

TECHNICAL MEMORANDUM

COLUMBIA COUNTY TRANSIT PLANS: Columbia County Community-wide Transit and US 30 Transit Access Plans

Final Technical Memorandum #1 – Plans, Goals, and Policies

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This memorandum summarizes plans and policies relevant to the Columbia County Community-wide Transit Plan (CTP) and the US 30 Transit Access Plan. Under the State of Oregon's Transportation Planning Rule, regional and local transportation plans must be consistent with the state's transportation plans. For this reason, along with a desire for transportation planning consistency within Columbia County, this memorandum reviews the relevant state, regional and local level transportation documents that relate to one or both of the County transit plans being developed. Although each document reviewed contains many policies and recommendations, this technical memo summarizes only the policies pertinent to development of the Columbia County transit plans (CTP).

Some of the "existing conditions" information described in these documents is dated. This memo describes information as it is presented in the source documents, generally using the past tense for information known to be out of date. Developing an up-to-date inventory of existing conditions is part of both projects' work scopes; this inventory will be presented in Technical Memorandum #2.

STATEWIDE PLANS

Oregon Transportation Plan (September 2006)

The Oregon Transportation Plan (OTP) is the overarching policy document for a series of modal plans that together form the state transportation system plan (TSP). The OTP establishes goals, policies, strategies, and initiatives that address the core challenges and opportunities facing Oregon. It provides the framework for prioritizing transportation improvements, and as such figures into the development of the Columbia County CTP. Sections of particular interest include *Goals, Policies, and Strategies*, which provides guidance for transportation decision-making, and *Implementation*, which outlines key state initiatives that should be incorporated into plan development.

Goals, Policies, and Strategies

Goal 1 (*Mobility and Accessibility*) presents several important policies and strategies which should be considered through development of the Columbia County CTP.

- Policy 1.1 – Development of an Integrated Multimodal System
 - Strategy 1.1.1 calls for 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 involves promoting the growth of intercity bus services, along with other transportation modes, to link all areas of the state with national and international transportation facilities and services, as well as increasing the frequency of intercity services to provide travel options.
 - Strategy 1.1.3 emphasizes consideration of interstate transportation needs and cooperation with neighboring states to improve interstate travel.
- Policy 1.2 – Equity, Efficiency, and Travel Choices
 - Strategy 1.2.1 entails developing and promoting inter- and intra-city public transportation. Steps include optimizing existing services; finding innovative ways to augment existing public transportation infrastructure and travel options; working to coordinate services; using information technologies effectively; and promoting frequent public transit, intercity bus, and passenger rail services to increase ridership and decrease travel times, particularly during peak travel periods and along heavily traveled corridors.
 - Strategy 1.2.2 calls for better integrating, locating, and designing passenger and freight multimodal transportation facilities and connections to expedite travel and provide travel options. Steps include locating bus and train stations together; coordinating intermodal

connections; retrofitting roadways to support access to public transportation; supporting the development of grid street networks to increase connectivity and travel options; and supporting the development of adequate bicycle and pedestrian facilities.

■ Policy 1.3 – Relationship of Interurban and Urban Mobility

- Strategy 1.3.1 entails using a regional planning approach and inter-regional coordination to address problems that extend across urban growth boundaries.
- Strategy 1.3.2 calls for development, maintenance, and improvement of parallel roadways and transit to provide alternatives to using intercity highways for local trips.

Goal 3 (*Economic Vitality*) also contains several relevant policies and strategies.

■ Policy 3.2 – Moving People to Support Economic Vitality

- Strategy 3.2.1 involves increasing coordination among various agencies and jurisdictions in order to facilitate travel through the support of trip planning, convenient and reliable intermodal connections, and shared tickets among carriers.
- Strategy 3.2.2: In regional and local transportation system plans, support options for traveling to employment, services, and businesses.
- Strategy 3.2.3: Support intercity bus to facilitate business and recreational travel.

■ Policy 3.3 – Downtowns and Economic Development

- 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.
- Strategy 3.3.2: Integrate transportation planning and investments with state and local economic development strategies and plans.

■ Policy 3.4 – Development of the Transportation Industry

- Strategy 3.4.2: Partner with public transportation providers and the private sector to develop innovative ways to deliver goods and services more efficiently such as public transportation services in rural areas.
- Strategy 3.4.3: Partner with the private sector and public agencies to foster sustainable transportation services in rural areas.

Goal 4 (*Sustainability*) further outlines a number of potentially relevant policies and strategies.

■ Policy 4.1 – Environmentally Responsible Transportation System

- Strategy 4.1.2: Encourage the development and use of technologies that reduce greenhouse gases.
- Strategy 4.1.4: Work collaboratively to streamline permit procedures and gain efficiencies to transportation system improvements while meeting or exceeding environmental benefits or regulations.
- Strategy 4.1.5: In the construction and maintenance of transportation infrastructure and facilities, reduce the consumption of non-renewable construction materials, promote their efficient use and reuse, and reduce other environmental impacts such as stormwater impacts where appropriate
- Strategy 4.1.6: To determine the most cost-effective investments, consider using life-cycle costs in transportation maintenance, purchase of equipment, selection of materials, and design and engineering of infrastructure where appropriate.

■ Policy 4.2 – Energy Supply

- Strategy 4.2.2: Support the conversion of passenger vehicles and public transportation fleets to more fuel-efficient and alternative fuel vehicles, especially to those using renewable and cleaner fuels. Review and change the tax credit provisions to encourage these activities as appropriate.
- Strategy 4.2.3: Work with federal, state, regional and local jurisdictions and agencies as well as transportation providers, shippers and the general public to develop a contingency plan for fuel shortages affecting passenger and freight transportation.

■ Policy 4.3 – Creating Communities

- Strategy 4.3.1: Support travel options that allow individuals to reduce vehicle use.
- Strategy 4.3.2: Promote safe and convenient bicycling and walking networks in communities by: (1) filling in missing gaps in sidewalk and bikeway networks, especially to important community destinations such as schools, shopping areas, parks, medical facilities, and transit facilities; (2) enhancing walking, bicycling and connections to public transit through appropriate community and main street design; and, (3) promoting 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, as well as providing facility designs that consider the needs of the mobility-challenged including seniors, people with disabilities, children and non-English speaking populations.

Goal 5 (*Safety and Security*) contains several relevant policies and strategies.

■ Policy 5.1 – Safety

- 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.
- Strategy 5.1.4: Support the further development and improvement of interoperable communication systems among safety and security-related agencies, jurisdictions and private entities. Ensure that clear communication protocols are established.
- Strategy 5.1.9: Develop and implement a reliable, comprehensive, and coordinated multimodal transportation data, crashes and incidents reporting program to manage and evaluate transportation safety with the goal of better data integration.

■ Policy 5.2 – Security

- Strategy 5.2.1: Encourage the development of security plans for all modes of transportation encompassing prevention, detection and response. Security plans should provide for coordinated response across all entities and prioritize actions based on critical impact.
- Strategy 5.2.2: Promote the development of cost-effective security measures for transportation facilities and infrastructure.

Goal 6 (*Funding the Transportation System*) contains a relevant policy and strategy:

■ Policy 6.1 – Funding Structure

- Strategy 6.1.3: Develop a transportation finance system which consciously attempts to provide equity among competing users, payers, beneficiaries, transportation systems providers, and regions of the state.

Goal 7 (*Coordination, Communication, and Cooperation*)

■ Policy 7.3 – Public Involvement and Consultation

- 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, etc., 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.

■ Policy 7.4 – Environmental Justice

- Provide equal access to public information and decision-making about transportation planning, financing, construction, operations, and maintenance activities.

Oregon Highway Plan (May 1999)

The 1999 Oregon Highway Plan (OHP), most recently revised in 2006, is a modal element of the Oregon Transportation Plan. The following portions of the OHP relate to aspects of the Columbia County transit planning process:

■ Policy 1B: Land Use and Transportation

- Action 1B.1: Work with local governments to develop and implement plans that support compact development, especially within community centers and commercial centers. Support plans, strategies and local ordinances that include:
 - Parallel and interconnected local roadway networks to encourage local automobile trips off the state highway;
 - Transit, bicycle, and pedestrian facilities, including street amenities that support these modes
 - Design and orientation of buildings and amenities that accommodate pedestrian and bicycle use as well as automobile use;
- Action 1B.6: Develop design guidelines for highways that describe a range of automobile, pedestrian, bicycle or transit travel alternatives. The guidelines should include appropriate design features such as lighted, safe and accessible bus stops, on-street parking, ample sidewalks, pedestrian crossings, pedestrian scale lighting, street trees and related features.
- Action 1B.14: Work to accommodate alternate modes on state highways according to the various types of land uses and highways. Work toward development of alternate mode facilities in Special Transportation Areas, Commercial Centers and Urban Business Areas according to the other actions in this policy and to Table 4 on page 61. Use the following objectives to guide project design and development in other areas:

a. Within Urban Growth Boundaries:

On Expressways:

- Accommodate bicycle lanes, if any, on shoulders or separated facilities.
- Although pedestrians are generally not accommodated on Expressways for safety reasons, analyze accommodation on a case-by-case basis.

