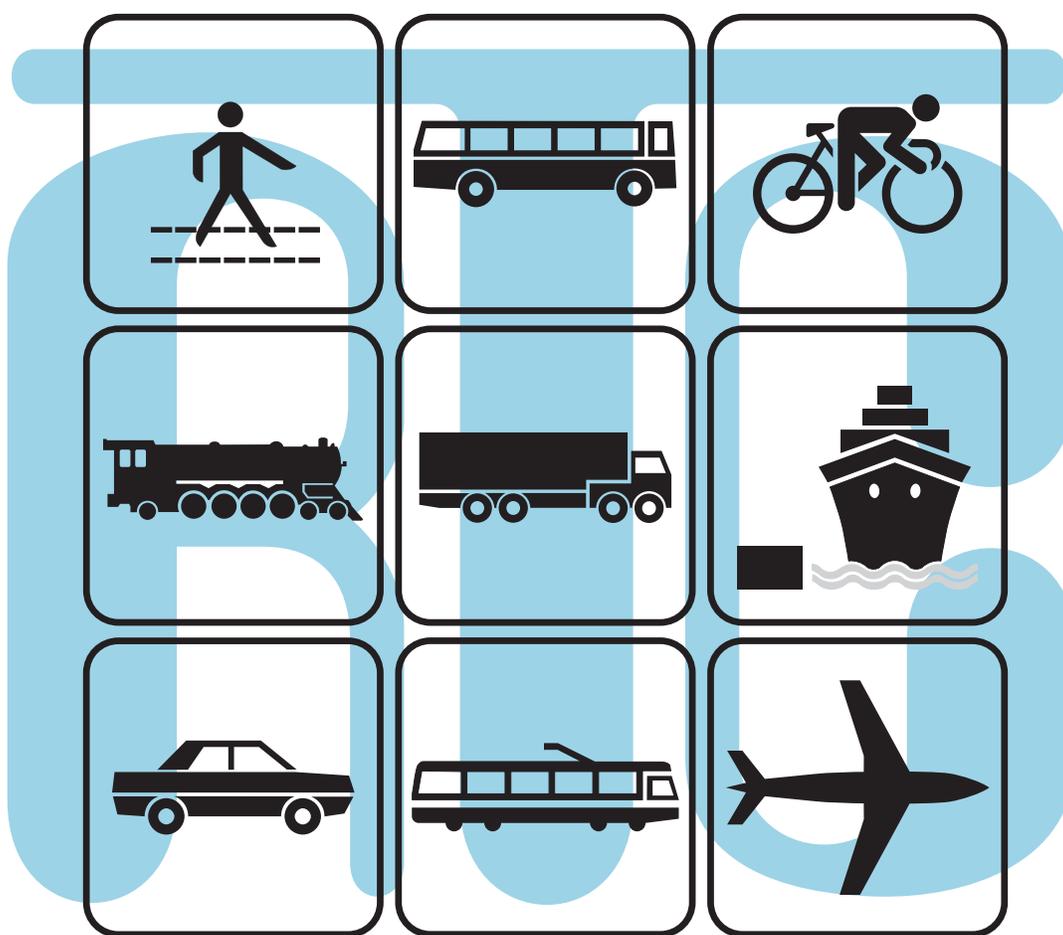


# Metropolitan Transportation Plan for Clark County



**Updated: December 2007**

**Amended: July 2008**

**Southwest Washington Regional Transportation Council**

## CHAPTER 5

# SYSTEM IMPROVEMENT AND STRATEGY PLAN

### OVERVIEW: DEVELOPMENT OF A BALANCED REGIONAL TRANSPORTATION SYSTEM

This chapter summarizes the solutions and strategies needed to provide an adequate level of regional mobility and accessibility over the next 20 plus years and to support the Comprehensive Growth Management Plan land use goals for the region. A wide range of solutions and strategies are needed to meet regional travel demand. There are strategies to address the travel demand side as well as transportation system supply side, strategies to increase the efficiency of the existing regional transportation system as well as strategies to provide for capacity expansion to accommodate growth, solutions requiring physical construction and solutions requiring planning applications with consideration for multiple transportation modes. In developing a balanced regional transportation system it is not only capacity deficiencies that must be addressed but also preservation and maintenance of the existing regional transportation system, as well as plans to make for a safer regional transportation system for mobility of people and freight. All transportation modes are to be addressed. Development of a balanced regional transportation system with reduced dependence on the single occupant vehicle (SOV) relies on development of alternative modes of transportation, transit and non-motorized modes, changed land use densities and patterns and/or changes in lifestyle. The chapter concludes with a map showing transportation system capacity expansion improvements included in the fiscally constrained MTP.

### MAINTENANCE OF THE EXISTING REGIONAL TRANSPORTATION SYSTEM

Of prime importance in the planning for the regional transportation system is the need to maintain the existing system. Maintenance addresses the day-to-day activities needed to keep the transportation system in good working order; daily operations that keep the system safe, clean, reliable and efficient. Such activities include incident response, filling potholes, repairing bridges, drainage ditches, guardrails, plowing snow, removing rocks, and efficiently operating traffic signals. The Washington State Department of Transportation (WSDOT) and local jurisdictions monitor the condition and operation of the existing system and program projects to maintain the system. The *MTP* supports the routine, regularly-scheduled and necessary maintenance work identified by local jurisdictions. The MTP supports maintenance being given high priority in the programming of transportation funds.

Maintenance, preservation and safety are primary policy considerations in the Washington Transportation Plan (WTP) published by WSDOT in November 2006. The issues are also addressed in WSDOT's Highway System Plan 2007-2026. Both documents can be reviewed at WSDOT's website: [www.wsdot.wa.gov](http://www.wsdot.wa.gov)

### PRESERVATION OF THE EXISTING REGIONAL TRANSPORTATION SYSTEM

Preservation of the existing regional transportation system is also important to protect the heavy investments already made in the system. Preservation can prolong the life of the existing transportation system through such projects as repaving roads, rehabilitating bridges, seismic retrofit and rock fall protection. Preservation needs are identified through the Pavement Management System (PMS) and local needs analysis and the MTP is highly supportive of giving prime consideration to such project needs.

## **BRIDGES**

Bridge maintenance and preservation needs are identified through the Washington State Bridge Inventory System (WSBIS). WSDOT's Highway System Plan, 2007-2026, address bridges and structure. Bridges on the Clark County highway system include: I-5 bridge crossings of the Columbia River, Salmon Creek, NE 129th Street, NE 134<sup>th</sup> Street, East Fork Lewis River and Lewis River; SR-14 crossings at West Camas Slough and Lawton Creek; SR-501 crossing of the rail lines in Vancouver, SR-503 crossings of Cedar Creek, Salmon Creek, Chelatchie Creek and the Lewis River at Yale; the La Center Bridge and Heisson Bridge. Bridge needs can include deck preservation, steel bridge painting, seismic retrofits, movable bridge repair, and scour protection. The I-5 Columbia River Crossing Project's (CRC's) Locally Preferred Alternative (LPA) includes a replacement Interstate-5 bridge.

## **SAFETY**

Accidents, their number, location, and type, are monitored by WSDOT and local jurisdictions and if there is deemed to be a safety deficiency then remedial measures are considered and corrective action taken. The MTP supports regional system safety projects identified through Safety Management System (SMS) planning and local plans and programs to correct safety deficiencies on the regional transportation system. In November 2007, the RTC Board supported the construction of roundabouts on SR-14 through Washougal as a short-term solution to intersection safety and capacity issues rather than invest in upgrading the existing signalized intersections at 15th Street and 32nd Street. The long-term transportation solution will be to construct grade-separated interchanges. The WSDOT "Strategic Highway Safety Plan: Target Zero" (SHSP; revised February 2007) was developed to identify Washington State's traffic safety needs and to guide investment decisions in order to achieve significant reductions in traffic fatalities and disabling injuries. WSDOT has identified both crossover accidents and run off the road accidents as two safety areas to focus on.

