VISION 2020 + 20 Update
Issue Paper on Transportation

Puget Sound Regional Council
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I. INTRODUCTION

The Puget Sound region has grown tremendously over the past several decades and is anticipated to add another 1.7 million people by 2040. Maintaining and improving on the characteristics that have made this region a great place to live and work will continue be a challenge. To maintain a forward-looking vision, the region's leadership has launched an effort to build on the success of its current plan VISION 2020 and look ahead another 20 years to the year 2040. The updated strategy will be clearer, more complete, and measurable. The work will emphasize the development of a mutually supportive and coordinated growth, economic and transportation strategy. The objective is to ensure that our region continues to be admired for its natural beauty, economic vitality, and quality of life throughout the 21st century and beyond.

The purpose of this paper is to support the update of VISION 2020 and its transportation element Destination 2030. For VISION 2020, this paper will summarize the transportation needs and issues that will inform the update of the vision's multicounty transportation planning policies. For the Destination 2030 update, this paper will be the first version of the issue identification process that is intended to frame the discussion of transportation issues and policy choices leading up to the adoption of the updated regional transportation plan. Both plans are being updated in a manner that will ensure the continued compatibility of the region’s long-range transportation plan with the region’s growth and economic vision. The region will adopt a growth, transportation and economic vision in 2007 and the Destination 2030 update in 2008.

The Destination 2030 update will be a collaborative process involving all members of the Puget Sound Regional Council (PSRC), the public and interested groups and organizations. The PSRC Transportation Policy Board will be the primary forum for the update process and their recommendations will be forwarded to the PSRC Executive Committee and General Assembly for final approval. This two-year program will utilize this Issue Paper on Transportation to identify trends, issues and policy and program gaps that will be analyzed in the plan update process. This paper will be updated as more data becomes available to support later phases of Destination 2030 update.

The update process will involve two main overlapping phases. The first phase will be an Interim Update that is scheduled to be completed in the spring of 2007. The intent of the Interim Update is to better integrate the federally required Congestion Management Process (CMP), the state-required Least Cost Planning (LCP) and to improve the transportation policies that guide these and other transportation planning decisions. Concurrent with the Interim Update, the Major Plan Update (second phase), which is required to be adopted in 2008, will be initiated. This second phase of the work will utilize the tools developed in the Interim Update and the newly adopted growth strategy (VISION 2040) to develop an integrated and prioritized 10-Year Action Plan and a long-range transportation plan for the central Puget Sound region.

This paper is generally organized around the nine issue areas included in the update of the Washington Transportation Plan. It is organized this way to better integrate regional and state planning efforts and to recognize the need to talk about transportation in terms of objectives and effects rather than just individual types (modes) of transportation such as transit, ferries or single-occupant vehicles. This is necessary to better understand the need to provide mobility for all users of the transportation system such
as truck drivers, commuters, people with special transportation needs and the person just trying to get to a sporting event.

Ultimately, the public would like a transportation system that is safe, clean, efficient, understandable, environmentally sustainable, affordable and supportive of our growth objectives. Achieving this transportation vision will require addressing a number of difficult issues previously identified by the Transportation Policy Board, including:

- **Structure:** The large number of jurisdictions involved in regional transportation decision-making creates a complex system that may be difficult for the public to understand. Also, regional transit and roadway investment decisions are not integrated under current state-authorized regional investment programs. Models from Vancouver, B.C., Portland and San Diego have been discussed as ways to improve the integration of regional transportation decision-making. Legislators and others around the region are discussing or proposing structural changes. This is sure to be a widely debated topic for the 2006 Legislature.
- **Prioritization:** Current plans have long project lists without an expressed priority. Are we investing in the highest priority transportation programs and projects? Should the regional transportation plan express priorities, and what would those priorities be based on?
- **Funding:** What can be done to address the need for sustainable funding to maintain and implement the transportation system? Are new funding mechanisms, such as roadway pricing, needed to manage demand as well as raise revenues?

**RECENT PROGRESS AND CHALLENGES**

In recent years there has been both progress and heightened debate about the direction of transportation in the region.

The region can boast progress in many areas of transportation, including the following:

- Between the 1995 adoption of Destination 2030 and the end of 2004, the region made investments of $847 million for general purpose improvements on state and interstate highways.
- Between 1995 and 2004, $370 million was invested in HOV improvements.
- Introduction of Sound Transit commuter rail, express bus, and construction of light rail.
- Between 1990 and 2000, the number of transit vehicles increased by 1,000, and bus routes increased by 110 percent.
- Between 1990 and 2004, the number of public vanpools increased from 313 to 1,201, an average annual growth rate of 10 percent.
- Nonmotorized transportation projects using $34 million of federal funds have been completed since 1992.
- Eight of 15 planned freight projects totaling $560 million have been completed since 1998.
- At Sea-Tac Airport, third runway construction is underway and scheduled for completion in 2008, and four major passenger terminal projects have been completed.
- The state Legislature enacted significant advances toward financing transportation:
  - Legislative authorization for development of a three-county (King, Pierce, Snohomish) investment/revenue plan (2002)
  - A 10-year statewide transportation funding package that included a 5-cent fuel tax increase, 15 percent increase in gross weight fees, and 0.3 percent vehicle sales tax (2003)
  - An additional statewide investment package to be funded through a phased increase in fuel taxes and vehicle registration fees which withstood a repeal initiative (2005)

At the same time, the region has also been faced with a number of challenging issues:

- There is growing frustration over the impacts of congestion in all forms of travel. Congestion results from many different forces and adds to travel time as well as uncertainty of arrival time for both people and freight.
- Over the years, the increasing costs of building and maintaining transportation facilities and programs and the lack of publicly acceptable funding sources have made it nearly impossible to balance the need for improvements with travel demand pressures.
Planning efforts have identified a large number of “deficiencies” in transportation systems, but there is continued debate about which priorities need to be addressed first.

REGIONAL PLANNING BACKGROUND

The central Puget Sound region began planning for growth and transportation even before it was required to do so. Such plans are now mandated by the state Growth Management Act (GMA, 1990) and the federal Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU, 2005). In October of 1990, the then Puget Sound Council of Governments2 adopted the first VISION 2020 after considerable work and extensive public involvement. Intended as the conceptual framework to guide growth and transportation planning, the plan focused much of the region's future growth within a defined urban growth boundary and provided for creation of more compact regional centers. The plan also called for preservation of rural towns, open space, and agricultural areas. In 1991, the newly created Puget Sound Regional Council adopted the VISION 2020 plan as its intended framework to begin planning under the new state GMA and the federal ISTEA legislation.

An updated VISION 2020 was adopted in May 1995. At the same time, the region’s first comprehensive transportation plan, the 1995 Metropolitan Transportation Plan (MTP), was adopted. It described how the transportation system was to connect the multiple regional centers, improve total regional mobility, and preserve the basic elements of all modal systems. For the first time, the region had a financial estimate of how much this would cost and how the revenues could be raised. The MTP was replaced in 2001 and is now known as Destination 2030.

TRANSPORTATION POLICIES OF VISION 2020

As envisioned in VISION 2020, the region's future will include development in urban growth areas where services can be provided efficiently and where employment and housing growth will be focused in centers. The vision also includes preservation of rural areas where farmlands, forests and other natural resources are conserved. The region will be served by a coordinated transportation system that is integrated with and supported by its land development patterns.3

The original VISION 2020, adopted in October 1990, represented the region's first major attempt to fully integrate growth management and transportation planning. With the 1993 adoption of multicounty planning policies (as required by the Growth Management Act) and their subsequent update in 1995, VISION 2020 has guided the region’s growth and transportation decisions at the local, regional and state levels. More than 40 of these policies support the overall goal to “develop a transportation system that emphasizes accessibility, includes a variety of mobility options, and enables the efficient movement of people, goods and freight, and information” (VISION 2020 Policy RT-8).

Following is a summary of VISION 2020's transportation policies as organized under four broad objectives. For a matrix that includes the complete policy text and shows the relationship of policies to the strategic issues that will be addressed in the update of Destination 2030, please see Appendix A.

Optimize and manage the use of transportation facilities and services. Maintain, preserve and operate the transportation system in an efficient and cost-effective manner.
- Link centers with an efficient, balanced, multimodal transportation system
- Make transfers between transportation modes convenient
- Give priority to maintenance and preservation of transportation systems
- Promote pedestrian, bicycle and transit links to marine ferry routes

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2 Puget Sound Council of Governments was the predecessor to Puget Sound Regional Council. The changeover took place in 1991. The Regional Council has specific mandates under federal transportation and air quality laws, and under the state Growth Management Act that the previous agency did not.
3 For more information about the region's growth management and transportation objectives, see VISION 2020, 1995 Update, Puget Sound Regional Council, May 1995
- Provide preferential access for freight and goods on ferries
- Provide access to rural areas without encouraging unplanned growth
- Use transportation system management activities to increase efficiency
- Establish level of service standards for state-owned transportation facilities
- Minimize environmental impacts of transportation investments

**Manage travel demand as a way to address traffic congestion and environmental objectives.**
Reduce vehicle trips by reducing the need for drive-alone travel, increasing the opportunity for other travel alternatives, shifting some trips to non-peak periods and eliminating the need for other trips.
- Use the efficiencies of multiple demand management strategies as an alternative to building additional infrastructure
- Expand transit's ability to compete with the speed of single-occupant vehicle travel
- Set goals for increased transit, high occupancy vehicle and nonmotorized travel
- Support alternatives to single occupancy vehicle use along major transportation routes
- Continue the public dialogue on the use of transportation pricing strategies during peak periods
- Investigate advanced transportation and information technologies

**Invest in transportation improvements that support land use objectives.** Support transit and pedestrian-oriented land use patterns. Invest in transportation improvements that support compact land use patterns and serve centers and other compact development.
- Reduce energy use, air pollution and protect the natural environment
- Support compact, pedestrian-oriented development and growth in centers
- Promote pedestrian and transit compatible redevelopment along urban transportation corridors
- Encourage a mix of land uses and densities at major transit access points
- Develop local street patterns that improve access to transit services

**Selectively expand transportation capacity, offering greater mobility options.** Selectively increase the capacity of all transportation options.
- Consider transportation pricing strategies to finance transportation systems
- Complete an interconnected freeway and arterial high-occupancy-vehicle lane system
- Develop high-speed intercity rail service connecting to other regions
- Manage air transportation capacity to meet long-term needs
- Ensure adequate capacity for cross-Sound travel demand
- Develop a regionally coordinated network of facilities for pedestrians and bicycles
- Develop new or expanded roadways to create efficient multimodal connections
- Maximize system continuity in support of economic and growth objectives
- Create convenient intermodal connections to high capacity transit stations linking centers
- Use local labor when building transportation facilities

These policies provide the primary guidance for transportation decision-making in the four-county region. They guide the funding of transportation projects and programs through the region's Transportation Improvement Program. The policies are used to certify local comprehensive plans, countywide planning policies and the Sound Transit plan.

Working from this policy basis, the 2001 update of the metropolitan transportation plan further developed a financial summary and investment strategy, incorporated growth strategies that address mobility and accessibility, and laid a foundation for monitoring the performance and implementation of the plan. The resulting product was the award-winning transportation plan known as Destination 2030.4

A central work element of the updates to VISION 2020 and Destination 2030 will be reviewing and proposing revisions and additions to the above policies. Section IV of this issue paper discusses

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4 Destination 2030 received the Association of Metropolitan Planning Organizations' 2002 award for Outstanding Project, a 2001-2002 Ahwahnee Award from the Local Government Commission, and a 2003 “America's Best Plan” award from the American Planning Association. This last award was primarily in recognition of the plan's pioneering approach for integrating land use and growth strategies into a regional transportation plan.
developments in a number of important transportation issues, which can serve as a starting point for policy revision and in the development of new policy.

CURRENT PUBLIC INPUT TO THE VISION 2020 UPDATE

For the update of VISION 2020, the Puget Sound Regional Council has asked for public input at various points along the way, and will continue to do so until the update is adopted. During the nearly six-month scoping period for the update, more than 1,200 comments were received. Much of the input stresses the importance of proper land use and concentration of growth into urban growth areas and centers as well as the importance of coordination. All of these issues have important implications for the region's transportation system. Below are the major themes and issues that were directed at the transportation element of the vision. For a complete summary of comments, see Scope of the Environmental Review for the Update of VISION 2020, Puget Sound Regional Council, June 2004.

- The relationship between land use and transportation is critical. Links between housing, services and employment areas must be convenient, safe and attractive.
- Expanding roadways is not the only answer to our transportation problems. High-capacity transit needs to be a viable, attractive alternative.
- Addressing mobility and congestion requires a "menu," not a single fix – it must include pricing, transportation demand strategies, alternative fuels, high-capacity transit (including bus rapid transit), paving shoulders, expanding sidewalks.
- The vision should more thoroughly address how to build a safe, secure, multimodal transportation system that offers more choices, less delay, and better value.
- The update should describe the need for connected arterial, pedestrian and bicycle networks for better local mobility. Considerations should include health and reducing dependence on heavily polluting forms of energy.
- The update should be particularly attentive to freight transport reliability, operations, security and capacity. Regional and global corridors, connectivity between regional producers and national markets, and distribution systems within the region should be addressed.
- The vision should help to better identify the region’s transportation priorities in the face of limited revenues. New methods of financing public investments should be considered. The update should clearly describe the costs of maintaining, preserving, and operating the region’s existing transportation system and services, and better describe the real benefits of transportation demand strategies.
- Problems with transportation concurrency programs and levels of service standards should be addressed.
- Long-range planning for the region’s numerous transit and transportation agencies could be better coordinated.
- The update should promote regional transportation management strategies and value pricing, and it should contain performance measures based on multimodal mobility, accessibility, and regional transportation goals.
- The region needs to assess employment opportunities throughout the region to better match housing supply with jobs.
- Economic development and job growth go hand-in-hand with transit-oriented development.
- Performance is often difficult to measure for travel other than by automobiles. However, this should not provide grounds for a bias for cars, nor as an excuse against monitoring nonmotorized travel.
- The HOV network should be completed.

KEY ISSUES FROM SPECIFIC TRANSPORTATION ISSUE AREAS

Throughout 2005, Regional Council staff have been making presentations to the Transportation Policy Board on nine topics similar to the areas developed for the Washington Transportation Plan update that have emerged as requiring some focused attention during the update of the regional plans. These issues
are summarized in Section III of this paper, which also elaborates on trends, challenges and opportunities facing transportation in the central Puget Sound region. Below are the major issues.

**System Preservation**
- The region faces huge preservation costs. Continued neglect or deferral of preservation investment leads to much more costly repairs and future improvements, potential safety problems and compromised or lost use of existing assets.
- Preservation investments have become more expensive and complicated, with increased expectations for additional environmental, safety and accessibility retrofits on existing facilities and vehicles.
- Large-scale preservation efforts such as the SR 520 Bridge, Alaskan Way Viaduct and the region's local roadway infrastructure require public education and support in order to be successful in the central Puget Sound region.

**Congestion, Mobility and System Efficiencies**
- Growth in vehicle miles traveled over the past 30 years has been extraordinary, resulting not only from population and employment growth but also an increase in two-worker households, more dispersed trip patterns, and growth in areas that are accessible only by private auto. The future growth rate for travel is projected to remain similar to that of population, as it has since the mid-1990s.
- Growth in trips has outpaced investments in transportation, leading to growing congestion and mobility problems.
- Operational improvements such as transportation demand management and traffic flow programs, and strategic investments show promise in restoring lost capacity on freeways and in addressing congestion and improving mobility in specific locations.
- Areas of higher density are taking hold and will support local and fixed-route transit service.
- Continued regional growth will require strategic expansion of transportation (transit, vanpool and roadway) capacity. The location and pattern of growth will determine which types of transportation systems can best meet the region’s travel needs.
- Stronger efforts to achieve regional growth and land use pattern objectives for more compact centers and corridors – urban development should result in longer-term transportation system efficiencies by enabling reduced need for automobile travel.
- As congestion grows, the efficiency and reliability of freight mobility suffers.
- International trade-security technology investments coordinated with regional and statewide intelligent transportation system initiatives where possible can help facilitate freight mobility.

**Safety and Security**
- When comparing the various transportation modes, roadway travel, including bike and pedestrian, has been subject to the highest number of fatalities. Ferry and transit are generally safer modes, although subject to greater security risks.
- Rural roadways have a higher fatality rate than urban roadways.
- Behavioral factors such as excessive speed, impaired driving, and not using seatbelts are significant contributors to fatal accidents.
- Improved communications are needed to meet emergency/security needs.
- Coordination and planning efforts for security and emergency management need to continue to improve.
- Increased traffic on both the rail and street/highway system will make grade separations more important.

**Special Needs Transportation**
- The elderly, persons with disabilities, low income, and children are groups who are more likely not to have access to an automobile for basic trips, and may have special transportation needs. These groups represent a large share of the population.
- The number of elderly, and especially the "old" (elderly over 85), will grow significantly over the next 30 years. While many will continue to drive longer, this group's growing numbers will increase the demand for special transit services as they surpass driving age.
A complex web of public, private nonprofit, and private entities exist to provide special transit services that are, at times, expensive to provide and confusing to the customer.

Greater coordination among providers will increase efficiencies.

Prosperous Economy and Global Competitiveness
- The region has adopted and is acting upon a Regional Economic Strategy.
- By 2040 1.2 million new jobs are forecast for the region.
- Transportation infrastructure has been identified as one of six regional foundations needed to support the economic strategy and maintain the global competitiveness of the region as well as a way to support targeted industry clusters.
- More work is needed to understand and address in the regional transportation plan the specific transportation needs of targeted industry clusters and the balance of competing interests in the overall economy.
- National research indicates the economic need for a dependable transportation system that includes integrated operational and infrastructure strategies, and protects against system disruption.5

Freight Movement
- Freight mobility is dependent on an interconnected system of local streets, highways, intermodal connectors, air and sea ports, and intermodal rail yards supporting the movement of trucks, rail, airplanes and ships.
- The Puget Sound region has three aspects of freight movement: 1) the region’s role as a gateway for international trade, 2) the freight movement needs of our own manufacturers, and 3) the local delivery system. All three need to be reflected in the regional transportation plan.
- Freight movement within and through the region has grown tremendously and is projected to continue growing. Infrastructure and operational solutions will be needed to cope with the significant growth caused by regional and statewide needs and larger impacts of globalization. International freight movement through the Seattle-Tacoma sea ports is 70 percent discretionary, and improving transportation mobility is critical to keep discretionary cargo here. That is vital to retaining and growing jobs related to this function.
- Development of air cargo issues is currently underway in the Regional Air Cargo Study and can be added when completed.
- To give freight mobility appropriate prioritization, it will be necessary to review the project selection criteria and other means used to develop the TIP.

