

## TECHNICAL MEMORANDUM #3

**DATE:** July 11, 2014

**TO:** Columbia County TSP Project Management Team

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**SUBJECT: Columbia County Transportation System Plan**

Technical Memorandum #3: Plan Review Summary

P11086-022

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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 transportation 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.<sup>1</sup> The Transportation Planning Rule (TPR), OAR 660-012, describes how to implement Statewide Planning Goal 12.<sup>2</sup>

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

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<sup>1</sup> Statewide Planning Goals: <http://www.oregon.gov/LCD/goals.shtml>

<sup>2</sup> Transportation Planning Rule: [http://arcweb.sos.state.or.us/rules/OARS\\_600/OAR\\_660/660\\_012.html](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.

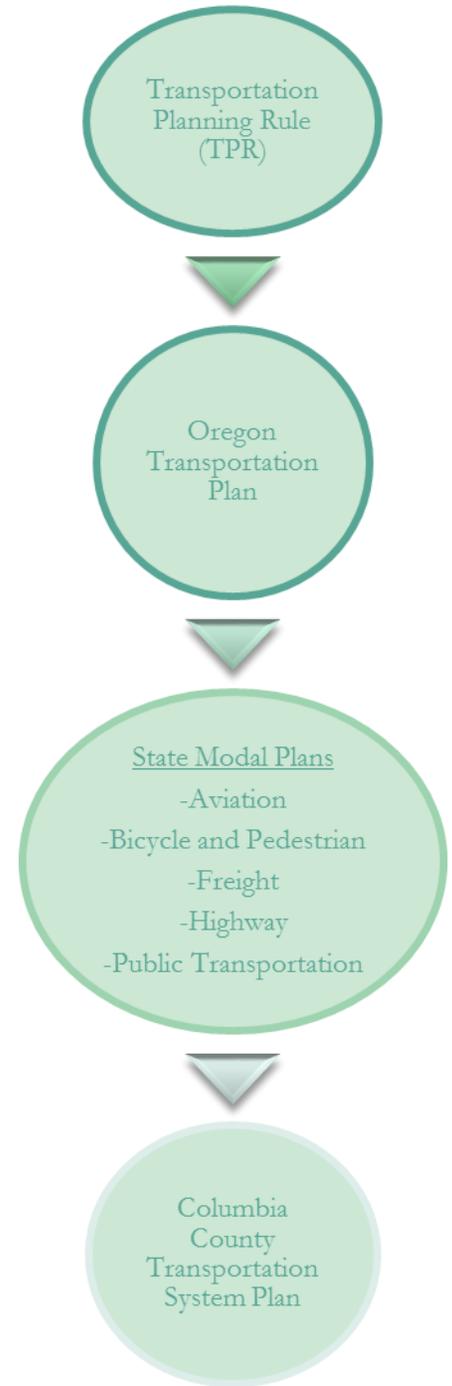
Recent amendments to the TPR (effective January 1, 2012) include new language in 660-012-060 that allows a local government to exempt a zone change from the “significant effect” determination if the proposed zoning is consistent with the comprehensive plan map designation and the TSP (Section 9). The 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 OTP<sup>3</sup> establishes goals, policies, strategies and initiatives that address the core challenges and opportunities facing transportation in Oregon. The goals and



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<sup>3</sup> 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 and 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, maintained 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 context 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 the 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 inter-urban and inter-regional mobility and provide connections to larger urban areas, ports, and major recreation 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 considered to be the most significant and necessary to ensure a functioning statewide transportation network.<sup>4</sup>

***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.

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<sup>4</sup> Lifeline Selection Summary Report:

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

## Columbia County Classification for Roadways

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.

Highway (classification)	Inside Urban Growth Boundary			Outside Urban Growth Boundary	
	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 Rule<sup>5</sup> (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 the 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.<sup>6</sup> The standards are based on state highway classification and differ based on posted speed. The applicable standards for highways in Columbia County can be seen in Table 2a and Table 2b.

<sup>5</sup> Access Management Rule: [http://arcweb.sos.state.or.us/rules/OARS\\_700/OAR\\_734/734\\_051.html](http://arcweb.sos.state.or.us/rules/OARS_700/OAR_734/734_051.html)

<sup>6</sup> ODOT Access Management Standards (Appendix C): [www.oregon.gov/ODOT/TD/TP/OHP\\_AM.shtml](http://www.oregon.gov/ODOT/TD/TP/OHP_AM.shtml)

**Table 2a: Highway Access Spacing Standards – US30 (min. distance feet)**

Highway	Posted Speed Limit (mph)	5,000 AADT or less			Over 5,000 AADT	
		Rural Areas	Urban Areas	Unincorporated Communities in Rural Areas	Rural Areas	Urban Areas
<b>US 30</b> (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 (min. distance feet)**