On Other Urban Statewide, Regional and District Highways:

- Accommodate bicycle lanes and sidewalks and other pedestrian facilities, especially in commercial centers and community use areas.
- Provide convenient pedestrian crossings, especially at transit stops and other high-use generators.
- Design intersections to address the needs of pedestrians and bicyclists.

b. Outside Urban Growth Boundaries:

- In unincorporated communities, address pedestrian crossing safety. This may be addressed through traffic signals and medians designed to serve as pedestrian refuges.

■ Policy 1G: Major Improvements

- Action 1G.1: Use the following priorities for developing corridor plans, transportation system plans, the Statewide Transportation Improvement Program, and project plans to respond to highways needs. Implement higher priority measures first unless a lower priority measure is clearly more cost-effective or unless it clearly better supports safety, growth management, or other livability and economic viability considerations. Plans must document the findings which support using lower priority measures before higher priority measures.
- Action 1G.2: Improve efficiency and capacity of existing highway facilities. The second priority is to make minor improvements to existing highway facilities access for alternative modes (e.g. bike lanes, sidewalks, and bus shelters), extending or connecting local streets, and making other off-system improvements.

■ Policy 2E: Intelligent Transportation Systems

It is the policy of the State of Oregon to consider a broad range of Intelligent Transportation Systems services to improve system efficiency and safety in a cost-effective manner. Deployment of ITS shall reflect the user service priorities established in the Oregon Intelligent Transportation Systems Strategic Plan

- Action 2E.6: Create a statewide network for real time weather, road condition, traffic, traveler services, and public transportation information.
- Action 2E.7: Encourage transit operators and emergency service providers to develop standardized dispatching, vehicle monitoring, and vehicle priority systems.

- Policy 2F: Traffic Safety: It is the policy of the State of Oregon to continually improve safety for all users of the highway system using solutions involving engineering, education, enforcement, and emergency medical services.
 - Action 2F.3: In identifying solutions to traffic safety problems, consider solutions including, but not limited to
 - Constructing appropriate bicycle and pedestrian facilities including safe and convenient crossings.

- Policy 4B: Alternative Passenger Modes: It is the policy of the State of Oregon to advance and support alternative passenger transportation systems where travel demand, land use, and other factors indicate the potential for successful and effective development of alternative passenger modes.
 - Action 4B.1: Promote alternative passenger transportation services in commute highway corridors to help maintain or meet established performance standards.
 - Action 4B.2: Promote alternative passenger transportation services located off the highway systems that help to preserve the performance and function of the state highway system.
 - Action 4B.3: Encourage the development of alternative passenger services and systems as part of broader corridor strategies, and coordinate them with necessary supportive local actions. Such actions include developing applicable land use regulations, appropriate types of passenger services, adequate collector-distributor roadway systems, and other local transportation system elements.
 - Action 4B.4: Encourage the use of alternative passenger modes to reduce local trips on the state highway system where limited highway facilities accommodate large numbers of both intercity and local trips.
 - Action 4B.5: Support the further development of alternative intercity passenger services in congested transportation corridors through additional peak hour service, use of excess freight rail system capacity, and the provision of support facilities and services which help connect passengers to their destinations (e.g., intercity passenger rail, air, and/or shuttle or charter bus operations coordinated with parking areas).
 - Action 4B.6: In recreational corridors, promote shuttles and/or charter passenger transportation services, coordinated with off-site parking areas, to lessen congestion during peak periods for travel to significant tourist/visitor destination areas.

- Policy 4E: Park-and-Ride Facilities: It is the policy of the State of Oregon to encourage the efficient use of the existing transportation system and to seek cost-effective expansion of the highway system's passenger capacity through development and use of park-and-ride facilities.

- Action 4E.1: In coordination with local jurisdictions and based on an analysis of need and potential use, provide park-and-ride facilities at appropriate urban and rural locations adjacent to or within the highway right-of-way.
- Action 4E.2: Acquire right-of-way for park-and-ride facilities during construction or expansion projects as appropriate. Consider acquisition and use of adjacent right-of-way for park-and-ride facilities at highway interchanges, consistent with ODOT access management policies and standards.
- Action 4E.3: Establish partnerships with other jurisdictions and the private sector to site park-and-ride facilities.
- Action 4E.4: Convert informal parking areas within highway rights-of-way to formal park-and-ride facilities where appropriate.
- Action 4E.5: Use ODOT surplus property for park-and-ride facilities where appropriate.
- Action 4E.6: Provide park-and-ride facilities located in urban areas that are safely accessible by pedestrians, bicyclists, and transit users whenever feasible. Include secure bicycle parking in urban park-and-ride designs.

Oregon Public Transportation Plan (1997)

The 1997 Oregon Public Transportation Plan (OPTP) is a modal element of the Oregon Transportation Plan. The following portions of the OHP relate to aspects of the Columbia County transit planning process:

- Goal 1: Purpose of the Public Transportation System: The public transportation system should provide mobility alternatives to meet daily medical, employment, educational, business, and leisure needs without dependence on single-occupant vehicle transportation. The system should enhance livability and economic opportunities for all Oregonians, and lessen the transportation system's impact on the environment. The public transportation system should provide service and meet transportation needs in a coordinated, integrated, and efficient manner.
- Policy 1A: Urban Access, Rural Access, Basic Mobility: The public transportation system should provide access to rural and frontier areas, connecting them with all other parts of the state and with service within them so that residents have access to all parts of their community. Service to and within rural areas and small cities should fit the needs of the community, be economical, convenient to use and contribute to state objectives and level of service goals.
 - Strategy 1A.1 – Work with local governments to promote development and use of public transportation, bicycle, and pedestrian services.

- Strategy 1A.2 – Work with local governments to identify and seek funding for high priority public transportation projects.
- Strategy 1A.4 – Encourage adequate and efficient public transportation access to employment, shopping and other commerce, medical care, housing and leisure activities, including access for the transportation disadvantaged.
- Policy 1B: Environmental Protection: The public transportation system should be designed, operated and maintained so that public transportation facilities and services lessen the transportation system’s impact on air and water quality, the natural environment and energy consumption.
- Policy 1C: Economic Prosperity: The public transportation system should strengthen economic opportunities by providing travel options that increase access to jobs.
- Policy 1D: Land Use: The public transportation system and local land use planning should be complementary and coordinated. Public transportation should be both responsive to and facilitate implementation of land use laws.
- Goal 2: The Components of the Public Transportation System: The public transportation system should be comprised of a hierarchy starting with (level 1) ridesharing or volunteer programs and moving upward as population and density increase to include (level 2) taxi or minibus service and finally adding (level 3) fixed-route services where appropriate. To ensure coordination and efficiency, different types of service should be provided as part of a single, unified public transportation system. Systems for special needs and the general public users should be integrated. Transportation demand management projects should be encouraged anywhere they can meet a need and not be restricted to metropolitan areas.
- Policy 2A: Urban, Small City and Rural Public Transportation Systems: Public transportation should be provided in small cities and towns in a manner appropriate for their size, density, and locally identified needs. At a minimum, public transportation should serve the transportation disadvantaged with rideshare, volunteer programs, taxis, or minibus services. Rideshare matching and transportation demand management services should be available in communities of 10,000, and may be available in communities of 5,000 where there are large employers with a base of at least 500 employees who are not covered by a regional program. General public transportation with fixed route or other service may be available, and all places of 10,000 people or more should have demand response service.
 - Strategy 2A.2: Implement the public transportation requirements of the Americans with Disabilities Act of 1990
 - Strategy 2A.3: Promote development of transit centers that are safe, near residential areas, and easily accessible to pedestrians and bicyclists.
 - Strategy 2A.6: Pursue revision of regulatory systems to stimulate the provision of transportation services by private companies in rural areas.

