The Clatsop County TSP is currently being updated to address TPR requirements and extend the plan horizon. The only two roads classified as collector or higher that connect the two counties (OR 202 and US 30) are both under ODOT's jurisdiction. Capacity and safety improvements along both routes are identified in the existing plan.

What this means for the Columbia County TSP Update: The updated Columbia County TSP should yecount for improvement projects or strategies in the Clatsop County TSP that may influence roads that cross into



Columbia County. As the Clatsop County TSP is updated the project team should remain vigilant to the recommended outcomes and assess how potential projects may influence Columbia County.

City of St. Helens Comprehensive Plan (Last Updated 2013): There is a significant amount of urban growth area – the area between the city limits and UGB – in St. Helens, which is an area of planning coordination between the City and the County. St. Helens shares its border with Columbia City, to the north.

Land use and transportation policies in the St. Helens Comprehensive Plan that are related to or that have implications for County transportation facilities are summarized below. Current governing transportation-specific policies were adopted as part of the 2011 TSP update and were updated in the Comprehensive Plan transportation policy section accordingly.

Land use policies

- Establish joint review procedures with the County Planning Commission for land partitions/divisions, conditional use permits, annexations, and service extensions.
- Coordinate with the County to ensure land partitions/divisions are done in a manner that does not hinder future urbanization.
- Consider rezoning land designated rural suburban unincorporated residential to R-5 and Apartment Residential (AR) if street capacity is sufficient for higher density development, amongst other conditions.

Economic policies

- Develop program strategies with agencies, groups, and businesses in an effort to improve the local economy. Strategies should include but not be limited to land use controls and capital improvement programming.
- Develop the local tourist and recreation sectors of the economy.
- Encourage land uses that are compatible with the transportation facilities.

Transportation policies

- Continue to coordinate with Columbia County regarding development, land uses, and transportation planning in areas of future urban growth, outside of the current city limits.
- Review all subdivision plats and road dedications to ensure the establishment of a safe and efficient street system that accommodates all modes of transportation appropriate for the surrounding land uses.
- Support an eventual extension of Pittsburg Road/West Road between Wyeth Street and Deer Island Road over or under both US 30 and the railroad to improve safety and mobility and reduce conflict between rail and road users.
- Acknowledge and support future expansion of both freight and potential commuter rail operations along the Lower Columbia River and continue to work with ODOT and Portland & Western Railroad and Columbia County Rider to take advantage of this growth and to mitigate potential conflicts.



Coordinate and cooperate with neighboring cities, Columbia County, ODOT, and other transportation agencies to develop and fund transportation projects that benefit the city, region, and the State.

Transit policies

- Work with Columbia County and other agencies in their efforts to meet the needs of the transportation disadvantaged in the community.
- Support public transit planning in Columbia County. Transit improvements within city limits shall be guided by the findings and recommendations of the County Community-wide Transit Plan, as adopted by Columbia County.
- Work in partnership with the County in planning for public transit facilities located within city limits and, when feasible, facilitate the siting and operation of such facilities.

What this means for the Columbia County TSP Update: St. Helens Comprehensive Plan policies will be reflected in the updated Columbia County TSP with regards to jurisdiction coordination of economic development, transit development, and combined transportation | land use planning.

City of St. Helens Transportation System Plan: Updated in 2011, the St. Helens TSP outlines individual transportation elements for development of the future transportation network. These include near-term, mid-tem, and long-term improvements, broken out by pedestrian, bicycle and roadway improvement projects. The near-term projects, planned for years 2011 to 2016 total \$13,888,000.

Table 3. Near-term Transportation Projects in St. Helens TSP		
Mode	Number of Projects	Total Cost of Projects
Roadways Improvement Projects	3	\$132,000
Bicycle Improvement Projects	13	\$4,049,000
Pedestrian Improvement Projects	18	\$9,707,000

As evidenced by the breakdown in funding, near-term improvements primarily focus on increasing the comfort, convenience, and safety of pedestrian and bicycle travel within the city. Mid-term and long-term project lists include all travel modes, but focus more heavily on roadway improvement projects, primarily installing left-turn lanes and reconstructing roadways to meet City street standards. The analysis of existing conditions within St. Helens identified significant gaps in the existing network and the opportunity to fill those gaps before significant increases in traffic volumes require vehicular capacity improvements.

What this means for the Columbia County TSP Update: Three bicycle and three pedestrian projects listed on the near-term project list are on Columbia County roads. The projects widen the roadway to add bike lanes, curbs and sidewalks to Bachelor Flat Road, Gable Road, and Columbia Boulevard.

City of Scappoose Comprehensive Plan (Last Updated 2008): There is a significant amount of urban growth area in Scappoose where land is currently zoned for rural uses, but planned for urban expansion. The Scappoose Industrial Airport is located within city limits but immediately adjacent to



urban growth area served by County roads (Crown Zellerbach Road, West Lane Road, and Honeyman Road). Development in the vicinity of the airport is governed by a City Airport Safety and Compatibility Overlay Zone (Section 17.88).

Policies in the City of Scappoose Comprehensive Plan that address coordination between the City and County regarding land use and transportation are summarized below. Transportation policies cited below are draft policies that have been developed as part of the update of the Scappoose TSP, currently in progress. Transportation policies in the Comprehensive Plan will be updated as they are finalized as part of TSP adoption.

Economic policies

Cooperate with other agencies, interest groups and businesses in efforts to develop program strategies for improving the local economy.

Transportation policies

- Develop an arterial and collector street system that provides additional north-south local access routes and an alternative route to US 30.
- Establish and maintain transit stops in locations that are safe and convenient for users and that are consistent with the Columbia County Community-Wide Transit Plan.
- Encourage increased opportunities for local and regional public transit routes and facilities
- Ensure that transportation planning provides for future freight facility needs at the Scappoose Industrial Airpark.

Transportation coordination policies

- Coordinate and cooperate with adjacent jurisdictions and other transportation agencies to develop transportation projects that benefit the City, Region, and State as a whole.
- Coordinate with the County and State agencies to ensure that improvements to County and State highways within the City benefit all modes of transportation.
- Participate with ODOT and Columbia County in the revision of their transportation system plans, and coordinate land development outside of the Scappoose area to ensure provision of a transportation system that serves the needs of all users.
- Participate in updates of the ODOT State Transportation Improvement Program (STIP) and Columbia County Capital Improvement Program (CIP) to promote the inclusion of projects identified in the Scappoose TSP.
- Coordinate public transit planning improvements within city limits with Columbia County to ensure that future transit routes and facilities are consistent with the findings and recommendations of the adopted Columbia County Community-Wide Transit Plan.

What this means for the Columbia County TSP Update: Transportation policies that are being updated as part of the Scappoose TSP update will be coordinated with the Columbia County TSP update process. Transportation-related policies in Scappoose that emphasize economic development (particularly related to the airport), connectivity, transit, and general jurisdiction coordination will be reflected in the updated Columbia County TSP.



City of Scappoose Transportation System Plan (TSP): The Scappoose TSP is a long range ansportation plan, last updated in 1997. The TSP focused on a combination of local street improvements to serve local access traffic circulation to relieve pressure on US 30. This includes an improved east-west collector system to provide access across US 30 and Scappoose Creek to relieve the use of US 30 for east-west cross-town movement, thus improving local accessibility and mobility on the highway.

The TSP breaks out projects in terms of short-range, intermediate range, and long-range project phasing, and focus equally on motor vehicle, bicycle and pedestrians. In many cases, projects are on roadways may be under the jurisdiction of ODOT or the County. The following table represents short and intermediate-term projects identified in the Scappoose TSP as being under the primary jurisdiction of Columbia County. These projects come to a total cost of \$4,978,500.

Table 4. County Led Transportation Projects in Scappoose			
Project Location	Mode	Phasing	Cost
E.M. Watts Road. US 30 to 4th St. W (No. 7)	Vehicle, Bicycle & Ped	Short-term	\$473,000
J.P. West Road. US 30 to First Street W. (No. 15)	Vehicle, Bicycle & Ped	Short-term	\$72,000
J.P. West Road. First Street W. to Fourth Street W. (No. 16)	Vehicle, Bicycle & Ped	Short-term	\$252,000
Old Portland Road, UGB to US 30 (No. 17)	Vehicle, Bicycle & Ped	Intermediate	\$1,377,500
E.J. Smith Road, Wickstrom Drive to Fifth Street W. (No. 27)	Vehicle, Bicycle & Ped	Intermediate	\$288,000
E.J. Smith Road, Fifth Street W to UGB (No. 28)	Vehicle, Bicycle & Ped	Intermediate	\$1,088,000
E.J. Smith Road, Scappoose Creek Crossings (No.29)	Vehicle, Bicycle & Ped	Intermediate	\$140,000
Columbia Avenue E. US 30 to West Lane Road (No. 32)	Bicycle & Ped	Intermediate	\$700,000
Forest Road. US 30 to West Lane Road (No. 33)	Vehicle, Bicycle & Ped	Intermediate	\$588,000

What this means for the Columbia County TSP Update: Columbia County should continue to coordinate with the City of Scappoose as they undergo their TSP update.