In March 2007, the Washington State Department of Licensing convened the At Risk Driver's Task Force to provide recommendations on how to reduce fatalities and serious injury collisions from drivers determined to be "at risk." The Task Force focused on three areas: 1) Young and aggressive drivers, 2) Elderly and medically impaired drivers, and 3) Drug impaired drivers. The Task Force published its final report in October 2007.

Measures to improve the safety and security of the transit system for transit passengers and employees will continue to be implemented by C-TRAN in keeping with guidance from the Federal Transit Administration.

## **ECONOMIC DEVELOPMENT AND FREIGHT TRANSPORTATION**

Economic development is linked to the market conditions, policies as well as provision of infrastructure to support development. Therefore, the prosperity of a region is somewhat dependent on the provision of transportation infrastructure to support its economic development. In RTC Board discussion, economic development emerged as a prime evaluation criteria for prioritizing MTP projects. Economic development is also a significant focus of the updated Comprehensive Growth Management Plan for Clark County (September 2007).

## FREIGHT TRANSPORTATION

At the statewide level, freight transportation is recognized as a vital component for Washington's economic health. The Washington's Transportation Plan addresses (WTP; November 2006) addressed freight transportation and speaks of three components to the freight transportation system: 1) international gateways, 2) transportation serving Washington's producers and manufacturers, and 3) the retail and wholesale distribution systems. Freight transportation underpins our national and state economies, supports national defense, directly sustains hundreds of thousands of jobs, and distributes the necessities of life to every resident of the state everyday. Washington is a gateway state, connecting: 1) Asian trade flows to the U.S. economy, 2) Alaska to the Lower 48, and 3) Canada to the U.S. West Coast. About 70 percent of international goods entering Washington gateways continue on to the larger U.S. market. 30 percent become part of Washington's manufactured output or are distributed in our retail system. Washington state's manufacturers and farmers rely on the freight system and Washington producers generate wealth and jobs in every region of the state. Washington's distribution system is also a fundamental local utility, since without it citizens would have nothing to eat, wear, or read, no spare parts, no fuel for cars, and no heat for homes. Without freight transportation, the economy of the region would no longer function. What is known is that the value and volume of goods moving in these freight systems is huge and is growing. More information on freight transportation in Washington state can be found at WSDOT's website at: <http://www.wsdot.wa.gov/planning/wtp/documents/Freight.htm>

WSDOT adopted a Statewide Freight and Goods Transportation System (FGTS) in 1995 that categorizes highways and local roads according to the tonnage of freight they carry. The FGTS is updated periodically. Washington State also created the Freight Mobility Strategic Investment Board (FMSIB) with a mission to create a comprehensive and coordinated state program to facilitate freight movement between and among local, national and international markets in order to enhance trade opportunities. The Board is also charged with finding solutions that lessen the impact of the movement of freight on local communities. The Board proposes policies, projects, corridors and funding to the legislature to promote strategic investments in a statewide freight mobility transportation system.

At the local level, Clark County's economy is integrally linked with that of the larger Vancouver/Portland metropolitan area. The Vancouver/Portland metro region is connected by two bridges over the Columbia River on I-5 and I-205. Recognizing the importance of freight transportation to this region's economy, RTC, WSDOT and the Port of Vancouver have participated in recent Bi-state regional freight transportation planning efforts. The "Portland and Vancouver International and Domestic Trade Capacity Analysis" (Port of Portland et al) was published in 2006 to determine the impact of increased international and domestic trade on the region's supply of and demand for trade support infrastructure, including surface transportation. The report addresses 1) the overall growth rate for the region's freight volumes to 2035, 2) assesses global market dynamics that may affect trade volumes through Portland/Vancouver gateways, and 3) identifies challenges and opportunities trade volume growth presents to the region. Significantly, the report forecasts a doubling of trade volume in the region by 2035. The Study can be referenced at the following website address: [http://www.flypdx.com/PDFPOP/Trade\\_Trans\\_Studies\\_TrCap\\_Exec\\_Smry.pdf](http://www.flypdx.com/PDFPOP/Trade_Trans_Studies_TrCap_Exec_Smry.pdf)

In 2006 to 2007, WSDOT, RTC and Port of Vancouver staff has also participated in the Regional Freight and Goods Movement Task Force convened by Metro to address regional freight transportation system needs.

As reported in Chapter 3 (pages 3-17 to 3-18), there are three Port districts in Clark County; the Port of Vancouver, Port of Ridgefield and Port of Camas/Washougal. The Ports help the region to achieve jobs' growth and have a significant interest in freight transportation.

## **FREIGHT RAIL**

In Washington State, freight rail needs were recently addressed in the Washington State Transportation Commission study, "Statewide Rail Capacity and System Needs Study" (December 2006). The Study notes that the economic vitality of Washington State requires a robust rail system capable of providing businesses, ports, and farms with competitive access to North American and overseas international markets. However, the rail system is nearing capacity and pressure on the rail system will increase as the state economy grows. The total freight tonnage moved over the Washington State rail system is expected to increase by about 60% between 2005 and 2025. The Study recommends policies, procedures and approaches to governance and management of the State's rail programs and assets that will help the State make effective and responsible improvements to the rail system. The State's role is shaped by the fact that nearly all freight railroads are privately owned for profit companies. While the major freight railroads are investing to add capacity and improve service in Washington State, their business practices and investment priorities are driven primarily by the railroads' national-level needs and competition.

Earlier, in 1990 the Washington State Legislature had defined the purpose of the state's freight rail program and planning activities. WSDOT was directed to maintain and improve the freight rail system in the state through better freight rail planning, better cooperation to preserve rail lines, and increased financial assistance from the state. In 1995 the Legislature had broadened the focus of the WSDOT Freight Rail Program to include not only light density lines and rail corridor preservation, but also mainline congestion and port access. The *Washington State Freight Rail Plan* provided detailed information about the state rail system, state freight rail programs and projects, rail line analysis, and funding priorities for the future.

The "Portland and Vancouver International and Domestic Trade Capacity Analysis" (Port of Portland et al; 2006) provides an assessment of the outlook for rail. The Study concluded that while the tonnage of goods will double between 2006 and 2035, the rail's share of total tonnage is forecast to drop because of the continuing structural shift in the economy toward industries and trade that generate lighter, higher-value, freight shipments. Nevertheless, rail tonnage will increase. The Pacific Northwest (Washington and Oregon) will grow faster than the national average. Therefore, the region will see a doubling or more of freight demand. In the Portland/Vancouver region, total freight tonnage is expected to grow from about 300 million tons today to 600 million tons in 2035. Demand for rail will grow more slowly than truck, but rail will carry about 50% more tonnage than it does today. The Portland/Vancouver region generates about 35 million tons for rail today and this will grow to over 56 million tons by 2035.