- Policy 2B: Intercity Bus and Rail Systems: The intercity bus and rail system should operate to provide a well-coordinated, unified network which enables Oregonians and visitors to access services and activities as identified in the minimum levels of service section. The passenger rail system should provide service through Oregon's main regional and interstate corridors. The passenger bus element should complement rail service by augmenting train schedules, providing feeder service, and serving the bulk of intercity travel needs to communities outside of rail corridors.
- Goal 3: The Management and Financing of the Public Transportation System: The public transportation system should be planned, operated, managed, and financed cooperatively by public and private organizations representing statewide, regional, and local interests.
 - Policy 3B: State Financing: State financial support for public transportation should be reliable, flexible, and stable, based on level of service factors, linked to state objectives and financial resources. The state, in partnership with others, should continue to seek development of new financing mechanisms that contribute to the overall financial adequacy of the public transportation system to meet these objectives.
 - Policy 3C: Public Transportation Facilities and Equipment Management System (PTMS): ODOT, in cooperation with affected local and regional governments, will develop and maintain a PTMS. The PTMS will supply data and other information to help guide public transportation planning, decision making and financing
 - Strategy 3C.2: Provide management training and technology sharing for public and private transportation providers and operators.

Oregon Bicycle and Pedestrian Plan (1995)

This review focuses on the 1995 adopted version of the Oregon Bicycle and Pedestrian Plan. An update of this plan is currently in development, with adoption anticipated by the end of 2008. Design alternatives developed in the CTP should consider the current adopted version of the Oregon Bicycle and Pedestrian Plan (which, as of the writing of this memorandum is the 1995 document).

The document includes a section on the design of traffic facilities for bicycle and pedestrian travel. This plan documents planning issues that impact walkway and bikeway design, including land use and site design, network connectivity, access management, and public transit.

In the public transit section, it is stated that high priority should be given to providing sidewalks and bikeways on transit routes and on local streets feeding these routes. It also gives three factors to take into account when deciding the location of transit stops:

- Passengers: stops must be near places where there is an expectation of riders;
- Access: if a stop cannot be located right where riders are, people must be able to get to the stop conveniently;

- Traffic characteristics: bus stops are not always located in ideal locations for riders because of complex traffic patterns, especially at intersections.

There are four types of bikeways listed in this plan, and design standards and recommendations are provided for each type. In particular, the Plan recommends retrofitting bike lanes to existing urban roadways that were built without bike lanes in the following ways:

- Marking and signing existing shoulders as bike lanes;
- Widening the roadway to add bike lanes; or
- Restriping the existing roadway to add bike lanes.

The Plan provides standards and recommendations for short- and long-term bike parking. It recommends covered parking as beneficial due to the high rainfall in the Northwest and also talks about key considerations for siting bike parking. Signing for bike parking is also discussed.

In the walkways section of the Plan, three types of walkways are presented: sidewalks, paths, and shoulders. Standards and guides have been given as to walkway designs. This section covers the standards on transit connections, as well as accommodating people with disabilities.

Other aspects of the Plan that apply to the US 30 Transit Access Plan include street crossing and intersection design for pedestrians and bicycles, and standards and guidelines for shared-use path design.

Oregon Highway Design Manual (December 2003)

The Highway Design Manual provides uniform design standards and procedures for ODOT. It is intended to provide guidance for the location and design of new construction, major reconstruction, and resurfacing, restoration, and rehabilitation projects. This document includes a chapter focusing on pedestrian and bicycle, and a chapter with design guidelines for public transportation. Other chapters also provide some information relating to the pedestrian, bicycle, and transit modes. Since its completion in year 2003, this manual has been updated and revised several times. The manual provides too many details to be repeated here; instead, a summary of the relevant sections is given below, along with a few key design points.

- Chapter 9, *Intersection and Interchange Design*, covers the design guidelines, standards, and process for designing road approaches, signalized and unsignalized at-grade intersections, and interchanges for State Highways. This chapter also discusses bicycle and pedestrian needs in the design of intersections and interchanges.
- Chapter 11, *Pedestrian and Bicycle*, provides general guidance for bicycle and pedestrian movements. Some key points are highlighted below.
 - Urban Highways
 - Bicycle Accommodation: Shoulders are necessary for safety, capacity, and maintenance reasons. The manual also provides the standard width for bike lanes.

- Pedestrian Accommodation: Sidewalks separated with a buffer are the preferred facility for pedestrians.
- Sidewalk Dimensions: The manual specifies the standard width for sidewalks and lists several conditions that require greater widths.
- Americans with Disabilities Act: Sidewalks and connections to private properties must be built so people with limited mobility and sight can easily use them. This section covers standards and guidance to make them accessible.
- Transit Stops: If a highway project is on a transit route, a complete sidewalk system should be provided for the length of the project. If the project ends at a transit stop, sidewalks should continue to the nearest intersection or to the nearest section of existing sidewalk. There are standards about bus stops in this section. Additionally, the location of bus stops in relation to street crossing opportunities is discussed.
- Street Crossings: Sidewalks provide mobility along the highway, but full pedestrian accommodation also requires frequent, safe and convenient crossing opportunities. In most cases, it is best to combine measures to improve pedestrian crossing opportunities and safety. Potential measures include raised medians, crossing islands, curb extensions, illumination, crosswalks, pedestrian signals, signing, and sight distance improvements.
- Chapter 12, *Design Guidelines for Public Transportation*, provides guidance to designers for integrating good public transportation design practices into projects. The best practices outlined in this section are intended to provide consistent guidance for all designers.
 - Design Considerations:
 - Yield to Bus Law: This law influences the decision of the local jurisdiction and ODOT between constructing bus pullouts and curbside stops.
 - Bus Signal Priority System: These systems can provide arriving buses the capability to alter the timing (but not the sequence) of green intervals at traffic signals. Discussions with the local transit agency will result in identifying the need for bus priority signalization.
 - Americans with Disabilities Act: Public transportation provides service to persons with disabilities. Designs must comply with the requirements of the Americans with Disabilities Act.
 - Safety and Personal Security: Design considerations include safety elements such as pedestrian access, passenger visibility, and traffic impacts, and personal security elements such as lighting, nearby development, and open areas.
 - Bus Stops: The spacing, location, and design of bus stops significantly influence transit system performance and ridership.

- Bus Stop Location Selection must address both traffic operation issues and passenger accessibility issues. If possible, the bus stop should be located in an area where typical improvements, such as a bench or shelter, can be placed in the public right of way. Elements to consider in bus stop placement include the following:

Use:

- Proximity to major trip generators;
- Presence of sidewalks, crosswalks, and curb ramps;
- Connection to nearby pedestrian circulation system;
- Access for people with disabilities; and
- Convenient passenger transfers to other routes.

Traffic and Rider Safety:

- Conflict between buses and other traffic;
- Passenger protection from passing traffic;
- All weather surface to step to/from the bus;
- Open and lighted spaces for personal security and passenger visibility; and
- Street illumination.

Bus Operations:

- Adequate curb space for the number of buses expected at the stop at one time;
- On-street automobile parking and truck delivery zones;
- Traffic control devices near the bus stop, such as traffic signals or stop signs;
- Volumes and turning movements of other traffic, including bicycles;
- Width of sidewalks;
- Pedestrian activity through intersections;
- Proximity and traffic volumes of nearby driveways;
- Street grade;
- Ease of re-entering traffic stream; and

- Proximity to rail crossing.
- Bus Stop Layout and Delineation: The bus stop must be clearly delineated to ensure that other traffic will not use the stop area and to give bus operators direction on where to stop the bus.
- Guidelines for Special Treatments:
 - Bus Pullouts: Bus stops may be designed with a pullout, which allows the transit vehicle to pick up and discharge passengers in an area outside the traveled way. Bus pullouts are provided primarily on high-volume and/or high-speed arterials. Well placed, carefully designed bus pullouts offer safe passenger loading and unloading with minimal delays to both transit and other roadway traffic.
 - Curb Extensions: A curb extension may be constructed along streets with on-street parking in areas with high pedestrian use such as downtown shopping districts and central business districts. Curb extensions may be designed in conjunction with bus stops to facilitate bus operations and passenger access.
 - Bus Pads: Very concentrated loads, coupled with the dynamic nature of braking, places high demands on the pavement at bus stops. Some curbside stop areas may require strengthened pavement sections.

Park-and-Ride facilities provide parking for people who wish to transfer from their personal vehicle to public transportation or carpools/vanpools. The manual provides guidance on siting and designing park-and-ride facilities.

Chapter 13 includes specific design features and dimensions for bus facilities on state highways.