City of Rainier Comprehensive Plan (Last Updated 2003): The City of Rainier is another city in the county with a significant urban growth area, where the County has jurisdiction over roadways where future city growth will occur. The City of Rainier Comprehensive Plan has adopted policies that address coordinated land use and transportation planning between the City and County; these are summarized below. The transportation-specific policies in the Comprehensive Plan were updated by he adopted 1997 TSP.



Land use and urbanization policies

- The first priority for future urbanization outside the current UGB is the Beaver Creek Valley area around the Rainier High School Complex because facilities are or can be made available amongst other factors.
- The City shall coordinate its planning programs and activities with affected public agencies and utilities, including Columbia County.
- Procedures for notice and coordination between the City and the County for the urban growth area are outlined in the Urban Growth Management Agreement.

Open space and recreation policies

- The City will work with relevant agencies, including Columbia County, the Department of Fish and Wildlife, the Department of Transportation and the Division of State Lands to preserve open space and recreational uses of Red Mill Beach. In addition, Rainier will cooperate with state agencies and Columbia County on efforts to maintain the open space and recreational uses of Dibblee Point.
- The City will create a Parks Plan for the urban growth area. The plan will consider options such as establishment of a system of pedestrian and bicycle trails and the need for parks in different areas of the city.

Transportation policies

- The City will take the following actions to enhance connectivity with the I-5 Corridor: Work with Columbia County, ODOT, the Longview-Kelso-Rainier Metropolitan Planning Organization (MPO), and other appropriate agencies to plan for greater connectivity, including evaluating alternatives for repair or replacement of the Lewis and Clark Bridge.
- The City may require that any subdivision, planned development and development allowed as a conditional use be accompanied by a traffic impact statement describing the potential on-site and off-site impacts of the proposed development, including the need for off-site transportation improvements.
- The City will support the efforts of Columbia County to meet the needs of the transportation disadvantaged of Rainier.
- Include bikeways in the roadway standards for all new arterials and collectors and sidewalks in the roadway standards for all new streets within the UGB.

What this means for the Columbia County TSP Update: The updated Columbia County TSP will reflect policies regarding general land use/transportation planning coordination, I-5 connectivity, open space access, trail system development, and multimodal transportation facilities and services, consistent with policies adopted by the City of Rainier.

City of Rainer Transportation System Plan (TSP): Rainier last updated its TSP in 1997. At the time, analysis of existing conditions found that all roads operated at acceptable levels of service. Therefore, the City focused on the insufficient infrastructure for cyclists and pedestrians to cross US 30. It was also determined that a parallel route to US 30 would be useful in reducing reliance on the highway for local travel. These projects were ranked for phase one, defined as years 1997-2006, and subsequent projects for years 2007-2016.



The TSP also evaluates current dial-a-ride transit program currently provided by the Columbia County ider, with a desire to increase the Rainier fleet and make them all ADA accessible with lifts. The track and structural conditions of the freight rail was also analyzed, and future connections between Longview and Rainier, as well as a reopening of Wauna-Astoria Segment were endorsed for future economic opportunities.

What this means for the Columbia County TSP Update: The TSP should address, as appropriate, City of Rainier policies about safe crossings of US30 for pedestrians and cyclists, as well as other multimodal accommodation.

City of Clatskanie Comprehensive Plan (1978): Similar to other cities in Columbia County, the City of Clatskanie has a significant urban growth area, where the County has jurisdiction over roadways where future city growth will occur. Policies in the City of Clatskanie Comprehensive Plan that address coordination of land use and transportation planning between the City and County are summarized below. Transportation policies were proposed as amendments to the Comprehensive Plan Transportation Element in the City's 1997 TSP but have not been incorporated into the Comprehensive Plan.

Land use policies and actions

The City will coordinate with Columbia County within the urban growth area on zoning, subdivision, and development regulation matters to ensure consistency with the County Comprehensive Plan.

Economic policies

Encourage the location of labor-intensive non-polluting industries in the city and UGB.

Transportation policies

- The City will consider the probable development pattern of future growth in the UGB when considering whether a proposed street has appropriate design capacity.
- The City supports County efforts to meet the needs of citizens who are transportation disadvantaged.

What this means for the Columbia County TSP Update: The updated Columbia County TSP will reflect or be consistent with City of Clatskanie policies regarding economic development, the needs of the transportation disadvantaged, and general planning coordination.

City of Clatskanie Transportation System Plan (TSP): The Clatskanie TSP was updated in 1997. The TSP has indicated that the primary policy guiding future land development is to protect the operation of the US 30 corridor, including the highway, pedestrian and bikeways and rail line. Similar to other communities throughout Columbia County, road operations were all functioning at acceptable levels of service, however pedestrians and cyclists encountered difficulties safely crossing US 30. There was also a recommendation to develop one or more parallel alternative routes to US 30 to reduce community reliance on the highway. At the time of the TSP, the City also noted that Columbia County was seeking to transfer jurisdiction of County roads in Clatskanie to the City.

The TSP indicates efforts to work with ODOT to limit private driveway access onto US 30, as well as consolidate access points to future development along the span.



What this means for the Columbia County TSP Update: The TSP should address, as appropriate, City of Clatskanie policies about safe crossings of US 30 for pedestrians and cyclists and preservation of mobility through access

City of Clatskanie Transportation Refinement Plan (2005): The Clatskanie Transportation Refinement Plan (TRP) studied potential improvements to US 30 not previously identified in the Clatskanie TSP. The purpose of this study was to identify ways to increase the safety of the traveling public, and to promote economic development. The main goals for the study were to:

- Review the addition of a continuous two way left turn lane (CTWLTL) on US 30 at Van Street and the impacts at the Clatskanie River Bridge.
- Review and recommend improvements to access management within the city.
- Review and recommend solutions to the lack of continuity and connectivity of pedestrian facilities along US 30.

The study recommended several areas of improvement for US 30. First, the CTWLTL should be implemented, both east and west from the Clatskanie River Bridge. Relocation and consolidation of several driveways were recommended to better regulate access to US 30. Further, ADA compliant sidewalk installation was suggested as a means to both define access points through reducing existing wide access approaches and improve pedestrian continuity and connectivity. Bike lanes were suggested to improve connectivity for bicyclists. Lastly, the study recommended widening the Clatskanie River Bridge to improve pedestrian and bicyclist connectivity through the installation of bike lanes and sidewalks on the bridge. Widening the bridge would also improve safety by reducing conflicts between bicyclists and vehicles, and providing better vehicle lane and shoulder continuity.

What this means for the Columbia County TSP Update: The TSP should address, as appropriate, City of Clatskanie policies regarding US 30 access, pedestrian and bicycle connectivity and continuity across the Clatskanie River, and identify pedestrian facilities along US 30 that need improvements to meet ADA standards.

City of Vernonia Comprehensive Plan (1996): The major transportation facility serving the City of Vernonia is Highway/OR 47. The Banks-Vernonia State Trail runs along the east side of Highway/OR 47 as the highway enters the city in the south. A substantial urban growth area is located in the southwest corner of the City's UGB adjacent to Highway/OR 47.

Policies in the City of Vernonia Comprehensive Plan that address coordination of transportation planning between the City and County are summarized below. The Comprehensive Plan was last updated in 1996. The City's TSP was adopted in 1999. Transportation policies in the TSP appear to add to transportation policies in the Comprehensive Plan, and thus transportation policies from the TSP are also summarized below

Policies in the City of Vernonia Comprehensive Plan that address coordination of land use and transportation planning between the City and County are summarized below.

Transportation policies.

The City continues to support the Banks-Vernonia Linear State Park as a safe means of providing bicycle/pedestrian/horseback travel along Highway 47 from the south into the City.



- The City continues to adopt Columbia County street and road improvement standards as a means of ensuring that new and existing roads and streets meet transportation needs of the City of Vernonia.
- The City will continue to plan for airport improvements designed to provide for increased usage and maintenance of safe operations; the City shall encourage the potential for destination resort development in conjunction with the airport and the adjacent City riverside park property and the Vernonia Golf Course.

What this means for the Columbia County TSP Update: The updated Columbia County TSP should address, as appropriate, City of Vernonia policies pertaining to design and operation standards, the Bank-Vernonia State Trail, transportation options, transit connections to other Columbia County communities, airport facilities and area development, and collaborative funding of transportation improvements.

City of Vernonia Transportation System Plan (2011): The City of Vernonia updated their transportation plan in 2011. Analysis of the existing conditions revealed the pavement condition of the most heavily used roads, including OR 47 and the State Avenue are in good to excellent condition. However many streets in Vernonia have inadequate width to provide for all users.