Freight rail needs were addressed in the Portland-Vancouver region were addressed as part of the I-5 Transportation and Trade Partnership. The Partnership concluded that several low-to-medium cost solutions can significantly improve existing rail capacity. One such "incremental improvement" is a proposed two-main track bypass around BNSF's Vancouver Yard. The Portland-Vancouver region "incremental improvements" are sufficient to address capacity needs for approximately 5 to 10 years given a growth rate of 1.625% to 3.25% per year. Beyond this, additional improvements will be required that will require further study to fully identify. The Vancouver Rail Project, to add new Vancouver Yard rail bypass tracks and provide a grade-separated crossing of the rail yard by West

39th Street, is now funded as one of the state “nickel package” projects. The intent of the Vancouver Rail Project is to increase safety, reduce rail congestion, and improve the on-time performance of Amtrak's passenger rail service. The Port of Vancouver has recommended improved rail access to the Port's industrial lands and a project to provide improved freight rail access to the Port of Vancouver is identified in the MTP list of projects. A project to provide a grade-separated crossing of the main BNSF north/south rail-line to improve access to the Port of Ridgefield is included in this MTP.

## **MARINE FREIGHT**

Freight also travels to and from our region via the Columbia River. As noted in Chapter 3 (page 3-17) the primary marine port in Clark County is the Port of Vancouver, located on the Columbia River. The Port emphasizes the importance of channel depth to its activities. The current channel depth limits service from ocean-going vessels, making it difficult for shippers to transport goods cost-effectively, especially if the vessels cannot be loaded to maximum capacity to sail out of the Columbia River. A \$188 million project involves deepening the 40-foot navigation channel to 43 feet for 106 miles between the mouth of the Columbia River to the Port of Vancouver. A deeper channel will allow larger ships to import and export cargo more efficiently that will benefit trade. Nearly 40 percent of the nation's wheat is exported down the Columbia River so this transportation corridor impacts both farmers in the region and across the nation.

## **AIR FREIGHT**

As noted in Chapter 3 (page 3-19), the Clark County region relies on access to the Portland International Airport in Oregon for air freight needs.

## **NON-MOTORIZED MODES**

The Regional Transportation Plan supports the development of pedestrian and bikeway facilities to both access the transit system and for use as alternative transportation modes. Reduced reliance on automobiles is largely dependent on the development of adequate sidewalks and bikeways to access activity centers and to allow for intermodal connections in use of the transit system. The development of non-motorized transportation modes is a strategy that can maximize the capacity of the existing transportation system. Sidewalk and bicycle path/lane projects are most appropriately identified at the local level. If pedestrian and bicycle projects are forwarded to compete for regional funding, such as federal Surface Transportation Program Enhancement funds, then projects can be prioritized through the regional transportation program. Local jurisdictions within Clark County are giving more emphasis than in previous programs to non-motorized projects in efforts to redress the balance in transportation system development from highway and auto dependence to provision of alternative modes. There is additional description of walking and bicycling modes in Appendix A of the MTP.

In 2005, the Washington State legislature enacted amendments to the Growth Management Act to require new elements in local comprehensive plans. These new requirements are designed to promote an increase in the physical activity of the citizens of Washington State. The legislature found that regular physical activity is essential to maintaining good health and reducing the rates of chronic disease. The legislation says that, “providing opportunities for walking, biking, horseback riding, and other regular forms of exercise is best accomplished through collaboration between the private sector and local, state, and institutional policymakers. This collaboration can build

communities where people find it easy and safe to be physically active. It is the intent of the legislature to promote policy and planning efforts that increase access to inexpensive or free opportunities for regular exercise in all communities around the state.” The transportation elements of local comprehensive plans must now include a pedestrian and bicycle component to identify planned improvements for pedestrian and bicycle facilities. There is also a requirement that, wherever possible, the land use element should consider utilizing urban planning approaches that promote physical activity.

Pedestrian and bicycling needs are identified through state and local planning programs, including recommendations from the Clark County Bicycle Advisory Committee, the local and Clark County Comprehensive Growth Management Plans, capital facilities plan elements, local transportation corridor plans and the *Regional Trail and Bikeway System Plan* (1992, updated 2006). The 2006 Plan has growth to encompass 16 regional trails. There are eight trail additions to the 1992 Plan; four new regional trails and four trail extensions. The Plan envisions a trail network of nearly 240 miles of regional trails and bikeways in Clark County and is the next step toward providing citizens and visitors transportation alternatives to daily vehicle trips and safer, more accessible opportunities for a healthier lifestyle. The Plan notes it has “one foot in the transportation system and one foot in the parks system and it needs both feet to work”. Trails outlined in the Plan are: 1) Lewis & Clark Discovery Greenway, 2) Chelatchie Prairie Railroad, 3) Lake to Lake, 4) Salmon Creek Greenway, 5) Padden Parkway, 6) I-5 Corridor, 7) I-205 Corridor, 8) East Fork of the Lewis River, 9), Battle Ground/Fisher’s Landing, 10) Washougal River Corridor, 11) North Fork of the Lewis River Greenway, 12) Whipple Creek Greenway, 13) North/South Powerline, 14) East Powerline, 15) Livingston Mountain Dole Valley, 16) Camp Bonneville and 17) Lower Columbia River Water Trail. The Plan seeks to develop a seamless trail and bikeway system throughout the region. As such, the Plan reviewed the developed and planned trail and bikeway facilities to complete a gap analysis of the existing system. The Plan also contains design guidelines and notes the cultural and historic resources this region possesses that can be enjoyed through trails development. Detailed information on the trails system can be found at: <http://www.ci.vancouver.wa.us/parks-recreation/index.asp>

Also of regional significance is improvement of pedestrian and bicycle facilities that will improve access to transit facilities. There are many areas where coordinated efforts to improve pedestrian facilities will improve access to transit. Bike racks are already provided on C-TRAN fixed-route buses and bike lockers are provided at C-TRAN Transit Centers and Park and Rides.

Local jurisdictions have adopted design standards for arterials that include sidewalks and bicycle facilities.

Local jurisdictions work in partnership with School Districts on a Safe Routes to Schools Program to identify transportation improvements that can improve safe access to schools. These improvements can include signage, curb cuts, sidewalks, crosswalks, bike lanes and bike paths. They should also include enforcement of traffic rules to ensure a safe journey to school and encouragement of bike and walk modes for school students.

The pedestrian and bicycle modes are promoted through the Active Community Environments program in Clark County; a program that encourages human powered transportation for mobility and health. Monthly meetings of the Active Community Environments Task Force were held throughout 2005 and 2006 with participation of Community Choices, citizens, local jurisdictions, advocates for people with disabilities and for older people within the community, the Community Cycling Center

and the Discovery Walks Festival. In 2007, the work continues with the Walkability Policy Team and Walkability Awareness Campaign Team.

## BICYCLE TRANSPORTATION

Clark County's Bicycle Advisory Committee helps to identify and prioritize needed bike projects. In addition, jurisdictions in Clark County have addressed the need for bicycle and pedestrian projects in their Comprehensive Growth Management Plans and as noted above in the *Regional Trail and Bikeway System Plan* (1992, updated 2006). In addition to the trails listed in the section above, notable existing pedestrian and bicycle trails in Clark County include the Columbia River Waterfront Trail, the Discovery Trail, the Columbia River/Evergreen Highway Trail, as well as bike lanes on priority arterials. Also of regional significance is improvement of bicycle facilities which will improve access to transit facilities. Bike racks are already provided on C-TRAN fixed-route buses and bike lockers are provided at C-TRAN Transit Centers and Park and Rides. Clark County produces a map showing bicycle facilities and routes throughout the County. A "Cycling Clark County" map is published by Clark County and was updated in 2006. The Clark County Geographic Information System (GIS) section also includes an information layer for bicycling on its "Clark County maps Online, the Digital Atlas". In October of 2005, the City of Vancouver was awarded a Bronze level Bicycle Friendly Community designation by the League of American Bicyclists. The City of Vancouver has published a new, bi-state, "Cycling the Cities" bicycle map showing bike facilities, routes and trails in the Vancouver and Portland area. The complete bicycling guide contains a map of both the Vancouver urban area (north to Salmon Creek and east to Camas) and the City of Portland. Helpful cycling tips and contact information are also listed in the guide.