Portland-Astoria (US 30) Corridor Plan (November 1999)

The Portland–Astoria (US 30) Corridor Plan is the product of a cooperative effort between ODOT, local and regional governments, interest groups, statewide agency and stakeholder committees, and the general public to develop a long-term program for management of and improvements to the Portland-Astoria Corridor. Elements of the plan were incorporated into local transportation system plans.

- Corridor Plan Objectives for bicycles:
 - A.10: Provide bicycle lanes in urban areas and, at a minimum, provide five-foot shoulders to accommodate bicycle use along the entire corridor length.
 - A.11: Maintain US 30 as a bicycle route, with connections to local bicycle and hiking systems where feasible.
 - A.12: Provide bicycle crossings across Highway 30 where appropriate and feasible.

- A.13: Improve bicycle access to the St. Johns and Lewis and Clark bridges.
- A.14: Incorporate adequate bikeways into the Astoria Truck Route and Fern Hill–John Day River Bridge projects and enhance bicycle access into Astoria along the existing Highway 30 corridor.
- A.15: Develop abandoned railroad corridors into bike/pedestrian corridors and investigate opportunities for co-use of active corridors.
- A.16: Where feasible, develop remaining sections of the Old Highway 30 alignment into bicycle routes.
- A.18: Emphasize shoulder maintenance (surfacing, cleaning, vegetation removal), particularly in the peak summer cycling months.
- A.19: Accommodate bicycles on rural transit lines (when developed).
- Corridor Plan Objectives for pedestrians:
 - A.20: In urban areas, at a minimum, provide six-foot sidewalks on both sides of the highway, and provide convenient and safe pedestrian crossings.
 - A.21: Where feasible, provide separation between pedestrians and autos through access management and landscaping
 - A.22: Provide adequate pedestrian warning signs in rural centers.
- Corridor Plan Objectives for transit services:
 - Service Improvements
 - A.23: Work with public and/or private contractors to provide transit services to serve increasing numbers of commuters and other riders between St. Helens and Portland.
 - A.24: Investigate expansion of Kelso/Longview transit service into Rainier/St. Helens.
 - A.25: Ensure ongoing intercity bus service between Astoria and Portland.
 - A.26: Encourage transit services, carpooling and/or vanpooling to transit centers and large employment centers.
 - Facility Improvements
 - A.27: Develop “Park and Ride” and “Park and Pool” lots
 - A.28: Provide enhanced security and comfort, i.e., covered waiting areas, at transit stops and park and ride locations.

- A.29: Ensure adequate services for the transportation disadvantaged in the Corridor.
- Improve pedestrian access to transit stops with sidewalks, street crossings and safer intersection design.

US 30 Corridor Transit Feasibility Study (November 1996)

This study assessed the feasibility of transit services between Portland and St. Helens both in the present and in the future.

- To determine transit feasibility, this study included the following:
 - Assessment of traffic conditions on US 30;
 - Summary of community input through a questionnaire mailed to over 2,000 people on the US 30 mailing list;
 - Information about existing service in the area;
 - Information about similar services in the Northwest and California, including C-Tran (Battle Ground/Yacolt to Vancouver), Pierce Transit (Buckley/Enumclaw to Tacoma), El Dorado (Placerville to Sacramento), Placer County Transit (Auburn to Sacramento), Mason County Transit (Shelton to Olympia), and Gray's Harbor Transit (Westport, Hoquiam, and Aberdeen to Olympia).
 - Assessment of travel patterns and attitudes about the use of alternative modes through a random telephone survey of over 300 people in the Scappoose and St. Helens area who commute toward Portland on US 30 at least three times a week;
 - Development of a service model consisting of fixed-route bus and vanpool service, based on the information gathered from the telephone survey about travel patterns and desirable characteristics of alternative modes; and
 - Evaluation of this model based on demand and cost.
- Based on the results of this feasibility analysis, the study made the following key recommendations:
 - Develop a regional vanpool program to serve commuters.
 - Support and strengthen the general fixed-route service from Columbia City to Portland.

REGIONAL AND COUNTY DOCUMENTS

Columbia County Comprehensive Plan (August 1984)

The Columbia County Comprehensive Plan was completed in year 1984 and updated in 2001. This Comprehensive Plan describes the County's goals and policies related to development and conservation of the County's resources, public facilities and services. This plan, adopted by the Board of Commissioners, is intended as an all-inclusive plan for Columbia County. The Plan includes information about transit, pedestrian, and bicycle transportation in its transportation section, summarized here.

- Bus
 - Companies and organizations providing bus services at the time included Greyhound, Jenson Transportation of St. Helens, and Colco Transportation.
- Bicycle and Pedestrian Transportation
 - The County currently has two bike paths. One runs along Old Portland Road in St. Helens and the other is in Columbia City. Another path has been discussed, which would link St. Helens with Columbia City.
 - The majority of inter-city bicycling is recreational travel.
 - Pedestrian travel is primarily limited to areas inside cities and rural neighborhoods.
 - Pedestrian travel is unlikely to serve a large portion of the County's overall intercity travel demand.
- Transportation Objective
 - 1. To utilize the various modes of transportation that are available in the county to provide services for the residents.
- Transportation Policies
 - 10. The County will study proposals, when presented, to develop modes of transportation as an alternative to the automobile. If these proposals prove to be feasible, the County will work to implement them.
 - 11. Columbia County will continue to support the efforts of COLCO Transportation to supply public transit to the citizens of the County.
 - 12. Special attention will be given to the needs of the handicapped whenever the County considers a proposal for the provision of public transit.

Columbia County Transportation System Plan (June 1998)

The Columbia County Transportation System Plan (TSP) provides the framework to guide development of the transportation system in the rural areas of Columbia County. All modes of transportation are considered in this TSP.

Existing Needs of the Transportation System

■ Bicycles

- The narrow shoulder on some county roads restricts bicycling opportunities. The TSP suggests that wider shoulders or the provision of bike lanes be considered on several facilities including:
 - Old Portland Road from US 30 and Scappoose
 - Old Highway 30 west of Rainier

■ Pedestrian

- The need for wide shoulders and/or sidewalks is identified along roadways located in areas between existing city limits and urban growth boundaries, to provide greater pedestrian safety and to encourage walking.

■ Transit

- Commuting by bus or carpool has the potential to increase if adequate services and facilities are provided.
- Columbia County had no official park-and-ride lots; however, informal park-and-ride activity was observed along US 30 corridor, south of Scappoose, and west of Rainier.
- Designated park-and-ride lots are proposed along the US 30 corridor. The most desirable locations for park-and-ride lots are Wonderly Road at US 30 and south of Scappoose near the county line.

Future Conditions and Transportation Alternatives

■ Pedestrian and Bicycle Movement

- Improved facilities could lead to increased usage both for utilitarian and recreational trips.

■ Transit

- The experiences of Colco Transportation with fixed route services in the mid-1990s indicated low transit demand in rural areas and cities along Highway 30 corridor.

- For commute travel, ridesharing and vanpools could prove best-suited for Portland and Washington County destinations.

Future Transportation Demand

■ Bicycles and Pedestrians

- Projects to widen shoulders or add bike lanes will improve the attractiveness and safety of these modes.

■ Transit/Transportation Demand Management

- The most important priority of future transit and TDM needs is to establish park-and-ride lots along the US 30 corridor, which would be served by new express bus service. Future park-and-ride lots should be located at:
 - Multnomah/Columbia county line
 - Highway 47 south of Vernonia
 - Highway 30 near Wonderly Road

Transportation System Plan Recommendations

■ Transit Plan

- Transit planning should coordinate with the Transportation Demand Management program that manages corridor capacity.
- Develop various park-and-ride locations in the county to support the formation of carpools and convenience of transit alternatives.
- Colco Transportation should routinely plan for expanded transit services.
- Restoration of transit service must await additional funding and increased demand.

■ Pedestrian and Bicycle Plan

- The Pedestrian and Bicycle Plan provides for improved facilities in the Highway 30 corridor and selected county roads.
- The Highway 30 improvements support the Portland to the coast bike route designation by providing connectivity among the county and the cities.

Columbia County Road Standards (August 1996)

This document specifies requirements and provides standard drawings of sidewalks. However, there is no information specific to the transit or bicycle modes in this document.