Based on the relatively low number of recorded collisions over the last 10 years, a focused crash analysis was not conducted. However ongoing safety issues for Vernonia include limited sight distance in the downtown core, bicycle and parking conflicts in the downtown core, and speeding on OR 47/Rose Avenue as traffic enters the city.

While level of service and delay were at acceptable levels, connectivity has been an ongoing issue due to the challenging geography involving water, hills and bluffs. The major improvement identified in the Vernonia TSP was developing street standards, including the inclusion of bicycle lane on collectors, and better access to the Banks-Vernonia Trail via Nehalem River Bridge.

Transportation System Goals:

Operations and Safety

Preserve and improve function, capacity, level of service, and safety of the roadway system

Transportation Alternatives

- Support use of other modes, especially bicycles and pedestrians, but including transit, etc.
- Maintain and look into expansion of airport facilities
- Support Safe Routes to New Schools programming and projects

Finance

Sound fiscal approach to financing transportation system improvements

What this means for the Columbia County TSP Update: The TSP should address, as appropriate, City of Vernonia policies about safe crossings of OR 47 for pedestrians and cyclists and the extension of the Banks-Vernonia Trail.



City of Columbia City Comprehensive Plan (2010): Columbia City shares a border with St. Helens, to the south and does not include large areas of unincorporated area within its UGB. Policies in the City of Columbia City Comprehensive Plan that address coordination of land use and transportation planning between the City and County are summarized below. The TSP was adopted in 1997 and includes additional transportation goals and objectives. For this reason, both Comprehensive Plan and TSP policies relevant to the County's TSP are included in the following list.

Land use planning policies

Continue to seek funding to support increased City participation in coordinated planning efforts with Columbia County, the City of St. Helens and affected state agencies.

Transportation and public facilities policies

- [Comprehensive Plan] Approve new developments only if provisions can be made for an acceptable level of public services including roads.
- [Comprehensive Plan] Require new development to plan, design, and develop street systems in accordance with the anticipated future land use and activity patterns in the area and the City, connecting new streets to existing streets whenever possible.
- [TSP] Provide safe, accessible, and connected pedestrian and bicycle facilities including: across and along US 30 and other collectors and arterials; to and along the waterfront; within neighborhoods; and to other towns.
- [TSP] Provide solutions to reduce conflicts between through and local traffic and improve traffic flow.
- [TSP] Improve town continuity by providing safe and easy access to and across US 30 and railroad crossings for all modes of travel.

What this means for the Columbia County TSP Update: The updated Columbia County TSP will reflect City of Columbia City policies pertaining to coordinated planning, local and regional pedestrian and bicycle facilities, and balance between needs associated with local and regional transportation facilities.

City of Columbia City Transportation System Plan (TSP): The TSP was most recently amended in 2001, and included updates to the street system, pedestrian, bicycle, transit, and air/rail/water/pipeline plan. The primary objectives of the plan are to maximize the efficiency and improve safety of the existing roadway system, while also promoting alternative modes of travel and improved connections. The City of Columbia City used the following goals and objectives to evaluate proposed projects for the next twenty years:

Goal Transportation: measured by mobility, vehicle miles traveled (VMT), vehicle hours of travel (VHT), level of service (LOS), and maximized system safety.

Goal Community: measured by accessibility to different modes and to varying levels of destinations, minimization of land uses impacts, and availability of transit.

Goal Resources: measured by minimization of environmental impacts.

Based on these evaluation criteria, Columbia City has a project prioritization list for the first decade and second decade. The near-term list provides a balance of roadway projects (constructing new roadways and widening existing roadways) and sidewalk construction. There is also a small budget to



add bicycle parking at City parks and buildings. The second decade includes bridge replacement, badway reconstruction, sidewalk additions and a proposal to construct a bicycle trail connecting the US 30 trail to 6th Street.

What this means for the Columbia County TSP Update: The TSP should address, as appropriate, City of Columbia City policies about safe crossings of US 30 for pedestrians and the proposed bicycle trail connection between 6th Street and the US 30 trail.

Columbia Countywide Transit Plan: This plan was passed in 2004, responding to many changes in the transit needs of the community, as well as a reduction in resources to meet these needs. Columbia County is a large geographic area, with spread out population centers. Some cities within Columbia County can share resources, while distance and geography make it more difficult for others. Communities such as St. Helens and Scappoose are near enough to Portland that they have intercity commuting needs; similarly Hillsboro serves as the closest major city to Vernonia.

At the time of the plan, ODOT withdrew funding from the organization providing transit service at the time, Columbia County Council of Seniors (COLCO). The transit plan was shaped based on the key findings that:

- ODOT terminated funding for the transit provider program COLCO
- The geography of the county creates challenges with each of the five cities needing its own service. However some cities are close enough to potentially share resources
- Resources for any transit operator are limited
- Ridership has significantly declined between the 1990s and 2004
- Citizens identified a greater need for both intra-city and intercity services

Together with an analysis of existing needs and extensive public outreach, Columbia County crafted the following goals to guide the Transit Plan:

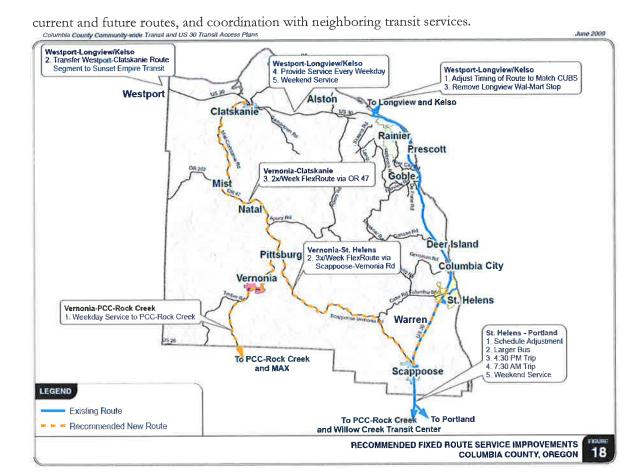
- Provide lifeline transit service focusing on the needs of the elderly, disabled and transportation disadvantaged. Transportation disadvantaged riders are people who are unable to provide their own transportation as a result of disability, an age-related condition, or an income constraint.
- Provide sustainable cost effective service to as many people as possible.
- Create opportunities to leverage additional resources to the program.

Columbia County Community-wide Transit Plan and US 30 Transit Access Plan (2009):

In 2009 Columbia County updated previous community-wide and coordinated transit service plans, drafted in 2002 and 2008 respectively. This update provides direction to the County for planning and implementing transit services, operations, facilities, and funding within a 10-year horizon. This plan also incorporates the US 30 Transit Access Plan for transit facility improvements along the US 30 transit corridor.

The Plan provides a set of recommendations for transit services throughout Columbia County. These include fixed routes bus, demand-response bus, vanpool, and carpool, supported by transit facilities, including upgraded bus stops and new park and ride lots. Additionally, the document addresses fares,





What this means for the Columbia County TSP Update: The Transit Plan includes code amendments that need to be adopted by County (and cities) comprehensive plans, transportation system plans, land use ordinances, and roadway standards. There are projects with county-wide impacts, and transit plans for the Columbia County TSP update should reflect the recommendations of this plan.

Lower Columbia River Rail Corridor Rail Safety Study: This document analyzes the transportation corridors between Portland and Astoria, primarily the Portland & Western Railroad's Portland-Astoria Line and US 30, also known as the Lower Columbia River Highway. These two corridors form the backbone for commerce, job access, connectivity between the communities and more. Specifically the study was undertaken to assess rail safety implications of longer, more frequent freight trains serving local industry. In particular, at-grade crossing conditions and issues and the delay faced by vehicles, bicyclists and pedestrians to make turning movements from US 30 when trains are blocking crossings.

Several types of projects were recommended, from closing streets to adding pedestrian gates. There are varying levels of support for each intervention, and the brief field inspection conducted during the study did not allow verification of ODOT's Rail Divisions' suggested closures in rural Columbia and Clatsop County.



What this means for the Columbia County TSP Update: The TSP should address, as appropriate, the ndings and recommended projects of the Rail Safety Study where feasible. In Rainier the railroad runs down the center of "A" Street, the main street of the community, leading to safety challenges.

Portland-Astoria (US 30) Corridor: This plan was drafted in 1999 in partnership with the Oregon Department of Transportation (ODOT), local and regional governments, industry interests, stakeholders, and the general public to develop a long-term improvement plan to the US 30 corridor between the cities of Portland and Astoria. The plan focused on all travel modes, and recommended both short and long term management strategies.

Project prioritization focused foremost on maintaining the safety and functionality of the facilities. Additionally, projects were evaluated based on the following items (in order): preserving, optimizing, improving safety and capacity, and completing projects that support economic development, especially recreation and tourism. The Corridor Plan also calls for development of the local street network to relieve pressure on US 30 from local trips.

What this means for the Columbia County TSP Update: The TSP should address, as appropriate, the findings and recommended actions from the corridor plan to maintain its function at the primary intercity travel and freight route through the county.