## PEDESTRIAN TRANSPORTATION

Local jurisdictions program projects to provide for better connectivity in the pedestrian walkways throughout Clark County. The local transportation elements of the Comprehensive Plans for each city include recommendations for pedestrian transportation in each jurisdiction. The City of Vancouver and Clark County have programs to prioritize and install curb cuts for better sidewalk accessibility. C-TRAN also notes that pedestrian facilities are also important for access to transit.

Both bicycle and pedestrian facilities are integral design elements in road projects. As roads are upgraded throughout the County then bicycle and sidewalks are added.

## TRANSPORTATION DEMAND MANAGEMENT (TDM)

The MTP supports TDM as a strategy to maximize the efficiency of the existing transportation system. Transportation demand management strategies to reduce vehicle trips on the regional transportation system can include use of transit, carpooling, vanpooling, working of flexi-hours and/or compressed work week, and working from home with use of communications technology, known as telecommuting. A list of many TDM strategies is outlined in Table 5-1. Such TDM strategies will become increasingly important as travel demand in the region continues to grow and transportation investments do not keep pace. TDM strategies can help to preserve transportation system capacity and RTC Board direction is to promote the use of such strategies throughout the Clark County region.

**Table 5-1: Outline of Transportation Demand Management Strategies**

<b>Outline of Transportation Demand Management Strategies</b>
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Type	Description
Education	Transport agencies, professionals and the public consider and understand TDM
TDM Marketing	Provide public information and encouragement programs
Commute Trip Reduction Programs	Employee commute trip reduction (CTR) programs
TMAs	Transportation Management Associations provide trip reduction services in a commercial or employment center
Manage Special Transport Activities	Manage special types of transport and special events for efficiency
Financial Planning	TDM competes against capacity expansion in terms of cost effectiveness
Transportation Allowance	Provide commuter with a transportation allowance rather than free parking
Transit	Maximize efficiency and effectiveness of transit service
Park and Ride	Parking at urban-fringe transit stops
Vanpool Programs	Promotion/organization of vanpools
Rideshare Programs	Rideshare promotion and matching
HOV Preference	Transit and rideshare lanes and other priority measures
Free Transit Zones	Free transit in commercial centers
Bicycle Improvements	Improved bicycle planning and facilities
Intermodal Bike	Bike lockers at transit stops, bike racks on transit vehicles
Telecommuting	Working at home to avoid commute trips
Alternative Work Hours	Flex time and alternative work weeks (such as 4 10-hour days)
Guaranteed Ride Home	Provide a limited number of free rides home for transit and rideshare commuters
Security	Address security concerns of rideshare, transit, cycle and pedestrian commuters
Parking Pricing	Charge users directly for parking. Charge by the hour or day rather than the month
Full Cost Pricing	Pricing reforms to encourage efficient transport
Road Pricing	Road tolls and congestion pricing
Mileage Fees	Per-mile charges for road use and/or distance-based vehicle insurance and registration fees
Fuel Taxes	Increase federal and state fuel taxes
Vehicle Restrictions	Prohibit vehicle use in specific areas
Cash Out Parking	Provide employees who do not drive the cash equivalent of parking subsidies
Reduce Parking Requirements	Reduce parking requirements in zoning laws
Preferential Parking	Preferential parking for rideshare vehicles
Vehicle Rentals	Encourage car-share cooperatives and neighborhood vehicle rentals
Land use Reforms	Higher density, mixed use, growth management
Neotraditional Planning	Develop neighborhoods that encourage walking bicycling and transit use
Traffic Calming	Use strategies to reduce vehicle traffic speeds when appropriate
Monitor TDM	Perform surveys and other monitoring of TDM program effectiveness

COMMUTE TRIP REDUCTION (CTR)

In 2006, the **Commute Trip Reduction** Efficiency Act (RCW 70.94.527) was passed by the Washington legislature. The 2006 law took the place of the Commute Trip Reduction law passed by the Washington State legislature in 1991. The 1991 law required that local jurisdictions with major employers adopt a Commute Trip Reduction Ordinance and that employers who have 100 or more employees arriving at work between 6 a.m. and 9 a.m., year-round, should establish a commute trip reduction program for their employees. Under the 1991 law, all affected Clark County jurisdictions adopted CTR ordinances. Following the 2006 law, the CTR program is now designed to ensure that CTR plans and employer goals are coordinated with transportation and growth plans. The CTR program now focuses on Urban Growth Areas (UGAs) with the most congested state highways. These Urban Growth Areas are the areas with greatest need and potential benefit to be derived from CTR programs. Within Clark County, these Urban Growth Areas are Vancouver, Camas and Washougal as well as the unincorporated Clark County portion of the Vancouver UGA. The overall goals of the CTR program are to improve transportation system efficiency, conserve energy, and improve air quality by decreasing the number of commute trips made by people driving alone.

The CTR program requires that local jurisdictions, Regional Transportation Planning Organizations (RTPOs), major employers, transit agencies, WSDOT, and the CTR Board work collaboratively. During 2007, Commute Trip Reduction Plans were developed for jurisdictions and the region. Guidance on implementation and update of the Plans is provided through Washington Administrative Chapter 468-63. In early October 2007, the RTC Board of Directors adopted the Southwest Washington Regional Transportation Council, Draft Regional Commute Trip Reduction Plan, endorsed the local CTR Plans for the City of Vancouver, Unincorporated Clark County, City of Camas and City of Washougal, and certified the Downtown Vancouver Growth and Transportation Efficiency Center voluntarily developed by the City of Vancouver. (RTC Board Resolution 10-07-21)

#### *Local CTR Plans*

The local CTR plans developed by the City of Vancouver, Unincorporated Clark County, City of Camas and City of Washougal analyze local conditions, establish goals and suggest a funding plan and program recommendations to achieve compliance with performance goals in the Act. RTC is responsible for ensuring that local CTR plans are consistent with the CTR rules (Washington Administrative Code 468-63) and the regional CTR plan. RTC found the four local plans to be in compliance with the CTR rules, consistent with the Regional CTR Plan and the Plans were submitted to the state CTR Board. Following submittal of draft local plans in October 2007, updates to local plans must be submitted by March 31 every two years. All local CTR Plans in the Clark County region set the goals of a 10% reduction in trips, the equivalent of a 13% reduction in vehicle miles traveled.

#### *Regional CTR Plan*

The CTR Efficiency Act expands the role of Regional Transportation Planning Organizations (RTPOs), such as RTC, in CTR planning. Under the CTR Efficiency Act, the MPO/RTPO is now required to develop a regional CTR plan. The purposes of the Regional CTR plan are to 1) Describe Regional Land Use and Transportation Conditions, 2) Establish Minimum Criteria for Growth and Transportation Efficiency Centers, 3) Establish Regional Program Goals and Targets, 4) Describe how Progress will be Measured, 5) Describe Planned Local Services and Strategies for Achieving Goals and Targets and 6) Provides a Sustainable Financial Plan. Following submittal of the Regional CTR Plan in October 2007, updates must be submitted by March 31 every two years if changes are made. Updates are expected to be developed concurrent with update of the regional

transportation plan. RTPOs with a regional CTR plan have to submit a first annual progress report to the CTR Board by June 2008 and every year thereafter. The report must describe progress in achieving the regional CTR goals and targets and highlight any problems encountered.