Health and Environment
- Air quality in the region has improved significantly over the years due to improved vehicle and fuel technologies. Implementation of strategies that reduce the need to drive alone (such strategies as transit, high occupancy vehicle (HOV) lanes, etc.) also help to improve air quality. The region has been meeting all national ambient air quality standards since 1996.
- Since mobile sources represent over half of the air emissions in the region, work must continue to maintain the standards. New areas of concern have emerged as well. They include fine particulates, toxics and climate change, all of which are currently being researched by the Puget Sound Clean Air Agency and other organizations.
- Water quality and runoff from transportation facilities remain significant environmental concerns and cost factors in transportation projects.
- Much recent attention has been paid to the connections among transportation, land use and health. The transportation system has been identified as an element that has a role in improving overall health and reducing obesity rates for local communities when it is carefully planned and linked to the form of land use to provide improved opportunities to walk and travel by bicycle. The 2005 legislative session addressed this by passing a GMA amendment mandating that all local jurisdictions planning under GMA incorporate a pedestrian and bicycle element in local transportation plans and address health and more active living opportunities in local land use plans.

5 The Freight Story: A National Perspective on Enhancing Freight Transportation, Federal Highway Administration, Nov. 2002
Freight Transportation Improvements and the Economy, FHWA, June 2004
Poverty and minority populations are growing and becoming more dispersed. Between 1990 and 2000, the poverty population grew by nearly 20 percent, while the overall population growth was under 17 percent. Environmental justice for these populations is an increasingly important transportation service issue.

**Transportation Finance**
- Long-term sustainable funding is critical to large-scale transportation investment programs.
- Dependence on fuel tax may limit long-term financing capabilities as vehicles become more fuel efficient and as inflation degrades the buying power of the existing fuel tax.
- There is a need to determine the role of user fees such as tolls and value pricing.
- Attracting private investment could help fill gaps in transportation finance and support strategic investments in freight networks.
- Although user fees, tolls, and private investment in transportation infrastructure will be necessary to achieve the region's goals, we must ensure that the transportation infrastructure cost of doing business here does not form an impediment to location decisions.

**Future Visions**
- Long-term sustainable and flexible future solutions require an integrated approach to transportation that supports the region's growth, economic and environmental objectives. Such an approach could also provide a framework for prioritizing limited transportation funding.
- Land use alternatives should be used to address transportation access and mobility issues and to help define the future transportation system.
- Public understanding and support for transportation investments needs to be improved.
- New technologies and programs need to be explored. Components such as intelligent transportation systems, telecommuting and alternative energy sources could play a bigger part in providing transportation solutions than they do currently.
- New systems and expanded capacity will be needed to serve the expected growth in the years ahead.

**APPROACH TO POLICY REVIEW**

As stated previously, this paper begins a process through which the region will update Destination 2030 and the transportation elements of VISION 2020. Central to this update process is the review of current policies and the consideration of policy revisions and additions. The region's current broad body of transportation policies is a diverse set of directions that try to be all-encompassing. But this set of policies is also subject to criticism as being unwieldy and cumbersome, potentially providing conflicting policy directions.

While Section IV of this paper examines a set of transportation issues that may require the development of new regional policy, there is also a need to streamline and simplify our policy base. Given these challenges and requirements, staff recommends that the Regional Council use the following three objectives to begin refining the existing body of adopted regional transportation policies:

1. Streamline current policies to be fewer and briefer and to better describe desired results and outcomes of a successful regional transportation plan.
2. Clarify regional policy intent by eliminating current redundancies and overlap among a number of policies.
3. Retain the benefits found in current policies that describe "how to" aspects of broader policies, but convert such statements into more appropriate and descriptive forms of regional plan direction and guidance.

Plan policy should guide actions and investment decisions, but to do this effectively, policies should lend themselves to the identification of decision criteria. State and federal laws require that regional transportation plans must also utilize a least-cost planning analysis and must integrate a congestion management program into the planning process. These disciplines require the use of evaluation criteria
that are based on policy and follow some general rules. Criteria selection and organization are intended to distill areas of policy into their component elements. When taken together, criteria ideally should be:

- Mutually exclusive – to prevent double counting of impacts
- Comprehensive – to include all criteria of importance to the decision process
- Measurable – to allow objective and discrete measurement of effectiveness

Within least-cost planning framework, criteria can then be applied in a formal project or programmatic prioritization process.

The chart below demonstrates a process through which policies can be translated into criteria that can then guide decisions.
II. REGIONAL TRENDS

In determining the transportation issues that face the region in the coming years, it's important to consider the factors that influence the region's transportation needs and its ability to meet those needs now and in the future. Chief among them are population, employment and land use and their related travel trends.

GROWTH

The central Puget Sound region has grown rapidly. Between 1970 and 2000 the region's population grew by more than 1.3 million. This was an average annual growth rate of 1.8 percent, compared to 1.1 percent for the nation overall. The population is expected to grow by another 1.7 million people between 2000 and 2040, an average annual increase of 1.1 percent. Employment is also growing. The number of jobs in the region grew by 1.1 million, an average annual growth rate of 2.9 percent. Total employment more than doubled from 0.8 million to 1.9 million between 1970 and 2000. Forecasts project that more than 1.2 million jobs will be added between 2000 and 2040, a growth rate of 1.2 percent a year. Because of our gateway role, demographic trends in the Pacific Rim, the rest of the US and even Europe, influence transportation here beyond what would be expected of our own population and employment growth.

Growth has been focused within the designated Urban Growth Area. With the passage of the Growth Management Act in 1990, most of the growth in the past decade has been focused within defined urban growth areas. Between 1995 and 2003, the region as a whole directed 85 percent of its population growth and 96 percent of its employment growth into urban growth areas (UGAs). The distribution of this growth has not been proportionate among the region's four counties. Between 1995 and 2003, King

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**Figure 1. Population and Employment** in the Central Puget Sound Region, 1970-2040

Growth has been focused within the designated Urban Growth Area. With the passage of the Growth Management Act in 1990, most of the growth in the past decade has been focused within defined urban growth areas. Between 1995 and 2003, the region as a whole directed 85 percent of its population growth and 96 percent of its employment growth into urban growth areas (UGAs). The distribution of this growth has not been proportionate among the region's four counties. Between 1995 and 2003, King

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7 Pursuant to the state's Growth Management Act, urban growth areas are designated by counties, in consultation with their municipalities. These areas are to accommodate 20 years of growth, based on population projections provided by the state's Office of Financial Management. No annexations are allowed beyond designated growth areas.
County received 69 percent of the region’s employment growth and 42 percent of the population growth. On a population basis, Kitsap, Pierce and Snohomish counties grew at a faster rate than King County, but each of these counties actually received significantly less new population than King County. (See Figure 2.)

**Figure 2. County Distribution of Population and Employment Growth, 1995-2003**

<table>
<thead>
<tr>
<th>County</th>
<th>Population</th>
<th>Covered Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>King</td>
<td>69%</td>
<td>42%</td>
</tr>
<tr>
<td>Kitsap</td>
<td>15%</td>
<td>5%</td>
</tr>
<tr>
<td>Pierce</td>
<td>23%</td>
<td>15%</td>
</tr>
<tr>
<td>Snohomish</td>
<td>29%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Growth rates also vary among jurisdictions in the region. Over the past three decades, the region has experienced a significant proportional shift in population and employment growth between older, developed cities and newer, developing cities. Population in the city of Seattle actually declined during the 1970s and part of the 1980s. Yet Seattle gained more population than any city in the region with nearly 50,000 more residents between 1990 and 2000. Also during the 1990s, the other central cities of Bellevue, Everett, and Tacoma gained more than 50,000 residents collectively. Despite large gains, population within these cities represents less than 30 percent of the region's total in 2000, down from 32 percent in 1990.

This proportional decrease reflects enormous growth that has occurred in many of the newly developing parts of the region. Much of the growth occurring in the fast growing suburban locations over the past three decades has resulted in a more dispersed pattern of land use development throughout the region. As fast growing suburban areas have increased in density, they have emerged as regionally significant centers.

Centers have emerged as focal points for growth. A key goal of focusing development in urban growth areas is to attract an increased proportion of the region’s jobs and housing into designated Regional Growth Centers. Currently, 25 locations in the region have been designated as Growth Centers. When Growth Centers were initially defined in VISION 2020 (adopted in 1990) they included historic downtown areas, large retail shopping centers (malls), and low-density office parks. Since then development trends have been mixed. Some of the designated centers have attracted a mix of different higher-density land uses while in other locations little development change has occurred.

Between 1990 and 2000, population in designated Growth Centers increased by more than 27 percent. In 2000, Growth Centers account for 2.6 percent of the region’s land area but contain 4.7 percent of the population and 27.5 percent of the jobs. The regional plan also calls for centers of intensive manufacturing and industrial activity supported by infrastructure and services. There are currently nine locations that are designated as Regional Manufacturing/Industrial Centers. Between 1995 and 2000, employment grew by more than 22 percent in the manufacturing/industrial centers and 18 percent in Growth Centers. Taken together, the Regional Growth Centers and Manufacturing Industrial Centers absorbed approximately 104,000 of the region’s 264,000 net new jobs, accounting for 39 percent of the
The fact that centers in many cities and in King County hold a much larger share of the region’s jobs than their share of the population, is an indicator of an imbalance between jobs and housing that has implications for transportation.

Regional demographic changes will influence travel demands. In addition to the size and distribution of the population, the region is forecast to experience a significant change in the age profile of the population. The change will be most dramatic among the elderly (65 years and older) where the proportion of regional population will increase from 10 percent today to 16.7 percent in 2040. This age profile change is known as the “squeezing of the population pyramid” (see Figure 3). Poverty, which has implications for greater need for transit service to serve those without autos, has increased as well. The region’s total population increased by 16.5 percent between 1990 and 2000, but the poverty population increased by 19.9 percent. Given that high numbers of the non-driving population are elderly and low-income, this demographic shift will have serious implications on travel in the region and potentially place more pressure on transit and paratransit services.

Figure 3. Population by Age in the Central Puget Sound Region, 2000 and 2025


TRANSPORTATION

Growth in travel has outpaced population growth. The overall growth in the region has led to substantial increases in travel, measured in total vehicle miles traveled. Since the late 1970s, there has been a significant shift in the number of people commuting to work per household. The shift is due in part to more two-worker households. This factor, combined with the dispersed travel patterns caused by an increase of employment outside traditional downtowns, led to a growth in vehicle miles traveled that surpassed the growth of population and employment. Between 1980 and the early 1990s the rate of growth in vehicle miles travel was about four times the rate of population growth. During the 1990s, the growth rate tapered off so that it is now similar to the rate of population and employment growth. The net effect is that between 1980 and 2000, vehicle miles traveled in the central Puget Sound region increased 120 percent, resulting in an average increase from 17 daily per-capita vehicle miles traveled to 24. (See Figure 4.)

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8 Central Puget Sound Regional Growth Centers Report, Puget Sound Milestones, Puget Sound Regional Council, December 2002. Note: Growth Centers data has been updated to include the four new centers designated since 2002.
9 For more information about Environmental Justice and the VISION 2020 Update, go to www.psrc.org/about/titlevi/ej.htm, (9/05)
10 Travel Indicators and Trends in Washington State (April 2005)
11 Puget Sound Trends (#T2 Oct 2004)
Figure 4. Cumulative Growth in the Central Puget Sound Region, 1980-2004

Note: While VMT outpaced population and employment between 1980 and 1992, since then the three growth rates have been similar.

Proportionally, regionwide work trips have changed only modestly among modes. In the face of growth and travel increases, the private automobile has remained the predominant mode of travel in the region. Although the use of public transit and vanpools has expanded in targeted markets, single-occupant vehicle trips have maintained a high rate of all trips in the region. Just over 70 percent of the region’s work trips are by single-occupant vehicle. Figure 5 displays mode choice journey-to-work data from the U.S. Census between 1980 and 2000. During this period, the proportion of SOV travel rose somewhat in the 1980s and dropped during the 1990s. Conversely, total trips on public transit (fixed-route and demand response) dropped slightly during the 1980s before recording substantial increases in absolute public transit ridership in the 1990s – increasing from less than 100 million trips to more than 130 million trips. The most significant change in commute patterns is in the number of people who work out of their homes, increasing from 2 percent to more than 4 percent of commute options between 1980 and 2000.

Figure 5. Work Trips by Mode, 1980, 1990, 2000

The freeway network bears the brunt of the growth in travel. The impact of growth, more dispersed travel patterns, lack of transportation investment and heavy reliance on single-occupant vehicles has led
to large increases in freeway congestion over the past two decades.\textsuperscript{12} A substantial proportion of the region’s roadway travel needs are met by limited access freeways, including local segments of the federal interstate highway system and major state highways. The region’s congestion has been estimated to be among the highest in the country for several years.\textsuperscript{13} Investments in the region’s roadway network have not kept pace with increasing travel demands. Part of the problem has been insufficient investment in developing a network of arterial roadways. In comparison to other major metropolitan areas, the central Puget Sound region has a relatively sparse arterial network, which has placed additional demands on the freeway system.\textsuperscript{14} This enormous influx of vehicle trips on a relatively sparse network of roadways has lead to significant traffic congestion problems throughout the region. Figure 6 depicts the delay caused by congestion on the region’s major roadways.

\textbf{Figure 6. Daily Vehicle Hours of Delay per Lane Mile on State Roadways in the Puget Sound Area}

\begin{figure}[h]
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\includegraphics[width=\textwidth]{image.png}
\caption{Daily Vehicle Hours of Delay per Lane Mile on State Roadways in the Puget Sound Area}
\label{fig:delay}
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\includegraphics[width=\textwidth]{image.png}
\caption{Daily Vehicle Hours of Delay per Lane Mile on State Roadways in the Puget Sound Area}
\label{fig:delay}
\end{figure}

\textbf{Substantial progress has been made in building freeway HOV lanes and operational improvements.} One response to the growing demand on limited-access highways has been the development of a network of high-occupancy-vehicle lanes. More than 200 lane-miles of the HOV system have been completed, almost half of the lanes have been built since 1990. As work on the HOV system progresses, the system becomes less fragmented. The HOV system now functions more as a system of interconnected facilities as envisioned in VISION 2020 and Destination 2030. HOV lanes have provided travel time savings to transit and carpoolers, particularly in the most congested corridors. During peak travel periods, the HOV lane system moves nearly a third of the people on the freeways in only 17 percent of the vehicles. They have also increased total transportation system efficiency by enabling greater total person-trip capacities on the region’s freeway system. In addition, investments in lower cost operational improvements, such as ramp metering and signal timing, have increased the efficiency and expanded the overall capacity of the roadway system.\textsuperscript{15}

\begin{figure}[h]
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\includegraphics[width=\textwidth]{image.png}
\caption{Daily Vehicle Hours of Delay per Lane Mile on State Roadways in the Puget Sound Area}
\label{fig:delay}
\end{figure}

\textbf{Transit’s influence is focused on specific markets.} Transit plays a significant role in serving travel needs in specific geographic areas and in many of the most congested locations and times of the day. Although public transit carries only a small percentage of all trips, transit has played an increasingly important role in serving peak period travel demand to concentrated employment locations. Transit’s share of work trips to downtown Seattle has increased from 34 percent in 1990 to 37 percent in 2000. Transit’s share of work trips to downtown Bellevue has increased from 5 to 8 percent and to Overlake

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{image.png}
\caption{Daily Vehicle Hours of Delay per Lane Mile on State Roadways in the Puget Sound Area}
\label{fig:delay}
\end{figure}

\textsuperscript{12} The number of hours of delay in a day on a given mile of roadway is a basic and accessible measure for describing congestion. It indicates which roadways are congested, and it gives an indication of the severity of congestion and how long it lasts.

\textsuperscript{13} Texas Transportation Institute’s Urban Mobility Reports. The Seattle area’s travel time index\textsuperscript{*} for 2003 is ranked 12th in a field of 85 urban areas, and 4th among the 26 areas that are in the population range of 1 million to 3 million. \textsuperscript{*}Travel time index is the ratio of travel time in the peak period to the travel time at free-flow conditions. For example, a value of 1.35 indicates that a 20-minute free-flow trip takes 27 minutes in the peak period.

\textsuperscript{14} Puget Sound Trends (#T-13, June 2003)

\textsuperscript{15} Washington State Freeway HOV System, WSDOT, March 2005
from 2 percent to 4 percent during the 1990s. Rapid population growth, substantial economic and employment growth, and increasing parking costs over the past decade have all influenced demand for more transit services. On the other hand, changes in travel and household structure, more dispersed land development patterns, historically low gas prices (until 2005), and increased auto ownership have presented challenges to creating new transit markets. A substantial ongoing public investment in transit has been needed to keep pace with these growth challenges. Between 1992 and 2004, transit service hours increased 65 percent, and transit ridership was up 35 percent. (See Figure 7). A large increase in service hours has allowed transit agencies to provide greater coverage to suburban areas and to more dispersed locations. Closing the gap between increases in service hours and passenger trips will demand more efficient delivery of transit service over the long-term.

**Figure 7. Population, Employment, VMT, Transit Service Hours and Ridership Cumulative Growth, 1992 - 2004**

Travel demand strategies have influenced travel choices. The central Puget Sound region has been in the forefront of implementing transportation demand strategies since the 1970s. The country's first public vanpool program was established by Seattle's Commuter Pool in 1979, and the guaranteed-ride-home concept was originated by King County Metro for downtown Bellevue in 1987. Jurisdictions began incorporating demand strategies into their comprehensive plans in the early 1980s, and transit agencies have developed rideshare programs and worked with employers and developers to tailor transit services. In the central Puget Sound region, ridesharing is the second most-used mode of travel at 18 percent of all work trips. The Commute Trip Reduction (CTR) program has been a major success story, reducing employee commute travel by 96 million vehicle miles between 1993 and 2003.

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16 2000 U.S. Census
17 2000 Census
Investments in transportation access to Growth Centers have been made. The 25 regional growth centers are currently connected by the roadway system. All are directly accessible by freeways or other major state routes. Public transit access to and between these centers is less extensive but has improved considerably during the 1990s. HOV lanes have been extended along much of the freeway network, and a number of direct access ramps have been constructed to facilitate transit vehicle access to centers. All of the centers have some level of bus service, ranging from very intensive to just a few routes. Sound Transit operates regional express bus service, which serves 19 centers and commuter rail which serves seven. Regional manufacturing/industrial centers generally do not support the level of transit services that Regional Growth Centers do because of their development characteristics. All manufacturing/industrial centers have access to state highways as well as regional arterial streets. Four of them also have access to rail and water facilities.

Air quality has improved, but other environmental risks are a concern. Although more people are driving more miles, air quality in the region has been improving due to better vehicle and fuel technologies, as well as the implementation of Vehicle Miles Traveled (VMT) and trip reduction measures. The region has met all national ambient air quality standards since 1996. Still, many pollutants contribute to respiratory illness and increased cancer risk, with children and the elderly among the most vulnerable. Preserving the region’s water quality has also been a challenge. Impervious surfaces that are part of the transportation infrastructure accumulate pollutants from the vehicles that use them. Surface water runoff has degraded the aquatic environment, increased stream channel erosion, and reduced groundwater recharge. A study of pollution in Puget Sound found waning levels of toxic metals associated with industry but increasing levels of polycyclic aromatic hydrocarbons, a chemical associated with car exhaust, roads, and tires.