US 30 Road Safety Audit Butterfield Road to Neer Creek Road and Carlson Road to Lindberg Road: In 2011, ODOT undertook a safety audit on two sections of US 30 in Columbia County that experience disproportionate number of crashes for its roadway type. The top features believed to be postributing to high and medium severity crashes in these sections were:

- High frequency near Tide Creek Road
- Short passing zones
- Adverse weather conditions in winter months
- Limited law enforcement
- Animals crossing roadway
- Limited delineation of intersections and horizontal curves
- Lack of turn lanes on US 30

The plan suggests a variety of roadway treatments at varying costs to help mitigate specifically identified safety issues within the study area at each individual location.

What this means for the Columbia County TSP Update: The TSP should address, as appropriate, the findings and recommended actions on US 30 from the safety audit, including recommended projects or safety strategies.

Cornelius Pass Road Safety Evaluation Jobs and Transportation Act (JTA): In 2009 ODOT, in coordination with Multnomah, Columbia and Washington Counties, developed design alternatives to improve safety on a five-mile section of Cornelius Pass Road. The study focused on identifying safety projects that could be considered as funding becomes available, some of these alternatives include improvements in vertical alignment, sight distance and lighting.



What this means for the Columbia County TSP Update: The TSP should support, as appropriate, the findings and recommended alternatives of the Cornelius Pass Safety Evaluation.

Port of St. Helens Airpark Master Plan Update: In 2004, the Port of St. Helens undertook a master plan update to the Airpark. Located in the City of Scappoose off US 30, the airport is 20 miles from downtown Portland. The airport is primarily used by recreationists, but as other regional airports become busier, it has begun to attract more itinerant and local aircrafts. The Port has undertaken master planning for an industrial park on the west side of the airport, on land zoned for light industrial. Access to the industrial park and between the park and airport was identified as a critical component to the success of the endeavor.

The Westside Rural Multnomah County Transportation System Plan: In 1998, western Multnomah County updated its TSP based on future land use and population growth. Existing roadways are expected to continue to function adequately through 2015, with the exception of Newberry Road. Newberry Road is classified as a local road, but carries high traffic volumes traveling between Portland and Washington County bypassing Cornelius Pass Road between Skyline Boulevard and US 30. The documents identifies transportation demand management strategies to manage projected growth, including high occupancy vehicles lanes along US 30.

What this means for the Columbia County TSP Update: The TSP should address, as appropriate, projects identified in the Westside Rural Multnomah TSP, that fall under Columbia County's jurisdiction. This includes a proposed commuter van pool or transit service from Columbia County to Washington County via Cornelius Pass Road.

The Columbia County Zoning Ordinance (CCZO) and Subdivision and Partitioning Ordinance (CCSPO) regulate the use of land in unincorporated areas of the county. They are intended to implement the goals and policies established in the County Comprehensive Plan. Provisions related to transportation planning in these ordinances include:

- transportation uses permitted in some zones;
- site design requirements including an access and circulation plan and impact assessment;
- procedures and criteria for zone changes as well as general administration and review procedures;
- land division review and approval authorities; and
- block and street standards for land divisions, including street layout and pedestrian access ways.

Standards for access and street design are also established in the County Roads Standards document. The CCZO and CCSPO are reviewed in detail for compliance with the State of Oregon Transportation Planning Rule (TPR) in Technical Memorandum #4 (Regulatory Review).

What this means for the Columbia County TSP Update: The CCZO and CCSPO may need to be amended to be consistent with the updated Columbia County TSP, implement its recommendations, and comply with TPR.

Pipeline Infrastructure: Gas transmission pipelines in Columbia County exist along US 30, OR 47 and OR 202 segments. Northwest Natural Gas Co operates the largest natural gas pipeline in the county, bounding most of US 30 and OR 47 Highways within Columbia County. There are other



minor pipelines that do not lay along major corridors within the county, operators for these pipelines aclude: KB Pipeline, Beaver Plant - Portland General Electric, Northwest Pipeline Corp (WGP), and United States Gypsum Co.

What this means for the Columbia County TSP Update: The general type and location of pipeline infrastructure may need to be documented in the TSP and considered, as appropriate, when developing cost estimates and feasibility of major transportation projects.



Attachment A: Applicable Plans and Policies

The following plans and policies were reviewed for the Columbia County TSP Update:

Columbia County

- Columbia County TSP, June 1998
- Columbia County Comprehensive Plan, August 2012
- Columbia County Road Standards
 Document
- Columbia Count Community-wide Transit Plan and US 30 Transit Access Plan, June 2009
- US 30 Road Safety Audit: Butterfield Road to Neer Creek Road and Carlson

- Road to Lindberg Road, November 2011
- Columbia County Zoning Ordinance (Further information included in TM #4 for TPR Compliance)
- Columbia County Subdivision and Partitioning Ordinance (Further information included in TM #4 for TPR Compliance)

State of Oregon

- 1999 Oregon Highway Plan, amended August 2013
- Oregon Transportation Plan, September 2006
- Oregon Bicycle and Pedestrian Plan, 1995
- Oregon Rail Plan, 2001
- Oregon Freight Plan, June 2011

- Oregon Aviation Plan, 2007
- Transportation Planning Rule (OAR 660-012), amended December 2011
- Access Management Rules (OAR 734-051), amended December 2011
- Statewide Transportation
 Improvement Program (STIP), June
 2012

Regional Documents

- Lower Columbia River Rail Corridor Rail Safety Study, May 2009
- Portland-Astoria (US 30) Corridor Plan, November 1999
- Cornelius Pass Road Safety Evaluation JTA, 2011
- Crown Zellerbach Trail Development Concept Plan, May 2007
- Clatsop County TSP, 2003

- Washington County TSP, 2003
- Port of St. Helens Plan, 2004
- St. Helens TSP, 2011
- St. Helens Comprehensive Plan, 2013
- Scappoose TSP, 1997
- Scappoose Comprehensive Plan
- Rainer TSP, 1997
- Rainier Comprehensive Plan, 2003



Section D

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Section E

Memo 4: Regulatory Review

The contents of Volume 2 represent an iterative process in the development of the TSP. Refinements to various plan elements occurred throughout the process as new information was obtained. In all cases, the contents of Volume 1 supersede those in Volume 2.



TECHNICAL MEMORANDUM #4

DATE: July 11, 2014

TO: Columbia County TSP Project Management Team

FROM: Darci Rudzinski, Angelo Planning Group

Shayna Rehberg, Angelo Planning Group

SUBJECT: Columbia County Transportation System Plan Update

Technical Memorandum #4: Regulatory Review

P11086-022

The purpose of this memorandum is to discuss and identify Columbia County Comprehensive Plan and Zoning Ordinance (CCZO) and Subdivision and Partitioning Ordinance (CCSPO) provisions that may need to be updated in order to: (1) to be consistent with and implement the updated Transportation System Plan (TSP); and (2) to comply with the Oregon Transportation Plan (OTP) and the Transportation Planning Rule (TPR).

Draft Transportation System Plan (TSP)

The objectives, outcomes, and recommendations of the TSP update process are expected to result in needed policy and regulatory amendments to ensure consistency between adopted County documents. These amendments are likely to be related to issues that have received state and local attention since the TSP was adopted in 1998, such as the emphasis on multimodal transportation, planning and implementation coordination, and finding ways to better manage and maximize the existing transportation system.

Policy amendments will reflect issues identified through the TSP update. Current transportation policies for the County are identical between the Comprehensive Plan and the TSP; the policies were updated as part of the 1998 TSP development and adoption process. These current policies address multi-modal transportation, transit for the transportation disadvantaged, right-of-way dedication, off-site improvements, access management, port development, and airport protection. Transportation goals and policies will be reviewed in detail in Technical Memorandum #5.

Transportation-related policy language may need to be modified to reflect recommendations from locally adopted City TSPs, as they pertain to County facilities, as well as recent state policy changes, such as those focused on greenhouse gas reduction, mobility, and access management.

Code amendments may also be necessary to implement the recommendations of the updated TSP. Examples include modifying street standards and other multi-modal, system and transportation facility

design standards.¹ Some preliminary recommended changes are identified in Table 1, based on State requirements related to implementing local TSPs (see Transportation Planning Rule section in this memorandum). These and potentially other code changes, as well as recommended policy amendments, will be identified and developed as part of the TSP update.

Oregon Transportation Plan (OTP)

The OTP, updated in 2006, is the State's comprehensive transportation plan. The planning horizon of the current plan extends through 2030. Its purpose is to establish goals, policies, strategies, and initiatives for long-range transportation planning in the state. A summary of the OTP is provided in Technical Memorandum #3 (Plan Review Summary).

The OTP emphasizes maximizing the investment in the existing transportation system, integrating transportation and land use regulations, and integrating the transportation system across jurisdictions and modes. The following are key initiatives in the OTP:

- Maintain the existing transportation system to maximize the value of the assets. If funds are not available to maintain the system, develop a triage method for investing available funds.
- Optimize system capacity and safety through information technology and other methods.
- Integrate transportation, land use, economic development and the environment.
- Integrate the transportation system across jurisdictions, ownerships and modes.
- Create a sustainable funding plan for Oregon transportation.
- Invest strategically in capacity enhancements.