Highway	Posted Speed Limit (mph)	5,000 AADT or less	Over 5,000 AADT	
		Rural and Urban Areas	Rural Areas	Urban Areas
<b>OR 47</b>	30 & 35	250	400	350
<b>OR 202</b> (District Highway)	40 & 45	360	500	500
	50	425	550	550
	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 drive 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.*

**Traffic 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 Manual<sup>7</sup> (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.*

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<sup>7</sup> ODOT Highway Design Manual: [http://www.oregon.gov/ODOT/HWY/ENGSERVICES/hwy\\_manuals.shtml](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.*

**Columbia 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 is 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 account 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-term, 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 transportation 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 4 <sup>th</sup> 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 the 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 Rainier 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 Rider, 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, roadway reconstruction, sidewalk additions and a proposal to construct a bicycle trail connecting the US 30 trail to 6<sup>th</sup> 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 6<sup>th</sup> 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:

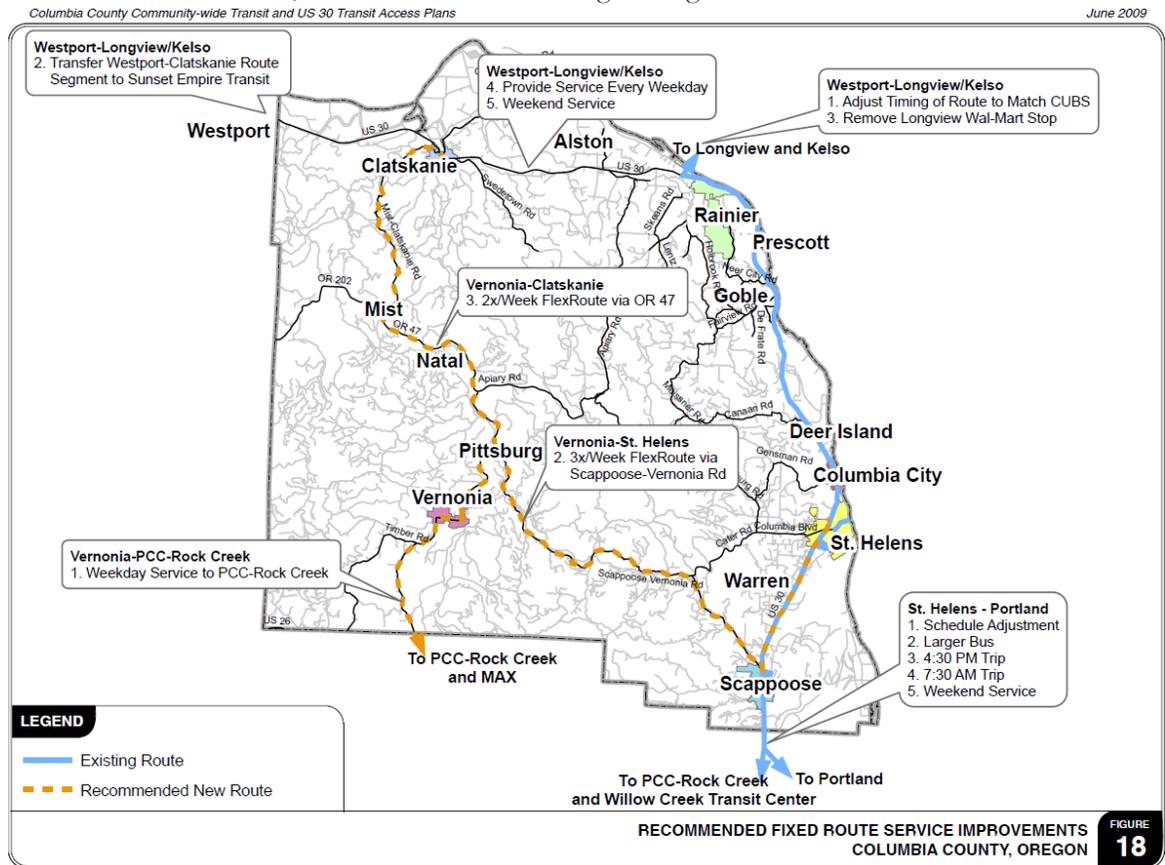
- Provide lifeline transit service focusing on the needs of the elderly, disabled and transportation disadvantaged. Transportation disadvantaged riders are people who are unable to provide their own transportation as a result of disability, an age-related condition, or an income constraint.
- Provide 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,

current and future routes, and coordination with neighboring transit services.



**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 findings 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 contributing 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 include: 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 County 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

- Clatskanie TSP, 1997
- Clatskanie Transportation refinement Plan, 2005
- Clatskanie Comprehensive Plan, 1978
- Vernonia TSP, 2011
- Vernonia Comprehensive Plan
- Columbia City TSP
- Columbia City Comprehensive Plan, 2010
- Land Use proposals in Columbia County
- Westside Rural Multnomah County TSP, 1998