#### *Growth and Transportation Efficiency Centers (GTECs)*

Under the CTR law, local jurisdictions have the option to propose Growth and Transportation Efficiency Centers (GTECs) that allow flexibility in implementing CTR programs. RTPOs, such as RTC, have to certify GTECs proposed by local jurisdictions before they can be forwarded to the state for funding eligibility consideration. The City of Vancouver analyzed two potential GTECs in Downtown Vancouver and the area of Columbia Tech Center in east Vancouver and in 2007 year submitted the Downtown Vancouver GTEC for state funding consideration. The GTEC proposal is voluntary on the part of City of Vancouver but outlines a higher goal for trip reduction in an area where employment is concentrated.

After the state CTR Board approves the Plans, cities and counties will update their CTR ordinances and the new CTR program will be underway in January 2008. Future Comprehensive Plan updates will be expected to reflect the requirements of the CTR program and to support its successful implementation.

Currently, there are forty affected employers in Clark County. Another eight employers participate voluntarily in the program. The Clark County Commute Trip Reduction report card for 2005 to 2007 indicates that the CTR program results in 4,372,745 fewer vehicle miles traveled. The program in 2005 to 2007 also reduced CO<sub>2</sub> emissions by 2,076 tons per year and saved 212,491 gallons of fuel.

The I-5 Partnership in 2002 concluded that Transportation Demand Management (TDM) and Transportation System Management (TSM) are essential strategies for improving our mobility. Today, the Columbia River Crossing project (CRC) is also developing a bi-state TDM program as part of the cross-Columbia travel strategies. TDM is about reducing auto trips, shortening some, eliminating others and making our transportation system more efficient.

CarpoolMatchNW.org provides a secure, online matching service that allows people in the Clark County, Portland and Salem region to find others who are interested in sharing a ride to work. Its usage has increased, especially following the significant increase in gas prices experienced since 2005. Recently, [www.ClarkCommute.org](http://www.ClarkCommute.org) was launched to provide access to information for people interested in CTR, in finding alternative transportation solutions.

### **TRANSPORTATION SYSTEM MANAGEMENT (TSM)**

TSM is also a strategy to maximize the efficiency of the existing transportation system. In 1993, a study to investigate the feasibility of various transportation system management strategies was conducted by ODOT. The ODOT Advanced Transportation Management System (ATMS) study was coordinated with WSDOT and included analysis of traffic surveillance, traffic control and traveler information needs in the I-5, I-205, SR-14 and SR-500 corridors. TSM measures include a wide range of strategies, most of which are ITS related to an intelligent transportation system. These include an incident response program, increased signage to alert motorists of travel conditions, ramp metering, improved communication means, Intelligent Vehicle/Highway System (IVHS) projects, and traffic signal interconnects to improve the efficiency of operation of the regional transportation system. Other TSM elements include minor capital upgrades such as channelization of traffic at

intersections. The need for ramp metering on some of the interchange ramps, with greatest need in the I-5 corridor, was identified in the WSDOT Systems Plan component of the *Statewide Multimodal Transportation Plan*.

## **INTELLIGENT TRANSPORTATION SYSTEM (ITS)**

Like TSM, ITS is also part of the transportation tool kit to better manage the transportation system. The key difference is the ITS uses real time information to integrate and manage conventional transportation system components such as roads, transit, ramp meters, traffic signals, and managing incidents for more efficient operations and performance. ITS uses advanced technology and information to improve mobility and productivity and enhance safety on the transportation system.

The Vancouver Area Smart Trek program plan was initiated in 1999 and completed in January 2001. The ITS Plan was developed through a partnership of transportation agencies working together to plan, develop and implement an intelligent transportation system for the Clark County region to improve the operation, safety, and efficiency of the transportation system. ITS efforts are being coordinated with the Oregon Department of Transportation to ensure that ITS strategies throughout the bi-state region are integrated and complementary. The VAST Steering Committee, made up of the Southwest Washington Regional Transportation Council, the City of Vancouver, the Washington State Department of Transportation, C-TRAN, Clark County, the City of Camas, and The Oregon Department of Transportation, meets regularly to facilitate the coordination, planning, funding, and deployment of ITS projects. This committee promotes the integration of ITS projects, the communications system, and the operation of ITS system elements. The VAST Program contains the following seven initiatives that, together, are intended to improve the efficiency of the transportation system:

Communications Infrastructure - Communications infrastructure is the backbone for all ITS deployment.

Traveler Information - Traveler information provides travelers with the ability to make an intelligent choice regarding mode, route and travel time through a wide range of distribution methods. This includes, but is not limited to websites, variable message signs, kiosks, television, radio, phone, and highway advisory radio. It uses both static and real-time information.

Incident Management - The freeway and arterial incident management plan covers operation of any function, device or system that is dedicated to the response to or monitoring of incidents on arterials and freeways. Early detection and a coordinated effort to respond to and clear roadway incidents can greatly reduce their impact on congestion and delay.

Transportation Management - The freeway and arterial transportation management plan covers the operation of all functions, devices and systems installed or developed for managing freeways and arterials. It includes the implementation of transportation management centers for the freeway and arterial network for the coordinated management of the transportation system.

Transit Priority - Public transit plays an important role in passenger transportation in the cities of Clark County. The C-TRAN bus system carried over 5 million passengers in 2006. Giving priority for buses at traffic signals under certain conditions can make transit more attractive to travelers by providing shorter and more consistent travel times. Signal prioritization can also help maximize limited transit service hours over the MTP planning period.

Transit Operation and Management - The two key components of transit operation and management are: (1) transit traveler information systems and (2) transit agency operations and management. Transit traveler information systems can deliver real-time bus arrival information to transit patrons using changeable message signs, the internet and other communication devices. Transit operation and management tools use advanced technology to help transit providers increase efficiency and improve quality of service provided to the public.

The VAST Implementation Plan is a twenty-year project list developed around the initiatives above and is based on a regional ITS architecture, or blueprint, developed in cooperation with the ITS stakeholders. The ITS architecture provides agencies with a high level physical representation of the important interfaces and major components of the system to ensure an integrated system. It provides a high-level structure around the processes, data flows, and connections between the ITS elements.

The Implementation Plan is consistent with the architecture and contains a description of each project, its priority, estimated costs and benefits and its relationship with other projects in the plan. There is also an Implementation Schedule for the plan that lists in general short, medium, and long-term time frames. The short-term projects include interconnected and adaptive signal control, freeway cameras and roadway detection, variable message signs, a traveler information system, and a traffic management center. C-TRAN's VAST projects include automatic vehicle locators, automatic passenger counters, and automated ADA call-outs, real time next bus information at transit centers, and computer aided dispatch. For more information, refer to the VAST website at <http://www.vastrek.org/travelinfo.htm>

## **TRANSIT**

Transit system improvements should be supported in the MTP. The transit transportation mode supports the land use goals established in the GMA Plans that envision denser developments in growth centers and in primary transportation corridors. Transit service expands roadway capacity by providing more person throughput, helping the system operate more effectively along transit corridors. Transit is also important in meeting the mobility needs of those unable to drive automobiles because of age, infirmity, disability, or low income. In addition, transit provides a viable option for those who have automobiles but choose the convenience and cost savings of utilizing transit for their commute and other local trips.

The level of service provided by Clark County's transit system was stabilized with passage of a funding proposition in September 2005. In addition to preserving existing service through 2011, this additional 0.2 percent sales tax allowed restoration of basic service to La Center, Ridgefield, and Yacolt as well as to Washington State University-Vancouver. The service redesign being implemented in late 2007 will expand the span of service until midnight on key urban routes in addition to other improvements, resulting from a thorough system evaluation and extensive customer and stakeholder input.