OTP policy and investment strategies are translated into plans for specific transportation modes in order to implement statewide multimodal priorities. The Oregon Highway Plan, the Oregon Bicycle and Pedestrian Plan, the Oregon Public Transportation Plan, Oregon Aviation Plan, and the Oregon Rail Plan are modal plans that have been reviewed for this project to ensure that the updated TSP will be consistent with policies, strategies, and design guidelines in these modal plans (see Technical Memorandum #3).

Transportation Planning Rule (TPR)

The Transportation Planning Rule (TPR) (OAR 660-012) implements Statewide Planning Goal 12 (Transportation), which is intended to promote the development of safe, convenient, and economic transportation systems that are designed to maximize the benefit of investment and reduce reliance on the automobile. The TPR includes direction for preparing, coordinating, and implementing TSPs. In particular, TPR Section -0045 (Implementation of the Transportation System Plan) requires local governments to amend their land use regulations to implement the TSP. It also requires local

¹ At the time that TSP-related amendments to the Development Code are considered for adoption, the County may wish to take the opportunity to make other procedural amendments to the Development Code.



governments to adopt land use and subdivision regulations to protect transportation facilities for their lentified functions.

TPR Section -0060 (Plan and Land Use Regulation Amendments) addresses amendments to plans and land use regulations. It specifies measures to be taken to ensure that allowed land uses are consistent with the identified function and capacity of existing and planned transportation facilities. These include access control measures, standards to protect future operations of roads, expanded notice requirements and coordinated review procedures for land use applications, a process to apply conditions of approval to development proposals, and regulations ensuring that amendments to land use designations, densities, and design standards are consistent with the functions, capacities, and performance standards of facilities identified in the TSP. Section -0060 also establishes criteria for identifying the significant effects of plan or land use regulation amendments on transportation facilities, actions to be taken when a significant effect would occur, identification of planned facilities, and coordination with transportation facility providers.

Table 1 provides an evaluation of the CCZO and CCSPO based on Sections -0045 and -0060 of the TPR.² The evaluation includes findings confirming whether existing code language complies with the TPR and, where necessary, recommendations for amending the code to better address TPR requirements. Notes regarding potential provisions to incorporate or update in the County Road Standards document and TSP, which are related to potential code amendments, are also included in the table.

² Note that the focus of the TPR evaluation is on how the County implements the local transportation plan through land use and development requirements. As such, Table 1 does not include an evaluation of existing policy language. However, as stated earlier in this memorandum, a review and update of policy language will be part of and outcome of the TSP update process.



Table I: TPR Review of Columbia Co. Zoning Ordinance (CCZO) and Subdivision and Partitioni

TPR Requirement

Local Development Code References and Recomm

OAR 660-012-0045

- (1) Each local government shall amend its land use regulations to implement the TSP.
- (a) The following transportation facilities, services and improvements need not be subject to land use regulations except as necessary to implement the TSP and, under ordinary circumstances, do not have a significant impact on land use:
 - (A) Operation, maintenance, and repair of existing transportation facilities identified in the TSP, such as road, bicycle, pedestrian, port, airport and rail facilities, and major regional pipelines and terminals;
 - (B) Dedication of right-of-way, authorization of construction and the construction of facilities and improvements, where the improvements are consistent with clear and objective dimensional standards;
 - (C) Uses permitted outright under ORS 215.213(1)(m) through (p)³ and 215.283(1)(k) through (n)⁴, consistent with the provisions of 660-012-0065⁵; and

CCZO Section 303 and 503 permit transportation uses specified in ORS 21 Primary Agriculture (PA) and Primary Forest (PF) zones respectively. Tran TPR Section -0045(1)(a) are not addressed in other zones in the CCZO.

<u>Recommendation:</u> Amend the CCZO to permit transportation uses the impact on land use either by including as permitted uses under indivipulsal provision, preceding the sections on County zones.

Transportation uses in ORS 215.213 and .283 include:

- Climbing and passing lanes within the right of way existing as of July 1, 1987.
- Reconstruction or modification of public roads and highways, including the placement of utility facilities overhead and in the subsurface of public roads way, but not including the addition of travel lanes, where no removal or displacement of buildings would occur, or no new land parcels result.
- Temporary public road and highway detours that will be abandoned and restored to original condition or use at such time as no longer needed.
- Minor betterment of existing public road and highway related facilities, such as maintenance yards, weigh stations and rest areas, within right of way contiguous public-owned property utilized to support the operation and maintenance of public roads and highways.

⁵ OAR 660-012-0065 (Transportation Improvements on Rural Lands); (1) This rule identifies transportation facilities, services and improvements which may be permitted on : 14 without a goal exception.



Table 1: TPR Review of Columbia Co. Zoning Ordinance (CCZO) and Subdivision and Partitioni

TPR Requirement

Local Development Code References and Recomm

- (D) Changes in the frequency of transit, rail and airport services.
- (b) To the extent, if any, that a transportation facility, service, or improvement concerns the application of a comprehensive plan provision or land use regulation, it may be allowed without further land use review if it is permitted outright or if it is subject to standards that do not require interpretation or the exercise of factual, policy or legal judgment.
- (c) In the event that a transportation facility, service or improvement is determined to have a significant impact on land use or requires interpretation or the exercise of factual, policy or legal judgment, the local government shall provide a review and approval process that is consistent with 660-012-0050. To facilitate implementation of the TSP, each local government shall amend regulations to provide for consolidated review of land use decisions required to permit a transportation project.

TPR Section -0050 addresses project development and implementation - he improvement authorized in a TSP is designed and constructed. Project development land use decision-making. The TPR directs that during project development authorized in an acknowledged TSP will not be subject to further justification with reg function, or general location.

Site Design Review and Conditional Use Review may be conducted concur Recreation and Surface Mining zones pursuant to CCZO Section 1024 and Otherwise, there are no other provisions for concurrent, coordinated, or co

Recommendation: Add a provision to Article VIII (Administration) to review of land use decisions in cases when project development required making.

- (2) Local governments shall adopt land use or subdivision ordinance regulations, consistent with applicable federal and state requirements, a facilities corridors and sites for their identified functions. Such regulations shall include:
- (a) Access control measures, for example, driveway and public road spacing, median control and signal spacing standards, which are consistent with the functional classification of roads and consistent with limiting development on rural lands to rural uses and densities;

The CCZO addresses access control generally in the following sections.

- Section 806 of the Highway Commercial zone prohibits access ale "thoroughfare" within 60 feet from the right-of-way of an interse
- Sections 1003, 1014, and 1024 of Community Service Institutiona allows the Planning Commission to limit the number of access po "public ways" as conditions to mitigate potential adverse impacts uses on adjacent land uses.

The CCSPO addresses access control in sections on blocks on streets.

Section 1004 (Blocks) limits block length in subdivisions where as



TPR Requirement	Local Development Code References and Recomm
	acre to 1,000 feet, and requires blocks along arterials or collector slong. Section 1005 (Streets) allows the Planning Commission to limit accarterial when a major partition or subdivision is proposed to abut the Planning Commission to limit access through means including street. Access spacing standards are established in the Columbia County Approact Recommendations: Existing County code mostly addresses this TPF following is recommended to ensure that the code better addresses to Consider whether a shorter maximum block size in subdivise roadway connectivity and create a more walkable environment Make standards in CCZO Section 806 and CCSPO Section 1 spacing standards in the TSP, as needed. Note for the County Road Standards: Update the access spacing standards as needed through the TSP update process. Notes for the TSP: Refer to the County Road Standards document in the update
	Consider adding references to local/city and state spacing s
(b) Standards to protect the future operations of roads, transitways and major transit corridors	Mobility standards for County roads are not clearly established in the 1998 Existing site design review submittal requirements (Section 1555) include a could potentially include a traffic impact analysis (TIA). Information required for the preliminary plat of a subdivision (Section 403 impact analysis; however, the provisions allow the Planning Commission to from an applicant, which could potentially include a TIA. Recommendations: Establish TIA requirements in the code that apply to subdive proposals that are expected to generate a threshold number amendments, and any other threshold criteria that the Countappropriate.