Freight mobility has emerged as a major challenge. Deteriorating trip reliability is a particular concern for freight movement, which also is being squeezed by the lengthening of daily peak travel periods. The movement of freight and goods involves a multimodal and intermodal system that includes roadways, rail lines, and sea and air routes, but also the freight terminals that serve as staging areas. In the Pacific Northwest, the freight system reaches far beyond this gateway region's boundaries. It involves a complex

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As Figure 8 could be confusing, we offer the following explanation. The Commute Trip Reduction program began in 1993, so the chart indicates zero reductions for that year. Each subsequent measurement year shows an increase in the average annual VMT that was reduced from the 1993 baseline VMT of CTR employers. (The data is NOT cumulative over the years.) The chart shows that CTR has produced greater benefits each year as the program has matured.

At 53 percent and 24 percent respectively, the major sources of air emissions in the Puget Sound region come from on-road motor vehicles and smaller non-mobile sources.

mix of public and private ownership. Some 70 percent of international import containers that arrive at Puget Sound ports are loaded directly onto trains for trans-shipment throughout the country and then in some cases, back onto ships for shipment to Europe. A value of the region's international-gateway status is lower transportation costs for the state's exports. The 30 percent of container shipments that stay here contributes to the region's distribution, warehousing, manufacturing, wholesaling and retailing jobs and markets.

The Washington Transportation Plan approaches freight mobility in terms of its direct benefits to three elements of the economy: 1) global gateway function, 2) local marketing and supply-chain needs, and 3) local distribution needs. Within this broad framework, a number of trends emerge:

- **Ports and Rail.** Port-related tonnage on rail is expected to double by 2020. Container volumes surged about 30 percent between 2002 and 2004, and will likely double or triple by 2020. Bottlenecks in the rail system are likely to constrain the long-haul rail transport of containerized cargo by 2012.

- **Trucking.** Truck volumes are generally rising three or four percent each year, about twice as fast as personal trip making. The state routes with the highest gross annual tonnage are in this region. Origins and destinations are defined by supply chain economics and are highly varied. For example, of trucks westbound over I-90, only 15 percent are heading directly to marine ports. Half are destined for warehouses, distribution centers or truck terminals. Eastbound trucks on I-90 increased by nearly half between 1994 and 2002, westbound by over 80 percent. Truck traffic on I-5 southbound and northbound doubled in the same ten-year period.

- **Air Cargo.** Air cargo dipped in 2001 due to both the national recession and 9/11 terrorism. Volumes are recovering and expected to grow at 3.5 percent/year. High value air cargo depends upon reliable service, and increasingly is being shipped by truck for overnight delivery when this is judged more reliable than air travel or less problematic due to heightened security. Landside access to Seattle-Tacoma Airport and to Boeing Field are major concerns. Tonnage through Sea-Tac are expected to increase from 347,000/year in 2004 to 798,000 in 2025. The Boeing Field figures are smaller (126,000 and 243,000), but the likelihood and implications of air cargo shifts between these two fields is a major focus of regional planning.

To better understand and act upon regional freight trends, since 1994 the Regional Council has fostered the public-private Regional Freight Mobility Roundtable, which brings together federal, state and local agencies, ports, and railroads. In addition, it has supported the FAST Corridor partnership in developing and implementing a system of 15 initial strategic freight-mobility projects, providing for grade separations that promote the movement of port-related international freight along the north-south rail mainline and help mitigate the impacts of that freight on local communities. Freight movement is addressed as part of Section IV of this issue paper. In addition to trends in personal mobility, it is important to note here that freight trends are having a profound effect on all modes of regional transportation. For example, between 1994 and 2003 truck counts on I-90 increased by half and on I-5 (near the Sea-Tac Airport) they increased by 100 percent.

**Transportation revenue sources have undergone structural changes.** Existing transportation revenues have not kept pace with travel demand and the infrastructure investments needed to support this growing demand. Transportation infrastructure costs have been on the rise over the past few decades because of increases in material and labor costs, the costs of mitigating environmental impacts, and increased urban land values. Insufficient public resources have led to an increase in the unfunded backlog of maintenance preservation projects, leading to higher overall costs in the future and raising safety concerns. The region is increasingly becoming reliant on operating revenues, sales tax, and general tax revenue. Reliance on fuel taxes and vehicle registration charges (as proceeds shrink against inflation and fuel economy gains), as well as revenues from taxes on vehicle value (a result of the elimination of the statewide motor vehicle excise tax), has declined. The changes have resulted in an increasing reliance on funding sources that are most effected by fluctuations in the regional economy.

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22. *Strategic Freight Transportation Analysis (SFTA), Washington State University, 2002-2007*
III. LAND USE AND TRANSPORTATION

A hallmark of both VISION 2020 and Destination 2030 is a foundational principle that land use, the economy and transportation are mutually supportive and therefore inextricably linked\(^{23}\). The way land is developed affects mobility and accessibility – and where transportation is available, demands for land development will follow. Both VISION 2020 and Destination 2030 have received national recognition for addressing land use and growth strategies as part of the overall transportation plan for the central Puget Sound region.

Washington state law also recognizes the importance of the land use/transportation linkage. For example, city and county comprehensive plans developed under the Growth Management Act are required to incorporate land use assumptions as the basis for creating transportation elements. Regional transportation plans are required to address a number of land use factors, including 1) development patterns that promote pedestrian and nonmotorized transportation, 2) residential density, 3) joint and mixed-use development, 4) development corridors and urban design that support high-capacity transit, and 5) concentrations of economic activity.\(^{24}\)

"A key part of the overall work on Destination 2030 was to provide more specificity on the linkage of land use and transportation planning contained in VISION 2020, as well as to add clarification and detail to existing growth management policies and provisions. The growth strategy is built around the concept that additional transportation infrastructure and services will be provided to areas that are accepting an increased share of the region's growth. It has become clear in recent years that the region must increase investment in targeted areas if it is to achieve its vision for growth."

"The centers strategy was devised to achieve multiple growth management goals, including the creation of an efficient transportation system that supports travel options by all modes and maximizes the benefits of system investments."

\(\text{− Destination 2030, Metropolitan Transportation Plan for the Central Puget Sound Region, Puget Sound Regional Council, May 2001}\)

LINKING CENTERS, COMPACT COMMUNITIES AND TRANSPORTATION

An important feature of the vision strategy is the centers concept, which was adopted in part to enable an efficient transportation system that includes all modes of travel and makes the most of system investments.

Although much of the focus for regional and local planning has been on the formally designated regional growth centers, VISION 2020 recognizes that other urban geographies such as compact communities, redevelopment corridors, mixed-use districts, rural/resource lands and transportation station areas remain an integral part of the overall vision for growth in the region. Other concentrations may act very much like the designated urban centers and contribute to achieving mobility and accessibility benefits. Strategic infrastructure investments in compact communities help the region's transportation system function better. Such investments and strategies include the following:

- Work with and support planning and funding for integrated urban development and transportation improvements with local agencies that have an interest in developing designated centers, compact communities, and high capacity transit station areas – recognizing that not all centers and areas of concentrated development are intended to be the same.
- Continue to use the physical design guidelines incorporated into Destination 2030\(^{25}\) to advance fundamental design principles and site development characteristics that serve the mutually supportive linkage between land use and transportation. The Regional Council should work with localities,

\(^{23}\) The relationship between land use and transportation with the economy is being addressed by the Prosperity Partnership and in a separate issue paper on the regional economy.

\(^{24}\) Revised Code of Washington, Chapter 47.80.023 and .026

\(^{25}\) Destination 2030, Puget Sound Regional Council, May 24, 2001, Pages 36 and 37
transit agencies, ports, and manufacturing/industrial and development communities to expand and refine these guidelines as needed.

- Bring to the Executive Board a recommendation for applying new detailed criteria for evaluating all existing regional growth centers.
- Continue to advance regional guidelines, technical assistance, and best practices that promote planning for regional centers.
- Expand and further detail the growth strategies included in Destination 203026 that are intended to address mobility and accessibility for people and freight.
- Continue to advocate the use of incentives to recognize places that are achieving the types of development that support the regional strategy of compact development and pedestrian and transit-supportive urban form by prioritizing funding for regional projects that create or enhance such development and urban form.
- Support continued implementation of a regional transportation improvement program planning policy framework that emphasizes the prioritization of regional transportation funding for regional growth and manufacturing/industrial centers, and the prioritization of countywide funding for regional and local growth and activity centers.
- Monitor and report on issues and trends affecting regional growth centers, manufacturing/industrial centers and major intermodal facilities27 as primary locations within the region’s transportation network. Review and monitor the progress that regional growth and manufacturing/industrial centers have made in implementing projects and plans.
- Pursue the development of new resources to create ongoing funding to support planning and projects for regional growth center subareas and for freight mobility.
- Develop a position for Executive Board consideration that strongly encourages the state to align its investment to support and implement the Growth Management Act and the region’s growth and transportation strategy.

While land use is not called out as a specific issue area in section 4 of this paper, the update of Destination 2030 will proceed with the region’s vision document as a core organizing principle. Transportation policies, strategies and actions will be designed to support the region’s broad-based and long-range vision. For a more complete discussion of the range of topics being reviewed during the VISION 2020 update process, please reference the Growth Management Policy Board’s adopted issue papers, available on the VISION 2020 Web page (http://www.psrc.org/projects/visions/pubs/issuepapers.htm).

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27 An intermodal facility is one where modes of travel intersect, e.g., park-and-ride lot, ferry terminal, rail, marine or airport where cargo is transferred to trucks for long-haul or local distribution.
IV. STRATEGIC ISSUES TO BE ADDRESSED

This section provides background information and a discussion of the transportation issues to be addressed in the updates of VISION 2020 and Destination 2030. The discussion is organized around nine strategic issue categories:

- System Preservation
- Congestion, Mobility and System Efficiencies
- Safety and Security
- Special Needs Transportation

- Prosperous Economy
- Freight Movement
- Health and Environment
- Transportation Finance
- Building Future Visions

This structure is a modified version of that developed by the Washington State Department of Transportation for its 2005 update of the Washington Transportation Plan. It provides a results-oriented context in which to discuss transportation issues that should be explored in the updates of VISION 2020 and Destination 2030. The structure can provide a framing tool for the region's transportation goals and policies, and it also helps maintain a coordinating link with the state's transportation plan.

The following issue areas are not the only areas of importance to transportation planning, but they represent crosscutting topics (typically, cutting across modes of travel, jurisdictions or implementing entities). These topics represent areas where the currently adopted plan, Destination 2030, lacks some significant detail, or where renewed focus may be required. It is important to keep in mind that transportation policies and issues are being addressed within the larger context of updating the region's plan for growth, transportation, and the economy – VISION 2020. As the planning process evolves, decisions about how to handle population growth, and strategies to maintain our economic prosperity, will help to guide the focus of transportation policy.

SYSTEM PRESERVATION

The existing transportation system is composed of a massive network of investments in local, regional and state transportation facilities and supporting capital assets that have become essential for personal, vehicular and freight mobility throughout the region. As is typically true in other urban regions, this combined set of publicly owned regional transportation assets, developed over many decades, is the single largest public investment in this region.

The past few years of regional planning have demonstrated that "preservation" needs reach well beyond conventional road overlays and rehabilitation. Some of the State’s top priority projects such as replacing the Alaskan Way Viaduct and the SR 520 floating bridge are also important preservation/safety projects that are essential for regional mobility and economic stability. While concrete may have as much as 10 times the life span of asphalt, at about $330,000 per lane-mile for concrete retrofit and about $1 million a lane-mile for replacement, facilities such as I-5 are long overdue for a significant investment that will last another 40 to 50 years. Furthermore, the state of the art in monitoring, measuring and rehabilitating local, regional and state asphalt roads, bridges and transit facilities has been much advanced over the past few decades. However, the motor vehicle fuel tax revenue base needed to maintain highways, streets and roadway preservation has been progressively eroded due to inflation.

In the long run, transportation system preservation saves money and avoids disruptions. The essence of preservation is responsible asset management. This requires a strategic framework for making cost-effective decisions about allocating funding and personnel and managing physical assets, including all forms of transportation facilities.

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28 Briefing to Washington Transportation Commission, WSDOT, June 2004
Asset management for system preservation is based on a process of monitoring the physical condition of assets and predicting deterioration over time. It also includes conducting timely repair, rehabilitation and replacement of existing transportation facilities and components in order to sustain and enhance the performance of assets over their useful life.

**What do federal and state laws say?** There are a number of federal and state mandates that add perspective to the importance of system preservation. *Preservation of the existing system* is one of the eight major planning factors required by Congress to be addressed in metropolitan transportation plans (23USC134(h)(1)). In 2003, the Washington State Legislature followed this national direction and established heightened accountability and performance monitoring oversight for management of all state transportation agency assets.30

**What do VISION 2020 and Destination 2030 say?** The first 10 multicounty planning policies for transportation in VISION 2020 and Destination 2030 address managing and optimizing existing transportation facilities and services. Policy RT-8.3 states that “high priority” should be given to preservation and rehabilitation. RT-8.8 advances “transportation system management activities” in order to “achieve maximum efficiency of the current system without adding major new infrastructure.” *Destination 2030* and its 2004 Progress Report Update identified the projected costs for all transportation system preservation plus other basic needs at about $53 billion over the 30-year plan horizon period. The magnitude of these dollars for just preserving all existing modes of transportation with no new capacity or services equates to 51 percent of all projected total transportation investments and 71 percent of all projected current law revenues for the 30-year plan.

**CONGESTION, MOBILITY AND SYSTEM EFFICIENCY**

Congestion in the central Puget Sound region is bad and getting worse, and it affects all forms of travel. As in other major metropolitan areas, this region’s congestion is influenced by rapid and dispersed growth in population and employment and comparatively slower growth in system capacity and efficiency. Total system delay is now at 285,000 hours per day and is expected to reach nearly

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20 SAFETEA-LU sets forth eight planning factors to be addressed by metropolitan transportation planning organizations. They include: (A) support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency; (B) increase the safety of the transportation system for motorized and nonmotorized users; (C) increase the security of the transportation system for motorized and nonmotorized users; (D) increase the accessibility and mobility of people and for freight; (E) protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns; (F) enhance the integration and connectivity of the transportation system, across and between modes, for people and freight; (G) promote efficient system management and operation; and (H) emphasize the preservation of the existing transportation system.

30 Chapter 44.75 RCW, Transportation Performance Audit Board

31 Congestion is defined in this paper as the involuntary slowing of traffic below posted speed limits. Recurring congestion is caused by routine traffic volumes operating in a typical environment and is expected based on location and time of day. Nonrecurring congestion can be caused by an unexpected occurrence such as a special event, rainstorm, collision or disabled vehicle that blocks or slows traffic on the roadway.
1,118,000 hours by 2025.\textsuperscript{32} On average, a trip that now takes 30 minutes during the afternoon peak period will increase to nearly 90 minutes in 2025.

This growing congestion is not limited to the roadways. According to WSDOT, the container freight entering the ports of Seattle and Tacoma is projected to nearly triple by 2025 (from 2.8 million 20-foot equivalent units in 2002 to at least 6.9 million TEUs in 2025). This growth in freight and competing use of the rail lines will lead to more demands on mainline rail, which can have implications for congestion on the region’s roadways. In the foreseeable future, mainline rail lines will be operating at or near capacity in the Stevens Pass, Everett/Seattle, and Tacoma/Seattle segments.\textsuperscript{33}

The region has taken an active role in planning for passenger capacity at Sea-Tac International Airport. The Port of Seattle’s Comprehensive Development Plan for Sea-Tac sets out a 20-year development program for meeting demand and reducing congestion and aircraft delay. Regional Council policy supports the following improvements at Sea-Tac Airport to meet the region’s airside, terminal and landside needs: a third parallel runway, passenger terminal expansion, parking and roadway improvements, and air cargo expansion. The airside and terminal improvements are underway by the Port of Seattle. To address long-term capacity needs beyond Sea-Tac, the region is participating in a Statewide Air Transportation Capacity Study, to be completed in 2009. The Regional Council is also preparing a Regional Air Cargo Strategy to address long range air cargo needs.

Ongoing efforts to address this growing congestion and mobility on the region’s roadways have included a variety of nationally recognized strategies. The 200+ mile regional high-occupancy-vehicle lane network is one of the largest and most successful in the nation.\textsuperscript{34} HOV lanes have provided travel time savings to transit and carpoolers, particularly in the most congested corridors. They have also increased total transportation system efficiency by enabling greater total person-trip capacities on the region’s freeway system during the peak commute periods when that capacity is most needed. The central Puget Sound region has also been in the forefront of implementing demand strategies since the 1970s.\textsuperscript{35} The country’s first and largest public vanpool program originated here, as did the guaranteed-ride-home concept. Some of the region’s jurisdictions began incorporating demand management requirements into their land-use strategies in the early 1980s. A landmark Commute Trip Reduction program was enacted in the early 1990s which targeted reducing vehicle trips to large employers in the most urban counties across the state. The region continues to implement strong demand strategies\textsuperscript{36} that aid in reducing congestion and providing a more efficient transportation system.

Public transit also plays a significant role in regional travel, although it may account for a relatively small percentage of total daily trips. A primary contribution of transit is to provide access to major activity centers during peak travel periods when roadways are at capacity. If transit is able to capture a small increase in the total share of total trips, it can have a big impact on the ability of our overburdened transportation network to accommodate the mobility needs of the region. The six transit operators in the region – Everett Transit, Community Transit, Kitsap Transit, Sound Transit, King County Metro, and Pierce Transit – have plans to expand services to mitigate the impacts of congestion and improve regional mobility. Sound Transit recently adopted a new Long-Range Transit Plan, and in the short-term is committed to completing Phase I LINK light rail investments between the University District and Sea-Tac Airport. Local transit providers also have plans to restructure existing services and add new service to ensure that transit provides an attractive and competitive travel option in the region’s most congested corridors and centers during peak periods.