Columbia County Transportation Coordinated Human Services Public Transportation Plan "Coordinated Plan" (September 2007)

The Coordinated Plan aims to improve transportation services for individuals with disabilities, seniors, and lower incomes ("special needs populations"). The Plan includes the following key elements:

- An evaluation of Columbia County transportation resources available to special needs populations.
- A summary of the results of a survey of special needs populations:
 - Seniors and low-income residents seem to have more transportation options than the disabled.
 - There is a need to have increased transportation services available for all special needs populations.
 - Recommendations for improved public transportation in Columbia County for these populations include: an increase in the number of routes outside the county; more routes within each city; establishment of intracity routes and routes between cities; additional pick-up times; additional stops; and extended hours-evenings and weekends.
 - An additional barrier to use of public transit among the special needs population is lack of top-of-mind awareness of the existing Columbia County rider system-fixed routes and the ability to call for a ride.
- Personal interviews were conducted with agencies and entities serving special needs populations. The Plan summarizes the key points from these interviews. Agencies serving these populations strongly advocate for increased transportation services for these Columbia County residents.
- Current coordination activities addressing gaps and improved efficiency in service delivery are discussed in the Plan. The Plan also lists strategies from Regional Stakeholder Meetings, Transit Advisory/Stakeholder Meetings, and surveys with special needs residents and agency services providers:
 - More frequent service, more local transportation loops, more stops.
 - Weekend and evening service.
 - Expanded demand responsive service (e.g., an additional driver in Rainier/Clatskanie).
 - Added buses for the increasing volume of workers using Columbia County Rider would allow the buses to be used for demand response service during the middle of the day for special needs populations.
 - An analysis of current Dial-a-Ride service (origin/destination).

- Projections of the aging population and corresponding demands on public transportation: people going into Portland for drug treatment programs, seniors and medical services.
 - Increased marketing to special needs populations.
 - Connections with the Veterans van from Clatsop County.
 - Emergency evacuation procedures for transportation disadvantaged populations.
 - More and better coordination with cabs.
 - Add Community Action Team and the senior centers to fixed route schedules.
- The Plan further explores the relative priorities of the strategies and lists FY 07/09 Discretionary Grant priorities for the targeted populations.
 - Finally, the Plan discusses the areas with opportunities for future partnering and collaboration between relevant organizations/entities.

Columbia County Countywide Community Transit Plan (February 2004)

This plan was developed by Columbia County in 2004 to develop a program to use resources as efficiently as possible and meet various needs throughout the County as well as possible with limited resources.

- Existing Conditions
 - Existing Service: Until June 2003, the Columbia County Council of Senior Citizens, Inc. provided general public transportation in the County under the name COLCO Transportation. They provided public dial-a-ride service throughout the County with buses stationed in Scappoose, St. Helens, Rainier, Vernonia and Clatskanie. COLCO ceased its service in 2003 after ODOT discontinued providing state and federal funding for the service because COLCO was not meeting federal and state requirements. Columbia County issued a Request for Proposals for an interim provider of public transit services and contracted with Metro West Ambulance, Inc. to provide fixed-route and Demand-Response services between St. Helens and Portland and service in Clatskanie, Rainier and Vernonia. It contracted with Scappoose Senior Citizens, Inc., for service in St. Helens and Scappoose.
 - Other transportation service providers in the County include:
 - St. Helens Taxi and Shuttle provides rides with a fleet of 7 vehicles, one of which has a lift.
 - First Student and Curls Transportation are the school transportation providers in the County.

- Riders Only has one car that it uses primarily to provide Medicaid trips through NW Ride Center, which brokers Medicaid ride services in Columbia County. It operates in Rainier and Clatskanie.
- Riverside Training Center has a fleet of 11 vehicles that it uses to transport its clients from group homes to worksites and other activities.

■ Survey, Community Meetings, and Stakeholder Interviews

- Survey: A survey was conducted to gain insights about the transportation needs of Columbia County residents. Because of limited resources, the County was unable to conduct a telephone survey that would yield a random sample. Instead, copies of the survey were distributed to the senior centers in each of the five cities in the County, to RSVP, to COLCO, to the libraries and city halls in each city, to the St. Helens Human Services offices, and to the Community Action Team (CAT) and religious organizations in each city. The survey was also available on-line through the County's website. The results of this survey do not necessarily reflect the opinions of the community as a whole. The survey asked questions about travel patterns, difficulties traveling within and out of the County, and the types of services needed.
- Community Meeting: The County sponsored six community meetings, including one for parents of children who used COLCO to get to daycare and/or school. These meetings were held in Rainier, St. Helens, Scappoose, Clatskanie, and Vernonia. The forums were used to obtain in-depth perspectives from the community to see if the data reflected their local mobility needs.
- Stakeholder Interviews: Interviews were conducted with caseworkers, senior and disabled advocates, local businesses, policy makers and elected officials, transportation providers and low-income advocates and programs. The stakeholders were asked about problems in meeting transportation needs, potential opportunities, barriers to coordination, informal networks, and suggested solutions. The interviews took place before COLCO ceased providing service in Columbia County. Therefore, most of the comments focused on concerns about COLCO and may or may not still be relevant.
- The major observations from these community involvement efforts were:
 - Over 50 percent of the people who responded to the survey said they had missed activities because of a lack of transportation. The most frequently identified activity in all five communities was shopping. A significant number also mentioned missed medical appointments.
 - When asked to choose the one most needed additional transportation service, the single most frequently selected option was more general public transportation (37 percent of respondents); however 24 percent identified commuter service to Portland and 13 percent chose more frequent trips to Portland. The implied difference between these two choices is frequency and scheduling of trips.

- Many potential riders do not know about the service or have been unable to get rides and have stopped requesting them.
- Transportation services must meet the needs of several groups, including not only those who need to get to medical appointments, shopping or personal business, but those who need to commute regularly to Portland or Longview/Kelso for work or school.
- Except for those who wanted to use the service daily, most COLCO riders did not think the fare was too high.

■ Goals

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

■ Organizational Structure and Governance

- Until May 2003, transit services were provided through COLCO Transportation, a service of the Columbia County Council of Senior Citizens, Inc. The County contracted with the council to provide this service and funneled state and federal funding to it for the provision of the service. With ODOT's decision to withdraw funds from the COLCO service, Columbia County needed to determine the best approach for the organization and governance of transit services. Governance and organizational options included:
 - County oversees service but contracts out administration and service provision.
 - County establishes a quasi-public organization and passes funds through to it to contract with providers.
 - County oversees, administers, and provides transit services.
 - County passes through funds to a non-profit or other public entity to provide service.
 - Establish a transportation district, with district boundaries set to reflect service areas.
- The first two options were viewed as being the most feasible. Both would require the County to appoint a transit advisory or oversight committee/board. The Plan recommended that it consist of the following:
 - Representative(s) of senior citizen centers

- Representative of a senior advocacy group
- Senior citizen user of transit
- Representative of disability advocacy or support group
- Representative of county social service agency (case worker for example)
- Disabled citizen user of transit
- Appointed representatives of Vernonia, Scappoose, St. Helens, Clatskanie, Rainier
- Representative from Community Action Team
- Representative from a community organization such as Turning Point Food Shelf
- Non disabled/elderly user of transit
- The Plan recommended that the committee should meet at least bi-monthly. It would advise the Columbia County Board of Commissioners on funding applications, complaints and requests for service, changes in service, and other issues related to the provision of transit service. This advisory committee could also fill the role of the Special Transportation Fund (STF) Local Advisory Committee, whose role it is to advise and assist the governing body in carrying out the purposes of the STF.

■ Service Improvements

- Columbia County must develop ways to improve efficiency while meeting the needs of all types of riders. This section of the Plan identified necessary service improvements as well as methods to improve efficiency.
 - Ideally each community should receive 10 to 11 hours of service a day from about 7 AM to 6 PM so that commuters can use this service. At the time, the County did not have the funding to offer this level of service. Therefore, it should seek additional funding to expand the number of hours of service it can provide.
 - Columbia County should coordinate service in Clatskanie/Rainier and Scappoose/St Helens through the use of a technique called zone routing during the time that these communities do not have high demands of transit. A zone or flex route is a hybrid of a fixed route and a demand-response service.
 - In the Clatskanie/Rainier area, there should be three daily round trips—morning, midday and afternoon—to Longview/Kelso. These trips should originate and end in Clatskanie, drop off and pick up riders in Rainier, and then travel on to Longview.
 - Columbia County may find ways to share services between St. Helens and Scappoose in the same way.