TPR Requirement Local Development Code References and Recomm Refer to the performance standards established in the TSP is Note for the TSP: Establish mobility and/or other performance stand CCZO Section 3.920 (Aircraft Land Field Overlay) allows for "the establisl (c) Measures to protect public use airports by controlling land uses within airport noise corridors and imaginary facilities, while preventing air space conflicts in approach and departure zor lying within the approach, departure, horizontal and conical zones of the ai surfaces, and by limiting physical hazards to air navigation; zoning maps." Recommendation: Existing code provisions address this TPR require code are recommended. (d) A process for coordinated review of future land use See response to -0045(1)(c). decisions affecting transportation facilities, corridors or sites; CCZO Sections 1003, 1014, 1024, and 1503 authorize the Planning Comm (e) A process to apply conditions to development proposals in order to minimize impacts and protect transportation approval to proposed uses in Community Service zones and proposed confacilities, corridors or sites; potential impacts on adjacent land uses. CCZO Sections 1557 and 1558 allow the Planning Director and Planning (conditions of approval to Type 1 and Type 2 design reviews, respectively. CCZO Sections 1601 and 1619 further allow the Planning Director to appr discretionary permits with conditions. Recommendation: Existing code provisions address this requiremen recommended. CCZO Section 1609 and CCSPO Section 213 require notice to be sent to p (f) Regulations to provide notice to public agencies providing 500 feet of the subject property. Notice requirements do not explicitly inclu transportation facilities and services, MPOs, and ODOT of: own facilities that may be affected by the proposal. (A) Land use applications that require public hearings; The Columbia County Community-wide Transit Plan/US 30 Transit Acces (B) Subdivision and partition applications; to add to Sections 1550, 1603, and 1606 about including agencies such as tl (C)Other applications which affect private access to roads; (Columbia County Rider) in pre-application conferences for site design rev. hearings for quasi-judicial and legislative hearings. (D)Other applications within airport noise corridor and Recommendations: imaginary surfaces which affect airport operations. Include provisions for inviting transportation facility and ser review pre-applications conferences (CCZO Section 1553).

Table 1: TPR Review of Columbia Co. Zoning Ordinance (CCZO) and Subdivision and Partitioni



Table 1: TPR Review of Columbia Co. Zoning Ordinano	co (CC7O) and Subdivision and Partitionil
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TPR Requirement

Local Development Code References and Recomm

Add provisions to CCZO Sections 1603, 1606, and 1609 and to

- include transportation facility and service providers and othe requirements for applications that may affect a transportatio (g) Regulations assuring amendments to land use
- designations, densities, and design standards are consistent with the functions, capacities and performance standards of facilities identified in the TSP.

See response related to traffic impact study requirements, Section -0045(2)(regulation amendments, Section -0060.

- (3) Local governments shall adopt land use or subdivision regulations for urban areas and rural communities as set forth below. The purpose for safe and convenient pedestrian, bicycle and vehicular circulation consistent with access management standards and the function of affec development provides on-site streets and accessways that provide reasonably direct routes for pedestrian and bicycle travel in areas where p likely if connections are provided, and which avoids wherever possible levels of automobile traffic which might interfere with or discourage
- (a) Bicycle parking facilities as part of new multi-family residential developments of four units or more, new retail, office and institutional developments, and all transit transfer

stations and park-and-ride lots.

- (b) On-site facilities shall be provided which accommodate safe and convenient pedestrian and bicycle access from within new subdivisions, multi-family developments, planned developments, shopping centers, and commercial districts to adjacent residential areas and transit stops, and to neighborhood activity centers within one-half mile of the development. Single-family residential developments shall generally include streets and accessways. Pedestrian circulation through parking lots should generally be provided in the form of accessways.
 - (A) "Neighborhood activity centers" includes, but is not limited to, existing or planned schools, parks, shopping areas, transit stops or employment centers;
 - (B) Bikeways shall be required along arterials and major collectors. Sidewalks shall be required along arterials,

The CCZO does not include provisions for bicycle parking.

Recommendation: Add requirements addressing the number of bicyc general design for new multi-family residential developments of four office and institutional developments, and all transit centers (if applie (Off-Street Parking and Loading).

Provisions of this TPR requirement are addressed in the following ways:

- CCZO Section 1561 requires that site plans show the location and bicycle circulation, and related access ways. The Columbia County Plan/US 30 Transit Access Plan provides draft code language (ne Access and Circulation) to strengthen requirements for safe, direc and bicycle access and circulation. The plan also provides draft lat requirements for walkways (new Section 1563.F, Walkway Design
- CCSPO Section 1004 limits block length on local streets to 1,000 "cross walkway" of not less than 10 feet in width "near the middle arterials or collector streets must be at least 1,000 feet long. The F require the reservation of an easement for "pedestrianways" at lea center of blocks that more than 800 feet long "where deemed esse access to schools, parks, shopping centers, public transportation,
- CCSPO Section 1005 requires additional right-of-way to be dedicated County Road Standards at the time of subdivision or partition wh

Table 1: TPR Review of Columbia Co. Zoning Ordinance (CCZO) and Subdivision and Partitioni

TPR Requirement

collectors and most local streets in urban areas except that sidewalks are not required along controlled access roadways, such as freeways;

- (C) Cul-de-sacs and other dead-end streets may be used as part of a development plan, consistent with the purposes set forth in this section;
- (D) Local governments shall establish their own standards or criteria for providing streets and accessways consistent with the purposes of this section. Such measures may include but are not limited to: standards for spacing of streets or accessways; and standards for excessive out-of-direction travel;
- (E) Streets and accessways need not be required where one or more of the following conditions exist:
 - (i) Physical or topographic conditions make a street or accessway connection impracticable. Such conditions include but are not limited to freeways, railroads, steep slopes, wetlands or other bodies of water where a connection could not reasonably be provided;
 - (ii) Buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; or
 - (iii) Where streets or accessways would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of May 1, 1995, which preclude a required street or accessway connection.

Local Development Code References and Recomm

- subject property is located within a UGB and fronts on a County subdivided or partitioned into lots or parcels of two acres or less.
- Bikeways and sidewalks The County Road Standards include bil arterials and collectors, and sidewalks along arterials, collectors, ar
- Parking lots Existing off-street parking provisions require a parl Section 1405). The plan must show proposed vehicle circulation a access and circulation are not specified.
- Cul-de-sacs CCSPO Section 1005 (Streets) limits cul-de-sac to s width, serving no more than 18 dwelling units, and not exceeding areas and 800 feet in rural areas. Dead-end streets are permitted a with the provision that reserve strips and street plans are required streets in the future (CCSPO Section 1007).
- Street spacing standards See findings and recommendations relations -0045(2)(a). Also, CCSPO Section 1005 (Streets) requires local stransfer through traffic and limit the number of streets to only convenient and safe access to properties.
- Exceptions for streets and accessways CCSPO Section 1005 (St laid out to conform to topography and permit efficient drainage a conditions for exempting streets and accessways identified in this specified in the code. Note that Section 1005 also requires that lo through traffic is discouraged and that the number of streets be lipprovide convenient and safe access to properties

Recommendations:

- Add definitions for access ways, bikeways, paths, and walkw 100) and for access ways, "pedestrianways," and walkways to
- Add draft code language from the Columbia County Commi 30 Transit Access Plan regarding pedestrian access and circulation and a new Section and Construction).
- Parking lots Add provisions for pedestrian access and circi parking plan requirements in CCZO Section 1405.



Table I: TPR Review of Columbia Co. Zoning Ordinance (CCZO) and Subo	division and Partitioni
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TPR Requirement	Local Development Code References and Recomm
	Add provisions to CCSPO Sections 1004 and 1005 to exempt cases of physical, topographic, development, and legal cons Section -0045(3)(b).
	Review the local streets provisions in CCSPO Section 1005 a therein are at odds with connectivity objectives in this TPR
	Note for the County Road Standards: Ensure that the County Road Strecommendations in the updated TSP related to bikeways and sidewand modify if necessary bikeway standards for arterial- and collector standards for arterials, collectors, and local streets serving suburban
(c) Off-site road improvements are otherwise required as a condition of development approval, they shall include facilities accommodating convenient pedestrian and bicycle and pedestrian travel, including bicycle ways on arterials and major collectors	See findings and recommendations related to conditions of approval, Secti
	Also, CCZO Section 1563 allows the Planning Commission, Planning, Dir to require off-site transportation facilities consistent with the County Road County TSP as conditions of approval in site design review.
	Recommendation: Existing code provisions address this requirement recommended.
(e) Internal pedestrian circulation within new office parks and commercial developments shall be provided through clustering of buildings, construction of accessways, walkways and similar techniques.	See findings and recommendations related to accessways, Section -0045(3)
	reater than 25,000, where the area is already served by a public transit system ments shall adopt land use and subdivision regulations as provided in (a)-(g)
(a) Transit routes and transit facilities shall be designed to support transit use through provision of bus stops, pullouts and shelters, optimum road geometrics, on-road parking restrictions and similar facilities, as appropriate;	Existing code does not address this TPR requirement. However, code lang requirement (new CCZO Section 1500, Transit Improvements) was drafted County Community-wide Transit Plan/US 30 Transit Access Plan (2009). County to require pedestrian connections between transit facilities and built passenger landing pads, easements or dedications for shelters or benches, a existing or planned transit facilities.
	In addition, draft language in the Columbia County Community-wide Trar Plan addresses permitting transit facilities and related signs in CCZO Artic 1311.