\textsuperscript{32} Congestion Relief Analysis for the Central Puget Sound, Spokane and Vancouver Urban Areas, Washington State Department of Transportation, August 2005
\textsuperscript{33} Rail Capacity Study, Washington Public Ports Association, 2004
\textsuperscript{34} Washington Division (USDOT, FHWA) Eastside Freeway Safety Improvements
\textsuperscript{35} For more information about demand strategies in the region, see the Puget Sound Milestones report, Metropolitan Transportation System: Transportation Demand Strategies, Puget Sound Regional Council, February 2005, http://psrc.org/projects/monitoring/tds.htm (9/05)
\textsuperscript{36} See Appendix B for a comprehensive list of demand strategies.
The Washington State Ferry system includes both car-ferry and passenger-only ferries, which operate across Puget Sound, connecting the east side of Puget Sound with Kitsap County and the Olympic Peninsula. These ferry routes function as part of the state highway system. Congestion related to the ferry system is similar to that on the region’s major highways. During morning and afternoon commutes, vehicle holding lanes are full, and commuter congestion is typically measured by how many ferry boats depart before the next boat arrives with available space. Given the financial and operational constraints facing the ferry system, it faces significant challenges in funding ongoing system maintenance and operations, as well as capacity expansion and improved customer service. Current efforts to address ferry system congestion include improved transit service to the ferry terminals, HOV priority loading, and increased use of passenger-only ferries on the most heavily traveled routes between Seattle and Bremerton and between Seattle and Winslow. In addition, Washington State Ferries is working with Kitsap Transit, Metro Transit, and Sound Transit to improve connections between arriving ferry boats and transit routes.

In spite of these actions, overall trip growth in the region has resulted in growing congestion, which degrades system efficiency. As congestion builds and traffic flows become unstable, the actual carrying capacity of the roadway is reduced. In highly congested locations like I-405 near Renton, the number of vehicles the lane can carry is reduced by 50 percent during the peak period. This lost productivity on the freeways increases travel time for autos and transit and encourages traffic to divert onto already crowded arterials and local streets.

**What do federal and state laws say?** Federal law requires the Regional Council to implement a congestion management process and integrate it into our planning processes. Also, promoting efficient system management and operation and increasing accessibility and mobility for people and freight are two one of the eight federal transportation planning factors.

Washington state’s transportation planning guidelines and principles require regional and local plans to factor in “circulation systems, access to regional systems, and effective and efficient highway systems” and address “intermodal connections” (RCW 47.80.023). Regional and local plans are also required to include transportation demand management strategies and programs. In 2003, the Legislature asked WSDOT to study current and forecasted congestion in the state’s major urban areas. The objective of this Congestion Relief Analysis was to understand how different approaches to transportation investment might help to offset anticipated increases in congestion and delay. Initial findings include the following:

- Combining roadway and transit improvements to match the unique characteristics of particular corridors provides the potential for more practical congestion relief when compared to single strategies.
- Transit investments are most effective in the urban core where capacity investment costs are high and congestion is persistent for much of the day.
- Pricing strategies are very effective in reducing delay if they use tolls that vary according to the level of congestion.
- Combining congestion-based tolls with new capacity investments proved to be particularly effective at reducing congestion delay and serving more people.

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37 Research for the Washington Transportation Plan found that congestion is dramatically reducing efficiency of the existing transportation system. During peak periods when volumes exceed 2000 vehicles per lane per hour, flows destabilize and vehicle speeds and volumes decline rapidly to the point that lane throughput is cut in half. But if speeds can be maintained at approximately 50 miles per hour, the roadway operates at its maximum efficiency and throughput.

38 There have been many studies focused on congestion relief. They include multiple corridor studies and various target-investment studies. Most of these efforts have focused on increasing the supply of transportation facilities.
What do VISION 2020 and Destination 2030 say? That transportation section of VISION 2020 makes the following statement regarding congestion:

Congestion and automobile reliance cannot be eliminated and the region does not have the financial capacity, land supply or public support to add enough streets and highways to bring service levels to those attained 10 or 20 years ago. We can, however, better manage the region's transportation system, make improvements to it, and complement the system with land use patterns that support alternatives to automobile travel (page 52).

The plan states that “the region's long-range transportation strategy is to establish a coordinated multimodal transportation system that is integrated with and supported by regional growth management objectives” (page 53). It further states that:

To support growth management objectives, transportation improvements and programs will be focused on establishing a more balanced transportation system, shifting emphasis from highways and single-occupant-vehicle travel to travel options to support the movement of people and goods (page 53).

The plan identifies facility improvements, such as roads, transit centers, walkways, bike paths and other infrastructure that support "different travel options." In terms of the operating environment, the plan calls for changes to make walking, bicycling, and transit use attractive options to automobile travel. Thus the multicounty transportation policies address both capacity expansion to address various travel options and changes in travel to reduce dependency solely on automobile travel (page 54).

Destination 2030, indicates rapid regional growth and development have left our existing transportation systems overburdened. Regular travelers on many transportation corridors face significant travel delays on a consistent basis. Strategically identified additions in capacity are a top regional transportation priority and support growth management objectives when designed and implemented appropriately (page 32).

Opportunities, Challenges and Implications for VISION 2020 and Destination 2030 Updates

- With population and employment growth and more complex travel patterns, congestion in the central Puget Sound region will likely never be eliminated. However, significant improvements in traffic flow within corridors can be made by improving bottlenecks, providing competitive alternatives, and improving management of the system to more completely use the capacity provided. Growth and changing travel patterns will necessitate new strategies geared to improving and tailoring mobility improvements and programs based on unique needs of each travel market as well as freight mobility.
- VISION 2020 and Destination 2030 updates should maintain their strong land use/transportation connections, and seek new, innovative ways to make the two mutually supportive. Suburb-to-suburb travel is increasing, as is the perception that a lack of affordable housing close to work centers is contributing to this phenomenon. Collection and analysis of data regarding affordable housing will be necessary to address this. Protecting connectivity for the movement of freight between manufacturing/industrial centers and freight intermodal facilities is also becoming increasingly important.
- Strategies to improve system efficiency — operational and demand management strategies, including roadway pricing/tolls — are potentially critical tools in reducing congestion and improving mobility in key corridors.

VISION 2020 acknowledges that current options to automobile travel are “unattractive” or “unavailable” in many locations of the region. Reasons for this, outlined in the plan, include land development patterns, currently available transportation infrastructure and services, and high subsidies for operating automobiles (page 53).

Bottlenecks can be defined as places where a roadway physically narrows, causing congestion. Chokepoints are places where delay occurs because of traffic interference and/or the roadway configuration.
- Water transportation opportunities in the region – including and in addition to services planned by the Washington State Ferry System and ferry service across Puget Sound and Lake Washington – should be evaluated.
- Public transportation – local and regional high capacity services – will need to play a significant role in mitigating the impacts of congestion and increasing the overall efficiency of the transportation system. That will require improved coordination of planning and investment in transit services and facilities (including HOV lanes).
- The state’s Commute Trip Reduction Task Force is currently redesigning the CTR program to focus on urban growth areas and centers. This represents an opportunity to make the program more effective and more efficient by directly addressing areas of high congestion.
- The updates of VISION 2020 and Destination 2030 should address context sensitive design by including provisions for greater sensitivity to the environmental and community impacts of transportation facilities.
- Under the state Growth Management Act, adequate local transportation facilities are required to be in place, or committed to financially, to serve new development. The GMA requires that transportation improvements or strategies to accommodate development be available when the impacts of development occur. In 2005 the Legislature approved a bill authorizing a study of multimodal transportation concurrency practices and issues in Washington state. Results of this work will be tracked and incorporated into the update processes for VISION 2020 and Destination 2030 as appropriate. (See Appendix C for more information about concurrency and recommendations for incorporating it into the VISION 2020 and Destination 2030 updates.)
- Two fuel-related challenges should be considered in planning for mobility and efficient transportation: 1) the relatively low cost of auto travel which contributes significantly to demands on our roadways, and 2) the need for a more sustainable system that is less dependent on fuel imports.
- The plan update should utilize the requirements to conduct Least Cost Planning and a Congestion Management Process as an opportunity to work with the public and business on the cost and benefits of various alternatives to improve mobility and reduce congestion.
- The public sector should work with private railroads to encourage investment in rail capacity, grade separations and other mitigation for increased freight and passenger volumes.
- The region will need to invest in ground access improvements to serve our major marine and air port facilities to ensure we meet forecast passenger and freight mobility demands. Destination 2030 recognizes both the transportation and economic importance of these intermodal facilities and the need to better integrate them into the regional transportation system.

SAFETY AND SECURITY

Transportation safety and security constitute an important issue in the region, one that will be highlighted in the update of Destination 2030. The issue addresses the safe design and operation of the system as well as threats from intentionally harmful acts and natural disasters.

Safety

The good news is that transportation system safety has improved as cars, roadways, and drivers have gotten better. However, too many people still die in motor vehicle accidents each year in the central

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41 Context sensitive design (CSD) is a collaborative, interdisciplinary approach that involves all stakeholders to develop transportation facilities that fit their physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. CSD is an approach that considers the total context within which a transportation improvement project will exist.

42 "Concurrency" for transportation facilities is defined in the Growth Management Act and the Washington Administrative Code to mean that any needed transportation improvements or programs be in place at the time of development or that a financial commitment exists to complete the improvements or strategies within six years. For more information about concurrency, see http://www.psrc.org/projects/growth/concur/concurrency.htm (10/05).

43 The state of Washington has implemented several successful programs to encourage highway safety and security throughout the region. In 2000, the state developed a strategic highway safety plan called Target Zero, a 30-year vision to achieve a
Puget Sound region. In 2003, there were 234 fatalities on the region’s roadways. While total roadway accident rates in the region exceed the statewide average, the regional fatality rate is lower than the statewide rate. This reflects the more populous urban nature of the region.44

In reviewing safety information across transportation modes, two areas of concern emerge: motor vehicle deaths and injuries on the roadways, and pedestrian deaths and injuries. Other transportation modes, including transit and ferries, have a much better safety record. Following is some data related to specific aspects of the region's transportation system.

### Roadways
The Washington Transportation Plan Update provides the following information on roadway safety:45
- Within the region, rural roads have a higher accident rate than urban roads, with head-on and run-off-the-road collisions especially common.
- Freeways tend to have lower fatality rates than two-lane roads.
- Motorcyclists are disproportionately represented in fatal accidents, and this rate is growing.
- The central Puget Sound region has the highest number of pedestrian fatalities in the state, with many of those accidents occurring among children, on school routes, and near transit stops.
- Driver behaviors contribute to fatal accidents. Excessive speed and aggressive driving, impaired driving, and not wearing a seatbelt all contribute to fatalities.
- Young drivers are disproportionately represented in fatal accidents.
- In Washington, there were more than 200 reported accidents involving bicyclists in 2001, some resulting in disabling injury.

### Rail
Rail transportation has a strong safety record with a national fatality record of 0.08 per 100 million passenger miles, about one-tenth that of motor vehicle fatalities. In Washington, flashing lights and gates protect nearly all at-grade crossings, resulting in a 56 percent reduction in rail-crossing collisions since 1992. Trespassing on rail lines poses one of the larger rail safety issues. In 2004, trespassing resulted in 18 deaths and has led to the development of the *Operation Lifesaver* program to reduce train collisions with pedestrians and vehicles.45

### Ferries
The Washington State Ferry System has an excellent safety record. In 2002, with more than 15,000 sailings carrying 25.2 million passengers, there were only 100 injuries reported, all of them minor.45

### Transit
Transit safety issues are approached from the aspect of passenger and driver safety. Data has shown that 80 percent of the locations where pedestrian accidents are high are within a hundred feet of a bus stop.45

### Freight
Freight highway safety has significantly improved since 2000 with the increased inspection of large trucks. Inspections serve to protect roadways and bridges as well as the motoring public by ensuring that truck equipment is functioning properly, licenses are valid, and load weights are proper. Inspections have become more efficient with the implementation of the Commercial Vehicle Information System Network and Weigh-in-Motion technology. Over the past five years, since the increase in truck inspections, the number of fatalities caused by large trucks has decreased.

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44 Data provided by WSDOT Transportation Data Office
Aviation. The Federal Aviation Administration (FAA) has set airport design standards that are intended to maintain safety. These standards include guidance for runway length and width, separation distances between runways and taxiways, runway protection zones, and runway safety areas. FAA has set a 100 percent compliance goal for runway safety areas by 2010. The region also uses this measure to monitor airport system safety. Of the 28 public use airports in the region, seven have substandard runway safety areas. Projects to bring these areas into compliance are included in current airport master plans, and all are scheduled for completion by 2010.

Security

Washington state completed a comprehensive emergency management plan in 2004, along with a state hazard mitigation plan. King, Kitsap, Pierce and Snohomish counties all have emergency management departments which coordinate plans to deal with large-scale emergencies such as terrorist attacks and natural disasters. Large intermodal facilities such as air and sea ports also actively plan for emergencies and participate in regional efforts. In addition, WSDOT is conducting a vulnerability assessment of its transportation assets, including roadways, tunnels, bridges and ferries. The Washington State Patrol, National Guard, Federal Highway Administration, U.S. Coast Guard and U.S. Army Corps of Engineers all are participating in this assessment. It will advance the development of investment needs to deter, delay, detect or avoid potential terrorist attacks and natural destruction of transportation facilities.

The only Power Projection Platform on the West Coast is the Puget Sound’s Fort Lewis Army Base. National security depends upon efficient and reliable marshaling and debarkation at this site. In support of this military restructuring, the Port of Tacoma serves as a strategic military port for the entire Pacific region, with the Port of Olympia now serving as an effective backup facility.

The ferry system is considered vulnerable from a national security standpoint, and extra precautions have been taken since the National Marine Transportation Security Act was enacted in 2002. The ferry system has been working in close cooperation with the Washington State Patrol and the U.S. Coast Guard to prepare a plan aimed at protecting the ferry system’s passengers and satisfying the law’s requirements. Security precautions and procedures include video monitoring in public areas, security screening of all vehicles, required Captain's permission to disembark once loading has begun, and no unaccompanied freight shipments on ferry vessels.

Additional security measures have also been taken in providing safe transit service. Transit security has been improved with additional measures such as camera surveillance, security call buttons and the dissemination of vehicle location information. Bus driver safety will be improved by the development of the Smart Card, which will be launched in 2007. This electronic fare media will alleviate some of the issues that arise when large amounts of cash are carried onboard. In terms of homeland security, the Federal Transit Administration requires additional security measures and monitoring with the Transit Watch Program.

The Department of Homeland Security and the Federal Railroad Administration monitor passenger rail security procedures. They conduct regular audits of Amtrak emergency preparedness. One of these audits included a joint effort with Sound Transit in April 2004. Some of the security measures taken on passenger rail lines include video surveillance, photo-identification requirements, and required reservations for Amtrak travel.

Since the terrorist attacks in 2001, security has become a priority at the nation's airports. All FAA civil aviation security functions were transferred to the Transportation Security Administration (TSA) in February 2002. The TSA developed Transportation Security Regulations defining security restrictions and procedures for airports. These include restrictions on access to terminals and gates, the use of air marshals on flights, additional law enforcement and canine units, restrictions on parking and use of airport terminal curbs, tighter screening of passengers and carry-on luggage, and increased security related to airfield access. The TSA has prepared an Air Cargo Security Plan, which is currently being finalized. The plan will result in higher security standards for air cargo, particularly the cargo carried on passenger aircraft. The emerging air cargo security program will likely include some level of screening for both
passenger and cargo planes, and will include security threat assessments, enhanced freight forwarder requirements and a strengthened “known shipper” program. The FAA and TSA are developing security programs for general aviation airports. In other efforts to enhance security, the FAA has established restrictions which limit flights near locations such as stadiums and nuclear power plants. The terrorist attacks also played a large role in the current push for freight security.

The Container Security Initiative, in conjunction with the Customs Department and the Custom Trade Partnership, which expedites border crossings, has contributed to higher security with regard to international trade. This is an example of how our gateway region has shown national leadership in dealing proactively with gateway issues. In 1981 the Port of Tacoma was the first West Coast port to install on-dock direct transfer of marine containers to rail cars – now a state-of-the-art practice. Today, the Ports of Seattle and Tacoma (working in parallel with the Ports of Los Angeles and Long Beach, and the Port Authority of New York/New Jersey) are testing operational approaches and container tracking technologies to develop and apply security procedures to the millions of containers that enter the nation each year from foreign ports. The national objective is to protect citizens from terrorism using insecure containers as a conveyance system, while at the same time continuing the timely and reliable delivery of freight. A side benefit of container security is that it improves routine tracking of shipments for system users.

The hurricane events on the U.S. Gulf Coast in 2005 have generated renewed concern for safety and security issues related to natural disasters. Many issues arose from problems in responding to those disasters, and regions around the country are revisiting their emergency-response plans to see where improvements can be made. Potential major transportation implications of natural disasters relate to evacuation, ability to deliver supplies, fuel resources, business and trade interruptions, and immediate and long-term transportation infrastructure repairs.

What do federal and state laws say? One of the eight federal guidelines calls for increasing the safety and security of the transportation system for motorized and nonmotorized users. (Additional key federal regulations and initiatives are cited in this section.) The state of Washington has implemented several programs to encourage highway safety and security in the state and throughout the region. Examples include a strategic highway safety plan, safety belt requirements, and the Intermediate Drivers’ License Law.

What do VISION 2020 and Destination 2030 say? Safety is a topic addressed in a few of the existing multicounty policies. For example, Policy RT-8.3 calls for maintaining and preserving “urban and rural transportation systems in a safe and usable state.” Other policies talk about “safe and convenient bicycle and pedestrian linkages” (RT-8.4) and “safe and effective operation of the HOV system” (RT-8.27).

Opportunities, Challenges and Implications for VISION 2020 and Destination 2030 Updates

- Safety and security planning requires multi-agency coordination and communication to be successful.
- Safety must be a consideration in planning and programming for motor vehicles, transit, freight, aviation, pedestrians and bicycle facilities, and rail.
- Is it possible for the region to adopt a Target Zero goal?
- What role can the Regional Council play in help meeting the state’s goal of zero deaths and disabling injuries?
- Rural roadway conditions should be addressed to ensure safety in rural areas and on rural two-lane roadways.
- Pedestrian safety needs special attention. Safe access to transit and schools are both important to improve pedestrian safety. Walking access needs to be specifically considered in school siting policies, which may result in schools being built in more accessible locations.
- Better understanding of data should help target safety efforts where they will have the most effect.
- Homeland security must be considered in planning for public transportation.
- Coordinated evacuation plans should be developed and evaluated to optimize the travel needs and demands of the region in the event of natural or man-made disaster.
SPECIAL NEEDS TRANSPORTATION

Although progress has been made to improve and expand travel options, much of the region’s population still primarily depends on auto travel for most of their travel needs. Significant segments of the population, however, do not have access to a car or, for a variety of reasons, cannot drive and generally must rely on non-auto travel options. The population segments that are particularly affected include the elderly, children, low-income residents, and people with disabilities. These population groups comprise a significant share of the region’s current population – 10 percent are elderly, 17 percent are disabled, 25 percent are children, and 9 percent are low-income. It is estimated that 30 to 40 percent of the regional population or about 1 million people cannot depend on a private automobile for some of their daily travel needs. The range of public and private transportation services that have been developed to serve these populations are commonly referred to as “special needs transportation services.”