While C-TRAN has achieved stability, the future will bring challenges as continuing growth creates demand for greater levels of transit service and operating costs increase. The C-TRAN Board of Directors has adopted a 50-Year Vision to guide the agency. Currently, C-TRAN is developing and evaluating options for growth over the next 20 years. Adoption of a 20 Year Transit Development Plan is expected in 2008, providing guidance for capital and service priorities.

## **COORDINATED HUMAN SERVICES TRANSPORTATION PLAN (HSTP)**

In 2002, the RTC Board adopted the Area-Wide Jobs Access and Reverse Commute Plan to support grant applications for the Job Access and Reverse Commute (JARC) grant program. The JARC program addresses transportation needs relating to jobs access. The SAFETEA-LU-required Human Services Transportation Plan expands on the existing JARC program to address the needs of the aged, people with disabilities as well as low income workers. By identifying the transportation needs of the aged, low income and people with disabilities, the HSTP provides a framework for project identification and development to meet these transportation needs. Development of an HSTP is a condition for receiving formula funding under three Federal Transit Administration (FTA) programs: 1) Section 5310, Special Needs of Elderly & Individuals with Disabilities, 2) Section 5316(g), Job Access and Reverse Commute, and 3) Section 5317(f), New Freedom. The JARC program is to fill gaps in employment transportation to provide access to jobs for previous welfare recipients and low-income workers and to provide transportation for those who may live in the city core and work in suburban locations. New Freedom funds are to support new public transportation services and transportation alternatives for individuals with disabilities. New Freedom funds should be used for transportation services beyond those required by the Americans with Disabilities Act. The RTC Board adopted the Human Services Transportation Plan for Clark, Skamania and Klickitat Counties in January 2007 (RTC Board Resolution 01-07-02).

The intent of the Human Services Transportation Plan is to identify transportation needs and solutions and thereby improve transportation services for people with disabilities, seniors, and individuals with lower incomes. Development of a Human Service Transportation Plan ensures that communities coordinate transportation resources provided through multiple federal programs. A Coordinated plan can help to enhance transportation access, minimize duplication of services, and encourage the most cost-effective transportation possible. Development of the Human Services Transportation Plan brings together service providers, agencies that distribute funds, riders, and the community at-large to improve special needs transportation throughout the region.

Elements of the Human Services Transportation Plan, as recommended by the state's Agency Council on Coordinated Transportation (ACCT) to meet both state and federal requirements include the convening of a stakeholder group, data and information collection and gathering, identification of unmet transportation needs, and development of transportation alternatives. In Clark County, the Stakeholders Group included Clark County Community Services Departments, Developmental Disabilities Program, Columbia River Mental Health Services, Cowlitz Indian Tribe, C-TRAN, Washington Department of Social and Health Services, Employment Services Division - Work Source, EOCF/Head Start/ECEAP, Goodwill Job Connection, Human Services Council Transportation Brokerage, Loaves & Fishes/Meals-on-Wheels, Partners in Careers (SWWPIC), Ride Connection, Share Outreach, and RTC.

The human service transportation needs identified in Clark County include the need to maintain and preserve existing transportation services, such as the transportation brokerage. Medical/seniors transportation needs include curb to curb transportation, rides to life sustaining medical treatment, rides for seniors to nutrition programs, extension of paratransit to rural areas as C-VAN is not available in rural areas of Clark County. Jobs transportation needs includes longer fixed route transit service hours, alternatives to fixed route transit for those whose needs are not accommodated, transportation to overcome the challenges of getting children to/from childcare on way to/from work, and transportation solutions in rural areas of Clark County which is outside C-TRAN's fixed route service area. Those with low incomes often face are challenged by the inability to pay for

transportation; this can be a problem for low income, elderly and people with disabilities. Strategies to help special needs transportation in Clark County include the need for recruitment, organization and training of volunteer drivers or transportation assistants as an efficient and cost effective way to help meet curb to curb transportation needs for elderly, people with disabilities and those needing medical transportation. Volunteers could provide curb to curb transportation for those outside of the C-VAN service area.

C-TRAN has worked with transportation providers in coordinating with the region's social service providers, including Washington Department of Social and Health Services and the Clark County Human Services Council, to develop a regional welfare to work transportation plan and pursue program grant funding. Program elements of the welfare to work transportation plan may include: supporting and developing services such as connector services to mass transit; vanpools; sharing buses with elderly and youth programs; coordinated human services and public transit transportation resources; employer provided transportation; Geographic Information System (GIS) based ride matching; guaranteed ride home programs; and public-private transportation partnerships. Some of these programs currently exist, and the outcome of the welfare to work plan will encourage coordinating the services into a seamless system to address the transportation problems for the region's welfare recipients and other low income persons.

More details can be found in RTC's Human Services Transportation Plan that can be found at the following website: <http://www.rtc.wa.gov/reports/index.htm#HSTP>

## **HIGH CAPACITY TRANSIT (HCT)**

The planning process to analyze the feasibility of High Capacity Transit in the Clark County region is currently underway. The MTP includes the I-5 Columbia River Crossing Project's Locally Preferred Alternative (LPA, June 2008) to construct a replacement Interstate-5 Bridge and extend Light Rail Transit into Clark County with a terminus in the vicinity of Clark College. The MTP's Strategic Plan section in Appendix B describes additional planning for future high capacity transit in Clark County through the Clark County High Capacity Transit System Study. Websites references are:

<http://www.columbiarivercrossing.org/> and <http://www.rtc.wa.gov/hct/>

The history of Light Rail Transit (LRT) planning in the region includes study of high capacity transit options advanced in the South/North High Capacity Transit Corridor Study. A *Tier I Recommendation Report*, published by Metro, September 14, 1994, recommended that Light Rail Transit be developed in the I-5 corridor to Clark County with Phase I terminating in the vicinity of NE 99th Street and Phase II terminating in the vicinity of NE 134th Street. On July 19, 1994, Metro released the *South North Transit Corridor Study, Draft Briefing Document, Tier I Technical Summary Report* to support the South/North HCT Corridor study recommendations. In 1995 the Clark County voters voted no to funding LRT development. A Draft Environmental Impact Statement (DEIS) was prepared through a coordinated process led by Metro, Portland with a northern terminus in the vicinity of Clark College. The purpose of the DEIS was to identify and disclose anticipated impacts of a potential light rail line from the Clackamas Town Center area to Clark County compared to a "No-build" alternative. Alternatives and options were described in detail in the *South/North Corridor Project Draft Environmental Impact Statement* (FTA/Metro, February 1998). FTA/Metro issued a South/North Corridor Project Supplemental Draft Environmental Impact Statement in April 1999 to address an LRT line along Interstate Avenue with

a terminus at the Expo Center in Oregon. The Interstate MAX Yellow Line with terminus at Delta Park, opened in 2004. The I-5 Partnership recommended the development of an LRT Loop within Clark County to provide for internal Clark County trips as well as cross-river trips. Further analysis of transportation needs was carried out through the I-5 Columbia River Crossing Project. The CRC's Locally Preferred Alternative (June 2008) includes extension of the LRT line to Clark County.

### **COMMUTER RAIL/RAIL CAPACITY ISSUES**

RTC completed the Commuter Rail Feasibility Study in May 1999. The purpose of the Study was to determine if commuter rail has the potential to serve as a low cost option to improve bi-state travel mobility by making more effective use of the existing Burlington Northern Santa Fe rail transportation corridor between Vancouver and Portland. Commuter rail provides passenger service by shared use of rail tracks with freight operators and other rail users. The Study examined critical issues in the implementation of commuter rail and included: schedule reliability, operations, the impact of shared use with freight and inter city passenger needs, capital and operating costs, and ridership.