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Table I: TPR Review of Columbia Co. Zoning Ordinance (CCZO) and Subdivision and Partitioni

TPR Requirement

Local Development Code References and Recomm

Recommendations:

- Update the code to include new Section 1500 (Transit Impro Columbia County Community-wide Transit Plan/US 30 Tra
- Add draft language from in the Columbia County Communi Transit Access Plan that permits transit facilities and related V, and VI and Section 1311.

Notes for the TSP: Include existing and planned transit route maps i designations that are consistent with the Columbia County Commun Transit Access Plan. Include transit features in figures and/or discus the TSP roadway plan.

- (b) New retail, office and institutional buildings at or near major transit stops shall provide for convenient pedestrian access to transit through the measures listed in (A) and (B) below.
 - (A) Walkways shall be provided connecting building entrances and streets adjoining the site;
 - (B) Pedestrian connections to adjoining properties shall be provided except where such a connection is impracticable as provided for in OAR 660-012-0045(3)(b)(E). Pedestrian connections shall connect the on site circulation system to existing or proposed streets, walkways, and driveways that abut the property. Where adjacent properties are undeveloped or have potential for redevelopment, streets, accessways and walkways on site shall be laid out or stubbed to allow for extension to the adjoining property;
 - (C) In addition to (A) and (B) above, on sites at major transit stops provide the following:

See the findings and recommendations for TPR Sections -0045(3)(b).

See the findings and recommendations for TPR Sections -0045(3)(b)



Table I: TPR Review of	Columbia Co. Zoning Ordinance	(CCZO) and Subdivision and Partitioni

TPR Requirement	Local Development Code References and Recomm
(i) Either locate buildings within 20 feet of the transit stop, a transit street or an intersecting street or provide a pedestrian plaza at the transit stop or a street intersection;	
(ii) A reasonably direct pedestrian connection between the transit stop and building entrances on the site;	
(iii) A transit passenger landing pad accessible to disabled persons;	
(iv) An easement or dedication for a passenger shelter if requested by the transit provider; and	
(v) Lighting at the transit stop.	
(c) Local governments may implement (4)(b)(A) and (B) above through the designation of pedestrian districts and adoption of appropriate implementing measures regulating development within pedestrian districts. Pedestrian districts must comply with the requirement of (4)(b)(C) above;	The City is not proposing to designate a pedestrian district at this time. Recommendation: No code changes are recommended.
(d) Designated employee parking areas in new developments shall provide preferential parking for carpools and vanpools;	Existing code does not address this TPR requirement. Recommendation: Add requirements in Section 1415 (Parking Areas) carpools and vanpools in designated employee parking areas in new
(e) Existing development shall be allowed to redevelop a portion of existing parking areas for transit-oriented uses, including bus stops and pullouts, bus shelters, park and ride stations, transit-oriented developments, and similar facilities, where appropriate;	Existing code does not address this TPR requirement. Recommendation: Add provisions in Section 1415 (Parking Areas) and 1500 (Transit Improvements) that allow existing development to redeparking areas for transit-oriented improvements identified in the Col wide Transit Plan/US 30 Transit Access Plan.
(f) Road systems for new development shall be provided that can be adequately served by transit, including provision of pedestrian access to existing and identified future transit routes. This shall include, where appropriate, separate	See the findings and recommendations related to transit access in The 0045(4)(a).



Table I: TPR Review of Columbia Co. Zoning Ordinance (CCZO) and Subdivision and Partitioni

TPR Requirement Local Development Code References and Recomm accessways to minimize travel distances; (g) Along existing or planned transit routes, designation of Existing code and zoning is generally consistent with this TPR requirement types and densities of land uses adequate to support transit. facility improvements recommended in the Columbia County Community-Transit Access Plan are primarily sited in cities within the county designate Recommendation: No code changes are recommended. This requirement will be addressed by the TSP update planning process. T (6) In developing a bicycle and pedestrian circulation plan as required by 660-012-0020(2)(d), local governments shall adopting improvements in developed areas that meet the needs identified is identify improvements to facilitate bicycle and pedestrian bicycle circulation elements. trips to meet local travel needs in developed areas. Specific measures identified in this TPR requirement are addressed by the c Appropriate improvements should provide for more direct, Walkways between cul-de-sacs and adjacent roads – Existing code convenient and safer bicycle or pedestrian travel within and long blocks and limits the length of cul-de-sacs, and allows for bu between residential areas and neighborhood activity centers between cul-de-sacs and adjacent roads. (i.e., schools, shopping, transit stops). Specific measures Walkways between buildings - See findings and recommendation: include, for example, constructing walkways between cul-decirculation on-site, Section -0045(3)(b). sacs and adjacent roads, providing walkways between buildings, and providing direct access between adjacent uses. Access between adjacent uses - See findings and recommendation community destinations, Section -0045(3)(b). Recommendations: Strengthen the provisions in CCSPO Section 1011 (Pedestrial access ways between cul-de-sacs and adjacent roads, except as slope, environmentally sensitive lands, and existing develidentified in TPR Section -0045(3)(b)).

Revise provisions for cul-de-sacs in CCSPO Section 1005 (Str-walkways or multi-use paths - where roadways cannot be e:



Table 1: TPR Review of Columbia Co. Zoning Ordinance (CCZO) and Subdivision and Partitioni

TPR Requirement

Local Development Code References and Recomm

(7) Local governments shall establish standards for local streets and accessways that minimize pavement width and total ROW consistent with the operational needs of the facility. The intent of this requirement is that local governments consider and reduce excessive standards for local streets and accessways in order to reduce the cost of construction, provide for more efficient use of urban land, provide for emergency vehicle access while discouraging inappropriate traffic volumes and speeds, and which accommodate convenient pedestrian and bicycle circulation. Notwithstanding section (1) or (3) of this rule, local street standards adopted to meet this requirement need not be adopted as land use regulations.

County roadway right-of-way and improvement standards are provided in a document. Rural road standards consist of pavement widths of approximat and four-foot bike lanes) for collector roads and approximately 26 feet (10-aggregate shoulders) for local roads. These are not excessive pavement wid Right-of-way widths for arterials, collectors, and local roads are also establis (Streets).

<u>Recommendation:</u> Ensure that the road standards in the CCSPO are Road Standards document, particularly if road standards are modified process.

OAR 660-12-0060

Amendments to functional plans, acknowledged comprehensive plans, and land use regulations that significantly affect an existing or planned transportation facility shall assure that allowed land uses are consistent with the identified function, capacity, and performance standards of the facility.

CCZO Section 1502 (Zone Changes) requires proposed zone changes and demonstrate consistency with the Comprehensive Plan and Statewide Plan that "the property and affected area are presently provided with adequate for transportation networks to support the use, or such facilities, services and to planned to be provided concurrently with the development of the property CCZO Section 1607 requires all amendments to the CCZO text and maps.

<u>Recommendations:</u> Existing code provisions generally address this I the following amendments are recommended to more clearly and the requirement.

- Add provisions to CCZO Section 1502 and Section 1607 that the Comprehensive Plan includes ensuring that changes to (significantly affect an existing or planned transportation faci identified function, capacity, and performance standards of
- Add similar provisions related to proposed amendments to (

Section E

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Section F

Memo 5: Goals, Objectives, and Evaluation Criteria

The contents of Volume 2 represent an iterative process in the development of the TSP. Refinements to various plan elements occurred throughout the process as new information was obtained. In all cases, the contents of Volume 1 supersede those in Volume 2.



TECHNICAL MEMORANDUM #5

DATE: July 11, 2014

TO: Columbia County TSP Project Management Team

FROM: John Bosket, DKS Associates

Garth Appanaitis, DKS Associates Edith Lopez Victoria, DKS Associates

SUBJECT: Columbia County Transportation System Plan Update

Technical Memorandum #5: Goals, Objectives, and Evaluation Criteria

P11086-022

The purpose of this memorandum is to facilitate the process of developing the transportation-related goals and objectives for Columbia County. The development of the goals and objectives will continue throughout the planning process, shaped by input received from the County Transportation Road Advisory Committee (TRAC), the general public, and other key stakeholders. An initial set of potential valuation criteria has also been identified as a guide to measure how well strategy/project alternatives considered through the Transportation System Plan (TSP) update process address these goals.

A Guiding Framework for Transportation Planning

The process of identifying a vision, goals, and objectives helps describe the transportation system that best fits Columbia County's values and guides how the TSP will be developed and implemented. This process typically begins with the development of a **vision statement**. A vision statement generally consists of an imaginative description of the desired condition in the future. It is important that the vision statement align with the County's core values.

Goals and objectives create manageable steps through which the broad vision statement can be achieved. **Goals** are the first step down from the broader vision. They are still somewhat general in nature and should be challenging, but not unreasonable. Each goal must be supported by more finite **objectives**. In contrast to goals, objectives should be specific and measurable. Where feasible, providing a targeted time period helps with objective prioritization and achievement.