As the fastest growing segment of the population, the elderly will comprise an increasing share of the regional population. Today 10 percent of region’s population is elderly (65 years and older), and this is expected to increase to 16.7 percent by 2040. It is estimated that one in five elderly Americans cannot or do not drive for a variety of reasons. This level of auto use is influenced by both ability and costs. Nearly 9 percent of elderly residents fall below the federal poverty level, and 13 percent do not own a car. This low level of auto use/access seriously diminishes personal mobility. A national study looking at elderly households found that those without access to a car made 15 percent fewer trips to the doctor, 59 percent fewer shopping trips, and 65 percent fewer social or recreational trips. Compounding the problem is the fact that the elderly population is working and living longer, and more elderly are living in suburban areas away from urban services.

According to the 2000 Census, 17 percent of the population has some form of disability. People with disabilities represent a larger share of low-income people than the general population and a greater share of the unemployed. Only 60 percent of the disabled population is employed, and 14 percent are classified as low-income. Some disabilities may limit access to conventional public transit services, requiring services that are tailored to meet specific needs. Federal requirements of the Americans with Disabilities Act have significantly expanded public transit’s role in providing these tailored services.

Children (0-17 yrs old) comprise the largest share of the regional population with special transportation needs: 25 percent or 800,000 people in 2000. Many children can depend on transportation from their parents, but many others live in households with limited auto access. Twenty-nine percent of the region’s children live in low-income households where auto availability is typically very low. Bus service to school is the greatest need for this population group. Because of the high costs, school districts are increasingly relying on local public transit agencies to coordinate this service.

Based on federal poverty standards, 9 percent of the region’s population, or 274,000 people, are living in a low-income household. Twenty-six percent of low-income households do not have access to a car, compared with 7 percent of households regionwide. Compounding the problem, many low-income households include elderly, children, and/or people with disabilities.

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46 2000 Census
47 Regional Special Needs Transportation Coordination Plan, Draft, Sound Transit, April 2005
48 2000 Census
49 Aging Americans: Stranded Without Options, Surface Transportation Policy Project, April 2004
50 Data sources: Washington State Department of Transportation, Office of Superintendent of Public Instruction and Department of Health and Social Services
Pierce County and North King County (which includes the city of Seattle) have a higher share of low-income population than other sub-areas of the region. However, poverty rates are growing fastest in South King County, and all subareas have concentrations of low-income residents.\(^5\)

**What do federal and state laws say?** The Americans with Disabilities Act gives civil rights protections to individuals with disabilities. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, and transportation. In response to this law, the U.S. Department of Transportation has issued requirements that all new fixed-route, public transit buses be accessible and that supplementary paratransit services be provided for those individuals with disabilities who cannot use fixed-route bus service.

**What do VISION 2020 and Destination 2030 say?** Existing multicounty policies, while advancing travel alternatives to driving alone, say little about special needs transportation. In the housing section of VISION 2020, there is a policy that calls for transit service “where appropriate” to low-income, moderate-income and special needs housing. The same policy focuses more on the location and development of affordable housing – “in and near urban centers and transportation corridors” (RH 4.4).

**Opportunities, Challenges and Implications for VISION 2020 and Destination 2030 Updates**

- The Washington State Legislature created the Agency Council on Coordinated Transportation in 1989. Efforts to improve regional coordination are underway, but they need to be expanded to bring together and better define the roles of more than 300 different public and private programs.
- Six public transit agencies provide both fixed route and paratransit (“dial-a-ride”) services for all special need populations.
- Over 200 human and social service agencies provide special van services to people with disabilities and the elderly.
- Fifty-five local school districts, funded by state and local sources, provide K-12 student transportation.
- Numerous senior centers, churches, and nursing homes provide a variety of transportation services.
- Medical assistance brokers play a role in matching clients with appropriate providers of Medicare-related transportation.
- Taxis and non-emergency ambulances provide a variety of services.
- The costs of special transportation are growing faster than available resources. Paratransit trips average $23-25 per trip compared with $3-5 per trip for general fixed-route service.
- Existing VISION 2020 policies do not directly address special transportation needs.

**PROSPEROUS ECONOMY**

In September 2005, the Central Puget Sound Economic Development District unanimously adopted the Prosperity Partnership’s Regional Economic Strategy\(^5\) to grow jobs and promote long-term prosperity for the community. The Prosperity Partnership is a coalition of more than 150 organizations in King, Kitsap, Pierce and Snohomish counties. The strategy, which is intended to serve as the functional economic element of VISION 2020, was developed with participation from government, business, labor, nonprofit and community leaders from throughout the region. It identifies six foundation initiatives on which to build to improve and sustain the region’s economy: education, technology commercialization, support for new and small businesses, tax structure, transportation, and social capital and quality of life.

The strategy further identifies 15 industry clusters. The clusters were evaluated in terms of their level of concentration in the region, the number of employees in the cluster, and the projected national growth rate of the cluster. Workers from all of the clusters rely on transportation for job access, freight delivery,

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\(^5\) Data source: 2000 Census
\(^5\) Adopted on September 27, 2005
and face-to-face business interactions. But industry clusters such as aerospace, logistics and international trade, military, wood products, and even tourism are likely to require more from the transportation system due to rising costs in gathering, shipping and distributing products and transporting people as primary industry functions. The Regional Economic Strategy will be evaluated on an ongoing basis to measure outcomes over time.

Five pilot clusters have been the focus of the first year and are the first steps toward strategic action that builds on existing strengths. Leaders in each of these industries have worked together to identify critical issues and challenges and have developed specific initiatives for improving the business climate for distinct clusters, either individually or working collaboratively. Several of these action initiatives are already being implemented. The cluster working groups for aerospace and logistics & international trade, (two of the five pilot clusters) identified a number of goals and actions to take in regard to transportation.

The logistics & international trade cluster working group recognized the importance of 1) finding ways to streamline day-to-day operations at ports and other intermodal hubs and 2) finance critically needed infrastructure preservation and capacity for the entire system. These improvements are to support all industry clusters as well as other regions dependent on West Coast gateways. Leaders of the industry proposed the following actions directly related to transportation.

- Communicate a jointly developed logistics and international trade message to inform regional political leadership and citizens of the need for freight-movement logistical improvements in the Pacific Rim gateway region and affected communities.
- Enhance freight mobility by securing sustained funding and developing transportation chokepoint solutions.
- Build support beyond the Puget Sound region for investments in freight mobility infrastructure in our gateway region.

What do federal and state laws say? One of the eight federal planning factors calls for support of the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity and efficiency. The regional transportation planning legislation in Washington state has two factors that relate to the economy: 1) concentration of economic activity, and 2) ability of transportation to retain existing and attract new jobs and private investment to accommodate growth in demand.

What do VISION 2020 and Destination 2030 say? Multicounty policy RT-8.36 states that "transportation investments in major facilities and services should maximize transportation system continuity and be phased to support regional economic development and growth management objectives. Policy RT-8.40 encourages the use of local labor when building regional transportation systems and components "to generate new economic and employment opportunities." Several of the policies in the economic section of VISION 2020 also address the relationship of the region’s economy and transportation. One set of policies in that section is titled "Sustain and Enhance Accessibility of Centers and Promote the Flow of Goods and Services in and through the Region." That section addresses transportation requirements and improvements necessary to sustain and enhance existing economic activity in the region. It also calls for identifying the transportation requirements of "leading and emerging sectors of the regional economy" (RE-7.13). Other provisions call for maintaining and enhancing the viability of centers and compact communities by improving accessibility to commercial and retail sector activities (RE-7.15). Coordinated investments in transportation infrastructure are also advocated to

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53 The Draft Regional Economic Strategy identified five pilot industry clusters to focus on as part of the first year action items for the Prosperity Partnership: aerospace, clean technology, information technology, life sciences, and logistics & international trade.

54 Cluster Working Groups made up of regional leaders in each industry were formed to establish goals and actions that will improve economic conditions specific to the needs of each pilot cluster.

55 Sea-Tac International Airport is the region’s primary commercial service airport, serving nearly 29 million passengers in 2004. Sea-Tac Airport and King County International Airport (Boeing Field) are the region’s two major air cargo airports, accommodating 530,000 tons of air cargo in 2004. Air cargo is the fastest growing segment of the aviation industry, and air cargo volume is forecast to triple by 2020. In addition to their transportation role, airports generate economic benefits to the region by providing significant employment. Over 250,000 jobs are located at, or adjacent to, the region’s airports. Sea-Tac Airport alone creates more than $15 billion in total economic benefit to the region and across the state.
“enhance the movement of goods, information and services within and between manufacturing/industrial centers” (RE-7.14).

Opportunities, Challenges and Implications for VISION 2020 and Destination 2030 Updates

- The Puget Sound region is heavily dependent on foreign trade. The location of our ports ensures that we can ship products to and from the Pacific Rim. Grade separations reduce the impact of through container movement on local transportation (i.e. FAST Corridor).
- In the emerging global economy, many of the world’s most prominent companies can be headquartered anywhere on the globe.
- Businesses will locate where there is a high quality of life, good schools, efficient transportation, affordable housing, and supportive government policies.
- The costs of delay and increasing risk to schedule reliability are the primary transportation challenges facing the economy.
- As the region looks to the future, it will be important to focus on the risk of disruptions due to the loss of adequate transportation infrastructure (due to weather, terrorism or earthquakes) or the absence of operational investments and other important programs and services.
- Transportation policy should inform and align transportation actions to support the growth and economic goals of the region.
  - Address the specific transportation needs of targeted industry clusters and balance other competing interests in the overall economy.
  - Provide improved access to jobs, housing, training and education.
  - Provide for a network of rural transportation investments that support rural area economies.
  - Improve access to jobs for low income, elderly and other communities with more specialized transportation needs.
  - Determine which investments are important for improving economic and living conditions so that industries and skilled workers are attracted to the region.
  - Identify appropriate transportation performance measures to use in tracking and evaluating plan performance in an economic context.
  - Delineate when it is appropriate to involve private investment responsibilities for transportation solutions that benefit the economy.

FREIGHT MOVEMENT

The movement of freight affects all of our lives on a daily basis. From the materials we use in our jobs to the produce we eat, transporting goods involves a complex system that includes roadways, rail lines, and sea and air routes and the intermodal terminals that connect them. These freight terminals also serve as staging areas. The freight elements of the central Puget Sound region can roughly be divided into three categories: 1) global gateway, 2) "grown in Washington," and 3) delivery of goods to end users.

In the Pacific Northwest, the freight system reaches far beyond this gateway region's boundaries. It involves a complex mix of public and private ownership and decisions. The region is part of a global economy. Its ports comprise one of the largest marine container complexes in North America. Cargo arrives here from all over the Pacific Rim. Some is sent to distribution warehouses like those in the Green River Valley, for either local or broader distribution. Some is trucked through the state and beyond. About two-thirds of international import containers are shipped directly by rail to the Midwest and other national markets, or even to Europe. The same system that brings goods into and through Washington allows producers here to ship items as backhaul to markets all over the world. Still, about a fourth of containers that are being transported are

Freight Studies
- Rail Capacity Study, Washington Public Ports Association, 2004
- Strategic Freight Transportation Analysis, Washington State University, 2002-2007
- Regional Air Cargo Strategy, Puget Sound Regional Council, 2006
- Prosperity Partnership regional Transportation Foundation Initiative and Logistics and International Trade cluster Action Initiatives (part of the Economic Development District's Regional Economic Strategy).
empties being repositioned. The region and state are working with other west coast states to secure federal help in mitigating the impacts of global supply chains on coastal gateways.

Container handling operations are expected to at least double by 2020 at the ports of Tacoma, Seattle and Everett, the Seattle-Tacoma and King County international airports, Burlington Northern Santa Fe and Union Pacific railroads. This will put more pressure on a multimodal and intermodal regional network that is already congested. More broadly, trucking activities are growing faster than overall traffic and serve our state, local and regional economy. Trucking relies on operational and capacity improvements keeping pace.

Locally produced goods rely on airports, marine ports and the roadway system to move goods, products and services throughout the region. This often involves "just-in-time" delivery needs. This can involve the movement of all kinds of items, from software to large airplane wing sections, and it can mean transporting the freight from one end of the region to the other, as in the case of Boeing moving freight between their Frederickson site in Pierce County and their Everett assembly plant in the north. National and international perceptions about the reliability of these transportation networks and systems strongly influence where industries locate and what goods and services are purchased from our region.

The third element of the freight story is local delivery, which accounts for 80 percent of the truck trips on our roads, and is critical to providing just-in-time deliveries to manufacturing sites, food to grocery stores, supplies to offices, and items bought on the Internet to our homes. The ability to make these deliveries in a timely, consistent and reliable manner is one factor in the price we pay for these items.

What do federal and state laws say? Federal planning factors call for "increasing the accessibility and mobility options available to people and for freight," as well as enhancing the "integration and connectivity of the transportation system, across and between modes, for people and for freight." State transportation planning guidelines and principles require that freight transportation and port access be addressed. An additional factor is "present and future railroad right-of-way corridors to provide needed rail capacity."

What do VISION 2020 and Destination 2030 say? The multicounty policies promote "efficient multimodal access to interregional facilities such as airports, seaports and intercity rail stations." (RT-8.6) Two policies speak specifically to freight issues:

- Encourage public and private sector partnerships to identify freight mobility improvements which provide access to centers and regional facilities, and facilitate convenient intermodal transfers between marine, rail, highway and air freight activities, to and through the region (RT-8.5). (The FAST Corridor is an example of a nationally recognized public and private sector partnership.)

- Support appropriate development of freight access improvements to greater reliability and efficiency in the movement of freight and goods. Such improvements may include but are not limited to consideration of exclusive freight access facilities and/or preferential freight access where appropriate (RT-8.35).

Destination 2030 includes a section that discusses investing in freight mobility. The plan states that freight mobility is dependent upon the improvement and coordination of multiple transportation modes. The plan also notes that many freight-related improvements are the responsibility of, and implemented by, private entities, such as railroads and shippers. Both infrastructure and operation improvements are described in the plan. There are four categories of infrastructure improvements presented: 1) corridor improvements, 2) truck priority/truck geometrics projects, 3) intermodal and multimodal infrastructure, and 4) information infrastructure (pages 57-58).

Opportunities, Challenges and Implications for VISION 2020 and Destination 2030 Updates

- Current project selection processes for regional funding allocations (Transportation Improvement Program) do not place the level of importance on supporting freight mobility that is now encouraged
by SAFETEA-LU and otherwise needed in our gateway region.

- In accordance with the freight message developed in the Washington Transportation Plan, the regional plan should address the port and rail gateway roles of the region, the additional marketing and supply chain needs of Washington manufacturers, and local distribution needs.
- The economic, environmental and social impacts of globalization will continue to affect our region.
- Truck traffic in the western states is expected to double by 2020, while highway lane miles will increase by only a few percentage points.
- Regional rail lines are approaching capacity.
- Air cargo trends and forecasts are outstripping other economic indicators and will likely double by 2020.
- The recent surge of container traffic through the ports is expected to moderate, but over the long term will more than double the volume in the next two decades or earlier.
- Freight chokepoints within and outside the region will have regional, state and national implications.
- Providing reliability of freight movement and protection against network disruptions is becoming increasingly difficult.
- Security programs for ports, borders and other critical elements of the system should be designed not to hinder the delivery of goods.
- Fully consider the supply chain ("conveyor belt") needs of business in configuring transportation networks for a broad range of user benefits.

HEALTH AND ENVIRONMENT

Protecting and enhancing the environment, promoting energy conservation, and improving the quality of life must be considered as part of the transportation planning process. But in the transportation arena, health impacts, other than potential injury, are typically not taken into account. However, there is increasing recognition that transportation investment decisions and strategies have an influence on bicyclist and pedestrian safety, both the physical and natural environment, and a person’s overall well-being. Physical inactivity can contribute to diabetes, cardiovascular disease and other leading causes of illness. The following areas of concern are evaluated below: air and water quality, health and physical activity, and environmental justice.

Air Quality. Although more people are driving more miles, air quality in the region has been improving due to better vehicle and fuel technologies and the implementation of traffic demand strategies such as transit and HOV lanes that help limit the growth in vehicle miles traveled. The central Puget Sound region has been meeting all national ambient air quality standards since 1996. Federal and state requirements for regional air quality conformity analyses ensure consistency of Destination 2030 and the Transportation Improvement Program (TIP) with air quality requirements. In addition, VISION 2020 and Destination 2030 identify policies that support the reduction of vehicle emissions (e.g., the development of growth centers, identifying the relationship between land use and transportation, and the development of a multimodal transportation system).

Still, we must ensure our air quality is maintained into the future, and mobile source (vehicle) emissions represent over half of emissions in the region. The focus for air quality is moving away from traditional pollutants such as carbon monoxide and fugitive dust, and toward ground-level ozone, fine particulates, toxics, visibility and climate change. We have come very close to exceeding the new eight-hour ozone standard, and while we are meeting the new fine particulate standard (PM$_{2.5}$), the Puget Sound Clean Air Agency (PSCAA) has adopted a goal for this pollutant that is more stringent than the current standard. In fact, the EPA is considering adopting a more stringent PM$_{2.5}$ standard that would be closer to the lower regional goal set by PSCAA. The most significant PM$_{2.5}$ emissions are from diesel exhaust. According to the Puget Sound Air Toxics Evaluation (PSCAA, October 2003), diesel particulate matter represents 70 percent of Seattle’s air toxics risk. Surface and marine freight movement play a significant part in production of these toxics. The potential health effects from air toxics, as well as other air pollutants, includes increased cancer risk, respiratory illness and cardiovascular disease, with children and the elderly among the most vulnerable.
The Puget Sound Regional Council continues to collaborate with other regional agencies addressing the air quality impacts from transportation sources. Some key activities undertaken throughout the region include the following:

- The Diesel Solutions/Clean School Bus diesel retrofit program
- The Clean Car Act requiring new vehicles to meet strict emissions standards
- Several anti-engine idling programs for trucks and school buses
- The conversion of transit and Washington State Ferries fleets to cleaner technologies (e.g., hybrid buses, natural gas, ultra-low sulfur diesel)
- The Puget Sound Maritime Air Forum, working towards an inventory and strategy to reduce emissions

**Water Quality.** The impervious surfaces that are part of the transportation infrastructure accumulate pollutants from the vehicles that use them. Too much runoff flowing too fast contributes to flooding, reduced groundwater recharge, stream channel erosion, and other degradations of the aquatic environment. Released in August 2005, a study\(^{56}\) of pollution in Puget Sound found waning levels of toxic metals associated with industry but increasing levels of polycyclic aromatic hydrocarbons, a chemical associated with car exhaust, roads, and tires. In response to this issue, local and state agencies are creating innovative storm water management strategies such as the Des Moines Creek Basin Plan and the City of Seattle’s “Cascade” prototype. After having previously partnered in the revision of the Highway Runoff Manual, WSDOT is currently working with the Department of Ecology to develop approaches to more broadly manage storm water within a watershed, as opposed to just a project area.