The Study concluded that, in a five year horizon, moderate levels of commuter rail service could be implemented between Vancouver and Portland with minor rail capacity improvements. By 2013, however, any level of commuter rail service would require a dedicated passenger track to accommodate the commuter service and the expected increases in freight and intercity passenger trains. The findings of this feasibility study indicate that a commuter rail system should not be pursued unless it is determined that a major rail investment necessary to support future intercity passenger and freight rail growth in the corridor is to be made. This rail corridor is severely constrained in terms of how much growth it can support without major capital investment. The commuter rail operations added a relatively small number of trips to the system but enough to trigger the requirement for a dedicated passenger alignment. Current plans for intercity passenger and freight growth could trigger the need for major capacity improvements before the 2018 horizon year. The results of this Study have created the awareness of the need to initiate regional discussion about long-term rail capacity issues affecting freight and passenger needs. The capacity constraints in this corridor need to be discussed further, not only in the context of the commuter rail system concept, but also as they relate to the rapid growth of rail freight traffic in the corridor and plans for greatly increased intercity passenger service.

In 2002 the question of commuter rail was again revisited as part of the I-5 Partnership. Findings concluded that commuter rail service cannot operate effectively on the freight rail network over the next 10 to 20 years, even with the identified incremental and additional network improvements commuter rail service could be instituted only on a separated passenger rail-only network. A separate passenger rail-only high speed rail system would improve intercity passenger rail service and could drive the feasibility of commuter rail. The cost of separated passenger network could be of the order of magnitude of \$1.5 to \$1.7 billion. The utility of the Chelatchie Prairie Railroad for HCT is currently being studied as part of the Clark County High Capacity Transit System Study.

### **TRANSPORTATION MANAGEMENT AREAS (TMA'S)**

The Clark County region was designated as a Transportation Management Area under the federal Transportation Act, ISTEA, in 1991. The region is designated as a TMA because it has a population

greater than 200,000. In addition to meeting all the specified metropolitan transportation planning process requirements, MPO's representing Transportation Management Areas must meet additional requirements. In TMAs, the MPO must have a **Congestion Management Process** that provides for the effective management of new and existing facilities through the use of travel demand reduction and operational management strategies. In air-quality non-attainment TMAs, highway capacity expansion projects that result in a significant increase in single occupancy vehicles can only be programmed if consistent with the Congestion Management System. The CMP serves as the process for identifying deficient regional travel corridors, for evaluating non-SOV alternatives to address congestion, and for managing the performance of the system.

### **CONGESTION MANAGEMENT PROCESS (CMP)**

The Congestion Management System (CMS) for Clark County was developed and operational by the federal deadline of October 1, 1995. The CMS identifies projects and programs for consideration in the metropolitan planning process. In November 1993, RTC released the *Intermodal Surface Transportation Efficiency Act, Transportation Management Systems for: Traffic Congestion, Public Transportation Facilities and Equipment, Intermodal Transportation Facilities and System, Phase I, Final Report*. In October 1994, the *CMS Phase I Compliance Statement and Work Plan* was issued. Elements of the CMS included the identified CMS network performance measures and data monitoring plan as described in the two reports mentioned above. The CMS network is a sub-set of the regional transportation system; now a set of 30 transportation corridors to be monitored and evaluated on an ongoing basis as part of the CMS. The *RTC Board adopted the Southwest Washington ISTEA Transportation Management Systems, Phase II Final Report, containing the CMS*, on May 2, 1995 (RTC Board Resolution 05-95-14). The CMS was intended to be an evaluation tool for monitoring traffic congestion and for identifying improvement strategies. The CMS allowed for the systematic monitoring of performance, identification of deficiencies, and the evaluation and recommendation of strategies. The evaluation becomes a part of MTP development. Performance of the CMS network was and continues to be monitored under the SAFETEA-LU-required Congestion Management Process (CMP) on an annual basis as new traffic volume, freight classification counts, travel time data, transit ridership and vehicle occupancy data is available.

SAFETEA-LU requires development of a Congestion Management Process. RTC's Congestion Management Process was adopted by the RTC Board in April 2006. The Congestion Management Process includes: 1) Identification of congestion management network, 2) Monitoring and analysis of system performance to identify needs, and 3) Implementation of identified needs.

It is recognized that selecting project priorities involves the consideration of many factors, of which congestion relief is just one. See Chapter 6 of this MTP for more details of RTC's ongoing Congestion Management Process.

### **TRANSPORTATION PLANNING AND THE ENVIRONMENT (INCLUDING ENVIRONMENTAL MITIGATION)**

The interrelationships between transportation planning, project development and both natural and human environments are acknowledged in federal, state, regional and local policies and practices. Regional MTP policies include a policy that specifically addresses the environment, "provide a transportation system that is sensitive to the quality of the environment and natural resources" and goes on to explain that provision of a transportation system to meet travel needs should be balanced with the need to protect the environment and provide for a healthy community. Environmental

considerations and stewardship include air quality, climate change, stormwater, noise, sprawl, habitat, cultural resource protection, historic preservation, environmental justice, active living, and neighborhood structure.

As transportation projects are developed, environmental analyses are carried out to ensure that identified environmental impacts can be avoided, minimized and/or mitigated. More detailed information on the laws and guidance that pertain to consideration of the environment and environmental mitigation in the metropolitan transportation planning process can be found in Appendix E of this document. Included in Appendix E is a summary matrix that addresses environmental mitigation efforts in the Clark County region that will be updated with each MTP update as well as mapped data that can be used in environmental and transportation decision-making.

## AIR QUALITY

Mobile emissions are a significant source of air pollution. Mobile source emissions can be minimized through increased use of non-motorized transportation modes, through increased transit use, through transportation systems management measures (such as inter-connecting traffic signals and enhanced timing of signals) and travel demand management techniques (such as work flex-time, parking charges, carpooling and vanpooling programs); all supported by the MTP. Mobile emissions can also be reduced through technology-based transportation command and control measures, such as enhanced emissions testing (I/M) programs, expansion of I/M and fuel requirements.

Historically, the Vancouver Air Quality Maintenance Area (AQMA) has been classified as non-attainment for both ozone (O<sub>3</sub>) and carbon monoxide (CO) pollutants. As a result, transportation planning and project programming could occur without consideration for air quality impacts. On March 15, 1991, the Governor of Washington State designated the urban area of the Vancouver portion of the Portland-Vancouver Interstate Air Quality Maintenance Area as a marginal non-attainment area for ozone (O<sub>3</sub>) and a moderate carbon monoxide (CO) non-attainment area. The action was taken in accordance with Section 107 of the Federal Clean Air Act as amended in 1990. Subsequently, the Southwest Clean Air Agency (SWCAA) developed, as supplements to the State Implementation Plan, two Maintenance Plans; 1) for Carbon Monoxide (CO), and 2) for Ozone (O<sub>3</sub>). The Environmental Protection Agency (EPA) approved the CO Maintenance Plan in October 1996 and the Ozone Maintenance Plan in April 1997. The RTC Board of Directors endorsed the mobile source strategies included in the Maintenance Plans in 1996 (Resolution 02-96-04).

Currently, under the new 8-hour federal Ozone standard, the Vancouver/Portland Air Quality Maintenance Area (AQMA) has been reclassified from “maintenance” to “unclassifiable/attainment” for Ozone and no longer needs to demonstrate air quality conformity for Ozone.