The solutions recommended through the TSP must be consistent with the goals and objectives. To accomplish this, measurable evaluation criteria that are based on the goals and objectives will be developed as part of the process to screen and prioritize TSP actions. The vision, goals, and objectives can be refined continuously throughout the TSP process. **Policy** statements to guide future transportation decisions will be developed in conjunction with the refinement of these pals and objectives. A final set of proposed transportation goals, objectives, and policies will be



developed during implementation tasks toward the end of the process in order to implement recommendations in the updated TSP and create consistency with other plans and State transportation planning requirements.

Draft Transportation Goals and Objectives

A draft set of goals and objectives have been prepared for consideration. These goals and objectives are based on the existing transportation goal, the Future Transportation Needs section outlined in the 1998 TSP, and the Columbia County Comprehensive Plan.

The previous (1998) Columbia County TSP, and Comprehensive Plan state the following transportation goal and objectives for the County's transportation system:

Goal:

The creation of efficient, safe, and diverse transportation system to serve the needs of Columbia County residents.

Objectives:

- 1. To utilize the various modes of transportation that are available in the County to provide services for the residents.
- 2. To encourage and promote an efficient and economical transportation system to serve the commercial and industrial establishments of the County.
- 3. To improve the existing transportation system.

The following goals and objectives have been developed for consideration and use in the current TSP update to broaden the goals and incorporate additional elements that address emerging local interests and statewide transportation planning requirements. The goals represent an initial set of elements to consider, which can be further refined to address the specific needs and vision of Columbia County through the review process. In addition to statements that define the County's vision for transportation, the draft goals will provide the basis for evaluation criteria that will be used to measure potential transportation projects and strategies developed through the TSP update.

Note: The following draft goals and objectives will be refined through stakeholder and public input.

Goal I: Provide for efficient and convenient motor vehicle travel.

- Objective 1a: Establish and maintain mobility standards to maintain the minimum level of motor vehicle travel efficiency. State and City standards for mobility will be supported on facilities under the respective jurisdiction.
- Objective 1b: Provide a mechanism to address the impacts of a proposed development and to fairly impose mitigation provisions.
- Objective 1c: Maintain the existing system of roads and bridges to a level suitable to the function of the road, allowing for smooth and comfortable travel, and reducing vehicle maintenance costs, through the preservation of pavements, and prevention of damage by overweight vehicles.
- Objective 1d: Keep County roads and bridges maintained and operable so that they continue to provide the primary function of connecting the transportation system, and



- coordinate with the State to ensure proper maintenance of their facilities.
- Objective 1e: Incorporate new technologies such as Intelligent Transportation System (ITS) elements, as appropriate, to maximize the use of the existing transportation system
- Objective 1f: Establish and maintain a functional classification system that provides a plan for system purpose and design.
- Objective 1g: Manage access to arterials and highways where practical to reduce congestion and conflicting travel patterns.

Goal 2: Provide for the safety and security of all transportation modes.

- Objective 2a: Identify improvements to address high collision locations to enhance safety for all modes.
- Objective 2b: Identify locations in the county where enhanced street crossings, shoulder improvements or road widening is needed for the safety of walking and biking users.
- Objective 2c: Support measures that enhance the safety at railroad crossings.
- Objective 2d: Identify investments needed along Lifeline Routes to preserve emergency response access and mobility.
- Objective 2e: Identify strategies to enhance emergency response to incidents.

Soal 3: Provide an equitable, and connected multi-modal ransportation system.

- Objective 3a: Provide facilities for all modes of transportation.
- Objective 3b: Distribute the benefits and impacts of transportation decisions fairly and address the transportation needs and safety of all users, including youth, the elderly, people with disabilities, and people of all races, ethnicities and income levels.
- Objective 3c: Provide connections for all modes that meet applicable County and Americans with Disabilities Act (ADA) standards.

Goal 4: Increase the quality and availability of pedestrian and bicycle facilities.

- Objective 4a: Consider walking and biking user needs that complement the basic provision of services to encourage higher levels of usage (e.g., street lighting, bike parking, and way finding signage).
- Objective 4b: Identify necessary changes to the land development code to support connectivity between compatible land uses and to provide internal site access and connections for pedestrian and bicycle travel.
- Objective 4c: Provide pedestrian and bicycle access to key activity centers such as transit facilities, employment centers, schools, parks and community facilities.
- Objective 4d: Promote walking, bicycling, and sharing the road through public information and organized events.



- Objective 4e: Identify new or improved transportation connections to improve compatibility and transfer between modes and system efficiency.
- Objective 4f: Improve bicycle access along all major corridors to provide intercity bicycle connectivity, including high quality bicycle access along Highway 30. Support the development of the CZ Trail and connection to the Banks-Vernonia Trail.

Goal 5: Work with transit service providers to provide transit service and amenities that encourage and increase ridership.

- Objective 5a: Identify areas that support additional transit services, and coordinate with transit providers and transit plans (e.g., the 2009 Columbia County Community-Wide Transit Plan and US 30 Transit Access Plan) to improve the coverage, reliability and frequency of services.
- Objective 5b: Promote transit accessibility to transportation-disadvantaged groups.
- Objective 5c: Support efforts to make transit more time-competitive with automobile travel, where feasible, for high-demand connections.
- Objective 5d: Enhance intercity transit connectivity.
- Objective 5e: Implement bus stops, park-and-ride lots, and transit centers that are identified for Columbia County in the 2009 Columbia County Community-Wide Transit Plan and US 30 Transit Access Plan.
- Objective 5f: Identify needs for services to regional employment and activity centers.
- Objective 5g: Consider transit user needs that complement the basic provision of service to encourage higher levels of usage (e.g., sidewalk and bicycle connections, shelters, benches). Implement projects addressing these needs that are identified for Columbia County in the 2009 Columbia County Community-Wide Transit Plan and US 30 Transit Access Plan.

Goal 6: Manage the transportation system to support a prosperous and competitive economy.

- Objective 6a: Enhance access to major employment and industrial centers.
- Objective 6b: Enhance the freight system efficiency, access, capacity and reliability.
- Objective 6c: Enhance access to intermodal facilities such as ports, airports, and transit centers.
- Objective 6d: Increase the distribution of travel information to maximize the reliability and effectiveness of highways, which serve as the primary freight corridors.

Goal 7: Provide transportation facilities and services that are fiscally responsible and economically feasible.

Objective 7a: Plan for an economically viable and cost-effective transportation system that makes the best use of limited transportation funds.



- Objective 7b: Identify and develop diverse and stable funding sources to implement recommended projects in a timely fashion and ensure sustained funding for road maintenance and transportation improvement projects.
- Objective 7c: Actively seek State and Federal Transportation funds to finance programs and improvements.

Goal 8: Provide a transportation system that conserves energy, and protects and improves the environment.

- Objective 8a: Support alternative vehicle types and identify potential electric vehicle plug-in stations and develop implementation code provisions.
- Objective 8b: Minimize impacts to preserve the natural, scenic, and cultural resources in the county.
- Objective 8c: Provide public access to designated public water bodies, natural resource areas, scenic and cultural resources.
- Objective 8d: Work with watershed councils for the priority replacement of barriers to migrating fish species.

Goal 9: Coordinate with local and state agencies and transportation plans.

- Objective 9a: Work with the Northwest Area Commission on Transportation (NWACT) to promote projects that improve regional linkages.
- Objective 9b: Coordinate with the Oregon Transportation Plan and associated modal plans.
- Objective 9c: Coordinate with local agency Transportation System Plans for communities within Columbia County.
- Objective 9d: Coordinate with local agencies and entities within Columbia County including major employers, incorporated and unincorporated communities, Port of St. Helens, and other stakeholders or groups, as appropriate, for transportation matters involving areas that impact such entities.
- Objective 9e: Coordinate with ODOT, Clatsop County, Washington County, and Multnomah County on projects that improve and impact regional connections within Oregon.
- Objective 9f: Coordinate with ODOT, WSDOT, Rainier, Longview, Cowlitz County, and FHWA on matters regarding the Lewis and Clark Bridge and connections to Washington.
- Objective 9g: Coordinate with cities and ODOT to review and assess potential impacts and appropriate mitigation of proposed development applications.

Draft Evaluation Criteria

Project alternatives developed through this update will be evaluated by criteria that are an extension of the goals and objectives. These project level criteria provide a point-based technical rating method that will be used to evaluate how well proposed design alternatives align with County interests. By summing



ratings (and weighting if desired), alternatives can be compared. In this way, a consistent method will be used to evaluate and rank the alternatives.

Evaluation Criteria and Scoring Methodology

The evaluation criteria were selected based on the County's proposed transportation goals and objectives. The criteria focus on compliance with state and local plans and policies, engineering design requirements, and a desire to maximize positive (and minimize negative) economic, social (livability), and environmental impacts. Table 1 lists the evaluation criteria and the corresponding scoring methodology.

Note: The following draft evaluation criteria will be refined through stakeholder and public input. Establishing weights to apply to the Goals will also be development through public outreach.