- The Portland-St. Helens route should be used whenever possible for riders going into the Portland area. The transit service can provide feeder transit services to the fixed route. At a minimum, the Portland service will offer an early morning, midday and late afternoon service that travelers can use.
- To maximize the amount of service that can be provided in Vernonia, the only service going into the greater Portland metro area should be to Hillsboro.
- The Columbia County transit service should make an effort to put Medicaid riders on existing service and should not make special trips outside of the county. The provider may still use a County-owned vehicle, but the ride will be paid for by the NW Ride Center and will be beyond the contract between the provider and the County.

■ Coordination with Other Services and Programs

- Columbia County should coordinate and share resources where possible with other providers (e.g., churches, veterans van, assisted living facilities) and programs:
 - The County may also need to work with parents of children who need to get to daycare or school and do not have access to school bus transportation.
 - Some parents voiced concerns about unsafe intersections along the routes to school. The City Public Works and Police departments are valuable partners in designing safe routes to school. In addition, stationing a volunteer crossing guard at these particular intersections assists in the level of safety around schools.
 - Columbia County should work with programs, including the Scappoose Senior Center and other service organizations that have volunteer drivers, to expand availability of service. It should also explore opportunities to set up vanpool or carpool programs.
 - Columbia County transit services should also work with private for profit providers such as St. Helens Taxi, especially for services the county cannot provide.

■ ADA Issues

- It was recommended that the Portland service deviate within $\frac{3}{4}$ mile in either direction of its route within Columbia County to pick up people whose disabilities make it impossible for them to get to the bus stops.

■ Increase Number and Diversity of Ridership

- The new County service should implement fare decreases and a comprehensive marketing program to bring riders back and attract new ones.
 - The plan recommended a simplified, less costly fare structure.
 - A marketing campaign to educate and attract riders to the service is essential.

CITY AND LOCAL JURISDICTION PLANS

Rainier Comprehensive Plan (2003)

- Goal 2: Land Use Planning: To establish a land use planning process and policy framework as a basis for all decisions and actions related to the use of land, and to assure an adequate factual basis for such decisions and actions.
 - Policies:
 - Central Business District (CBD): allows mixed uses including a limited range of attached housing, retail, service and office commercial, and public recreational uses in a well-designed, pedestrian-oriented manner so as to promote a vital downtown Rainier.

- Goal 8: Recreational Needs: To satisfy the recreational needs of the citizens of the State and visitors.
 - Policies:
 - 1. 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.

- Goal 12: Transportation: To provide and encourage a safe, convenient, and economic transportation system.
 - Policies:
 - 1. The City will coordinate with the Oregon Department of Transportation (ODOT) on the Highway 30 Corridor Study. In particular, the City will advocate consideration of the following local issues as part of the larger corridor study:
 - a. Need for improved pedestrian access along and across US 30 in Rainier.
 - 10. The City will support efforts to increase the availability of public transit to the residents of Rainier. This may include the extension of bus service to Rainier from Longview.
 - 11. The City will implement the TSP to achieve a multi-modal transportation system including highway, rail, water, public transportation, and pedestrian and bicycle facilities. Rainier's varied transportation facilities can be leveraged to attract new development to the community.

- Transportation System Plan Policies
 - B. Policies for Protection of Transportation Facilities

- The City of Rainier wishes to protect future operation of the Highway 30 corridor, including the highway, pedestrian and bikeways and the rail line. The City also seeks to protect existing and planned transportation systems by continuing coordination with other relevant agencies, adhering to the road standards and following the access management policies and other measures contained in the Plan.
- C. Policies for Pedestrian and Bicycle Circulation
 - The City of Rainier wishes to plan and develop a network of streets, accessways, and other improvements, including bikeways, sidewalks, and safe street crossings to promote safe and convenient bicycle and pedestrian circulation within the community. It is the policy of the City to:
 - 7. Give priority to developing pedestrian and bicycle access to major activity centers within the Urban Growth Boundary, such as the downtown, schools, and community centers.
 - 8. Design and construct bikeways and pedestrian access ways to minimize potential conflicts between transportation modes.

City of Rainier Transportation System Plan (September 1997)

The Rainier TSP includes a pedestrian and bicycle mobility plan and a transit plan.

■ Pedestrian Plan

- Provide a safe and attractive environment for walkers, primarily through good sidewalks and pedestrian crossing locations.
- Upgrade and infill sidewalks to include continuous east-west sidewalks along existing and proposed sections of the following streets:
 - A Street,
 - US 30/ B Street,
 - C Street,
 - Dike Road,
 - E Street (part)
 - A new greenway along the Columbia Riverfront will provide a shared-use path, and good connections to downtown

North/south connections will be improved on:

- Rockcrest Street,
- Mill Street,
- W 7th/Fernhill Drive,
- W 4th/DeBast Road,
- E Second Street, and
- E Fifth Street.

■ Bicycle Plan

- Provide bicycle facilities primarily in the east-west direction.
- Focus the bike plan on the facilities on US 30/B Street as part of the Columbia River Highway bikeway.
- Construct Columbia River greenway to provide link along the river's edge between Rockcrest Street and First Street.
- C Street between Fernhill Drive and E Fifth Street will be signed as a bicycle route for traffic accessing the elementary school and middle school.
- A signing program will be considered on any routes that are identified as serving bicycle trips.
- Bicycle Plan elements are outlined below:

On-Street Bike Lanes

- US 30/ B Street from E. City Limit to W. City Limit: 1 section
- Rockcrest Street from A Street to US 30: 2 sections
- Mill Street from Dike Road to US 30: 2 sections

■ Transit Plan

- Improve paratransit service in Rainier.
- Work actively with Columbia County Transit to promote and improve the service connecting Rainier to Tri-Met's route #17 (Sauvie Island).
- Increase the Rainier fleet (Colco paratransit buses) by two or three vehicles in the next twenty years, not including vehicle replacement, to support the growing population.

- Coordinate with the Cowlitz Transit Authority to assess the viability of a regularly scheduled connection between Rainier and Longview/Kelso.
- Focus intercity transit stops on US 30 in the proximity of First Street.

Clatskanie Transportation System Plan (August 1997)

The Clatskanie Transportation System Plan includes a pedestrian and bicycle mobility plan and a transit plan that are pertinent to Columbia County CTP.

■ Pedestrian Plan

- Promote pedestrian travel by providing safe and efficient facilities for the use of residents, in particular connecting the pedestrian trip generators.
 - Upgrade and infill sidewalks along existing sections of US 30.
 - Install a new pedestrian crossing at Belair Drive & US 30 intersection.
 - Build a new pedestrian/bicycle bridge between Highway 47 near the Orchard Street intersection with Belair to avoid pedestrians having to walk to the US 30 intersection.
 - Connect Whispering Woods development with NE 5th Street with a new pedestrian trail to avoid people having to walk along US 30 to travel into town.
- Pedestrian Plan elements are outlined below:

Sidewalks

- US 30 from NW UGB to E UGB: first decade project (ODOT Plan)
- NW/NE 5th Street from NW City limit to E City Limit: first decade project
- Belair Drive from US 30 to Chestnut Street
- Nehalem Street from NW 5th Street to NE 8th Street: first decade project
- Bryant Street from US 30 to SW 7th Street: first decade project
- Tichenor Street from US 30 to W 7th Street: second decade project

Bridges/Trails

- Trail from City street to Whispering Woods: first decade project (to avoid having pedestrians on US 30)

Pedestrian Crossings

- US 30/ Belair Drive: second decade project
- US 30/ Van Street: first decade project

■ Bicycle Plan

- Supplements, rather than replaces, the elements developed in Clatskanie's Bicycle Transportation Plan (March 1995), which are summarized below.
- Put in place a continuous system that links the primary trip generators that is attractive and safe to use.
 - Posted routes
 - On-street bike lanes
 - Separated bicycle trails
- Focus the bicycle plan on east-west streets, including facilities on US 30 as part of the Columbia River Highway bikeway, NE/NW 5th Street, and Nehalem Street.
- Bicycle Plan elements are summarized below:

On-Street Bike Lanes

- US 30 from NW UGB to E UGB: first decade project (ODOT plan)
- NE/NW 5th Street from Beaver Falls Rd to E UGB: first decade project
- Nehalem Street from NW 5th St to Conyers Creek Rd: first decade project
- Belair Drive from US 30 to Chestnut St: first decade project

■ Transit Plan

- Utilize demand-responsive or paratransit in Clatskanie area.
 - Increase two or three vehicles, in addition to replacement of old vehicles, to support the growing population in this area.
 - Support COLCO in investigating coordination of service between Clatskanie, Rainier, and Sauvie Island with a possible Cowlitz Transit Authority connection between Rainier and Longview/Kelso.
 - Develop the terminal for transit service in Clatskanie on North Nehalem Street in the section between US 30 and the Clatskanie River bridge

Scappoose Transportation System Plan (December 1997)

The purpose of this Plan is to provide a community-based multi-modal transportation system that addresses transportation needs to the year 2015 associated with anticipated future growth in the Scappoose urban area. The Plan is intended to serve as a guide for the management of existing transportation facilities, and for the design and implementation of future transportation facilities.