**Health and Active Living.** The link between transportation and health is an emerging national issue.\(^{57}\) The Center for Disease Control cites direct medical expenses associated with physical inactivity totaling more than $76 billion in 2000. Public health professionals are looking at ways the built environment can help people incorporate physical activity into their daily routine because recent trends indicate decreasing levels of physical activity and increasing health problems. One way of improving health is through regular physical activity. The number of kids walking or biking to school has dropped from nearly half in 1960 to about 1 in 10 today, while childhood obesity has more than doubled in three decades. A sedentary lifestyle increases the risk of cardiovascular disease three- to five-fold and overall mortality two- to three-fold. It also contributes to the risk of some types of cancer. The U.S. Department of Transportation has set a national goal for 2010 to increase bike and walk trips to 15 percent of all trips.

A number of existing programs and policies support health and physical activity. WSDOT’s "Safe Routes to School" grant program funds engineering fixes, safety education curriculums, enforcement programs, and community health and encouragement initiatives. Through the Active Community Environments project, the Regional Council works with the state’s departments of transportation and health, as well as community, trade and economic development, and with other regional transportation planning organizations, to increase opportunities for physical activity through policy changes. The Regional Council also maintains an approved bicycle and pedestrian implementation strategy, and in 2001, the Council adopted design guidelines that address mixed-use development and expand opportunities for walking, biking, and transit use. Under TEA-21,\(^{58}\) 10 percent of the Surface Transportation Program funds that come to the state of Washington are in the form of a set-aside for the Statewide Transportation Enhancements Program that funds bicycle and pedestrian facilities. It is also the approved policy of the region to make at least 10 percent of the combined estimated Surface Transportation Program and Congestion Mitigation and Air Quality Program funds available for programming of nonmotorized transportation projects in the four counties.


\(^{58}\) Federal Transportation Equity Act for the 21st Century
The 2005 legislative session addressed this health and active living issue by passing a GMA amendment (RCW 36.70A.070) mandating that all local jurisdictions planning under GMA incorporate a pedestrian and bicycle element into local transportation plans and address health and more active living opportunities in local land use plans.

Unfortunately, the region’s existing system of sidewalks and bike lanes is fragmented. Individual projects often are planned in isolation rather than being incorporated into a cohesive network. Much of the system does not connect to employment and retail centers, dense residential development or other common trip origins and destinations. Planning and zoning decisions should promote integrated land uses that provide support for walking and biking.

Environmental Justice. Environmental justice is about social equity – the fair distribution of costs and benefits. Environmental justice concerns have been around since the framing of the U.S. Constitution and became a legal issue under Title VI of the Civil Rights Act of 1964. In 1994, federal Executive Order 12898 directed every federal agency to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies and activities on "minority populations and low-income populations." Around the region, minority populations are growing and becoming more dispersed. Poverty has increased as well. The region's total population increased by 16.5 percent between 1990 and 2000, while the poverty population increased by 19.7 percent.

What do federal and state laws say? Among the federal transportation requirements is a planning factor that calls for protecting and enhancing the environment, promoting energy conservation and improving quality of life. Both federal and state clean air legislation require that the metropolitan transportation plan and programs to implement it go through an analysis and conform with established air quality standards. The state has technical standards for stormwater management and water quantity and quality. And, as stated above, environmental justice concerns became a legal issue under Title VI of the Civil Rights Act of 1964. Federal Executive Order 12898, issued in 1994, directs agencies receiving federal funds to address environmental justice as part of their missions.

In 2000, the Federal Highway Administration adopted policy and guidance that calls for incorporation of bicycling and walking facilities into all transportation projects unless exceptional circumstances exist. In Washington state, regional transportation planning guidelines and principles call for "development patterns that promote pedestrian and nonmotorized transportation," "joint and mixed use development," "urban design that supports high capacity transit," and "residential density." Transportation elements in comprehensive plans are now required to include pedestrian, bicycle and transit plans. Senate Bill 5186, which passed during the 2005 legislative session, advances walking and bicycling both for health benefits and alternatives to driving alone.

What do VISION 2020 and Destination 2030 say? Multicounty Policy RC-2.6 calls for giving "high priority to protecting and enhancing the natural environment and public health and safety when providing services and facilities." However, the connection between transportation strategies and environmental goals is not well established in the current plan documents, with little or no mention of emission reductions, storm water runoff, habitat loss, and development and use of alternative fuels. A number of policies recommend development patterns or travel choices that would increase opportunities for walking and biking by advancing provisions from the Regional Bicycle and Pedestrian Implementation Strategy. One of the growth strategies in Destination 2030 calls for "salmon-friendly development practices" (page 38). This strategy promotes project design that minimizes impacts on habitat.

59 Released in October 2003, the Regional Council developed a baseline demographic profile, presenting key demographic data describing the central Puget Sound region and identifying population groups and communities to be considered for subsequent environmental justice analyses and activities.

60 For more information about environmental justice and the VISION 2020 Update, go to www.psrc.org/about/titlevi/ej.htm. (9/05)

61 According to RCW 36.70A.070, communities planning under GMA must consider planning approaches that promote physical activity. In addition, the transportation element must include a bicycle and pedestrian component, and city and county six-year transportation programs must include new bicycle and pedestrian facilities identified in the plan.

62 For more information on environmental issues affecting regional planning, see the Issue Paper on Environmental Planning. The paper is available on-line at: www.psrc.org/projects/vision/pubs/environment.pdf.
While health and active living were not explicit considerations when the multicounty policies were adopted in 1995, there are a number of policies in the current VISION 2020 plan that already advance development patterns or travel choices that would support more active living. Among the provisions in VISION 2020 related to health are policies that promote: 1) the development of centers and compact communities, 2) transportation demand management and efforts to increase alternatives to driving alone – especially for walking, biking and transit use – and 3) mixed land use adjacent to transit stations.

Destination 2030 includes provisions that support increased transit use and improved nonmotorized facilities for pedestrians and bicyclists. The plan calls for the creation of a regionally integrated network of nonmotorized facilities linking bicycle and pedestrian infrastructure within urban places, and connecting these facilities to regional transit services. To support the development of walkable, transit-oriented centers, Destination 2030 established 10 physical design guidelines. These guidelines advance many of the concepts advocated for creating healthier, more active communities.

The process that produced Destination 2030 considered environmental justice from the outset. According to the plan document, the Regional Council "set out to ensure that the burdens and benefits of implementing Destination 2030 are not inequitably distributed across groups based on race, income, age or disability" (page 11).

Opportunities, Challenges and Implications for VISION 2020 and Destination 2030 Updates

- The Growth Management Policy Board provided direction that health and its relationship to land use and transportation should be integrated into appropriate portions of the VISION 2020 update. That direction offers a number of policy recommendations and proposed activities in the areas of 1) environmental impacts, 2) safety, and 3) active living.
- According to RCW 36.70A.070, communities planning under GMA must consider planning approaches that promote physical activity. In addition, the transportation element must include a bicycle and pedestrian component, and city and county six-year transportation programs must include new bicycle and pedestrian facilities identified in the plan. The region has a unique opportunity to address the relatively fragmented nature of many communities' overall pedestrian and bicycle travel networks by providing consistent guidance and assistance for development and plan certification expectations for how to meet these new GMA requirements.
- The region should discuss and debate the role it can play in addressing national and international issues, such as fossil fuel availability (and rising energy costs) and the growing consensus that vehicle emissions contribute to global warming. These factors need to be considered in weighing costs and benefits of proposed transportation solutions over the long-term.
- The connection between transportation strategies and environmental goals is not well established in the current plan, and no mention of emission reductions, storm water runoff, habitat loss, and development and use of alternative fuels is made. A number of policies recommend development patterns or travel choices that would increase opportunities for walking and biking by advancing provisions from the Regional Bicycle and Pedestrian Implementation Strategy.
- Policies or programs such as those associated with funding could establish a better connection between transportation strategies and environmental goals, such as sustainability, low-impact design, emission reductions, storm water control, and the use of alternative fuels.
- The Ten Physical Design Guidelines adopted in Destination 2030 could be refined to give more guidance about how to implement land use strategies that are supportive of bicycle, pedestrian and transit travel.

63 The physical design guidelines in Destination 2030: 1) encourage a mix of complementary land uses, particularly uses that generate pedestrian activity and transit ridership, 2) encourage compact growth by addressing planned density, 3) link neighborhoods, connect streets, sidewalks and trails, 4) integrate activity areas with surrounding neighborhoods, 5) locate public and semipublic uses near high capacity transit stations in designated urban centers and activity centers, 6) design for pedestrians and bicyclists, 7) provide usable open spaces for the public, 8) manage the supply of parking, 9) promote the benefits of on-street parking, and 10) reduce and mitigate the effects of parking. See Destination 2030 (adopted May 2001), page 37.

64 A full discussion of the key conclusions related to environmental justice that emerged from the Destination 2030 process is available in Appendix 2 of the Destination 2030 document.
TRANSPORTATION FINANCE

The successful implementation of Destination 2030 relies on investment in a wide variety of transportation projects and programs by numerous implementing organizations. Each organization has its own legal, institutional, political, and financial mandates and limitations. The result is a highly complex environment where financial realities govern what investments are made as much as any set of articulated goals or policies. Recognizing this important factor, the Regional Council has made financial planning and analysis a centerpiece of plan development. Similarly, financial monitoring is a central component of plan implementation monitoring, allowing the region to gauge whether resources are available and consistently organized in a manner that furthers regional policy objectives.

Transportation funding in the central Puget Sound region draws mainly from a few primary tax bases. These include motor fuel sales, retail sales, motor vehicle market value, assessed property valuation, and vehicle registrations and licenses. In addition to taxes on these tax bases, transportation revenues are drawn from a combination of other sources such as operating income and sources comprising city and county general funds. It is important to note that some sources (taxes on vehicle registrations [volume] and motor fuel sales [gallons]) are taxed at a flat rate, and the revenues generated decline over time on a real monetary basis.

There are numerous transportation operating agencies in the central Puget Sound region, which can for the most part be grouped into seven major categories. These are cities, counties, local transit agencies, the regional transit authority (Sound Transit), the Seattle Monorail Authority, the state highway program, and the state ferry system. Each program has its own revenue sources and uses of funds. Revenue generated from sources, by program, changes over time as the size of the regional economy grows (more people and economic activity), with inflation (relative price changes independent of the size of the economy), and with changes in tax rates or the application of those rates to the tax bases. One way to better understand the purchasing power of these transportation programs over time is to review revenue data while controlling for population growth and inflation. In general, the various transportation programs have retained their real per capita buying power across the analysis period, with some degree of variability from one fund source to another. The notable exception is the state highway program, which relies heavily on fuel taxes that do not track with the broader economy. A number of citizen initiatives and legislative actions have more recently limited tax revenues, some of the effects of which, especially for cities and counties, are not seen in the historical data at this time (see text box inset above). It should be noted that each implementing agency faces its own unique financial constraints (e.g., reliance on general-fund contributions, reliance upon a single primary revenue source such as sales taxes, and evolving investment demands). These and other finance issues are discussed in greater detail in the Regional Council’s financial monitoring report and Destination 2030 progress report.

Recent History of Transportation Finance

- In November 1999, the citizens passed Initiative 695, which eliminated the statewide Motor Vehicle Excise Tax (MVET) and replaced it with a flat $30 vehicle-licensing fee. The initiative was struck down by the courts, but it motivated the Legislature to enact legislation that carried forward the intent of the initiative.
- In November of 2001, citizens voted to support a property tax limit measure, Initiative 747.
- In November of 2002, the citizens passed Initiative 776, which limited auto license fees to $30 a year and repealed local taxes on vehicle registrations.
- Since 2000, local transit agencies have successfully garnered voter support to pass increases in the local sales tax rates.
- The Seattle Popular Monorail Authority was created with voter approval of Seattle Citizen Petition No.1 in November 2002. In 2005, the voters passed Proposition 1 which canceled the 2002 vote and the monorail project.
- In 2002 voters rejected Referendum 51, a $7.8 billion statewide transportation tax package that included a nine-cent-a-gallon gas-tax increase.
- Spring 2002, the state Legislature authorized a process for King, Pierce and Snohomish counties to develop an investment and revenue plan to enhance mobility in the region.
- April 2003, the Legislature passed, and the Governor approved, a 10-year statewide transportation funding package that included a 5-cent fuel tax increase, a 15 percent increase in gross weight fees, and a 0.3 percent vehicle sales tax.
- In 2005 the Legislature passed an additional statewide spending package to be funded through a phased increase in fuel taxes and vehicle registration fees.
- November 2005, voters rejected Initiative 912 which would have repealed the gas tax increase approved by the Legislature earlier in 2005.

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Figure 11. Inflation-Adjusted, Per-Capita Revenue in the Central Puget Sound Region
Historical Data 1991-2002 (Year 2000 Base)

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</tr>
</thead>
<tbody>
<tr>
<td>Local Transit</td>
<td>$206.07</td>
<td>$165.69</td>
<td>$172.84</td>
<td>$177.00</td>
<td>$187.33</td>
<td>$199.15</td>
<td>$199.10</td>
<td>$223.14</td>
<td>$221.36</td>
<td>$177.06</td>
<td>$202.10</td>
<td>$192.05</td>
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<tr>
<td>Regional Transit</td>
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<td>Highways</td>
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<td>Roads</td>
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<tr>
<td>Ferries</td>
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<tr>
<td>Total</td>
<td>$627.82</td>
<td>$553.67</td>
<td>$609.52</td>
<td>$699.98</td>
<td>$653.42</td>
<td>$632.43</td>
<td>$683.90</td>
<td>$709.52</td>
<td>$743.79</td>
<td>$746.94</td>
<td>$822.91</td>
<td>$817.08</td>
<td></td>
</tr>
</tbody>
</table>

IMPORTANT NOTES:
- Total values do not equal the sum of their parts - population in the corresponding program's service area weights each number.
- Audited historical data becomes available some period after the close of the fiscal year. Not all the consequences of recent initiatives or legislative actions are observable in the available data.

While revenue authority recently has been increased for many transportation programs, cities and counties have largely faced newly imposed tax limitation initiatives. New local revenue authority will be of particular importance to continued local investment. The state contribution to local investments has also declined over time, as a percent of the total revenues that support local transportation expenditures. As an example, while cities and counties will benefit from an increase in state gas tax distribution as a result of the Transportation Partnership Act, their shares of the gas tax distributions have declined, and will continue to decline.

Figure 12. Gas Tax Distributions

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage of 37.5-Cent Gas Tax</th>
<th>Percentage of 28-Cent Gas Tax</th>
<th>Percentage of 23-Cent Gas Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cities</td>
<td>8%</td>
<td>9%</td>
<td>11%</td>
</tr>
<tr>
<td>Counties</td>
<td>13%</td>
<td>16%</td>
<td>19%</td>
</tr>
<tr>
<td>County Road Administration Board</td>
<td>3%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Transportation Improvement Board</td>
<td>8%</td>
<td>11%</td>
<td>13%</td>
</tr>
<tr>
<td>Washington State Department of Transportation</td>
<td>65%</td>
<td>57%</td>
<td>48%</td>
</tr>
<tr>
<td>Washington State Ferries</td>
<td>3%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>Total Cities and Counties</td>
<td>Total</td>
<td>31.88%</td>
<td>39.13%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>47.64%</td>
<td></td>
</tr>
</tbody>
</table>

Under federal law, the regional transportation plan, Destination 2030, must make reasonable financing assumptions, accounting for existing or new revenue sources which can be expected to be available over the life of the plan (Title 23 USC 134). Funding availability for transportation investments, however, must match implementation responsibility, and the allowable uses of nearly all existing transportation funding sources in the region are restricted to specific uses, by source, by expenditure, and often by geography or jurisdiction. Meanwhile, existing transportation revenues have not been keeping pace with travel demand and the infrastructure investments needed to support this growing demand. Transportation infrastructure costs have been on the rise over the past few decades because of increases in material and labor costs, the costs of mitigating environmental impacts, and increased urban land values. Insufficient public resources have led to an increase in the unfunded backlog of maintenance projects, leading to higher overall costs in the future and raising safety concerns.

Structural changes in transportation finance are just beginning to be evident in transportation operating agencies’ historical revenue and expenditure data. The data demonstrates an increasing reliance on operating revenues, sales tax, and other (general tax) sources. It also shows a declining reliance on fuel taxes and vehicle registration charges (as proceeds shrink against inflation and fuel economy gains), as well as revenues from taxes on vehicle value (a result of the elimination of the statewide motor vehicle excise tax). The changes are structural and are expected to continue to be reflected in future data. They
are resulting in an increasing reliance on funding sources that fluctuate with regional economic performance.

Fluctuations in economic performance create greater fiscal uncertainty and suggest the need for different approaches to agency-level fiscal management. And in the mid- to long-term, the nature of urban transportation needs (large capital projects in physically constrained urban environments) may require new finance instruments that free public agencies from the limitations of a pay-as-you-go investment approach. For example, recent proposals for regional and state funding rely heavily on bond financing mechanisms to turn streams of revenue into sufficient capital to make sizable transportation investments in early years. In some part, these new fiscal challenges have resulted in a number of voter and legislative initiatives that respond to some aspect (revenue inadequacy, funding uncertainty, or perceived unfairness) of our greater reliance upon a tax-based approach to transportation finance.

The past decade has demonstrated that the state and the region need a new transportation finance approach, one that benefits all communities and helps create a stable and sustainable fiscal future. The investment strategy for Destination 2030 includes principles to guide the development of a financing strategy and new revenue sources. The Destination 2030 investment strategy is in many ways dependent on successful development of more state funding, along with new regional funding mechanisms that are flexible enough to allow investment in the full array of regional transportation priorities. Regional systems cannot be managed effectively without some significant ability to plan, prioritize and implement change in a coordinated manner at a regional scale.

What do federal and state laws say? Federal requirements state that metropolitan transportation plans must make reasonable financing assumptions. This process can include taking into account new revenue sources which can likely be expected to be available over the life of the plan (Title 23 USC 134). Washington state law requires regional transportation planning organizations to utilize least cost planning to evaluate transportation projects and programs.66

What do VISION 2020 and Destination 2030 say? The current multicounty planning policies do not present a comprehensive investment strategy for addressing transportation. However, one of the four groupings of the transportation policies is titled focus transportation investments supporting transit and pedestrian-oriented land use patterns. The provisions under that set of policies state that "transportation investments can dramatically influence how land is developed" (page 56). Policy RT-8.18 states that:

"Investments in transportation facilities and services should support compact pedestrian-oriented land use development throughout urban communities and encourage growth in urban areas, especially in centers."

A more complete investment strategy was developed for Destination 2030 and includes principles to guide the development of a financing strategy and new revenue sources. The Destination 2030 investment strategy is in many ways dependent on successful development of more state funding, along with new regional funding mechanisms that are flexible enough to allow investment in the full array of regional transportation priorities.