The Vancouver AQMA is currently designated as a Carbon Monoxide maintenance area. The Southwest Clean Air Agency submitted a Carbon Monoxide, Second 10-year Limited Maintenance Plan (2006-2016) in January 2007. The CO Limited Maintenance Plan for the Vancouver AQMA was found to be adequate by the Environmental Protection Agency (EPA) and on November 19, 2007, EPA published notice of its adequacy for transportation conformity purposes in the Federal Register. Based on the population growth assumptions contained in the Vancouver Limited Maintenance Plan and the LMP’s technical analysis of emissions from the on-road transportation sector, it was concluded that the area would continue to maintain CO standards. Therefore, regional

conformity is presumed and regional emissions analyses and emission budget tests are no longer required.

As described in Appendix A, RTC consults with clean air partners and agencies, such as the Southwest Clean Air Agency, Washington State Department of Ecology, and the federal Environmental Protection Agency, to develop a methodology for mobile source emissions analysis and uses the regional travel model data to provide data needed to develop mobile source emissions inventories.

The Limited Maintenance Plan does not include mobile source Transportation Control Measures (TCMs) for this Air Quality Maintenance Area, however, several tiered contingency measures are listed in the LMP that could be triggered in the event that the triennial emission inventory shows that annual county-wide on-road mobile emissions have increased over 2005 levels. The escalating responses include: confirmation of emissions inventory methodology, evaluation of “other” source categories, temporary CO “hot spot” monitoring, and reinstatement of oxygenated fuels.

The transportation strategy identified in the SIP for the Vancouver Air Quality Maintenance Area continues the emissions testing (I/M) program for the area of Clark County within the Air Quality Maintenance Area (AQMA) which contributes to maintaining National Ambient Air Quality Standards (NAAQS).

Although regional conformity is presumed, both the MTP and TIP include statements describing the current conformity requirements for the Vancouver AQMA. A conformity statement for the *Metropolitan Transportation Plan* with the federal Clean Air Act, as amended in 1990, and the Washington Clean Air Act can be found in Appendix A of this document. Conformity with the Clean Air Act is also addressed in the Metropolitan Transportation Improvement Program for the Clark County region. At the project level, non-exempt transportation projects must still undergo conformity analysis for carbon monoxide to show they meet federal and state air quality standards before completion of the design phase.

## WATER QUALITY

Transportation projects must be mindful of water quality impacts. Water quality is a significant issue in the Pacific Northwest. Transportation projects often include measures to mitigate for the construction of impervious surfaces. Bioswales and street trees are becoming part of the design for many transportation projects. Another issue that relates to water quality is the listing of certain species, such as the Pacific salmon species, under the Endangered Species Act.

## MTP REGIONAL SYSTEM IMPROVEMENTS AND PRIORITIZATION PROCESS

Figure 5-1 is a map showing identified capacity improvements on the regional transportation system. The map shows the location of highway capacity expansion projects identified needed to address safety and/or level of service issues. Appendix A provides a list of needed improvements, both on and off the regional transportation system, which have been assumed in the regional travel forecasting model process for MTP development and its accompanying air quality conformity analysis. The list focuses on system expansion projects for it is these that are most readily incorporated into the regional travel forecasting model and their impacts measured. The MTP Appendix also outlines the wide array of transportation system improvements, which will contribute to the development of a balanced regional transportation system. Even with the extensive list of

transportation improvements, increased congestion can be expected on Clark County's transportation system by the year 2030. In many of the transportation corridors, further system expansion through widening of existing highways will not be feasible. Therefore, it is imperative that this region continue to develop a more balanced transportation system to create transportation options for its residents and to encourage use of alternative transportation modes to the Single Occupant Vehicle.

Federal and state legislation, together with citizen input, has prompted the identification and implementation of alternative transportation solutions. Alternative solutions provide a way to avoid increasing capacity of the highway system through road widening projects. The MTP provides for strategies and solutions to meet regional travel demand and to develop a balanced regional transportation system over the 20+ -year planning period.

RTC periodically conducts a prioritization of transportation projects. Such a prioritization process followed adoption of the MTP for Clark County in December 1997. This process arose out of concern that funding for transportation "mobility" improvements is limited compared with the growing needs. With limited funding availability, it is prudent to reach regional consensus on the highest priorities. RTC is the forum for discussion and analysis of project priorities at times such as development of projects for grant request to the state Transportation Improvement Board and discussion of projects for federal earmarking consideration. A prioritization process helps the region to make most effective use of limited transportation funding to meet transportation system improvement needs.

In December 2001 the RTC Board reviewed regional priorities with "Mobility" type improvements a prime focus because these are the projects that the region finds increasingly difficult to fund after maintenance, preservation and safety needs are addressed. In a rapidly growing, urbanizing region such as Clark County, there is need for significant investment in "mobility" projects to complete the arterial street system and to improve the design standard of facilities to support urban transportation needs. It is recognized that Transportation System Management and Transportation Demand Management strategies can contribute toward system capacity preservation and were also considered in the 2001 prioritization process. The following key policy issues again emerged in 2001 as the most important to emphasize in terms of project prioritization: 1) Economic Development, 2) Land Use and Transportation System Performance, 3) Transportation Demand Management (TDM), 4) Funding and 5) Bi-state Transportation Strategy. Economic development is the prime criteria for project prioritization.

The project prioritization process is dynamic and project priorities are reviewed periodically to consider emerging trends and results and recommendations from ongoing transportation studies.

Decisions on funding and phasing of regional transportation projects are made during the development process for the Metropolitan Transportation Improvement Program (MTIP). Transportation improvements require programming and it is in the regional MTIP that federal funds are programmed. Projects that use local funding are programmed in the local Transportation Improvement Programs which are developed each year by individual local jurisdictions.

## **BI-STATE TRANSPORTATION**

### **BI-STATE COORDINATION COMMITTEE**

The Bi-State Transportation Committee was established in 1999 to ensure that bi-state transportation issues are addressed. This Committee was reconstituted in 2004 to expand its scope to include both transportation and land use according to the Bi-State Coordination Charter. The Committee is now known as the Bi-State Coordination Committee. The Committee's discussions and recommendations continue to be advisory to the Southwest Washington Regional Transportation Council (RTC), and Metro's Joint Policy Advisory Committee on Transportation (JPACT) and Metro Council on issues of bi-state transportation significance. On issues of bi-state land use and economic significance, the Committee advises the appropriate local and regional governments.

### **COLUMBIA RIVER CROSSING PROJECT**

The Portland-Vancouver I-5 Transportation and Trade Partnership study concluded in 2002 with key policy recommendations for cross-Columbia river travel in the I-5 corridor. The Columbia River Crossing project (CRC) evolved from the previous I-5 Partnership. The CRC is aimed at improving the mobility, reliability, and accessibility for automobile, freight, transit, bicycle, and pedestrian users of the I-5 corridor from State Route 500 in Vancouver to Columbia Boulevard in Portland. The CRC's process includes examination of bridge capacity and analysis of a range of modal options. The Draft Environmental Impact Statement (DEIS) for the project was released in May 2008. It assessed four build alternatives compared to a No Build alternative (Alternative 1). The build alternatives analyzed were: Alternative 2, a replacement crossing with Bus Rapid Transit, Alternative 3, a replacement crossing with Light Rail, Alternative 4, supplemental crossing with Bus Rapid Transit, and Alternative 5, a supplemental crossing with Light Rail. In June 2008, the CRC Task Force recommended a Locally Preferred Alternative (LPA) for the Columbia River Crossing Project to include a replacement crossing with light rail terminating in the Clark College vicinity and in July, the MTP for Clark County was amended to incorporate the CRC's LPA.

Figure 5-1: MTP Regional System Improvements