■ Goals and Objectives

- Goal 1: Enhance Transportation User Safety
 - B. Provide safe east-west crossings across Highway 30 for pedestrians and bicyclists.
 - C. Provide safe access to schools located in the proximity of Highway 30, specifically in relation to access by school children using crosswalks across Highway 30.
- Goal 3: Increase the Use of Alternative Travel Modes Through Improved Safety and Service
 - A. Develop a bicycle and pedestrian facility network.
 - B. Provide safe east-west access for pedestrians and bicyclists across Highway 30.
 - C. Provide pedestrian and bicycle access, especially when direct motor vehicle access is not possible.
 - D. Evaluate the need for bike paths, including the Scappoose Creek Greenway.
 - F. Evaluate the need for passenger rail transportation and other mass transit alternatives for travel to Portland and Astoria, for commuting and recreation purposes.
 - G. Identify the need for a carpool/vanpool program for reducing commuter vehicular travel demand along Highway 30 (to Portland).

■ Transportation System Plan

- Bikeway Plan
 - While all streets in the Scappoose urban area should accommodate safe travel by bicyclists, a bikeway network providing a higher level of service for bicyclists should be implemented along all designated arterial and collector streets to encourage bicycle use.
 - Where separate bike lanes are recommended, they should be provided on each side of the road and be five or six feet wide.

- The bikeways on new streets or streets to be improved as part of the street system plan shall be added when the improvements are made.
- Pedestrian Facilities Plan
 - An upgrade of existing facilities and an expansion of the sidewalk system is planned to help bring the mode share for journey-to-work trips above the national average, and also more importantly increase the use of walking for non-work trips.
 - Sidewalks are currently provided along the west side of Highway 30, south of High School Way, and on both sides of Highway 30 north of High School Way.
 - Sidewalks are required on both sides along all streets within the urban growth boundary to meet the requirements set forth in the street design standards. Sidewalks and walkways should be required in new developments in the municipal area and they should be provided in connection with most major street improvement projects.
 - A complete pedestrian system shall be implemented in the city. Every paved street shall have sidewalks on both sides of the roadway meeting the requirements set forth in the street standards.
- Public Transportation Plan
 - COLCO transportation provides demand-responsive bus service for elderly and disadvantaged citizens in the county for travel to Portland, St. Helens, and throughout Scappoose.
 - No inter-city transit service is provided to Scappoose.
 - Without intercity bus service, Scappoose's transportation system does not follow the guidelines of the Oregon Transportation Plan (OTP).
 - It is likely that inter-city transit service along Highway 30 will be re-instituted in the next one or two years. In addition, there may be an increasing need for on-demand transportation services as the area population grows.
- Transportation System Improvements Project List
 - Maple Street, Highway 30 to First Street W: Restripe existing pavement to provide bike lanes
 - Maple Street, Highway 30 to First Street W: Provide curb, gutter, and sidewalks on both sides
 - E.M. Watts Road, Highway 30 to Fourth Street: Widen to 44-foot-wide urban cross section

- High School Drive, Highway 30 to Sixth Street E: Add sidewalks and restripe with bike lanes
- Highway 30 and Williams Street: Provide Pedestrian Island in highway median
- J.P. West Road, Highway 30 to First Street W: Widen to 36-foot-wide urban cross section
- Old Portland Road, UGB to Highway 30: Widen to 44-foot-wide urban cross section
- Walnut Road, Highway 30 to Old Portland Road extension: Restripe existing pavement to provide bike lanes
- Maple Street E, Highway 30 to Fourth Street E: Widen to 36-foot-wide urban cross section
- Columbia Avenue E, Highway 30 to Fourth Street E: Widen to 36-foot-wide urban cross section
- Forest Road, Highway 30 to West Lane Road: Reconstruct as new 44-foot-wide urban cross section
- Williams Street, Highway 30 to First Street W: Construct new 36-foot-wide urban cross section
- Scappoose-Vernonia Highway, Highway 30 to UGB: Widen to 36-foot-wide urban cross section
- West Lane Road, Forest Road to Highway 30: Widen to 44-foot-wide urban cross section
- North Park Drive, Six Street E. to Highway 30

St. Helens Comprehensive Plan (February 2006)

- 19.08.040 Transportation goals and policies.
 - (1) Preface. Transportation is all about moving people, goods and services within a defined geographic area. The city of St. Helens is like many communities which have started with a small area and expanded into areas with county-type roads. Many of our roads are gravel and many are substandard based upon current requirements. Overall the system of roads, bike paths, and pedestrian paths serves the community adequately in most areas. There are some areas lacking in pedestrian paths between new developments and existing developments. Most of the transportation system is addressed in the public facilities plan, and there are general schedules and estimated costs for bringing the transportation facilities into compliance with current standards.

- (2) Goals:
 - (j) To encourage energy-conserving modes of transit.
 - (k) To increase appropriate walking and bicycling opportunities.
- (3) Policies:
 - (j) Develop a plan for walking trails.
 - (k) Maintain, implement, and update the bikeway plan.
 - (m) Encourage increased opportunities for public local and regional transit facilities. (Ord. 2980 § 2, 2006)

St. Helens Transportation System Plan (June 1997)

- Goal: Transportation: Develop a transportation plan to manage future transportation needs and prolong the useful life of the existing transportation system.
 - Objective
 - Improve safety for all modes of transportation
 - Provide safe, accessible, and connected pedestrian and bicycle facilities: including across and along Highway 30 and other collectors and arterials; to and along the waterfront; within neighborhoods; and to other towns.
 - Improve town continuity by providing safe and easy access to and across Highway 30 and railroad crossings for all modes of transportation.
 - Improve public transportation opinions in St. Helens as well as to other areas.
 - Promote alternative modes of travel (such as pedestrian and bicycle) and connections to those modes to reduce vehicle miles of travel.
- Future Transportation Needs
 - Public Transportation Needs: It is not anticipated that the community will need or be able to justify an intra-city fixed-route transit system. Instead, it is likely that COLCO will need to expand operations of its current local dial-a-ride service. There will be a future need for increase intercity public transit between Columbia City/St. Helens and Portland.
 - Bicycle Transportation Needs

- Bicycle networks should be developed and promoted in all urban areas to provide safe, easy, and convenient access to all major employment, shopping, educational, and recreational destinations in a manner that will double person trips by bicycle.
- Secure and convenient bicycle storage available to public should be provided at all major employment and shopping centers, parks and ride lots, passenger terminals and recreational destinations.
- Statewide and regional bicycle systems should be integrated with other transportation systems in urban areas to accommodate commuting and other trips by bicycle.

■ Transportation System Plan

- To encourage more walking, the City must provide a continuous network, provide a safe walking environment, and ensure pedestrian-oriented urban design. This section also discusses proposed pedestrian facility improvements, sidewalk standard and policies, and pedestrian street crossings.
- Bikeway System Plan: The 1989 St. Helens Bikeway Master Plan outlined a number of objectives to guide the City's bicycle system. The plan identifies seven objectives:
 - Complete the bikeway in the Old Town area which will tie in with the existing routes in the downtown area.
 - Provide a safe system of bikeways which will be a showcase for St. Helens.
 - Provide a system of bikeways which will link major community centers with residential areas.
 - Provide bikeways in the residential areas west of Highway 30 that will provide access to schools and parks and eventually tie in with the existing routes on the east side of Highway 30.
 - Provide for maintenance of bicycle facilities.
 - Provide adequate areas for parking bikes for those uses that attract bicycles.
 - Minimize unsafe conflicts between bicycles, pedestrians, and motorized traffic.

This section also outlined the proposed bicycle facility improvement projects and discusses the bicycle standards and policies.

- Public Transportation Plan
 - Intracity Transit: The City should continue to support COLCO's dial-a-ride service in the county, and actively participate and financially support any expansions and added service improvements by COLCO.