Opportunities, Challenges and Implications for VISION 2020 and Destination 2030 Updates

- The region needs to be in a position to ensure the sustainability of transportation revenue over time.
- What is an appropriate level of transportation investment and how should the level of investment be weighed against other public investment that may be needed to implement the VISION 2020 update?
- In the face of inflationary pressures and alternative-fueled vehicles, the future of a fuel-tax-based approach to highway finance may be limited, and alternate approaches to collecting revenues will likely be needed. These issues and the role of congestion-based user fees should be addressed.

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66 Least cost planning is defined as "a process of comparing direct and indirect costs or demand and supply options to meet transportation goals and/or policies where the intent of the process is to identify the most cost-effective mix of options" (see Washington Administrative Code 468-86-030 and 468-86-080).
Nationally and internationally, the private sector is increasingly interested in investment opportunities in the transportation sector for personal mobility. It is possible that some local transportation markets could offer significant opportunities to take advantage of private capital for investment purposes.

The issue of revenue collections from and distributions to regions and sub-regions of the state will continue to be a focus of discussion and will complicate debates on regional transportation projects.

Currently, there are no multicounty planning policies that relate directly to transportation finance.

BUILDING FUTURE VISIONS

The strongest reason for having a clear, concise and accepted long-term transportation plan is to make better decisions today. The vast majority of today's regional transportation system was either built or planned in the 1960s and 1970s, about 35 to 40 years ago. How our children, grandchildren and great grandchildren will travel in 2040 and receive the goods and services they need will be dictated by the decisions made today. While Destination 2030 and its update are required under federal and state law to be reconciled with reasonably available levels of funding, i.e., “financially constrained,” it's important to envision a picture of future transportation that can support the region's growth management and economic strategies and that will set a future investment path the people in the region can understand and support, and one on which a reasonable financial plan can be built.

We must find a way to maintain and improve the efficiency of what we have while making necessary strategic expansions to our transportation system. However, that will not be enough to accommodate a forecast population increase of nearly 50 percent and an employment increase of nearly two-thirds. If we do not make good decisions today, even with the projects and programs currently funded or planned, the region will experience severe levels of congestion and mobility problems in 2040.

As we go through the Destination 2030 update process we will need to be open to new ideas, technologies, fuels and opportunities that may provide mobility and environmental benefits. At the same time we must remember that it is unlikely that large-scale transportation funding will become available from either federal or statewide programs. These opportunities and constraints will dictate that new concepts and programs must be aligned with future transportation needs including how, when and where people and freight need to be transported. Future investments must also be sustainable and provide the most cost effective way of accommodating the region's travel demand.

What do federal and state laws say? Throughout this chapter, references have been made to eight planning factors required by federal transportation legislation. This legislation also requires that urban regions link comprehensive planning programs with funding decisions for transportation projects. It also provides a context for aligning transportation planning programs with growth and development considerations.

What do VISION 2020 and Destination 2030 say? Both VISION 2020 and Destination 2030 were developed to address and will continue to address key federal and state legislation, including the new SAFETEA-LU law at the federal level and the goals and requirements of the Washington State Growth Management Act. The policies in these documents reflect broad directions agreed to by member jurisdictions and agencies, and are not meant to necessarily convey regional responsibility for every facet of implementation. Indeed, many of the policies and actions are implemented by localities, transit providers, and state agencies, as well as through regional efforts.

Opportunities, Challenges and Implications for VISION 2020 and Destination 2030 Updates

- Plan for much more intentional linkages in local, regional and state decisions that can demonstrate effective land use, economic development and transportation collaboration.
- We need to start consciously asking 'what combination of land use and transportation systems can really take us into the future?'
- Adapt technology advances for use in our transportation system
- What role will the new federal emphasis on operational solutions contribute to improving mobility in
the future, and will system strategies such as congestion tolling be acceptable to the public?

- How can the plan update process create an environment that encourages open discussion of long-term transportation options, supported by data?
- Ensure the region’s planning and project selection processes place the level of importance on freight mobility that is required to support our economy, global competitiveness and quality-of-life.
- How should the Destination 2030 update address the need for a more clearly defined and specific regional transit system plan that incorporates appropriate elements of the Sound Transit long-range plans as well as local transit agency capital facility and service plans?
- Can the region reach agreement on a long-range transportation strategy that can be implemented, and that accommodates the planned growth while achieving the following objectives:
  - Establishes clear priorities
  - Addresses the growing issue of congestion and loss of mobility
  - Productively coordinates transportation planning and investment
  - Supports the complex global and inter-regional issues associated with the economy and freight mobility
  - Focuses on specific travel markets to customize solutions
  - Results in publicly acceptable and sustainable funding packages
  - Incorporates state guidelines for regional planning (RCW 47.80.023-026)
  - Integrates and adheres to the eight federal planning guidelines that draw attention to broader perspectives:
    - Economic vitality, productivity and efficiency
    - Safety and security
    - Accessibility and mobility for people and freight
    - Environmental protection and energy conservation including issues such as global warming and the Endangered Species Act (ESA)
    - Integration and connectivity for people and freight
    - Efficient system operation and management
    - Preservation of the existing transportation system
V. NEXT STEPS

The update of VISION 2020 is currently in its environmental review and alternatives analysis phase, which is scheduled to be completed in February 2006. During this period, an initial draft of revised multicounty policies will be developed along with the preliminary transportation strategy. The Draft Environmental Impact Statement will be released for public review in February 2006, and the Final will be released in January 2007. The final plan document will go to the full membership General Assembly for adoption in March 2007.

The Destination 2030 update will be conducted in two phases. The first will be completed in spring of 2007 and will include the following:
- An update of the multicounty transportation planning policies for inclusion in the VISION 2020 update. The updated policies within VISION 2020 become the organizing framework for conducting project prioritization and least-cost planning within the Destination 2030 update.
- Establishment of programmatic strategies and criteria to inform prioritization and funding decisions.
- Integration of the federally required congestion management process and the state-required Least Cost Planning process into the planning for the update of Destination 2030.

Phase Two will involve development of an updated long-range transportation strategy intended to support the adopted growth management strategy (VISION 2020) and completion of the transportation environmental process. This full plan update is scheduled for completion in spring 2008.

Later versions of the Transportation Issue Paper will support the VISION 2020 update and both phases of the Destination 2030 update by:
- Providing further planning analysis for the Destination 2030 update.
- Incorporating 2040 forecasts and analysis to move the Destination 2030 plan update to a 2040 horizon.
- Providing the framework for a separate transportation policy document to inform the update of the VISION 2020 multicounty transportation planning policies.
- Defining the most important issues that the Destination 2030 phase two update should address.
APPENDIX A:  
Policy/Issue Relationship Matrix

The matrix on the following pages provides the full text of the VISION 2020 multicounty planning policies that relate to transportation. The last page contains the framework policies that address urban growth, contiguous and orderly development, regional capital facilities, housing, rural areas, open space, resource protection and critical areas, and economics.

The purpose of the matrix is to show the relationship of the policies to the strategic issues that provide the framework for this issue paper. This is a somewhat subjective exercise, but it gives readers an idea of the policies that relate to their particular areas of interest.
## RELATIONSHIP BETWEEN ADOPTED MULTICOUNTY PLANNING POLICIES AND STRATEGIC ISSUES DESCRIBED IN SECTION V

<table>
<thead>
<tr>
<th>FRAMEWORK POLICIES</th>
<th>System Preservation</th>
<th>Congestion, Mobility &amp; System Efficiencies</th>
<th>Safety &amp; Security</th>
<th>Special Needs Transportation</th>
<th>Prosperous Economy</th>
<th>Freight Movement</th>
<th>Health &amp; Environment</th>
<th>Building Future Visions</th>
<th>Transportation Finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>RG-1 Locate development in urban growth areas to conserve natural resources and enable efficient provision of services and facilities. Within urban growth areas, focus growth in compact communities and centers in a manner that uses land efficiently, provides parks and recreation areas, is pedestrian-oriented, and helps strengthen communities. Connect and serve urban communities with an efficient, transit-oriented, multimodal transportation system.</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
</tr>
<tr>
<td>RC-2 Coordinate provision of necessary public facilities and services to support development and to implement local and regional growth planning objectives. Provide public facilities and services in a manner that is efficient, cost-effective, and conserves resources. Emphasize interjurisdictional planning to coordinate plans and implementation activities and to achieve consistency.</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
</tr>
<tr>
<td>RF-3 Strategically locate public facilities and amenities in a manner that adequately considers alternatives to new facilities (including demand management), implements regional growth planning objectives, maximizes public benefit, and minimizes and mitigates adverse impacts.</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
</tr>
<tr>
<td>RH-4 Provide a variety of choices in housing types to meet the needs of all segments of the population. Achieve and sustain an adequate supply of low-income, moderate-income and special needs housing located throughout the region.</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
</tr>
<tr>
<td>RR-5 Preserve the character of identified rural areas by protecting and enhancing the natural environment, open space and recreational opportunities, and scenic and historic areas; supporting small-scale farming and forestry uses; and permitting low-density residential living and cluster development maintained by rural levels of service. Support cities and towns in rural areas as locations for a mix of housing types, urban services, cultural activities, and employment that serves the needs of rural areas.</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
</tr>
<tr>
<td>RO-6 Use rural and urban open space to separate and delineate urban areas and to create a permanent regional greenspace network. Protect critical areas, conserve natural resources, and preserve lands and resources of regional significance.</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
</tr>
<tr>
<td>RE-7 Foster economic opportunity and stability, promote economic well-being, and encourage economic vitality and family wage jobs while managing growth. Support effective and efficient mobility for people, freight, and goods that is consistent with the region’s growth and transportation strategy. Maintain region-wide information about past and present economic performance. Assess future economic conditions that could affect the central Puget Sound region.</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
<td>✓ ✔</td>
</tr>
</tbody>
</table>

A - 2
ADOPTED TRANSPORTATION POLICIES

**RT-8** Develop a transportation system that emphasizes accessibility, includes a variety of mobility options, and enables the efficient movement of people, goods and freight, and information.

<table>
<thead>
<tr>
<th>OPTIMIZE &amp; MANAGE THE USE OF TRANSPORTATION FACILITIES &amp; SERVICES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RT-8.1</strong> Develop and maintain efficient, balanced, multimodal transportation systems which provide connections between urban centers and link centers with surrounding communities by:</td>
</tr>
<tr>
<td>a. Offering a variety of options to single-occupant vehicle travel.</td>
</tr>
<tr>
<td>b. Facilitating convenient connections and transfers between travel modes.</td>
</tr>
<tr>
<td>c. Promoting transportation and land use improvements that support localized trip-making between and within communities.</td>
</tr>
<tr>
<td>d. Supporting the efficient movement of freight and goods.</td>
</tr>
<tr>
<td><strong>RT-8.3</strong> Maintain and preserve the existing urban and rural transportation systems in a safe and usable state. Give high priority to preservation and rehabilitation projects, which increase effective multimodal and intermodal accessibility, and serve to enhance historic, scenic, recreational and/or cultural resources.</td>
</tr>
<tr>
<td><strong>RT-8.4</strong> Maximize multimodal access to marine ferry routes through:</td>
</tr>
<tr>
<td>a. Coordinated connections to land-based transit;</td>
</tr>
<tr>
<td>b. Safe and convenient bicycle and pedestrian linkages;</td>
</tr>
<tr>
<td>c. Preferential access for high-occupancy vehicles, and freight and goods movement on designated routes.</td>
</tr>
<tr>
<td><strong>RT-8.6</strong> Promote efficient multimodal access to interregional transportation facilities such as airports, seaports, and intercity rail stations.</td>
</tr>
<tr>
<td><strong>RT-8.7</strong> Where increased roadway capacity is warranted to support safe and efficient travel through rural areas, appropriate rural zoning and strong commitments to access management should be in place prior to authorizing such capacity expansion in order to prevent unplanned growth in rural areas.</td>
</tr>
<tr>
<td><strong>RT-8.8</strong> Support transportation system management activities, such as ramp metering, signalization improvements, and transit priority treatments, to achieve maximum efficiency of the current system without adding major new infrastructure.</td>
</tr>
<tr>
<td><strong>RT-8.9</strong> Develop and periodically update regional transportation system performance standards to assist in the development of level-of-service standards for state owned and/or operated transportation facilities which seek to assure effective coordination and mutual benefit between local and state transportation systems.</td>
</tr>
<tr>
<td><strong>RT-8.10</strong> Support the retrofit of existing roadways and other transportation facilities to control and reduce noise, polluting runoff and barriers to fish passage.</td>
</tr>
</tbody>
</table>
ADOPTED TRANSPORTATION POLICIES

**RT-8** Develop a transportation system that emphasizes accessibility, includes a variety of mobility options, and enables the efficient movement of people, goods and freight, and information.

### MANAGE TRAVEL DEMAND ADDRESSING TRAFFIC CONGESTION & ENVIRONMENTAL OBJECTIVES

| RT-8.11 | Promote demand management and education programs that shift travel demand to non-single-occupant vehicle travel modes and to off-peak travel periods, and reduce the need for new capital investment in surface, marine and air transportation. | ✓ | ✓ | ✓ |
| RT-8.12 | Support transportation system management programs, services, and facility enhancements which improve transit’s ability to compete with single-occupant vehicle travel times. | ✓ | ✓ | ✓ |
| RT-8.13 | Regional, major corridor, and urban center goals should be established reflecting regional policy intent to achieve increased proportional travel by transit, high-occupancy vehicle, and nonmotorized travel modes to achieve reduced dependence on single-occupant vehicle travel, with the greatest proportional increases in urban centers. Such goals should be set for 5- to 10-year periods and periodically updated in consultation with local jurisdictions, transit agencies and WSDOT. | ✓ | ✓ | ✓ | ✓ |
| RT-8.14 | Emphasize transportation investments that provide alternatives to single-occupant vehicle travel to and within urban centers and along corridors connecting centers. | ✓ | ✓ | ✓ | ✓ |
| RT-8.15 | Develop a public dialogue and seek broad public support for implementation of transportation pricing strategies, which can reduce subsidies for less efficient travel and manage travel demand. Pricing strategies are intended to assist in achieving growth management and economic development goals and policies, and should also support objectives for energy conservation, air quality improvement and congestion management. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RT-8.16 | Support opportunities to use advanced transportation and information technologies, which demonstrate support for regional growth and transportation strategies. | ✓ | ✓ | ✓ | ✓ | ✓ |

### FOCUS TRANSPORTATION INVESTMENTS THAT SUPPORT TRANSIT & PEDESTRIAN-ORIENTED LAND USE PATTERNS

| RT-8.17 | Integrate land use and transportation solutions that offer the best opportunity to reduce air pollution, conserve energy, and protect the natural environment. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RT-8.18 | Investments in transportation facilities and services should support compact, pedestrian-oriented land use development throughout urban communities, and encourage growth in urban areas, especially in centers. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RT-8.19 | Promote transportation improvements that support the redevelopment of lower-density, auto-dominated arterials to become more pedestrian and transit compatible urban transportation corridors. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RT-8.20 | Encourage a mix of land uses and densities at major transit access points to meet passenger needs and offer an opportunity to reduce vehicle trips. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RT-8.21 | Promote the development of local street patterns and pedestrian routes that provide access to transit services within convenient walking distance of homes, jobs, schools, stores, and other activity areas. | ✓ | ✓ | ✓ | ✓ | ✓ |
ADOPTED TRANSPORTATION POLICIES

**RT-8** Develop a transportation system that emphasizes accessibility, includes a variety of mobility options, and enables the efficient movement of people, goods and freight, and information.

<table>
<thead>
<tr>
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</tr>
</thead>
</table>

**RT-8.22** Support the establishment of high capacity transit stations that advance regional growth objectives by:

a. Maximizing opportunities to walk, bike or take short transit trips to access regional transit stations.

b. Locating stations within urban centers and at sites supporting development of concentrated urban corridors.

c. Providing direct, frequent and convenient regional transit service between urban centers.

d. Providing system access to urban areas in a manner that does not induce development in rural areas.

**RT-8.23** Regional high capacity transit station area guidelines should be developed by the Puget Sound Regional Council in cooperation with the Regional Transit Authority, WSDOT, local transit agencies, and local jurisdictions to establish regionally consistent expectations of appropriate development in the vicinity of high capacity transit stations (including rail, major bus, and ferry) that best support and assure effective utilization of the regional transit system.

**RT-8.24** The regional high capacity transit station area guidelines should be addressed by the Regional Transit Authority, transit agencies and WSDOT in conducting planning activity through interlocal agreements to be developed with local jurisdictions for station area planning. Such planning shall set forth conditions for development and access around high capacity transit stations. Consistency with transit station area guidelines, in conjunction with other regional policies, should be addressed in developing the regional transit system within corridors.

**RT-8.25** Local jurisdictions that are or will be directly served by the high capacity transit system identified in the Metropolitan Transportation Plan should develop specific station area plans as part of their comprehensive planning efforts that provide for development, services and facilities sufficient to support efficient transit service commensurate with the regional investment in transit. Local station area plans should be consistent with regional high capacity transit station area guidelines, and at a minimum address land use and density, transit-supportive development regulations, urban design, parking, and nonmotorized and motorized access.

**EXPAND TRANSPORTATION CAPACITY OFFERING GREATER MOBILITY OPTIONS**

**RT-8.26** Upon potential achievement of broad public support, regional transportation pricing strategies should be considered as a method to assist in financing the costs for development, maintenance and operation of the regional multimodal transportation system in order to reflect a more direct relationship between transportation system costs and benefits.

**RT-8.27** Promote an interconnected system of high-occupancy vehicle lanes on limited access freeways that provides options for ridesharing and facilitates local and express transit services connecting centers and communities. Assure safe and effective operation of the HOV system at intended design speed for transit vehicles while also enabling the region to assure attainment and maintenance of federal and state air quality standards.
### ADOPTED TRANSPORTATION POLICIES

**RT-8** Develop a transportation system that emphasizes accessibility, includes a variety of mobility options, and enables the efficient movement of people, goods and freight, and information.

| RT-8.28 | Support the design and development of components of the regional high-occupancy vehicle (HOV) system, which improve transit access and travel time relative to single-occupant vehicle travel. | ✓ | ✓ |
| RT-8.29 | Promote and support the development of arterial HOV lanes and other transit priority treatments in urban areas to facilitate reliable transit and HOV operations. | ✓ | ✓ |
| RT-8.30 | Promote and assist in coordinated development and operation of high speed intercity rail corridor services and facilities connecting the Puget Sound region with effective interregional and interstate transportation mobility which may reduce highway and air travel demands in such corridors. | ✓ | ✓ | ✓ | ✓ |
| RT-8.31 | Support effective management and preservation of existing regional air transportation capacity and ensure that future air transportation capacity and phasing of existing airport facilities needs are addressed in cooperation with responsible agencies. Coordinate this effort with long-range comprehensive planning of land use, surface transportation facilities for effective access, and development of financing strategies. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RT-8.32 | Ensure adequate capacity to serve cross-sound travel demands that focus on foot-passenger travel and freight and goods movement. Promote convenient connections for foot-passengers to the regional transit network. | ✓ | ✓ | ✓ | ✓ |
| RT-8.33 | Develop a regionally coordinated network of facilities for pedestrians and bicycles which provides effective local mobility, accessibility to transit and ferry services and connections to and between centers. | ✓ | ✓ | ✓ | ✓ |
| RT-8.34 | Support the development of roadways when they are needed to provide more efficient connections for a comprehensive road network to move people and goods when such roads will not cause the region to exceed air quality standards. | ✓ | ✓ | ✓ | ✓ |
| RT-8.35 | Support appropriate development of freight access improvements for greater reliability and efficiency in the movement of freight and goods. Such improvements may include but are not limited to consideration of exclusive freight access facilities and/or preferential freight access where appropriate. | ✓ | ✓ | ✓ |
| RT-8.36 | Transportation investments in major facilities and services should maximize transportation system continuity and be phased to support regional economic development and growth management objectives. | ✓ | ✓ | ✓ |
| RT-8.37 | Improve intermodal connections between high capacity transit stations, (including ferry terminals, rail stations, and bus centers), major transfer points, and the communities they serve, primarily through more frequent and convenient transit service. | ✓ | ✓ | ✓ | ✓ |
| RT-8.38 | Support opportunities to redevelop the road system as multimodal public facilities which accommodate the needs of pedestrians, cyclists, transit, high-occupancy vehicles, automobiles, and trucks. | ✓ | ✓ | ✓ | ✓ |
| RT-8.39 | Develop a high-capacity transit system along congested corridors that connects urban centers with frequent service sufficient to serve both community and regional needs. | ✓ | ✓ | ✓ |
| RT-8.40 | Encourage, when possible, the use of local labor when building regional transportation systems and components which could generate new economic and employment opportunities. | ✓ | ✓ | ✓ |
### OTHER MULTICOUNTY PLANNING POLICIES THAT ADDRESS TRANSPORTATION DIRECTLY

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
<th>System Preservation</th>
<th>Congestion, Mobility &amp; System Efficiencies</th>
<th>Safety &amp; Security</th>
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<th>Freight Movement</th>
<th>Health &amp; Environment</th>
<th>Building Future Visions</th>
<th>Transportation Finance</th>
</tr>
</thead>
</table>
| RG-1.6 | Support the transformation of low-density auto-oriented transportation corridors to higher-density mixed-use urban transportation corridors when redevelopment would not detract from centers or compact communities. Corridors that offer potential include those that are located near significant concentrations of residences or employment, and have the potential to support frequent transit service and increased pedestrian activity. Encourage the redevelopment of these arterials through:  
  a. Addition of transit facilities, pedestrian-oriented retail, offices, housing, and public amenities,  
  b. Building design and placement, street improvements, parking standards, and other measures that encourage pedestrian and transit travel, and  
  c. Provision of pedestrian and bicycle connections between transportation corridors and nearby neighborhoods. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RG-1.9 | Encourage growth in compact, well-defined urban centers which: 1) enable residents to live near jobs and urban activities; 2) help strengthen existing communities; and (3) promote bicycling, walking and transit use through sufficient density and mix of land uses. Connect and serve urban centers by a fast and convenient regional transit system. Provide service between centers and nearby areas by an efficient, transit-oriented, multi-modal transportation system. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RG-1.10 | Provide opportunities for creation of town centers in urban areas that: 1) serve as focal points for neighborhoods and major activity areas; 2) include a mix of land uses, such as pedestrian-oriented commercial, transit stops, recreation and housing; and 3) encourage transit use, biking and walking through design and land use density. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RE-7.6 | Promote economic opportunity by encouraging employment growth in all centers, and foster strength and sustainability by supporting centers-based economic strategies identified in local comprehensive plans and countywide planning policies. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RE-7.12 | Through broad participation of the private sector and major institutions, identify transportation requirements and improvements necessary to sustain and enhance existing economic activity in the region and promote accessibility to and within all centers for people, information, and goods. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RE-7.13 | Identify the transportation requirements of leading and emerging sectors of the regional economy, and develop a multi-modal transportation system that recognizes the distinctive needs of all business sectors of the regional economy to move goods, people and information within and through the region. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RE-7.14 | Coordinate investments in transportation infrastructure with the needs of the private sector to maximize the development of current and future industrial sites, including existing ports, and to enhance the movement of goods, information and services within and between manufacturing/industrial centers. | ✓ | ✓ | ✓ | ✓ | ✓ |
| RE-7.15 | Maintain and enhance the economic viability of centers and compact communities by improving accessibility to commercial and retail sector activities and promoting circulation of goods and people. | ✓ | ✓ | ✓ | ✓ | ✓ |
APPENDIX B: Comprehensive List of Transportation Demand Strategies

The following list is adapted from the Victoria Transport Institute's Online TDM Encyclopedia.67 The strategies are divided into major categories according to how they impact travel.

### Improved Transport Options

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Address Security Concerns</strong></td>
<td>Strategies for improving personal security</td>
</tr>
<tr>
<td><strong>Alternative Work Schedules</strong></td>
<td>Flextime, Compressed Work Week, and staggered shifts</td>
</tr>
<tr>
<td><strong>Bus Rapid Transit</strong></td>
<td>Bus system design features that significantly improve service quality and cost efficiency</td>
</tr>
<tr>
<td><strong>Cycling Improvements</strong></td>
<td>Strategies for improving bicycle transport</td>
</tr>
<tr>
<td><strong>Bike/Transit Integration</strong></td>
<td>Ways to integrate bicycling and public transit</td>
</tr>
<tr>
<td><strong>CarsHaring</strong></td>
<td>Vehicle rental services that substitute for private vehicle ownership</td>
</tr>
<tr>
<td><strong>Flextime</strong></td>
<td>Flexible daily work schedules</td>
</tr>
<tr>
<td><strong>Guaranteed Ride Home</strong></td>
<td>An occasional subsidized ride home for commuters who use alternative modes</td>
</tr>
<tr>
<td><strong>Individual Actions for Efficient Transport</strong></td>
<td>Actions that individuals can take to support TDM objectives</td>
</tr>
<tr>
<td><strong>Light Rail Transit</strong></td>
<td>Light Rail Transit systems are designed to provide convenient local service on busy urban corridors</td>
</tr>
<tr>
<td><strong>Nonmotorized Transportation Planning</strong></td>
<td>Planning for walking, cycling, and small-wheeled transport</td>
</tr>
<tr>
<td><strong>Nonmotorized Facility Management</strong></td>
<td>Best practices for managing and maintaining nonmotorized transportation facilities such as walkways, sidewalks and paths</td>
</tr>
<tr>
<td><strong>Park &amp; Ride</strong></td>
<td>Programs to provide convenient parking at transit and rideshare stations</td>
</tr>
<tr>
<td><strong>Pedestrian Improvements</strong></td>
<td>Strategies for improving walking conditions</td>
</tr>
<tr>
<td><strong>Ridesharing</strong></td>
<td>Strategies for encouraging carpooling and vanpooling</td>
</tr>
<tr>
<td><strong>Shuttle Services</strong></td>
<td>Shuttle buses, jitneys and free transit zones</td>
</tr>
<tr>
<td><strong>Small Wheeled Transport</strong></td>
<td>Accommodating skates, scooters, handcarts and utility wagons</td>
</tr>
<tr>
<td><strong>Taxi Service Improvements</strong></td>
<td>Strategies for improving taxi services</td>
</tr>
<tr>
<td><strong>Telework (Telecommuting, Distance-Learning, Tele-shopping, etc.)</strong></td>
<td>Use of telecommunications as a substitute for physical travel</td>
</tr>
<tr>
<td><strong>Traffic Calming</strong></td>
<td>Roadway designs that reduce vehicle traffic speeds and volumes</td>
</tr>
<tr>
<td><strong>Transit Improvements</strong></td>
<td>Strategies for improving public transit services</td>
</tr>
<tr>
<td><strong>Universal Design (Barrier Free Transport Planning)</strong></td>
<td>Transportation systems that accommodate all users, including people with disabilities and other special needs</td>
</tr>
</tbody>
</table>

### Incentives To Use Alternative Modes and Reduce Driving

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Walking And Cycling Encouragement</strong></td>
<td>Strategies for encouraging use of nonmotorized transportation</td>
</tr>
<tr>
<td><strong>Commuter Financial Incentives</strong></td>
<td>Parking cash out, travel allowance, transit and rideshare benefits</td>
</tr>
<tr>
<td><strong>Congestion Pricing</strong></td>
<td>Variable road pricing used to reduce peak-period vehicle trips</td>
</tr>
<tr>
<td><strong>Distance-Based Pricing</strong></td>
<td>Various fees and taxes based on a vehicle's mileage</td>
</tr>
<tr>
<td><strong>Fuel Taxes</strong></td>
<td>Increasing fuel taxes to achieve TDM objectives</td>
</tr>
<tr>
<td><strong>HOV (High Occupant Vehicle) Priority</strong></td>
<td>Strategies that give transit and rideshare vehicles priority over other traffic</td>
</tr>
<tr>
<td><strong>Parking Pricing</strong></td>
<td>Charging motorists directly for parking</td>
</tr>
<tr>
<td><strong>Pay-As-You-Drive Vehicle Insurance</strong></td>
<td>Converting vehicle insurance premiums into distance-based fees</td>
</tr>
<tr>
<td><strong>Road Pricing</strong></td>
<td>Congestion pricing, value pricing, road tolls and HOT lanes</td>
</tr>
<tr>
<td><strong>Road Space Reallocation</strong></td>
<td>Roadway design and management practices that favor efficient modes</td>
</tr>
<tr>
<td><strong>Speed Reductions</strong></td>
<td>Strategies to reduce traffic speeds</td>
</tr>
<tr>
<td><strong>Street Reclaiming</strong></td>
<td>Strategies for encouraging community interaction on neighborhood streets</td>
</tr>
<tr>
<td><strong>Transit Encouragement</strong></td>
<td>Strategies for encouraging public transit use</td>
</tr>
<tr>
<td><strong>Vehicle Use Restrictions</strong></td>
<td>Strategies to limit vehicle traffic at a particular time and place</td>
</tr>
</tbody>
</table>

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## Parking and Land Use Management

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle Parking</td>
<td>Bicycle racks, bicycle lockers and changing facilities</td>
</tr>
<tr>
<td>Car-Free Districts and &quot;Pedestrianized&quot; Streets</td>
<td>Designing special areas and times for minimal automobile use</td>
</tr>
<tr>
<td>Strong Commercial Centers</td>
<td>Creating vibrant downtowns, business districts, urban villages and other accessible, mixed-use activity centers</td>
</tr>
<tr>
<td>Connectivity</td>
<td>Creating More Connected Roadway and Pathway Networks</td>
</tr>
<tr>
<td>Land Use Density and Clustering</td>
<td>Locating common destinations close together can increase land use accessibility and transportation diversity</td>
</tr>
<tr>
<td>Location Efficient Development</td>
<td>Development that maximizes multi-modal accessibility</td>
</tr>
</tbody>
</table>

## New Urbanism Accessible, Livable Community Design

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking Cost, Pricing and Revenue Calculator</td>
<td>Excel spreadsheet calculates parking facility costs, prices and revenue</td>
</tr>
<tr>
<td>Parking Management</td>
<td>Strategies for more efficient use of parking</td>
</tr>
<tr>
<td>Parking Pricing</td>
<td>Charging motorists directly for parking</td>
</tr>
<tr>
<td>Parking Solutions</td>
<td>Comprehensive menu of solutions to parking problems</td>
</tr>
<tr>
<td>Parking Evaluation</td>
<td>Guidelines for evaluating parking problems and solutions</td>
</tr>
<tr>
<td>Shared Parking</td>
<td>Sharing parking facilities among multiple users</td>
</tr>
<tr>
<td>Smart Growth</td>
<td>Land use practices to create more efficient and livable communities</td>
</tr>
<tr>
<td>Smart Growth Planning and Policy Reforms</td>
<td>Planning, regulatory and fiscal reforms that encourage Smart Growth</td>
</tr>
<tr>
<td>Transit Oriented Development</td>
<td>Using transit stations as a catalyst for creating livable communities</td>
</tr>
<tr>
<td>Land Use Impacts on Transport</td>
<td>Land use patterns’ effects on travel behavior</td>
</tr>
<tr>
<td>Multimodal Access Guides</td>
<td>Customized directions to particular destinations by various travel modes</td>
</tr>
</tbody>
</table>

## Policy and Institutional Reforms

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Management</td>
<td>Policies and programs to preserve valuable assets</td>
</tr>
<tr>
<td>Car-Free Planning</td>
<td>Reduced driving at particular times and places</td>
</tr>
<tr>
<td>Change Management</td>
<td>Building support for institutional change</td>
</tr>
<tr>
<td>Comprehensive Market Reforms</td>
<td>Policy changes that result in more efficient transport pricing</td>
</tr>
<tr>
<td>Context Sensitive Design</td>
<td>Flexible design requirements to reflect community values</td>
</tr>
<tr>
<td>Institutional Reforms</td>
<td>Creating organizations that support efficient transport</td>
</tr>
<tr>
<td>Least Cost Planning</td>
<td>Creating an unbiased framework for transport planning</td>
</tr>
<tr>
<td>Traffic Operations and Management Programs</td>
<td>Traffic operations and management programs to encourage more efficient use of existing roadway systems</td>
</tr>
<tr>
<td>Prioritizing Transportation</td>
<td>Principles for prioritizing transportation activities and investments</td>
</tr>
<tr>
<td>Regulatory Reform</td>
<td>Policy changes to encourage competition, innovation, diversity and efficiency in transport services</td>
</tr>
</tbody>
</table>

## Miscellaneous TDM Programs and Program Support

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access Management</td>
<td>Improved coordination between roadway design and land use</td>
</tr>
<tr>
<td>Aviation Transport Management</td>
<td>Applying TDM to air transport</td>
</tr>
<tr>
<td>Campus Transport Management</td>
<td>Transport management for colleges, universities and other large facilities</td>
</tr>
<tr>
<td>Data Collection and Surveys</td>
<td>Data collection for TDM program planning and evaluation</td>
</tr>
<tr>
<td>Commute Trip Reduction</td>
<td>Programs that encourage more efficient commuting</td>
</tr>
<tr>
<td>Funding Options</td>
<td>Funding transportation programs and evaluating the degree to which they support TDM objectives</td>
</tr>
<tr>
<td>Intelligent Transportation</td>
<td>Use of new information technologies to improve transportation system performance and efficiency</td>
</tr>
<tr>
<td>Freight Transport Management</td>
<td>Strategies for improving the efficiency of freight and commercial transport</td>
</tr>
<tr>
<td>School Transport Management</td>
<td>Transport management for schools</td>
</tr>
<tr>
<td>Special Event Management</td>
<td>Transportation management for major events, construction projects and emergencies</td>
</tr>
<tr>
<td>TDM Marketing</td>
<td>Programs to promote TDM</td>
</tr>
<tr>
<td>TDM Framework</td>
<td>Developing an institutional framework for implementing TDM</td>
</tr>
<tr>
<td>Tourist Transport Management</td>
<td>Transportation management for tourist and leisure travel</td>
</tr>
<tr>
<td>Transportation Management Associations</td>
<td>Member-controlled organizations that provide transportation services in a particular area</td>
</tr>
</tbody>
</table>
APPENDIX C:
Concurrency and Level of Service under the Growth Management Act

Under the State Growth Management Act, adequate local transportation facilities are required to be in place, or committed to financially, to serve new development. The Act requires that transportation improvements or strategies to accommodate development be available when the impacts of development occur. "Concurrency" for transportation facilities is defined in the Growth Management Act and the Washington Administrative Code to mean that any needed transportation improvements or programs be in place at the time of development or that a financial commitment exists to complete the improvements or strategies within six years.

As part of the requirement to develop a comprehensive plan, jurisdictions are required to establish level-of-service standards for arterials, transit service, and other facilities. Once a jurisdiction sets a standard, it is used to determine whether the impacts of a proposed development can be met through existing capacity and/or to decide what level of mitigation will be required. Local governments have a significant amount of flexibility regarding how to apply transportation concurrency within their plans, regulations, and permit systems.

A Regional Perspective. Although the bulk of work related to concurrency and level-of-service is done at the local level, Washington State law provides for regionwide perspectives. The Regional Transportation Planning Organization legislation requires regional review of level-of-service methodologies used by cities and counties to promote a consistent regional evaluation of transportation facilities and corridors. Regional transportation planning organizations are also required to work with cities, counties, transit agencies, the department of transportation, and others to develop level-of-service standards or alternative transportation performance measures.

During 2002 and 2003, the Regional Council conducted research on concurrency and developed a series of four reports. The final report includes a series of recommendations – some are designed to provide additional guidance to local jurisdictions, while others describe ways in which the Regional Council should be more involved in advancing concurrency issues through its planning policies and process. Among the recommendations are the following:

- Multicounty planning policies should be developed to provide guidance to local jurisdictions to expand their concurrency programs to address multimodal considerations in both assessment and mitigation.

- Multicounty policies should also address expectations for countywide planning policies regarding multimodal approaches to concurrency.

- Multicounty polices should direct local jurisdictions to incorporated policies and provisions in their local comprehensive that outline the goals and principles of their concurrency programs – to facilitate better coordination within the region. These provisions would then be reviewed as part of the Regional Council's policy and plan review project.

- Multicounty policies should be developed to provide guidance to jurisdictions on how to balance growth targets and service standards in a way that reduces sprawl and prioritizes where development should occur.

- Multicounty and countywide policies should define subareas and/or key corridors where common approaches to concurrency are particularly needed or desired.

The reports are available on-line at [www.psrc.org/projects/growth/concur/concurrency.htm](http://www.psrc.org/projects/growth/concur/concurrency.htm) (9/05) The site also provides information on the state legislation and lists a number of resources that address concurrency.
- Countywide policies should direct localities to consider developing a financing strategy that first directs funds to pay for improvements in urban areas where growth is desired, with higher fees imposed in areas where growth is less desired.

- Countywide planning policies should address which methodologies are most appropriate for their localities to use.

- Countywide planning policies should support an exemption of high-capacity transit system improvements from concurrency.

- Charge the Regional Council's Transportation Operators Committee to consider how local concurrency programs can better integrate transit.

- The Regional Council should work with jurisdictions to develop a process for regular reporting on concurrency.

- The Regional Council should oversee the development of a concurrency manual that fully describes particular concurrency methodologies.

- The Regional Council should include criteria used for the regional transportation improvement program project selection process to take into account the degree to which a locality has tried to raise funds locally for a particular improvement, prior to requesting PSRC-managed funding.

- The Regional Council should use the long-range planning process to prioritize transportation projects to give local jurisdictions greater certainty as to which projects are likely to be funded in the near-term so they can use this information in structuring their concurrency programs.

- Encourage jurisdictions with formally designated regional growth centers to tailor their concurrency programs for their centers.

- Localities should consider tailoring concurrency programs for other subareas and districts within their jurisdictions.