- Intercity Transit: A transit feasibility study from 1996 determined there is not enough demand to support a commuter fixed-route bus service from St. Helens and Columbia City all the way into downtown Portland. The study recommends that a “Vanpool Service” be implemented between St. Helens/Columbia City and Portland. It is recommended that this service be expanded to an all-day service, with connections to the St. John’s Transit Center.

■ Transportation System Plan Implementation

- Pedestrian Improvement Projects

First 5 Years

- Gable Road Sidewalks (Highway 30 to Bachelor Flat Road)

Years 11-20

- Pittsburg Road Sidewalks (Highway 30 to Vernonia Road)
- Vernonia Road Sidewalks (Highway 30 to Pittsburg Road)
- Columbia Boulevard Sidewalks (Highway 30 to Sykes Road)
- Millard Road Sidewalks (Highway 30 to Ross Road)
- Gable Road Sidewalks (Old Portland Road to Highway 30)

Tied to Development (no exact time frame)

- Achilles Road Sidewalks (Highway 30 to Millard Road)
- Bicycle Improvement Projects

First 5 Years

- Gable Road Bike Lanes (Highway 30 to Bachelor Flat Road)

Years 11-20

- Pittsburg Road Bike Lanes (Highway 30 to Vernonia Road)
- Vernonia Road Bike Lanes (Highway 30 to Pittsburg Road)
- Columbia Boulevard Bike Lanes (Highway 30 to Sykes Road)
- Millard Road Bike Lanes (Highway 30 to Ross Road)

City of Columbia City Comprehensive Plan (June 2003)

■ II. Inventories of State Goals

- J. Transportation: To provide and encourage a safe, convenient, and economical transportation system.
 - 1. Motorized Transportation: School buses serve the needs of the local school district. COLCO Transportation is a nonprofit corporation operated by the Columbia County Council of Senior Citizens and has provided transportation services since 1969.
 - 2. Bicycle and Pedestrian Transportation: Bicycle and pedestrian transportation are energy-efficient forms of transportation; however, the wide distribution of services and jobs and the distances between the towns are limiting factors. As part of the Highway 30 reconstruction project, a bicycle path was reconstructed adjacent to Highway 30 north of "E" Street and extended to the northern edge of the city. Completion of this project provides a continuous bicycle route along the entire length of the City.

■ III. Goals and Policies

- K. Transportation: The goal of the City is to implement the adopted transportation system plan in order to manage future transportation needs and prolong the useful life of the existing transportation system. The policy of the City for transportation shall be to:
 - 4. Promote activities furthering traffic and pedestrian safety (such as signalized intersections and crosswalks), especially along the Columbia River Highway.

- 8. Continue to support the efforts of COLCO Transportation to supply public transit to the citizens of Columbia City.
- 9. Special attention will be given to the needs of the handicapped and other transportation disadvantaged individuals whenever the City considers a proposal for the provision of public transit.

■ K. Energy Conservation

- 2. Encourage car and van pooling programs
- 3. Promote pedestrian and bicycle transportation within the City.

City of Columbia City Transportation System Plan

■ Goals and Objectives

- Goal: Transportation: Develop a transportation plan to manage future transportation needs and prolong the useful life of the existing transportation system.
- Objectives
 - Improve safety for all modes, especially along the Columbia River Highway.
 - Provide safe, accessible, and connected pedestrian and bicycle facilities including: across and along Highway 30 and other collectors and arterials; to and along the waterfront; within neighborhoods; and to other towns.
 - Improve town continuity by providing safe and easy access to and across Highway 30 and railroad crossings for all modes of travel.
 - Promote alternative modes of travel (such as bicycle and pedestrian) and connections to these modes to reduce vehicle miles of travel.

■ Future Transportation Conditions and Needs

- Public Transportation Needs: It is not anticipated that the community will need or be able to justify an intra-city fixed-route transit system. Instead, it is likely that COLCO will need to expand operations of its current local dial-a-ride service. There will be a future need for increase intercity public transit between Columbia City/St. Helens and Portland.
- Bicycle Transportation Needs:
 - Columbia City currently has one designated bicycle route. The route connects the Rutherford Road Parkway to bicycle lanes along Highway 30.

- As part of the Highway 30 reconstruction project, a separate bicycle route is being developed adjacent to Highway 30 north of "E" Street.
- Residential growth west of Highway 30 will create more automobile traffic and increase the demand for designated safe bicycle routes.
- Secure and convenient parking is needed to make bicycle travel a viable transportation alternative.
- Pedestrian Transportation Needs: The Oregon Transportation Plan (OTP) identifies a set of principles and policies for pedestrian travel similar to those for bicycle travel. The principles generally state that urban areas should provide safe pedestrian facilities that provide for connectivity and convenient access to all major destinations.

■ Transportation System Plan

- Pedestrian System Plan: The City must emphasize walking as a major means of travel.
 - Pedestrian Facility Improvement: The Pedestrian Plan recommends a continuous sidewalk system in good repair that connects neighborhoods with schools, parks, community centers, and the waterfront.
 - Sidewalk Standards and Policies: To enable a connected and complete pedestrian system, sidewalks must be considered at inception of transportation projects and incorporated into the total design.
 - Pedestrian Facility Improvement projects are listed below:

Sidewalks

- "I" Street from Highway 30 to Second Street (both sides)
- "E" Street from Highway 30 to The Strand (north side only)
- "E" Street from Sixth Street to Highway 30 (both sides)
- "A" Street (Both Sides, to be completed as part of the road reconstruction project)
- Pacific Street (North Side Only, to be completed as part of the road reconstruction project)
- Pedestrian Path from Sixth St/"K" St Intersection to sidewalk on Hwy 30
- Bikeway System Plan: The purpose of the Bikeway System Plan is to develop a continuous, safe, and interconnected network of bicycle routes throughout Columbia City. The plan calls for keeping the current designated bicycle route on the east side, from Rutherford Road Parkway to the Highway 30/"E" Street intersection along existing City streets.

- Bicycle Facility Improvements: The bicycle plan recommends several improvements to the City's bicycle networks and system.
 - New bicycle trail connecting the Highway 30 trail to Sixth Street.
- Public Transportation Plan
 - Intracity Transit: The City of Columbia City should continue to support COLCO's dial-a-ride service throughout Columbia County.
 - Intercity Transit: A recent transit feasibility study has determined there is not enough demand to support a commuter fixed-route bus service from St. Helens and Columbia City all the way into downtown Portland. The study recommends that a "Vanpool Service" be implemented between St. Helens/Columbia City and Portland. It is recommended that this service be expanded to an all-day service, with connections to the St. John's Transit Center.

City of Vernonia Transportation System Plan (July 1999)

■ Future Conditions

- Public Transportation Services
 - Currently, transit service is provided on demand to Vernonia residents by Colco Transportation.
 - For the planning horizon, the dial-a-ride van service will serve rural transit demands effectively and economically.
 - The City of Vernonia will work with Columbia County to set up vanpools and rideshare matching services for commuter travel.
 - The County reports that the establishment of formal park-and-ride lots is an important priority.
 - One of the three future park-and-ride lot locations sited by Columbia County is on Highway 47 south of Vernonia.

■ Transportation System Plan

• Bicycle System Plan

This TSP identifies several bicycle system improvements:

- The first major improvement is the development of street design standards and recommended upgrades throughout the study area.
- An alternate was developed for the congested downtown area by providing a bikeway one block south of the highway.
- Maple Street, which runs parallel to and south of Bridge Street, will be designated bike route through the downtown area.
- Identify safety hazards and alleviate them to encourage bicycling.

• Pedestrian System Plan

The City of Vernonia recently completed a Downtown Revitalization Plan. The pedestrian improvements include:

- Intersection crossing improvements
 - Curb extensions at intersections to shorten crossing distances and improve visibility
 - Well-defined crosswalks
- Improvements to the pedestrian environment
 - Continuous street trees spaced at consistent intervals
 - Flowering trees at intersections
 - Sidewalk and furniture zones that create separation from each other
 - Ornamental lighting
 - Improved street furnishings
 - Improved gathering spaces
- Traffic management
 - Curb extensions that define parking zones and provide traffic calming.

- Public Transit System Plan
 - It is recommended that the City support and encourage this service in any manner it can, as it is the only service available to the transportation disadvantaged. No additional service is recommended.
 - It is recommended that the City of Vernonia work with Columbia County in setting up vanpools and rideshare matching services for commuter travel.
 - One of the three future park-and-ride lot locations sited by Columbia County is on Highway 47 south of Vernonia. When this lot is operational, the City should assess the demand for a peak hour fixed route bus service through the City to the park and ride lot.